STRUCTURAL CALCULATIONS

CHIPMAN ROAD BoA

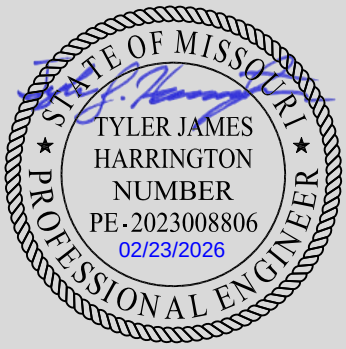
1801 NW CHIPMAN RD, LEE'S SUMMIT, MO

IAI000003.30

PREPARED FOR:
INTERIOR ARCHITECTS

PREPARED BY:
Galloway & Company, Inc.
5500 Greenwood Plaza Blvd., Suite 200
Greenwood Village, CO 80111

DATE:
JANUARY 2026



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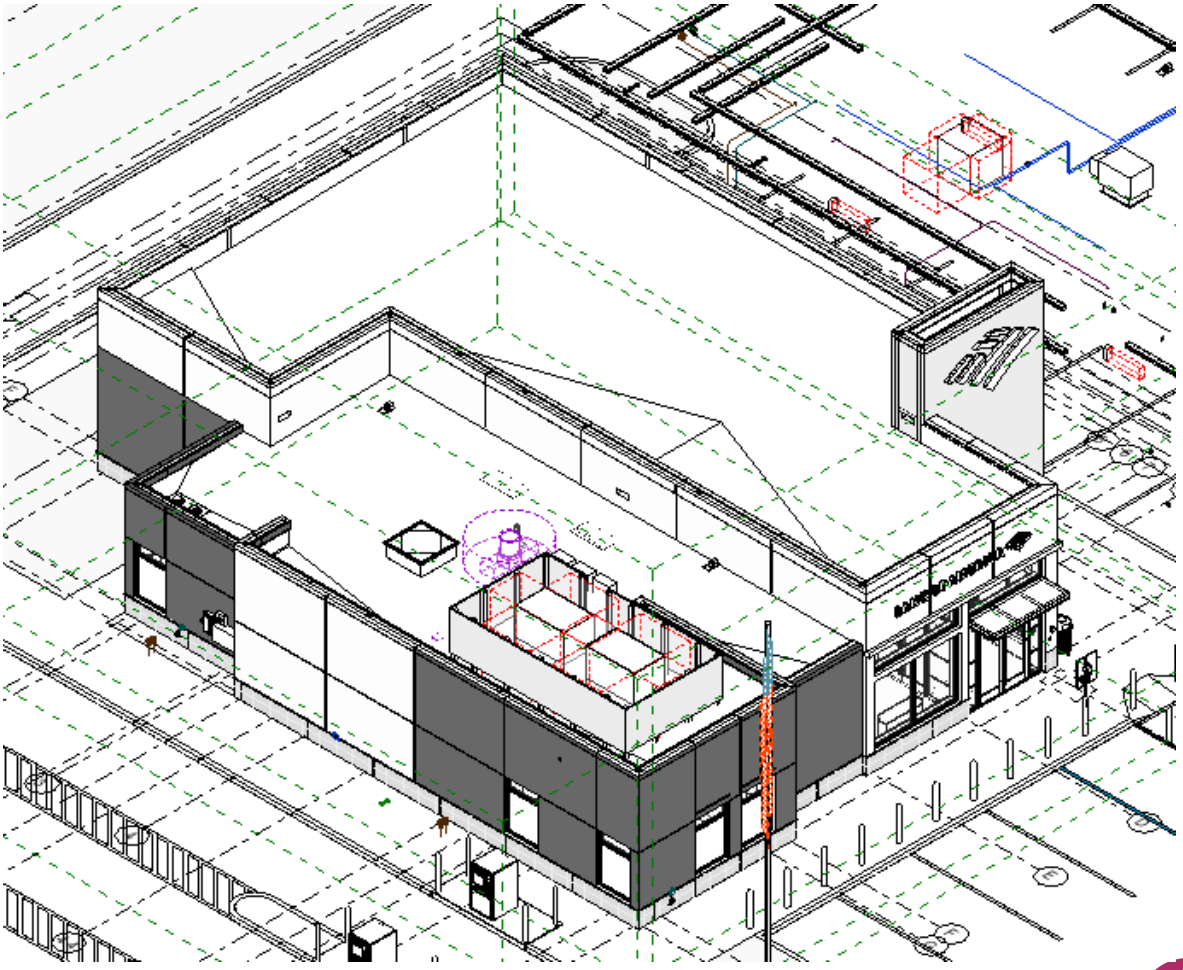
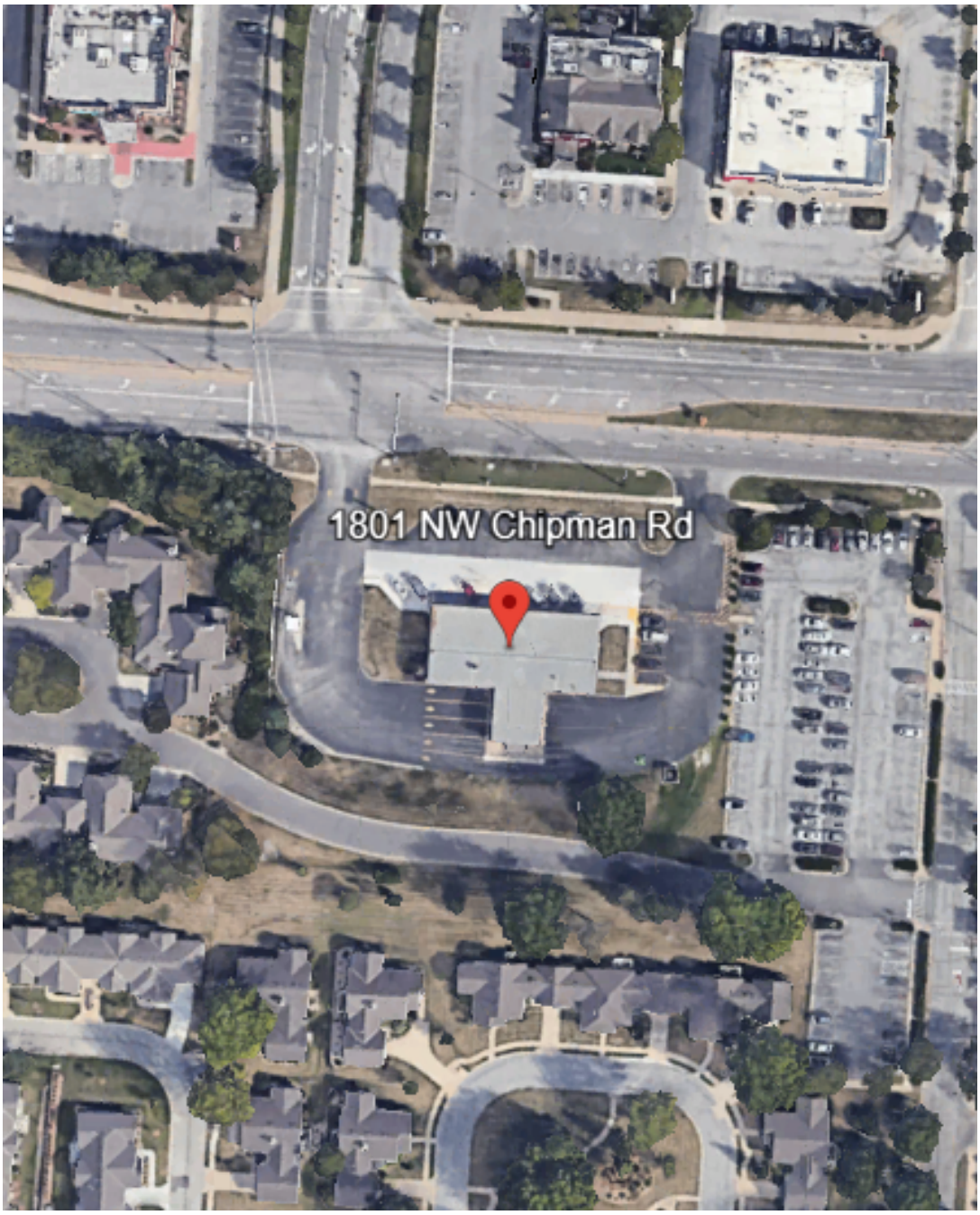


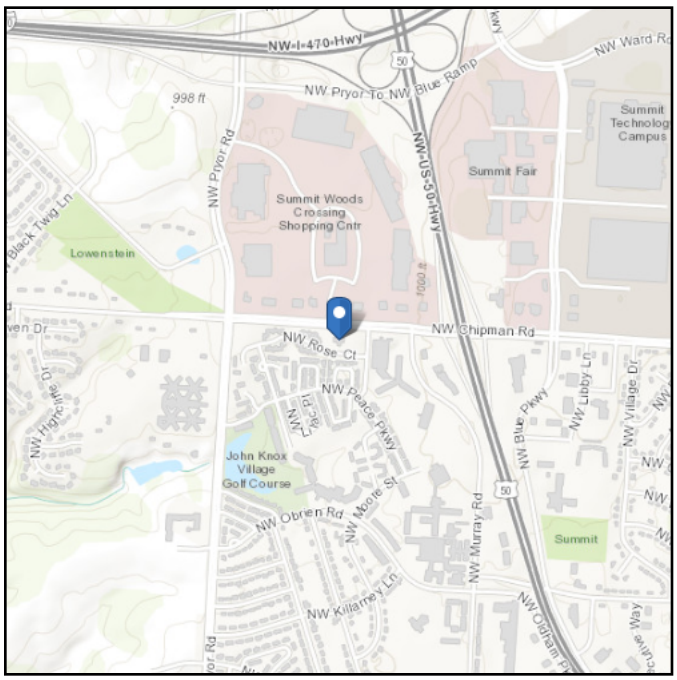
LOCAL DESIGN CRITERIA

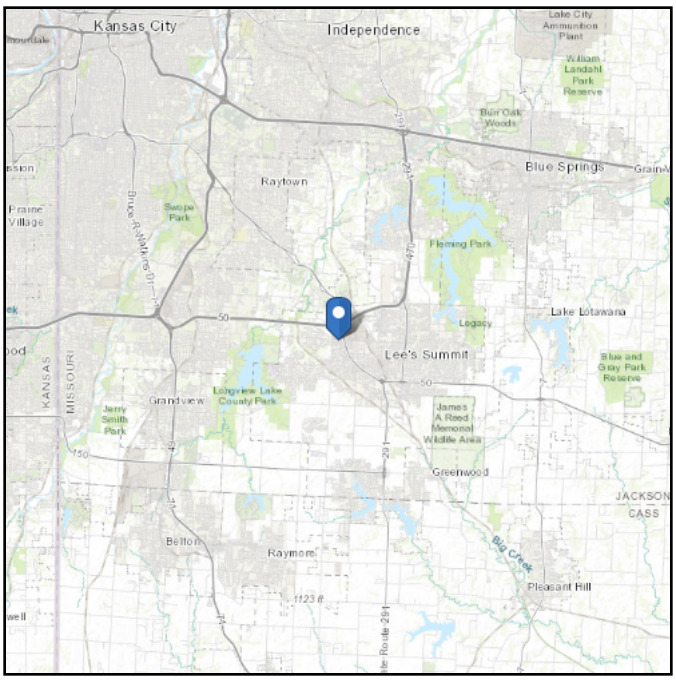

1801 NW Chipman Rd

ASCE Hazards Report

Address:
1801 NW Chipman Rd
Lees Summit, Missouri
64081

Standard:	ASCE/SEI 7-16	**Latitude:**	38.925727
Risk Category:	II	**Longitude:**	-94.408593
Soil Class:	C - Very Dense Soil and Soft Rock	**Elevation:**	995.3758978789307 ft (NAVD 88)





Wind

Results:

Wind Speed	109 Vmph
10-year MRI	76 Vmph
25-year MRI	83 Vmph
50-year MRI	88 Vmph
100-year MRI	94 Vmph

Data Source:	ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2
Date Accessed:	Fri Dec 12 2025

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-16 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

Site is not in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2.

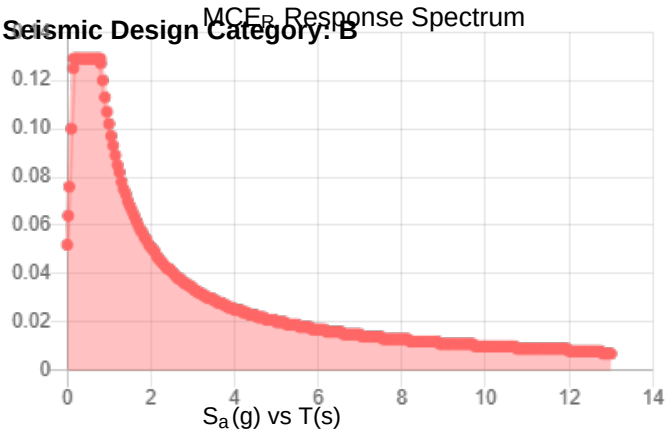
Seismic

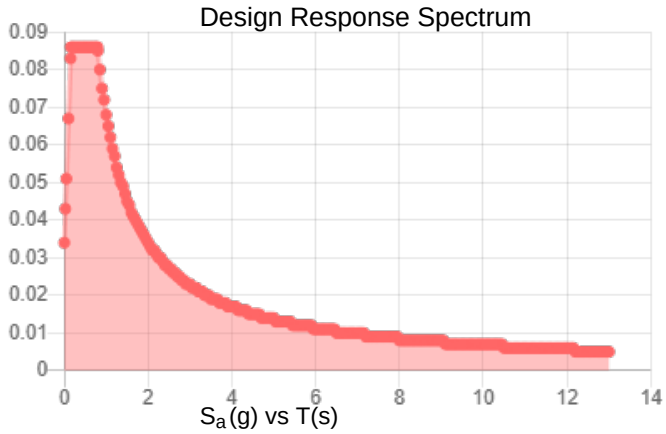
Site Soil Class: C - Very Dense Soil and Soft Rock

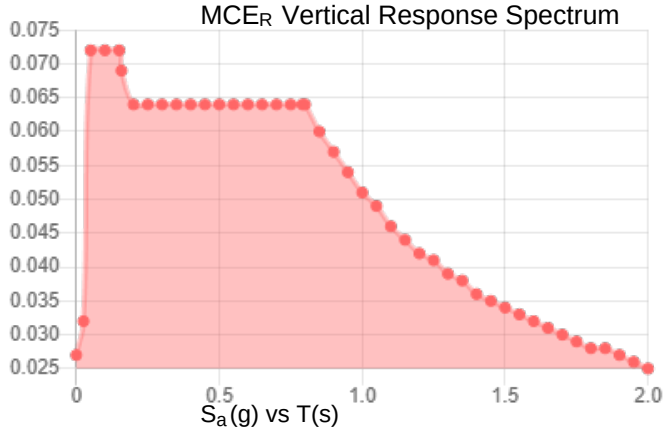
Results:

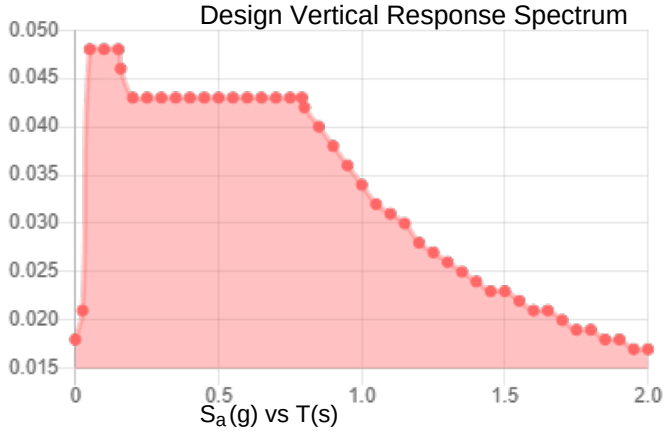
S_S :	0.099	S_{D1} :	0.068
S_1 :	0.068	T_L :	12
F_a :	1.3	PGA :	0.047
F_v :	1.5	PGA_M :	0.061
S_{MS} :	0.129	F_{PGA} :	1.3
S_{M1} :	0.102	I_e :	1
S_{DS} :	0.086	C_v :	0.7

Seismic Design Category: B









Data Accessed: **Fri Dec 12 2025**

Date Source:

USGS Seismic Design Maps based on ASCE/SEI 7-16 and ASCE/SEI 7-16 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-16 Ch. 21 are available from USGS.

Ice

Results:

Ice Thickness:	1.50 in.
Concurrent Temperature:	5 F
Gust Speed	40 mph
Data Source:	Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8
Date Accessed:	Fri Dec 12 2025

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 500-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Snow

Results:

Ground Snow Load, p_g:	20 lb/ft^2
Mapped Elevation:	995.4 ft
Data Source:	ASCE/SEI 7-16, Table 7.2-8
Date Accessed:	Fri Dec 12 2025

Values provided are ground snow loads. In areas designated "case study required," extreme local variations in ground snow loads preclude mapping at this scale. Site-specific case studies are required to establish ground snow loads at elevations not covered.

Snow load values are mapped to a 0.5 mile resolution. This resolution can create a mismatch between the mapped elevation and the site-specific elevation in topographically complex areas. Engineers should consult the local authority having jurisdiction in locations where the reported ‘elevation’ and ‘mapped elevation’ differ significantly from each other.

Rain

Results:

15-minute Precipitation Intensity: 7.5 in./h

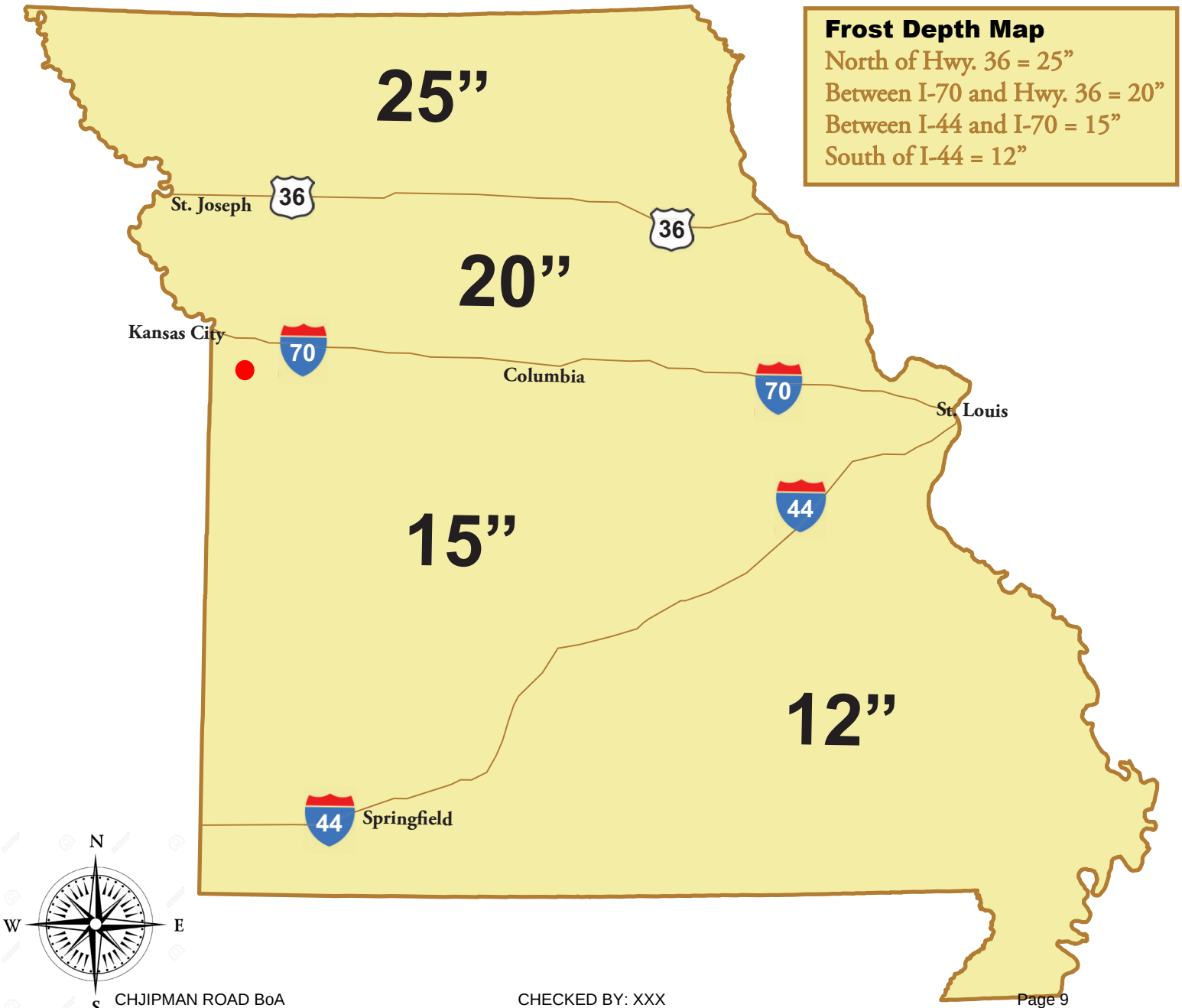
60-minute Precipitation Intensity: 3.52 in./h

Data Source: NOAA National Weather Service, Precipitation Frequency Data Server, Atlas 14 (https://www.nws.noaa.gov/oh/hdsc/)

Date Accessed: Fri Dec 12 2025

Frost Depth Map

Note: Some local jurisdictions may require the footing(s) to be at a greater depth than what is required by the PSC.



Code Search

Code: ASCE 7 - 16

Occupancy:

Occupancy Group = M Mercantile

Risk Category & Importance Factors:

Risk Category =	II
Wind Factor =	1.00
Importance Factor	1.00
Seismic Importance factor =	1.00

Type of Construction:

Fire Rating:

Roof =	0.0 hr
Floor =	0.0 hr

Building Geometry:

Roof angle (θ)	0.25 / 12	1.2 deg
Building length	80.0 ft	
Least width	48.2 ft	
Mean Roof Ht (h)	16.2 ft	
Parapet ht above grd	26.5 ft	
Minimum parapet ht	2.3 ft	
hb for Elevated bldg	0.0 ft	

Live Loads:

Roof 0 to 200 sf: 20 psf
200 to 600 sf: 24 - 0.02Area, but not less than 12 psf
over 600 sf: 12 psf

Floor:

Typical Floor

Partitions N/A

Storage warehouses: Heavy 250 psf

JOB TITLE	Bank of America - Chipman Road
JOB NO.	**SHEET NO.**
CALCULATED BY	BCR **DATE** 12/15/25
CHECKED BY	**DATE**

Wind Loads : ASCE 7- 16

Ultimate Wind Speed	109 mph
Nominal Wind Speed	84.4 mph
Risk Category	II
Exposure Category	C
Enclosure Classif.	Enclosed Building
Internal pressure	+/-0.18
Bldg Directionality (Kd)	0.85
Kh MWFRS<=60	0.863
Kh all other	0.863
Type of roof	Monoslope

Topographic Factor (Kzt)

Topography		Flat
Hill Height	(H)	80.0 ft
Half Hill Length (Lh)		100.0 ft
Actual H/Lh	=	0.80
Use H/Lh	=	0.50
Modified Lh	=	160.0 ft
From top of crest: x =		50.0 ft
Bldg up/down wind?		downwind

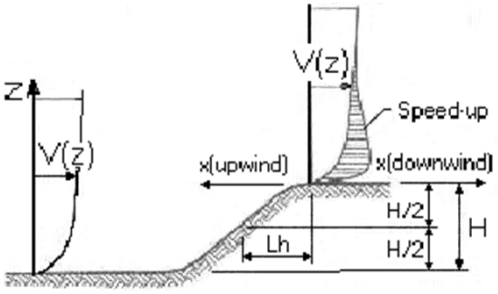
H/Lh= 0.50 K_1 = 0.000

x/Lh = 0.31 K_2 = 0.792

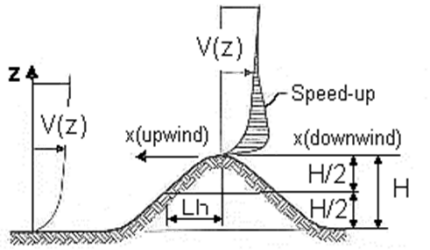
z/Lh = 0.10 K_3 = 1.000

At Mean Roof Ht:

$Kzt = (1+K_1K_2K_3)^2$ = 1.00



ESCARPMENT



2D RIDGE or 3D AXISYMMETRICAL HILL

Gust Effect Factor

h =	16.2 ft
B =	48.2 ft
/z (0.6h) =	15.0 ft

Flexible structure if natural frequency < 1 Hz (T > 1 second).

If building h/B>4 then may be flexible and should be investigated.

h/B = 0.34 Rigid structure (low rise bldg)

G = 0.85 Using rigid structure default

Rigid Structure

$\bar{e}$ =	0.20
ℓ =	500 ft
z_{min} =	15 ft
c =	0.20
g_Q, g_v =	3.4
L_z =	427.1 ft
Q =	0.92
I_z =	0.23
G =	**0.88** use G = 0.85

Flexible or Dynamically Sensitive Structure

Natural Frequency (η_1) =	0.7 Hz			
Damping ratio (β) =	0.01			
/b =	0.650			
/α =	0.154			
Vz =	92.0			
N_1 =	3.25			
R_n =	0.067			
R_h =	0.709	η =	0.567	h = 16.2 ft
R_B =	0.423	η =	1.686	
R_L =	0.101	η =	9.369	
g_R =	4.104			
R =	1.073			
Gf =	1.234			

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Ground Elevation Factor (Ke)

Grd level above sea level = 0 ft

Constant = 0.00256

0.00256Ke = 0.00256

Ke = 1.0000

Enclosure Classification

Test for Enclosed Building: Ao < 0.01Ag or 4 sf, whichever is smaller

Test for Open Building: All walls are at least 80% open.
Ao ≥ 0.8Ag

Test for Partially Enclosed Building: Predominately open on one side only

	Input			Test	
Ao	500.0	sf	Ao ≥ 1.1Aoi	NO	
Ag	600.0	sf	Ao > 4' or 0.01Ag	YES	
Aoi	1000.0	sf	Aoi / Agi ≤ 0.20	YES	Building is NOT
Agi	10000.0	sf			Partially Enclosed

Conditions to qualify as Partially Enclosed Building. Must satisfy all of the following:

Ao ≥ 1.1Aoi

Ao > smaller of 4' or 0.01 Ag

Aoi / Agi ≤ 0.20

Where:

Ao = the total area of openings in a wall that receives positive external pressure.

Ag = the gross area of that wall in which Ao is identified.

Aoi = the sum of the areas of openings in the building envelope (walls and roof) not including Ao.

Agi = the sum of the gross surface areas of the building envelope (walls and roof) not including Ag.

Test for Partially Open Building: A building that does not qualify as open, enclosed or partially enclosed.
(This type building will have same wind pressures as an enclosed building.

Reduction Factor for large volume partially enclosed buildings (Ri) :

If the partially enclosed building contains a single room that is unpartitioned , the internal pressure coefficient may be multiplied by the reduction factor Ri.

Total area of all wall & roof openings (Aog): - SF

Unpartitioned internal volume (Vi) : - CF

Ri = 1.00

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Wind Loads - MWFRS all h (Except for Open Buildings)

		Kh =	0.863	GCpi =	+/-0.18
Base pressure (qh) =	**22.3 psf**	Bldg dim parallel to ridge =	80.0 ft	G =	0.85
Roof Angle (θ) =	1.2 deg	Bldg dim normal to ridge =	48.2 ft	qi = qh	
Roof tributary area:		h =	16.2 ft		
Wind normal to ridge =(h/2)*L:	648 sf	ridge ht =	16.7 ft		
Wind parallel to ridge =(h/2)*L:	390 sf				

Ultimate Wind Surface Pressures (psf)

Surface	Wind Normal to Ridge L/B = 0.60 Cp	q_hGC_p	h/L = 0.34 w/+q_iGC_{pi}	w/-q_hGC_{pi}	Wind Parallel to Ridge L/B = 1.66 Dist.*	Cp	q_hGC_p	h/L = 0.20 w/ +q_iGC_{pi}	w/ -q_hGC_{pi}
Windward Wall (WW)	0.80	15.2	see table below			0.80	15.2	see table below	
Leeward Wall (LW)	-0.50	-9.5	-13.5	-5.5		-0.37	-7.0	-11.0	-3.0
Side Wall (SW)	-0.70	-13.3	-17.3	-9.3		-0.70	-13.3	-17.3	-9.3
Leeward Roof (LR)		**				Included in windward roof			
Neg Windward Roof: 0 to h/2*	-0.90	-17.1	-21.1	-13.0	0 to h/2*	-0.90	-17.1	-21.1	-13.0
h/2 to h*	-0.90	-17.1	-21.1	-13.0	h/2 to h*	-0.90	-17.1	-21.1	-13.0
h to 2h*	-0.50	-9.5	-13.5	-5.5	h to 2h*	-0.50	-9.5	-13.5	-5.5
> 2h*	-0.30	-5.7	-9.7	-1.7	> 2h*	-0.30	-5.7	-9.7	-1.7
Pos/min windward roof press.	-0.18	-3.4	-7.4	0.6	Min press.	-0.18	-3.4	-7.4	0.6

*Horizontal distance from windward edge

**Roof angle < 10 degrees. Therefore, leeward roof is included in windward roof pressure zones.

For monoslope roofs, entire roof surface is either windward or leeward surface.

Windward roof overhangs : 15.2 psf (upward - add to qhGCp windward roof pressure)

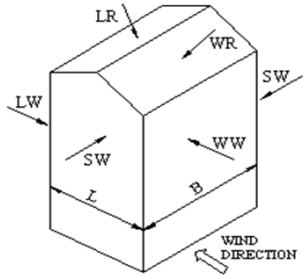
Parapet

z	Kz	Kzt	qp (psf)
26.5 ft	0.957	1.00	24.7

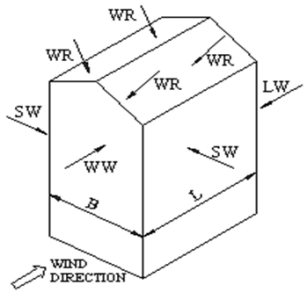
Windward parapet: 37.1 psf (GCpn = +1.5)
Leeward parapet: -24.7 psf (GCpn = -1.0)

Windward Wall Pressures at "z" (psf)

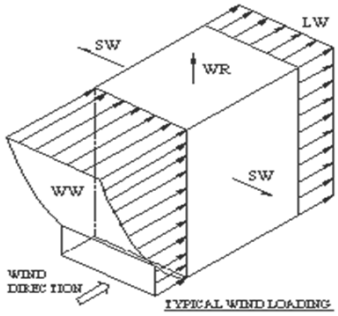
	z	Kz	Kzt	Windward Wall q_zGC_p	w/+q_iGC_{pi}	w/-q_hGC_{pi}	Combined WW + LW Wind Normal to Ridge	Wind Parallel to Ridge
	0 to 15'	0.85	1.00	14.9	10.9	18.9	24.4	21.9
h=	16.2 ft	0.86	1.00	15.2	11.2	19.2	24.6	22.1
ridge =	16.7 ft	0.87	1.00	15.3	11.2	19.3	24.7	22.2



WIND NORMAL TO RIDGE



WIND PARALLEL TO RIDGE



TYPICAL WIND LOADING

JOB TITLE	Bank of America - Chipman Road		
JOB NO.		**SHEET NO.**	
CALCULATED BY	BCR	**DATE**	12/15/25
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Ultimate Wind Pressures

Wind Loads - Components & Cladding : h ≤ 60'

		Kh =	0.863	
Base pressure (qh) =	**22.3 psf**	h =	16.2 ft	0.2h = 3.2 ft
Minimum parapet ht =	2.3 ft	0.6h =	9.7 ft	
Roof Angle (θ) =	1.2 deg	GCpi =	+/-0.18	
Type of roof =	Monoslope	qi = qh =	22.3 psf	

Roof

	Surface Pressure (psf)								User input	
Area	10 sf	20 sf	50 sf	100 sf	200 sf	350 sf	500 sf	1000 sf	20 sf	50 sf
Negative Zone 1	-41.90	-39.20	-35.50	-32.70	-30.0	-27.7	-26.3	-26.3	-39.2	-35.5
Negative Zone 1'	-24.10	-24.10	-24.10	-24.10	-20.7	-18.0	-16.3	-16.0	-24.1	-24.1
Negative Zone 2	-55.30	-51.80	-47.10	-43.50	-39.9	-37.1	-35.2	-35.2	-51.8	-47.1
Negative Zone 3	-75.40	-68.30	-58.90	-51.80	-44.6	-38.9	-35.2	-35.2	-68.3	-58.9
Positive All Zones	16.00	16.00	16.00	16.00	16.0	16.0	16.0	16.0	16.0	16.0
Overhang Zone 1&1'	-37.90	-37.20	-36.40	-35.70	-29.9	-25.3	-22.3	-22.3	-37.2	-36.4
Overhang Zone 2	-51.30	-46.60	-40.30	-35.50	-30.8	-27.0	-24.5	-24.5	-46.6	-40.3
Overhang Zone 3	-71.40	-63.10	-52.10	-43.80	-35.5	-28.8	-24.5	-24.5	-63.1	-52.1

Overhang pressures in the table above assume an internal pressure coefficient (Gcpi) of 0.0
Overhang soffit pressure equals adj wall pressure (which includes internal pressure of 4 psf)

Parapet

qp = 24.7 psf

		Surface Pressure (psf)						User input
Solid Parapet Pressure		10 sf	20 sf	50 sf	100 sf	200 sf	500 sf	80 sf
CASE A:	Zone 2 :	79.2	74.0	67.3	62.1	57.0	50.2	63.8
	Zone 3 :	101.4	92.4	80.4	71.3	62.2	50.2	74.2
CASE B:	Interior zone :	-46.8	-44.4	-41.3	-38.9	-36.5	-33.4	-39.7
	Corner zone :	-53.4	-49.9	-45.2	-41.6	-38.1	-33.4	-42.8

wall a = 4.8 ft

Walls

	GCp +/- GCpi				Surface Pressure at h				User input	
Area	10 sf	100 sf	200 sf	500 sf	10 sf	100 sf	200 sf	500 sf	20 sf	50 sf
Negative Zone 4	-1.17	-1.01	-0.96	-0.90	-26.1	-22.6	-21.5	-20.1	-25.0	-23.6
Negative Zone 5	-1.44	-1.12	-1.03	-0.90	-32.1	-25.0	-22.9	-20.1	-30.0	-27.2
Positive Zone 4 & 5	1.08	0.92	0.87	0.81	24.1	20.5	19.5	18.1	23.0	21.6

Note: GCp reduced by 10% due to roof angle <= 10 deg.

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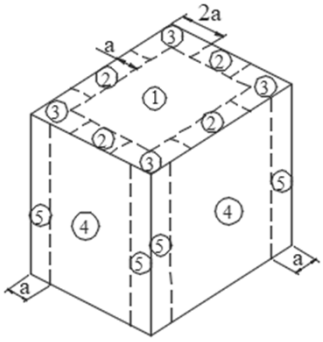
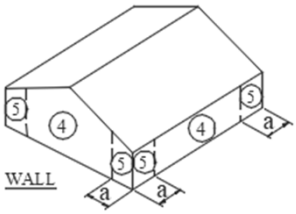
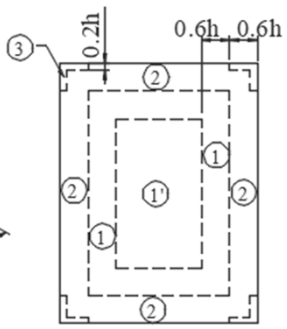
Location of C&C Wind Pressure Zones - ASCE 7-16

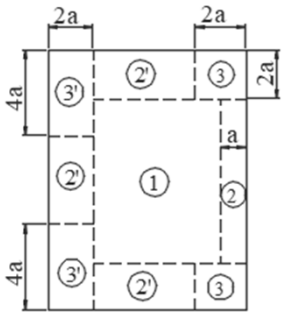


Roofs w/ θ ≤ 10°
and all walls
h > 60'



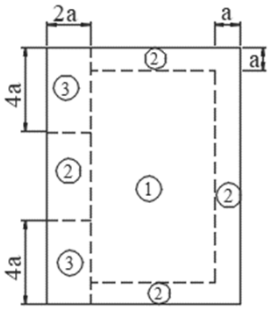
Walls h ≤ 60'
& alt design h<90'



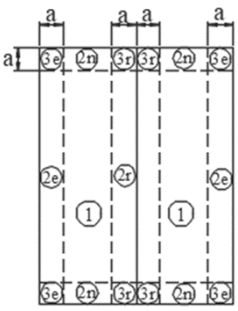


Multispan Gable & Sawtooth ≤ 10°
and Gable θ ≤ 7 degrees &
Monoslope ≤ 3 degrees
h ≤ 60' & alt design h<90'

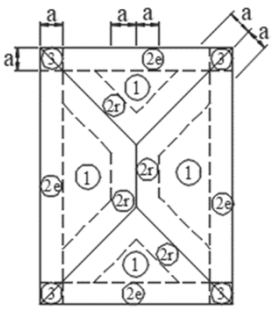
Monoslope roofs
3° < θ ≤ 10°
h ≤ 60' & alt design h<90'



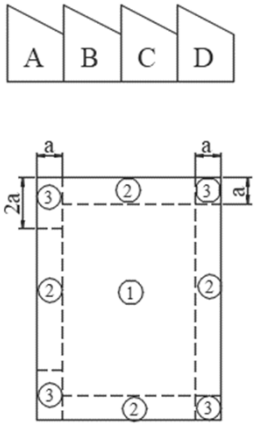
Monoslope roofs
10° < θ ≤ 30°
h ≤ 60' & alt design h<90'



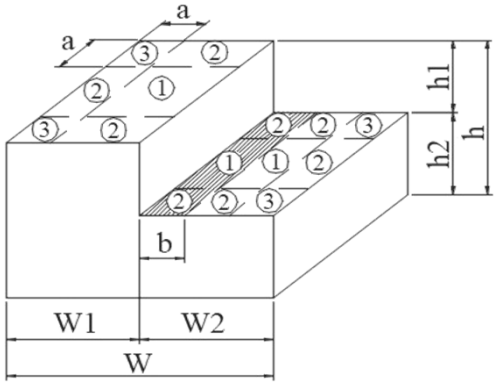
Multispan Gable > 10°
& Gable 7° < θ ≤ 45°



Hip 7° < θ ≤ 27°

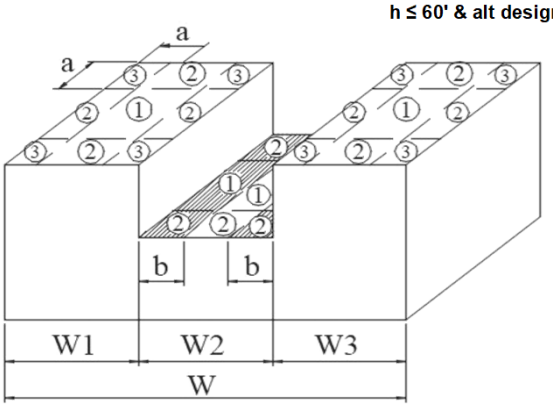


Sawtooth 10° < θ ≤ 45°
h ≤ 60' & alt design h<90'



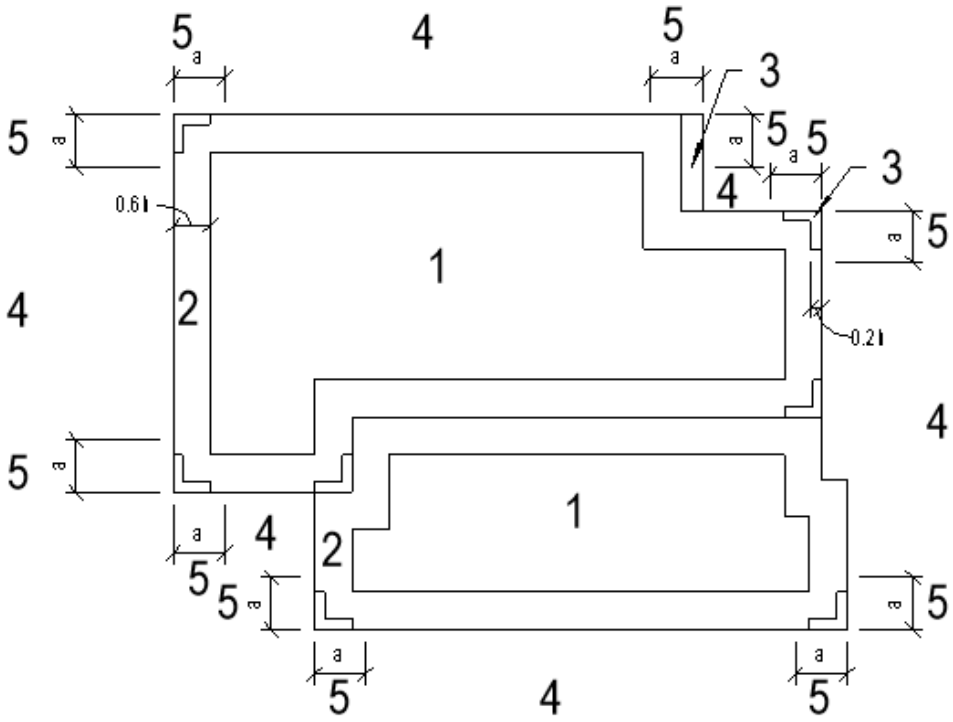
Note: The hatched area indicates where roof positive pressures are equal to the adjacent wall positive pressure.

Stepped roofs θ ≤ 3°
h ≤ 60' & alt design h<90'



Note: The stepped roof zones above are as shown in ASCE 7-16 . Prior editions didn't show zones, but the notes sent you to the low slope gable figure. The note in ASCE 7-16 still sends you to the low slope gable figure, but for some reason the zones shown are per editions prior to ASCE 7-16. Therefore, the above zones may be a code mistake and the correct zone locations may be per the low slope gable roof shown at the top of this page.

WIND ZONES FOR PROJECT



Ultimate Design Wind Pressure (psf)								
			Effective Wind Area (sq ft)					
Walls:			**10**	**20**	**50**	**100**	**200**	**500**
Interior	Zone 4	+	24.1	23.0	21.6	20.5	19.5	18.1
		-	-26.1	-25.0	-23.6	-22.6	-21.5	-20.1
Edge	Zone 5	+	24.1	23.0	21.6	20.5	19.5	18.1
		-	-32.1	23.0	21.6	-25.0	-22.9	-20.1
Roof:			**10**	**20**	**50**	**100**	**200**	**500**
Interior	Zone 1	+	16.0	16.0	16.0	16.0	16.0	16.0
		-	-41.9	-39.2	-35.5	-32.7	-30.0	-26.3
Interior	Zone 1'	+	16.0	16.0	16.0	16.0	16.0	16.0
		-	-24.1	-24.1	-24.1	-24.1	-20.7	-16.3
Edge	Zone 2	+	16.0	16.0	16.0	16.0	16.0	16.0
		-	-55.3	-51.8	-47.1	-43.5	-39.9	-35.2
Corner	Zone 3	+	16.0	16.0	16.0	16.0	16.0	16.0
		-	-75.4	-68.3	-58.9	-51.8	-44.6	-35.2
Overhang:			**10**	**20**	**50**	**100**	**200**	**500**
Interior	Zone 4	+	24.1	23.0	21.6	20.5	19.5	18.1
		-	-51.30	-46.6	-40.3	-35.5	-30.8	-24.5
Edge	Zone 5	+	24.1	23.0	21.6	20.5	19.5	18.1
		-	-71.40	-63.10	-52.10	-43.80	-35.51	-24.5
Parapet			**10**	**20**	**50**	**100**	**200**	**500**
Edge	Zone 2	+	79.2	74.0	67.3	62.1	57.0	50.2
		-	-46.8	-44.4	-41.3	-38.9	-36.5	-33.4
Corner	Zone 3	+	101.4	92.4	80.4	71.3	62.2	50.2
		-	-53.4	-49.9	-45.2	-41.6	-38.1	-33.4

JOB TITLE	Bank of America - Chipman Road		
JOB NO.		SHEET NO.	
CALCULATED BY	BCR	DATE	12/15/25
CHECKED BY		DATE	

Seismic Loads: ASCE 7- 16 Strength Level Forces

Risk Category : II
Importance Factor (Ie) : 1.00
Site Class : C

Ss (0.2 sec) = 0.10 g Fa = 1.300
S1 (1.0 sec) = 0.07 g Fv = 1.500

Site specific ground motion analysis performed:

Sms = 0.129 S_{DS} = 0.086 Design Category = A
Sm1 = 0.102 S_{D1} = 0.068 Design Category = B

Seismic Design Category = **B**
Redundancy Coefficient ρ = 1.00
Number of Stories: 1

Structure Type: All other building systems
Horizontal Struct Irregularities: 2) Reentrant Corners
Vertical Structural Irregularities: No vertical Irregularity

Flexible Diaphragms: Yes
Building System: **Structural steel systems not specifically detailed for seismic resistance**
Seismic resisting system: **Structural steel systems not specifically detailed for seismic resistance**
System Structural Height Limit: **Height not limited**
Actual Structural Height (hn) = 16.2 ft

DESIGN COEFFICIENTS AND FACTORS

Response Modification Coefficient (R) = 3 To = 0.2(Sd1/Sds) = 0.159
Over-Strength Factor (Ωo) = 2.5 Ts = Sd1/Sds = 0.793
Deflection Amplification Factor (Cd) = 3 Long Period Transition Period (TL) = 12 sec

S_{DS} = 0.086
S_{D1} = 0.068

Seismic Load Effect (E) = Eh +/-Ev = ρ Q_E +/- 0.2S_{DS} D = Qe +/- 0.000D Q_E = horizontal seismic force
Special Seismic Load Effect (Em) = Emh +/- Ev = Ωo Q_E +/- 0.2S_{DS} D = &G40&"(0.017D D = dead load

ALLOWABLE STORY DRIFT

Structure Type: All other structures

Allowable story drift Δa = 0.020hsx where hsx is the story height below level x

PERMITTED ANALYTICAL PROCEDURES

Index Force Analysis - Method Not Permitted (only applies to Seismic Category A

Model & Seismic Response Analysis - Permitted (see code for procedure

Equivalent Lateral-Force (ELF) Analysis - Permitted

Building period coef. (C_T) = 0.020 Cu = 1.70
Approx fundamental period (Ta) = $C_T h_n^x$ = 0.161 sec x= 0.75 Tmax = CuTa = 0.275 sec
User calculated fundamental period = T = 0.161 sec

Seismic response coef. (Cs) = SdsI/R = 0.029
need not exceed Cs = Sd1 I /RT = 0.140
but not less than Cs = 0.044Sds*I = 0.010
USE Cs = 0.029

Design Base Shear V = 0.029W

DEAD AND LIVE LOAD ANALYSIS

JOB TITLE	Bank of America - Chipman Road		
JOB NO.		**SHEET NO.**	
CALCULATED BY	BCR	**DATE**	12/15/25
CHECKED BY		**DATE**	

Roof Design Loads

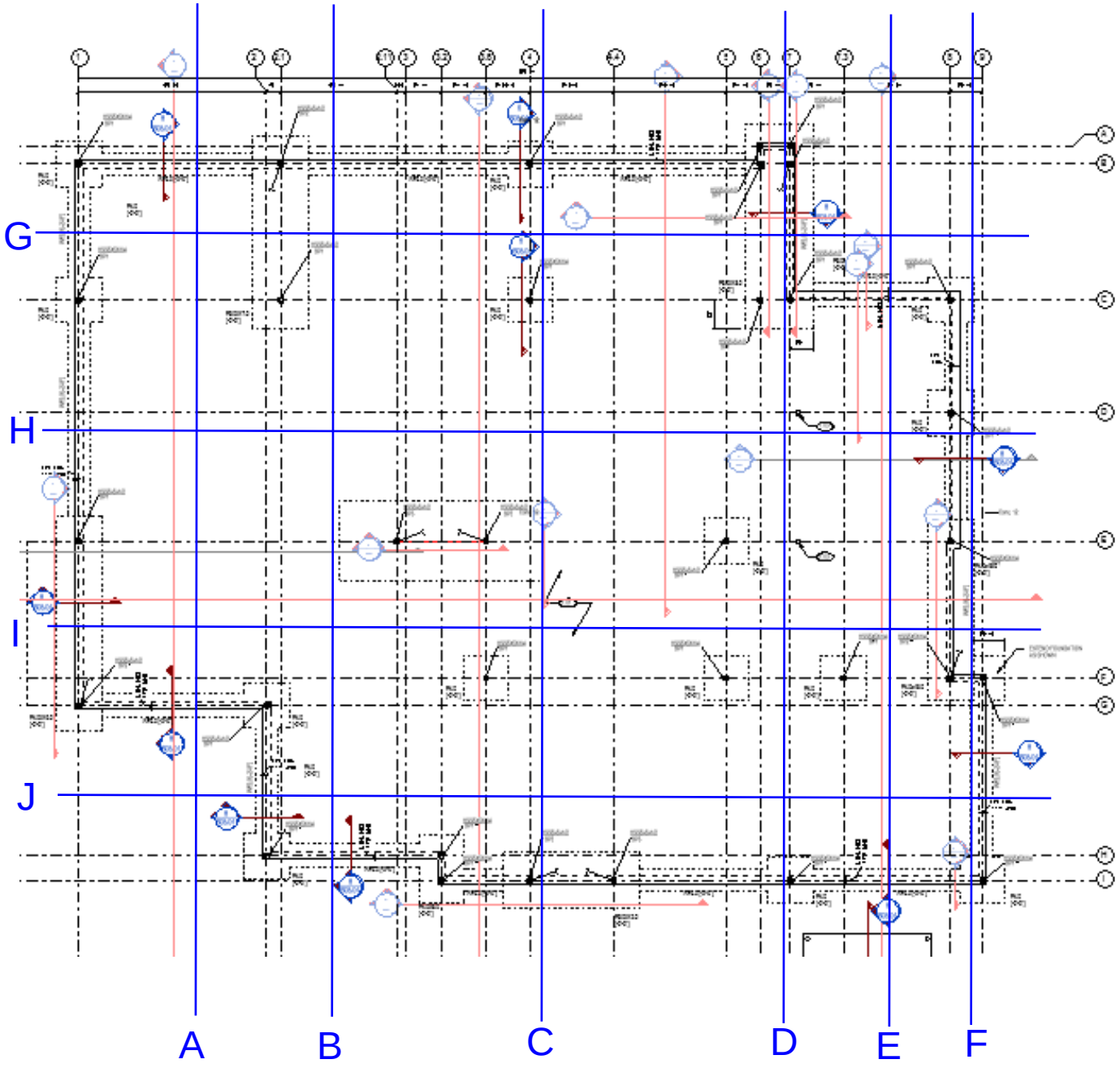
Items	Description	Multiple	psf (max)	psf (min)
Roofing	Single ply		1.0	0.7
Decking	Metal Roof deck, 1.5, 20 ga.		2.5	2.0
Framing	Steel roof joists & girders		3.0	2.0
Insulation	Urethane Foam w/ skin per ir	x 5.0	2.5	2.5
Ceiling	Suspended acoustical tile		1.8	1.0
Mech & Elec	Mech. & Elec.		2.0	0.0
Misc.	Misc.	x 4.0	2.0	0.0
Ceiling	1/2" gypsum board	x 1.5	3.3	3.0
		Actual Dead Load	○ 18.1	○ 11.2
		Use this DL instead	◉ 20.0	◉ 6.0
		Live Load	20.0	0.0
		Snow Load	20.0	0.0
		Ultimate Wind (zone 2 - 100 sf)	16.0	-43.5
ASD Loading		D + Lr	40.0	-
		D + 0.75(0.6*W + Lr)	42.2	-
		0.6*D + 0.6*W	-	-22.5
LRFD Loading		1.2D + 1.6 Lr + 0.5W	64.0	-
		1.2D + 1.0W + 0.5Lr	50.0	-
		0.9D + 1.0W	-	-38.1

Roof Live Load Reduction Roof angle 0.25 / 12 1.2 deg

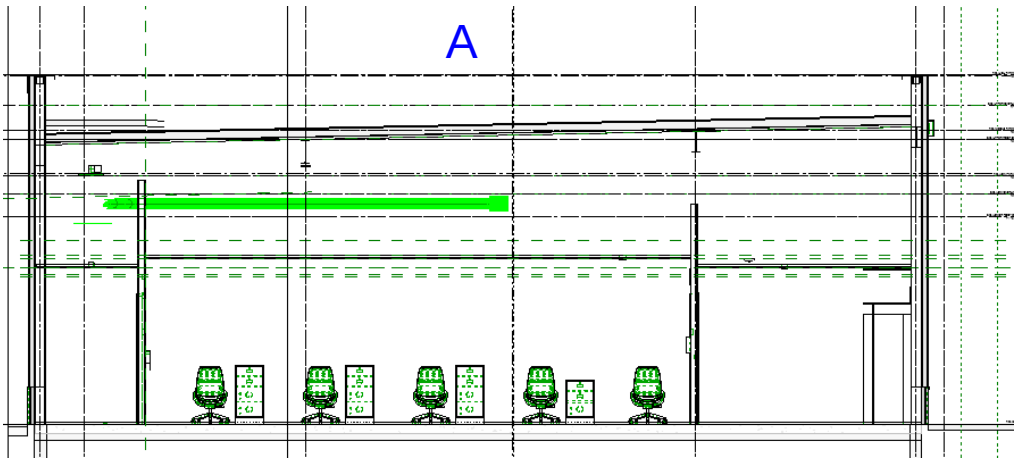
0 to 200 sf: 20.0 psf
200 to 600 sf: 24 - 0.02Area, but not less than 12 psf
over 600 sf: 12.0 psf

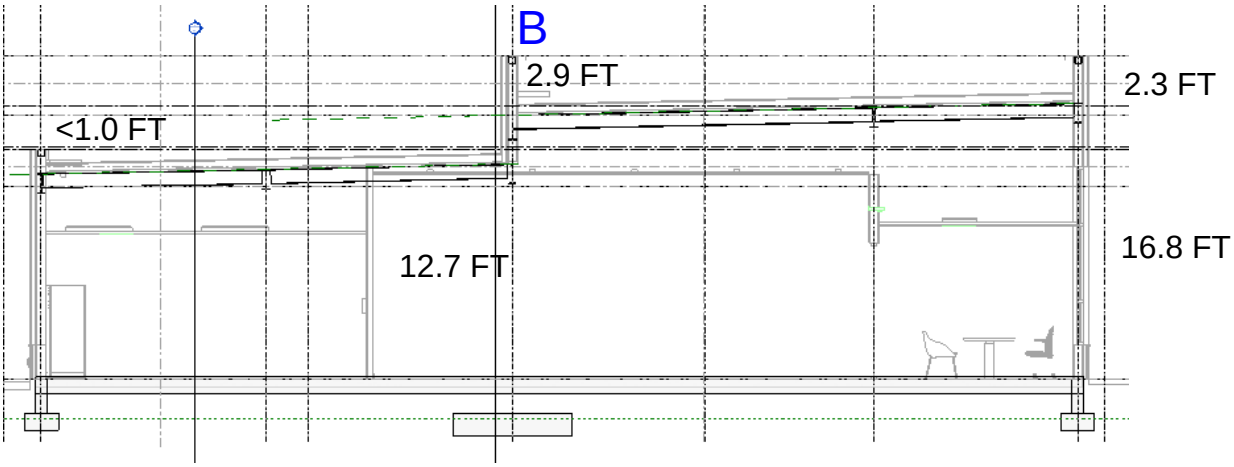
	300 sf	18.0 psf
	400 sf	16.0 psf
	500 sf	14.0 psf
User Input:	450 sf	15.0 psf

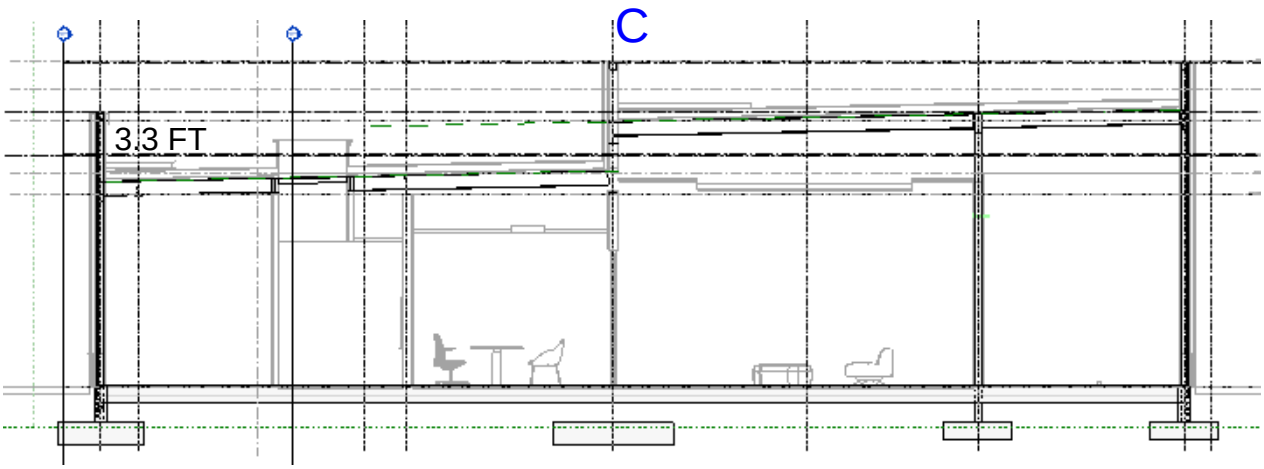
SNOW LOAD ANALYSIS

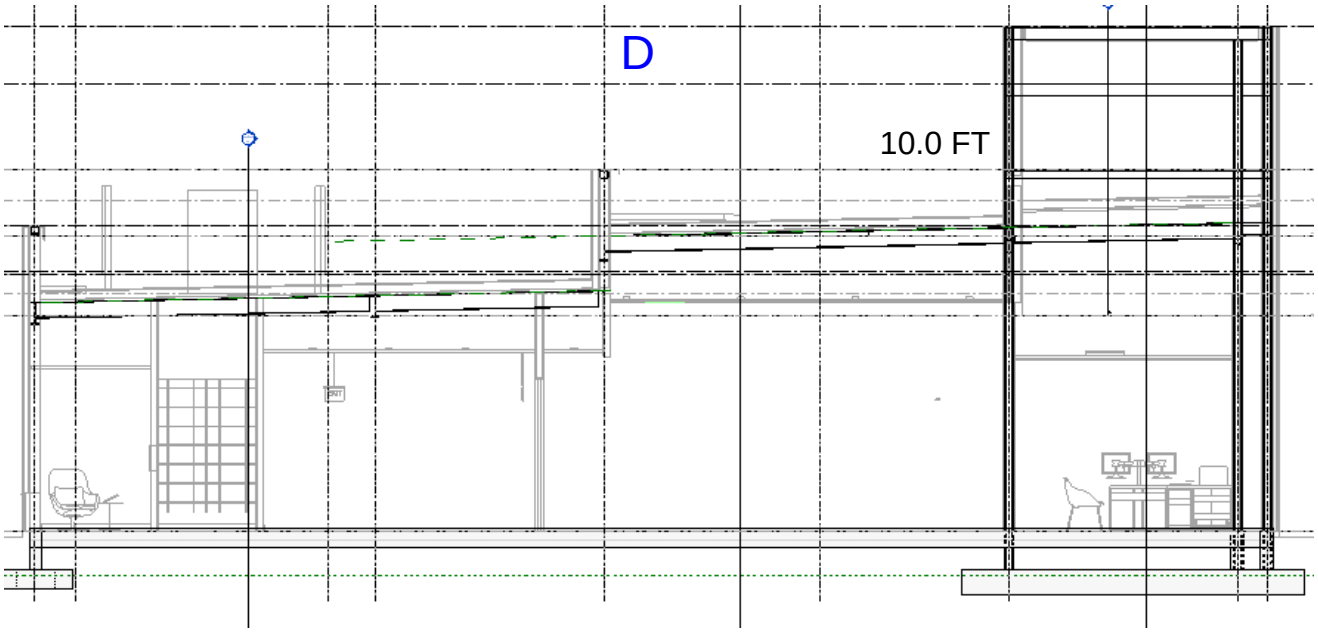

G
H
I
J
A
B
C
D
E
F

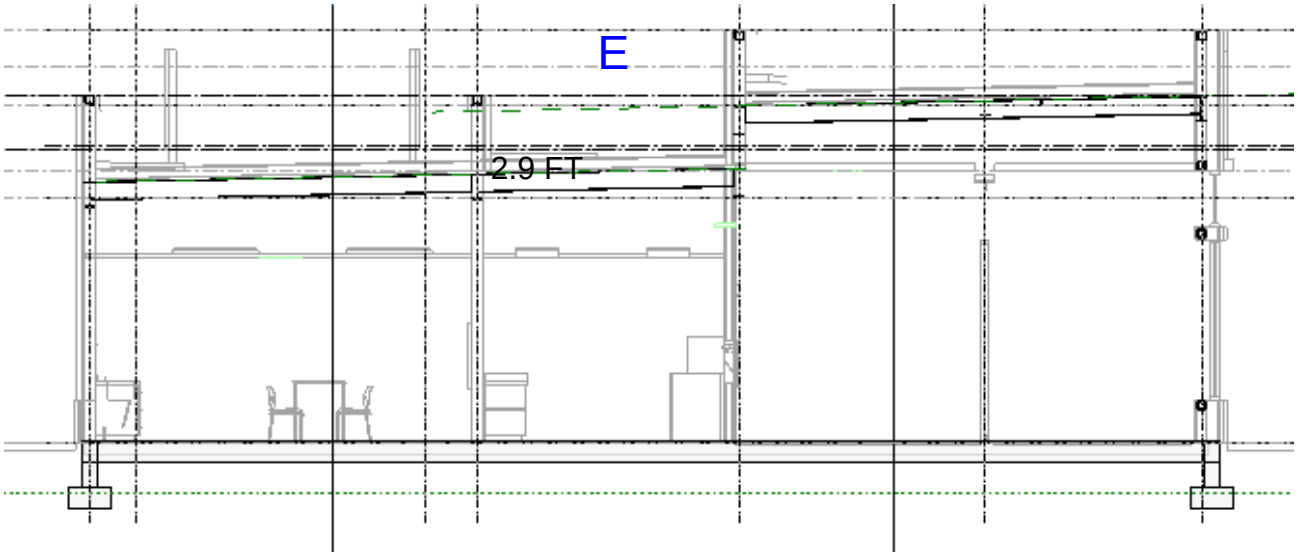
SECTIONS THROUGH PLAN N-S

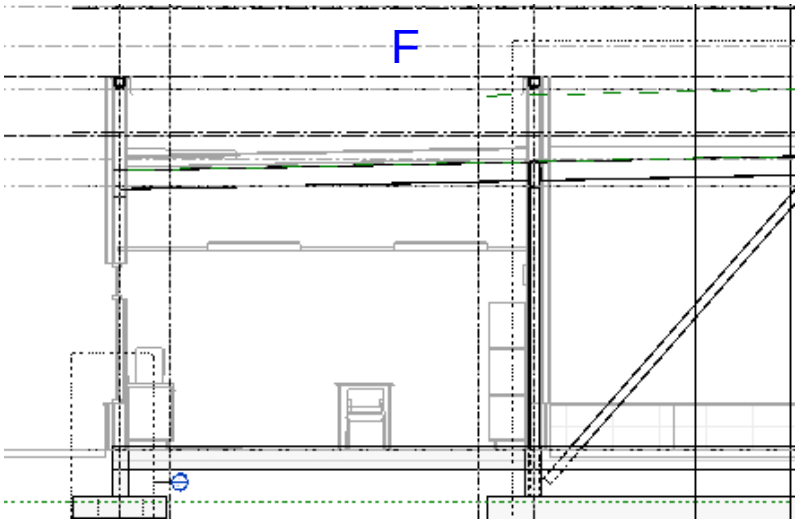






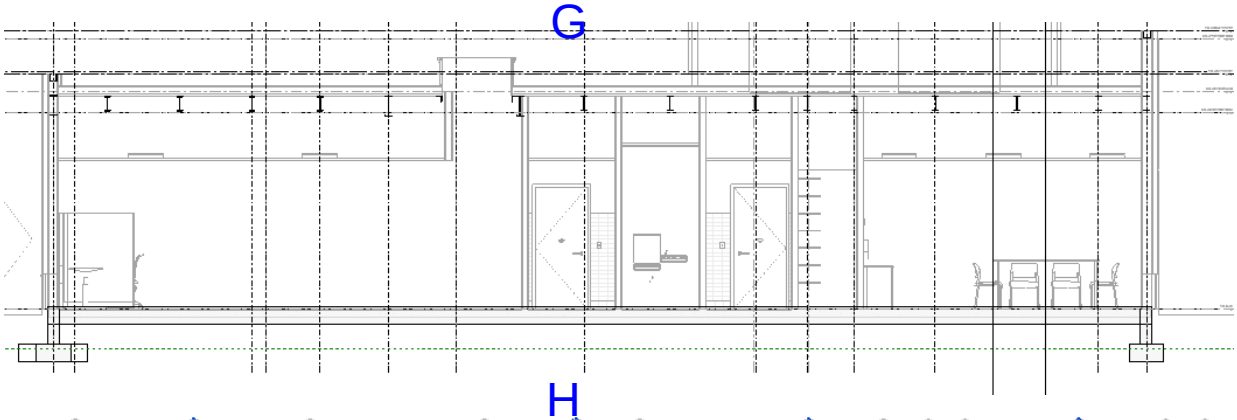

D
10.0 FT


E
2.9 FT


F

SECTIONS THROUGH PLAN E-W

G



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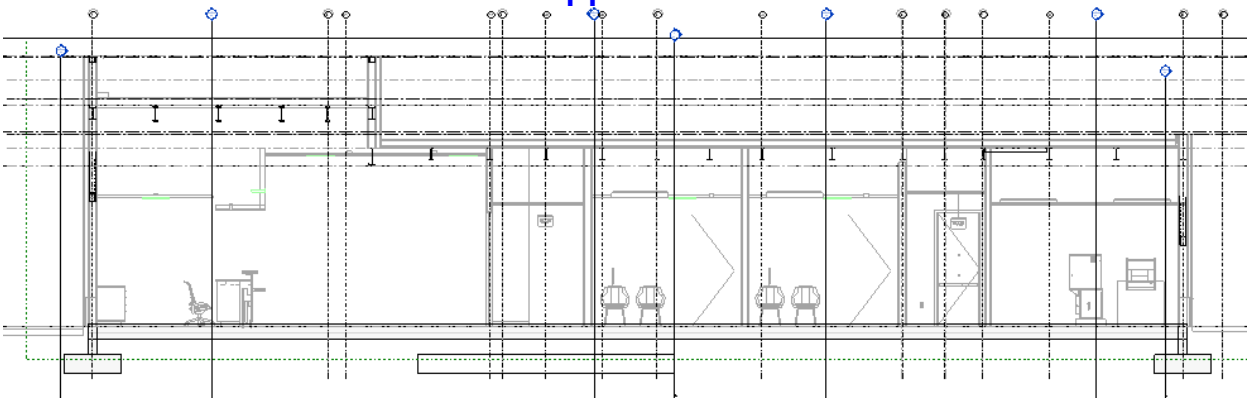

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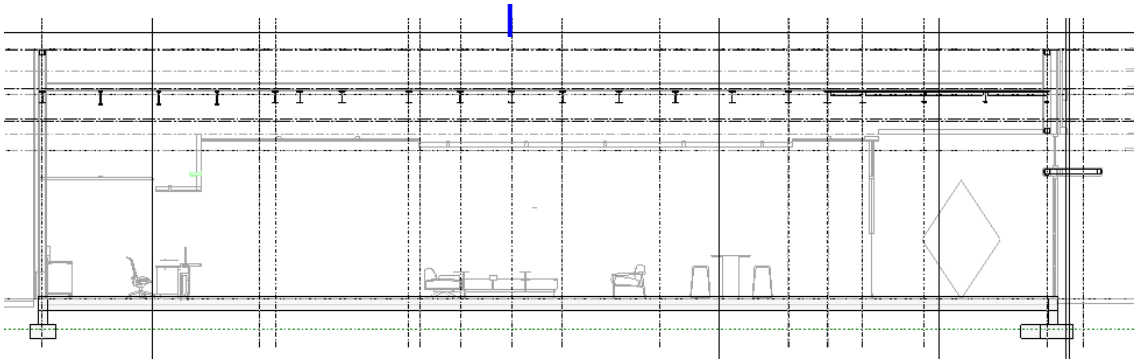

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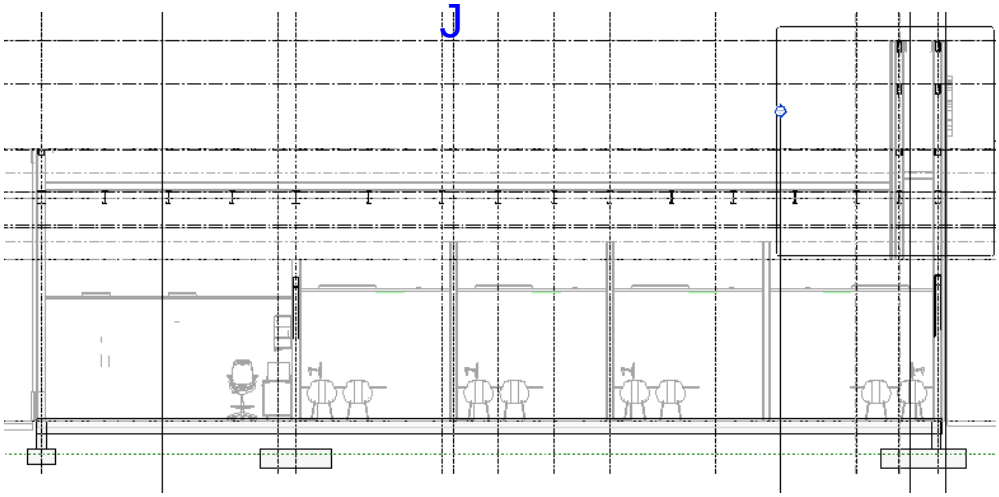


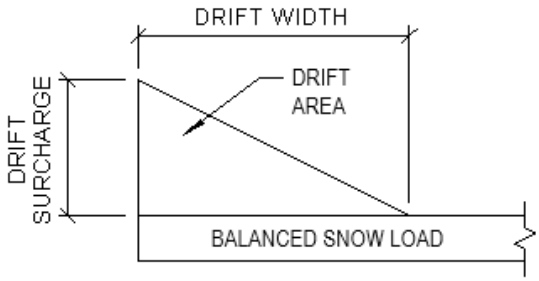
4. DESIGN SNOW LOADS:

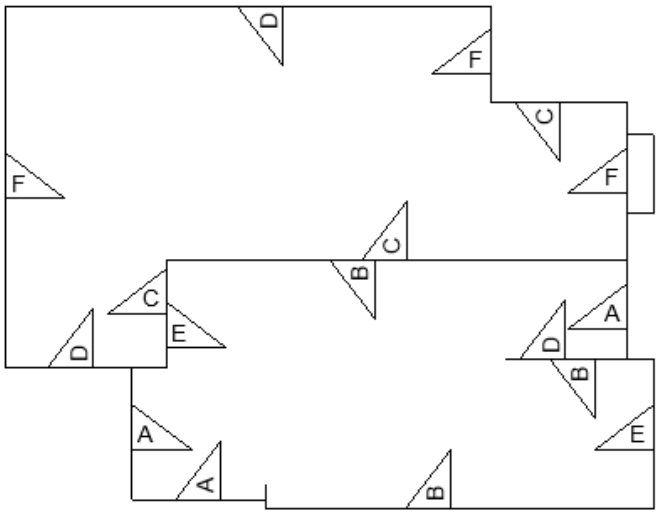
1.	GROUND SNOW LOAD:	P_G	20 PSF
2.	FLAT ROOF SNOW LOAD:	P_F	20 PSF
3.	SNOW EXPOSURE FACTOR:	C_E	1.0
4.	SNOW THERMAL FACTOR:	C_T	1.0
5.	SLOPE FACTOR:	C_S	1.0
6.	SNOW IMPORTANCE FACTOR:	I_S	1.0
7.	RAIN-ON-SNOW SURCHARGE:		5 PSF

SNOW DRIFT DIAGRAM

BALANCED SNOW LOAD : 14 PSF

DRIFT AREA	DRIFT SURCHARGE	DRIFT WIDTH
A	0 PSF	0'-0"
B	20.3 PSF TO 0 PSF	4'-11"
C	22.3 PSF TO 0 PSF	5'-5"
D	26.9 PSF TO 0 PSF	6'-6"
E	31.2 PSF TO 0 PSF	7'-7"
F	35.3 PSF TO 0 PSF	8'-7"





LOWER ROOF

Snow Loads : ASCE 7- 16

Nominal Snow Forces

Roof slope		=	1.2 deg
Horiz. eave to ridge dist (W)		=	48.2 ft
Roof length parallel to ridge (L)		=	80.0 ft
Type of Roof			Monoslope
Ground Snow Load	Pg	=	20.0 psf
Risk Category		=	II
Importance Factor	I	=	1.0
Roof R value	Rroof	=	30
Thermal Factor	Ct	=	1.000
Exposure Factor	Ce	=	1.0
Pf = 0.7*Ce*Ct*I*Pg		=	14.0 psf
Unobstructed Slippery Surface			no
Sloped-roof Factor	Cs	=	1.00
Balanced Snow Load		=	**14.0 psf**
Rain on Snow Surcharge Angle			0.96 deg
Code Maximum Rain Surcharge			5.0 psf
Rain on Snow Surcharge		=	0.0 psf
Ps plus rain surcharge		=	14.0 psf
Minimum Snow Load	Pm	=	20.0 psf
Uniform Roof Design Snow Load		=	**20.0 psf** use 20.0

Near ground level surface balanced snow load = **20.0 psf**

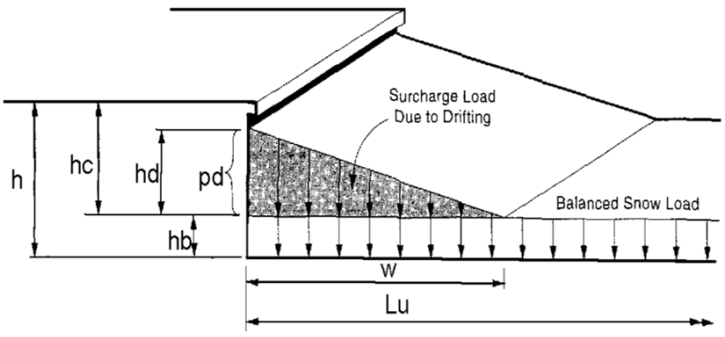
NOTE: Alternate spans of continuous beams shall be loaded with half the design roof snow load so as to produce the greatest possible effect - see code for loading diagrams and exceptions for gable roofs

0.55

Snow Drift 1 - Against roof projections, parapets, etc

B

Up or downwind fetch	lu	=	30.0 ft
Projection height	h	=	3.3 ft
Projection width/length	lp	=	60.0 ft
Snow density	γ	=	16.6 pcf
Balanced snow height	hb	=	0.84 ft
	hd	=	1.22 ft
	hc	=	2.46 ft
hc/hb >0.2 = 2.9	**Therefore, design for drift**		
Drift height (hd)		=	1.22 ft
Drift width	w	=	4.88 ft
Surcharge load:	pd = γ*hd	=	**20.3 psf**
Balanced Snow load:		=	14.0 psf
			34.3 psf



Note: If bottom of projection is at least 2 feet above hb then snow drift is not required.

Snow Drift 2- Against roof projections, parapets, etc

E

Up or downwind fetch	lu	=	63.0 ft
Projection height	h	=	3.3 ft
Projection width/length	lp	=	80.0 ft
Snow density	γ	=	16.6 pcf
Balanced snow height	hb	=	0.84 ft
	hd	=	1.88 ft
	hc	=	2.46 ft
hc/hb >0.2 = 2.9	**Therefore, design for drift**		
Drift height (hd)		=	1.88 ft
Drift width	w	=	7.51 ft
Surcharge load:	pd = γ*hd	=	**31.2 psf**
Balanced Snow load:		=	14.0 psf
			45.2 psf

UPPER ROOF

Snow Loads : ASCE 7- 16

Nominal Snow Forces

Roof slope		=	1.2 deg
Horiz. eave to ridge dist (W)		=	48.2 ft
Roof length parallel to ridge (L)		=	80.0 ft
Type of Roof			Monoslope
Ground Snow Load	Pg	=	20.0 psf
Risk Category		=	II
Importance Factor	I	=	1.0
Roof R value	Rroof	=	30
Thermal Factor	Ct	=	1.000
Exposure Factor	Ce	=	1.0
Pf = 0.7*Ce*Ct*I*Pg		=	14.0 psf
Unobstructed Slippery Surface			no
Sloped-roof Factor	Cs	=	1.00
Balanced Snow Load		=	**14.0 psf**
Rain on Snow Surcharge Angle			0.96 deg
Code Maximum Rain Surcharge			5.0 psf
Rain on Snow Surcharge		=	0.0 psf
Ps plus rain surcharge		=	14.0 psf
Minimum Snow Load	Pm	=	20.0 psf
Uniform Roof Design Snow Load		=	**20.0 psf** use 20.0

Near ground level surface balanced snow load = **20.0 psf**

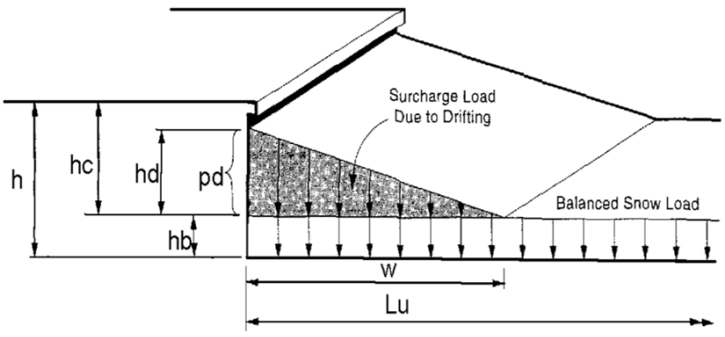
NOTE: Alternate spans of continuous beams shall be loaded with half the design roof snow load so as to produce the greatest possible effect - see code for loading diagrams and exceptions for gable roofs

0.55

Snow Drift 1 - Against roof projections, parapets, etc

C

Up or downwind fetch	lu	=	35.0 ft
Projection height	h	=	2.9 ft
Projection width/length	lp	=	60.0 ft
Snow density	γ	=	16.6 pcf
Balanced snow height	hb	=	0.84 ft
	hd	=	1.34 ft
	hc	=	2.06 ft
hc/hb >0.2 = 2.4	**Therefore, design for drift**		
Drift height (hd)		=	1.34 ft
Drift width	w	=	5.38 ft
Surcharge load:	pd = γ*hd	=	**22.3 psf**
Balanced Snow load:		=	14.0 psf
			36.3 psf



Note: If bottom of projection is at least 2 feet above hb then snow drift is not required.

Snow Drift 2- Against roof projections, parapets, etc

F

Up or downwind fetch	lu	=	80.0 ft
Projection height	h	=	3.3 ft
Projection width/length	lp	=	80.0 ft
Snow density	γ	=	16.6 pcf
Balanced snow height	hb	=	0.84 ft
	hd	=	2.13 ft
	hc	=	2.46 ft
hc/hb >0.2 = 2.9	**Therefore, design for drift**		
Drift height (hd)		=	2.13 ft
Drift width	w	=	8.51 ft
Surcharge load:	pd = γ*hd	=	**35.3 psf**
Balanced Snow load:		=	14.0 psf
			49.3 psf

UPPER ROOF

Snow Loads : ASCE 7- 16

Nominal Snow Forces

Roof slope		=	1.2 deg
Horiz. eave to ridge dist (W)		=	48.2 ft
Roof length parallel to ridge (L)		=	80.0 ft
Type of Roof			Monoslope
Ground Snow Load	Pg	=	20.0 psf
Risk Category		=	II
Importance Factor	I	=	1.0
Roof R value	Rroof	=	30
Thermal Factor	Ct	=	1.000
Exposure Factor	Ce	=	1.0
Pf = 0.7*Ce*Ct*I*Pg		=	14.0 psf
Unobstructed Slippery Surface			no
Sloped-roof Factor	Cs	=	1.00
Balanced Snow Load		=	**14.0 psf**
Rain on Snow Surcharge Angle			0.96 deg
Code Maximum Rain Surcharge			5.0 psf
Rain on Snow Surcharge		=	0.0 psf
Ps plus rain surcharge		=	14.0 psf
Minimum Snow Load	Pm	=	20.0 psf
Uniform Roof Design Snow Load		=	**20.0 psf** use 20.0

Near ground level surface balanced snow load = **20.0 psf**

NOTE: Alternate spans of continuous beams shall be loaded with half the design roof snow load so as to produce the greatest possible effect - see code for loading diagrams and exceptions for gable roofs

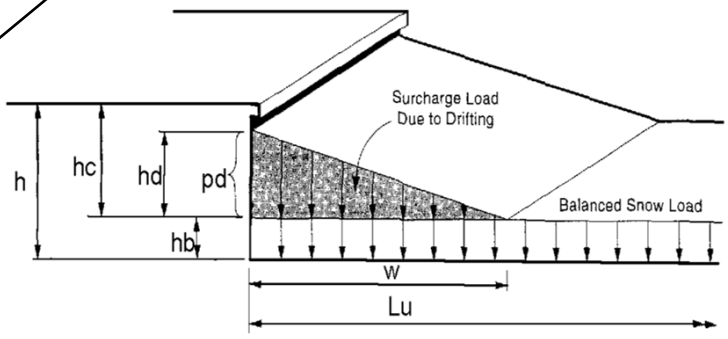
0.55

CONSERVATIVELY OK FOR 2.3 FT PARAPET

D

Snow Drift 1 - Against roof projections, parapets, etc

Up or downwind fetch	lu	=	48.0 ft
Projection height	h	=	3.3 ft
Projection width/length	lp	=	60.0 ft
Snow density	γ	=	16.6 pcf
Balanced snow height	hb	=	0.84 ft
	hd	=	1.62 ft
	hc	=	2.46 ft
hc/hb >0.2 = 2.9	**Therefore, design for drift**		
Drift height (hd)		=	1.62 ft
Drift width	w	=	6.47 ft
Surcharge load:	pd = γ*hd	=	**26.9 psf**
Balanced Snow load:		=	14.0 psf
			40.9 psf



Note: If bottom of projection is at least 2 feet above hb then snow drift is not required.

USE C

Snow Drift 2- Against roof projections, parapets, etc

Up or downwind fetch	lu	=	20.0 ft
Projection height	h	=	3.3 ft
Projection width/length	lp	=	80.0 ft
Snow density	γ	=	16.6 pcf
Balanced snow height	hb	=	0.84 ft
	hd	=	0.92 ft
	hc	=	2.46 ft
hc/hb >0.2 = 2.9	**Therefore, design for drift**		
Drift height (hd)		=	0.92 ft
Drift width	w	=	3.69 ft
Surcharge load:	pd = γ*hd	=	**15.3 psf**
Balanced Snow load:		=	14.0 psf
			29.3 psf

ROOF DECK DESIGN

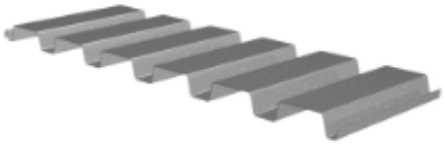
ROOF DECK SCHEDULE

DECK TYPE	DESIGN THICKNESS (IN)	FINISH	SECTION PROPERTIES				Fy (KSI)
			Ip^4	Sp (IN³/FT)	In^4	Sn (IN³/FT)	
1.5B20	0.0358	GALVANIZED G60	0.197	0.224	0.217	0.229	50

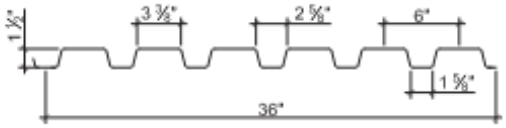
1.5B-36/1.5BI-36/1.5PLB-36 ROOF DECKS
GRADE 50 STEEL

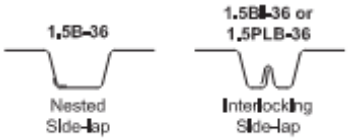
ASD

1.5B ROOF DECKS
- **1.5B-36 Deck used with Side-lap Screws**
- **1.5BI-36 Deck used with TSWs or BPs**
- **1.5PLB-36 Deck used with PunchLok® II System**



Nominal Dimensions





Inward Uniform Allowable Loads, ASD (psf)

Deck Gage	Spans	Criteria	Span (ft-in.) 2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
20	Single	W_n / Ω	1117	497	279	179	124	91	70	55	45	37	31
		L/240	---	478	202	103	60	38	25	18	13	10	7
	Double	W_n / Ω	1044	487	279	180	126	93	71	56	46	38	32
		L/240	---	---	---	---	---	---	67	47	34	26	20
	Triple	W_n / Ω	1260	598	345	223	156	115	88	70	57	47	40
		L/240	---	---	---	215	124	78	52	37	27	20	16

MAX SPAN = 5.1 FT
MAX DESIGN LOAD = 49.3 PSF + 1.0 PSF + 2.5 PSF = 52.8 PSF < 124 PSF

SDI Diaphragm Interaction Calculator V1

Last Revision 3 / 21 / 2018

Per AISI S-100-16, AISI S-310-16, AISI S-310-13, SDI DDM04

Deck Profile	1.5 x 6	WR	Support Fastener	5/8" arc spot	
Deck Gage	20		Support Fastener Pattern	36/4	
Deck Fy1, Fu1	33, 45	ksi	Sidelap Fastener	#10 screw	
MWFRS			Substrate thickness, t2	3/16"	
(-) Uplift, ASCE 7-10 (16)	21.1	psf	Substrate Fy2, Fu2	33, 45	ksi
			Number of Spans	3	
			AISI S-310	2016	

1.5 WR 20 gage deck (t1 = 0.0358) over 3/16" supports (t2 = 0.1875)

Support fastener = 5/8" arc spot with a 36/4 pattern

Sidelap fastener = #10 screw

Pnf = *2.088* *kips*

Pns = *0.558* *kips*

Uplift = 0

Sidelaps per Span	DDM04 Nominal Shear Strength, Sn, plf — Span, ft								
	4.50	5	5.5	6	6.5	7	7.5	8	8.5
1	756	684	618	563					
2	854	781	719	656	602	555	515	480	449
3	945	867	801	743	688	635	590	550	515
4	1030	949	878	817	763	715	664	620	581
5	1108	1025	952	888	831	780	734	689	646
6	1181	1096	1022	955	895	842	794	751	712
7	1247	1163	1087	1018	957	902	852	807	766

Sf = *0.006*

Ss = *0.016*

Uplift = 0

Sidelaps per Span	S310 Diaphragm Shear Stiffness, G' kips/in — Span, ft								
	4.5	5	5.5	6	6.5	7	7.5	8	8.5
1	19.5	20.9	22.0	23.0	23.9	24.6	25.2	25.7	26.0
2	20.2	21.7	23.1	24.3	25.3	26.3	27.1	27.8	28.3
3	20.6	22.3	23.8	25.1	26.3	27.4	28.4	29.3	30.0
4	20.9	22.7	24.3	25.7	27.1	28.3	29.4	30.4	31.3
5	21.2	23.0	24.6	26.2	27.6	28.9	30.2	31.3	32.2
6	21.3	23.2	24.9	26.6	28.1	29.5	30.8	31.9	33.0
7	21.5	23.4	25.2	26.8	28.4	29.9	31.3	32.5	33.7

Uplift = 21.1 x 0.6 = 12.66 psf

Pnft, kips	2.028	2.017	2.006	1.994	1.982	1.970	1.956	1.943	1.929
Sidelaps per Span	ASD Interactive Allowable Shear Strength, Snf/Ωd, plf — Span, ft								
	4.5	5	5.5	6	6.5	7	7.5	8	8.5
1	343	309	278	252					
2	388	354	324	295	270	248	229	212	198
3	430	394	362	335	310	285	264	245	228
4	469	431	398	369	343	321	298	277	259
5	506	466	432	401	374	350	329	310	289
6	539	499	464	432	404	379	356	336	318
7	569	529	494	461	432	406	383	362	342

Uplift = 21.1 x 1.0 = 21.1 psf

Pnft, kips	2.017	2.005	1.992	1.978	1.964	1.949	1.933	1.917	1.901
	LRFD Interactive Shear Strength,ϕd Snf, plf								
Sidelaps per Span	Span, ft								
	4.5	5	5.5	6	6.5	7	7.5	8	8.5
1	551	496	446	403					
2	623	568	520	473	432	397	366	339	316
3	691	632	581	537	496	457	422	392	365
4	754	693	639	592	550	514	478	444	414
5	812	749	693	644	600	562	527	496	463
6	866	802	745	694	648	608	571	538	508
7	915	851	793	741	694	652	613	579	548

F Fasteners Fail in tension. See AISI S310

MAX ULTIMATE REACTION AT X-BRACE = 13075 #
13075 * 2 * 0.6 = 15690 # MAXIMUM POSSIBLE LATERAL LOAD TO X BRACE FRAME

MINIMUM LENGTH OF SHEAR TRANSFER FROM DECK TO BEAMS AT ANY BRACED FRAME = 47.5 FT

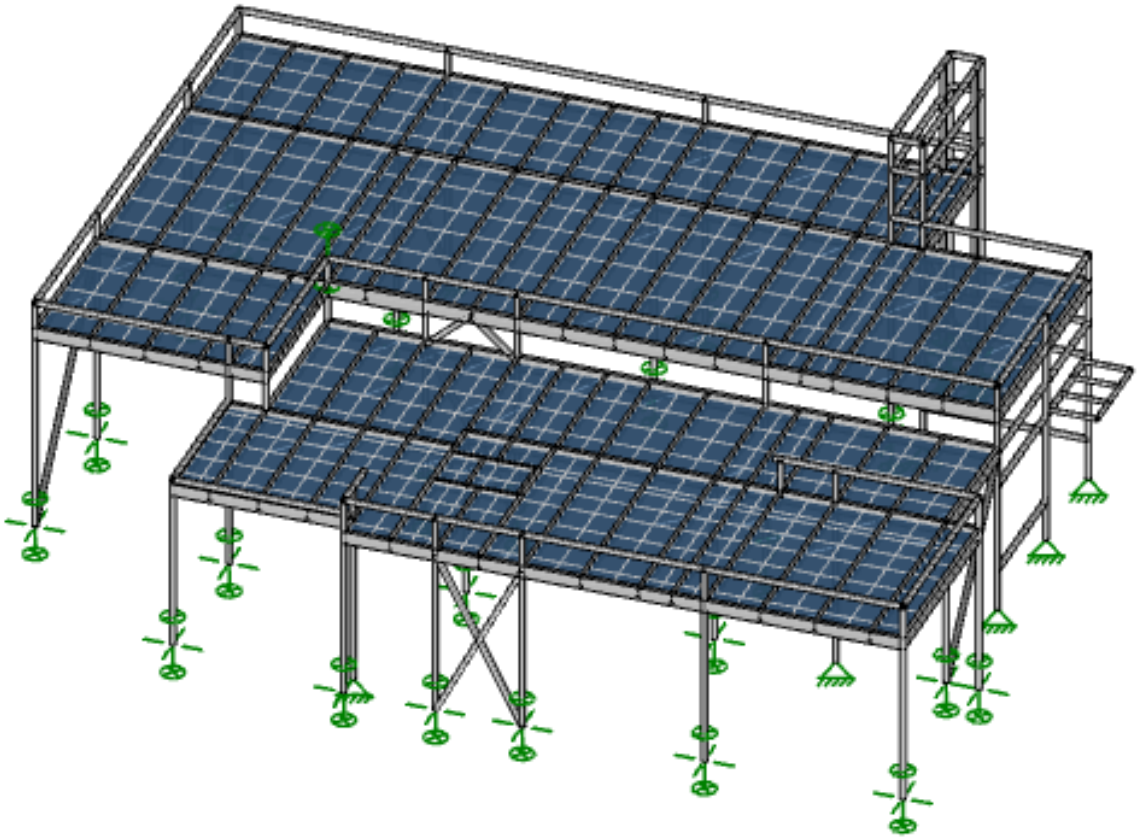
15690 / 47.5 = 330 PLF OKAY

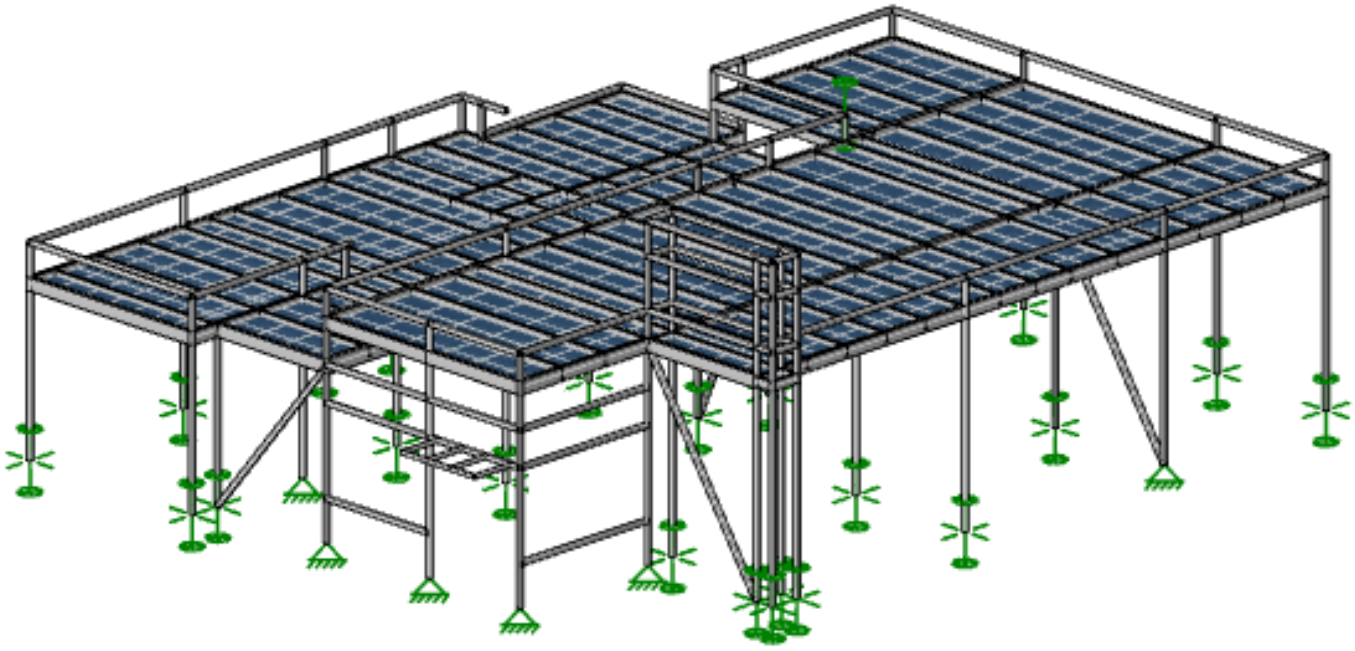
MAX ULTIMATE REACTION AT SINGLE BRACE = 12886 #
12886 * 0.6 = 7732 # MAXIMUM POSSIBLE LATERAL LOAD TO X BRACE FRAME

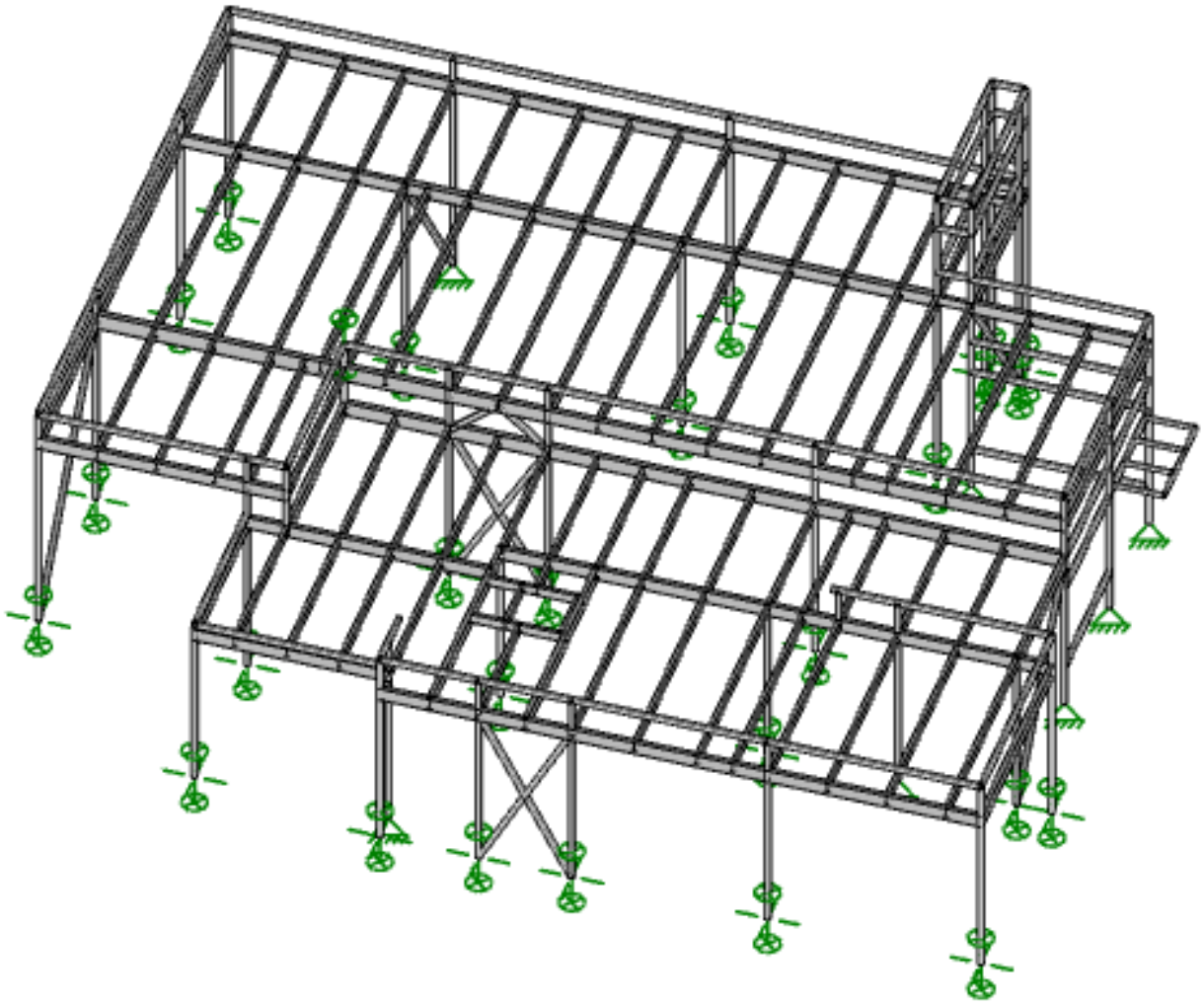
MINIMUM LENGTH OF SHEAR TRANSFER FROM DECK TO BEAMS AT ANY BRACED FRAME = 30 FT

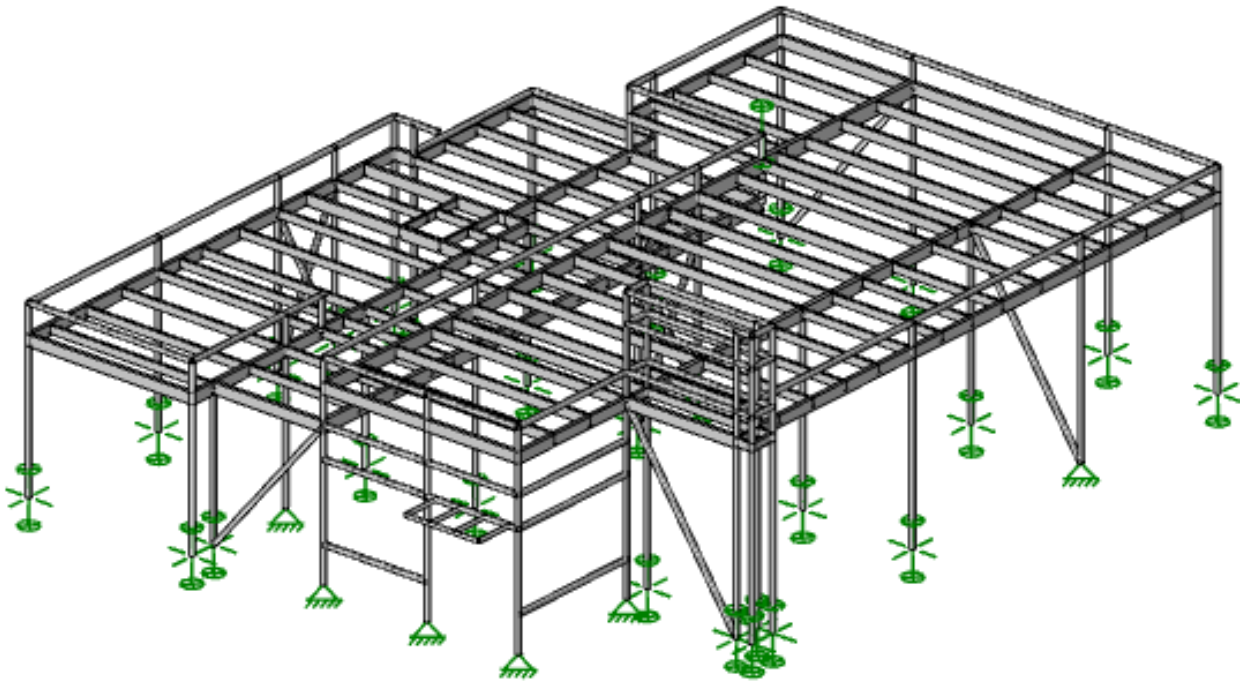
7732 / 30 = 258 PLF OKAY

STRUCTURAL FRAMING DESIGN

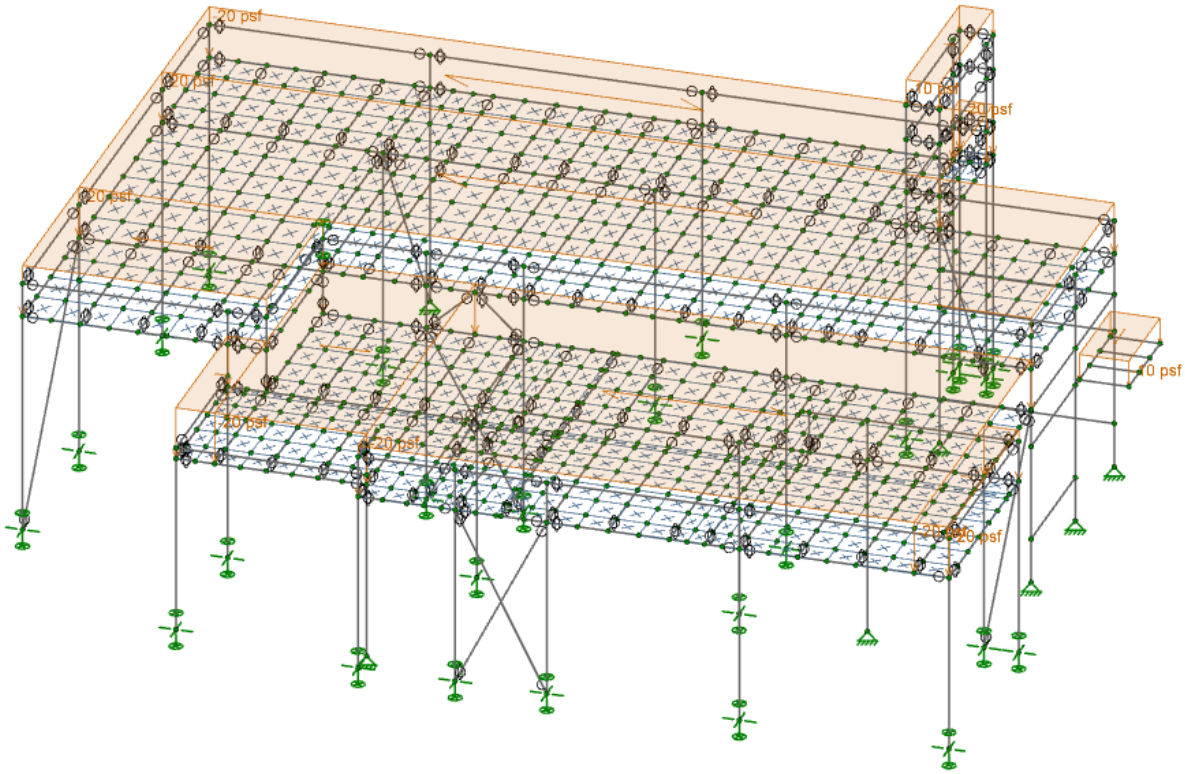




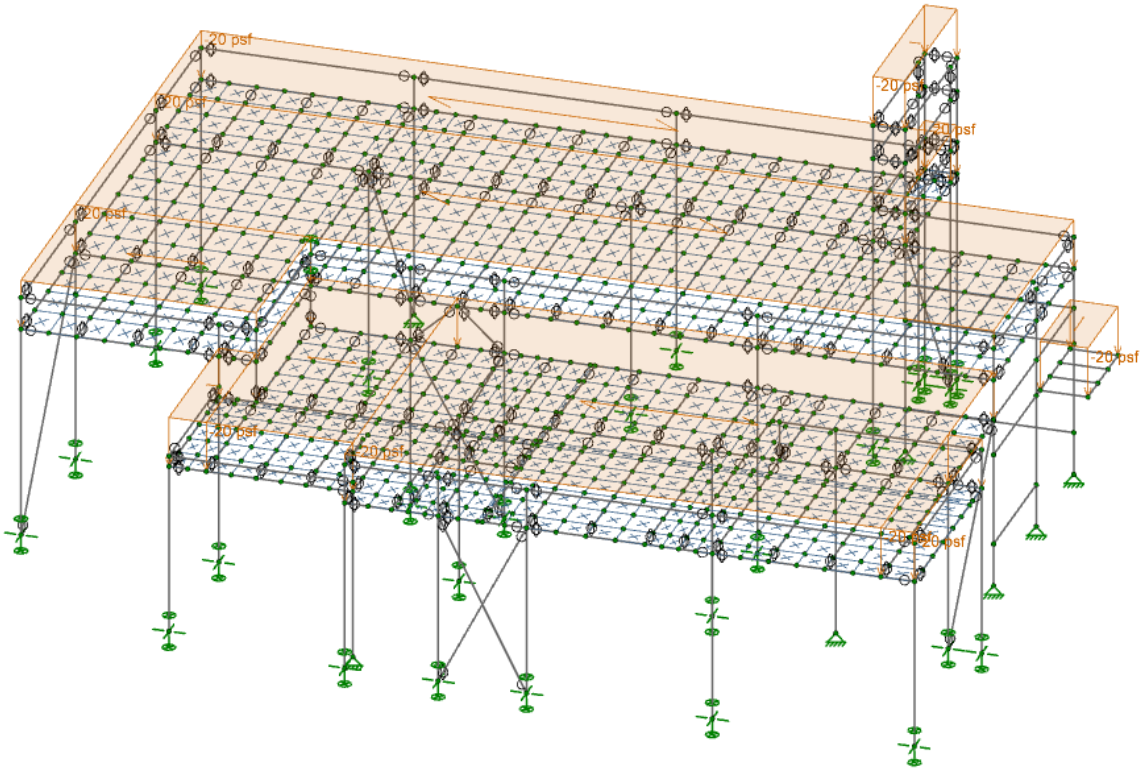




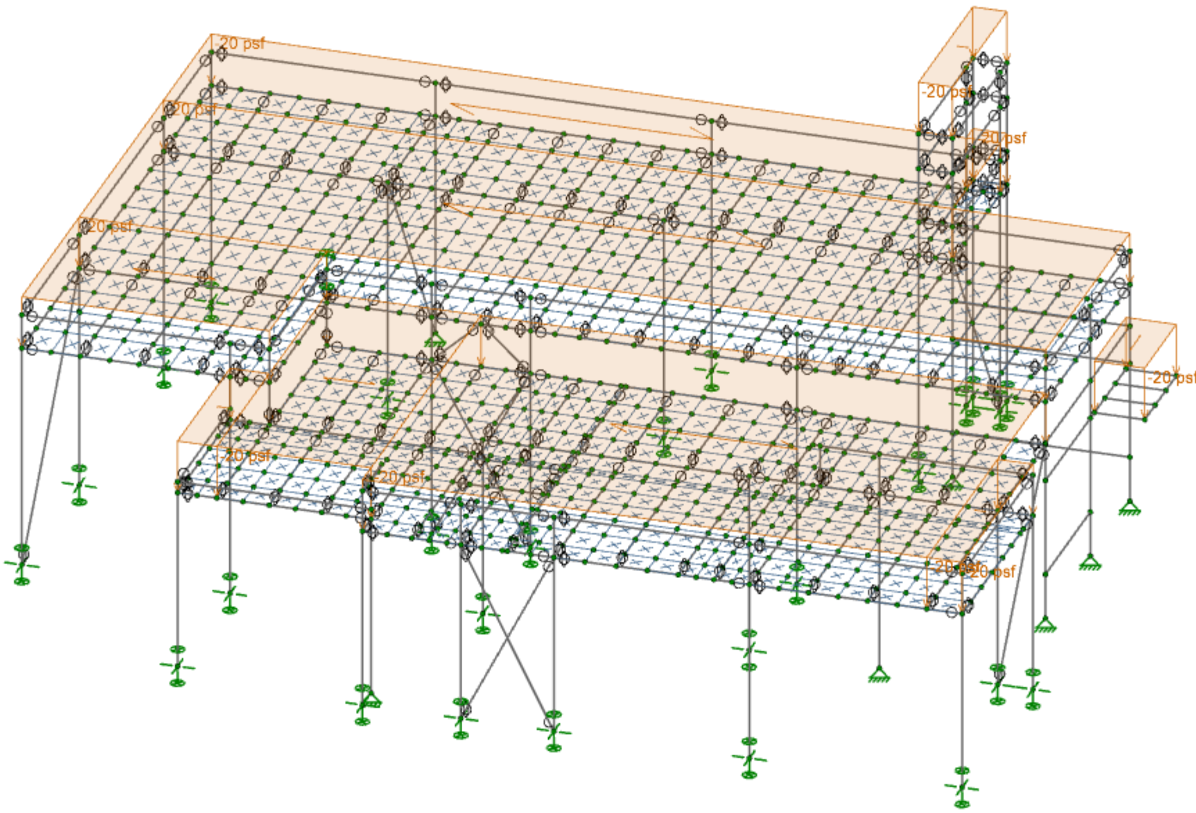
DEAD LOAD



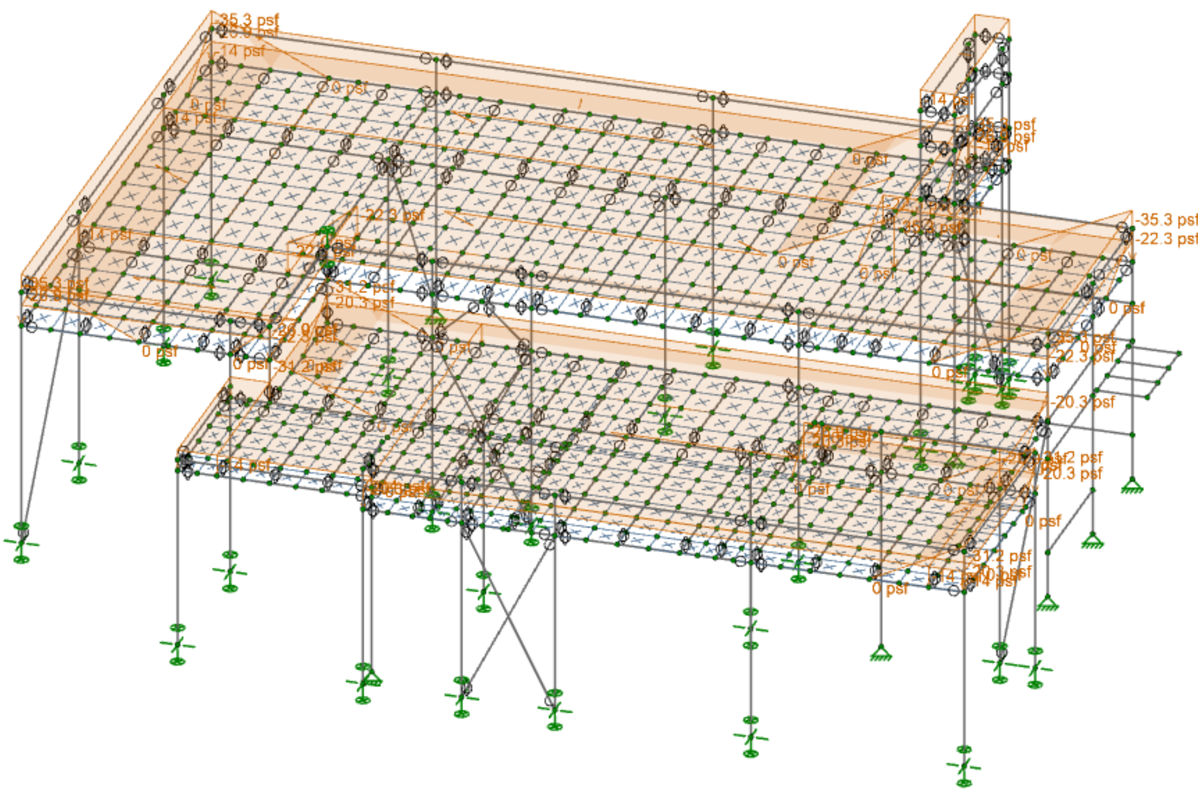
LIVE LOAD



SNOW LOAD

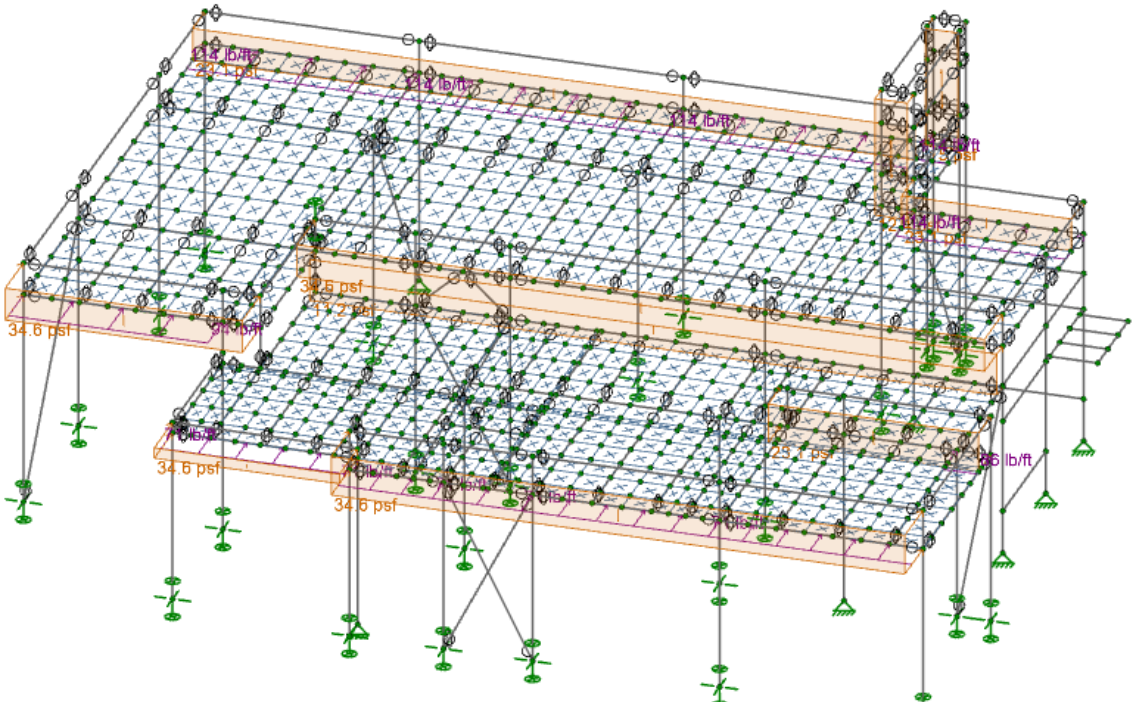


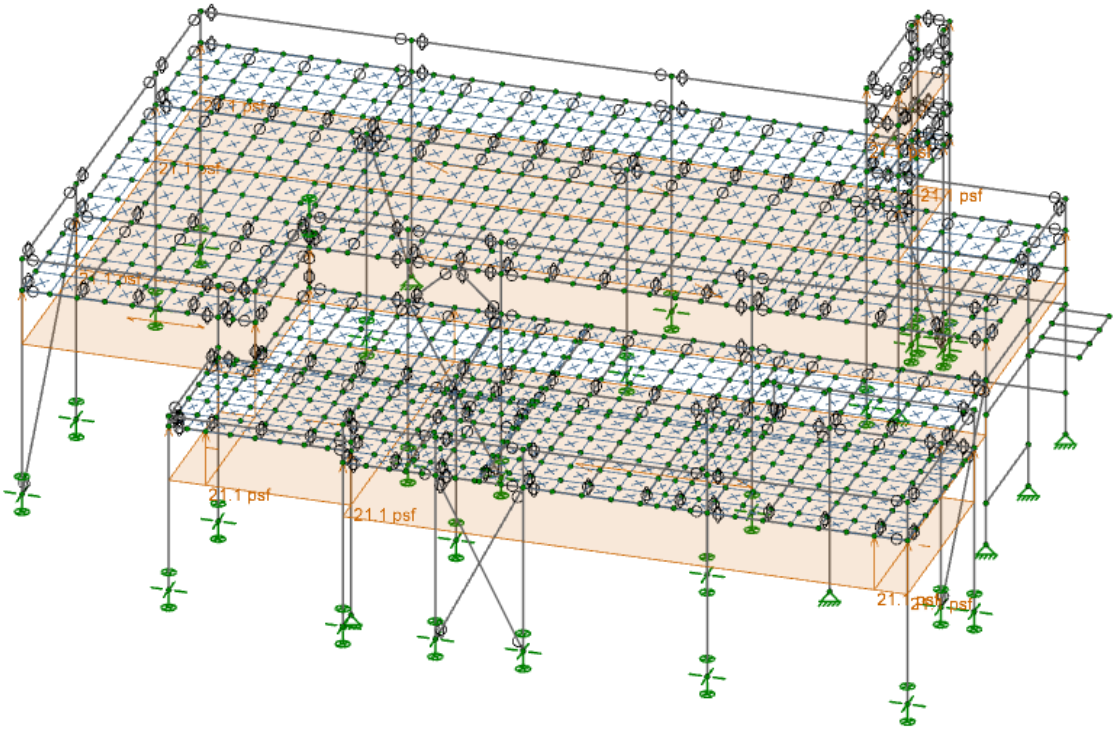
SNOW LOAD - NON SHEDDING



EXAMPLE OF WIND LOAD APPLICATION

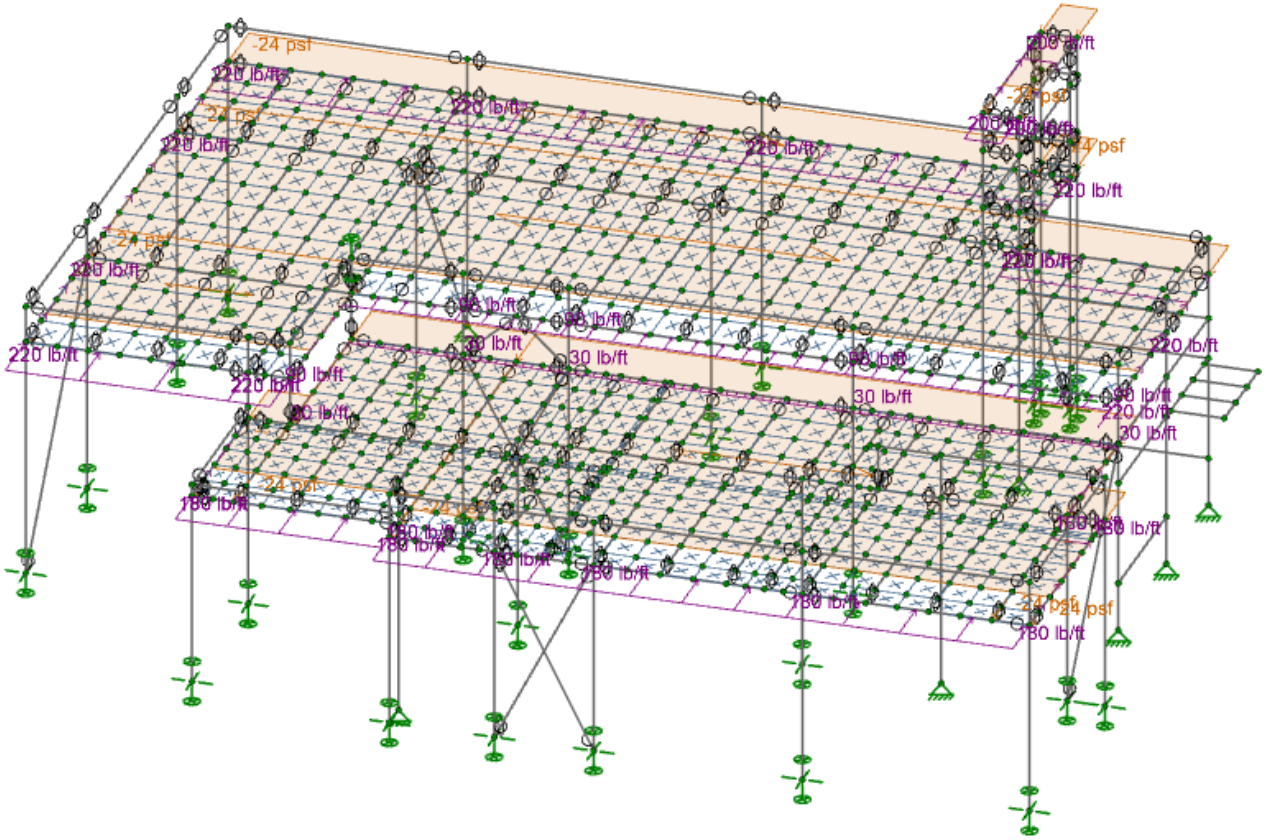
PERFORMED FOR X, Y AND Z DIRECTIONS AS + AND - DIRECTIONS AND + AND - GCpi TO ACCOUNT FOR SPLIT LEVEL BEHAVIOR (LOAD TRANSFER BETWEEN LEVELS DUE AFFECTED BY INTERNAL PRESSURIZATION.





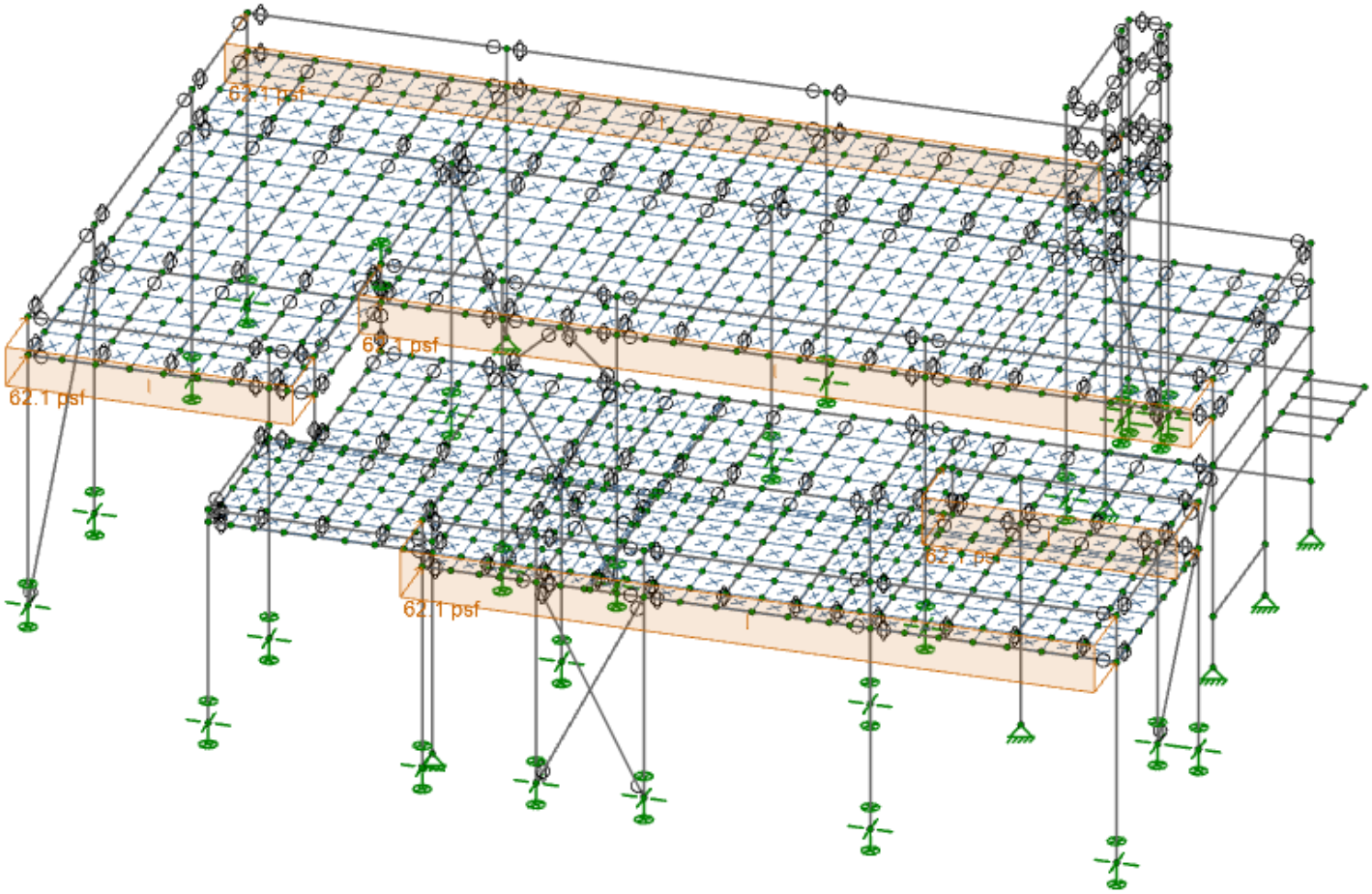
EXAMPLE OF SEISMIC LOAD APPLICATION

PERFORMED FOR X AND Z DIRECTIONS AS + AND - DIRECTIONS.



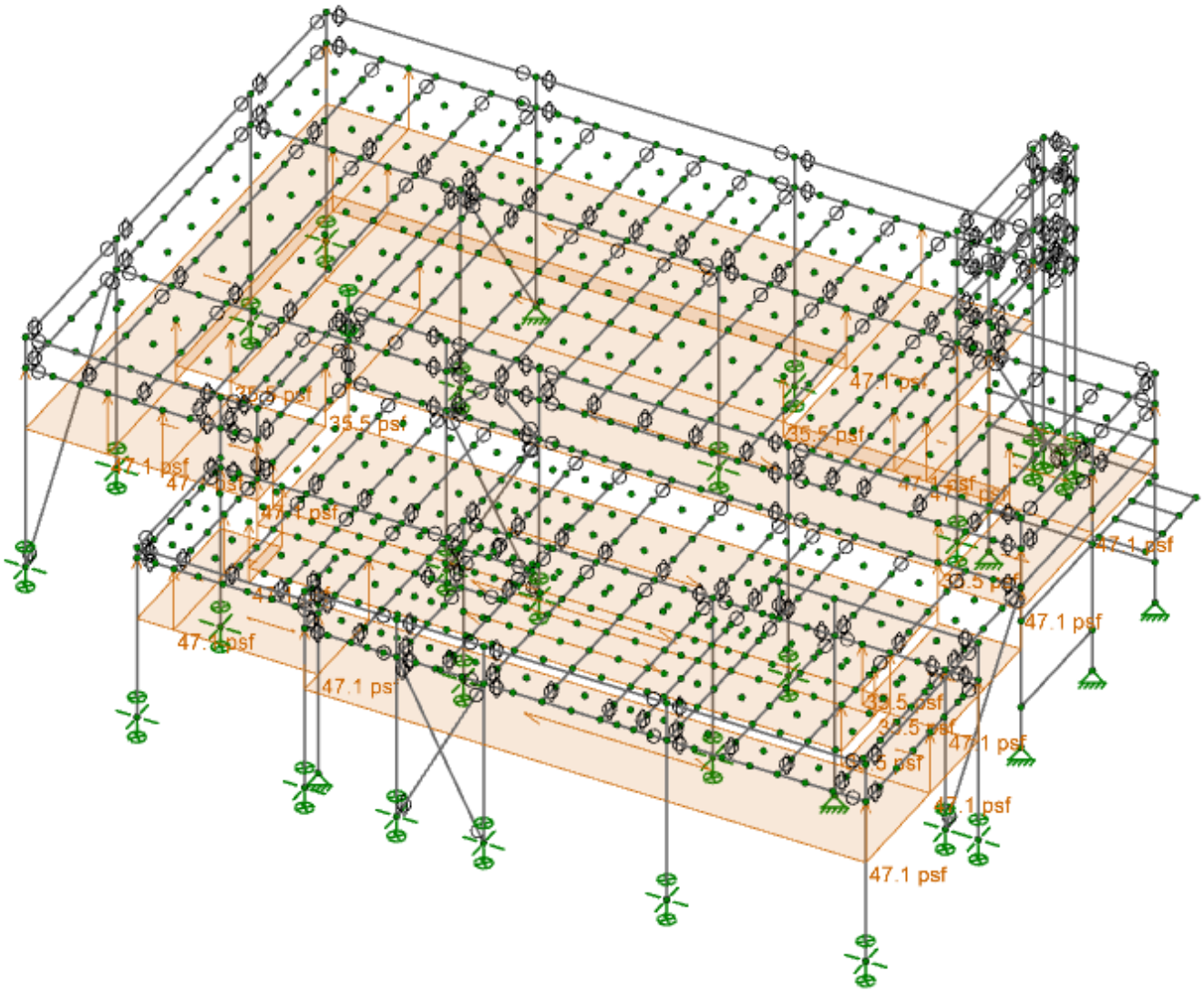
EXAMPLE OF CC WIND APPLICATION

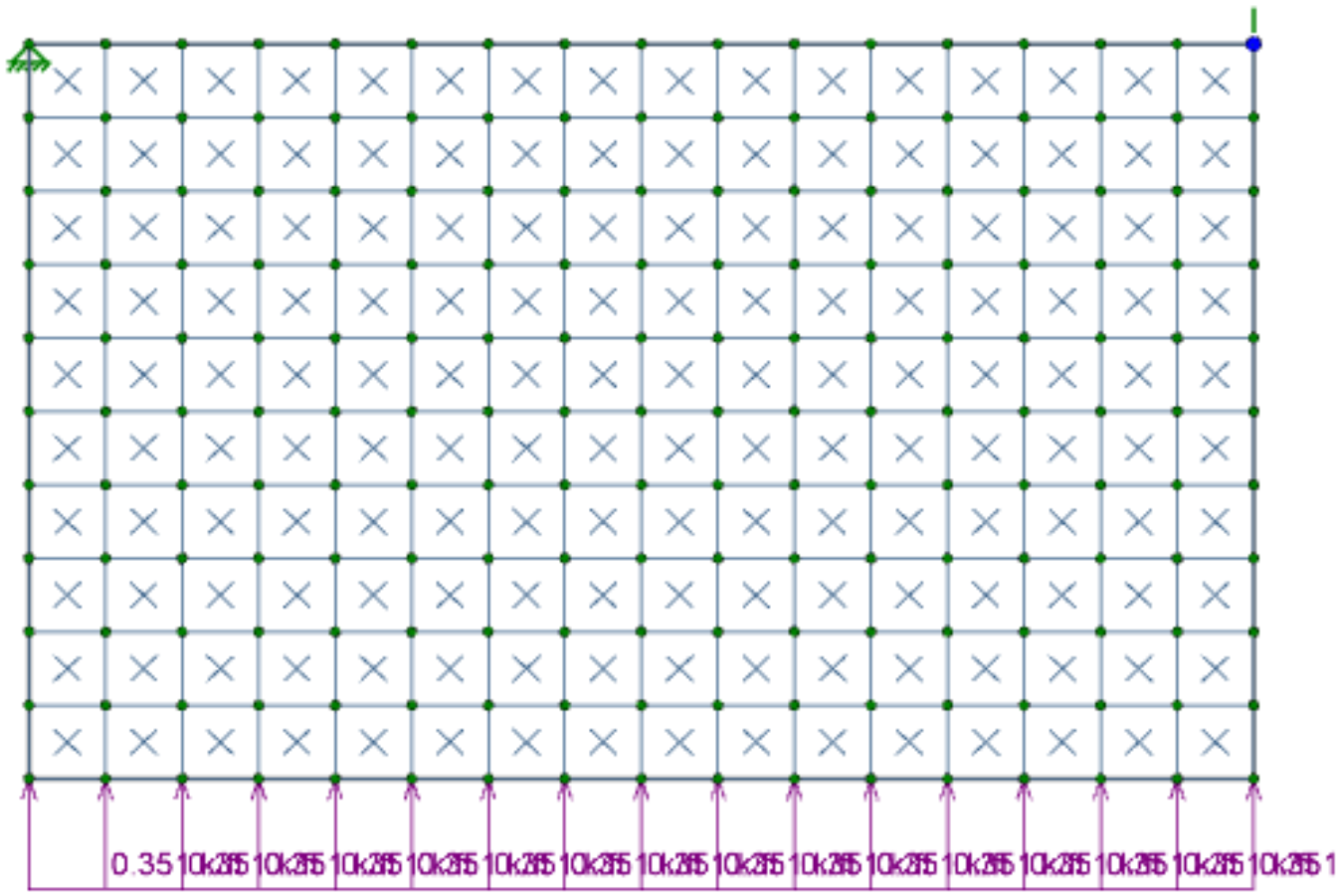
PERFORMED FOR X AND Z DIRECTIONS ON PARAPETS FOR STRESS AND SERVICEABILITY CHECKS.



EXAMPLE OF CC WIND APPLICATION

PERFORMED FOR Y DIRECTION FOR BEAM UPLIFT (MOST BEAMS ARE NOT BOTTOM CHORD BRACED). CONSERVATIVE USE OF ZONE 2 AND ZONE 1 PRESSURES INCLUDING +GCpi.





Diaphragm Deflection		
Chord Area	6.49	sq in
Deck K1	0.394	
Deck K2	1056	
Deck K4	3.78	
Deck Dn	802	
Deck Span (Lv)	5	ft
G'	18.27	kip/in
Web Shear Deflection	0.32	in
Bending Deflection	0.01	in
Total Deflection	0.33	in

Procedure:

Fictitious roof roughly same size as project with fictitious lateral load.
Obtain diaphragm deflection based on roof properties of project.
Adjust plate thickness to obtain equal or slightly larger diaphragm deflection.
Final plate thickness (0.001" herein) used for semi-rigid diaphragm analysis.
Note for small project with low deflection, shear modulus is not altered.

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]	Yield [ksi]	Ry	Fu [ksi]	Rt
1	A992	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	0.3	0.65	0.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
4	A500 Gr.B	29000	11154	0.3	0.65	0.527	46	1.4	58	1.3
5	A500 Gr.C	29000	11154	0.3	0.65	0.527	50	1.4	62	1.3
6	A53 Gr.B	29000	11154	0.3	0.65	0.49	35	1.6	60	1.2
7	A1085	29000	11154	0.3	0.65	0.49	50	1.4	65	1.3
8	A913 Gr.65	29000	11154	0.3	0.65	0.49	65	1.1	80	1.1

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	column3	HSS5X5X3	Column	Tube	A500 Gr.C	Typical	3.28	12.6	12.6	19.9
2	column4	HSS5X5X4	Column	Tube	A500 Gr.C	Typical	4.3	16	16	25.8
3	column5	HSS5X5X5	Column	Tube	A500 Gr.C	Typical	5.26	19	19	31.2
4	column6	HSS5X5X6	Column	Tube	A500 Gr.C	Typical	6.18	21.7	21.7	36.1
5	column8	HSS5X5X8	Column	Tube	A500 Gr.C	Typical	7.88	26	26	44.6
6	beam1	W10X12	Beam	Wide Flange	A992	Typical	3.54	2.18	53.8	0.055
7	beam2	W14X22	Beam	Wide Flange	A992	Typical	6.49	7	199	0.208
8	beam3	W10X22	Beam	Wide Flange	A992	Typical	6.49	11.4	118	0.239
9	beam4	W16X26	Beam	Wide Flange	A992	Typical	7.68	9.59	301	0.262
10	beam5	W18X35	Beam	Wide Flange	A992	Typical	10.3	15.3	510	0.506
11	girt1	HSS5X5X4	Beam	Tube	A500 Gr.C	Typical	4.3	16	16	25.8
12	girt2	HSS5X5X5	Beam	Tube	A500 Gr.C	Typical	5.26	19	19	31.2
13	girt3	HSS5X5X6	Beam	Tube	A500 Gr.C	Typical	6.18	21.7	21.7	36.1
14	girt4	HSS5X5X8	Beam	Tube	A500 Gr.C	Typical	7.88	26	26	44.6
15	girt5	HSS5X5X8	Beam	Tube	A500 Gr.C	Typical	7.88	26	26	44.6
16	brace1	HSS5X5X4	VBrace	Tube	A500 Gr.C	Typical	4.3	16	16	25.8
17	brace2	HSS5X5X4	VBrace	Tube	A500 Gr.C	Typical	4.3	16	16	25.8

Member Primary Data

	Label	I Node	J Node	Section/Shape	Type	Design List	Material	Design Rule
1	M1	N6	N48	column4	Column	Tube	A500 Gr.C	Typical
2	M2	N7	N46	column4	Column	Tube	A500 Gr.C	Typical
3	M3	N1	N41	column4	Column	Tube	A500 Gr.C	Typical
4	M4	N2	N42	column8	Column	Tube	A500 Gr.C	Typical
5	M5	N3	N43	column8	Column	Tube	A500 Gr.C	Typical
6	M6	N4	N44	column4	Column	Tube	A500 Gr.C	Typical
7	M7	N5	N45	column4	Column	Tube	A500 Gr.C	Typical
8	M8	N39	N40	beam2	Beam	Wide Flange	A992	Typical
9	M9	N40	N34	beam2	Beam	Wide Flange	A992	Typical
10	M10	N34	N35	beam2	Beam	Wide Flange	A992	Typical
11	M11	N35	N36	beam2	Beam	Wide Flange	A992	Typical
12	M12	N36	N37	beam2	Beam	Wide Flange	A992	Typical
13	M13	N37	N38	beam2	Beam	Wide Flange	A992	Typical
14	M14	N9	N75	column8	Column	Tube	A500 Gr.C	Typical
15	M15	N10	N50	column4	Column	Tube	A500 Gr.C	Typical
16	M16	N11	N51	column4	Column	Tube	A500 Gr.C	Typical
17	M233	N12	N55	column4	Column	Tube	A500 Gr.C	Typical
18	M18	N13	N53	column8	Column	Tube	A500 Gr.C	Typical
19	M19	N14	N56	column4	Column	Tube	A500 Gr.C	Typical
20	M20	N38	N54	beam2	Beam	Wide Flange	A992	Typical
21	M21	N54	N53	beam2	Beam	Wide Flange	A992	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Section/Shape	Type	Design List	Material	Design Rule
22	M22	N53	N52	beam2	Beam	Wide Flange	A992	Typical
23	M23	N52	N51	beam2	Beam	Wide Flange	A992	Typical
24	M24	N51	N50	beam2	Beam	Wide Flange	A992	Typical
25	M25	N19	N59	column8	Column	Tube	A500 Gr.C	Typical
26	M26	N53	N57	beam2	Beam	Wide Flange	A992	Typical
27	M27	N58	N60	beam2	Beam	Wide Flange	A992	Typical
28	M28	N60	N61	beam2	Beam	Wide Flange	A992	Typical
29	M29	N20	N62	column4	Column	Tube	A500 Gr.C	Typical
30	M30	N26	N63	column4	Column	Tube	A500 Gr.C	Typical
31	M31	N18	N72	column8	Column	Tube	A500 Gr.C	Typical
32	M32	N17	N71	column8	Column	Tube	A500 Gr.C	Typical
33	M33	N16	N70	column8	Column	Tube	A500 Gr.C	Typical
34	M34	N57	N66	beam4	Beam	Wide Flange	A992	Typical
35	M35	N66	N65	beam4	Beam	Wide Flange	A992	Typical
36	M36	N65	N64	beam4	Beam	Wide Flange	A992	Typical
37	M37	N58	N69	beam4	Beam	Wide Flange	A992	Typical
38	M38	N69	N68	beam4	Beam	Wide Flange	A992	Typical
39	M39	N68	N67	beam4	Beam	Wide Flange	A992	Typical
40	M40	N39	N49	beam2	Beam	Wide Flange	A992	Typical
41	M41	N74	N77	beam2	Beam	Wide Flange	A992	Typical
42	M42	N8	N78	column8	Column	Tube	A500 Gr.C	Typical
43	M43	N15	N85	column8	Column	Tube	A500 Gr.C	Typical
44	M44	N21	N86	column4	Column	Tube	A500 Gr.C	Typical
45	M45	N27	N87	column4	Column	Tube	A500 Gr.C	Typical
46	M46	N28	N88	column8	Column	Tube	A500 Gr.C	Typical
47	M47	N29	N89	column8	Column	Tube	A500 Gr.C	Typical
48	M48	N30	N212	column8	Column	Tube	A500 Gr.C	Typical
49	M49	N77	N79	beam2	Beam	Wide Flange	A992	Typical
50	M50	N79	N80	beam2	Beam	Wide Flange	A992	Typical
51	M51	N80	N81	beam2	Beam	Wide Flange	A992	Typical
52	M52	N81	N82	beam2	Beam	Wide Flange	A992	Typical
53	M53	N82	N83	beam2	Beam	Wide Flange	A992	Typical
54	M54	N83	N84	beam2	Beam	Wide Flange	A992	Typical
55	M55	N32	N216	column4	Column	Tube	A500 Gr.C	Typical
56	M56	N33	N217	column4	Column	Tube	A500 Gr.C	Typical
57	M58	N24	N213	column8	Column	Tube	A500 Gr.C	Typical
58	M59	N25	N214	column8	Column	Tube	A500 Gr.C	Typical
59	M60	N84	N94	beam1	Beam	Wide Flange	A992	Typical
60	M61	N94	N95	beam1	Beam	Wide Flange	A992	Typical
61	M62	N95	N93	beam1	Beam	Wide Flange	A992	Typical
62	M63	N93	N84	beam1	Beam	Wide Flange	A992	Typical
63	M64	N84	N91	beam1	Beam	Wide Flange	A992	Typical
64	M65	N91	N92	beam1	Beam	Wide Flange	A992	Typical
65	M66	N92	N93	beam2	Beam	Wide Flange	A992	Typical
66	M67	N92	N61	beam2	Beam	Wide Flange	A992	Typical
67	M68	N64	N145	beam2	Beam	Wide Flange	A992	Typical
68	M70	N80	N102	beam2	Beam	Wide Flange	A992	Typical
69	M71	N102	N103	beam2	Beam	Wide Flange	A992	Typical
70	M72	N103	N91	beam2	Beam	Wide Flange	A992	Typical
71	M73	N22	N102	column8	Column	Tube	A500 Gr.C	Typical
72	M74	N23	N103	column4	Column	Tube	A500 Gr.C	Typical
73	M75	N102	N82	beam3	Beam	Wide Flange	A992	Typical
74	M76	N103	N83	beam1	Beam	Wide Flange	A992	Typical
75	M80	N36	N107	beam1	Beam	Wide Flange	A992	Typical
76	M81	N108	N51	beam1	Beam	Wide Flange	A992	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Section/Shape	Type	Design List	Material	Design Rule
77	M82	N37	N109	beam1	Beam	Wide Flange	A992	Typical
78	M83	N110	N52	beam1	Beam	Wide Flange	A992	Typical
79	M84	N111	N53	beam1	Beam	Wide Flange	A992	Typical
80	M85	N113	N112	beam1	Beam	Wide Flange	A992	Typical
81	M86	N114	N115	beam1	Beam	Wide Flange	A992	Typical
82	M87	N112	N118	beam1	Beam	Wide Flange	A992	Typical
83	M88	N52	N116	beam1	Beam	Wide Flange	A992	Typical
84	M89	N109	N117	beam1	Beam	Wide Flange	A992	Typical
85	M90	N51	N66	beam1	Beam	Wide Flange	A992	Typical
86	M91	N115	N120	beam1	Beam	Wide Flange	A992	Typical
87	M92	N107	N119	beam1	Beam	Wide Flange	A992	Typical
88	M93	N121	N122	beam2	Beam	Wide Flange	A992	Typical
89	M94	N122	N124	beam1	Beam	Wide Flange	A992	Typical
90	M95	N106	N123	beam1	Beam	Wide Flange	A992	Typical
91	M97	N128	N130	beam1	Beam	Wide Flange	A992	Typical
92	M98	N125	N127	beam1	Beam	Wide Flange	A992	Typical
93	M99	N126	N106	beam1	Beam	Wide Flange	A992	Typical
94	M100	N35	N129	beam1	Beam	Wide Flange	A992	Typical
95	M101	N134	N133	beam1	Beam	Wide Flange	A992	Typical
96	M102	N136	N135	beam1	Beam	Wide Flange	A992	Typical
97	M103	N40	N231	beam1	Beam	Wide Flange	A992	Typical
98	M104	N138	N139	beam1	Beam	Wide Flange	A992	Typical
99	M105	N49	N232	beam2	Beam	Wide Flange	A992	Typical
100	M106	N141	N229	beam1	Beam	Wide Flange	A992	Typical
101	M107	N143	N230	beam1	Beam	Wide Flange	A992	Typical
102	M108	N139	N145	beam2	Beam	Wide Flange	A992	Typical
103	M109	N229	N146	beam1	Beam	Wide Flange	A992	Typical
104	M110	N230	N64	beam1	Beam	Wide Flange	A992	Typical
105	M111	N231	N147	beam1	Beam	Wide Flange	A992	Typical
106	M112	N50	N65	beam1	Beam	Wide Flange	A992	Typical
107	M113	N150	N148	beam1	Beam	Wide Flange	A992	Typical
108	M114	N148	N149	beam1	Beam	Wide Flange	A992	Typical
109	M115	N151	N152	W12X16	Beam	Wide Flange	A992	Typical
110	M116	N152	N153	beam1	Beam	Wide Flange	A992	Typical
111	M117	N154	N155	W12X16	Beam	Wide Flange	A992	Typical
112	M118	N155	N156	beam1	Beam	Wide Flange	A992	Typical
113	M119	N157	N158	W12X16	Beam	Wide Flange	A992	Typical
114	M120	N158	N159	beam1	Beam	Wide Flange	A992	Typical
115	M121	N102	N160	W12X16	Beam	Wide Flange	A992	Typical
116	M127	N169	N92	W12X16	Beam	Wide Flange	A992	Typical
117	M128	N168	N91	W12X16	Beam	Wide Flange	A992	Typical
118	M129	N69	N170	W12X16	Beam	Wide Flange	A992	Typical
119	M130	N171	N103	W12X16	Beam	Wide Flange	A992	Typical
120	M131	N170	N172	beam1	Beam	Wide Flange	A992	Typical
121	M132	N173	N174	W12X16	Beam	Wide Flange	A992	Typical
122	M133	N174	N175	beam1	Beam	Wide Flange	A992	Typical
123	M134	N176	N177	W12X16	Beam	Wide Flange	A992	Typical
124	M135	N177	N178	beam1	Beam	Wide Flange	A992	Typical
125	M136	N179	N180	W12X16	Beam	Wide Flange	A992	Typical
126	M137	N180	N181	beam1	Beam	Wide Flange	A992	Typical
127	M138	N67	N182	W12X16	Beam	Wide Flange	A992	Typical
128	M139	N68	N183	W12X16	Beam	Wide Flange	A992	Typical
129	M140	N182	N184	beam1	Beam	Wide Flange	A992	Typical
130	M141	N183	N185	beam1	Beam	Wide Flange	A992	Typical
131	M142	N186	N187	W12X16	Beam	Wide Flange	A992	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Section/Shape	Type	Design List	Material	Design Rule
132	M143	N187	N188	beam1	Beam	Wide Flange	A992	Typical
133	M144	N189	N190	beam1	Beam	Wide Flange	A992	Typical
134	M145	N189	N191	W12X16	Beam	Wide Flange	A992	Typical
135	M146	N192	N151	beam1	Beam	Wide Flange	A992	Typical
136	M147	N193	N154	beam1	Beam	Wide Flange	A992	Typical
137	M148	N194	N157	beam1	Beam	Wide Flange	A992	Typical
138	M149	N74	N196	beam1	Beam	Wide Flange	A992	Typical
139	M150	N74	N197	beam2	Beam	Wide Flange	A992	Typical
140	M151	N139	N198	column4	Column	Tube	A500 Gr.C	Typical
141	M152	N197	N199	beam1	Beam	Wide Flange	A992	Typical
142	M153	N145	N199	column4	Column	Tube	A500 Gr.C	Typical
143	M154	N67	N79	beam5	Beam	Wide Flange	A992	Typical
144	M156	N199	N201	W12X16	Beam	Wide Flange	A992	Typical
145	M157	N78	N85	girt2	Beam	Tube	A500 Gr.C	Typical
146	M158	N85	N86	girt2	Beam	Tube	A500 Gr.C	Typical
147	M159	N86	N87	girt2	Beam	Tube	A500 Gr.C	Typical
148	M160	N87	N88	girt2	Beam	Tube	A500 Gr.C	Typical
149	M161	N88	N89	girt2	Beam	Tube	A500 Gr.C	Typical
150	M162	N89	N90	girt2	Beam	Tube	A500 Gr.C	Typical
151	M163	N90	N99	girt1	Beam	Tube	A500 Gr.C	Typical
152	M164	N99	N100	girt1	Beam	Tube	A500 Gr.C	Typical
153	M165	N100	N98	girt1	Beam	Tube	A500 Gr.C	Typical
154	M166	N90	N98	girt1	Beam	Tube	A500 Gr.C	Typical
155	M167	N98	N97	girt1	Beam	Tube	A500 Gr.C	Typical
156	M168	N97	N63	girt2	Beam	Tube	A500 Gr.C	Typical
157	M169	N63	N62	girt2	Beam	Tube	A500 Gr.C	Typical
158	M170	N62	N59	girt2	Beam	Tube	A500 Gr.C	Typical
159	M171	N59	N72	girt2	Beam	Tube	A500 Gr.C	Typical
160	M172	N72	N71	girt2	Beam	Tube	A500 Gr.C	Typical
161	M173	N71	N70	girt2	Beam	Tube	A500 Gr.C	Typical
162	M174	N70	N200	girt2	Beam	Tube	A500 Gr.C	Typical
163	M175	N200	N198	girt2	Beam	Tube	A500 Gr.C	Typical
164	M176	N198	N75	girt2	Beam	Tube	A500 Gr.C	Typical
165	M177	N75	N78	girt2	Beam	Tube	A500 Gr.C	Typical
166	M178	N73	N48	girt1	Beam	Tube	A500 Gr.C	Typical
167	M179	N48	N47	girt1	Beam	Tube	A500 Gr.C	Typical
168	M180	N204	N41	girt2	Beam	Tube	A500 Gr.C	Typical
169	M181	N41	N42	girt2	Beam	Tube	A500 Gr.C	Typical
170	M182	N42	N43	girt2	Beam	Tube	A500 Gr.C	Typical
171	M183	N43	N44	girt2	Beam	Tube	A500 Gr.C	Typical
172	M184	N44	N45	girt2	Beam	Tube	A500 Gr.C	Typical
173	M185	N45	N56	girt1	Beam	Tube	A500 Gr.C	Typical
174	M186	N56	N202	girt2	Beam	Tube	A500 Gr.C	Typical
175	M190	N2	N36	brace1	VBrace	Tube	A500 Gr.C	Typical
176	M191	N28	N102	brace1	VBrace	Tube	A500 Gr.C	Typical
177	M193	N13	N57	brace1	VBrace	Tube	A500 Gr.C	Typical
178	M194	N16	N65	brace1	VBrace	Tube	A500 Gr.C	Typical
179	M195	N97	N96	girt1	Beam	Tube	A500 Gr.C	Typical
180	M196	N96	N90	girt1	Beam	Tube	A500 Gr.C	Typical
181	M197	N206	N210	girt1	Beam	Tube	A500 Gr.C	Typical
182	M198	N210	N211	girt1	Beam	Tube	A500 Gr.C	Typical
183	M202	N208	N207	girt1	Beam	Tube	A500 Gr.C	Typical
184	M203	N207	N206	girt1	Beam	Tube	A500 Gr.C	Typical
185	M204	N216	N217	girt1	Beam	Tube	A500 Gr.C	Typical
186	M207	N214	N213	girt1	Beam	Tube	A500 Gr.C	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Section/Shape	Type	Design List	Material	Design Rule
187	M208	N213	N216	girt1	Beam	Tube	A500 Gr.C	Typical
188	M201	N208	N968	girt1	Beam	Tube	A500 Gr.C	Typical
189	M205	N214	N217	girt1	Beam	Tube	A500 Gr.C	Typical
190	M206	N215	N967	column8	Column	Tube	A500 Gr.C	Typical
191	M199	N165	N167	W12X16	Beam	Wide Flange	A992	Typical
192	M209	N162	N164	W12X16	Beam	Wide Flange	A992	Typical
193	M210	N131	N50	beam2	Beam	Wide Flange	A992	Typical
194	M211	N109	N220	column4	Column	Tube	A500 Gr.C	Typical
195	M212	N215	N92	brace1	VBrace	Tube	A500 Gr.C	Typical
196	M213	N315	N316	girt1	Beam	Tube	A500 Gr.C	Typical
197	M215	N312	N313	girt1	Beam	Tube	A500 Gr.C	Typical
198	M216	N313	N314	girt1	Beam	Tube	A500 Gr.C	Typical
199	M217	N309	N310	girt1	Beam	Tube	A500 Gr.C	Typical
200	M218	N310	N311	girt1	Beam	Tube	A500 Gr.C	Typical
201	M219	N311	N318	girt1	Beam	Tube	A500 Gr.C	Typical
202	M220	N314	N319	girt1	Beam	Tube	A500 Gr.C	Typical
203	M221	N317	N320	girt1	Beam	Tube	A500 Gr.C	Typical
204	M214	N64	N186	brace1	VBrace	Tube	A500 Gr.C	Typical
205	M222	N186	N65	brace1	VBrace	Tube	A500 Gr.C	Typical
206	M223	N17	N64	brace1	VBrace	Tube	A500 Gr.C	Typical
207	M224	N8	N79	brace1	VBrace	Tube	A500 Gr.C	Typical
208	M225	N35	N3	brace1	VBrace	Tube	A500 Gr.C	Typical
209	M226	N968	N211	girt1	Beam	Tube	A500 Gr.C	Typical
210	M227	N199	N200	column4	Column	Tube	A500 Gr.C	Typical
211	M228	N972	N974	HSS4X4X5	Beam	Tube	A500 Gr.C	Typical
212	M229	N974	N975	HSS4X4X5	Beam	Tube	A500 Gr.C	Typical
213	M230	N975	N973	HSS4X4X5	Beam	Tube	A500 Gr.C	Typical
214	M231	N976	N977	HSS4X4X5	Beam	Tube	A500 Gr.C	Typical
215	M232	N978	N979	HSS4X4X5	Beam	Tube	A500 Gr.C	Typical

Member Advanced Data

	Label	I Release	J Release	Col-Wall Vert Release	Physical	Deflection Ratio Options	Seismic DR
1	M1				Yes	** NA **	None
2	M2				Yes	** NA **	None
3	M3				Yes	** NA **	None
4	M4				Yes	** NA **	None
5	M5				Yes	** NA **	None
6	M6				Yes	** NA **	None
7	M7				Yes	** NA **	None
8	M8	AllPIN	BenPIN		Yes	Default	None
9	M9	AllPIN	BenPIN		Yes	Default	None
10	M10	AllPIN	BenPIN		Yes	Default	None
11	M11	AllPIN	BenPIN		Yes	Default	None
12	M12	AllPIN	BenPIN		Yes	Default	None
13	M13	AllPIN	BenPIN		Yes	Default	None
14	M14				Yes	** NA **	None
15	M15				Yes	** NA **	None
16	M16				Yes	** NA **	None
17	M233				Yes	** NA **	None
18	M18				Yes	** NA **	None
19	M19				Yes	** NA **	None
20	M20	AllPIN	BenPIN		Yes	Default	None
21	M21	AllPIN	BenPIN		Yes	Default	None
22	M22	AllPIN	BenPIN		Yes	Default	None
23	M23	AllPIN	BenPIN		Yes	Default	None

Member Advanced Data (Continued)

	Label	I Release	J Release	Col-Wall Vert Release	Physical	Deflection Ratio Options	Seismic DR
24	M24	AllPIN	BenPIN		Yes	Default	None
25	M25				Yes	** NA **	None
26	M26	AllPIN	BenPIN		Yes	Default	None
27	M27	AllPIN	BenPIN		Yes	Default	None
28	M28	AllPIN	BenPIN		Yes	Default	None
29	M29				Yes	** NA **	None
30	M30				Yes	** NA **	None
31	M31				Yes	** NA **	None
32	M32				Yes	** NA **	None
33	M33				Yes	** NA **	None
34	M34	AllPIN	BenPIN		Yes	Default	None
35	M35	AllPIN	BenPIN		Yes	Default	None
36	M36	AllPIN	BenPIN		Yes	Default	None
37	M37	AllPIN	BenPIN		Yes	Default	None
38	M38	AllPIN	BenPIN		Yes	Default	None
39	M39	AllPIN	BenPIN		Yes	Default	None
40	M40	AllPIN	BenPIN		Yes	Default	None
41	M41	AllPIN	BenPIN		Yes	Default	None
42	M42				Yes	** NA **	None
43	M43				Yes	** NA **	None
44	M44				Yes	** NA **	None
45	M45				Yes	** NA **	None
46	M46				Yes	** NA **	None
47	M47				Yes	** NA **	None
48	M48		AllPIN		Yes	** NA **	None
49	M49	AllPIN	BenPIN		Yes	Default	None
50	M50	AllPIN	BenPIN		Yes	Default	None
51	M51	AllPIN	BenPIN		Yes	Default	None
52	M52	AllPIN	BenPIN		Yes	Default	None
53	M53	AllPIN	BenPIN		Yes	Default	None
54	M54	AllPIN	BenPIN		Yes	Default	None
55	M55				Yes	** NA **	None
56	M56				Yes	** NA **	None
57	M58				Yes	** NA **	None
58	M59				Yes	** NA **	None
59	M60	AllPIN	BenPIN		Yes	Default	None
60	M61	AllPIN	BenPIN		Yes	Default	None
61	M62	AllPIN	BenPIN		Yes	Default	None
62	M63	AllPIN	BenPIN		Yes	Default	None
63	M64	AllPIN	BenPIN		Yes	Default	None
64	M65	AllPIN	BenPIN		Yes	Default	None
65	M66	AllPIN	BenPIN		Yes	Default	None
66	M67	AllPIN	BenPIN		Yes	Default	None
67	M68	AllPIN	BenPIN		Yes	Default	None
68	M70	AllPIN	BenPIN		Yes	Default	None
69	M71	AllPIN	BenPIN		Yes	Default	None
70	M72	AllPIN	BenPIN		Yes	Default	None
71	M73				Yes	** NA **	None
72	M74				Yes	** NA **	None
73	M75	AllPIN	BenPIN		Yes	Default	None
74	M76	AllPIN	BenPIN		Yes	Default	None
75	M80	AllPIN	BenPIN		Yes	Default	None
76	M81	AllPIN	BenPIN		Yes	Default	None
77	M82	AllPIN	BenPIN		Yes	Default	None
78	M83	AllPIN	BenPIN		Yes	Default	None

Member Advanced Data (Continued)

	Label	I Release	J Release	Col-Wall Vert Release	Physical	Deflection Ratio Options	Seismic DR
79	M84	AllPIN	BenPIN		Yes	Default	None
80	M85	AllPIN	BenPIN		Yes	Default	None
81	M86	AllPIN	BenPIN		Yes	Default	None
82	M87	AllPIN	BenPIN		Yes	Default	None
83	M88	AllPIN	BenPIN		Yes	Default	None
84	M89	AllPIN	BenPIN		Yes	Default	None
85	M90	AllPIN	BenPIN		Yes	Default	None
86	M91	AllPIN	BenPIN		Yes	Default	None
87	M92	AllPIN	BenPIN		Yes	Default	None
88	M93	AllPIN	BenPIN		Yes	Default	None
89	M94	AllPIN	BenPIN		Yes	Default	None
90	M95	AllPIN	BenPIN		Yes	Default	None
91	M97	AllPIN	BenPIN		Yes	Default	None
92	M98	AllPIN	BenPIN		Yes	Default	None
93	M99	AllPIN	BenPIN		Yes	Default	None
94	M100	AllPIN	BenPIN		Yes	Default	None
95	M101	AllPIN	BenPIN		Yes	Default	None
96	M102	AllPIN	BenPIN		Yes	Default	None
97	M103	AllPIN	BenPIN		Yes	Default	None
98	M104	AllPIN	BenPIN		Yes	Default	None
99	M105	AllPIN	BenPIN		Yes	Default	None
100	M106	AllPIN	BenPIN		Yes	Default	None
101	M107	AllPIN	BenPIN		Yes	Default	None
102	M108	AllPIN	BenPIN		Yes	Default	None
103	M109	AllPIN	BenPIN		Yes	Default	None
104	M110	AllPIN	BenPIN		Yes	Default	None
105	M111	AllPIN	BenPIN		Yes	Default	None
106	M112	AllPIN	BenPIN		Yes	Default	None
107	M113	AllPIN	BenPIN		Yes	Default	None
108	M114	AllPIN	BenPIN		Yes	Default	None
109	M115	AllPIN	BenPIN		Yes	Default	None
110	M116	AllPIN	BenPIN		Yes	Default	None
111	M117	AllPIN	BenPIN		Yes	Default	None
112	M118	AllPIN	BenPIN		Yes	Default	None
113	M119	AllPIN	BenPIN		Yes	Default	None
114	M120	AllPIN	BenPIN		Yes	Default	None
115	M121	AllPIN	BenPIN		Yes	Default	None
116	M127	AllPIN	BenPIN		Yes	Default	None
117	M128	AllPIN	BenPIN		Yes	Default	None
118	M129	AllPIN	BenPIN		Yes	Default	None
119	M130	AllPIN	BenPIN		Yes	Default	None
120	M131	AllPIN	BenPIN		Yes	Default	None
121	M132	AllPIN	BenPIN		Yes	Default	None
122	M133	AllPIN	BenPIN		Yes	Default	None
123	M134	AllPIN	BenPIN		Yes	Default	None
124	M135	AllPIN	BenPIN		Yes	Default	None
125	M136	AllPIN	BenPIN		Yes	Default	None
126	M137	AllPIN	BenPIN		Yes	Default	None
127	M138	AllPIN	BenPIN		Yes	Default	None
128	M139	AllPIN	BenPIN		Yes	Default	None
129	M140	AllPIN	BenPIN		Yes	Default	None
130	M141	AllPIN	BenPIN		Yes	Default	None
131	M142	AllPIN	BenPIN		Yes	Default	None
132	M143	AllPIN	BenPIN		Yes	Default	None
133	M144	AllPIN	BenPIN		Yes	Default	None

Member Advanced Data (Continued)

	Label	I Release	J Release	Col-Wall Vert Release	Physical	Deflection Ratio Options	Seismic DR
134	M145	AllPIN	BenPIN		Yes	Default	None
135	M146	AllPIN	BenPIN		Yes	Default	None
136	M147	AllPIN	BenPIN		Yes	Default	None
137	M148	AllPIN	BenPIN		Yes	Default	None
138	M149	AllPIN	BenPIN		Yes	Default	None
139	M150	AllPIN	BenPIN		Yes	Default	None
140	M151	AllPIN			Yes	** NA **	None
141	M152	AllPIN	BenPIN		Yes	Default	None
142	M153	AllPIN	BenPIN		Yes	** NA **	None
143	M154	AllPIN	BenPIN		Yes	Default	None
144	M156	AllPIN	BenPIN		Yes	Default	None
145	M157	AllPIN			Yes	Default	None
146	M158				Yes	Default	None
147	M159		BenPIN		Yes	Default	None
148	M160	AllPIN			Yes	Default	None
149	M161				Yes	Default	None
150	M162		AllPIN		Yes	Default	None
151	M163	AllPIN	BenPIN		Yes	Default	None
152	M164	AllPIN	BenPIN		Yes	Default	None
153	M165	AllPIN	BenPIN		Yes	Default	None
154	M166	AllPIN	BenPIN		Yes	Default	None
155	M167	AllPIN	BenPIN		Yes	Default	None
156	M168	AllPIN	BenPIN		Yes	Default	None
157	M169	AllPIN			Yes	Default	None
158	M170		BenPIN		Yes	Default	None
159	M171	AllPIN			Yes	Default	None
160	M172				Yes	Default	None
161	M173				Yes	Default	None
162	M174		AllPIN		Yes	Default	None
163	M175	AllPIN	BenPIN		Yes	Default	None
164	M176	AllPIN			Yes	Default	None
165	M177		BenPIN		Yes	Default	None
166	M178	AllPIN	BenPIN		Yes	Default	None
167	M179	AllPIN	BenPIN		Yes	Default	None
168	M180		AllPIN		Yes	Default	None
169	M181	AllPIN			Yes	Default	None
170	M182				Yes	Default	None
171	M183				Yes	Default	None
172	M184		AllPIN		Yes	Default	None
173	M185	AllPIN	BenPIN		Yes	Default	None
174	M186	AllPIN			Yes	Default	None
175	M190	AllPIN	BenPIN		Yes	** NA **	None
176	M191		AllPIN		Yes	** NA **	None
177	M193	AllPIN	BenPIN		Yes	** NA **	None
178	M194	AllPIN	BenPIN		Yes	** NA **	None
179	M195	AllPIN	BenPIN		Yes	Default	None
180	M196	AllPIN	BenPIN		Yes	Default	None
181	M197	AllPIN	BenPIN		Yes	Default	None
182	M198	AllPIN	BenPIN		Yes	Default	None
183	M202	AllPIN	BenPIN		Yes	Default	None
184	M203	AllPIN	BenPIN		Yes	Default	None
185	M204	AllPIN	BenPIN		Yes	Default	None
186	M207	AllPIN	BenPIN		Yes	Default	None
187	M208	AllPIN	BenPIN		Yes	Default	None
188	M201	AllPIN	BenPIN		Yes	Default	None

Member Advanced Data (Continued)

	Label	I Release	J Release	Col-Wall Vert Release	Physical	Deflection Ratio Options	Seismic DR
189	M205	AllPIN	BenPIN		Yes	Default	None
190	M206		AllPIN		Yes	** NA **	None
191	M199	AllPIN	BenPIN		Yes	Default	None
192	M209	AllPIN	BenPIN		Yes	Default	None
193	M210	AllPIN	BenPIN		Yes	Default	None
194	M211	AllPIN			Yes	** NA **	None
195	M212	AllPIN	BenPIN		Yes	** NA **	None
196	M213				Yes	Default	None
197	M215				Yes	Default	None
198	M216				Yes	Default	None
199	M217				Yes	Default	None
200	M218				Yes	Default	None
201	M219				Yes	Default	None
202	M220				Yes	Default	None
203	M221				Yes	Default	None
204	M214	AllPIN	BenPIN		Yes	** NA **	None
205	M222	AllPIN	BenPIN		Yes	** NA **	None
206	M223	AllPIN	BenPIN		Yes	** NA **	None
207	M224	AllPIN	BenPIN		Yes	** NA **	None
208	M225	AllPIN	BenPIN		Yes	** NA **	None
209	M226	AllPIN	BenPIN		Yes	Default	None
210	M227	AllPIN			Yes	** NA **	None
211	M228				Yes	Default	None
212	M229				Yes	Default	None
213	M230				Yes	Default	None
214	M231				Yes	Default	None
215	M232				Yes	Default	None

Hot Rolled Steel Design Parameters

	Label	Shape	Length [ft]	Lb y-y [ft]	Lcomp top [ft]	Lcomp bot [ft]	Channel Conn.	a [ft]	Function
1	M1	column4	15.5		Lbyy		N/A	N/A	Lateral
2	M2	column4	18		Lbyy		N/A	N/A	Lateral
3	M3	column4	18		Lbyy		N/A	N/A	Lateral
4	M4	column8	18		Lbyy		N/A	N/A	Lateral
5	M5	column8	18		Lbyy		N/A	N/A	Lateral
6	M6	column4	18		Lbyy		N/A	N/A	Lateral
7	M7	column4	18		Lbyy		N/A	N/A	Lateral
8	M8	beam2	15.36	5	Lbyy	6	N/A	N/A	Lateral
9	M9	beam2	2.17		Lbyy		N/A	N/A	Lateral
10	M10	beam2	7.81	5	Lbyy	6	N/A	N/A	Lateral
11	M11	beam2	7.38	5	Lbyy	6	N/A	N/A	Lateral
12	M12	beam2	15.52	5	Lbyy	6	N/A	N/A	Lateral
13	M13	beam2	16.88	5	Lbyy		N/A	N/A	Lateral
14	M14	column8	21		Lbyy		N/A	N/A	Lateral
15	M15	column4	14.6		Lbyy		N/A	N/A	Lateral
16	M16	column4	14.6		Lbyy		N/A	N/A	Lateral
17	M233	column4	18		Lbyy		N/A	N/A	Lateral
18	M18	column8	14.6		Lbyy		N/A	N/A	Lateral
19	M19	column4	18		Lbyy		N/A	N/A	Lateral
20	M20	beam2	17.83	2	Lbyy	6	N/A	N/A	Lateral
21	M21	beam2	2.8		Lbyy		N/A	N/A	Lateral
22	M22	beam2	9.39	5	Lbyy		N/A	N/A	Lateral
23	M23	beam2	10.33	5	Lbyy		N/A	N/A	Lateral
24	M24	beam2	21.14	5	Lbyy		N/A	N/A	Lateral
25	M25	column8	21		Lbyy		N/A	N/A	Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [ft]	Lb y-y [ft]	Lcomp top [ft]	Lcomp bot [ft]	Channel Conn.	a [ft]	Function
26	M26	beam2	12.02	2	Lbyy	6	N/A	N/A	Lateral
27	M27	beam2	11.31	2	Lbyy	6	N/A	N/A	Lateral
28	M28	beam2	9.95	2	Lbyy	6	N/A	N/A	Lateral
29	M29	column4	21		Lbyy		N/A	N/A	Lateral
30	M30	column4	21		Lbyy		N/A	N/A	Lateral
31	M31	column8	21		Lbyy		N/A	N/A	Lateral
32	M32	column8	21		Lbyy		N/A	N/A	Lateral
33	M33	column8	21		Lbyy		N/A	N/A	Lateral
34	M34	beam4	19.72	5	Lbyy		N/A	N/A	Lateral
35	M35	beam4	21.14	5	Lbyy		N/A	N/A	Lateral
36	M36	beam4	7.85	5	Lbyy		N/A	N/A	Lateral
37	M37	beam4	19.72	5	Lbyy		N/A	N/A	Lateral
38	M38	beam4	21.14	5	Lbyy		N/A	N/A	Lateral
39	M39	beam4	7.85	5	Lbyy		N/A	N/A	Lateral
40	M40	beam2	13.23	2	Lbyy	6	N/A	N/A	Lateral
41	M41	beam2	16.53	5	Lbyy	6	N/A	N/A	Lateral
42	M42	column8	21		Lbyy		N/A	N/A	Lateral
43	M43	column8	21		Lbyy		N/A	N/A	Lateral
44	M44	column4	21		Lbyy		N/A	N/A	Lateral
45	M45	column4	21		Lbyy		N/A	N/A	Lateral
46	M46	column8	21		Lbyy		N/A	N/A	Lateral
47	M47	column8	21		Lbyy		N/A	N/A	Lateral
48	M48	column8	28.44		Lbyy		N/A	N/A	Lateral
49	M49	beam2	14.45	2	Lbyy	6	N/A	N/A	Lateral
50	M50	beam2	21.26	2	Lbyy	6	N/A	N/A	Lateral
51	M51	beam2	12	2	Lbyy	6	N/A	N/A	Lateral
52	M52	beam2	17.78	5	Lbyy	6	N/A	N/A	Lateral
53	M53	beam2	21.92	5	Lbyy	6	N/A	N/A	Lateral
54	M54	beam2	20.21	5	Lbyy	6	N/A	N/A	Lateral
55	M55	column4	28.44		Lbyy		N/A	N/A	Lateral
56	M56	column4	28.44		Lbyy		N/A	N/A	Lateral
57	M58	column8	28.44		Lbyy		N/A	N/A	Lateral
58	M59	column8	28.44		Lbyy		N/A	N/A	Lateral
59	M60	beam1	1.69		Lbyy		N/A	N/A	Lateral
60	M61	beam1	2.69		Lbyy		N/A	N/A	Lateral
61	M62	beam1	1.69		Lbyy		N/A	N/A	Lateral
62	M63	beam1	2.69		Lbyy		N/A	N/A	Lateral
63	M64	beam1	12		Lbyy		N/A	N/A	Lateral
64	M65	beam1	2.69		Lbyy		N/A	N/A	Lateral
65	M66	beam2	12	2	Lbyy	6	N/A	N/A	Lateral
66	M67	beam2	14.08	5	Lbyy		N/A	N/A	Lateral
67	M68	beam2	8.32	5	Lbyy		N/A	N/A	Lateral
68	M70	beam2	17.78	5	Lbyy		N/A	N/A	Lateral
69	M71	beam2	21.92	5	Lbyy		N/A	N/A	Lateral
70	M72	beam2	20.21	5	Lbyy		N/A	N/A	Lateral
71	M73	column8	18.2		Lbyy		N/A	N/A	Lateral
72	M74	column4	18.2		Lbyy		N/A	N/A	Lateral
73	M75	beam3	12	2	Lbyy		N/A	N/A	Lateral
74	M76	beam1	12	2	Lbyy		N/A	N/A	Lateral
75	M80	beam1	17.83	2	Lbyy		N/A	N/A	Lateral
76	M81	beam1	17.83	2	Lbyy		N/A	N/A	Lateral
77	M82	beam1	17.83	2	Lbyy		N/A	N/A	Lateral
78	M83	beam1	17.83	2	Lbyy		N/A	N/A	Lateral
79	M84	beam1	17.83	2	Lbyy		N/A	N/A	Lateral
80	M85	beam1	17.83	2	Lbyy		N/A	N/A	Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [ft]	Lb y-y [ft]	Lcomp top [ft]	Lcomp bot [ft]	Channel Conn.	a [ft]	Function
81	M86	beam1	17.83	2	Lbyy		N/A	N/A	Lateral
82	M87	beam1	12.02	2	Lbyy		N/A	N/A	Lateral
83	M88	beam1	12.02	2	Lbyy		N/A	N/A	Lateral
84	M89	beam1	12.02	2	Lbyy		N/A	N/A	Lateral
85	M90	beam1	12.02	2	Lbyy		N/A	N/A	Lateral
86	M91	beam1	12.02	2	Lbyy		N/A	N/A	Lateral
87	M92	beam1	12.02	2	Lbyy		N/A	N/A	Lateral
88	M93	beam2	17.83	2	Lbyy		N/A	N/A	Lateral
89	M94	beam1	12.02	2	Lbyy		N/A	N/A	Lateral
90	M95	beam1	12.02	2	Lbyy		N/A	N/A	Lateral
91	M97	beam1	7.57	5	Lbyy		N/A	N/A	Lateral
92	M98	beam1	7.57	2	Lbyy		N/A	N/A	Lateral
93	M99	beam1	3.25		Lbyy		N/A	N/A	Lateral
94	M100	beam1	10.18	2	Lbyy		N/A	N/A	Lateral
95	M101	beam1	4.4		Lbyy		N/A	N/A	Lateral
96	M102	beam1	4.4	2	Lbyy		N/A	N/A	Lateral
97	M103	beam1	13.23	2	Lbyy		N/A	N/A	Lateral
98	M104	beam1	13.23	2	Lbyy		N/A	N/A	Lateral
99	M105	beam2	19.29	5	Lbyy		N/A	N/A	Lateral
100	M106	beam1	13.23	2	Lbyy		N/A	N/A	Lateral
101	M107	beam1	13.23	2	Lbyy		N/A	N/A	Lateral
102	M108	beam2	14.45	2	Lbyy		N/A	N/A	Lateral
103	M109	beam1	14.45	2	Lbyy		N/A	N/A	Lateral
104	M110	beam1	14.45	2	Lbyy		N/A	N/A	Lateral
105	M111	beam1	14.45	2	Lbyy		N/A	N/A	Lateral
106	M112	beam1	12.02	2	Lbyy		N/A	N/A	Lateral
107	M113	beam1	17.83	2	Lbyy		N/A	N/A	Lateral
108	M114	beam1	12.02	2	Lbyy		N/A	N/A	Lateral
109	M115	W12X16	21.26	2	Lbyy		N/A	N/A	Lateral
110	M116	beam1	12	2	Lbyy		N/A	N/A	Lateral
111	M117	W12X16	21.26	2	Lbyy		N/A	N/A	Lateral
112	M118	beam1	12	2	Lbyy		N/A	N/A	Lateral
113	M119	W12X16	21.26	2	Lbyy		N/A	N/A	Lateral
114	M120	beam1	12	2	Lbyy		N/A	N/A	Lateral
115	M121	W12X16	21.26	2	Lbyy		N/A	N/A	Lateral
116	M127	W12X16	21.26	2	Lbyy		N/A	N/A	Lateral
117	M128	W12X16	21.26	2	Lbyy		N/A	N/A	Lateral
118	M129	W12X16	21.26	2	Lbyy		N/A	N/A	Lateral
119	M130	W12X16	21.26	2	Lbyy		N/A	N/A	Lateral
120	M131	beam1	12	2	Lbyy		N/A	N/A	Lateral
121	M132	W12X16	21.26	2	Lbyy		N/A	N/A	Lateral
122	M133	beam1	12	2	Lbyy		N/A	N/A	Lateral
123	M134	W12X16	21.26	2	Lbyy		N/A	N/A	Lateral
124	M135	beam1	12	2	Lbyy		N/A	N/A	Lateral
125	M136	W12X16	21.26	2	Lbyy		N/A	N/A	Lateral
126	M137	beam1	12	2	Lbyy		N/A	N/A	Lateral
127	M138	W12X16	21.26	2	Lbyy		N/A	N/A	Lateral
128	M139	W12X16	21.26	2	Lbyy		N/A	N/A	Lateral
129	M140	beam1	12	2	Lbyy		N/A	N/A	Lateral
130	M141	beam1	12	2	Lbyy		N/A	N/A	Lateral
131	M142	W12X16	21.26	2	Lbyy		N/A	N/A	Lateral
132	M143	beam1	12	2	Lbyy		N/A	N/A	Lateral
133	M144	beam1	12	2	Lbyy		N/A	N/A	Lateral
134	M145	W12X16	21.26	2	Lbyy		N/A	N/A	Lateral
135	M146	beam1	14.45	2	Lbyy		N/A	N/A	Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [ft]	Lb y-y [ft]	Lcomp top [ft]	Lcomp bot [ft]	Channel Conn.	a [ft]	Function
136	M147	beam1	14.45	2	Lbyy		N/A	N/A	Lateral
137	M148	beam1	14.45	2	Lbyy		N/A	N/A	Lateral
138	M149	beam1	14.45	2	Lbyy		N/A	N/A	Lateral
139	M150	beam2	3.12		Lbyy		N/A	N/A	Lateral
140	M151	column4	6.4		Lbyy		N/A	N/A	Lateral
141	M152	beam1	14.45		Lbyy		N/A	N/A	Lateral
142	M153	column4	3.6		Lbyy		N/A	N/A	Lateral
143	M154	beam5	27.97	5	Lbyy		N/A	N/A	Lateral
144	M156	W12X16	21.26	2	Lbyy		N/A	N/A	Lateral
145	M157	girt2	14.45		Lbyy		N/A	N/A	Lateral
146	M158	girt2	21.26		Lbyy		N/A	N/A	Lateral
147	M159	girt2	12		Lbyy		N/A	N/A	Lateral
148	M160	girt2	17.78		Lbyy		N/A	N/A	Lateral
149	M161	girt2	21.92		Lbyy		N/A	N/A	Lateral
150	M162	girt2	20.21		Lbyy		N/A	N/A	Lateral
151	M163	girt1	1.69		Lbyy		N/A	N/A	Lateral
152	M164	girt1	2.69		Lbyy		N/A	N/A	Lateral
153	M165	girt1	1.69		Lbyy		N/A	N/A	Lateral
154	M166	girt1	2.69		Lbyy		N/A	N/A	Lateral
155	M167	girt1	12		Lbyy		N/A	N/A	Lateral
156	M168	girt2	14.08		Lbyy		N/A	N/A	Lateral
157	M169	girt2	9.95		Lbyy		N/A	N/A	Lateral
158	M170	girt2	11.31		Lbyy		N/A	N/A	Lateral
159	M171	girt2	19.72		Lbyy		N/A	N/A	Lateral
160	M172	girt2	21.14		Lbyy		N/A	N/A	Lateral
161	M173	girt2	7.85		Lbyy		N/A	N/A	Lateral
162	M174	girt2	8.32		Lbyy		N/A	N/A	Lateral
163	M175	girt2	14.45		Lbyy		N/A	N/A	Lateral
164	M176	girt2	3.12		Lbyy		N/A	N/A	Lateral
165	M177	girt2	16.53		Lbyy		N/A	N/A	Lateral
166	M178	girt1	13.23		Lbyy		N/A	N/A	Lateral
167	M179	girt1	15.36		Lbyy		N/A	N/A	Lateral
168	M180	girt2	4.83		Lbyy		N/A	N/A	Lateral
169	M181	girt2	7.81		Lbyy		N/A	N/A	Lateral
170	M182	girt2	7.38		Lbyy		N/A	N/A	Lateral
171	M183	girt2	15.52		Lbyy		N/A	N/A	Lateral
172	M184	girt2	16.88		Lbyy		N/A	N/A	Lateral
173	M185	girt1	17.83		Lbyy		N/A	N/A	Lateral
174	M186	girt2	17.46		Lbyy		N/A	N/A	Lateral
175	M190	brace1	16.359		Lbyy		N/A	N/A	Lateral
176	M191	brace1	21.8		Lbyy		N/A	N/A	Lateral
177	M193	brace1	18.911		Lbyy		N/A	N/A	Lateral
178	M194	brace1	16.577		Lbyy		N/A	N/A	Lateral
179	M195	girt1	2.69		Lbyy		N/A	N/A	Lateral
180	M196	girt1	12		Lbyy		N/A	N/A	Lateral
181	M197	girt1	1.69		Lbyy		N/A	N/A	Lateral
182	M198	girt1	2.69		Lbyy		N/A	N/A	Lateral
183	M202	girt1	2.69		Lbyy		N/A	N/A	Lateral
184	M203	girt1	12		Lbyy		N/A	N/A	Lateral
185	M204	girt1	2.69		Lbyy		N/A	N/A	Lateral
186	M207	girt1	2.69		Lbyy		N/A	N/A	Lateral
187	M208	girt1	13.69		Lbyy		N/A	N/A	Lateral
188	M201	girt1	12		Lbyy		N/A	N/A	Lateral
189	M205	girt1	13.69		Lbyy		N/A	N/A	Lateral
190	M206	column8	28.44		Lbyy		N/A	N/A	Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [ft]	Lb y-y [ft]	Lcomp top [ft]	Lcomp bot [ft]	Channel Conn.	a [ft]	Function
191	M199	W12X16	21.26	2	Lbyy		N/A	N/A	Lateral
192	M209	W12X16	21.26	2	Lbyy		N/A	N/A	Lateral
193	M210	beam2	17.83	2	Lbyy		N/A	N/A	Lateral
194	M211	column4	3.4		Lbyy		N/A	N/A	Lateral
195	M212	brace1	21.8		Lbyy		N/A	N/A	Lateral
196	M213	girt1	11.31		Lbyy		N/A	N/A	Lateral
197	M215	girt1	11.31		Lbyy		N/A	N/A	Lateral
198	M216	girt1	9.95		Lbyy		N/A	N/A	Lateral
199	M217	girt1	11.31		Lbyy		N/A	N/A	Lateral
200	M218	girt1	9.95		Lbyy		N/A	N/A	Lateral
201	M219	girt1	14.08		Lbyy		N/A	N/A	Lateral
202	M220	girt1	14.08		Lbyy		N/A	N/A	Lateral
203	M221	girt1	14.08		Lbyy		N/A	N/A	Lateral
204	M214	brace1	5.33		Lbyy		N/A	N/A	Lateral
205	M222	brace1	5.322		Lbyy		N/A	N/A	Lateral
206	M223	brace1	16.577		Lbyy		N/A	N/A	Lateral
207	M224	brace1	23.239		Lbyy		N/A	N/A	Lateral
208	M225	brace1	16.359		Lbyy		N/A	N/A	Lateral
209	M226	girt1	1.69		Lbyy		N/A	N/A	Lateral
210	M227	column4	2.8		Lbyy		N/A	N/A	Lateral
211	M228	HSS4X4X5	4		Lbyy		N/A	N/A	Lateral
212	M229	HSS4X4X5	7.95		Lbyy		N/A	N/A	Lateral
213	M230	HSS4X4X5	4		Lbyy		N/A	N/A	Lateral
214	M231	HSS4X4X5	4		Lbyy		N/A	N/A	Lateral
215	M232	HSS4X4X5	4		Lbyy		N/A	N/A	Lateral

Basic Load Cases

	BLC Description	Category	Y Gravity	Point	Distributed	Area(Member)
1	dl	DL	-1	10		10
2	rll	RLL				10
3	sl	SL				10
4	sln	SLN				23
5	wl+x (+GCpi)	OL1			12	10
6	wl+x (-GCpi)	OL2			12	10
7	wl-x (+GCpi)	OL3			12	10
8	wl-x (-GCpi)	OL4			12	10
9	wl+z (+GCpi)	OL5			10	9
10	wl+z (-GCpi)	OL6			10	9
11	wl-z (+GCpi)	OL7			10	9
12	wl-z (-GCpi)	OL8			10	9
13	wl+y (+GCpi)	OL9				9
14	wl+y (-GCpi)	OL10				9
15	wl-y (+GCpi)	OL11				9
16	wl-y (-GCpi)	OL12				9
17	ex	ELX			37	9
18	ez	ELZ			36	9
19	Parapet CC x	OL13				5
20	Parapet CC z	OL14				6
21	Roof uplift CC y	OL15				21
22	BLC 1 Transient Area Loads	None			183	
23	BLC 2 Transient Area Loads	None			183	
24	BLC 3 Transient Area Loads	None			183	
25	BLC 4 Transient Area Loads	None			358	
26	BLC 5 Transient Area Loads	None			75	
27	BLC 6 Transient Area Loads	None			75	

Basic Load Cases (Continued)

	BLC Description	Category	Y Gravity	Point	Distributed	Area(Member)
28	BLC 7 Transient Area Loads	None			75	
29	BLC 8 Transient Area Loads	None			75	
30	BLC 9 Transient Area Loads	None			85	
31	BLC 10 Transient Area Loads	None			85	
32	BLC 11 Transient Area Loads	None			85	
33	BLC 12 Transient Area Loads	None			85	
34	BLC 13 Transient Area Loads	None			179	
35	BLC 14 Transient Area Loads	None			179	
36	BLC 15 Transient Area Loads	None			179	
38	BLC 17 Transient Area Loads	None			179	
39	BLC 18 Transient Area Loads	None			179	

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	dl	Yes	Y	DL	1.4						
2	dl+rll	Yes	Y	DL	1.2	RLL	1.6				
3	dl+sl	Yes	Y	DL	1.2	SL	1.6				
4	dl+sln	Yes	Y	DL	1.2	SLN	1.6				
5	dl+rll+wl	Yes	Y	DL	1.2	RLL	1.6	OL1	0.5	OL11	0.5
6	dl+rll+wl	Yes	Y	DL	1.2	RLL	1.6	OL2	0.5	OL12	0.5
7	dl+rll+wl	Yes	Y	DL	1.2	RLL	1.6	OL3	0.5	OL11	0.5
8	dl+rll+wl	Yes	Y	DL	1.2	RLL	1.6	OL4	0.5	OL12	0.5
9	dl+rll+wl	Yes	Y	DL	1.2	RLL	1.6	OL5	0.5	OL11	0.5
10	dl+rll+wl	Yes	Y	DL	1.2	RLL	1.6	OL6	0.5	OL12	0.5
11	dl+rll+wl	Yes	Y	DL	1.2	RLL	1.6	OL7	0.5	OL11	0.5
12	dl+rll+wl	Yes	Y	DL	1.2	RLL	1.6	OL8	0.5	OL12	0.5
13	dl+sl+wl	Yes	Y	DL	1.2	SL	1.6	OL1	0.5	OL11	0.5
14	dl+sl+wl	Yes	Y	DL	1.2	SL	1.6	OL2	0.5	OL12	0.5
15	dl+sl+wl	Yes	Y	DL	1.2	SL	1.6	OL3	0.5	OL11	0.5
16	dl+sl+wl	Yes	Y	DL	1.2	SL	1.6	OL4	0.5	OL12	0.5
17	dl+sl+wl	Yes	Y	DL	1.2	SL	1.6	OL5	0.5	OL11	0.5
18	dl+sl+wl	Yes	Y	DL	1.2	SL	1.6	OL6	0.5	OL12	0.5
19	dl+sl+wl	Yes	Y	DL	1.2	SL	1.6	OL7	0.5	OL11	0.5
20	dl+sl+wl	Yes	Y	DL	1.2	SL	1.6	OL8	0.5	OL12	0.5
21	dl+sln+wl	Yes	Y	DL	1.2	SLN	1.6	OL1	0.5	OL11	0.5
22	dl+sln+wl	Yes	Y	DL	1.2	SLN	1.6	OL2	0.5	OL12	0.5
23	dl+sln+wl	Yes	Y	DL	1.2	SLN	1.6	OL3	0.5	OL11	0.5
24	dl+sln+wl	Yes	Y	DL	1.2	SLN	1.6	OL4	0.5	OL12	0.5
25	dl+sln+wl	Yes	Y	DL	1.2	SLN	1.6	OL5	0.5	OL11	0.5
26	dl+sln+wl	Yes	Y	DL	1.2	SLN	1.6	OL6	0.5	OL12	0.5
27	dl+sln+wl	Yes	Y	DL	1.2	SLN	1.6	OL7	0.5	OL11	0.5
28	dl+sln+wl	Yes	Y	DL	1.2	SLN	1.6	OL8	0.5	OL12	0.5
29	dl+wl+rll	Yes	Y	DL	1.2	OL1	1	OL11	1	RLL	0.5
30	dl+wl+rll	Yes	Y	DL	1.2	OL2	1	OL12	1	RLL	0.5
31	dl+wl+rll	Yes	Y	DL	1.2	OL3	1	OL11	1	RLL	0.5
32	dl+wl+rll	Yes	Y	DL	1.2	OL4	1	OL12	1	RLL	0.5
33	dl+wl+rll	Yes	Y	DL	1.2	OL5	1	OL11	1	RLL	0.5
34	dl+wl+rll	Yes	Y	DL	1.2	OL6	1	OL12	1	RLL	0.5
35	dl+wl+rll	Yes	Y	DL	1.2	OL7	1	OL11	1	RLL	0.5
36	dl+wl+rll	Yes	Y	DL	1.2	OL8	1	OL12	1	RLL	0.5
37	dl+wl+sl	Yes	Y	DL	1.2	OL1	1	OL11	1	SL	0.5
38	dl+wl+sl	Yes	Y	DL	1.2	OL2	1	OL12	1	SL	0.5
39	dl+wl+sl	Yes	Y	DL	1.2	OL3	1	OL11	1	SL	0.5
40	dl+wl+sl	Yes	Y	DL	1.2	OL4	1	OL12	1	SL	0.5
41	dl+wl+sl	Yes	Y	DL	1.2	OL5	1	OL11	1	SL	0.5

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
42	dl+wl+sl	Yes	Y	DL	1.2	OL6	1	OL12	1	SL	0.5
43	dl+wl+sl	Yes	Y	DL	1.2	OL7	1	OL11	1	SL	0.5
44	dl+wl+sl	Yes	Y	DL	1.2	OL8	1	OL12	1	SL	0.5
45	dl+wl+sln	Yes	Y	DL	1.2	OL1	1	OL11	1	SLN	0.5
46	dl+wl+sln	Yes	Y	DL	1.2	OL2	1	OL12	1	SLN	0.5
47	dl+wl+sln	Yes	Y	DL	1.2	OL3	1	OL11	1	SLN	0.5
48	dl+wl+sln	Yes	Y	DL	1.2	OL4	1	OL12	1	SLN	0.5
49	dl+wl+sln	Yes	Y	DL	1.2	OL5	1	OL11	1	SLN	0.5
50	dl+wl+sln	Yes	Y	DL	1.2	OL6	1	OL12	1	SLN	0.5
51	dl+wl+sln	Yes	Y	DL	1.2	OL7	1	OL11	1	SLN	0.5
52	dl+wl+sln	Yes	Y	DL	1.2	OL8	1	OL12	1	SLN	0.5
53	dl+wl	Yes	Y	DL	0.9	OL1	1	OL9	1		
54	dl+wl	Yes	Y	DL	0.9	OL2	1	OL10	1		
55	dl+wl	Yes	Y	DL	0.9	OL3	1	OL9	1		
56	dl+wl	Yes	Y	DL	0.9	OL4	1	OL10	1		
57	dl+wl	Yes	Y	DL	0.9	OL5	1	OL9	1		
58	dl+wl	Yes	Y	DL	0.9	OL6	1	OL10	1		
59	dl+wl	Yes	Y	DL	0.9	OL7	1	OL9	1		
60	dl+wl	Yes	Y	DL	0.9	OL8	1	OL10	1		
61	dl+ex+sl	Yes	Y	DL	1.2	ELX	0.029	SL	0.2		
62	dl-ex+sl	Yes	Y	DL	1.2	ELX	-0.029	SL	0.2		
63	dl+ez+sl	Yes	Y	DL	1.2	ELZ	0.029	SL	0.2		
64	dl-ez+sl	Yes	Y	DL	1.2	ELZ	-0.029	SL	0.2		
65	dl+ex	Yes	Y	DL	0.9	ELX	0.029				
66	dl-ex	Yes	Y	DL	0.9	ELX	-0.029				
67	dl+ez	Yes	Y	DL	0.9	ELZ	0.029				
68	dl-ez	Yes	Y	DL	0.9	ELZ	-0.029				
69	cc		Y	DL	0.45	OL15	1				

Envelope Node Reactions

	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
1	N200	max	0	68	0	68	0	68	0	68	0	68	0	68
2		min	0	1	0	1	0	1	0	1	0	1	0	1
3	N215	max	11618.378	56	21293.644	37	23.044	42	0	68	0	52	0	68
4		min	-12042.864	45	-16012.714	56	-27.776	35	0	1	0	33	0	1
5	N1	max	35.533	39	2974.574	23	3.153	49	0	68	0	68	0	68
6		min	-34.929	54	-280.585	53	-1.699	60	0	1	0	1	0	1
7	N5	max	65.065	46	7916.484	23	5.671	54	0	68	0	68	0	68
8		min	-55.459	47	1071.959	53	-4.525	47	0	1	0	1	0	1
9	N4	max	234.02	37	12915.117	23	4.741	46	0	68	60.03	38	0	68
10		min	-120.076	55	2230.266	53	-3.222	35	0	1	-53.467	47	0	1
11	N6	max	116.339	47	4338.935	19	35.713	41	0	68	0	68	0	68
12		min	-132.242	54	658.569	57	-22.935	35	0	1	0	1	0	1
13	N7	max	31.933	39	5700.374	13	47.252	42	0	68	0	68	0	68
14		min	-20.595	54	-45.968	55	-34.467	35	0	1	0	1	0	1
15	N3	max	203.951	37	18522.721	41	2736.702	60	0	68	74.678	56	0	68
16		min	-106.094	55	-9798.428	60	-3564.213	33	0	1	-167.794	29	0	1
17	N2	max	126.76	37	16355.855	51	3674.549	51	0	68	117.356	55	0	68
18		min	-48.105	56	-9846.932	57	-2646.707	57	0	1	-197.57	30	0	1
19	N16	max	138.719	55	67964.106	51	12680.4	51	0	68	248.067	56	0	68
20		min	-234.761	54	-44709.592	57	-10131.797	57	0	1	-240.981	29	0	1
21	N15	max	12.913	45	23201.268	21	213.45	49	0	68	234.982	57	0	68
22		min	-10.132	32	-4250	55	-86.416	59	0	1	-199.506	36	0	1
23	N9	max	198.338	39	17773.82	27	132.205	50	0	68	213.586	46	0	68
24		min	-236.762	54	1626.858	57	-82.908	59	0	1	-107.349	55	0	1

Envelope Node Reactions (Continued)

	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
25	N20	max	13.119	55	4638.207	25	70.138	14	0	68	0	68	0	68
26		min	-95.804	30	1299.78	59	20.081	59	0	1	0	1	0	1
27	N23	max	11.024	55	24911.26	15	23.577	41	0	68	0	68	0	68
28		min	-39.877	31	679.559	53	-33.324	35	0	1	0	1	0	1
29	N13	max	9919.431	47	18245.644	47	11.25	59	0	68	0	68	0	68
30		min	-10771.085	54	-11696.85	54	-7.681	23	0	1	0	1	0	1
31	N27	max	3.052	60	6561.364	27	22.508	49	0	68	0	68	0	68
32		min	-3.893	57	618.352	57	-18.136	51	0	1	0	1	0	1
33	N18	max	159.527	55	27929.974	25	25.158	49	0	68	56.329	37	0	68
34		min	-257.446	54	1945.89	59	-27.516	51	0	1	-74.063	56	0	1
35	N30	max	39.67	54	9703.573	27	34.773	49	0	68	0	52	0	68
36		min	-59.22	47	965.901	57	-32.773	51	0	1	0	33	0	1
37	N19	max	71.619	39	22095.626	45	55.376	41	0	68	0	68	0	68
38		min	-23.255	54	-9109.015	55	-57.697	52	0	1	0	1	0	1
39	N32	max	24.384	53	822.756	59	19.107	50	0	68	0	68	0	68
40		min	-31.758	47	-44.381	33	-18.989	59	0	1	0	1	0	1
41	N8	max	6003.686	47	12897.792	47	107.251	25	0	68	0	68	0	68
42		min	-4864.755	53	-5030.719	53	-21.278	59	0	1	0	1	0	1
43	N10	max	14.164	55	19659.032	17	46.178	17	0	68	0	68	0	68
44		min	-27.168	31	664.077	59	-1.444	57	0	1	0	1	0	1
45	N11	max	3.913	55	18217.924	19	5.114	59	0	68	0	68	0	68
46		min	-39.261	7	1515.098	57	-66.202	11	0	1	0	1	0	1
47	N12	max	65.193	53	13112.475	25	-1.663	59	0	68	0	68	0	68
48		min	-110.771	31	1710.468	59	-25.858	11	0	1	0	1	0	1
49	N14	max	63.697	53	2201.417	25	4.335	59	0	68	0	68	0	68
50		min	-57.351	47	557.111	59	-28.32	33	0	1	0	1	0	1
51	N17	max	119.09	55	63374.494	49	9902.943	59	0	68	168.404	40	0	68
52		min	-202.422	54	-44193.853	59	-13075.051	49	0	1	-200.994	53	0	1
53	N21	max	5.374	45	13719.557	27	118.001	49	0	68	7.327	55	0	68
54		min	-4.301	48	950.269	57	-42.298	59	0	1	-36.35	51	0	1
55	N22	max	-1.096	59	33954.366	39	57.402	17	0	68	0	68	0	68
56		min	-43.995	31	-16217.779	53	-17.646	57	0	1	0	1	0	1
57	N24	max	44.507	45	16503.287	27	137.965	49	0	68	0	68	0	68
58		min	-66.468	47	1042.329	57	-170.35	51	0	1	0	1	0	1
59	N26	max	1.637	60	8086.784	25	164.511	60	0	68	0	68	0	68
60		min	-33.427	9	920.634	59	-236.755	49	0	1	0	1	0	1
61	N25	max	32.713	54	24546.773	47	265.759	44	0	68	0	68	0	68
62		min	-71.357	31	-16008.794	53	-123.073	57	0	1	0	1	0	1
63	N28	max	10694.99	56	28525.442	45	65.749	49	0	68	0	68	0	68
64		min	-12886.273	29	-15010.563	55	-45.595	51	0	1	0	1	0	1
65	N29	max	90.989	46	12045.331	25	57.686	49	0	68	73.854	56	0	68
66		min	-159.53	47	1181.254	59	-51.039	51	0	1	-62.891	29	0	1
67	N33	max	23.364	53	807.457	57	20.631	50	0	68	0	41	0	68
68		min	-33.713	31	-64.718	35	-17.427	59	0	1	0	52	0	1
69	Totals:	max	35795.535	39	381266.029	21	26134.013	60						
70		min	-38407.121	54	41427.76	55	-25837.035	57						

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-y [lb-ft]	phi*Mn z-z [lb-ft]	Cb	Eqn
1	M1	HSS5X5X4	0.08	14.531	39	0.041	15.5	y	54	98047.975	193500	28537.5	28537.5	1.596	H1-1b
2	M2	HSS5X5X4	0.074	0	13	0.01	15.375	y	54	77360.374	193500	28537.5	28537.5	3	H1-1b*
3	M3	HSS5X5X4	0.039	14.438	39	0.003	18	y	39	77360.374	193500	28537.5	28537.5	1.431	H1-1b
4	M4	HSS5X5X8	0.071	0	51	0.008	18	y	38	125894.191	354600	49125	49125	1.431	H1-1b*
5	M5	HSS5X5X8	0.09	0	41	0.012	18	y	37	125894.191	354600	49125	49125	1.431	H1-1b*
6	M6	HSS5X5X4	0.18	14.438	37	0.022	18	y	38	77360.374	193500	28537.5	28537.5	1.431	H1-1b

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-y [lb-ft]	phi*Mn z-z [lb-ft]	Cb	Eqn
7	M7	HSS5X5X4	0.102	0	23	0.006	18	y	53	77360.374	193500	28537.5	28537.5	1.796	H1-1b*
8	M8	W14X22	0.123	7.36	13	0.047	15.36	y	15	122572.09	292050	16462.5	115000.791	1	H1-1b
9	M9	W14X22	0.003	1.085	41	0.002	2.17	y	15	249471.246	292050	16462.5	124500	1.136	H1-1b
10	M10	W14X22	0.076	3.905	13	0.044	7.81	y	15	193715.322	292050	16462.5	115000.791	1	H1-1b
11	M11	W14X22	0.053	3.69	15	0.036	7.38	y	15	198810.722	292050	16462.5	115000.791	1	H1-1b
12	M12	W14X22	0.189	9.862	13	0.088	15.52	y	15	121401.893	292050	16462.5	115000.791	1	H1-1b
13	M13	W14X22	0.234	9.319	27	0.094	16.88	y	23	112159.499	292050	16462.5	115000.791	1	H1-1b
14	M14	HSS5X5X8	0.192	0	27	0.032	18.156	y	46	92493.691	354600	49125	49125	1.521	H1-1b*
15	M15	HSS5X5X4	0.186	0	17	0.001	14.6	z	19	105859.4	193500	28537.5	28537.5	1.667	H1-1b*
16	M16	HSS5X5X4	0.172	0	19	0.001	14.6	z	17	105859.4	193500	28537.5	28537.5	1.667	H1-1b*
17	M233	HSS5X5X4	0.169	0	25	0.009	18	y	37	77360.374	193500	28537.5	28537.5	1.431	H1-1b*
18	M18	HSS5X5X8	0.044	0	27	0.001	14.6	y	21	179609.218	354600	49125	49125	1.667	H1-1b*
19	M19	HSS5X5X4	0.053	14.625	45	0.006	18	y	45	77360.374	193500	28537.5	28537.5	1.839	H1-1b
20	M20	W14X22	0.056	8.915	27	0.031	17.83	y	25	106509.932	292050	16462.5	124500	1	H1-1b
21	M21	W14X22	0.01	1.4	48	0.003	0	z	56	243057.993	292050	16462.5	124500	1.136	H1-1b
22	M22	W14X22	0.121	4.695	27	0.043	9.39	y	21	175670.185	292050	16462.5	115000.791	1	H1-1b
23	M23	W14X22	0.143	4.735	13	0.058	8.824	y	13	165677.809	292050	16462.5	115000.791	1	H1-1b
24	M24	W14X22	0.502	9.909	13	0.095	19.599	y	13	92419.308	292050	16462.5	115000.791	1	H1-1b
25	M25	HSS5X5X8	0.261	14.438	45	0.032	14.656	y	41	92493.691	354600	49125	49125	2.51	H1-1a
26	M26	W14X22	0.058	12.02	54	0.02	12.02	y	15	149447.606	292050	16462.5	124500	1	H1-1b*
27	M27	W14X22	0.043	5.419	25	0.017	11.31	y	23	155983.461	292050	16462.5	124500	1	H1-1b
28	M28	W14X22	0.034	5.182	28	0.015	9.95	y	23	169639.378	292050	16462.5	124500	1	H1-1b
29	M29	HSS5X5X4	0.127	14.875	44	0.027	18.156	y	49	56919.195	193500	28537.5	28537.5	2.455	H1-1b
30	M30	HSS5X5X4	0.197	14.875	49	0.017	21	z	43	56919.195	193500	28537.5	28537.5	2.357	H1-1b
31	M31	HSS5X5X8	0.321	14.438	21	0.026	18.156	y	46	92493.691	354600	49125	49125	2.736	H1-1a
32	M32	HSS5X5X8	0.42	14.438	49	0.022	21	z	21	92493.691	354600	49125	49125	2.903	H1-1a
33	M33	HSS5X5X8	0.485	14.438	51	0.032	21	z	23	92493.691	354600	49125	49125	1.688	H1-1a
34	M34	W16X26	0.151	9.449	23	0.054	19.72	y	23	113397.746	345600	20550	156319.632	1	H1-1b
35	M35	W16X26	0.178	9.909	23	0.054	19.599	y	27	106080.251	345600	20550	156319.632	1	H1-1b
36	M36	W16X26	0.04	3.925	21	0.034	7.85	y	15	230190.342	345600	20550	156319.632	1	H1-1b
37	M37	W16X26	0.278	9.449	21	0.089	19.72	y	21	113397.746	345600	20550	156319.632	1	H1-1b
38	M38	W16X26	0.29	10.79	27	0.078	21.14	y	25	106080.251	345600	20550	156319.632	1	H1-1b
39	M39	W16X26	0.059	5.806	50	0.036	7.85	y	13	230190.342	345600	20550	156319.632	1	H1-1b*
40	M40	W14X22	0.027	6.753	19	0.013	13.23	y	19	139258.511	292050	16462.5	124500	1	H1-1b
41	M41	W14X22	0.198	7.232	21	0.071	16.53	y	25	114500.781	292050	16462.5	115000.791	1	H1-1b
42	M42	HSS5X5X8	0.08	0	27	0.007	21	z	17	92493.691	354600	49125	49125	3	H1-1b*
43	M43	HSS5X5X8	0.283	18.156	25	0.017	21	z	57	92493.691	354600	49125	49125	3	H1-1a
44	M44	HSS5X5X4	0.275	18.156	25	0.016	21	z	49	56919.195	193500	28537.5	28537.5	3	H1-1a
45	M45	HSS5X5X4	0.115	0	27	0.003	21	z	25	56919.195	193500	28537.5	28537.5	3	H1-1b*
46	M46	HSS5X5X8	0.124	0	27	0.017	21	z	41	92493.691	354600	49125	49125	2.176	H1-1b*
47	M47	HSS5X5X8	0.13	0	25	0.017	21	z	41	92493.691	354600	49125	49125	1.509	H1-1b*
48	M48	HSS5X5X8	0.192	0	27	0.008	20.738	z	51	50430.296	354600	49125	49125	1.791	H1-1b*
49	M49	W14X22	0.061	8.58	27	0.022	14.45	y	27	129658.378	292050	16462.5	124500	1	H1-1b
50	M50	W14X22	0.131	9.744	27	0.038	21.26	y	25	92028.382	292050	16462.5	124500	1	H1-1b
51	M51	W14X22	0.045	4.875	27	0.023	12	y	25	149626.043	292050	16462.5	124500	1	H1-1b
52	M52	W14X22	0.191	9.26	23	0.061	17.78	y	21	106784.886	292050	16462.5	115000.791	1	H1-1b
53	M53	W14X22	0.264	10.275	23	0.062	21.92	y	21	89991.793	292050	16462.5	115000.791	1	H1-1b
54	M54	W14X22	0.241	10.526	23	0.077	20.21	y	21	95688.951	292050	16462.5	115000.791	1	H1-1b
55	M55	HSS5X5X4	0.033	18.368	55	0.004	20.738	y	39	31034.028	193500	28537.5	28537.5	1.905	H1-1b
56	M56	HSS5X5X4	0.034	18.368	39	0.004	20.738	y	39	31034.028	193500	28537.5	28537.5	1.875	H1-1b
57	M58	HSS5X5X8	0.345	18.071	27	0.005	25.478	z	43	50430.296	354600	49125	49125	1.814	H1-1a
58	M59	HSS5X5X8	0.494	14.813	47	0.008	20.738	z	51	50430.296	354600	49125	49125	1.529	H1-1a
59	M60	W10X12	0.003	1.69	40	0.002	1.69	y	15	140222.55	159300	6457.579	46904.385	1.136	H1-1b*
60	M61	W10X12	0.027	1.345	48	0.006	2.69	z	56	131741.535	159300	6457.579	46904.385	1.136	H1-1b
61	M62	W10X12	0.011	0.845	44	0.004	1.69	z	60	140222.55	159300	6457.579	46904.385	1.136	H1-1b

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-y [lb-ft]	phi*Mn z-z [lb-ft]	Cb	Eqn
62	M63	W10X12	0.008	1.345	44	0.024	2.69	z	21	131741.535	159300	6457.579	46904.385	1.389	H1-1b
63	M64	W10X12	0.258	6	23	0.027	12	y	25	23750.423	159300	6457.579	17061.163	1.144	H1-1b
64	M65	W10X12	0.019	1.345	52	0.02	2.69	z	37	131741.535	159300	6457.579	46904.385	1.358	H1-1b
65	M66	W14X22	0.03	7.5	44	0.011	12	y	13	149626.043	292050	16462.5	124500	1	H1-1b
66	M67	W14X22	0.191	9.387	23	0.077	11.733	y	21	132759.313	292050	16462.5	115000.791	1	H1-1b
67	M68	W14X22	0.053	4.16	21	0.039	8.32	y	25	187752.637	292050	16462.5	115000.791	1	H1-1b
68	M70	W14X22	0.4	9.26	17	0.099	16.484	y	13	106784.886	292050	16462.5	115000.791	1	H1-1b
69	M71	W14X22	0.594	10.275	13	0.115	3.653	y	13	89991.793	292050	16462.5	115000.791	1	H1-1b
70	M72	W14X22	0.5	8.631	19	0.115	20.21	y	21	95688.951	292050	16462.5	115000.791	1	H1-1b
71	M73	HSS5X5X8	0.289	18.2	39	0.001	18.2	z	19	123142.489	354600	49125	49125	1.667	H1-1a
72	M74	HSS5X5X4	0.346	18.2	17	0.001	18.2	y	37	75791.648	193500	28537.5	28537.5	1.667	H1-1a
73	M75	W10X22	0.061	6	15	0.037	12	y	19	192064.674	292050	22875	97500	1	H1-1b
74	M76	W10X12	0.109	6.125	15	0.032	12	y	15	65257.013	159300	6457.579	46904.385	1	H1-1b
75	M80	W10X12	0.251	8.915	13	0.045	17.83	y	15	46337.132	159300	6457.579	46904.385	1	H1-1b
76	M81	W10X12	0.31	8.544	13	0.052	17.83	y	15	46337.132	159300	6457.579	46904.385	1	H1-1b
77	M82	W10X12	0.303	8.729	13	0.048	17.83	y	13	46337.132	159300	6457.579	46904.385	1	H1-1b
78	M83	W10X12	0.348	8.544	15	0.059	0	y	15	46337.132	159300	6457.579	46904.385	1	H1-1b
79	M84	W10X12	0.28	8.729	21	0.074	15.23	y	27	46337.132	159300	6457.579	46904.385	1	H1-1b
80	M85	W10X12	0.351	8.544	17	0.058	0	y	13	46337.132	159300	6457.579	46904.385	1	H1-1b
81	M86	W10X12	0.286	8.915	13	0.052	0	y	13	46337.132	159300	6457.579	46904.385	1	H1-1b
82	M87	W10X12	0.116	6.135	17	0.04	12.02	y	15	65153.269	159300	6457.579	46904.385	1	H1-1b
83	M88	W10X12	0.12	6.01	13	0.034	12.02	y	13	65153.269	159300	6457.579	46904.385	1	H1-1b
84	M89	W10X12	0.096	6.01	13	0.03	12.02	y	19	65153.269	159300	6457.579	46904.385	1	H1-1b
85	M90	W10X12	0.104	6.01	13	0.036	12.02	y	17	65153.269	159300	6457.579	46904.385	1	H1-1b
86	M91	W10X12	0.125	6.01	13	0.039	12.02	y	15	65153.269	159300	6457.579	46904.385	1	H1-1b
87	M92	W10X12	0.113	6.01	13	0.035	12.02	y	15	65153.269	159300	6457.579	46904.385	1	H1-1b
88	M93	W14X22	0.128	10.215	17	0.041	15.23	y	15	106509.932	292050	16462.5	124500	1	H1-1b
89	M94	W10X12	0.098	6.01	13	0.028	12.02	y	15	65153.269	159300	6457.579	46904.385	1	H1-1b
90	M95	W10X12	0.099	6.01	13	0.028	12.02	y	13	65153.269	159300	6457.579	46904.385	1	H1-1b
91	M97	W10X12	0.096	3.864	13	0.041	1.419	y	1	96828.156	159300	6457.579	39385.213	1	H1-1b
92	M98	W10X12	0.042	2.76	13	0.017	7.57	y	15	96828.156	159300	6457.579	46904.385	1	H1-1b
93	M99	W10X12	0.007	1.557	15	0.023	3.25	y	15	125646.604	159300	6457.579	46904.385	1.138	H1-1b
94	M100	W10X12	0.074	5.09	13	0.043	10.18	y	19	76118.756	159300	6457.579	46904.385	1	H1-1b
95	M101	W10X12	0.011	2.2	19	0.018	4.4	y	15	110850.343	159300	6457.579	46904.385	1.161	H1-1b
96	M102	W10X12	0.016	2.2	13	0.025	4.4	y	15	123555.16	159300	6457.579	46904.385	1	H1-1b
97	M103	W10X12	0.124	6.753	13	0.036	13.23	y	17	59303.025	159300	6457.579	46904.385	1	H1-1b
98	M104	W10X12	0.116	6.615	17	0.04	13.23	y	19	59303.025	159300	6457.579	46904.385	1	H1-1b
99	M105	W14X22	0.35	11.453	17	0.092	17.281	y	17	99399.792	292050	16462.5	115000.791	1	H1-1b
100	M106	W10X12	0.132	6.615	13	0.034	13.23	y	19	59303.025	159300	6457.579	46904.385	1	H1-1b
101	M107	W10X12	0.13	6.615	13	0.034	13.23	y	19	59303.025	159300	6457.579	46904.385	1	H1-1b
102	M108	W14X22	0.049	7.225	25	0.018	14.45	y	23	129658.378	292050	16462.5	124500	1	H1-1b
103	M109	W10X12	0.191	7.225	25	0.044	14.45	y	23	54637.118	159300	6457.579	46904.385	1	H1-1b
104	M110	W10X12	0.149	7.074	13	0.034	0	y	17	54637.118	159300	6457.579	46904.385	1	H1-1b
105	M111	W10X12	0.15	7.225	13	0.034	14.45	y	17	54637.118	159300	6457.579	46904.385	1	H1-1b
106	M112	W10X12	0.103	6.01	13	0.037	12.02	y	13	65153.269	159300	6457.579	46904.385	1	H1-1b
107	M113	W10X12	0.252	8.544	13	0.045	17.83	y	15	46337.132	159300	6457.579	46904.385	1	H1-1b
108	M114	W10X12	0.073	6.01	13	0.028	12.02	y	13	65153.269	159300	6457.579	46904.385	1	H1-1b
109	M115	W12X16	0.296	10.63	27	0.056	21.26	y	27	55331.317	211950	8475	75375	1	H1-1b
110	M116	W10X12	0.149	6.125	27	0.05	12	y	27	65257.013	159300	6457.579	46904.385	1	H1-1b
111	M117	W12X16	0.234	10.63	19	0.041	21.26	y	17	55331.317	211950	8475	75375	1	H1-1b
112	M118	W10X12	0.116	6.125	15	0.035	12	y	19	65257.013	159300	6457.579	46904.385	1	H1-1b
113	M119	W12X16	0.217	10.409	13	0.043	21.26	y	17	55331.317	211950	8475	75375	1	H1-1b
114	M120	W10X12	0.105	6.125	15	0.037	12	y	17	65257.013	159300	6457.579	46904.385	1	H1-1b
115	M121	W12X16	0.183	9.744	13	0.039	3.322	y	13	55331.317	211950	8475	75375	1	H1-1b
116	M127	W12X16	0.21	11.516	13	0.038	21.26	y	19	55331.317	211950	8475	75375	1	H1-1b

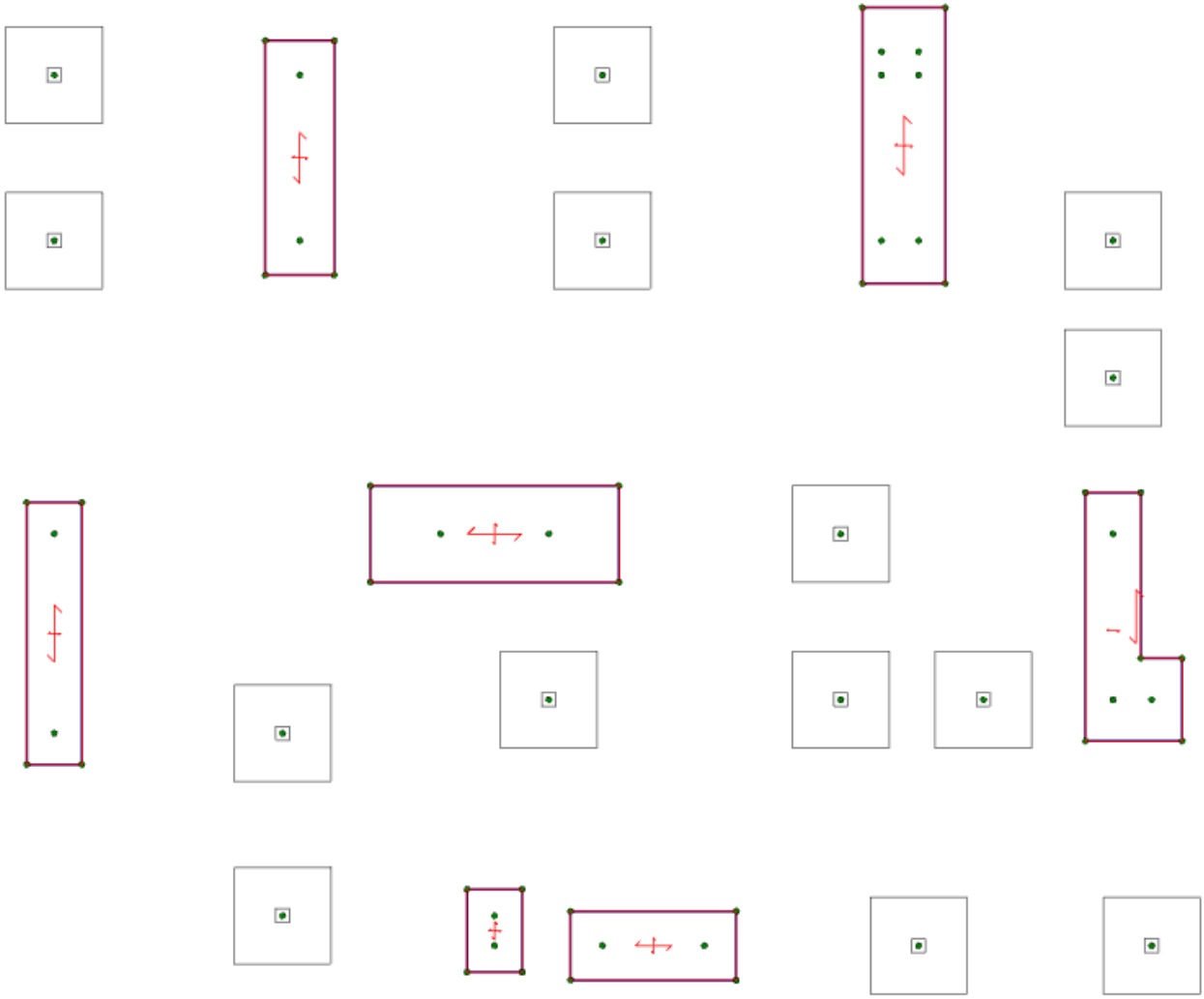
Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-y [lb-ft]	phi*Mn z-z [lb-ft]	Cb	Eqn
117	M128	W12X16	0.15	10.409	15	0.029	21.26	y	27	55331.317	211950	8475	75375	1	H1-1b
118	M129	W12X16	0.192	10.63	13	0.037	21.26	y	23	55331.317	211950	8475	75375	1	H1-1b
119	M130	W12X16	0.209	10.409	15	0.037	0	y	15	55331.317	211950	8475	75375	1	H1-1b
120	M131	W10X12	0.133	6	25	0.039	12	y	25	65257.013	159300	6457.579	46904.385	1	H1-1b
121	M132	W12X16	0.221	10.63	17	0.04	0	y	13	55331.317	211950	8475	75375	1	H1-1b
122	M133	W10X12	0.117	6	23	0.034	12	y	27	65257.013	159300	6457.579	46904.385	1	H1-1b
123	M134	W12X16	0.22	10.63	17	0.04	21.26	y	19	55331.317	211950	8475	75375	1	H1-1b
124	M135	W10X12	0.111	6	15	0.033	12	y	19	65257.013	159300	6457.579	46904.385	1	H1-1b
125	M136	W12X16	0.22	10.63	17	0.042	21.26	y	19	55331.317	211950	8475	75375	1	H1-1b
126	M137	W10X12	0.11	6.125	15	0.036	12	y	15	65257.013	159300	6457.579	46904.385	1	H1-1b
127	M138	W12X16	0.225	10.851	13	0.048	21.26	y	13	55331.317	211950	8475	75375	1	H1-1b
128	M139	W12X16	0.201	10.63	13	0.039	21.26	y	15	55331.317	211950	8475	75375	1	H1-1b
129	M140	W10X12	0.118	6	15	0.037	12	y	15	65257.013	159300	6457.579	46904.385	1	H1-1b
130	M141	W10X12	0.101	6	15	0.032	12	y	15	65257.013	159300	6457.579	46904.385	1	H1-1b
131	M142	W12X16	0.203	10.63	19	0.039	21.26	y	15	55331.317	211950	8475	75375	1	H1-1b
132	M143	W10X12	0.104	6	15	0.031	12	y	15	65257.013	159300	6457.579	46904.385	1	H1-1b
133	M144	W10X12	0.13	6.125	15	0.043	12	y	15	65257.013	159300	6457.579	46904.385	1	H1-1b
134	M145	W12X16	0.213	10.63	15	0.043	21.26	y	15	55331.317	211950	8475	75375	1	H1-1b
135	M146	W10X12	0.218	7.074	27	0.051	14.45	y	27	54637.118	159300	6457.579	46904.385	1	H1-1b
136	M147	W10X12	0.173	7.225	19	0.04	14.45	y	17	54637.118	159300	6457.579	46904.385	1	H1-1b
137	M148	W10X12	0.14	7.225	13	0.034	14.45	y	17	54637.118	159300	6457.579	46904.385	1	H1-1b
138	M149	W10X12	0.115	7.526	13	0.033	14.45	y	17	54637.118	159300	6457.579	46904.385	1	H1-1b
139	M150	W14X22	0.007	1.268	27	0.015	3.12	y	22	239259.832	292050	16462.5	124500	1.572	H1-1b
140	M151	HSS5X5X4	0.112	3.6	27	0.015	6.4	z	19	172323.845	193500	28537.5	28537.5	1.596	H1-1b
141	M152	W10X12	0.301	7.225	25	0.028	14.45	y	21	16379.406	159300	6457.579	12865.54	1.138	H1-1b
142	M153	HSS5X5X4	0.018	3.6	23	0	3.6	y	68	186532.484	193500	28537.5	28537.5	1	H1-1b*
143	M154	W18X35	0.536	10.197	21	0.103	25.639	y	23	132173.725	463500	30225	240928.086	1	H1-1b
144	M156	W12X16	0.141	10.63	17	0.032	21.26	y	13	55331.317	211950	8475	75375	1	H1-1b
145	M157	HSS5X5X5	0.079	14.45	42	0.008	14.45	z	42	128788.021	236700	34350	34350	2.169	H1-1b
146	M158	HSS5X5X5	0.091	0	42	0.011	0	z	51	65948.426	236700	34350	34350	2.155	H1-1b
147	M159	HSS5X5X5	0.04	0	42	0.028	0	z	49	155563.914	236700	34350	34350	2.25	H1-1b
148	M160	HSS5X5X5	0.084	17.78	48	0.008	17.78	z	56	94191.511	236700	34350	34350	2.083	H1-1b
149	M161	HSS5X5X5	0.099	0	52	0.013	0	z	40	62036.867	236700	34350	34350	2.399	H1-1b
150	M162	HSS5X5X5	0.088	0	52	0.009	0	z	47	72979.071	236700	34350	34350	3	H1-1b
151	M163	HSS5X5X4	0.001	0.845	42	0.001	1.69	z	50	191942.487	193500	28537.5	28537.5	1.136	H1-1b
152	M164	HSS5X5X4	0.003	1.345	40	0.002	2.69	z	56	189578.269	193500	28537.5	28537.5	1.136	H1-1b
153	M165	HSS5X5X4	0.001	0.845	44	0.001	1.69	z	52	191942.487	193500	28537.5	28537.5	1.136	H1-1b
154	M166	HSS5X5X4	0.01	2.69	52	0.001	2.69	y	1	189578.269	193500	28537.5	28537.5	1.136	H1-1b*
155	M167	HSS5X5X4	0.061	6	44	0.009	12	z	60	128741.895	193500	28537.5	28537.5	1.136	H1-1b
156	M168	HSS5X5X5	0.052	7.04	39	0.005	14.08	z	56	132812.338	236700	34350	34350	1.136	H1-1b
157	M169	HSS5X5X5	0.047	9.95	48	0.004	9.95	y	48	177366.311	236700	34350	34350	2.109	H1-1b
158	M170	HSS5X5X5	0.04	0	37	0.029	11.31	z	60	163030.72	236700	34350	34350	2.475	H1-1b
159	M171	HSS5X5X5	0.107	19.72	46	0.009	19.72	z	46	76650.878	236700	34350	34350	2.209	H1-1b
160	M172	HSS5X5X5	0.093	0	53	0.011	0	z	37	66699.256	236700	34350	34350	2.515	H1-1b
161	M173	HSS5X5X5	0.121	7.85	21	0.02	7.85	y	45	197783.666	236700	34350	34350	2.245	H1-1b
162	M174	HSS5X5X5	0.327	0	25	0.022	0	y	25	193450.439	236700	34350	34350	1.701	H1-1b
163	M175	HSS5X5X5	0.054	7.225	43	0.005	14.45	z	60	128788.021	236700	34350	34350	1.136	H1-1b
164	M176	HSS5X5X5	0.3	3.12	19	0.051	3.12	y	19	230078.213	236700	34350	34350	1.672	H1-1b
165	M177	HSS5X5X5	0.118	0	37	0.02	0	z	54	106734.05	236700	34350	34350	2.357	H1-1b
166	M178	HSS5X5X4	0.027	6.615	50	0.003	13.23	y	1	117918.971	193500	28537.5	28537.5	1.136	H1-1b
167	M179	HSS5X5X4	0.035	7.68	37	0.003	15.36	y	1	99252.609	193500	28537.5	28537.5	1.136	H1-1b
168	M180	HSS5X5X5	0.051	2.667	46	0.013	2.667	y	46	221139.456	236700	34350	34350	2.883	H1-1b
169	M181	HSS5X5X5	0.023	4.556	54	0.004	0	z	54	198145.12	236700	34350	34350	1.173	H1-1b
170	M182	HSS5X5X5	0.025	7.38	45	0.023	7.38	z	37	201953.717	236700	34350	34350	3	H1-1b
171	M183	HSS5X5X5	0.048	15.52	46	0.023	15.52	z	37	117295.34	236700	34350	34350	2.838	H1-1b

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-y [lb-ft]	phi*Mn z-z [lb-ft]	Cb	Eqn
172	M184	HSS5X5X5	0.062	9.671	38	0.009	0	z	53	103157.356	236700	34350	34350	1.686	H1-1b
173	M185	HSS5X5X4	0.108	8.915	51	0.01	17.83	z	60	78705.284	193500	28537.5	28537.5	1.136	H1-1b
174	M186	HSS5X5X5	0.042	12.186	37	0.01	12.368	y	41	97339.038	236700	34350	34350	2.082	H1-1b
175	M190	HSS5X5X4	0.091	0	51	0.002	16.359	y	1	90739.907	193500	28537.5	28537.5	1.136	H1-1b*
176	M191	HSS5X5X4	0.465	10.219	37	0.003	0	y	1	52818.292	193500	28537.5	28537.5	1.161	H1-1a
177	M193	HSS5X5X4	0.24	8.865	47	0.002	18.911	y	1	70186.044	193500	28537.5	28537.5	1.136	H1-1a
178	M194	HSS5X5X4	0.312	7.598	51	0.002	16.577	y	1	88920.473	193500	28537.5	28537.5	1.136	H1-1a
179	M195	HSS5X5X4	0.004	2.69	43	0.002	2.69	z	54	189578.269	193500	28537.5	28537.5	1.136	H1-1b*
180	M196	HSS5X5X4	0.061	6	42	0.009	0	z	58	128741.895	193500	28537.5	28537.5	1.136	H1-1b
181	M197	HSS5X5X4	0.001	0.845	50	0.001	1.69	z	50	191942.487	193500	28537.5	28537.5	1.136	H1-1b
182	M198	HSS5X5X4	0.003	1.345	48	0.002	2.69	z	56	189578.269	193500	28537.5	28537.5	1.136	H1-1b
183	M202	HSS5X5X4	0.003	1.345	46	0.002	2.69	z	54	189578.269	193500	28537.5	28537.5	1.136	H1-1b
184	M203	HSS5X5X4	0.062	6	42	0.009	0	z	58	128741.895	193500	28537.5	28537.5	1.136	H1-1b
185	M204	HSS5X5X4	0.002	1.345	48	0.001	2.69	z	56	189578.269	193500	28537.5	28537.5	1.136	H1-1b
186	M207	HSS5X5X4	0.002	1.345	38	0.001	2.69	z	54	189578.269	193500	28537.5	28537.5	1.136	H1-1b
187	M208	HSS5X5X4	0.045	5.134	18	0.014	12.121	y	13	113858.646	193500	28537.5	28537.5	1.39	H1-1b
188	M201	HSS5X5X4	0.062	6	44	0.009	0	z	60	128741.895	193500	28537.5	28537.5	1.136	H1-1b
189	M205	HSS5X5X4	0.045	11.979	17	0.015	12.121	y	15	113858.646	193500	28537.5	28537.5	1.522	H1-1b
190	M206	HSS5X5X8	0.074	0	17	0.009	20.738	z	52	50430.296	354600	49125	49125	1.769	H1-1b*
191	M199	W12X16	0.243	10.63	17	0.048	21.26	y	17	55331.317	211950	8475	75375	1	H1-1b
192	M209	W12X16	0.309	10.63	25	0.06	21.26	y	25	55331.317	211950	8475	75375	1	H1-1b
193	M210	W14X22	0.209	10.215	13	0.121	17.83	y	17	106509.932	292050	16462.5	124500	1	H1-1b
194	M211	HSS5X5X4	0.042	3.4	41	0.006	3.4	z	41	187272.897	193500	28537.5	28537.5	1.667	H1-1b
195	M212	HSS5X5X4	0.435	9.992	45	0.002	21.8	y	1	52818.292	193500	28537.5	28537.5	1.136	H1-1a
196	M213	HSS5X5X4	0.024	11.31	46	0.009	11.31	y	44	134736.526	193500	28537.5	28537.5	2.254	H1-1b
197	M215	HSS5X5X4	0.037	11.31	37	0.014	0	y	41	134736.526	193500	28537.5	28537.5	2.457	H1-1b
198	M216	HSS5X5X4	0.069	0	16	0.108	9.95	y	13	146223.495	193500	28537.5	28537.5	2.277	H1-1b
199	M217	HSS5X5X4	0.07	0	40	0.018	11.31	y	52	134736.526	193500	28537.5	28537.5	2.456	H1-1b
200	M218	HSS5X5X4	0.071	0	41	0.01	0	y	41	146223.495	193500	28537.5	28537.5	2.251	H1-1b
201	M219	HSS5X5X4	0.11	14.08	51	0.014	14.08	y	43	110422.277	193500	28537.5	28537.5	2.326	H1-1b
202	M220	HSS5X5X4	0.092	0	42	0.01	0	y	42	110422.277	193500	28537.5	28537.5	2.364	H1-1b
203	M221	HSS5X5X4	0.069	14.08	44	0.007	0	y	49	110422.277	193500	28537.5	28537.5	2.335	H1-1b
204	M214	HSS5X5X4	0.082	0	51	0.001	5.33	y	1	178555.936	193500	28537.5	28537.5	1.136	H1-1b*
205	M222	HSS5X5X4	0.082	5.322	49	0.001	5.322	y	1	178595.602	193500	28537.5	28537.5	1.136	H1-1b*
206	M223	HSS5X5X4	0.321	7.598	49	0.002	16.577	y	1	88920.473	193500	28537.5	28537.5	1.136	H1-1a
207	M224	HSS5X5X4	0.233	10.651	47	0.003	23.239	y	1	46480.351	193500	28537.5	28537.5	1.136	H1-1a
208	M225	HSS5X5X4	0.089	16.359	41	0.002	16.359	y	1	90739.907	193500	28537.5	28537.5	1.136	H1-1b*
209	M226	HSS5X5X4	0.001	0.845	44	0.001	1.69	z	60	191942.487	193500	28537.5	28537.5	1.136	H1-1b
210	M227	HSS5X5X4	0.006	2.8	25	0	2.8	y	68	189254.59	193500	28537.5	28537.5	1	H1-1b*
211	M228	HSS4X4X5	0.07	0	20	0.013	0	y	16	171071.412	184500	20962.5	20962.5	2.038	H1-1b
212	M229	HSS4X4X5	0.026	5.3	18	0.011	0	y	17	136885.192	184500	20962.5	20962.5	1.18	H1-1b
213	M230	HSS4X4X5	0.073	4	17	0.015	4	y	13	171071.412	184500	20962.5	20962.5	1.979	H1-1b
214	M231	HSS4X4X5	0.029	0	16	0.01	0	y	17	171071.412	184500	20962.5	20962.5	2.867	H1-1b
215	M232	HSS4X4X5	0.03	0	20	0.01	0	y	17	171071.412	184500	20962.5	20962.5	2.751	H1-1b

FOUNDATION DESIGN



Concrete Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]	f'c [ksi]	Lambda	Flex Steel [ksi]	Shear Steel [ksi]
1	Conc3000NW	3156	1372	0.15	0.6	0.145	3	1	60	60
2	Conc3500NW	3409	1482	0.15	0.6	0.145	3.5	1	60	60
3	Conc4000NW	3644	1584	0.15	0.6	0.145	4	1	60	60
4	Conc3000LW	2085	907	0.15	0.6	0.11	3	0.75	60	60
5	Conc3500LW	2252	979	0.15	0.6	0.11	3.5	0.75	60	60
6	Conc4000LW	2408	1047	0.15	0.6	0.11	4	0.75	60	60
7	Conc3000NW WWR	3156	1372	0.15	0.6	0.145	3	1	70	60
8	Conc3500NW WWR	3409	1482	0.15	0.6	0.145	3.5	1	70	60
9	Conc4000NW WWR	3644	1584	0.15	0.6	0.145	4	1	70	60

Design Rules - Mat Slab

	Label	Max Bending Chk	Max Shear Chk	Top Bar	Bottom Bar	Min Top Bar Spacing [in]	Max Top Bar Spacing [in]	Min Bot Bar Spacing [in]	Max Bot Bar Spacing [in]	Spacing Increment [in]	Top Cover [in]	Bottom Cover [in]	Side Cover [in]	Rebar Options
1	Typical	1	1	#5	#5	6	18	6	18	2	2	3	3	Optimize

Design Rules - Footing

	Label	Max Bending Chk	Max Shear Chk	Top Bar	Bottom Bar	Top Cover [in]	Bottom Cover [in]
1	Typical	1	1	#5	#5	2	3

Design Strips

	Label	Rebar Angle from Plan Horizontal (deg)	No. of Design Cuts	Design Rule
1	DS1	0	50	Typical
2	DS2	0	50	Typical
3	DS3	0	50	Typical
4	DS4	0	50	Typical
5	DS5	0	50	Typical
6	DS6	0	50	Typical
7	DS7	0	50	Typical
8	DS8	90	50	Typical
9	DS9	90	50	Typical
10	DS10	90	50	Typical
11	DS11	90	50	Typical
12	DS12	90	50	Typical
13	DS13	90	50	Typical
14	DS14	90	50	Typical

Load Category

	Category	Node Loads	Area Loads
1	DL	96	7
2	SL	90	
3	RLL	90	
4	SLN	92	
5	ELX	106	
6	ELZ	99	
7	OL1	95	
8	OL2	95	
9	OL3	95	
10	OL4	95	
11	OL5	95	
12	OL6	95	

Load Category (Continued)

	Category	Node Loads	Area Loads
13	OL7	96	
14	OL8	96	
15	OL9	93	
16	OL10	89	
17	OL11	89	
18	OL13	95	
19	OL14	98	
20	OL15	97	

Load Combination

	Label	Solve	Service	Category	Factor	Category	Factor	Category	Factor	Category	Factor
1	Service	Yes	Yes	DL	1						
2	Strength	Yes		DL	1.2						
3	dl	Yes		DL	1.4						
4	dl+rll	Yes		DL	1.2	RLL	1.6				
5	dl+sl	Yes		DL	1.2	SL	1.6				
6	dl+sln	Yes		DL	1.2	SLN	1.6				
7	dl+rll+wl	Yes		DL	1.2	RLL	1.6	OL1	0.5	OL11	0.5
8	dl+rll+wl	Yes		DL	1.2	RLL	1.6	OL2	0.5	OL12	0.5
9	dl+rll+wl	Yes		DL	1.2	RLL	1.6	OL3	0.5	OL11	0.5
10	dl+rll+wl	Yes		DL	1.2	RLL	1.6	OL4	0.5	OL12	0.5
11	dl+rll+wl	Yes		DL	1.2	RLL	1.6	OL5	0.5	OL11	0.5
12	dl+rll+wl	Yes		DL	1.2	RLL	1.6	OL6	0.5	OL12	0.5
13	dl+rll+wl	Yes		DL	1.2	RLL	1.6	OL7	0.5	OL11	0.5
14	dl+rll+wl	Yes		DL	1.2	RLL	1.6	OL8	0.5	OL12	0.5
15	dl+sl+wl	Yes		DL	1.2	SL	1.6	OL1	0.5	OL11	0.5
16	dl+sl+wl	Yes		DL	1.2	SL	1.6	OL2	0.5	OL12	0.5
17	dl+sl+wl	Yes		DL	1.2	SL	1.6	OL3	0.5	OL11	0.5
18	dl+sl+wl	Yes		DL	1.2	SL	1.6	OL4	0.5	OL12	0.5
19	dl+sl+wl	Yes		DL	1.2	SL	1.6	OL5	0.5	OL11	0.5
20	dl+sl+wl	Yes		DL	1.2	SL	1.6	OL6	0.5	OL12	0.5
21	dl+sl+wl	Yes		DL	1.2	SL	1.6	OL7	0.5	OL11	0.5
22	dl+sl+wl	Yes		DL	1.2	SL	1.6	OL8	0.5	OL12	0.5
23	dl+sln+wl	Yes		DL	1.2	SLN	1.6	OL1	0.5	OL11	0.5
24	dl+sln+wl	Yes		DL	1.2	SLN	1.6	OL2	0.5	OL12	0.5
25	dl+sln+wl	Yes		DL	1.2	SLN	1.6	OL3	0.5	OL11	0.5
26	dl+sln+wl	Yes		DL	1.2	SLN	1.6	OL4	0.5	OL12	0.5
27	dl+sln+wl	Yes		DL	1.2	SLN	1.6	OL5	0.5	OL11	0.5
28	dl+sln+wl	Yes		DL	1.2	SLN	1.6	OL6	0.5	OL12	0.5
29	dl+sln+wl	Yes		DL	1.2	SLN	1.6	OL7	0.5	OL11	0.5
30	dl+sln+wl	Yes		DL	1.2	SLN	1.6	OL8	0.5	OL12	0.5
31	dl+wl+rll	Yes		DL	1.2	OL1	1	OL11	1	RLL	0.5
32	dl+wl+rll	Yes		DL	1.2	OL2	1	OL12	1	RLL	0.5
33	dl+wl+rll	Yes		DL	1.2	OL3	1	OL11	1	RLL	0.5
34	dl+wl+rll	Yes		DL	1.2	OL4	1	OL12	1	RLL	0.5
35	dl+wl+rll	Yes		DL	1.2	OL5	1	OL11	1	RLL	0.5
36	dl+wl+rll	Yes		DL	1.2	OL6	1	OL12	1	RLL	0.5
37	dl+wl+rll	Yes		DL	1.2	OL7	1	OL11	1	RLL	0.5
38	dl+wl+rll	Yes		DL	1.2	OL8	1	OL12	1	RLL	0.5
39	dl+wl+sl	Yes		DL	1.2	OL1	1	OL11	1	SL	0.5
40	dl+wl+sl	Yes		DL	1.2	OL2	1	OL12	1	SL	0.5
41	dl+wl+sl	Yes		DL	1.2	OL3	1	OL11	1	SL	0.5
42	dl+wl+sl	Yes		DL	1.2	OL4	1	OL12	1	SL	0.5
43	dl+wl+sl	Yes		DL	1.2	OL5	1	OL11	1	SL	0.5
44	dl+wl+sl	Yes		DL	1.2	OL6	1	OL12	1	SL	0.5

Load Combination (Continued)

	Label	Solve	Service	Category	Factor	Category	Factor	Category	Factor	Category	Factor
45	dl+wl+sl	Yes		DL	1.2	OL7	1	OL11	1	SL	0.5
46	dl+wl+sl	Yes		DL	1.2	OL8	1	OL12	1	SL	0.5
47	dl+wl+sln	Yes		DL	1.2	OL1	1	OL11	1	SLN	0.5
48	dl+wl+sln	Yes		DL	1.2	OL2	1	OL12	1	SLN	0.5
49	dl+wl+sln	Yes		DL	1.2	OL3	1	OL11	1	SLN	0.5
50	dl+wl+sln	Yes		DL	1.2	OL4	1	OL12	1	SLN	0.5
51	dl+wl+sln	Yes		DL	1.2	OL5	1	OL11	1	SLN	0.5
52	dl+wl+sln	Yes		DL	1.2	OL6	1	OL12	1	SLN	0.5
53	dl+wl+sln	Yes		DL	1.2	OL7	1	OL11	1	SLN	0.5
54	dl+wl+sln	Yes		DL	1.2	OL8	1	OL12	1	SLN	0.5
55	dl+wl	Yes		DL	0.9	OL1	1	OL9	1		
56	dl+wl	Yes		DL	0.9	OL2	1	OL10	1		
57	dl+wl	Yes		DL	0.9	OL3	1	OL9	1		
58	dl+wl	Yes		DL	0.9	OL4	1	OL10	1		
59	dl+wl	Yes		DL	0.9	OL5	1	OL9	1		
60	dl+wl	Yes		DL	0.9	OL6	1	OL10	1		
61	dl+wl	Yes		DL	0.9	OL7	1	OL9	1		
62	dl+wl	Yes		DL	0.9	OL8	1	OL10	1		
63	dl+ex+sl	Yes		DL	1.2	ELX	0.029	SL	0.2		
64	dl-ex+sl	Yes		DL	1.2	ELX	-0.029	SL	0.2		
65	dl+ez+sl	Yes		DL	1.2	ELZ	0.029	SL	0.2		
66	dl-ez+sl	Yes		DL	1.2	ELZ	-0.029	SL	0.2		
67	dl+ex	Yes		DL	0.9	ELX	0.029				
68	dl-ex	Yes		DL	0.9	ELX	-0.029				
69	dl+ez	Yes		DL	0.9	ELZ	0.029				
70	dl-ez	Yes		DL	0.9	ELZ	-0.029				
71	dl	Yes	Yes	DL	1						
72	dl+rll	Yes	Yes	DL	1	RLL	1				
73	dl+sl	Yes	Yes	DL	1	SL	1				
74	dl+sln	Yes	Yes	DL	1	SLN	1				
75	dl+wl	Yes	Yes	DL	1	OL1	0.6	OL11	0.6		
76	dl+wl	Yes	Yes	DL	1	OL2	0.6	OL12	0.6		
77	dl+wl	Yes	Yes	DL	1	OL3	0.6	OL11	0.6		
78	dl+wl	Yes	Yes	DL	1	OL4	0.6	OL12	0.6		
79	dl+wl	Yes	Yes	DL	1	OL5	0.6	OL11	0.6		
80	dl+wl	Yes	Yes	DL	1	OL6	0.6	OL12	0.6		
81	dl+wl	Yes	Yes	DL	1	OL7	0.6	OL11	0.6		
82	dl+wl	Yes	Yes	DL	1	OL8	0.6	OL12	0.6		
83	dl+rll+wl	Yes	Yes	DL	1	RLL	0.75	OL1	0.45	OL11	0.45
84	dl+rll+wl	Yes	Yes	DL	1	RLL	0.75	OL2	0.45	OL12	0.45
85	dl+rll+wl	Yes	Yes	DL	1	RLL	0.75	OL3	0.45	OL11	0.45
86	dl+rll+wl	Yes	Yes	DL	1	RLL	0.75	OL4	0.45	OL12	0.45
87	dl+rll+wl	Yes	Yes	DL	1	RLL	0.75	OL5	0.45	OL11	0.45
88	dl+rll+wl	Yes	Yes	DL	1	RLL	0.75	OL6	0.45	OL12	0.45
89	dl+rll+wl	Yes	Yes	DL	1	RLL	0.75	OL7	0.45	OL11	0.45
90	dl+rll+wl	Yes	Yes	DL	1	RLL	0.75	OL8	0.45	OL12	0.45
91	dl+sl+wl	Yes	Yes	DL	1	SL	0.75	OL1	0.45	OL11	0.45
92	dl+sl+wl	Yes	Yes	DL	1	SL	0.75	OL2	0.45	OL12	0.45
93	dl+sl+wl	Yes	Yes	DL	1	SL	0.75	OL3	0.45	OL11	0.45
94	dl+sl+wl	Yes	Yes	DL	1	SL	0.75	OL4	0.45	OL12	0.45
95	dl+sl+wl	Yes	Yes	DL	1	SL	0.75	OL5	0.45	OL11	0.45
96	dl+sl+wl	Yes	Yes	DL	1	SL	0.75	OL6	0.45	OL12	0.45
97	dl+sl+wl	Yes	Yes	DL	1	SL	0.75	OL7	0.45	OL11	0.45
98	dl+sl+wl	Yes	Yes	DL	1	SL	0.75	OL8	0.45	OL12	0.45
99	dl+sln+wl	Yes	Yes	DL	1	SLN	0.75	OL1	0.45	OL11	0.45

Load Combination (Continued)

	Label	Solve	Service	Category	Factor	Category	Factor	Category	Factor	Category	Factor
100	dl+sln+wl	Yes	Yes	DL	1	SLN	0.75	OL2	0.45	OL12	0.45
101	dl+sln+wl	Yes	Yes	DL	1	SLN	0.75	OL3	0.45	OL11	0.45
102	dl+sln+wl	Yes	Yes	DL	1	SLN	0.75	OL4	0.45	OL12	0.45
103	dl+sln+wl	Yes	Yes	DL	1	SLN	0.75	OL5	0.45	OL11	0.45
104	dl+sln+wl	Yes	Yes	DL	1	SLN	0.75	OL6	0.45	OL12	0.45
105	dl+sln+wl	Yes	Yes	DL	1	SLN	0.75	OL7	0.45	OL11	0.45
106	dl+sln+wl	Yes	Yes	DL	1	SLN	0.75	OL8	0.45	OL12	0.45
107	dl+wl	Yes	Yes	DL	0.6	OL1	0.6	OL9	0.6		
108	dl+wl	Yes	Yes	DL	0.6	OL2	0.6	OL10	0.6		
109	dl+wl	Yes	Yes	DL	0.6	OL3	0.6	OL9	0.6		
110	dl+wl	Yes	Yes	DL	0.6	OL4	0.6	OL10	0.6		
111	dl+wl	Yes	Yes	DL	0.6	OL5	0.6	OL9	0.6		
112	dl+wl	Yes	Yes	DL	0.6	OL6	0.6	OL10	0.6		
113	dl+wl	Yes	Yes	DL	0.6	OL7	0.6	OL9	0.6		
114	dl+wl	Yes	Yes	DL	0.6	OL8	0.6	OL10	0.6		
115	dl+ex	Yes	Yes	DL	1	ELX	0.02				
116	dl+ex	Yes	Yes	DL	1	ELX	-0.02				
117	dl+ex	Yes	Yes	DL	1	ELZ	0.02				
118	dl+ex	Yes	Yes	DL	1	ELZ	-0.02				
119	dl+ex+sl	Yes	Yes	DL	1	ELX	0.015	SL	0.75		
120	dl-ex+sl	Yes	Yes	DL	1	ELX	-0.015	SL	0.75		
121	dl+ez+sl	Yes	Yes	DL	1	ELZ	0.015	SL	0.75		
122	dl-ez+sl	Yes	Yes	DL	1	ELZ	-0.015	SL	0.75		
123	dl+ex+sln	Yes	Yes	DL	1	ELX	0.015	SLN	0.75		
124	dl+ex+sln	Yes	Yes	DL	1	ELX	-0.015	SLN	0.75		
125	dl+ex+sln	Yes	Yes	DL	1	ELZ	0.015	SLN	0.75		
126	dl+ex+sln	Yes	Yes	DL	1	ELZ	-0.015	SLN	0.75		
127	dl+ex	Yes	Yes	DL	0.6	ELX	0.02				
128	dl-ex	Yes	Yes	DL	0.6	ELX	-0.02				
129	dl+ez	Yes	Yes	DL	0.6	ELZ	0.02				
130	dl-ez	Yes	Yes	DL	0.6	ELZ	-0.02				

Envelope Slab Soil Pressures

	Label	Max UC	Max LC	Soil Pressure[psf]	Allowable Bearing[psf]	Node
1	S1	0.634	85	1268.043	2000	N188
2	S2	0.607	99	1213.691	2000	N215
3	S3	0.595	111	1189.023	2000	N129
4	S4	0.524	99	1048.169	2000	N47
5	S5	0.477	79	954.481	2000	N249
6	S6	0.591	101	1182.135	2000	N59
7	S7	0.337	83	673.565	2000	N206

Envelope Spread Footing Soil Pressures

	Label	Max UC	Max LC	Soil Pressure[psf]	Allowable Bearing[psf]	Node
1	Footing 1 - R3D_N27	0.31	74	620.615	2000	A
2	Footing 1 - R3D_N21	0.462	103	924.08	2000	A
3	Footing 1 - R3D_N23	0.705	87	1409.723	2000	B
4	Footing 1 - R3D_N29	0.434	101	867.136	2000	B
5	Footing 1 - R3D_N26	0.365	103	730.117	2000	B
6	Footing 1 - R3D_N20	0.287	74	573.55	2000	A
7	Footing 1 - R3D_N5	0.332	101	664.696	2000	B
8	Footing 1 - R3D_N4	0.425	99	849.221	2000	D
9	Footing 1 - R3D_N6	0.279	85	557.73	2000	D

Envelope Spread Footing Soil Pressures (Continued)

	Label	Max UC	Max LC	Soil Pressure[psf]	Allowable Bearing[psf]	Node
10	Footing 1 - R3D_N9	0.565	99	1129.289	2000	A
11	Footing 1 - R3D_N10	0.598	83	1195.415	2000	A
12	Footing 1 - R3D_N11	0.537	89	1074.505	2000	B
13	Footing 1 - R3D_N18	0.771	99	1541.803	2000	B
14	Footing 1 - R3D_N12	0.425	101	849.775	2000	B

Slab Stability - Overturning

	LC	Slab	Angle[deg]	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]	Ms-xx/Mo-xx	Ms-zz/Mo-zz
1	1	S1	0	0	117220.446	0	413198.137	9.99+	9.99+
2	1	S2	0	0	80520.175	0	355729.824	9.99+	9.99+
3	1	S3	0	0	598649.552	0	235914.476	9.99+	9.99+
4	1	S4	0	0	116754.978	0	438807.328	9.99+	9.99+
5	1	S5	0	0	184553.771	0	75404.381	9.99+	9.99+
6	1	S6	0	0	183280.576	0	676538.736	9.99+	9.99+
7	1	S7	0	0	23425.153	0	34085.737	9.99+	9.99+
8	71	S1	0	0	117220.446	0	413198.137	9.99+	9.99+
9	71	S2	0	0	80520.175	0	355729.824	9.99+	9.99+
10	71	S3	0	0	598649.552	0	235914.476	9.99+	9.99+
11	71	S4	0	0	116754.978	0	438807.328	9.99+	9.99+
12	71	S5	0	0	184553.771	0	75404.381	9.99+	9.99+
13	71	S6	0	0	183280.576	0	676538.736	9.99+	9.99+
14	71	S7	0	0	23425.153	0	34085.737	9.99+	9.99+
15	72	S1	0	0	139673.535	0	504986.692	9.99+	9.99+
16	72	S2	0	0	92491.92	0	393609.053	9.99+	9.99+
17	72	S3	0	0	695444.629	0	275796.276	9.99+	9.99+
18	72	S4	0	0	127294.489	0	479776.424	9.99+	9.99+
19	72	S5	0	0	207969.064	0	84064.333	9.99+	9.99+
20	72	S6	0	0	201230.597	0	787774.006	9.99+	9.99+
21	72	S7	0	0	27252.056	0	39036.953	9.99+	9.99+
22	73	S1	0	0	139673.535	0	504986.692	9.99+	9.99+
23	73	S2	0	0	92491.92	0	393609.053	9.99+	9.99+
24	73	S3	0	0	695444.629	0	275796.276	9.99+	9.99+
25	73	S4	0	0	127294.489	0	479776.424	9.99+	9.99+
26	73	S5	0	0	207969.064	0	84064.333	9.99+	9.99+
27	73	S6	0	0	201230.597	0	787774.006	9.99+	9.99+
28	73	S7	0	0	27252.056	0	39036.953	9.99+	9.99+
29	74	S1	0	0	138575.014	0	486738.751	9.99+	9.99+
30	74	S2	0	0	98771.99	0	421199.998	9.99+	9.99+
31	74	S3	0	0	708444.529	0	282171.113	9.99+	9.99+
32	74	S4	0	0	133599.94	0	500959.631	9.99+	9.99+
33	74	S5	0	0	206877.398	0	83826.16	9.99+	9.99+
34	74	S6	0	0	205002.586	0	811402.488	9.99+	9.99+
35	74	S7	0	0	26529.283	0	38407.715	9.99+	9.99+
36	75	S1	0	0	127999.074	133244.937	457275.676	9.99+	3.432
37	75	S2	0	76.225	86266.79	57999.608	374020.97	9.99+	6.449
38	75	S3	0	15000.604	667336.136	218.982	255057.911	9.99+	9.99+
39	75	S4	0	1462.158	206994.313	94788.712	458390.472	9.99+	4.836
40	75	S5	0	15121.602	195757.804	253.245	79452.501	9.99+	9.99+
41	75	S6	0	0	192081.538	137519.102	730021.905	9.99+	5.309
42	75	S7	0	0	25268.002	976.756	36462.443	9.99+	9.99+
43	76	S1	0	10.462	117220.446	131908.052	413198.137	9.99+	3.132
44	76	S2	0	80.059	80520.175	58534.193	355729.824	9.99+	6.077
45	76	S3	0	19188.447	614869.109	389.191	235914.476	9.99+	9.99+
46	76	S4	0	1370.451	195481.273	104452.781	438807.328	9.99+	4.201
47	76	S5	0	19389.709	184553.771	256.028	75325.909	9.518	9.99+

Slab Stability - Overturning (Continued)

	LC	Slab	Angle[deg]	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]	Ms-xx/Mo-xx	Ms-zz/Mo-zz
48	76	S6	0	0	183397.654	129282.864	676538.736	9.99+	5.233
49	76	S7	0	0	23432.809	1109.929	34085.737	9.99+	9.99+
50	77	S1	0	6.934	128059.137	127838.783	413318.855	9.99+	3.233
51	77	S2	0	0	86341.456	56226.045	446619.785	9.99+	7.943
52	77	S3	0	15463.936	644624.134	187.031	255007.176	9.99+	9.99+
53	77	S4	0	0	122317.306	83801.9	388066.463	9.99+	4.631
54	77	S5	0	15448.383	185874.943	65.419	79561.143	9.99+	9.99+
55	77	S6	0	128.181	191942.334	129163.94	628638.804	9.99+	4.867
56	77	S7	0	6.359	25262.077	878.784	39454.603	9.99+	9.99+
57	78	S1	0	19.09	117266.16	129426.941	384056.325	9.99+	2.967
58	78	S2	0	0	80591.132	55764.899	410012.601	9.99+	7.353
59	78	S3	0	11376.725	598649.552	29.287	235878.394	9.99+	9.99+
60	78	S4	0	0	117294.68	74073.653	364977.994	9.99+	4.927
61	78	S5	0	11293.942	177198.926	78.733	75404.381	9.99+	9.99+
62	78	S6	0	150.282	183280.576	137738.443	604141.295	9.99+	4.386
63	78	S7	0	4.659	23425.153	743.157	36311.354	9.99+	9.99+
64	79	S1	0	164.561	127998.078	15924.335	457275.676	9.99+	9.99+
65	79	S2	0	244.436	86266.79	38984.979	374020.97	9.99+	9.594
66	79	S3	0	236199.734	667336.136	74.32	255057.911	2.825	9.99+
67	79	S4	0	0	122334.622	26842.432	388066.463	9.99+	9.99+
68	79	S5	0	52618.828	185874.943	0	79582.062	3.532	9.99+
69	79	S6	0	2267.071	215655.878	20741.716	628638.804	9.99+	9.99+
70	79	S7	0	51.802	25262.077	129.041	36462.443	9.99+	9.99+
71	80	S1	0	163.604	117220.446	16855.735	413198.137	9.99+	9.99+
72	80	S2	0	254.165	80520.175	37140.446	355729.824	9.99+	9.578
73	80	S3	0	236240.835	614869.109	77.654	235914.476	2.603	9.99+
74	80	S4	0	0	117264.825	26564.152	364977.994	9.99+	9.99+
75	80	S5	0	50251.653	177198.926	0	75424.289	3.526	9.99+
76	80	S6	0	2249.135	200923.433	20152.371	604141.295	9.99+	9.99+
77	80	S7	0	48.634	23425.153	128.16	34085.737	9.99+	9.99+
78	81	S1	0	0	128166.08	15071.919	413318.855	9.99+	9.99+
79	81	S2	0	0	86476.685	35574.814	446619.785	9.99+	9.99+
80	81	S3	0	233173.489	644624.134	12.917	255007.176	2.765	9.99+
81	81	S4	0	1011.04	206994.313	29868.704	458390.472	9.99+	9.99+
82	81	S5	0	53987.338	195757.804	23.639	79452.501	3.626	9.99+
83	81	S6	0	0	192590.727	10286.35	730021.905	9.99+	9.99+
84	81	S7	0	0	25316.192	42.095	39454.603	9.99+	9.99+
85	82	S1	0	0	117389.413	14142.435	384056.325	9.99+	9.99+
86	82	S2	0	0	80720.231	37463.826	410012.601	9.99+	9.99+
87	82	S3	0	233336.131	598649.552	11.747	235878.394	2.566	9.99+
88	82	S4	0	1025.397	195481.273	30197.241	438807.328	9.99+	9.99+
89	82	S5	0	56567.165	184553.771	24.541	75325.909	3.263	9.99+
90	82	S6	0	0	183943.568	10762.408	676538.736	9.99+	9.99+
91	82	S7	0	0	23482.616	32.985	36311.354	9.99+	9.99+
92	83	S1	0	0	142144.234	99933.703	515097.707	9.99+	5.154
93	83	S2	0	57.169	93808.944	43499.706	397857.605	9.99+	9.146
94	83	S3	0	11250.453	735437.547	164.236	280183.402	9.99+	9.99+
95	83	S4	0	1096.619	222093.683	71091.534	484221.508	9.99+	6.811
96	83	S5	0	11341.201	210518.266	189.934	84868.681	9.99+	9.99+
97	83	S6	0	0	203343.813	103139.327	800077.566	9.99+	7.757
98	83	S7	0	0	27677.467	732.567	39581.678	9.99+	9.99+
99	84	S1	0	7.847	134060.263	98931.039	482039.553	9.99+	4.872
100	84	S2	0	60.044	89498.984	43900.645	384139.246	9.99+	8.75
101	84	S3	0	14391.335	696087.276	291.894	265825.826	9.99+	9.99+
102	84	S4	0	1027.838	213458.903	78339.586	469534.15	9.99+	5.994

Slab Stability - Overturning (Continued)

	LC	Slab	Angle[deg]	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]	Ms-xx/Mo-xx	Ms-zz/Mo-zz
103	84	S5	0	14542.281	202115.24	192.021	81773.737	9.99+	9.99+
104	84	S6	0	0	196830.9	96962.148	759965.188	9.99+	7.838
105	84	S7	0	0	26301.072	832.447	37799.149	9.99+	9.99+
106	85	S1	0	5.2	142224.588	95879.088	451753.747	9.99+	4.712
107	85	S2	0	0	93864.944	42169.534	494834.771	9.99+	9.99+
108	85	S3	0	11597.952	705726.797	140.273	280113.76	9.99+	9.99+
109	85	S4	0	0	128831.357	62851.425	418195.863	9.99+	6.654
110	85	S5	0	11586.287	197207.169	49.064	85016.917	9.99+	9.99+
111	85	S6	0	96.136	203239.41	96872.955	660693.621	9.99+	6.82
112	85	S7	0	4.769	27673.023	659.088	43580.26	9.99+	9.99+
113	86	S1	0	14.317	134129.855	97070.206	429806.849	9.99+	4.428
114	86	S2	0	0	89552.201	41823.674	467379.383	9.99+	9.99+
115	86	S3	0	8532.544	671245.86	21.965	265767.173	9.99+	9.99+
116	86	S4	0	0	125064.388	55555.24	400879.511	9.99+	7.216
117	86	S5	0	8470.457	190700.156	59.05	81899.345	9.99+	9.99+
118	86	S6	0	112.712	196743.092	103303.832	642320.489	9.99+	6.218
119	86	S7	0	3.494	26295.33	557.368	41222.824	9.99+	9.99+
120	87	S1	0	123.421	142143.487	11943.251	515097.707	9.99+	9.99+
121	87	S2	0	183.327	93808.944	29238.735	397857.605	9.99+	9.99+
122	87	S3	0	177149.8	735437.547	55.74	280183.402	4.152	9.99+
123	87	S4	0	0	128844.344	20131.824	418195.863	9.99+	9.99+
124	87	S5	0	39464.121	197207.169	0	85032.606	4.997	9.99+
125	87	S6	0	1700.303	234991.946	15556.287	660693.621	9.99+	9.99+
126	87	S7	0	38.852	27673.023	96.78	39581.678	9.99+	9.99+
127	88	S1	0	122.703	134060.263	12641.801	482039.553	9.99+	9.99+
128	88	S2	0	190.624	89498.984	27855.335	384139.246	9.99+	9.99+
129	88	S3	0	177180.626	696087.276	58.241	265825.826	3.929	9.99+
130	88	S4	0	0	125041.997	19923.114	400879.511	9.99+	9.99+
131	88	S5	0	37688.739	190700.156	0	81914.277	5.06	9.99+
132	88	S6	0	1686.851	223942.611	15114.278	642320.489	9.99+	9.99+
133	88	S7	0	36.475	26295.33	96.12	37799.149	9.99+	9.99+
134	89	S1	0	0	142269.488	11303.939	451753.747	9.99+	9.99+
135	89	S2	0	0	93966.366	26681.11	494834.771	9.99+	9.99+
136	89	S3	0	174880.117	705726.797	9.688	280113.76	4.035	9.99+
137	89	S4	0	758.28	222093.683	22401.528	484221.508	9.99+	9.99+
138	89	S5	0	40490.504	210518.266	17.729	84868.681	5.199	9.99+
139	89	S6	0	0	203725.705	7714.762	800077.566	9.99+	9.99+
140	89	S7	0	0	27713.609	31.572	43580.26	9.99+	9.99+
141	90	S1	0	0	134186.988	10606.826	429806.849	9.99+	9.99+
142	90	S2	0	0	89649.025	28097.87	467379.383	9.99+	9.99+
143	90	S3	0	175002.098	671245.86	8.81	265767.173	3.836	9.99+
144	90	S4	0	769.048	213458.903	22647.931	469534.15	9.99+	9.99+
145	90	S5	0	42425.373	202115.24	18.406	81773.737	4.764	9.99+
146	90	S6	0	0	197240.336	8071.806	759965.188	9.99+	9.99+
147	90	S7	0	0	26338.427	24.739	41222.824	9.99+	9.99+
148	91	S1	0	0	142144.234	99933.703	515097.707	9.99+	5.154
149	91	S2	0	57.169	93808.944	43499.706	397857.605	9.99+	9.146
150	91	S3	0	11250.453	735437.547	164.236	280183.402	9.99+	9.99+
151	91	S4	0	1096.619	222093.683	71091.534	484221.508	9.99+	6.811
152	91	S5	0	11341.201	210518.266	189.934	84868.681	9.99+	9.99+
153	91	S6	0	0	203343.813	103139.327	800077.566	9.99+	7.757
154	91	S7	0	0	27677.467	732.567	39581.678	9.99+	9.99+
155	92	S1	0	7.847	134060.263	98931.039	482039.553	9.99+	4.872
156	92	S2	0	60.044	89498.984	43900.645	384139.246	9.99+	8.75
157	92	S3	0	14391.335	696087.276	291.894	265825.826	9.99+	9.99+

Slab Stability - Overturning (Continued)

	LC	Slab	Angle[deg]	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]	Ms-xx/Mo-xx	Ms-zz/Mo-zz
158	92	S4	0	1027.838	213458.903	78339.586	469534.15	9.99+	5.994
159	92	S5	0	14542.281	202115.24	192.021	81773.737	9.99+	9.99+
160	92	S6	0	0	196830.9	96962.148	759965.188	9.99+	7.838
161	92	S7	0	0	26301.072	832.447	37799.149	9.99+	9.99+
162	93	S1	0	5.2	142224.588	95879.088	451753.747	9.99+	4.712
163	93	S2	0	0	93864.944	42169.534	494834.771	9.99+	9.99+
164	93	S3	0	11597.952	705726.797	140.273	280113.76	9.99+	9.99+
165	93	S4	0	0	128831.357	62851.425	418195.863	9.99+	6.654
166	93	S5	0	11586.287	197207.169	49.064	85016.917	9.99+	9.99+
167	93	S6	0	96.136	203239.41	96872.955	660693.621	9.99+	6.82
168	93	S7	0	4.769	27673.023	659.088	43580.26	9.99+	9.99+
169	94	S1	0	14.317	134129.855	97070.206	429806.849	9.99+	4.428
170	94	S2	0	0	89552.201	41823.674	467379.383	9.99+	9.99+
171	94	S3	0	8532.544	671245.86	21.965	265767.173	9.99+	9.99+
172	94	S4	0	0	125064.388	55555.24	400879.511	9.99+	7.216
173	94	S5	0	8470.457	190700.156	59.05	81899.345	9.99+	9.99+
174	94	S6	0	112.712	196743.092	103303.832	642320.489	9.99+	6.218
175	94	S7	0	3.494	26295.33	557.368	41222.824	9.99+	9.99+
176	95	S1	0	123.421	142143.487	11943.251	515097.707	9.99+	9.99+
177	95	S2	0	183.327	93808.944	29238.735	397857.605	9.99+	9.99+
178	95	S3	0	177149.8	735437.547	55.74	280183.402	4.152	9.99+
179	95	S4	0	0	128844.344	20131.824	418195.863	9.99+	9.99+
180	95	S5	0	39464.121	197207.169	0	85032.606	4.997	9.99+
181	95	S6	0	1700.303	234991.946	15556.287	660693.621	9.99+	9.99+
182	95	S7	0	38.852	27673.023	96.78	39581.678	9.99+	9.99+
183	96	S1	0	122.703	134060.263	12641.801	482039.553	9.99+	9.99+
184	96	S2	0	190.624	89498.984	27855.335	384139.246	9.99+	9.99+
185	96	S3	0	177180.626	696087.276	58.241	265825.826	3.929	9.99+
186	96	S4	0	0	125041.997	19923.114	400879.511	9.99+	9.99+
187	96	S5	0	37688.739	190700.156	0	81914.277	5.06	9.99+
188	96	S6	0	1686.851	223942.611	15114.278	642320.489	9.99+	9.99+
189	96	S7	0	36.475	26295.33	96.12	37799.149	9.99+	9.99+
190	97	S1	0	0	142269.488	11303.939	451753.747	9.99+	9.99+
191	97	S2	0	0	93966.366	26681.11	494834.771	9.99+	9.99+
192	97	S3	0	174880.117	705726.797	9.688	280113.76	4.035	9.99+
193	97	S4	0	758.28	222093.683	22401.528	484221.508	9.99+	9.99+
194	97	S5	0	40490.504	210518.266	17.729	84868.681	5.199	9.99+
195	97	S6	0	0	203725.705	7714.762	800077.566	9.99+	9.99+
196	97	S7	0	0	27713.609	31.572	43580.26	9.99+	9.99+
197	98	S1	0	0	134186.988	10606.826	429806.849	9.99+	9.99+
198	98	S2	0	0	89649.025	28097.87	467379.383	9.99+	9.99+
199	98	S3	0	175002.098	671245.86	8.81	265767.173	3.836	9.99+
200	98	S4	0	769.048	213458.903	22647.931	469534.15	9.99+	9.99+
201	98	S5	0	42425.373	202115.24	18.406	81773.737	4.764	9.99+
202	98	S6	0	0	197240.336	8071.806	759965.188	9.99+	9.99+
203	98	S7	0	0	26338.427	24.739	41222.824	9.99+	9.99+
204	99	S1	0	0	141320.344	99933.703	501411.752	9.99+	5.017
205	99	S2	0	57.169	98518.997	43499.706	418550.814	9.99+	9.622
206	99	S3	0	11250.453	750295.153	164.236	284964.53	9.99+	9.99+
207	99	S4	0	1096.619	231493.3	71091.534	500108.914	9.99+	7.035
208	99	S5	0	11341.201	209699.516	189.934	84703.953	9.99+	9.99+
209	99	S6	0	0	206172.805	103139.327	817798.927	9.99+	7.929
210	99	S7	0	0	27135.388	732.567	39109.75	9.99+	9.99+
211	100	S1	0	7.847	133236.372	98931.039	468353.597	9.99+	4.734
212	100	S2	0	60.044	94209.037	43900.645	404832.455	9.99+	9.222

Slab Stability - Overturning (Continued)

	LC	Slab	Angle[deg]	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]	Ms-xx/Mo-xx	Ms-zz/Mo-zz
213	100	S3	0	14391.335	710944.883	291.894	270606.954	9.99+	9.99+
214	100	S4	0	1027.838	222858.521	78339.586	485421.555	9.99+	6.196
215	100	S5	0	14542.281	201296.491	192.021	81609.008	9.99+	9.99+
216	100	S6	0	0	199659.892	96962.148	777686.55	9.99+	8.021
217	100	S7	0	0	25758.993	832.447	37327.221	9.99+	9.99+
218	101	S1	0	5.2	141392.492	95879.088	459809.348	9.99+	4.796
219	101	S2	0	0	98574.997	42169.534	518905.594	9.99+	9.99+
220	101	S3	0	11597.952	715476.722	140.273	284899.57	9.99+	9.99+
221	101	S4	0	0	133560.446	62851.425	438679.784	9.99+	6.98
222	101	S5	0	11586.287	197201.859	49.064	84838.287	9.99+	9.99+
223	101	S6	0	96.136	206068.402	96872.955	676209.927	9.99+	6.98
224	101	S7	0	4.769	27130.944	659.088	42423.24	9.99+	9.99+
225	102	S1	0	14.317	133297.76	97070.206	437862.451	9.99+	4.511
226	102	S2	0	0	94262.254	41823.674	491450.206	9.99+	9.99+
227	102	S3	0	8532.544	680995.785	21.965	270552.984	9.99+	9.99+
228	102	S4	0	0	129793.476	55555.24	421363.432	9.99+	7.585
229	102	S5	0	8470.457	190694.846	59.05	81720.715	9.99+	9.99+
230	102	S6	0	112.712	199572.084	103303.832	657836.795	9.99+	6.368
231	102	S7	0	3.494	25753.251	557.368	40065.804	9.99+	9.99+
232	103	S1	0	123.421	141319.597	11943.251	501411.752	9.99+	9.99+
233	103	S2	0	183.327	98518.997	29238.735	418550.814	9.99+	9.99+
234	103	S3	0	177149.8	750295.153	55.74	284964.53	4.235	9.99+
235	103	S4	0	0	133573.433	20131.824	438679.784	9.99+	9.99+
236	103	S5	0	39464.121	197201.859	0	84853.976	4.997	9.99+
237	103	S6	0	1700.303	242134.254	15556.287	676209.927	9.99+	9.99+
238	103	S7	0	38.852	27130.944	96.78	39109.75	9.99+	9.99+
239	104	S1	0	122.703	133236.372	12641.801	468353.597	9.99+	9.99+
240	104	S2	0	190.624	94209.037	27855.335	404832.455	9.99+	9.99+
241	104	S3	0	177180.626	710944.883	58.241	270606.954	4.013	9.99+
242	104	S4	0	0	129771.085	19923.114	421363.432	9.99+	9.99+
243	104	S5	0	37688.739	190694.846	0	81735.647	5.06	9.99+
244	104	S6	0	1686.851	231084.92	15114.278	657836.795	9.99+	9.99+
245	104	S7	0	36.475	25753.251	96.12	37327.221	9.99+	9.99+
246	105	S1	0	0	141445.598	11303.939	459809.348	9.99+	9.99+
247	105	S2	0	0	98676.419	26681.11	518905.594	9.99+	9.99+
248	105	S3	0	174880.117	715476.722	9.688	284899.57	4.091	9.99+
249	105	S4	0	758.28	231493.3	22401.528	500108.914	9.99+	9.99+
250	105	S5	0	40490.504	209699.516	17.729	84703.953	5.179	9.99+
251	105	S6	0	0	206554.697	7714.762	817798.927	9.99+	9.99+
252	105	S7	0	0	27171.53	31.572	42423.24	9.99+	9.99+
253	106	S1	0	0	133363.097	10606.826	437862.451	9.99+	9.99+
254	106	S2	0	0	94359.078	28097.87	491450.206	9.99+	9.99+
255	106	S3	0	175002.098	680995.785	8.81	270552.984	3.891	9.99+
256	106	S4	0	769.048	222858.521	22647.931	485421.555	9.99+	9.99+
257	106	S5	0	42425.373	201296.491	18.406	81609.008	4.745	9.99+
258	106	S6	0	0	200069.328	8071.806	777686.55	9.99+	9.99+
259	106	S7	0	0	25796.348	24.739	40065.804	9.99+	9.99+
260	107	S1	0	14234.125	70370.33	191372.192	247918.882	4.944	1.295
261	107	S2	0	7719.168	48413.254	82121.056	213437.895	6.272	2.599
262	107	S3	0	84191.496	368921.465	25464.387	141548.686	4.382	5.559
263	107	S4	0	16644.979	117288.764	120613.983	263284.397	7.046	2.183
264	107	S5	0	29896.921	110732.262	5695.189	45195.546	3.704	7.936
265	107	S6	0	19428.413	120648.634	208050.032	405923.241	6.21	1.951
266	107	S7	0	2422.443	14061.017	4111.037	20451.442	5.804	4.975
267	108	S1	0	10794.626	70359.696	175985.592	247918.882	6.518	1.409

Slab Stability - Overturning (Continued)

	LC	Slab	Angle[deg]	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]	Ms-xx/Mo-xx	Ms-zz/Mo-zz
268	108	S2	0	5870.294	48413.254	76825.339	213437.895	8.247	2.778
269	108	S3	0	71655.474	368921.465	19532.627	141548.686	5.149	7.247
270	108	S4	0	12883.491	117288.764	124035.925	263284.397	9.104	2.123
271	108	S5	0	30593.742	110732.262	4382.62	45195.546	3.619	9.99+
272	108	S6	0	14732.446	120609.453	182766.033	405923.241	8.187	2.221
273	108	S7	0	1836.924	14062.748	3486.635	20451.442	7.656	5.866
274	109	S1	0	14241.059	70359.696	166428.745	230433.795	4.941	1.385
275	109	S2	0	7663.162	48468.617	104501.769	246007.561	6.325	2.354
276	109	S3	0	76092.916	359189.731	25413.112	141527.036	4.72	5.569
277	109	S4	0	15182.821	118668.802	114249.819	218986.796	7.816	1.917
278	109	S5	0	26889.88	106319.356	5547.149	45242.629	3.954	8.156
279	109	S6	0	19508.88	120554.06	161470.03	362484.777	6.179	2.245
280	109	S7	0	2428.802	14055.092	5023.943	21786.812	5.787	4.337
281	110	S1	0	10812.066	70359.696	158689.472	230433.795	6.508	1.452
282	110	S2	0	5810.929	48465.336	92372.083	246007.561	8.34	2.663
283	110	S3	0	57351.307	359189.731	19158.069	141527.036	6.263	7.387
284	110	S4	0	11513.04	118762.019	97162.123	218986.796	9.99+	2.254
285	110	S5	0	19969.959	106319.356	4235.496	45242.629	5.324	9.99+
286	110	S6	0	14851.831	120554.06	162235.952	362484.777	8.117	2.234
287	110	S7	0	1841.582	14055.092	3886.406	21786.812	7.632	5.606
288	111	S1	0	14376.676	70332.268	74051.59	247918.882	4.892	3.348
289	111	S2	0	7822.784	48312.105	63106.428	213437.895	6.176	3.382
290	111	S3	0	305390.626	368921.465	25319.726	141548.686	1.208	5.59
291	111	S4	0	15182.821	118328.255	57290.35	218986.796	7.794	3.822
292	111	S5	0	64060.326	106319.356	5481.73	45263.547	1.66	8.257
293	111	S6	0	21695.483	120554.06	70530.93	416928.37	5.557	5.911
294	111	S7	0	2474.245	14055.092	4145.16	21842.015	5.681	5.269
295	112	S1	0	10941.237	70332.268	60933.274	247918.882	6.428	4.069
296	112	S2	0	6000.779	48312.105	55431.592	213437.895	8.051	3.85
297	112	S3	0	288707.862	368921.465	19221.089	141548.686	1.278	7.364
298	112	S4	0	11513.04	118313.659	49652.621	218986.796	9.99+	4.41
299	112	S5	0	58927.67	106319.356	4156.762	45262.537	1.804	9.99+
300	112	S6	0	16981.581	120554.06	53483.17	416446.49	7.099	7.786
301	112	S7	0	1885.557	14055.092	3143.249	21851.121	7.454	6.952
302	113	S1	0	14234.125	70508.098	53661.881	230433.795	4.953	4.294
303	113	S2	0	7663.162	48448.971	83850.538	246007.561	6.322	2.934
304	113	S3	0	293802.469	359189.731	25238.998	141527.036	1.223	5.607
305	113	S4	0	16193.862	117288.764	55693.976	263284.397	7.243	4.727
306	113	S5	0	68762.658	110732.262	5502.882	45242.629	1.61	8.222
307	113	S6	0	19428.413	122762.414	80817.28	405923.241	6.319	5.023
308	113	S7	0	2422.443	14071.334	4187.255	21786.812	5.809	5.203
309	114	S1	0	10792.976	70508.431	43404.965	230433.795	6.533	5.309
310	114	S2	0	5810.929	48446.163	74071.01	246007.561	8.337	3.321
311	114	S3	0	279310.713	359189.731	19140.529	141527.036	1.286	7.394
312	114	S4	0	12538.437	117288.764	49780.386	263284.397	9.354	5.289
313	114	S5	0	67771.198	110732.262	4178.981	45242.629	1.634	9.99+
314	114	S6	0	14732.446	122780.849	64245.578	405923.241	8.334	6.318
315	114	S7	0	1836.924	14074.852	3176.234	21786.812	7.662	6.859
316	115	S1	0	0	117221.609	6359.504	384056.325	9.99+	9.99+
317	115	S2	0	0	80522.868	150.077	410012.601	9.99+	9.99+
318	115	S3	0	1270.024	598649.552	22.735	235878.394	9.99+	9.99+
319	115	S4	0	15.873	195481.273	2061.448	364977.994	9.99+	9.99+
320	115	S5	0	1321.505	177198.926	0	75408.848	9.99+	9.99+
321	115	S6	0	0	183288.043	1916.385	604141.295	9.99+	9.99+
322	115	S7	0	0.747	23428.152	47.87	36311.354	9.99+	9.99+

Slab Stability - Overturning (Continued)

	LC	Slab	Angle[deg]	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]	Ms-xx/Mo-xx	Ms-zz/Mo-zz
323	116	S1	0	1.163	117220.446	6366.668	413198.137	9.99+	9.99+
324	116	S2	0	2.692	80520.175	168.955	355729.824	9.99+	9.99+
325	116	S3	0	1273.567	614869.109	24.112	235914.476	9.99+	9.99+
326	116	S4	0	0	116763.624	1998.329	438807.328	9.99+	9.99+
327	116	S5	0	1334.192	184553.771	4.467	75404.381	9.99+	9.99+
328	116	S6	0	12.54	200923.433	1983.075	676538.736	9.99+	9.99+
329	116	S7	0	0	23425.867	45.676	34085.737	9.99+	9.99+
330	117	S1	0	13.255	117220.446	123.627	384056.325	9.99+	9.99+
331	117	S2	0	2.799	80520.175	317.291	355729.824	9.99+	9.99+
332	117	S3	0	8803.053	598649.552	0	235918.165	9.99+	9.99+
333	117	S4	0	8.084	116754.978	388.055	438807.328	9.99+	9.99+
334	117	S5	0	1908.441	184553.771	0.237	75325.909	9.99+	9.99+
335	117	S6	0	4.74	200923.433	568.946	604141.295	9.99+	9.99+
336	117	S7	0	0	23426.279	1.281	36311.354	9.99+	9.99+
337	118	S1	0	0	117233.701	65.625	413198.137	9.99+	9.99+
338	118	S2	0	1.492	80688.756	311.085	410012.601	9.99+	9.99+
339	118	S3	0	8812.598	614869.109	3.689	235914.476	9.99+	9.99+
340	118	S4	0	0	116763.062	363.147	364977.994	9.99+	9.99+
341	118	S5	0	1907.515	177198.926	0	75404.53	9.99+	9.99+
342	118	S6	0	60.713	183280.576	755.522	676538.736	9.99+	9.99+
343	118	S7	0	1.28	23428.152	4.896	34085.737	9.99+	9.99+
344	119	S1	0	0	134061.135	4769.628	429806.849	9.99+	9.99+
345	119	S2	0	0	89501.003	112.558	467379.383	9.99+	9.99+
346	119	S3	0	952.518	671245.86	17.051	265767.173	9.99+	9.99+
347	119	S4	0	11.905	213458.903	1546.086	400879.511	9.99+	9.99+
348	119	S5	0	991.129	190700.156	0	81902.696	9.99+	9.99+
349	119	S6	0	0	196748.692	1437.289	642320.489	9.99+	9.99+
350	119	S7	0	0.56	26298.329	35.902	41222.824	9.99+	9.99+
351	120	S1	0	0.872	134060.263	4775.001	482039.553	9.99+	9.99+
352	120	S2	0	2.019	89498.984	126.716	384139.246	9.99+	9.99+
353	120	S3	0	955.175	696087.276	18.084	265825.826	9.99+	9.99+
354	120	S4	0	0	124666.096	1498.747	469534.15	9.99+	9.99+
355	120	S5	0	1000.644	202115.24	3.35	81899.345	9.99+	9.99+
356	120	S6	0	9.405	223942.611	1487.306	759965.188	9.99+	9.99+
357	120	S7	0	0	26295.865	34.257	37799.149	9.99+	9.99+
358	121	S1	0	9.941	134060.263	92.72	429806.849	9.99+	9.99+
359	121	S2	0	2.099	89498.984	237.968	384139.246	9.99+	9.99+
360	121	S3	0	6602.29	671245.86	0	265828.593	9.99+	9.99+
361	121	S4	0	6.063	124659.611	291.041	469534.15	9.99+	9.99+
362	121	S5	0	1431.331	202115.24	0.177	81773.737	9.99+	9.99+
363	121	S6	0	3.555	223942.611	426.709	642320.489	9.99+	9.99+
364	121	S7	0	0	26296.174	0.961	41222.824	9.99+	9.99+
365	122	S1	0	0	134070.204	49.219	482039.553	9.99+	9.99+
366	122	S2	0	1.119	89768.096	233.313	467379.383	9.99+	9.99+
367	122	S3	0	6609.449	696087.276	2.767	265825.826	9.99+	9.99+
368	122	S4	0	0	124665.674	272.36	400879.511	9.99+	9.99+
369	122	S5	0	1430.636	190700.156	0	81899.457	9.99+	9.99+
370	122	S6	0	45.535	196743.092	566.641	759965.188	9.99+	9.99+
371	122	S7	0	0.96	26298.329	3.672	37799.149	9.99+	9.99+
372	123	S1	0	0	133237.245	4769.628	437862.451	9.99+	9.99+
373	123	S2	0	0	94211.056	112.558	491450.206	9.99+	9.99+
374	123	S3	0	952.518	680995.785	17.051	270552.984	9.99+	9.99+
375	123	S4	0	11.905	222858.521	1546.086	421363.432	9.99+	9.99+
376	123	S5	0	991.129	190694.846	0	81724.066	9.99+	9.99+
377	123	S6	0	0	199577.684	1437.289	657836.795	9.99+	9.99+

Slab Stability - Overturning (Continued)

	LC	Slab	Angle[deg]	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]	Ms-xx/Mo-xx	Ms-zz/Mo-zz
378	123	S7	0	0.56	25756.25	35.902	40065.804	9.99+	9.99+
379	124	S1	0	0.872	133236.372	4775.001	468353.597	9.99+	9.99+
380	124	S2	0	2.019	94209.037	126.716	404832.455	9.99+	9.99+
381	124	S3	0	955.175	710944.883	18.084	270606.954	9.99+	9.99+
382	124	S4	0	0	129395.184	1498.747	485421.555	9.99+	9.99+
383	124	S5	0	1000.644	201296.491	3.35	81720.715	9.99+	9.99+
384	124	S6	0	9.405	231084.92	1487.306	777686.55	9.99+	9.99+
385	124	S7	0	0	25753.786	34.257	37327.221	9.99+	9.99+
386	125	S1	0	9.941	133236.372	92.72	437862.451	9.99+	9.99+
387	125	S2	0	2.099	94209.037	237.968	404832.455	9.99+	9.99+
388	125	S3	0	6602.29	680995.785	0	270609.721	9.99+	9.99+
389	125	S4	0	6.063	129388.7	291.041	485421.555	9.99+	9.99+
390	125	S5	0	1431.331	201296.491	0.177	81609.008	9.99+	9.99+
391	125	S6	0	3.555	231084.92	426.709	657836.795	9.99+	9.99+
392	125	S7	0	0	25754.095	0.961	40065.804	9.99+	9.99+
393	126	S1	0	0	133246.314	49.219	468353.597	9.99+	9.99+
394	126	S2	0	1.119	94482.05	233.313	491450.206	9.99+	9.99+
395	126	S3	0	6609.449	710944.883	2.767	270606.954	9.99+	9.99+
396	126	S4	0	0	129394.763	272.36	421363.432	9.99+	9.99+
397	126	S5	0	1430.636	190694.846	0	81720.827	9.99+	9.99+
398	126	S6	0	45.535	199572.084	566.641	777686.55	9.99+	9.99+
399	126	S7	0	0.96	25756.25	3.672	37327.221	9.99+	9.99+
400	127	S1	0	0	70333.431	6359.504	230433.795	9.99+	9.99+
401	127	S2	0	0	48314.798	150.077	246007.561	9.99+	9.99+
402	127	S3	0	1270.024	359189.731	22.735	141527.036	9.99+	9.99+
403	127	S4	0	15.873	117288.764	2061.448	218986.796	9.99+	9.99+
404	127	S5	0	1321.505	106319.356	0	45247.096	9.99+	9.99+
405	127	S6	0	0	109975.813	1916.385	362484.777	9.99+	9.99+
406	127	S7	0	0.747	14056.891	47.87	21786.812	9.99+	9.99+
407	128	S1	0	1.163	70332.268	6366.668	247918.882	9.99+	9.99+
408	128	S2	0	2.692	48312.105	168.955	213437.895	9.99+	9.99+
409	128	S3	0	1273.567	368921.465	24.112	141548.686	9.99+	9.99+
410	128	S4	0	0	70061.632	1998.329	263284.397	9.99+	9.99+
411	128	S5	0	1334.192	110732.262	4.467	45242.629	9.99+	9.99+
412	128	S6	0	12.54	120554.06	1983.075	405923.241	9.99+	9.99+
413	128	S7	0	0	14055.805	45.676	20451.442	9.99+	9.99+
414	129	S1	0	13.255	70332.268	123.627	230433.795	9.99+	9.99+
415	129	S2	0	2.799	48312.105	317.291	213437.895	9.99+	9.99+
416	129	S3	0	8803.053	359189.731	0	141552.375	9.99+	9.99+
417	129	S4	0	8.084	70052.987	388.055	263284.397	9.99+	9.99+
418	129	S5	0	1908.441	110732.262	0.237	45195.546	9.99+	9.99+
419	129	S6	0	4.74	120554.06	568.946	362484.777	9.99+	9.99+
420	129	S7	0	0	14056.217	1.281	21786.812	9.99+	9.99+
421	130	S1	0	0	70345.523	65.625	247918.882	9.99+	9.99+
422	130	S2	0	1.492	48413.254	311.085	246007.561	9.99+	9.99+
423	130	S3	0	8812.598	368921.465	3.689	141548.686	9.99+	9.99+
424	130	S4	0	0	70061.071	363.147	218986.796	9.99+	9.99+
425	130	S5	0	1907.515	106319.356	0	45242.778	9.99+	9.99+
426	130	S6	0	60.713	109968.346	755.522	405923.241	9.99+	9.99+
427	130	S7	0	1.28	14056.891	4.896	20451.442	9.99+	9.99+

Slab Stability - Sliding

	LC	Slab	Angle[deg]	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]	SR-xx	SR-zz
1	1	S1	0	717.65	14069.196	17.143	14069.196	9.99+	9.99+
2	1	S2	0	532.732	12090.67	63.218	12090.67	9.99+	9.99+

Slab Stability - Sliding (Continued)

	LC	Slab	Angle[deg]	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]	SR-xx	SR-zz
3	1	S3	0	13.531	20219.694	151.778	20219.694	9.99+	9.99+
4	1	S4	0	320.02	13381.554	6.239	13381.554	9.99+	9.99+
5	1	S5	0	29.427	9043.817	2.537	9043.817	9.99+	9.99+
6	1	S6	0	144.371	19210.2	60.321	19210.2	9.99+	9.99+
7	1	S7	0	11.773	3513.998	1.499	3513.998	9.99+	9.99+
8	71	S1	0	717.65	14069.196	17.143	14069.196	9.99+	9.99+
9	71	S2	0	532.732	12090.67	63.218	12090.67	9.99+	9.99+
10	71	S3	0	13.531	20219.694	151.778	20219.694	9.99+	9.99+
11	71	S4	0	320.02	13381.554	6.239	13381.554	9.99+	9.99+
12	71	S5	0	29.427	9043.817	2.537	9043.817	9.99+	9.99+
13	71	S6	0	144.371	19210.2	60.321	19210.2	9.99+	9.99+
14	71	S7	0	11.773	3513.998	1.499	3513.998	9.99+	9.99+
15	72	S1	0	1256.494	16765.477	29.082	16765.477	9.99+	9.99+
16	72	S2	0	930.725	13896.485	113.484	13896.485	9.99+	9.99+
17	72	S3	0	24.816	23636.845	277.797	23636.845	9.99+	9.99+
18	72	S4	0	511.496	14860.54	11.794	14860.54	9.99+	9.99+
19	72	S5	0	52.995	10079.241	16.695	10079.241	9.99+	9.99+
20	72	S6	0	221.72	21642.313	77.837	21642.313	9.99+	9.99+
21	72	S7	0	20.765	4088.033	1.499	4088.033	9.99+	9.99+
22	73	S1	0	1256.494	16765.477	29.082	16765.477	9.99+	9.99+
23	73	S2	0	930.725	13896.485	113.484	13896.485	9.99+	9.99+
24	73	S3	0	24.816	23636.845	277.797	23636.845	9.99+	9.99+
25	73	S4	0	511.496	14860.54	11.794	14860.54	9.99+	9.99+
26	73	S5	0	52.995	10079.241	16.695	10079.241	9.99+	9.99+
27	73	S6	0	221.72	21642.313	77.837	21642.313	9.99+	9.99+
28	73	S7	0	20.765	4088.033	1.499	4088.033	9.99+	9.99+
29	74	S1	0	1224.959	16632.998	24.979	16632.998	9.99+	9.99+
30	74	S2	0	935.87	14838.885	115.434	14838.885	9.99+	9.99+
31	74	S3	0	22.475	24183.527	244.198	24183.527	9.99+	9.99+
32	74	S4	0	517.809	15667.895	13.264	15667.895	9.99+	9.99+
33	74	S5	0	46.044	10051.772	32.608	10051.772	9.99+	9.99+
34	74	S6	0	261.575	22307.067	54.004	22307.067	9.99+	9.99+
35	74	S7	0	18.207	3979.617	1.499	3979.617	9.99+	9.99+
36	75	S1	0	7734.505	15364.131	26.511	15364.131	1.986	9.99+
37	75	S2	0	2211.816	12947.568	94.918	12947.568	5.854	9.99+
38	75	S3	0	127.843	21857.947	1177.285	21857.947	9.99+	9.99+
39	75	S4	0	5491.861	14006.793	21.821	14006.793	2.55	9.99+
40	75	S5	0	182.868	9533.17	951.579	9533.17	9.99+	9.99+
41	75	S6	0	7105.988	20391.6	60.927	20391.6	2.87	9.99+
42	75	S7	0	12.708	3790.425	1.499	3790.425	9.99+	9.99+
43	76	S1	0	7405.356	14068.47	20.448	14068.47	1.9	9.99+
44	76	S2	0	2437.581	12080.213	70.978	12080.213	4.956	9.99+
45	76	S3	0	257.106	20217.265	1401.552	20217.265	9.99+	9.99+
46	76	S4	0	6194.591	13302.03	19.626	13302.03	2.147	9.99+
47	76	S5	0	167.51	9035.187	1209.611	9035.187	9.99+	7.47
48	76	S6	0	6637.028	19218.824	62.945	19218.824	2.896	9.99+
49	76	S7	0	25.359	3515.146	1.499	3515.146	9.99+	9.99+
50	77	S1	0	5475.266	15363.107	19.732	15363.107	2.806	9.99+
51	77	S2	0	3613.142	12967.238	80.097	12967.238	3.589	9.99+
52	77	S3	0	176.625	21861.912	834.43	21861.912	9.99+	9.99+
53	77	S4	0	5916.502	14172.5	2.007	14172.5	2.395	9.99+
54	77	S5	0	48.477	9547.243	967.081	9547.243	9.99+	9.872
55	77	S6	0	6253.236	20369.478	52.872	20369.478	3.257	9.99+
56	77	S7	0	48.496	3788.583	1.499	3788.583	9.99+	9.99+
57	78	S1	0	5813.151	14067.462	13.665	14067.462	2.42	9.99+

Slab Stability - Sliding (Continued)

	LC	Slab	Angle[deg]	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]	SR-xx	SR-zz
58	78	S2	0	3389.447	12099.898	56.14	12099.898	3.57	9.99+
59	78	S3	0	49.016	20221.24	614.906	20221.24	9.99+	9.99+
60	78	S4	0	5231.457	13467.823	4.236	13467.823	2.574	9.99+
61	78	S5	0	63.757	9049.279	713.752	9049.279	9.99+	9.99+
62	78	S6	0	6729.062	19196.717	54.897	19196.717	2.853	9.99+
63	78	S7	0	36.012	3513.299	1.499	3513.299	9.99+	9.99+
64	79	S1	0	1790.185	15344.979	30.982	15344.979	8.572	9.99+
65	79	S2	0	1237.646	12938.667	176.572	12938.667	9.99+	9.99+
66	79	S3	0	20.429	21858.071	12516.208	21858.071	9.99+	1.746
67	79	S4	0	2275.83	14158.647	6.93	14158.647	6.221	9.99+
68	79	S5	0	39.774	9543.484	3291.092	9543.484	9.99+	2.9
69	79	S6	0	822.553	20233.862	55.796	20233.862	9.99+	9.99+
70	79	S7	0	11.141	3785.851	28.73	3785.851	9.99+	9.99+
71	80	S1	0	1580.193	14050.818	24.984	14050.818	8.892	9.99+
72	80	S2	0	1336.737	12070.909	155.036	12070.909	9.03	9.99+
73	80	S3	0	27.629	20217.742	12416.793	20217.742	9.99+	1.628
74	80	S4	0	2174.253	13447.328	9.046	13447.328	6.185	9.99+
75	80	S5	0	28.397	9046.371	3151.555	9046.371	9.99+	2.87
76	80	S6	0	830.798	19065.764	64.646	19065.764	9.99+	9.99+
77	80	S7	0	6.457	3510.811	28.885	3510.811	9.99+	9.99+
78	81	S1	0	151.912	15382.417	15.547	15382.417	9.99+	9.99+
79	81	S2	0	2580.508	12975.907	22.019	12975.907	5.028	9.99+
80	81	S3	0	56.531	21863.111	11969.923	21863.111	9.99+	1.827
81	81	S4	0	1409.206	14026.213	27.395	14026.213	9.953	9.99+
82	81	S5	0	41.673	9538.131	3382.854	9538.131	9.99+	2.82
83	81	S6	0	1141.444	20522.748	46.566	20522.748	9.99+	9.99+
84	81	S7	0	20.849	3794.678	18.337	3794.678	9.99+	9.99+
85	82	S1	0	58.402	14088.258	9.556	14088.258	9.99+	9.99+
86	82	S2	0	2480.633	12108.142	0.538	12108.142	4.881	9.99+
87	82	S3	0	49.357	20222.782	12081.532	20222.782	9.99+	1.674
88	82	S4	0	1510.471	13314.891	25.193	13314.891	8.815	9.99+
89	82	S5	0	30.298	9041.012	3535.494	9041.012	9.99+	2.557
90	82	S6	0	1133.02	19354.69	55.49	19354.69	9.99+	9.99+
91	82	S7	0	16.172	3519.655	18.252	3519.655	9.99+	9.99+
92	83	S1	0	6384.423	17062.608	33.123	17062.608	2.673	9.99+
93	83	S2	0	1227.184	14087.705	124.692	14087.705	9.99+	9.99+
94	83	S3	0	84.036	24011.247	1015.422	24011.247	9.99+	9.99+
95	83	S4	0	3895.284	14959.723	22.091	14959.723	3.84	9.99+
96	83	S5	0	162.184	10187.399	724.938	10187.399	9.99+	9.99+
97	83	S6	0	5423.595	21920.334	73.912	21920.334	4.042	9.99+
98	83	S7	0	0.156	4151.845	1.499	4151.845	9.99+	9.99+
99	84	S1	0	6137.562	16090.862	28.576	16090.862	2.622	9.99+
100	84	S2	0	1396.507	13437.188	106.737	13437.188	9.622	9.99+
101	84	S3	0	180.983	22780.735	1183.623	22780.735	9.99+	9.99+
102	84	S4	0	4422.331	14431.151	20.445	14431.151	3.263	9.99+
103	84	S5	0	150.666	9813.912	918.461	9813.912	9.99+	9.99+
104	84	S6	0	5071.876	21040.753	75.426	21040.753	4.149	9.99+
105	84	S7	0	9.332	3945.386	1.499	3945.386	9.99+	9.99+
106	85	S1	0	3522.904	17061.84	28.039	17061.84	4.843	9.99+
107	85	S2	0	3141.534	14102.457	113.577	14102.457	4.489	9.99+
108	85	S3	0	144.315	24014.221	493.364	24014.221	9.99+	9.99+
109	85	S4	0	4660.988	15084.003	4.22	15084.003	3.236	9.99+
110	85	S5	0	11.325	10197.954	714.058	10197.954	9.99+	9.99+
111	85	S6	0	4595.823	21903.743	67.871	21903.743	4.766	9.99+
112	85	S7	0	46.06	4150.463	1.499	4150.463	9.99+	9.99+

Slab Stability - Sliding (Continued)

	LC	Slab	Angle[deg]	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]	SR-xx	SR-zz
113	86	S1	0	3776.318	16090.106	23.489	16090.106	4.261	9.99+
114	86	S2	0	2973.763	13451.952	95.609	13451.952	4.524	9.99+
115	86	S3	0	48.609	22783.716	328.721	22783.716	9.99+	9.99+
116	86	S4	0	4147.205	14555.496	2.549	14555.496	3.51	9.99+
117	86	S5	0	22.785	9824.481	524.061	9824.481	9.99+	9.99+
118	86	S6	0	4952.692	21024.173	69.39	21024.173	4.245	9.99+
119	86	S7	0	36.696	3944	1.499	3944	9.99+	9.99+
120	87	S1	0	1926.184	17048.244	36.477	17048.244	8.851	9.99+
121	87	S2	0	496.556	14081.029	185.933	14081.029	9.99+	9.99+
122	87	S3	0	3.475	24011.34	9519.614	24011.34	9.99+	2.522
123	87	S4	0	1930.485	15073.613	0.528	15073.613	7.808	9.99+
124	87	S5	0	54.864	10195.135	2457.066	10195.135	9.99+	4.149
125	87	S6	0	522.811	21802.031	70.064	21802.031	9.99+	9.99+
126	87	S7	0	18.043	4148.414	21.922	4148.414	9.99+	9.99+
127	88	S1	0	1768.69	16077.624	31.978	16077.624	9.09	9.99+
128	88	S2	0	570.874	13430.21	169.781	13430.21	9.99+	9.99+
129	88	S3	0	8.875	22781.093	9445.053	22781.093	9.99+	2.412
130	88	S4	0	1854.302	14540.124	1.059	14540.124	7.841	9.99+
131	88	S5	0	46.331	9822.3	2352.413	9822.3	9.99+	4.175
132	88	S6	0	528.994	20925.958	76.702	20925.958	9.99+	9.99+
133	88	S7	0	14.53	3942.134	22.038	3942.134	9.99+	9.99+
134	89	S1	0	697.479	17076.323	24.9	17076.323	9.99+	9.99+
135	89	S2	0	2367.059	14108.958	70.018	14108.958	5.961	9.99+
136	89	S3	0	54.245	24015.12	8844.983	24015.12	9.99+	2.715
137	89	S4	0	833.292	14974.288	26.272	14974.288	9.99+	9.99+
138	89	S5	0	56.288	10191.12	2548.394	10191.12	9.99+	3.999
139	89	S6	0	950.187	22018.696	63.142	22018.696	9.99+	9.99+
140	89	S7	0	25.324	4155.035	13.378	4155.035	9.99+	9.99+
141	90	S1	0	539.743	16105.704	20.407	16105.704	9.99+	9.99+
142	90	S2	0	2292.153	13458.135	53.907	13458.135	5.871	9.99+
143	90	S3	0	48.865	22784.873	8928.691	22784.873	9.99+	2.552
144	90	S4	0	909.241	14440.796	24.621	14440.796	9.99+	9.99+
145	90	S5	0	47.756	9818.281	2662.874	9818.281	9.99+	3.687
146	90	S6	0	943.869	21142.652	69.835	21142.652	9.99+	9.99+
147	90	S7	0	21.816	3948.767	13.314	3948.767	9.99+	9.99+
148	91	S1	0	6384.423	17062.608	33.123	17062.608	2.673	9.99+
149	91	S2	0	1227.184	14087.705	124.692	14087.705	9.99+	9.99+
150	91	S3	0	84.036	24011.247	1015.422	24011.247	9.99+	9.99+
151	91	S4	0	3895.284	14959.723	22.091	14959.723	3.84	9.99+
152	91	S5	0	162.184	10187.399	724.938	10187.399	9.99+	9.99+
153	91	S6	0	5423.595	21920.334	73.912	21920.334	4.042	9.99+
154	91	S7	0	0.156	4151.845	1.499	4151.845	9.99+	9.99+
155	92	S1	0	6137.562	16090.862	28.576	16090.862	2.622	9.99+
156	92	S2	0	1396.507	13437.188	106.737	13437.188	9.622	9.99+
157	92	S3	0	180.983	22780.735	1183.623	22780.735	9.99+	9.99+
158	92	S4	0	4422.331	14431.151	20.445	14431.151	3.263	9.99+
159	92	S5	0	150.666	9813.912	918.461	9813.912	9.99+	9.99+
160	92	S6	0	5071.876	21040.753	75.426	21040.753	4.149	9.99+
161	92	S7	0	9.332	3945.386	1.499	3945.386	9.99+	9.99+
162	93	S1	0	3522.904	17061.84	28.039	17061.84	4.843	9.99+
163	93	S2	0	3141.534	14102.457	113.577	14102.457	4.489	9.99+
164	93	S3	0	144.315	24014.221	493.364	24014.221	9.99+	9.99+
165	93	S4	0	4660.988	15084.003	4.22	15084.003	3.236	9.99+
166	93	S5	0	11.325	10197.954	714.058	10197.954	9.99+	9.99+
167	93	S6	0	4595.823	21903.743	67.871	21903.743	4.766	9.99+

Slab Stability - Sliding (Continued)

	LC	Slab	Angle[deg]	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]	SR-xx	SR-zz
168	93	S7	0	46.06	4150.463	1.499	4150.463	9.99+	9.99+
169	94	S1	0	3776.318	16090.106	23.489	16090.106	4.261	9.99+
170	94	S2	0	2973.763	13451.952	95.609	13451.952	4.524	9.99+
171	94	S3	0	48.609	22783.716	328.721	22783.716	9.99+	9.99+
172	94	S4	0	4147.205	14555.496	2.549	14555.496	3.51	9.99+
173	94	S5	0	22.785	9824.481	524.061	9824.481	9.99+	9.99+
174	94	S6	0	4952.692	21024.173	69.39	21024.173	4.245	9.99+
175	94	S7	0	36.696	3944	1.499	3944	9.99+	9.99+
176	95	S1	0	1926.184	17048.244	36.477	17048.244	8.851	9.99+
177	95	S2	0	496.556	14081.029	185.933	14081.029	9.99+	9.99+
178	95	S3	0	3.475	24011.34	9519.614	24011.34	9.99+	2.522
179	95	S4	0	1930.485	15073.613	0.528	15073.613	7.808	9.99+
180	95	S5	0	54.864	10195.135	2457.066	10195.135	9.99+	4.149
181	95	S6	0	522.811	21802.031	70.064	21802.031	9.99+	9.99+
182	95	S7	0	18.043	4148.414	21.922	4148.414	9.99+	9.99+
183	96	S1	0	1768.69	16077.624	31.978	16077.624	9.09	9.99+
184	96	S2	0	570.874	13430.21	169.781	13430.21	9.99+	9.99+
185	96	S3	0	8.875	22781.093	9445.053	22781.093	9.99+	2.412
186	96	S4	0	1854.302	14540.124	1.059	14540.124	7.841	9.99+
187	96	S5	0	46.331	9822.3	2352.413	9822.3	9.99+	4.175
188	96	S6	0	528.994	20925.958	76.702	20925.958	9.99+	9.99+
189	96	S7	0	14.53	3942.134	22.038	3942.134	9.99+	9.99+
190	97	S1	0	697.479	17076.323	24.9	17076.323	9.99+	9.99+
191	97	S2	0	2367.059	14108.958	70.018	14108.958	5.961	9.99+
192	97	S3	0	54.245	24015.12	8844.983	24015.12	9.99+	2.715
193	97	S4	0	833.292	14974.288	26.272	14974.288	9.99+	9.99+
194	97	S5	0	56.288	10191.12	2548.394	10191.12	9.99+	3.999
195	97	S6	0	950.187	22018.696	63.142	22018.696	9.99+	9.99+
196	97	S7	0	25.324	4155.035	13.378	4155.035	9.99+	9.99+
197	98	S1	0	539.743	16105.704	20.407	16105.704	9.99+	9.99+
198	98	S2	0	2292.153	13458.135	53.907	13458.135	5.871	9.99+
199	98	S3	0	48.865	22784.873	8928.691	22784.873	9.99+	2.552
200	98	S4	0	909.241	14440.796	24.621	14440.796	9.99+	9.99+
201	98	S5	0	47.756	9818.281	2662.874	9818.281	9.99+	3.687
202	98	S6	0	943.869	21142.652	69.835	21142.652	9.99+	9.99+
203	98	S7	0	21.816	3948.767	13.314	3948.767	9.99+	9.99+
204	99	S1	0	6360.772	16963.249	30.046	16963.249	2.667	9.99+
205	99	S2	0	1223.325	14794.505	126.155	14794.505	9.99+	9.99+
206	99	S3	0	85.792	24421.259	990.223	24421.259	9.99+	9.99+
207	99	S4	0	3890.55	15565.239	23.194	15565.239	4.001	9.99+
208	99	S5	0	156.971	10166.798	736.872	10166.798	9.99+	9.99+
209	99	S6	0	5453.487	22418.899	56.037	22418.899	4.111	9.99+
210	99	S7	0	1.762	4070.533	1.499	4070.533	9.99+	9.99+
211	100	S1	0	6113.91	15991.503	25.499	15991.503	2.616	9.99+
212	100	S2	0	1392.648	14143.989	108.2	14143.989	9.99+	9.99+
213	100	S3	0	182.739	23190.747	1158.423	23190.747	9.99+	9.99+
214	100	S4	0	4417.597	15036.667	21.548	15036.667	3.404	9.99+
215	100	S5	0	145.452	9793.311	930.395	9793.311	9.99+	9.99+
216	100	S6	0	5101.767	21539.318	57.551	21539.318	4.222	9.99+
217	100	S7	0	11.25	3864.074	1.499	3864.074	9.99+	9.99+
218	101	S1	0	3546.555	16962.481	24.962	16962.481	4.783	9.99+
219	101	S2	0	3145.393	14809.257	115.04	14809.257	4.708	9.99+
220	101	S3	0	142.559	24424.232	518.564	24424.232	9.99+	9.99+
221	101	S4	0	4665.723	15689.519	5.323	15689.519	3.363	9.99+
222	101	S5	0	16.538	10177.353	702.124	10177.353	9.99+	9.99+

Slab Stability - Sliding (Continued)

	LC	Slab	Angle[deg]	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]	SR-xx	SR-zz
223	101	S6	0	4565.931	22402.309	49.997	22402.309	4.906	9.99+
224	101	S7	0	44.141	4069.151	1.499	4069.151	9.99+	9.99+
225	102	S1	0	3799.969	15990.747	20.412	15990.747	4.208	9.99+
226	102	S2	0	2977.622	14158.752	97.072	14158.752	4.755	9.99+
227	102	S3	0	46.853	23193.728	353.921	23193.728	9.99+	9.99+
228	102	S4	0	4151.939	15161.012	3.652	15161.012	3.652	9.99+
229	102	S5	0	27.998	9803.88	512.126	9803.88	9.99+	9.99+
230	102	S6	0	4922.801	21522.738	51.515	21522.738	4.372	9.99+
231	102	S7	0	34.778	3862.688	1.499	3862.688	9.99+	9.99+
232	103	S1	0	1902.532	16948.885	33.4	16948.885	8.909	9.99+
233	103	S2	0	492.697	14787.83	187.396	14787.83	9.99+	9.99+
234	103	S3	0	5.231	24421.351	9494.415	24421.351	9.99+	2.572
235	103	S4	0	1935.219	15679.129	1.631	15679.129	8.102	9.99+
236	103	S5	0	49.65	10174.533	2445.131	10174.533	9.99+	4.161
237	103	S6	0	492.919	22300.596	52.189	22300.596	9.99+	9.99+
238	103	S7	0	16.125	4067.102	21.922	4067.102	9.99+	9.99+
239	104	S1	0	1745.038	15978.264	28.901	15978.264	9.156	9.99+
240	104	S2	0	567.016	14137.011	171.244	14137.011	9.99+	9.99+
241	104	S3	0	10.631	23191.105	9419.854	23191.105	9.99+	2.462
242	104	S4	0	1859.036	15145.64	0.044	15145.64	8.147	9.99+
243	104	S5	0	41.118	9801.699	2340.479	9801.699	9.99+	4.188
244	104	S6	0	499.103	21424.523	58.827	21424.523	9.99+	9.99+
245	104	S7	0	12.612	3860.822	22.038	3860.822	9.99+	9.99+
246	105	S1	0	673.828	16976.963	21.823	16976.963	9.99+	9.99+
247	105	S2	0	2370.918	14815.759	71.481	14815.759	6.249	9.99+
248	105	S3	0	52.489	24425.131	8870.183	24425.131	9.99+	2.754
249	105	S4	0	828.558	15579.804	27.375	15579.804	9.99+	9.99+
250	105	S5	0	51.075	10170.519	2560.328	10170.519	9.99+	3.972
251	105	S6	0	980.079	22517.261	45.267	22517.261	9.99+	9.99+
252	105	S7	0	23.406	4073.723	13.378	4073.723	9.99+	9.99+
253	106	S1	0	516.092	16006.344	17.33	16006.344	9.99+	9.99+
254	106	S2	0	2296.012	14164.936	55.37	14164.936	6.169	9.99+
255	106	S3	0	47.109	23194.884	8953.89	23194.884	9.99+	2.59
256	106	S4	0	904.507	15046.312	25.724	15046.312	9.99+	9.99+
257	106	S5	0	42.543	9797.679	2674.808	9797.679	9.99+	3.663
258	106	S6	0	973.761	21641.217	51.96	21641.217	9.99+	9.99+
259	106	S7	0	19.898	3867.455	13.314	3867.455	9.99+	9.99+
260	107	S1	0	6849.941	6735.441	5.646	6735.441	0.983	9.99+
261	107	S2	0	2880.77	6101.371	13.708	6101.371	2.118	9.99+
262	107	S3	0	145.997	9966.768	1031.008	9966.768	9.99+	9.667
263	107	S4	0	5809.53	7006.922	11.579	7006.922	1.206	9.99+
264	107	S5	0	144.863	4763.221	929.652	4763.221	9.99+	5.124
265	107	S6	0	6958.755	9995.254	45.473	9995.254	1.436	9.99+
266	107	S7	0	27.443	1745.921	0.9	1745.921	9.99+	9.99+
267	108	S1	0	6860.612	7146.555	7.837	7146.555	1.042	9.99+
268	108	S2	0	2847.271	6377.129	21.573	6377.129	2.24	9.99+
269	108	S3	0	268.013	10489.149	1303.94	10489.149	9.99+	8.044
270	108	S4	0	6404.393	7239.005	13.79	7239.005	1.13	9.99+
271	108	S5	0	144.425	4920.659	1199.577	4920.659	9.99+	4.102
272	108	S6	0	6540.688	10365.034	42.558	10365.034	1.585	9.99+
273	108	S7	0	34.392	1834.009	0.9	1834.009	9.99+	9.99+
274	109	S1	0	6359.829	6734.418	1.133	6734.418	1.059	9.99+
275	109	S2	0	2944.187	6121.041	1.113	6121.041	2.079	9.99+
276	109	S3	0	158.471	9970.733	980.706	9970.733	9.99+	9.99+
277	109	S4	0	5598.833	7172.628	12.248	7172.628	1.281	9.99+

Slab Stability - Sliding (Continued)

	LC	Slab	Angle[deg]	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]	SR-xx	SR-zz
278	109	S5	0	86.482	4777.295	989.008	4777.295	9.99+	4.83
279	109	S6	0	6400.469	9973.133	37.418	9973.133	1.558	9.99+
280	109	S7	0	33.762	1744.078	0.9	1744.078	9.99+	9.99+
281	110	S1	0	6357.895	7145.547	1.054	7145.547	1.124	9.99+
282	110	S2	0	2979.756	6396.814	6.735	6396.814	2.147	9.99+
283	110	S3	0	38.109	10493.124	712.519	10493.124	9.99+	9.99+
284	110	S4	0	5021.655	7404.798	10.072	7404.798	1.475	9.99+
285	110	S5	0	86.842	4934.751	723.785	4934.751	9.99+	6.818
286	110	S6	0	6825.402	10342.927	34.51	10342.927	1.515	9.99+
287	110	S7	0	26.979	1832.161	0.9	1832.161	9.99+	9.99+
288	111	S1	0	905.621	6716.29	10.117	6716.29	7.416	9.99+
289	111	S2	0	1906.6	6092.471	95.362	6092.471	3.195	9.99+
290	111	S3	0	38.583	9966.892	12369.932	9966.892	9.99+	0.806
291	111	S4	0	1958.162	7158.776	17.171	7158.776	3.656	9.99+
292	111	S5	0	1.769	4773.535	3313.019	4773.535	9.99+	1.441
293	111	S6	0	969.787	9837.516	40.342	9837.516	9.99+	9.99+
294	111	S7	0	3.593	1741.347	28.13	1741.347	9.99+	9.99+
295	112	S1	0	1035.449	7128.903	12.373	7128.903	6.885	9.99+
296	112	S2	0	1746.428	6367.825	105.631	6367.825	3.646	9.99+
297	112	S3	0	38.537	10489.627	12319.18	10489.627	9.99+	0.851
298	112	S4	0	1964.451	7384.303	14.883	7384.303	3.759	9.99+
299	112	S5	0	5.313	4931.843	3161.588	4931.843	9.99+	1.56
300	112	S6	0	927.138	10211.973	44.259	10211.973	9.99+	9.99+
301	112	S7	0	2.575	1829.673	28.285	1829.673	9.99+	9.99+
302	113	S1	0	732.652	6753.728	5.318	6753.728	9.218	9.99+
303	113	S2	0	1911.553	6129.71	59.192	6129.71	3.207	9.99+
304	113	S3	0	38.377	9971.932	12116.199	9971.932	9.99+	0.823
305	113	S4	0	1726.874	7026.341	17.153	7026.341	4.069	9.99+
306	113	S5	0	3.669	4768.183	3360.927	4768.183	9.99+	1.419
307	113	S6	0	994.211	10126.402	31.113	10126.402	9.99+	9.99+
308	113	S7	0	6.115	1750.174	18.937	1750.174	9.99+	9.99+
309	114	S1	0	603.146	7166.343	3.055	7166.343	9.99+	9.99+
310	114	S2	0	2070.943	6405.059	48.867	6405.059	3.093	9.99+
311	114	S3	0	38.45	10494.666	12179.145	10494.666	9.99+	0.862
312	114	S4	0	1720.273	7251.865	19.357	7251.865	4.216	9.99+
313	114	S5	0	7.213	4926.484	3525.46	4926.484	9.99+	1.397
314	114	S6	0	1036.68	10500.899	35.102	10500.899	9.99+	9.99+
315	114	S7	0	7.139	1838.517	18.851	1838.517	9.99+	9.99+
316	115	S1	0	392.154	14069.323	17.061	14069.323	9.99+	9.99+
317	115	S2	0	540.998	12090.968	62.689	12090.968	9.99+	9.99+
318	115	S3	0	31.099	20219.753	68.476	20219.753	9.99+	9.99+
319	115	S4	0	448.308	13380.503	5.335	13380.503	9.99+	9.99+
320	115	S5	0	30.795	9044.135	80.885	9044.135	9.99+	9.99+
321	115	S6	0	10.848	19211.201	61.785	19211.201	9.99+	9.99+
322	115	S7	0	14.64	3513.888	1.483	3513.888	9.99+	9.99+
323	116	S1	0	1043.147	14069.07	17.225	14069.07	9.99+	9.99+
324	116	S2	0	524.465	12090.372	63.747	12090.372	9.99+	9.99+
325	116	S3	0	4.037	20219.635	235.08	20219.635	9.99+	9.99+
326	116	S4	0	191.733	13382.604	7.144	13382.604	9.99+	9.99+
327	116	S5	0	28.059	9043.5	85.959	9043.5	9.99+	9.99+
328	116	S6	0	299.59	19209.2	58.857	19209.2	9.99+	9.99+
329	116	S7	0	8.905	3514.107	1.516	3514.107	9.99+	9.99+
330	117	S1	0	713.999	14068.173	20.687	14068.173	9.99+	9.99+
331	117	S2	0	517.283	12090.572	64.827	12090.572	9.99+	9.99+
332	117	S3	0	14.906	20219.853	345.709	20219.853	9.99+	9.99+

Slab Stability - Sliding (Continued)

	LC	Slab	Angle[deg]	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]	SR-xx	SR-zz
333	117	S4	0	296.048	13381.139	5.525	13381.139	9.99+	9.99+
334	117	S5	0	29.46	9043.794	122.728	9043.794	9.99+	9.99+
335	117	S6	0	111.914	19212.999	90.455	19212.999	9.99+	9.99+
336	117	S7	0	11.944	3514.178	1.577	3514.178	9.99+	9.99+
337	118	S1	0	721.302	14070.22	13.599	14070.22	9.99+	9.99+
338	118	S2	0	548.18	12090.768	61.609	12090.768	9.99+	9.99+
339	118	S3	0	12.156	20219.535	649.265	20219.535	9.99+	9.99+
340	118	S4	0	343.993	13381.968	6.953	13381.968	9.99+	9.99+
341	118	S5	0	29.394	9043.841	117.655	9043.841	9.99+	9.99+
342	118	S6	0	176.829	19207.402	30.188	19207.402	9.99+	9.99+
343	118	S7	0	11.601	3513.817	1.422	3513.817	9.99+	9.99+
344	119	S1	0	877.66	16091.502	26.035	16091.502	9.99+	9.99+
345	119	S2	0	837.427	13445.255	100.52	13445.255	9.99+	9.99+
346	119	S3	0	35.171	22782.601	183.815	22782.601	9.99+	9.99+
347	119	S4	0	559.843	14490.005	9.727	14490.005	9.99+	9.99+
348	119	S5	0	48.129	9820.623	49.411	9820.623	9.99+	9.99+
349	119	S6	0	85.969	21035.035	74.556	21035.035	9.99+	9.99+
350	119	S7	0	20.668	3944.442	1.487	3944.442	9.99+	9.99+
351	120	S1	0	1365.905	16091.312	26.159	16091.312	9.99+	9.99+
352	120	S2	0	825.027	13444.807	101.314	13444.807	9.99+	9.99+
353	120	S3	0	8.819	22782.513	308.768	22782.513	9.99+	9.99+
354	120	S4	0	367.411	14491.582	11.083	14491.582	9.99+	9.99+
355	120	S5	0	46.077	9820.147	75.722	9820.147	9.99+	9.99+
356	120	S6	0	318.797	21033.535	72.36	21033.535	9.99+	9.99+
357	120	S7	0	16.366	3944.607	1.512	3944.607	9.99+	9.99+
358	121	S1	0	1119.044	16090.639	28.755	16090.639	9.99+	9.99+
359	121	S2	0	819.641	13444.957	102.124	13444.957	9.99+	9.99+
360	121	S3	0	23.026	22782.676	126.823	22782.676	9.99+	9.99+
361	121	S4	0	445.648	14490.482	9.87	14490.482	9.99+	9.99+
362	121	S5	0	47.128	9820.368	103.299	9820.368	9.99+	9.99+
363	121	S6	0	178.04	21036.384	96.059	21036.384	9.99+	9.99+
364	121	S7	0	18.645	3944.66	1.557	3944.66	9.99+	9.99+
365	122	S1	0	1124.521	16092.175	23.439	16092.175	9.99+	9.99+
366	122	S2	0	842.813	13445.104	99.71	13445.104	9.99+	9.99+
367	122	S3	0	20.963	22782.438	619.407	22782.438	9.99+	9.99+
368	122	S4	0	481.606	14491.104	10.941	14491.104	9.99+	9.99+
369	122	S5	0	47.079	9820.402	76.988	9820.402	9.99+	9.99+
370	122	S6	0	226.726	21032.186	50.858	21032.186	9.99+	9.99+
371	122	S7	0	18.388	3944.389	1.441	3944.389	9.99+	9.99+
372	123	S1	0	854.009	15992.143	22.959	15992.143	9.99+	9.99+
373	123	S2	0	841.286	14152.055	101.983	14152.055	9.99+	9.99+
374	123	S3	0	33.415	23192.613	158.616	23192.613	9.99+	9.99+
375	123	S4	0	564.577	15095.521	10.83	15095.521	9.99+	9.99+
376	123	S5	0	42.916	9800.021	37.477	9800.021	9.99+	9.99+
377	123	S6	0	115.86	21533.6	56.681	21533.6	9.99+	9.99+
378	123	S7	0	18.749	3863.13	1.487	3863.13	9.99+	9.99+
379	124	S1	0	1342.254	15991.953	23.082	15991.953	9.99+	9.99+
380	124	S2	0	828.886	14151.608	102.777	14151.608	9.99+	9.99+
381	124	S3	0	7.063	23192.524	283.569	23192.524	9.99+	9.99+
382	124	S4	0	372.146	15097.098	12.186	15097.098	9.99+	9.99+
383	124	S5	0	40.864	9799.546	87.657	9799.546	9.99+	9.99+
384	124	S6	0	348.688	21532.1	54.486	21532.1	9.99+	9.99+
385	124	S7	0	14.448	3863.295	1.512	3863.295	9.99+	9.99+
386	125	S1	0	1095.393	15991.28	25.678	15991.28	9.99+	9.99+
387	125	S2	0	823.499	14151.758	103.587	14151.758	9.99+	9.99+

Slab Stability - Sliding (Continued)

	LC	Slab	Angle[deg]	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]	SR-xx	SR-zz
388	125	S3	0	21.27	23192.688	152.023	23192.688	9.99+	9.99+
389	125	S4	0	450.382	15095.998	10.973	15095.998	9.99+	9.99+
390	125	S5	0	41.915	9799.766	115.233	9799.766	9.99+	9.99+
391	125	S6	0	207.931	21534.949	78.184	21534.949	9.99+	9.99+
392	125	S7	0	16.727	3863.348	1.557	3863.348	9.99+	9.99+
393	126	S1	0	1100.87	15992.816	20.362	15992.816	9.99+	9.99+
394	126	S2	0	846.672	14151.905	101.173	14151.905	9.99+	9.99+
395	126	S3	0	19.207	23192.449	594.208	23192.449	9.99+	9.99+
396	126	S4	0	486.341	15096.62	12.044	15096.62	9.99+	9.99+
397	126	S5	0	41.865	9799.801	65.054	9799.801	9.99+	9.99+
398	126	S6	0	256.617	21530.751	32.983	21530.751	9.99+	9.99+
399	126	S7	0	16.47	3863.077	1.441	3863.077	9.99+	9.99+
400	127	S1	0	105.093	8441.644	10.203	8441.644	9.99+	9.99+
401	127	S2	0	327.906	7254.7	37.402	7254.7	9.99+	9.99+
402	127	S3	0	25.686	12131.876	7.765	12131.876	9.99+	9.99+
403	127	S4	0	320.3	8027.881	2.839	8027.881	9.99+	9.99+
404	127	S5	0	19.024	5426.608	81.9	5426.608	9.99+	9.99+
405	127	S6	0	68.596	11527.121	37.657	11527.121	9.99+	9.99+
406	127	S7	0	9.931	2108.289	0.883	2108.289	9.99+	9.99+
407	128	S1	0	756.087	8441.391	10.368	8441.391	9.99+	9.99+
408	128	S2	0	311.373	7254.104	38.46	7254.104	9.99+	9.99+
409	128	S3	0	9.449	12131.758	174.369	12131.758	9.99+	9.99+
410	128	S4	0	63.724	8029.983	4.648	8029.983	9.99+	9.99+
411	128	S5	0	16.288	5425.973	84.944	5425.973	9.99+	9.99+
412	128	S6	0	241.842	11525.12	34.729	11525.12	9.99+	9.99+
413	128	S7	0	4.196	2108.508	0.916	2108.508	9.99+	9.99+
414	129	S1	0	426.939	8440.494	13.83	8440.494	9.99+	9.99+
415	129	S2	0	304.191	7254.304	39.54	7254.304	9.99+	9.99+
416	129	S3	0	9.494	12131.976	406.42	12131.976	9.99+	9.99+
417	129	S4	0	168.04	8028.518	3.03	8028.518	9.99+	9.99+
418	129	S5	0	17.689	5426.267	121.713	5426.267	9.99+	9.99+
419	129	S6	0	54.166	11528.919	66.326	11528.919	9.99+	9.99+
420	129	S7	0	7.235	2108.579	0.977	2108.579	9.99+	9.99+
421	130	S1	0	434.241	8442.541	6.742	8442.541	9.99+	9.99+
422	130	S2	0	335.088	7254.5	36.322	7254.5	9.99+	9.99+
423	130	S3	0	6.743	12131.658	588.554	12131.658	9.99+	9.99+
424	130	S4	0	215.984	8029.347	4.458	8029.347	9.99+	9.99+
425	130	S5	0	17.623	5426.314	118.669	5426.314	9.99+	9.99+
426	130	S6	0	119.08	11523.322	6.059	11523.322	9.99+	9.99+
427	130	S7	0	6.892	2108.218	0.822	2108.218	9.99+	9.99+

Slab Stability - Overturning by Category

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
1	1	S1	DL	0	117220.446	0	413198.137
2	1	S2	DL	0	80520.175	0	355729.824
3	1	S3	DL	0	598649.552	0	235914.476
4	1	S4	DL	0	116754.978	0	438807.328
5	1	S5	DL	0	184553.771	0	75404.381
6	1	S6	DL	0	183280.576	0	676538.736
7	1	S7	DL	0	23425.153	0	34085.737
8	71	S1	DL	0	117220.446	0	413198.137
9	71	S2	DL	0	80520.175	0	355729.824
10	71	S3	DL	0	598649.552	0	235914.476
11	71	S4	DL	0	116754.978	0	438807.328
12	71	S5	DL	0	184553.771	0	75404.381

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
13	71	S6	DL	0	183280.576	0	676538.736
14	71	S7	DL	0	23425.153	0	34085.737
15	72	S1	DL	0	117220.446	0	413198.137
16	72	S1	RLL	0	22453.089	0	91788.555
17	72	S2	DL	0	80520.175	0	355729.824
18	72	S2	RLL	0	11971.744	0	37879.228
19	72	S3	DL	0	598649.552	0	235914.476
20	72	S3	RLL	0	96795.077	0	39881.8
21	72	S4	DL	0	116754.978	0	438807.328
22	72	S4	RLL	0	10539.511	0	40969.096
23	72	S5	DL	0	184553.771	0	75404.381
24	72	S5	RLL	0	23415.293	0	8659.952
25	72	S6	DL	0	183280.576	0	676538.736
26	72	S6	RLL	0	17950.02	0	111235.27
27	72	S7	DL	0	23425.153	0	34085.737
28	72	S7	RLL	0	3826.902	0	4951.216
29	73	S1	DL	0	117220.446	0	413198.137
30	73	S1	SL	0	22453.089	0	91788.555
31	73	S2	DL	0	80520.175	0	355729.824
32	73	S2	SL	0	11971.744	0	37879.228
33	73	S3	DL	0	598649.552	0	235914.476
34	73	S3	SL	0	96795.077	0	39881.8
35	73	S4	DL	0	116754.978	0	438807.328
36	73	S4	SL	0	10539.511	0	40969.096
37	73	S5	DL	0	184553.771	0	75404.381
38	73	S5	SL	0	23415.293	0	8659.952
39	73	S6	DL	0	183280.576	0	676538.736
40	73	S6	SL	0	17950.02	0	111235.27
41	73	S7	DL	0	23425.153	0	34085.737
42	73	S7	SL	0	3826.902	0	4951.216
43	74	S1	DL	0	117220.446	0	413198.137
44	74	S1	SLN	0	21354.568	0	73540.615
45	74	S2	DL	0	80520.175	0	355729.824
46	74	S2	SLN	0	18251.815	0	65470.174
47	74	S3	DL	0	598649.552	0	235914.476
48	74	S3	SLN	0	109794.977	0	46256.637
49	74	S4	DL	0	116754.978	0	438807.328
50	74	S4	SLN	0	16844.962	0	62152.303
51	74	S5	DL	0	184553.771	0	75404.381
52	74	S5	SLN	0	22323.627	0	8421.779
53	74	S6	DL	0	183280.576	0	676538.736
54	74	S6	SLN	0	21722.01	0	134863.752
55	74	S7	DL	0	23425.153	0	34085.737
56	74	S7	SLN	0	3104.13	0	4321.978
57	75	S1	DL	0	117220.446	0	413198.137
58	75	S1	OL1	0	0.996	133244.937	0
59	75	S1	OL11	0	10777.633	0	44077.539
60	75	S2	DL	0	80520.175	0	355729.824
61	75	S2	OL1	76.225	0	57999.608	0
62	75	S2	OL11	0	5746.614	0	18291.146
63	75	S3	DL	0	-614869.109	0	235914.476
64	75	S3	OL1	15000.604	0	218.982	0
65	75	S3	OL11	0	-52467.027	0	19143.435
66	75	S4	DL	0	-195481.273	0	438807.328
67	75	S4	OL1	1462.158	0	94788.712	0

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
68	75	S4	OL11	0	-11513.04	0	19583.144
69	75	S5	DL	0	184553.771	0	-75325.909
70	75	S5	OL1	15121.602	0	253.245	0
71	75	S5	OL11	0	11204.034	0	-4126.592
72	75	S6	DL	0	183280.576	0	676538.736
73	75	S6	OL1	0	139.204	137519.102	0
74	75	S6	OL11	0	8661.758	0	53483.17
75	75	S7	DL	0	23425.153	0	34085.737
76	75	S7	OL1	0	5.925	976.756	0
77	75	S7	OL11	0	1836.924	0	2376.706
78	76	S1	DL	0	117220.446	0	413198.137
79	76	S1	OL2	10.462	0	131908.052	0
80	76	S2	DL	0	80520.175	0	355729.824
81	76	S2	OL2	80.059	0	58534.193	0
82	76	S3	DL	0	-614869.109	0	235914.476
83	76	S3	OL2	19188.447	0	389.191	0
84	76	S4	DL	0	-195481.273	0	438807.328
85	76	S4	OL2	1370.451	0	104452.781	0
86	76	S5	DL	0	184553.771	0	-75325.909
87	76	S5	OL2	19389.709	0	256.028	0
88	76	S6	DL	0	183280.576	0	676538.736
89	76	S6	OL2	0	117.078	129282.864	0
90	76	S7	DL	0	23425.153	0	34085.737
91	76	S7	OL2	0	7.656	1109.929	0
92	77	S1	DL	0	-117266.16	0	-384056.325
93	77	S1	OL3	6.934	0	127838.783	0
94	77	S1	OL11	0	-10792.976	0	-29262.53
95	77	S2	DL	0	80520.175	0	-410012.601
96	77	S2	OL3	0	74.666	56226.045	0
97	77	S2	OL11	0	5746.614	0	-36607.184
98	77	S3	DL	0	598649.552	0	-235878.394
99	77	S3	OL3	15463.936	0	187.031	0
100	77	S3	OL11	0	45974.582	0	-19128.782
101	77	S4	DL	0	116754.978	0	-364977.994
102	77	S4	OL3	0	499.269	83801.9	0
103	77	S4	OL11	0	5063.059	0	-23088.469
104	77	S5	DL	0	-177198.926	0	75404.381
105	77	S5	OL3	15448.383	0	65.419	0
106	77	S5	OL11	0	-8676.017	0	4156.762
107	77	S6	DL	0	183280.576	0	-604141.295
108	77	S6	OL3	128.181	0	129163.94	0
109	77	S6	OL11	0	8661.758	0	-24497.509
110	77	S7	DL	0	23425.153	0	-36311.354
111	77	S7	OL3	6.359	0	878.784	0
112	77	S7	OL11	0	1836.924	0	-3143.249
113	78	S1	DL	0	-117266.16	0	-384056.325
114	78	S1	OL4	19.09	0	129426.941	0
115	78	S2	DL	0	80520.175	0	-410012.601
116	78	S2	OL4	0	70.956	55764.899	0
117	78	S3	DL	0	598649.552	0	-235878.394
118	78	S3	OL4	11376.725	0	29.287	0
119	78	S4	DL	0	116754.978	0	-364977.994
120	78	S4	OL4	0	539.702	74073.653	0
121	78	S5	DL	0	-177198.926	0	75404.381
122	78	S5	OL4	11293.942	0	78.733	0

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
123	78	S6	DL	0	183280.576	0	-604141.295
124	78	S6	OL4	150.282	0	137738.443	0
125	78	S7	DL	0	23425.153	0	-36311.354
126	78	S7	OL4	4.659	0	743.157	0
127	79	S1	DL	0	117220.446	0	413198.137
128	79	S1	OL5	164.561	0	15924.335	0
129	79	S1	OL11	0	10777.633	0	44077.539
130	79	S2	DL	0	80520.175	0	355729.824
131	79	S2	OL5	244.436	0	38984.979	0
132	79	S2	OL11	0	5746.614	0	18291.146
133	79	S3	DL	0	-614869.109	0	235914.476
134	79	S3	OL5	236199.734	0	74.32	0
135	79	S3	OL11	0	-52467.027	0	19143.435
136	79	S4	DL	0	116754.978	0	-364977.994
137	79	S4	OL5	0	516.585	26842.432	0
138	79	S4	OL11	0	5063.059	0	-23088.469
139	79	S5	DL	0	-177198.926	0	75404.381
140	79	S5	OL5	52618.828	0	0	20.919
141	79	S5	OL11	0	-8676.017	0	4156.762
142	79	S6	DL	0	-200923.433	0	-604141.295
143	79	S6	OL5	2267.071	0	20741.716	0
144	79	S6	OL11	0	-14732.446	0	-24497.509
145	79	S7	DL	0	23425.153	0	34085.737
146	79	S7	OL5	51.802	0	129.041	0
147	79	S7	OL11	0	1836.924	0	2376.706
148	80	S1	DL	0	117220.446	0	413198.137
149	80	S1	OL6	163.604	0	16855.735	0
150	80	S2	DL	0	80520.175	0	355729.824
151	80	S2	OL6	254.165	0	37140.446	0
152	80	S3	DL	0	-614869.109	0	235914.476
153	80	S3	OL6	236240.835	0	77.654	0
154	80	S4	DL	0	116754.978	0	-364977.994
155	80	S4	OL6	0	509.847	26564.152	0
156	80	S5	DL	0	-177198.926	0	75404.381
157	80	S5	OL6	50251.653	0	0	19.908
158	80	S6	DL	0	-200923.433	0	-604141.295
159	80	S6	OL6	2249.135	0	20152.371	0
160	80	S7	DL	0	23425.153	0	34085.737
161	80	S7	OL6	48.634	0	128.16	0
162	81	S1	DL	0	117220.446	0	-384056.325
163	81	S1	OL7	0	168.002	15071.919	0
164	81	S1	OL11	0	10777.633	0	-29262.53
165	81	S2	DL	0	80520.175	0	-410012.601
166	81	S2	OL7	0	209.895	35574.814	0
167	81	S2	OL11	0	5746.614	0	-36607.184
168	81	S3	DL	0	598649.552	0	-235878.394
169	81	S3	OL7	233173.489	0	12.917	0
170	81	S3	OL11	0	45974.582	0	-19128.782
171	81	S4	DL	0	-195481.273	0	438807.328
172	81	S4	OL7	1011.04	0	29868.704	0
173	81	S4	OL11	0	-11513.04	0	19583.144
174	81	S5	DL	0	184553.771	0	-75325.909
175	81	S5	OL7	53987.338	0	23.639	0
176	81	S5	OL11	0	11204.034	0	-4126.592
177	81	S6	DL	0	183280.576	0	676538.736

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
178	81	S6	OL7	0	648.392	10286.35	0
179	81	S6	OL11	0	8661.758	0	53483.17
180	81	S7	DL	0	23425.153	0	-36311.354
181	81	S7	OL7	0	54.115	42.095	0
182	81	S7	OL11	0	1836.924	0	-3143.249
183	82	S1	DL	0	117220.446	0	-384056.325
184	82	S1	OL8	0	168.967	14142.435	0
185	82	S2	DL	0	80520.175	0	-410012.601
186	82	S2	OL8	0	200.056	37463.826	0
187	82	S3	DL	0	598649.552	0	-235878.394
188	82	S3	OL8	233336.131	0	11.747	0
189	82	S4	DL	0	-195481.273	0	438807.328
190	82	S4	OL8	1025.397	0	30197.241	0
191	82	S5	DL	0	184553.771	0	-75325.909
192	82	S5	OL8	56567.165	0	24.541	0
193	82	S6	DL	0	183280.576	0	676538.736
194	82	S6	OL8	0	662.992	10762.408	0
195	82	S7	DL	0	23425.153	0	-36311.354
196	82	S7	OL8	0	57.463	32.985	0
197	83	S1	DL	0	117220.446	0	413198.137
198	83	S1	RLL	0	16839.817	0	68841.416
199	83	S1	OL1	0	0.747	99933.703	0
200	83	S1	OL11	0	8083.224	0	33058.154
201	83	S2	DL	0	80520.175	0	355729.824
202	83	S2	RLL	0	8978.808	0	28409.421
203	83	S2	OL1	57.169	0	43499.706	0
204	83	S2	OL11	0	4309.961	0	13718.359
205	83	S3	DL	0	-614869.109	0	235914.476
206	83	S3	RLL	0	-81218.167	0	29911.35
207	83	S3	OL1	11250.453	0	164.236	0
208	83	S3	OL11	0	-39350.27	0	14357.576
209	83	S4	DL	0	-195481.273	0	438807.328
210	83	S4	RLL	0	-17977.63	0	30726.822
211	83	S4	OL1	1096.619	0	71091.534	0
212	83	S4	OL11	0	-8634.78	0	14687.358
213	83	S5	DL	0	184553.771	0	-75325.909
214	83	S5	RLL	0	17561.47	0	-6447.827
215	83	S5	OL1	11341.201	0	189.934	0
216	83	S5	OL11	0	8403.025	0	-3094.944
217	83	S6	DL	0	183280.576	0	676538.736
218	83	S6	RLL	0	13462.515	0	83426.453
219	83	S6	OL1	0	104.403	103139.327	0
220	83	S6	OL11	0	6496.319	0	40112.377
221	83	S7	DL	0	23425.153	0	34085.737
222	83	S7	RLL	0	2870.177	0	3713.412
223	83	S7	OL1	0	4.444	732.567	0
224	83	S7	OL11	0	1377.693	0	1782.53
225	84	S1	DL	0	117220.446	0	413198.137
226	84	S1	RLL	0	16839.817	0	68841.416
227	84	S1	OL2	7.847	0	98931.039	0
228	84	S2	DL	0	80520.175	0	355729.824
229	84	S2	RLL	0	8978.808	0	28409.421
230	84	S2	OL2	60.044	0	43900.645	0
231	84	S3	DL	0	-614869.109	0	235914.476
232	84	S3	RLL	0	-81218.167	0	29911.35

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
233	84	S3	OL2	14391.335	0	291.894	0
234	84	S4	DL	0	-195481.273	0	438807.328
235	84	S4	RLL	0	-17977.63	0	30726.822
236	84	S4	OL2	1027.838	0	78339.586	0
237	84	S5	DL	0	184553.771	0	-75325.909
238	84	S5	RLL	0	17561.47	0	-6447.827
239	84	S5	OL2	14542.281	0	192.021	0
240	84	S6	DL	0	183280.576	0	676538.736
241	84	S6	RLL	0	13462.515	0	83426.453
242	84	S6	OL2	0	87.808	96962.148	0
243	84	S7	DL	0	23425.153	0	34085.737
244	84	S7	RLL	0	2870.177	0	3713.412
245	84	S7	OL2	0	5.742	832.447	0
246	85	S1	DL	0	-117266.16	0	-384056.325
247	85	S1	RLL	0	-16863.695	0	-45750.524
248	85	S1	OL3	5.2	0	95879.088	0
249	85	S1	OL11	0	-8094.732	0	-21946.898
250	85	S2	DL	0	80520.175	0	-410012.601
251	85	S2	RLL	0	8978.808	0	-57366.781
252	85	S2	OL3	0	56	42169.534	0
253	85	S2	OL11	0	4309.961	0	-27455.388
254	85	S3	DL	0	598649.552	0	-235878.394
255	85	S3	RLL	0	72596.308	0	-29888.779
256	85	S3	OL3	11597.952	0	140.273	0
257	85	S3	OL11	0	34480.936	0	-14346.586
258	85	S4	DL	0	116754.978	0	-364977.994
259	85	S4	RLL	0	7904.633	0	-35901.517
260	85	S4	OL3	0	374.452	62851.425	0
261	85	S4	OL11	0	3797.294	0	-17316.352
262	85	S5	DL	0	-177198.926	0	75404.381
263	85	S5	RLL	0	-13501.23	0	6494.964
264	85	S5	OL3	11586.287	0	49.064	0
265	85	S5	OL11	0	-6507.013	0	3117.572
266	85	S6	DL	0	183280.576	0	-604141.295
267	85	S6	RLL	0	13462.515	0	-38179.194
268	85	S6	OL3	96.136	0	96872.955	0
269	85	S6	OL11	0	6496.319	0	-18373.132
270	85	S7	DL	0	23425.153	0	-36311.354
271	85	S7	RLL	0	2870.177	0	-4911.47
272	85	S7	OL3	4.769	0	659.088	0
273	85	S7	OL11	0	1377.693	0	-2357.437
274	86	S1	DL	0	-117266.16	0	-384056.325
275	86	S1	RLL	0	-16863.695	0	-45750.524
276	86	S1	OL4	14.317	0	97070.206	0
277	86	S2	DL	0	80520.175	0	-410012.601
278	86	S2	RLL	0	8978.808	0	-57366.781
279	86	S2	OL4	0	53.217	41823.674	0
280	86	S3	DL	0	598649.552	0	-235878.394
281	86	S3	RLL	0	72596.308	0	-29888.779
282	86	S3	OL4	8532.544	0	21.965	0
283	86	S4	DL	0	116754.978	0	-364977.994
284	86	S4	RLL	0	7904.633	0	-35901.517
285	86	S4	OL4	0	404.777	55555.24	0
286	86	S5	DL	0	-177198.926	0	75404.381
287	86	S5	RLL	0	-13501.23	0	6494.964

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
288	86	S5	OL4	8470.457	0	59.05	0
289	86	S6	DL	0	183280.576	0	-604141.295
290	86	S6	RLL	0	13462.515	0	-38179.194
291	86	S6	OL4	112.712	0	103303.832	0
292	86	S7	DL	0	23425.153	0	-36311.354
293	86	S7	RLL	0	2870.177	0	-4911.47
294	86	S7	OL4	3.494	0	557.368	0
295	87	S1	DL	0	117220.446	0	413198.137
296	87	S1	RLL	0	16839.817	0	68841.416
297	87	S1	OL5	123.421	0	11943.251	0
298	87	S1	OL11	0	8083.224	0	33058.154
299	87	S2	DL	0	80520.175	0	355729.824
300	87	S2	RLL	0	8978.808	0	28409.421
301	87	S2	OL5	183.327	0	29238.735	0
302	87	S2	OL11	0	4309.961	0	13718.359
303	87	S3	DL	0	-614869.109	0	235914.476
304	87	S3	RLL	0	-81218.167	0	29911.35
305	87	S3	OL5	177149.8	0	55.74	0
306	87	S3	OL11	0	-39350.27	0	14357.576
307	87	S4	DL	0	116754.978	0	-364977.994
308	87	S4	RLL	0	7904.633	0	-35901.517
309	87	S4	OL5	0	387.439	20131.824	0
310	87	S4	OL11	0	3797.294	0	-17316.352
311	87	S5	DL	0	-177198.926	0	75404.381
312	87	S5	RLL	0	-13501.23	0	6494.964
313	87	S5	OL5	39464.121	0	0	15.689
314	87	S5	OL11	0	-6507.013	0	3117.572
315	87	S6	DL	0	-200923.433	0	-604141.295
316	87	S6	RLL	0	-23019.179	0	-38179.194
317	87	S6	OL5	1700.303	0	15556.287	0
318	87	S6	OL11	0	-11049.334	0	-18373.132
319	87	S7	DL	0	23425.153	0	34085.737
320	87	S7	RLL	0	2870.177	0	3713.412
321	87	S7	OL5	38.852	0	96.78	0
322	87	S7	OL11	0	1377.693	0	1782.53
323	88	S1	DL	0	117220.446	0	413198.137
324	88	S1	RLL	0	16839.817	0	68841.416
325	88	S1	OL6	122.703	0	12641.801	0
326	88	S2	DL	0	80520.175	0	355729.824
327	88	S2	RLL	0	8978.808	0	28409.421
328	88	S2	OL6	190.624	0	27855.335	0
329	88	S3	DL	0	-614869.109	0	235914.476
330	88	S3	RLL	0	-81218.167	0	29911.35
331	88	S3	OL6	177180.626	0	58.241	0
332	88	S4	DL	0	116754.978	0	-364977.994
333	88	S4	RLL	0	7904.633	0	-35901.517
334	88	S4	OL6	0	382.385	19923.114	0
335	88	S5	DL	0	-177198.926	0	75404.381
336	88	S5	RLL	0	-13501.23	0	6494.964
337	88	S5	OL6	37688.739	0	0	14.931
338	88	S6	DL	0	-200923.433	0	-604141.295
339	88	S6	RLL	0	-23019.179	0	-38179.194
340	88	S6	OL6	1686.851	0	15114.278	0
341	88	S7	DL	0	23425.153	0	34085.737
342	88	S7	RLL	0	2870.177	0	3713.412

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
343	88	S7	OL6	36.475	0	96.12	0
344	89	S1	DL	0	117220.446	0	-384056.325
345	89	S1	RLL	0	16839.817	0	-45750.524
346	89	S1	OL7	0	126.001	11303.939	0
347	89	S1	OL11	0	8083.224	0	-21946.898
348	89	S2	DL	0	80520.175	0	-410012.601
349	89	S2	RLL	0	8978.808	0	-57366.781
350	89	S2	OL7	0	157.421	26681.11	0
351	89	S2	OL11	0	4309.961	0	-27455.388
352	89	S3	DL	0	598649.552	0	-235878.394
353	89	S3	RLL	0	72596.308	0	-29888.779
354	89	S3	OL7	174880.117	0	9.688	0
355	89	S3	OL11	0	34480.936	0	-14346.586
356	89	S4	DL	0	-195481.273	0	438807.328
357	89	S4	RLL	0	-17977.63	0	30726.822
358	89	S4	OL7	758.28	0	22401.528	0
359	89	S4	OL11	0	-8634.78	0	14687.358
360	89	S5	DL	0	184553.771	0	-75325.909
361	89	S5	RLL	0	17561.47	0	-6447.827
362	89	S5	OL7	40490.504	0	17.729	0
363	89	S5	OL11	0	8403.025	0	-3094.944
364	89	S6	DL	0	183280.576	0	676538.736
365	89	S6	RLL	0	13462.515	0	83426.453
366	89	S6	OL7	0	486.294	7714.762	0
367	89	S6	OL11	0	6496.319	0	40112.377
368	89	S7	DL	0	23425.153	0	-36311.354
369	89	S7	RLL	0	2870.177	0	-4911.47
370	89	S7	OL7	0	40.587	31.572	0
371	89	S7	OL11	0	1377.693	0	-2357.437
372	90	S1	DL	0	117220.446	0	-384056.325
373	90	S1	RLL	0	16839.817	0	-45750.524
374	90	S1	OL8	0	126.725	10606.826	0
375	90	S2	DL	0	80520.175	0	-410012.601
376	90	S2	RLL	0	8978.808	0	-57366.781
377	90	S2	OL8	0	150.042	28097.87	0
378	90	S3	DL	0	598649.552	0	-235878.394
379	90	S3	RLL	0	72596.308	0	-29888.779
380	90	S3	OL8	175002.098	0	8.81	0
381	90	S4	DL	0	-195481.273	0	438807.328
382	90	S4	RLL	0	-17977.63	0	30726.822
383	90	S4	OL8	769.048	0	22647.931	0
384	90	S5	DL	0	184553.771	0	-75325.909
385	90	S5	RLL	0	17561.47	0	-6447.827
386	90	S5	OL8	42425.373	0	18.406	0
387	90	S6	DL	0	183280.576	0	676538.736
388	90	S6	RLL	0	13462.515	0	83426.453
389	90	S6	OL8	0	497.244	8071.806	0
390	90	S7	DL	0	23425.153	0	-36311.354
391	90	S7	RLL	0	2870.177	0	-4911.47
392	90	S7	OL8	0	43.097	24.739	0
393	91	S1	DL	0	117220.446	0	413198.137
394	91	S1	SL	0	16839.817	0	68841.416
395	91	S1	OL1	0	0.747	99933.703	0
396	91	S1	OL11	0	8083.224	0	33058.154
397	91	S2	DL	0	80520.175	0	355729.824

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
398	91	S2	SL	0	8978.808	0	28409.421
399	91	S2	OL1	57.169	0	43499.706	0
400	91	S2	OL11	0	4309.961	0	13718.359
401	91	S3	DL	0	-614869.109	0	235914.476
402	91	S3	SL	0	-81218.167	0	29911.35
403	91	S3	OL1	11250.453	0	164.236	0
404	91	S3	OL11	0	-39350.27	0	14357.576
405	91	S4	DL	0	-195481.273	0	438807.328
406	91	S4	SL	0	-17977.63	0	30726.822
407	91	S4	OL1	1096.619	0	71091.534	0
408	91	S4	OL11	0	-8634.78	0	14687.358
409	91	S5	DL	0	184553.771	0	-75325.909
410	91	S5	SL	0	17561.47	0	-6447.827
411	91	S5	OL1	11341.201	0	189.934	0
412	91	S5	OL11	0	8403.025	0	-3094.944
413	91	S6	DL	0	183280.576	0	676538.736
414	91	S6	SL	0	13462.515	0	83426.453
415	91	S6	OL1	0	104.403	103139.327	0
416	91	S6	OL11	0	6496.319	0	40112.377
417	91	S7	DL	0	23425.153	0	34085.737
418	91	S7	SL	0	2870.177	0	3713.412
419	91	S7	OL1	0	4.444	732.567	0
420	91	S7	OL11	0	1377.693	0	1782.53
421	92	S1	DL	0	117220.446	0	413198.137
422	92	S1	SL	0	16839.817	0	68841.416
423	92	S1	OL2	7.847	0	98931.039	0
424	92	S2	DL	0	80520.175	0	355729.824
425	92	S2	SL	0	8978.808	0	28409.421
426	92	S2	OL2	60.044	0	43900.645	0
427	92	S3	DL	0	-614869.109	0	235914.476
428	92	S3	SL	0	-81218.167	0	29911.35
429	92	S3	OL2	14391.335	0	291.894	0
430	92	S4	DL	0	-195481.273	0	438807.328
431	92	S4	SL	0	-17977.63	0	30726.822
432	92	S4	OL2	1027.838	0	78339.586	0
433	92	S5	DL	0	184553.771	0	-75325.909
434	92	S5	SL	0	17561.47	0	-6447.827
435	92	S5	OL2	14542.281	0	192.021	0
436	92	S6	DL	0	183280.576	0	676538.736
437	92	S6	SL	0	13462.515	0	83426.453
438	92	S6	OL2	0	87.808	96962.148	0
439	92	S7	DL	0	23425.153	0	34085.737
440	92	S7	SL	0	2870.177	0	3713.412
441	92	S7	OL2	0	5.742	832.447	0
442	93	S1	DL	0	-117266.16	0	-384056.325
443	93	S1	SL	0	-16863.695	0	-45750.524
444	93	S1	OL3	5.2	0	95879.088	0
445	93	S1	OL11	0	-8094.732	0	-21946.898
446	93	S2	DL	0	80520.175	0	-410012.601
447	93	S2	SL	0	8978.808	0	-57366.781
448	93	S2	OL3	0	56	42169.534	0
449	93	S2	OL11	0	4309.961	0	-27455.388
450	93	S3	DL	0	598649.552	0	-235878.394
451	93	S3	SL	0	72596.308	0	-29888.779
452	93	S3	OL3	11597.952	0	140.273	0

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
453	93	S3	OL11	0	34480.936	0	-14346.586
454	93	S4	DL	0	116754.978	0	-364977.994
455	93	S4	SL	0	7904.633	0	-35901.517
456	93	S4	OL3	0	374.452	62851.425	0
457	93	S4	OL11	0	3797.294	0	-17316.352
458	93	S5	DL	0	-177198.926	0	75404.381
459	93	S5	SL	0	-13501.23	0	6494.964
460	93	S5	OL3	11586.287	0	49.064	0
461	93	S5	OL11	0	-6507.013	0	3117.572
462	93	S6	DL	0	183280.576	0	-604141.295
463	93	S6	SL	0	13462.515	0	-38179.194
464	93	S6	OL3	96.136	0	96872.955	0
465	93	S6	OL11	0	6496.319	0	-18373.132
466	93	S7	DL	0	23425.153	0	-36311.354
467	93	S7	SL	0	2870.177	0	-4911.47
468	93	S7	OL3	4.769	0	659.088	0
469	93	S7	OL11	0	1377.693	0	-2357.437
470	94	S1	DL	0	-117266.16	0	-384056.325
471	94	S1	SL	0	-16863.695	0	-45750.524
472	94	S1	OL4	14.317	0	97070.206	0
473	94	S2	DL	0	80520.175	0	-410012.601
474	94	S2	SL	0	8978.808	0	-57366.781
475	94	S2	OL4	0	53.217	41823.674	0
476	94	S3	DL	0	598649.552	0	-235878.394
477	94	S3	SL	0	72596.308	0	-29888.779
478	94	S3	OL4	8532.544	0	21.965	0
479	94	S4	DL	0	116754.978	0	-364977.994
480	94	S4	SL	0	7904.633	0	-35901.517
481	94	S4	OL4	0	404.777	55555.24	0
482	94	S5	DL	0	-177198.926	0	75404.381
483	94	S5	SL	0	-13501.23	0	6494.964
484	94	S5	OL4	8470.457	0	59.05	0
485	94	S6	DL	0	183280.576	0	-604141.295
486	94	S6	SL	0	13462.515	0	-38179.194
487	94	S6	OL4	112.712	0	103303.832	0
488	94	S7	DL	0	23425.153	0	-36311.354
489	94	S7	SL	0	2870.177	0	-4911.47
490	94	S7	OL4	3.494	0	557.368	0
491	95	S1	DL	0	117220.446	0	413198.137
492	95	S1	SL	0	16839.817	0	68841.416
493	95	S1	OL5	123.421	0	11943.251	0
494	95	S1	OL11	0	8083.224	0	33058.154
495	95	S2	DL	0	80520.175	0	355729.824
496	95	S2	SL	0	8978.808	0	28409.421
497	95	S2	OL5	183.327	0	29238.735	0
498	95	S2	OL11	0	4309.961	0	13718.359
499	95	S3	DL	0	-614869.109	0	235914.476
500	95	S3	SL	0	-81218.167	0	29911.35
501	95	S3	OL5	177149.8	0	55.74	0
502	95	S3	OL11	0	-39350.27	0	14357.576
503	95	S4	DL	0	116754.978	0	-364977.994
504	95	S4	SL	0	7904.633	0	-35901.517
505	95	S4	OL5	0	387.439	20131.824	0
506	95	S4	OL11	0	3797.294	0	-17316.352
507	95	S5	DL	0	-177198.926	0	75404.381

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
508	95	S5	SL	0	-13501.23	0	6494.964
509	95	S5	OL5	39464.121	0	0	15.689
510	95	S5	OL11	0	-6507.013	0	3117.572
511	95	S6	DL	0	-200923.433	0	-604141.295
512	95	S6	SL	0	-23019.179	0	-38179.194
513	95	S6	OL5	1700.303	0	15556.287	0
514	95	S6	OL11	0	-11049.334	0	-18373.132
515	95	S7	DL	0	23425.153	0	34085.737
516	95	S7	SL	0	2870.177	0	3713.412
517	95	S7	OL5	38.852	0	96.78	0
518	95	S7	OL11	0	1377.693	0	1782.53
519	96	S1	DL	0	117220.446	0	413198.137
520	96	S1	SL	0	16839.817	0	68841.416
521	96	S1	OL6	122.703	0	12641.801	0
522	96	S2	DL	0	80520.175	0	355729.824
523	96	S2	SL	0	8978.808	0	28409.421
524	96	S2	OL6	190.624	0	27855.335	0
525	96	S3	DL	0	-614869.109	0	235914.476
526	96	S3	SL	0	-81218.167	0	29911.35
527	96	S3	OL6	177180.626	0	58.241	0
528	96	S4	DL	0	116754.978	0	-364977.994
529	96	S4	SL	0	7904.633	0	-35901.517
530	96	S4	OL6	0	382.385	19923.114	0
531	96	S5	DL	0	-177198.926	0	75404.381
532	96	S5	SL	0	-13501.23	0	6494.964
533	96	S5	OL6	37688.739	0	0	14.931
534	96	S6	DL	0	-200923.433	0	-604141.295
535	96	S6	SL	0	-23019.179	0	-38179.194
536	96	S6	OL6	1686.851	0	15114.278	0
537	96	S7	DL	0	23425.153	0	34085.737
538	96	S7	SL	0	2870.177	0	3713.412
539	96	S7	OL6	36.475	0	96.12	0
540	97	S1	DL	0	117220.446	0	-384056.325
541	97	S1	SL	0	16839.817	0	-45750.524
542	97	S1	OL7	0	126.001	11303.939	0
543	97	S1	OL11	0	8083.224	0	-21946.898
544	97	S2	DL	0	80520.175	0	-410012.601
545	97	S2	SL	0	8978.808	0	-57366.781
546	97	S2	OL7	0	157.421	26681.11	0
547	97	S2	OL11	0	4309.961	0	-27455.388
548	97	S3	DL	0	598649.552	0	-235878.394
549	97	S3	SL	0	72596.308	0	-29888.779
550	97	S3	OL7	174880.117	0	9.688	0
551	97	S3	OL11	0	34480.936	0	-14346.586
552	97	S4	DL	0	-195481.273	0	438807.328
553	97	S4	SL	0	-17977.63	0	30726.822
554	97	S4	OL7	758.28	0	22401.528	0
555	97	S4	OL11	0	-8634.78	0	14687.358
556	97	S5	DL	0	184553.771	0	-75325.909
557	97	S5	SL	0	17561.47	0	-6447.827
558	97	S5	OL7	40490.504	0	17.729	0
559	97	S5	OL11	0	8403.025	0	-3094.944
560	97	S6	DL	0	183280.576	0	676538.736
561	97	S6	SL	0	13462.515	0	83426.453
562	97	S6	OL7	0	486.294	7714.762	0

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
563	97	S6	OL11	0	6496.319	0	40112.377
564	97	S7	DL	0	23425.153	0	-36311.354
565	97	S7	SL	0	2870.177	0	-4911.47
566	97	S7	OL7	0	40.587	31.572	0
567	97	S7	OL11	0	1377.693	0	-2357.437
568	98	S1	DL	0	117220.446	0	-384056.325
569	98	S1	SL	0	16839.817	0	-45750.524
570	98	S1	OL8	0	126.725	10606.826	0
571	98	S2	DL	0	80520.175	0	-410012.601
572	98	S2	SL	0	8978.808	0	-57366.781
573	98	S2	OL8	0	150.042	28097.87	0
574	98	S3	DL	0	598649.552	0	-235878.394
575	98	S3	SL	0	72596.308	0	-29888.779
576	98	S3	OL8	175002.098	0	8.81	0
577	98	S4	DL	0	-195481.273	0	438807.328
578	98	S4	SL	0	-17977.63	0	30726.822
579	98	S4	OL8	769.048	0	22647.931	0
580	98	S5	DL	0	184553.771	0	-75325.909
581	98	S5	SL	0	17561.47	0	-6447.827
582	98	S5	OL8	42425.373	0	18.406	0
583	98	S6	DL	0	183280.576	0	676538.736
584	98	S6	SL	0	13462.515	0	83426.453
585	98	S6	OL8	0	497.244	8071.806	0
586	98	S7	DL	0	23425.153	0	-36311.354
587	98	S7	SL	0	2870.177	0	-4911.47
588	98	S7	OL8	0	43.097	24.739	0
589	99	S1	DL	0	117220.446	0	413198.137
590	99	S1	SLN	0	16015.926	0	55155.461
591	99	S1	OL1	0	0.747	99933.703	0
592	99	S1	OL11	0	8083.224	0	33058.154
593	99	S2	DL	0	80520.175	0	355729.824
594	99	S2	SLN	0	13688.861	0	49102.63
595	99	S2	OL1	57.169	0	43499.706	0
596	99	S2	OL11	0	4309.961	0	13718.359
597	99	S3	DL	0	-614869.109	0	235914.476
598	99	S3	SLN	0	-96075.773	0	34692.478
599	99	S3	OL1	11250.453	0	164.236	0
600	99	S3	OL11	0	-39350.27	0	14357.576
601	99	S4	DL	0	-195481.273	0	438807.328
602	99	S4	SLN	0	-27377.247	0	46614.228
603	99	S4	OL1	1096.619	0	71091.534	0
604	99	S4	OL11	0	-8634.78	0	14687.358
605	99	S5	DL	0	184553.771	0	-75325.909
606	99	S5	SLN	0	16742.72	0	-6283.099
607	99	S5	OL1	11341.201	0	189.934	0
608	99	S5	OL11	0	8403.025	0	-3094.944
609	99	S6	DL	0	183280.576	0	676538.736
610	99	S6	SLN	0	16291.507	0	101147.814
611	99	S6	OL1	0	104.403	103139.327	0
612	99	S6	OL11	0	6496.319	0	40112.377
613	99	S7	DL	0	23425.153	0	34085.737
614	99	S7	SLN	0	2328.098	0	3241.484
615	99	S7	OL1	0	4.444	732.567	0
616	99	S7	OL11	0	1377.693	0	1782.53
617	100	S1	DL	0	117220.446	0	413198.137

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
618	100	S1	SLN	0	16015.926	0	55155.461
619	100	S1	OL2	7.847	0	98931.039	0
620	100	S2	DL	0	80520.175	0	355729.824
621	100	S2	SLN	0	13688.861	0	49102.63
622	100	S2	OL2	60.044	0	43900.645	0
623	100	S3	DL	0	-614869.109	0	235914.476
624	100	S3	SLN	0	-96075.773	0	34692.478
625	100	S3	OL2	14391.335	0	291.894	0
626	100	S4	DL	0	-195481.273	0	438807.328
627	100	S4	SLN	0	-27377.247	0	46614.228
628	100	S4	OL2	1027.838	0	78339.586	0
629	100	S5	DL	0	184553.771	0	-75325.909
630	100	S5	SLN	0	16742.72	0	-6283.099
631	100	S5	OL2	14542.281	0	192.021	0
632	100	S6	DL	0	183280.576	0	676538.736
633	100	S6	SLN	0	16291.507	0	101147.814
634	100	S6	OL2	0	87.808	96962.148	0
635	100	S7	DL	0	23425.153	0	34085.737
636	100	S7	SLN	0	2328.098	0	3241.484
637	100	S7	OL2	0	5.742	832.447	0
638	101	S1	DL	0	-117266.16	0	-384056.325
639	101	S1	SLN	0	-16031.599	0	-53806.126
640	101	S1	OL3	5.2	0	95879.088	0
641	101	S1	OL11	0	-8094.732	0	-21946.898
642	101	S2	DL	0	80520.175	0	-410012.601
643	101	S2	SLN	0	13688.861	0	-81437.605
644	101	S2	OL3	0	56	42169.534	0
645	101	S2	OL11	0	4309.961	0	-27455.388
646	101	S3	DL	0	598649.552	0	-235878.394
647	101	S3	SLN	0	82346.233	0	-34674.59
648	101	S3	OL3	11597.952	0	140.273	0
649	101	S3	OL11	0	34480.936	0	-14346.586
650	101	S4	DL	0	116754.978	0	-364977.994
651	101	S4	SLN	0	12633.722	0	-56385.438
652	101	S4	OL3	0	374.452	62851.425	0
653	101	S4	OL11	0	3797.294	0	-17316.352
654	101	S5	DL	0	-177198.926	0	75404.381
655	101	S5	SLN	0	-13495.92	0	6316.334
656	101	S5	OL3	11586.287	0	49.064	0
657	101	S5	OL11	0	-6507.013	0	3117.572
658	101	S6	DL	0	183280.576	0	-604141.295
659	101	S6	SLN	0	16291.507	0	-53695.5
660	101	S6	OL3	96.136	0	96872.955	0
661	101	S6	OL11	0	6496.319	0	-18373.132
662	101	S7	DL	0	23425.153	0	-36311.354
663	101	S7	SLN	0	2328.098	0	-3754.45
664	101	S7	OL3	4.769	0	659.088	0
665	101	S7	OL11	0	1377.693	0	-2357.437
666	102	S1	DL	0	-117266.16	0	-384056.325
667	102	S1	SLN	0	-16031.599	0	-53806.126
668	102	S1	OL4	14.317	0	97070.206	0
669	102	S2	DL	0	80520.175	0	-410012.601
670	102	S2	SLN	0	13688.861	0	-81437.605
671	102	S2	OL4	0	53.217	41823.674	0
672	102	S3	DL	0	598649.552	0	-235878.394

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
673	102	S3	SLN	0	82346.233	0	-34674.59
674	102	S3	OL4	8532.544	0	21.965	0
675	102	S4	DL	0	116754.978	0	-364977.994
676	102	S4	SLN	0	12633.722	0	-56385.438
677	102	S4	OL4	0	404.777	55555.24	0
678	102	S5	DL	0	-177198.926	0	75404.381
679	102	S5	SLN	0	-13495.92	0	6316.334
680	102	S5	OL4	8470.457	0	59.05	0
681	102	S6	DL	0	183280.576	0	-604141.295
682	102	S6	SLN	0	16291.507	0	-53695.5
683	102	S6	OL4	112.712	0	103303.832	0
684	102	S7	DL	0	23425.153	0	-36311.354
685	102	S7	SLN	0	2328.098	0	-3754.45
686	102	S7	OL4	3.494	0	557.368	0
687	103	S1	DL	0	117220.446	0	413198.137
688	103	S1	SLN	0	16015.926	0	55155.461
689	103	S1	OL5	123.421	0	11943.251	0
690	103	S1	OL11	0	8083.224	0	33058.154
691	103	S2	DL	0	80520.175	0	355729.824
692	103	S2	SLN	0	13688.861	0	49102.63
693	103	S2	OL5	183.327	0	29238.735	0
694	103	S2	OL11	0	4309.961	0	13718.359
695	103	S3	DL	0	-614869.109	0	235914.476
696	103	S3	SLN	0	-96075.773	0	34692.478
697	103	S3	OL5	177149.8	0	55.74	0
698	103	S3	OL11	0	-39350.27	0	14357.576
699	103	S4	DL	0	116754.978	0	-364977.994
700	103	S4	SLN	0	12633.722	0	-56385.438
701	103	S4	OL5	0	387.439	20131.824	0
702	103	S4	OL11	0	3797.294	0	-17316.352
703	103	S5	DL	0	-177198.926	0	75404.381
704	103	S5	SLN	0	-13495.92	0	6316.334
705	103	S5	OL5	39464.121	0	0	15.689
706	103	S5	OL11	0	-6507.013	0	3117.572
707	103	S6	DL	0	-200923.433	0	-604141.295
708	103	S6	SLN	0	-30161.487	0	-53695.5
709	103	S6	OL5	1700.303	0	15556.287	0
710	103	S6	OL11	0	-11049.334	0	-18373.132
711	103	S7	DL	0	23425.153	0	34085.737
712	103	S7	SLN	0	2328.098	0	3241.484
713	103	S7	OL5	38.852	0	96.78	0
714	103	S7	OL11	0	1377.693	0	1782.53
715	104	S1	DL	0	117220.446	0	413198.137
716	104	S1	SLN	0	16015.926	0	55155.461
717	104	S1	OL6	122.703	0	12641.801	0
718	104	S2	DL	0	80520.175	0	355729.824
719	104	S2	SLN	0	13688.861	0	49102.63
720	104	S2	OL6	190.624	0	27855.335	0
721	104	S3	DL	0	-614869.109	0	235914.476
722	104	S3	SLN	0	-96075.773	0	34692.478
723	104	S3	OL6	177180.626	0	58.241	0
724	104	S4	DL	0	116754.978	0	-364977.994
725	104	S4	SLN	0	12633.722	0	-56385.438
726	104	S4	OL6	0	382.385	19923.114	0
727	104	S5	DL	0	-177198.926	0	75404.381

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
728	104	S5	SLN	0	-13495.92	0	6316.334
729	104	S5	OL6	37688.739	0	0	14.931
730	104	S6	DL	0	-200923.433	0	-604141.295
731	104	S6	SLN	0	-30161.487	0	-53695.5
732	104	S6	OL6	1686.851	0	15114.278	0
733	104	S7	DL	0	23425.153	0	34085.737
734	104	S7	SLN	0	2328.098	0	3241.484
735	104	S7	OL6	36.475	0	96.12	0
736	105	S1	DL	0	117220.446	0	-384056.325
737	105	S1	SLN	0	16015.926	0	-53806.126
738	105	S1	OL7	0	126.001	11303.939	0
739	105	S1	OL11	0	8083.224	0	-21946.898
740	105	S2	DL	0	80520.175	0	-410012.601
741	105	S2	SLN	0	13688.861	0	-81437.605
742	105	S2	OL7	0	157.421	26681.11	0
743	105	S2	OL11	0	4309.961	0	-27455.388
744	105	S3	DL	0	598649.552	0	-235878.394
745	105	S3	SLN	0	82346.233	0	-34674.59
746	105	S3	OL7	174880.117	0	9.688	0
747	105	S3	OL11	0	34480.936	0	-14346.586
748	105	S4	DL	0	-195481.273	0	438807.328
749	105	S4	SLN	0	-27377.247	0	46614.228
750	105	S4	OL7	758.28	0	22401.528	0
751	105	S4	OL11	0	-8634.78	0	14687.358
752	105	S5	DL	0	184553.771	0	-75325.909
753	105	S5	SLN	0	16742.72	0	-6283.099
754	105	S5	OL7	40490.504	0	17.729	0
755	105	S5	OL11	0	8403.025	0	-3094.944
756	105	S6	DL	0	183280.576	0	676538.736
757	105	S6	SLN	0	16291.507	0	101147.814
758	105	S6	OL7	0	486.294	7714.762	0
759	105	S6	OL11	0	6496.319	0	40112.377
760	105	S7	DL	0	23425.153	0	-36311.354
761	105	S7	SLN	0	2328.098	0	-3754.45
762	105	S7	OL7	0	40.587	31.572	0
763	105	S7	OL11	0	1377.693	0	-2357.437
764	106	S1	DL	0	117220.446	0	-384056.325
765	106	S1	SLN	0	16015.926	0	-53806.126
766	106	S1	OL8	0	126.725	10606.826	0
767	106	S2	DL	0	80520.175	0	-410012.601
768	106	S2	SLN	0	13688.861	0	-81437.605
769	106	S2	OL8	0	150.042	28097.87	0
770	106	S3	DL	0	598649.552	0	-235878.394
771	106	S3	SLN	0	82346.233	0	-34674.59
772	106	S3	OL8	175002.098	0	8.81	0
773	106	S4	DL	0	-195481.273	0	438807.328
774	106	S4	SLN	0	-27377.247	0	46614.228
775	106	S4	OL8	769.048	0	22647.931	0
776	106	S5	DL	0	184553.771	0	-75325.909
777	106	S5	SLN	0	16742.72	0	-6283.099
778	106	S5	OL8	42425.373	0	18.406	0
779	106	S6	DL	0	183280.576	0	676538.736
780	106	S6	SLN	0	16291.507	0	101147.814
781	106	S6	OL8	0	497.244	8071.806	0
782	106	S7	DL	0	23425.153	0	-36311.354

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
783	106	S7	SLN	0	2328.098	0	-3754.45
784	106	S7	OL8	0	43.097	24.739	0
785	107	S1	DL	0	-70359.696	0	247918.882
786	107	S1	OL1	0	-10.633	133244.937	0
787	107	S1	OL9	14234.125	0	58127.255	0
788	107	S2	DL	0	-48413.254	0	213437.895
789	107	S2	OL1	56.006	0	57999.608	0
790	107	S2	OL9	7663.162	0	24121.448	0
791	107	S3	DL	0	-368921.465	0	141548.686
792	107	S3	OL1	15000.604	0	218.982	0
793	107	S3	OL9	69190.892	0	25245.405	0
794	107	S4	DL	0	-117288.764	0	263284.397
795	107	S4	OL1	1462.158	0	94788.712	0
796	107	S4	OL9	15182.821	0	25825.272	0
797	107	S5	DL	0	110732.262	0	-45195.546
798	107	S5	OL1	15121.602	0	253.245	0
799	107	S5	OL9	14775.32	0	5441.943	0
800	107	S6	DL	0	-120554.06	0	405923.241
801	107	S6	OL1	0	-94.574	137519.102	0
802	107	S6	OL9	19428.413	0	70530.93	0
803	107	S7	DL	0	14055.092	0	20451.442
804	107	S7	OL1	0	5.925	976.756	0
805	107	S7	OL9	2422.443	0	3134.281	0
806	108	S1	DL	0	-70359.696	0	247918.882
807	108	S1	OL2	1.65	0	131908.052	0
808	108	S1	OL10	10792.976	0	44077.539	0
809	108	S2	DL	0	-48413.254	0	213437.895
810	108	S2	OL2	59.366	0	58534.193	0
811	108	S2	OL10	5810.929	0	18291.146	0
812	108	S3	DL	0	-368921.465	0	141548.686
813	108	S3	OL2	19188.447	0	389.191	0
814	108	S3	OL10	52467.027	0	19143.435	0
815	108	S4	DL	0	-117288.764	0	263284.397
816	108	S4	OL2	1370.451	0	104452.781	0
817	108	S4	OL10	11513.04	0	19583.144	0
818	108	S5	DL	0	110732.262	0	-45195.546
819	108	S5	OL2	19389.709	0	256.028	0
820	108	S5	OL10	11204.034	0	4126.592	0
821	108	S6	DL	0	-120554.06	0	405923.241
822	108	S6	OL2	0	-55.394	129282.864	0
823	108	S6	OL10	14732.446	0	53483.17	0
824	108	S7	DL	0	14055.092	0	20451.442
825	108	S7	OL2	0	7.656	1109.929	0
826	108	S7	OL10	1836.924	0	2376.706	0
827	109	S1	DL	0	-70359.696	0	-230433.795
828	109	S1	OL3	6.934	0	127838.783	0
829	109	S1	OL9	14234.125	0	38589.962	0
830	109	S2	DL	0	-48413.254	0	-246007.561
831	109	S2	OL3	0	-55.363	56226.045	0
832	109	S2	OL9	7663.162	0	48275.724	0
833	109	S3	DL	0	359189.731	0	-141527.036
834	109	S3	OL3	15463.936	0	187.031	0
835	109	S3	OL9	60628.98	0	25226.081	0
836	109	S4	DL	0	-117288.764	0	-218986.796
837	109	S4	OL3	0	-1380.038	83801.9	0

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
838	109	S4	OL9	15182.821	0	30447.919	0
839	109	S5	DL	0	-106319.356	0	45242.629
840	109	S5	OL3	15448.383	0	65.419	0
841	109	S5	OL9	11441.498	0	5481.73	0
842	109	S6	DL	0	-120554.06	0	-362484.777
843	109	S6	OL3	80.467	0	129163.94	0
844	109	S6	OL9	19428.413	0	32306.09	0
845	109	S7	DL	0	14055.092	0	-21786.812
846	109	S7	OL3	6.359	0	878.784	0
847	109	S7	OL9	2422.443	0	4145.16	0
848	110	S1	DL	0	-70359.696	0	-230433.795
849	110	S1	OL4	19.09	0	129426.941	0
850	110	S1	OL10	10792.976	0	29262.53	0
851	110	S2	DL	0	-48413.254	0	-246007.561
852	110	S2	OL4	0	-52.082	55764.899	0
853	110	S2	OL10	5810.929	0	36607.184	0
854	110	S3	DL	0	359189.731	0	-141527.036
855	110	S3	OL4	11376.725	0	29.287	0
856	110	S3	OL10	45974.582	0	19128.782	0
857	110	S4	DL	0	-117288.764	0	-218986.796
858	110	S4	OL4	0	-1473.255	74073.653	0
859	110	S4	OL10	11513.04	0	23088.469	0
860	110	S5	DL	0	-106319.356	0	45242.629
861	110	S5	OL4	11293.942	0	78.733	0
862	110	S5	OL10	8676.017	0	4156.762	0
863	110	S6	DL	0	-120554.06	0	-362484.777
864	110	S6	OL4	119.385	0	137738.443	0
865	110	S6	OL10	14732.446	0	24497.509	0
866	110	S7	DL	0	14055.092	0	-21786.812
867	110	S7	OL4	4.659	0	743.157	0
868	110	S7	OL10	1836.924	0	3143.249	0
869	111	S1	DL	0	70332.268	0	247918.882
870	111	S1	OL5	164.561	0	15924.335	0
871	111	S1	OL9	14212.115	0	58127.255	0
872	111	S2	DL	0	48312.105	0	213437.895
873	111	S2	OL5	244.436	0	38984.979	0
874	111	S2	OL9	7578.348	0	24121.448	0
875	111	S3	DL	0	-368921.465	0	141548.686
876	111	S3	OL5	236199.734	0	74.32	0
877	111	S3	OL9	69190.892	0	25245.405	0
878	111	S4	DL	0	-117288.764	0	-218986.796
879	111	S4	OL5	0	-1039.491	26842.432	0
880	111	S4	OL9	15182.821	0	30447.919	0
881	111	S5	DL	0	-106319.356	0	45242.629
882	111	S5	OL5	52618.828	0	0	20.919
883	111	S5	OL9	11441.498	0	5481.73	0
884	111	S6	DL	0	-120554.06	0	405923.241
885	111	S6	OL5	2267.071	0	0	11005.128
886	111	S6	OL9	19428.413	0	70530.93	0
887	111	S7	DL	0	14055.092	0	-21786.812
888	111	S7	OL5	51.802	0	0	-55.202
889	111	S7	OL9	2422.443	0	4145.16	0
890	112	S1	DL	0	70332.268	0	247918.882
891	112	S1	OL6	163.604	0	16855.735	0
892	112	S1	OL10	10777.633	0	44077.539	0

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
893	112	S2	DL	0	48312.105	0	213437.895
894	112	S2	OL6	254.165	0	37140.446	0
895	112	S2	OL10	5746.614	0	18291.146	0
896	112	S3	DL	0	-368921.465	0	141548.686
897	112	S3	OL6	236240.835	0	77.654	0
898	112	S3	OL10	52467.027	0	19143.435	0
899	112	S4	DL	0	-117288.764	0	-218986.796
900	112	S4	OL6	0	-1024.895	26564.152	0
901	112	S4	OL10	11513.04	0	23088.469	0
902	112	S5	DL	0	-106319.356	0	45242.629
903	112	S5	OL6	50251.653	0	0	19.908
904	112	S5	OL10	8676.017	0	4156.762	0
905	112	S6	DL	0	-120554.06	0	405923.241
906	112	S6	OL6	2249.135	0	0	10523.249
907	112	S6	OL10	14732.446	0	53483.17	0
908	112	S7	DL	0	14055.092	0	-21786.812
909	112	S7	OL6	48.634	0	0	-64.308
910	112	S7	OL10	1836.924	0	3143.249	0
911	113	S1	DL	0	-70359.696	0	-230433.795
912	113	S1	OL7	0	-148.402	15071.919	0
913	113	S1	OL9	14234.125	0	38589.962	0
914	113	S2	DL	0	-48413.254	0	-246007.561
915	113	S2	OL7	0	-35.717	35574.814	0
916	113	S2	OL9	7663.162	0	48275.724	0
917	113	S3	DL	0	359189.731	0	-141527.036
918	113	S3	OL7	233173.489	0	12.917	0
919	113	S3	OL9	60628.98	0	25226.081	0
920	113	S4	DL	0	-117288.764	0	263284.397
921	113	S4	OL7	1011.04	0	29868.704	0
922	113	S4	OL9	15182.821	0	25825.272	0
923	113	S5	DL	0	110732.262	0	45242.629
924	113	S5	OL7	53987.338	0	21.151	0
925	113	S5	OL9	14775.32	0	5481.73	0
926	113	S6	DL	0	-120554.06	0	405923.241
927	113	S6	OL7	0	-2208.355	10286.35	0
928	113	S6	OL9	19428.413	0	70530.93	0
929	113	S7	DL	0	-14056.891	0	-21786.812
930	113	S7	OL7	0	-14.443	42.095	0
931	113	S7	OL9	2422.443	0	4145.16	0
932	114	S1	DL	0	-70359.696	0	-230433.795
933	114	S1	OL8	0	-148.734	14142.435	0
934	114	S1	OL10	10792.976	0	29262.53	0
935	114	S2	DL	0	-48413.254	0	-246007.561
936	114	S2	OL8	0	-32.909	37463.826	0
937	114	S2	OL10	5810.929	0	36607.184	0
938	114	S3	DL	0	359189.731	0	-141527.036
939	114	S3	OL8	233336.131	0	11.747	0
940	114	S3	OL10	45974.582	0	19128.782	0
941	114	S4	DL	0	-117288.764	0	263284.397
942	114	S4	OL8	1025.397	0	30197.241	0
943	114	S4	OL10	11513.04	0	19583.144	0
944	114	S5	DL	0	110732.262	0	45242.629
945	114	S5	OL8	56567.165	0	22.219	0
946	114	S5	OL10	11204.034	0	4156.762	0
947	114	S6	DL	0	-120554.06	0	405923.241

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
948	114	S6	OL8	0	-2226.79	10762.408	0
949	114	S6	OL10	14732.446	0	53483.17	0
950	114	S7	DL	0	-14056.891	0	-21786.812
951	114	S7	OL8	0	-17.961	32.985	0
952	114	S7	OL10	1836.924	0	3143.249	0
953	115	S1	DL	0	117220.446	0	-384056.325
954	115	S1	ELX	0	1.163	6359.504	0
955	115	S2	DL	0	80520.175	0	-410012.601
956	115	S2	ELX	0	2.692	150.077	0
957	115	S3	DL	0	598649.552	0	-235878.394
958	115	S3	ELX	1270.024	0	22.735	0
959	115	S4	DL	0	-195481.273	0	-364977.994
960	115	S4	ELX	15.873	0	2061.448	0
961	115	S5	DL	0	-177198.926	0	75404.381
962	115	S5	ELX	1321.505	0	0	4.467
963	115	S6	DL	0	183280.576	0	-604141.295
964	115	S6	ELX	0	7.467	1916.385	0
965	115	S7	DL	0	-23428.152	0	-36311.354
966	115	S7	ELX	0.747	0	47.87	0
967	116	S1	DL	0	117220.446	0	413198.137
968	116	S1	ELX	1.163	0	6366.668	0
969	116	S2	DL	0	80520.175	0	355729.824
970	116	S2	ELX	2.692	0	168.955	0
971	116	S3	DL	0	-614869.109	0	235914.476
972	116	S3	ELX	1273.567	0	24.112	0
973	116	S4	DL	0	116754.978	0	438807.328
974	116	S4	ELX	0	8.646	1998.329	0
975	116	S5	DL	0	184553.771	0	75404.381
976	116	S5	ELX	1334.192	0	4.467	0
977	116	S6	DL	0	-200923.433	0	676538.736
978	116	S6	ELX	12.54	0	1983.075	0
979	116	S7	DL	0	23425.153	0	34085.737
980	116	S7	ELX	0	0.713	45.676	0
981	117	S1	DL	0	117220.446	0	-384056.325
982	117	S1	ELZ	13.255	0	123.627	0
983	117	S2	DL	0	80520.175	0	355729.824
984	117	S2	ELZ	2.799	0	317.291	0
985	117	S3	DL	0	598649.552	0	235914.476
986	117	S3	ELZ	8803.053	0	0	3.689
987	117	S4	DL	0	116754.978	0	438807.328
988	117	S4	ELZ	8.084	0	388.055	0
989	117	S5	DL	0	184553.771	0	-75325.909
990	117	S5	ELZ	1908.441	0	0.237	0
991	117	S6	DL	0	-200923.433	0	-604141.295
992	117	S6	ELZ	4.74	0	568.946	0
993	117	S7	DL	0	23425.153	0	-36311.354
994	117	S7	ELZ	0	1.126	1.281	0
995	118	S1	DL	0	117220.446	0	413198.137
996	118	S1	ELZ	0	13.255	65.625	0
997	118	S2	DL	0	-80688.756	0	-410012.601
998	118	S2	ELZ	1.492	0	311.085	0
999	118	S3	DL	0	-614869.109	0	235914.476
1000	118	S3	ELZ	8812.598	0	3.689	0
1001	118	S4	DL	0	116754.978	0	-364977.994
1002	118	S4	ELZ	0	8.084	363.147	0

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
1003	118	S5	DL	0	-177198.926	0	75404.381
1004	118	S5	ELZ	1907.515	0	0	0.149
1005	118	S6	DL	0	183280.576	0	676538.736
1006	118	S6	ELZ	60.713	0	755.522	0
1007	118	S7	DL	0	-23428.152	0	34085.737
1008	118	S7	ELZ	1.28	0	4.896	0
1009	119	S1	DL	0	117220.446	0	-384056.325
1010	119	S1	SL	0	16839.817	0	-45750.524
1011	119	S1	ELX	0	0.872	4769.628	0
1012	119	S2	DL	0	80520.175	0	-410012.601
1013	119	S2	SL	0	8978.808	0	-57366.781
1014	119	S2	ELX	0	2.019	112.558	0
1015	119	S3	DL	0	598649.552	0	-235878.394
1016	119	S3	SL	0	72596.308	0	-29888.779
1017	119	S3	ELX	952.518	0	17.051	0
1018	119	S4	DL	0	-195481.273	0	-364977.994
1019	119	S4	SL	0	-17977.63	0	-35901.517
1020	119	S4	ELX	11.905	0	1546.086	0
1021	119	S5	DL	0	-177198.926	0	75404.381
1022	119	S5	SL	0	-13501.23	0	6494.964
1023	119	S5	ELX	991.129	0	0	3.35
1024	119	S6	DL	0	183280.576	0	-604141.295
1025	119	S6	SL	0	13462.515	0	-38179.194
1026	119	S6	ELX	0	5.6	1437.289	0
1027	119	S7	DL	0	-23428.152	0	-36311.354
1028	119	S7	SL	0	-2870.177	0	-4911.47
1029	119	S7	ELX	0.56	0	35.902	0
1030	120	S1	DL	0	117220.446	0	413198.137
1031	120	S1	SL	0	16839.817	0	68841.416
1032	120	S1	ELX	0.872	0	4775.001	0
1033	120	S2	DL	0	80520.175	0	355729.824
1034	120	S2	SL	0	8978.808	0	28409.421
1035	120	S2	ELX	2.019	0	126.716	0
1036	120	S3	DL	0	-614869.109	0	235914.476
1037	120	S3	SL	0	-81218.167	0	29911.35
1038	120	S3	ELX	955.175	0	18.084	0
1039	120	S4	DL	0	116754.978	0	438807.328
1040	120	S4	SL	0	7904.633	0	30726.822
1041	120	S4	ELX	0	6.484	1498.747	0
1042	120	S5	DL	0	184553.771	0	75404.381
1043	120	S5	SL	0	17561.47	0	6494.964
1044	120	S5	ELX	1000.644	0	3.35	0
1045	120	S6	DL	0	-200923.433	0	676538.736
1046	120	S6	SL	0	-23019.179	0	83426.453
1047	120	S6	ELX	9.405	0	1487.306	0
1048	120	S7	DL	0	23425.153	0	34085.737
1049	120	S7	SL	0	2870.177	0	3713.412
1050	120	S7	ELX	0	0.535	34.257	0
1051	121	S1	DL	0	117220.446	0	-384056.325
1052	121	S1	SL	0	16839.817	0	-45750.524
1053	121	S1	ELZ	9.941	0	92.72	0
1054	121	S2	DL	0	80520.175	0	355729.824
1055	121	S2	SL	0	8978.808	0	28409.421
1056	121	S2	ELZ	2.099	0	237.968	0
1057	121	S3	DL	0	598649.552	0	235914.476

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
1058	121	S3	SL	0	72596.308	0	29911.35
1059	121	S3	ELZ	6602.29	0	0	2.767
1060	121	S4	DL	0	116754.978	0	438807.328
1061	121	S4	SL	0	7904.633	0	30726.822
1062	121	S4	ELZ	6.063	0	291.041	0
1063	121	S5	DL	0	184553.771	0	-75325.909
1064	121	S5	SL	0	17561.47	0	-6447.827
1065	121	S5	ELZ	1431.331	0	0.177	0
1066	121	S6	DL	0	-200923.433	0	-604141.295
1067	121	S6	SL	0	-23019.179	0	-38179.194
1068	121	S6	ELZ	3.555	0	426.709	0
1069	121	S7	DL	0	23425.153	0	-36311.354
1070	121	S7	SL	0	2870.177	0	-4911.47
1071	121	S7	ELZ	0	0.844	0.961	0
1072	122	S1	DL	0	117220.446	0	413198.137
1073	122	S1	SL	0	16839.817	0	68841.416
1074	122	S1	ELZ	0	9.941	49.219	0
1075	122	S2	DL	0	-80688.756	0	-410012.601
1076	122	S2	SL	0	-9079.34	0	-57366.781
1077	122	S2	ELZ	1.119	0	233.313	0
1078	122	S3	DL	0	-614869.109	0	235914.476
1079	122	S3	SL	0	-81218.167	0	29911.35
1080	122	S3	ELZ	6609.449	0	2.767	0
1081	122	S4	DL	0	116754.978	0	-364977.994
1082	122	S4	SL	0	7904.633	0	-35901.517
1083	122	S4	ELZ	0	6.063	272.36	0
1084	122	S5	DL	0	-177198.926	0	75404.381
1085	122	S5	SL	0	-13501.23	0	6494.964
1086	122	S5	ELZ	1430.636	0	0	0.112
1087	122	S6	DL	0	183280.576	0	676538.736
1088	122	S6	SL	0	13462.515	0	83426.453
1089	122	S6	ELZ	45.535	0	566.641	0
1090	122	S7	DL	0	-23428.152	0	34085.737
1091	122	S7	SL	0	-2870.177	0	3713.412
1092	122	S7	ELZ	0.96	0	3.672	0
1093	123	S1	DL	0	117220.446	0	-384056.325
1094	123	S1	SLN	0	16015.926	0	-53806.126
1095	123	S1	ELX	0	0.872	4769.628	0
1096	123	S2	DL	0	80520.175	0	-410012.601
1097	123	S2	SLN	0	13688.861	0	-81437.605
1098	123	S2	ELX	0	2.019	112.558	0
1099	123	S3	DL	0	598649.552	0	-235878.394
1100	123	S3	SLN	0	82346.233	0	-34674.59
1101	123	S3	ELX	952.518	0	17.051	0
1102	123	S4	DL	0	-195481.273	0	-364977.994
1103	123	S4	SLN	0	-27377.247	0	-56385.438
1104	123	S4	ELX	11.905	0	1546.086	0
1105	123	S5	DL	0	-177198.926	0	75404.381
1106	123	S5	SLN	0	-13495.92	0	6316.334
1107	123	S5	ELX	991.129	0	0	3.35
1108	123	S6	DL	0	183280.576	0	-604141.295
1109	123	S6	SLN	0	16291.507	0	-53695.5
1110	123	S6	ELX	0	5.6	1437.289	0
1111	123	S7	DL	0	-23428.152	0	-36311.354
1112	123	S7	SLN	0	-2328.098	0	-3754.45

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
1113	123	S7	ELX	0.56	0	35.902	0
1114	124	S1	DL	0	117220.446	0	413198.137
1115	124	S1	SLN	0	16015.926	0	55155.461
1116	124	S1	ELX	0.872	0	4775.001	0
1117	124	S2	DL	0	80520.175	0	355729.824
1118	124	S2	SLN	0	13688.861	0	49102.63
1119	124	S2	ELX	2.019	0	126.716	0
1120	124	S3	DL	0	-614869.109	0	235914.476
1121	124	S3	SLN	0	-96075.773	0	34692.478
1122	124	S3	ELX	955.175	0	18.084	0
1123	124	S4	DL	0	116754.978	0	438807.328
1124	124	S4	SLN	0	12633.722	0	46614.228
1125	124	S4	ELX	0	6.484	1498.747	0
1126	124	S5	DL	0	184553.771	0	75404.381
1127	124	S5	SLN	0	16742.72	0	6316.334
1128	124	S5	ELX	1000.644	0	3.35	0
1129	124	S6	DL	0	-200923.433	0	676538.736
1130	124	S6	SLN	0	-30161.487	0	101147.814
1131	124	S6	ELX	9.405	0	1487.306	0
1132	124	S7	DL	0	23425.153	0	34085.737
1133	124	S7	SLN	0	2328.098	0	3241.484
1134	124	S7	ELX	0	0.535	34.257	0
1135	125	S1	DL	0	117220.446	0	-384056.325
1136	125	S1	SLN	0	16015.926	0	-53806.126
1137	125	S1	ELZ	9.941	0	92.72	0
1138	125	S2	DL	0	80520.175	0	355729.824
1139	125	S2	SLN	0	13688.861	0	49102.63
1140	125	S2	ELZ	2.099	0	237.968	0
1141	125	S3	DL	0	598649.552	0	235914.476
1142	125	S3	SLN	0	82346.233	0	34692.478
1143	125	S3	ELZ	6602.29	0	0	2.767
1144	125	S4	DL	0	116754.978	0	438807.328
1145	125	S4	SLN	0	12633.722	0	46614.228
1146	125	S4	ELZ	6.063	0	291.041	0
1147	125	S5	DL	0	184553.771	0	-75325.909
1148	125	S5	SLN	0	16742.72	0	-6283.099
1149	125	S5	ELZ	1431.331	0	0.177	0
1150	125	S6	DL	0	-200923.433	0	-604141.295
1151	125	S6	SLN	0	-30161.487	0	-53695.5
1152	125	S6	ELZ	3.555	0	426.709	0
1153	125	S7	DL	0	23425.153	0	-36311.354
1154	125	S7	SLN	0	2328.098	0	-3754.45
1155	125	S7	ELZ	0	0.844	0.961	0
1156	126	S1	DL	0	117220.446	0	413198.137
1157	126	S1	SLN	0	16015.926	0	55155.461
1158	126	S1	ELZ	0	9.941	49.219	0
1159	126	S2	DL	0	-80688.756	0	-410012.601
1160	126	S2	SLN	0	-13793.293	0	-81437.605
1161	126	S2	ELZ	1.119	0	233.313	0
1162	126	S3	DL	0	-614869.109	0	235914.476
1163	126	S3	SLN	0	-96075.773	0	34692.478
1164	126	S3	ELZ	6609.449	0	2.767	0
1165	126	S4	DL	0	116754.978	0	-364977.994
1166	126	S4	SLN	0	12633.722	0	-56385.438
1167	126	S4	ELZ	0	6.063	272.36	0

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
1168	126	S5	DL	0	-177198.926	0	75404.381
1169	126	S5	SLN	0	-13495.92	0	6316.334
1170	126	S5	ELZ	1430.636	0	0	0.112
1171	126	S6	DL	0	183280.576	0	676538.736
1172	126	S6	SLN	0	16291.507	0	101147.814
1173	126	S6	ELZ	45.535	0	566.641	0
1174	126	S7	DL	0	-23428.152	0	34085.737
1175	126	S7	SLN	0	-2328.098	0	3241.484
1176	126	S7	ELZ	0.96	0	3.672	0
1177	127	S1	DL	0	70332.268	0	-230433.795
1178	127	S1	ELX	0	1.163	6359.504	0
1179	127	S2	DL	0	48312.105	0	-246007.561
1180	127	S2	ELX	0	2.692	150.077	0
1181	127	S3	DL	0	359189.731	0	-141527.036
1182	127	S3	ELX	1270.024	0	22.735	0
1183	127	S4	DL	0	-117288.764	0	-218986.796
1184	127	S4	ELX	15.873	0	2061.448	0
1185	127	S5	DL	0	-106319.356	0	45242.629
1186	127	S5	ELX	1321.505	0	0	4.467
1187	127	S6	DL	0	109968.346	0	-362484.777
1188	127	S6	ELX	0	7.467	1916.385	0
1189	127	S7	DL	0	-14056.891	0	-21786.812
1190	127	S7	ELX	0.747	0	47.87	0
1191	128	S1	DL	0	70332.268	0	247918.882
1192	128	S1	ELX	1.163	0	6366.668	0
1193	128	S2	DL	0	48312.105	0	213437.895
1194	128	S2	ELX	2.692	0	168.955	0
1195	128	S3	DL	0	-368921.465	0	141548.686
1196	128	S3	ELX	1273.567	0	24.112	0
1197	128	S4	DL	0	70052.987	0	263284.397
1198	128	S4	ELX	0	8.646	1998.329	0
1199	128	S5	DL	0	110732.262	0	45242.629
1200	128	S5	ELX	1334.192	0	4.467	0
1201	128	S6	DL	0	-120554.06	0	405923.241
1202	128	S6	ELX	12.54	0	1983.075	0
1203	128	S7	DL	0	14055.092	0	20451.442
1204	128	S7	ELX	0	0.713	45.676	0
1205	129	S1	DL	0	70332.268	0	-230433.795
1206	129	S1	ELZ	13.255	0	123.627	0
1207	129	S2	DL	0	48312.105	0	213437.895
1208	129	S2	ELZ	2.799	0	317.291	0
1209	129	S3	DL	0	359189.731	0	141548.686
1210	129	S3	ELZ	8803.053	0	0	3.689
1211	129	S4	DL	0	70052.987	0	263284.397
1212	129	S4	ELZ	8.084	0	388.055	0
1213	129	S5	DL	0	110732.262	0	-45195.546
1214	129	S5	ELZ	1908.441	0	0.237	0
1215	129	S6	DL	0	-120554.06	0	-362484.777
1216	129	S6	ELZ	4.74	0	568.946	0
1217	129	S7	DL	0	14055.092	0	-21786.812
1218	129	S7	ELZ	0	1.126	1.281	0
1219	130	S1	DL	0	70332.268	0	247918.882
1220	130	S1	ELZ	0	13.255	65.625	0
1221	130	S2	DL	0	-48413.254	0	-246007.561
1222	130	S2	ELZ	1.492	0	311.085	0

Slab Stability - Overturning by Category (Continued)

	LC	Slab	Category	Mo-xx[lb-ft]	Ms-xx[lb-ft]	Mo-zz[lb-ft]	Ms-zz[lb-ft]
1223	130	S3	DL	0	-368921.465	0	141548.686
1224	130	S3	ELZ	8812.598	0	3.689	0
1225	130	S4	DL	0	70052.987	0	-218986.796
1226	130	S4	ELZ	0	8.084	363.147	0
1227	130	S5	DL	0	-106319.356	0	45242.629
1228	130	S5	ELZ	1907.515	0	0	0.149
1229	130	S6	DL	0	109968.346	0	405923.241
1230	130	S6	ELZ	60.713	0	755.522	0
1231	130	S7	DL	0	-14056.891	0	20451.442
1232	130	S7	ELZ	1.28	0	4.896	0

Slab Stability - Sliding by Category

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
1	1	S1	DL	717.65	14069.196	-17.143	14069.196
2	1	S2	DL	-532.732	12090.67	-63.218	12090.67
3	1	S3	DL	-13.531	20219.694	151.778	20219.694
4	1	S4	DL	-320.02	13381.554	6.239	13381.554
5	1	S5	DL	-29.427	9043.817	-2.537	9043.817
6	1	S6	DL	144.371	19210.2	-60.321	19210.2
7	1	S7	DL	-11.773	3513.998	-1.499	3513.998
8	71	S1	DL	717.65	14069.196	-17.143	14069.196
9	71	S2	DL	-532.732	12090.67	-63.218	12090.67
10	71	S3	DL	-13.531	20219.694	151.778	20219.694
11	71	S4	DL	-320.02	13381.554	6.239	13381.554
12	71	S5	DL	-29.427	9043.817	-2.537	9043.817
13	71	S6	DL	144.371	19210.2	-60.321	19210.2
14	71	S7	DL	-11.773	3513.998	-1.499	3513.998
15	72	S1	DL	717.65	14069.196	-17.143	14069.196
16	72	S1	RLL	538.843	2696.281	-11.939	2696.281
17	72	S2	DL	-532.732	12090.67	-63.218	12090.67
18	72	S2	RLL	-397.994	1805.815	-50.266	1805.815
19	72	S3	DL	-13.531	20219.694	151.778	20219.694
20	72	S3	RLL	-11.285	3417.15	126.019	3417.15
21	72	S4	DL	-320.02	13381.554	6.239	13381.554
22	72	S4	RLL	-191.476	1478.986	5.554	1478.986
23	72	S5	DL	-29.427	9043.817	-2.537	9043.817
24	72	S5	RLL	-23.568	1035.423	-14.159	1035.423
25	72	S6	DL	144.371	19210.2	-60.321	19210.2
26	72	S6	RLL	77.349	2432.113	-17.516	2432.113
27	72	S7	DL	-11.773	3513.998	-1.499	3513.998
28	72	S7	RLL	-8.992	574.035	0	574.035
29	73	S1	DL	717.65	14069.196	-17.143	14069.196
30	73	S1	SL	538.843	2696.281	-11.939	2696.281
31	73	S2	DL	-532.732	12090.67	-63.218	12090.67
32	73	S2	SL	-397.994	1805.815	-50.266	1805.815
33	73	S3	DL	-13.531	20219.694	151.778	20219.694
34	73	S3	SL	-11.285	3417.15	126.019	3417.15
35	73	S4	DL	-320.02	13381.554	6.239	13381.554
36	73	S4	SL	-191.476	1478.986	5.554	1478.986
37	73	S5	DL	-29.427	9043.817	-2.537	9043.817
38	73	S5	SL	-23.568	1035.423	-14.159	1035.423
39	73	S6	DL	144.371	19210.2	-60.321	19210.2
40	73	S6	SL	77.349	2432.113	-17.516	2432.113
41	73	S7	DL	-11.773	3513.998	-1.499	3513.998
42	73	S7	SL	-8.992	574.035	0	574.035

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
43	74	S1	DL	717.65	14069.196	-17.143	14069.196
44	74	S1	SLN	507.308	2563.802	-7.836	2563.802
45	74	S2	DL	-532.732	12090.67	-63.218	12090.67
46	74	S2	SLN	-403.139	2748.215	-52.216	2748.215
47	74	S3	DL	-13.531	20219.694	151.778	20219.694
48	74	S3	SLN	-8.944	3963.832	92.42	3963.832
49	74	S4	DL	-320.02	13381.554	6.239	13381.554
50	74	S4	SLN	-197.788	2286.341	7.025	2286.341
51	74	S5	DL	-29.427	9043.817	-2.537	9043.817
52	74	S5	SLN	-16.618	1007.955	-30.071	1007.955
53	74	S6	DL	144.371	19210.2	-60.321	19210.2
54	74	S6	SLN	117.204	3096.866	6.317	3096.866
55	74	S7	DL	-11.773	3513.998	-1.499	3513.998
56	74	S7	SLN	-6.435	465.62	0	465.62
57	75	S1	DL	717.65	14069.196	-17.143	14069.196
58	75	S1	OL1	6759.171	0.698	-3.614	0.698
59	75	S1	OL11	257.684	1294.237	-5.754	1294.237
60	75	S2	DL	-532.732	12090.67	-63.218	12090.67
61	75	S2	OL1	2931.228	0	-17.5	0
62	75	S2	OL11	-196.598	866.816	-24.118	866.816
63	75	S3	DL	-13.531	20219.694	151.778	20219.694
64	75	S3	OL1	144.884	0	986.62	0
65	75	S3	OL11	-5.495	1640.238	36.901	1640.238
66	75	S4	DL	-320.02	13381.554	6.239	13381.554
67	75	S4	OL1	5808.511	0	-72.924	0
68	75	S4	OL11	-81.794	710.404	3.34	710.404
69	75	S5	DL	-29.427	9043.817	-2.537	9043.817
70	75	S5	OL1	-149.776	0	-947.673	0
71	75	S5	OL11	-11.314	497.001	-9.019	497.001
72	75	S6	DL	144.371	19210.2	-60.321	19210.2
73	75	S6	OL1	6923.025	11.689	-4.346	11.689
74	75	S6	OL11	38.592	1169.71	3.741	1169.71
75	75	S7	DL	-11.773	3513.998	-1.499	3513.998
76	75	S7	OL1	28.804	0.889	0	0.889
77	75	S7	OL11	-4.324	275.539	0	275.539
78	76	S1	DL	717.65	14069.196	-17.143	14069.196
79	76	S1	OL2	6686.979	0	-4.031	0
80	76	S2	DL	-532.732	12090.67	-63.218	12090.67
81	76	S2	OL2	2959.856	0	-18.217	0
82	76	S3	DL	-13.531	20219.694	151.778	20219.694
83	76	S3	OL2	268.207	0	1247.345	0
84	76	S4	DL	-320.02	13381.554	6.239	13381.554
85	76	S4	OL2	6435.088	0	-66.137	0
86	76	S5	DL	-29.427	9043.817	-2.537	9043.817
87	76	S5	OL2	-146.713	0	-1215.704	0
88	76	S6	DL	144.371	19210.2	-60.321	19210.2
89	76	S6	OL2	6492.657	8.624	-2.624	8.624
90	76	S7	DL	-11.773	3513.998	-1.499	3513.998
91	76	S7	OL2	37.132	1.148	0	1.148
92	77	S1	DL	717.65	14069.196	-17.143	14069.196
93	77	S1	OL3	-6450.925	0	2.839	0
94	77	S1	OL11	257.684	1294.237	-5.754	1294.237
95	77	S2	DL	-532.732	12090.67	-63.218	12090.67
96	77	S2	OL3	-2883.812	9.752	7.239	9.752
97	77	S2	OL11	-196.598	866.816	-24.118	866.816

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
98	77	S3	DL	-13.531	20219.694	151.778	20219.694
99	77	S3	OL3	-157.599	1.98	-1023.11	1.98
100	77	S3	OL11	-5.495	1640.238	36.901	1640.238
101	77	S4	DL	-320.02	13381.554	6.239	13381.554
102	77	S4	OL3	-5514.687	80.542	-11.587	80.542
103	77	S4	OL11	-81.794	710.404	3.34	710.404
104	77	S5	DL	-29.427	9043.817	-2.537	9043.817
105	77	S5	OL3	89.218	6.425	978.637	6.425
106	77	S5	OL11	-11.314	497.001	-9.019	497.001
107	77	S6	DL	144.371	19210.2	-60.321	19210.2
108	77	S6	OL3	-6446.632	0	-6.724	0
109	77	S6	OL11	38.592	1169.71	3.741	1169.71
110	77	S7	DL	-11.773	3513.998	-1.499	3513.998
111	77	S7	OL3	-33.354	0	-0.954	0
112	77	S7	OL11	-4.324	275.539	0	275.539
113	78	S1	DL	717.65	14069.196	-17.143	14069.196
114	78	S1	OL4	-6532.536	0	1.743	0
115	78	S2	DL	-532.732	12090.67	-63.218	12090.67
116	78	S2	OL4	-2856.715	9.228	7.078	9.228
117	78	S3	DL	-13.531	20219.694	151.778	20219.694
118	78	S3	OL4	-35.485	1.545	-766.684	1.545
119	78	S4	DL	-320.02	13381.554	6.239	13381.554
120	78	S4	OL4	-4911.436	86.27	-10.475	86.27
121	78	S5	DL	-29.427	9043.817	-2.537	9043.817
122	78	S5	OL4	93.184	5.462	716.288	5.462
123	78	S6	DL	144.371	19210.2	-60.321	19210.2
124	78	S6	OL4	-6886.916	0	-8.059	0
125	78	S7	DL	-11.773	3513.998	-1.499	3513.998
126	78	S7	OL4	-24.938	0	-0.699	0
127	79	S1	DL	717.65	14069.196	-17.143	14069.196
128	79	S1	OL5	796.397	0	-26.539	0
129	79	S1	OL11	257.684	1294.237	-5.754	1294.237
130	79	S2	DL	-532.732	12090.67	-63.218	12090.67
131	79	S2	OL5	1948.157	0	-108.055	0
132	79	S2	OL11	-196.598	866.816	-24.118	866.816
133	79	S3	DL	-13.531	20219.694	151.778	20219.694
134	79	S3	OL5	37.593	0	12325.667	0
135	79	S3	OL11	-5.495	1640.238	36.901	1640.238
136	79	S4	DL	-320.02	13381.554	6.239	13381.554
137	79	S4	OL5	-1874.016	66.689	-16.51	66.689
138	79	S4	OL11	-81.794	710.404	3.34	710.404
139	79	S5	DL	-29.427	9043.817	-2.537	9043.817
140	79	S5	OL5	0.967	2.665	3302.647	2.665
141	79	S5	OL11	-11.314	497.001	-9.019	497.001
142	79	S6	DL	144.371	19210.2	-60.321	19210.2
143	79	S6	OL5	-1151.565	0	-145.264	0
144	79	S6	OL11	38.592	1169.71	3.741	1169.71
145	79	S7	DL	-11.773	3513.998	-1.499	3513.998
146	79	S7	OL5	1.269	0	-30.916	0
147	79	S7	OL11	-4.324	275.539	0	275.539
148	80	S1	DL	717.65	14069.196	-17.143	14069.196
149	80	S1	OL6	844.164	0	-26.219	0
150	80	S2	DL	-532.732	12090.67	-63.218	12090.67
151	80	S2	OL6	1849.708	0	-111.58	0
152	80	S3	DL	-13.531	20219.694	151.778	20219.694

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
153	80	S3	OL6	39.208	0	12263.062	0
154	80	S4	DL	-320.02	13381.554	6.239	13381.554
155	80	S4	OL6	-1854.233	65.775	-15.286	65.775
156	80	S5	DL	-29.427	9043.817	-2.537	9043.817
157	80	S5	OL6	1.03	2.554	3154.092	2.554
158	80	S6	DL	144.371	19210.2	-60.321	19210.2
159	80	S6	OL6	-1119.606	0	-148.761	0
160	80	S7	DL	-11.773	3513.998	-1.499	3513.998
161	80	S7	OL6	2.128	0	-30.573	0
162	81	S1	DL	717.65	14069.196	-17.143	14069.196
163	81	S1	OL7	-823.422	18.984	7.35	18.984
164	81	S1	OL11	257.684	1294.237	-5.754	1294.237
165	81	S2	DL	-532.732	12090.67	-63.218	12090.67
166	81	S2	OL7	-1851.178	18.421	65.317	18.421
167	81	S2	OL11	-196.598	866.816	-24.118	866.816
168	81	S3	DL	-13.531	20219.694	151.778	20219.694
169	81	S3	OL7	-37.505	3.179	-12158.602	3.179
170	81	S3	OL11	-5.495	1640.238	36.901	1640.238
171	81	S4	DL	-320.02	13381.554	6.239	13381.554
172	81	S4	OL7	1745.275	0	-47.93	0
173	81	S4	OL11	-81.794	710.404	3.34	710.404
174	81	S5	DL	-29.427	9043.817	-2.537	9043.817
175	81	S5	OL7	-3.62	0	-3373.986	0
176	81	S5	OL11	-11.314	497.001	-9.019	497.001
177	81	S6	DL	144.371	19210.2	-60.321	19210.2
178	81	S6	OL7	958.481	142.837	10.014	142.837
179	81	S6	OL11	38.592	1169.71	3.741	1169.71
180	81	S7	DL	-11.773	3513.998	-1.499	3513.998
181	81	S7	OL7	-4.753	5.142	19.836	5.142
182	81	S7	OL11	-4.324	275.539	0	275.539
183	82	S1	DL	717.65	14069.196	-17.143	14069.196
184	82	S1	OL8	-776.053	19.062	7.587	19.062
185	82	S2	DL	-532.732	12090.67	-63.218	12090.67
186	82	S2	OL8	-1947.902	17.472	62.68	17.472
187	82	S3	DL	-13.531	20219.694	151.778	20219.694
188	82	S3	OL8	-35.827	3.088	-12233.31	3.088
189	82	S4	DL	-320.02	13381.554	6.239	13381.554
190	82	S4	OL8	1763.828	0	-47.709	0
191	82	S5	DL	-29.427	9043.817	-2.537	9043.817
192	82	S5	OL8	-3.676	0	-3535.763	0
193	82	S6	DL	144.371	19210.2	-60.321	19210.2
194	82	S6	OL8	988.649	144.489	4.832	144.489
195	82	S7	DL	-11.773	3513.998	-1.499	3513.998
196	82	S7	OL8	-4.399	5.657	19.751	5.657
197	83	S1	DL	717.65	14069.196	-17.143	14069.196
198	83	S1	RLL	404.132	2022.211	-8.954	2022.211
199	83	S1	OL1	5069.378	0.523	-2.71	0.523
200	83	S1	OL11	193.263	970.677	-4.315	970.677
201	83	S2	DL	-532.732	12090.67	-63.218	12090.67
202	83	S2	RLL	-298.495	1354.361	-37.699	1354.361
203	83	S2	OL1	2198.421	0	-13.125	0
204	83	S2	OL11	-147.449	650.112	-18.088	650.112
205	83	S3	DL	-13.531	20219.694	151.778	20219.694
206	83	S3	RLL	-8.464	2562.863	94.514	2562.863
207	83	S3	OL1	108.663	0	739.965	0

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
208	83	S3	OL11	-4.121	1230.178	27.676	1230.178
209	83	S4	DL	-320.02	13381.554	6.239	13381.554
210	83	S4	RLL	-143.607	1109.24	4.166	1109.24
211	83	S4	OL1	4356.384	0	-54.693	0
212	83	S4	OL11	-61.346	532.803	2.505	532.803
213	83	S5	DL	-29.427	9043.817	-2.537	9043.817
214	83	S5	RLL	-17.676	776.567	-10.619	776.567
215	83	S5	OL1	-112.332	0	-710.755	0
216	83	S5	OL11	-8.485	372.751	-6.764	372.751
217	83	S6	DL	144.371	19210.2	-60.321	19210.2
218	83	S6	RLL	58.011	1824.085	-13.137	1824.085
219	83	S6	OL1	5192.269	8.767	-3.26	8.767
220	83	S6	OL11	28.944	877.283	2.806	877.283
221	83	S7	DL	-11.773	3513.998	-1.499	3513.998
222	83	S7	RLL	-6.744	430.527	0	430.527
223	83	S7	OL1	21.603	0.667	0	0.667
224	83	S7	OL11	-3.243	206.654	0	206.654
225	84	S1	DL	717.65	14069.196	-17.143	14069.196
226	84	S1	RLL	404.132	2022.211	-8.954	2022.211
227	84	S1	OL2	5015.234	0	-3.024	0
228	84	S2	DL	-532.732	12090.67	-63.218	12090.67
229	84	S2	RLL	-298.495	1354.361	-37.699	1354.361
230	84	S2	OL2	2219.892	0	-13.663	0
231	84	S3	DL	-13.531	20219.694	151.778	20219.694
232	84	S3	RLL	-8.464	2562.863	94.514	2562.863
233	84	S3	OL2	201.155	0	935.509	0
234	84	S4	DL	-320.02	13381.554	6.239	13381.554
235	84	S4	RLL	-143.607	1109.24	4.166	1109.24
236	84	S4	OL2	4826.316	0	-49.603	0
237	84	S5	DL	-29.427	9043.817	-2.537	9043.817
238	84	S5	RLL	-17.676	776.567	-10.619	776.567
239	84	S5	OL2	-110.035	0	-911.778	0
240	84	S6	DL	144.371	19210.2	-60.321	19210.2
241	84	S6	RLL	58.011	1824.085	-13.137	1824.085
242	84	S6	OL2	4869.493	6.468	-1.968	6.468
243	84	S7	DL	-11.773	3513.998	-1.499	3513.998
244	84	S7	RLL	-6.744	430.527	0	430.527
245	84	S7	OL2	27.849	0.861	0	0.861
246	85	S1	DL	717.65	14069.196	-17.143	14069.196
247	85	S1	RLL	404.132	2022.211	-8.954	2022.211
248	85	S1	OL3	-4838.194	0	2.129	0
249	85	S1	OL11	193.263	970.677	-4.315	970.677
250	85	S2	DL	-532.732	12090.67	-63.218	12090.67
251	85	S2	RLL	-298.495	1354.361	-37.699	1354.361
252	85	S2	OL3	-2162.859	7.314	5.429	7.314
253	85	S2	OL11	-147.449	650.112	-18.088	650.112
254	85	S3	DL	-13.531	20219.694	151.778	20219.694
255	85	S3	RLL	-8.464	2562.863	94.514	2562.863
256	85	S3	OL3	-118.199	1.485	-767.332	1.485
257	85	S3	OL11	-4.121	1230.178	27.676	1230.178
258	85	S4	DL	-320.02	13381.554	6.239	13381.554
259	85	S4	RLL	-143.607	1109.24	4.166	1109.24
260	85	S4	OL3	-4136.015	60.406	-8.69	60.406
261	85	S4	OL11	-61.346	532.803	2.505	532.803
262	85	S5	DL	-29.427	9043.817	-2.537	9043.817

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
263	85	S5	RLL	-17.676	776.567	-10.619	776.567
264	85	S5	OL3	66.914	4.818	733.978	4.818
265	85	S5	OL11	-8.485	372.751	-6.764	372.751
266	85	S6	DL	144.371	19210.2	-60.321	19210.2
267	85	S6	RLL	58.011	1824.085	-13.137	1824.085
268	85	S6	OL3	-4834.974	0	-5.043	0
269	85	S6	OL11	28.944	877.283	2.806	877.283
270	85	S7	DL	-11.773	3513.998	-1.499	3513.998
271	85	S7	RLL	-6.744	430.527	0	430.527
272	85	S7	OL3	-25.015	0	-0.715	0
273	85	S7	OL11	-3.243	206.654	0	206.654
274	86	S1	DL	717.65	14069.196	-17.143	14069.196
275	86	S1	RLL	404.132	2022.211	-8.954	2022.211
276	86	S1	OL4	-4899.402	0	1.308	0
277	86	S2	DL	-532.732	12090.67	-63.218	12090.67
278	86	S2	RLL	-298.495	1354.361	-37.699	1354.361
279	86	S2	OL4	-2142.536	6.921	5.308	6.921
280	86	S3	DL	-13.531	20219.694	151.778	20219.694
281	86	S3	RLL	-8.464	2562.863	94.514	2562.863
282	86	S3	OL4	-26.614	1.159	-575.013	1.159
283	86	S4	DL	-320.02	13381.554	6.239	13381.554
284	86	S4	RLL	-143.607	1109.24	4.166	1109.24
285	86	S4	OL4	-3683.577	64.702	-7.856	64.702
286	86	S5	DL	-29.427	9043.817	-2.537	9043.817
287	86	S5	RLL	-17.676	776.567	-10.619	776.567
288	86	S5	OL4	69.888	4.096	537.216	4.096
289	86	S6	DL	144.371	19210.2	-60.321	19210.2
290	86	S6	RLL	58.011	1824.085	-13.137	1824.085
291	86	S6	OL4	-5165.187	0	-6.044	0
292	86	S7	DL	-11.773	3513.998	-1.499	3513.998
293	86	S7	RLL	-6.744	430.527	0	430.527
294	86	S7	OL4	-18.704	0	-0.524	0
295	87	S1	DL	717.65	14069.196	-17.143	14069.196
296	87	S1	RLL	404.132	2022.211	-8.954	2022.211
297	87	S1	OL5	597.298	0	-19.904	0
298	87	S1	OL11	193.263	970.677	-4.315	970.677
299	87	S2	DL	-532.732	12090.67	-63.218	12090.67
300	87	S2	RLL	-298.495	1354.361	-37.699	1354.361
301	87	S2	OL5	1461.118	0	-81.041	0
302	87	S2	OL11	-147.449	650.112	-18.088	650.112
303	87	S3	DL	-13.531	20219.694	151.778	20219.694
304	87	S3	RLL	-8.464	2562.863	94.514	2562.863
305	87	S3	OL5	28.195	0	9244.25	0
306	87	S3	OL11	-4.121	1230.178	27.676	1230.178
307	87	S4	DL	-320.02	13381.554	6.239	13381.554
308	87	S4	RLL	-143.607	1109.24	4.166	1109.24
309	87	S4	OL5	-1405.512	50.017	-12.382	50.017
310	87	S4	OL11	-61.346	532.803	2.505	532.803
311	87	S5	DL	-29.427	9043.817	-2.537	9043.817
312	87	S5	RLL	-17.676	776.567	-10.619	776.567
313	87	S5	OL5	0.725	1.999	2476.985	1.999
314	87	S5	OL11	-8.485	372.751	-6.764	372.751
315	87	S6	DL	144.371	19210.2	-60.321	19210.2
316	87	S6	RLL	58.011	1824.085	-13.137	1824.085
317	87	S6	OL5	-863.674	0	-108.948	0

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
318	87	S6	OL11	28.944	877.283	2.806	877.283
319	87	S7	DL	-11.773	3513.998	-1.499	3513.998
320	87	S7	RLL	-6.744	430.527	0	430.527
321	87	S7	OL5	0.952	0	-23.187	0
322	87	S7	OL11	-3.243	206.654	0	206.654
323	88	S1	DL	717.65	14069.196	-17.143	14069.196
324	88	S1	RLL	404.132	2022.211	-8.954	2022.211
325	88	S1	OL6	633.123	0	-19.664	0
326	88	S2	DL	-532.732	12090.67	-63.218	12090.67
327	88	S2	RLL	-298.495	1354.361	-37.699	1354.361
328	88	S2	OL6	1387.281	0	-83.685	0
329	88	S3	DL	-13.531	20219.694	151.778	20219.694
330	88	S3	RLL	-8.464	2562.863	94.514	2562.863
331	88	S3	OL6	29.406	0	9197.297	0
332	88	S4	DL	-320.02	13381.554	6.239	13381.554
333	88	S4	RLL	-143.607	1109.24	4.166	1109.24
334	88	S4	OL6	-1390.675	49.331	-11.464	49.331
335	88	S5	DL	-29.427	9043.817	-2.537	9043.817
336	88	S5	RLL	-17.676	776.567	-10.619	776.567
337	88	S5	OL6	0.772	1.915	2365.569	1.915
338	88	S6	DL	144.371	19210.2	-60.321	19210.2
339	88	S6	RLL	58.011	1824.085	-13.137	1824.085
340	88	S6	OL6	-839.704	0	-111.571	0
341	88	S7	DL	-11.773	3513.998	-1.499	3513.998
342	88	S7	RLL	-6.744	430.527	0	430.527
343	88	S7	OL6	1.596	0	-22.929	0
344	89	S1	DL	717.65	14069.196	-17.143	14069.196
345	89	S1	RLL	404.132	2022.211	-8.954	2022.211
346	89	S1	OL7	-617.566	14.238	5.512	14.238
347	89	S1	OL11	193.263	970.677	-4.315	970.677
348	89	S2	DL	-532.732	12090.67	-63.218	12090.67
349	89	S2	RLL	-298.495	1354.361	-37.699	1354.361
350	89	S2	OL7	-1388.383	13.816	48.988	13.816
351	89	S2	OL11	-147.449	650.112	-18.088	650.112
352	89	S3	DL	-13.531	20219.694	151.778	20219.694
353	89	S3	RLL	-8.464	2562.863	94.514	2562.863
354	89	S3	OL7	-28.129	2.384	-9118.951	2.384
355	89	S3	OL11	-4.121	1230.178	27.676	1230.178
356	89	S4	DL	-320.02	13381.554	6.239	13381.554
357	89	S4	RLL	-143.607	1109.24	4.166	1109.24
358	89	S4	OL7	1308.956	0	-35.948	0
359	89	S4	OL11	-61.346	532.803	2.505	532.803
360	89	S5	DL	-29.427	9043.817	-2.537	9043.817
361	89	S5	RLL	-17.676	776.567	-10.619	776.567
362	89	S5	OL7	-2.715	0	-2530.49	0
363	89	S5	OL11	-8.485	372.751	-6.764	372.751
364	89	S6	DL	144.371	19210.2	-60.321	19210.2
365	89	S6	RLL	58.011	1824.085	-13.137	1824.085
366	89	S6	OL7	718.861	107.128	7.51	107.128
367	89	S6	OL11	28.944	877.283	2.806	877.283
368	89	S7	DL	-11.773	3513.998	-1.499	3513.998
369	89	S7	RLL	-6.744	430.527	0	430.527
370	89	S7	OL7	-3.565	3.856	14.877	3.856
371	89	S7	OL11	-3.243	206.654	0	206.654
372	90	S1	DL	717.65	14069.196	-17.143	14069.196

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
373	90	S1	RLL	404.132	2022.211	-8.954	2022.211
374	90	S1	OL8	-582.04	14.297	5.69	14.297
375	90	S2	DL	-532.732	12090.67	-63.218	12090.67
376	90	S2	RLL	-298.495	1354.361	-37.699	1354.361
377	90	S2	OL8	-1460.926	13.104	47.01	13.104
378	90	S3	DL	-13.531	20219.694	151.778	20219.694
379	90	S3	RLL	-8.464	2562.863	94.514	2562.863
380	90	S3	OL8	-26.87	2.316	-9174.983	2.316
381	90	S4	DL	-320.02	13381.554	6.239	13381.554
382	90	S4	RLL	-143.607	1109.24	4.166	1109.24
383	90	S4	OL8	1322.871	0	-35.782	0
384	90	S5	DL	-29.427	9043.817	-2.537	9043.817
385	90	S5	RLL	-17.676	776.567	-10.619	776.567
386	90	S5	OL8	-2.757	0	-2651.822	0
387	90	S6	DL	144.371	19210.2	-60.321	19210.2
388	90	S6	RLL	58.011	1824.085	-13.137	1824.085
389	90	S6	OL8	741.486	108.367	3.624	108.367
390	90	S7	DL	-11.773	3513.998	-1.499	3513.998
391	90	S7	RLL	-6.744	430.527	0	430.527
392	90	S7	OL8	-3.299	4.243	14.813	4.243
393	91	S1	DL	717.65	14069.196	-17.143	14069.196
394	91	S1	SL	404.132	2022.211	-8.954	2022.211
395	91	S1	OL1	5069.378	0.523	-2.71	0.523
396	91	S1	OL11	193.263	970.677	-4.315	970.677
397	91	S2	DL	-532.732	12090.67	-63.218	12090.67
398	91	S2	SL	-298.495	1354.361	-37.699	1354.361
399	91	S2	OL1	2198.421	0	-13.125	0
400	91	S2	OL11	-147.449	650.112	-18.088	650.112
401	91	S3	DL	-13.531	20219.694	151.778	20219.694
402	91	S3	SL	-8.464	2562.863	94.514	2562.863
403	91	S3	OL1	108.663	0	739.965	0
404	91	S3	OL11	-4.121	1230.178	27.676	1230.178
405	91	S4	DL	-320.02	13381.554	6.239	13381.554
406	91	S4	SL	-143.607	1109.24	4.166	1109.24
407	91	S4	OL1	4356.384	0	-54.693	0
408	91	S4	OL11	-61.346	532.803	2.505	532.803
409	91	S5	DL	-29.427	9043.817	-2.537	9043.817
410	91	S5	SL	-17.676	776.567	-10.619	776.567
411	91	S5	OL1	-112.332	0	-710.755	0
412	91	S5	OL11	-8.485	372.751	-6.764	372.751
413	91	S6	DL	144.371	19210.2	-60.321	19210.2
414	91	S6	SL	58.011	1824.085	-13.137	1824.085
415	91	S6	OL1	5192.269	8.767	-3.26	8.767
416	91	S6	OL11	28.944	877.283	2.806	877.283
417	91	S7	DL	-11.773	3513.998	-1.499	3513.998
418	91	S7	SL	-6.744	430.527	0	430.527
419	91	S7	OL1	21.603	0.667	0	0.667
420	91	S7	OL11	-3.243	206.654	0	206.654
421	92	S1	DL	717.65	14069.196	-17.143	14069.196
422	92	S1	SL	404.132	2022.211	-8.954	2022.211
423	92	S1	OL2	5015.234	0	-3.024	0
424	92	S2	DL	-532.732	12090.67	-63.218	12090.67
425	92	S2	SL	-298.495	1354.361	-37.699	1354.361
426	92	S2	OL2	2219.892	0	-13.663	0
427	92	S3	DL	-13.531	20219.694	151.778	20219.694

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
428	92	S3	SL	-8.464	2562.863	94.514	2562.863
429	92	S3	OL2	201.155	0	935.509	0
430	92	S4	DL	-320.02	13381.554	6.239	13381.554
431	92	S4	SL	-143.607	1109.24	4.166	1109.24
432	92	S4	OL2	4826.316	0	-49.603	0
433	92	S5	DL	-29.427	9043.817	-2.537	9043.817
434	92	S5	SL	-17.676	776.567	-10.619	776.567
435	92	S5	OL2	-110.035	0	-911.778	0
436	92	S6	DL	144.371	19210.2	-60.321	19210.2
437	92	S6	SL	58.011	1824.085	-13.137	1824.085
438	92	S6	OL2	4869.493	6.468	-1.968	6.468
439	92	S7	DL	-11.773	3513.998	-1.499	3513.998
440	92	S7	SL	-6.744	430.527	0	430.527
441	92	S7	OL2	27.849	0.861	0	0.861
442	93	S1	DL	717.65	14069.196	-17.143	14069.196
443	93	S1	SL	404.132	2022.211	-8.954	2022.211
444	93	S1	OL3	-4838.194	0	2.129	0
445	93	S1	OL11	193.263	970.677	-4.315	970.677
446	93	S2	DL	-532.732	12090.67	-63.218	12090.67
447	93	S2	SL	-298.495	1354.361	-37.699	1354.361
448	93	S2	OL3	-2162.859	7.314	5.429	7.314
449	93	S2	OL11	-147.449	650.112	-18.088	650.112
450	93	S3	DL	-13.531	20219.694	151.778	20219.694
451	93	S3	SL	-8.464	2562.863	94.514	2562.863
452	93	S3	OL3	-118.199	1.485	-767.332	1.485
453	93	S3	OL11	-4.121	1230.178	27.676	1230.178
454	93	S4	DL	-320.02	13381.554	6.239	13381.554
455	93	S4	SL	-143.607	1109.24	4.166	1109.24
456	93	S4	OL3	-4136.015	60.406	-8.69	60.406
457	93	S4	OL11	-61.346	532.803	2.505	532.803
458	93	S5	DL	-29.427	9043.817	-2.537	9043.817
459	93	S5	SL	-17.676	776.567	-10.619	776.567
460	93	S5	OL3	66.914	4.818	733.978	4.818
461	93	S5	OL11	-8.485	372.751	-6.764	372.751
462	93	S6	DL	144.371	19210.2	-60.321	19210.2
463	93	S6	SL	58.011	1824.085	-13.137	1824.085
464	93	S6	OL3	-4834.974	0	-5.043	0
465	93	S6	OL11	28.944	877.283	2.806	877.283
466	93	S7	DL	-11.773	3513.998	-1.499	3513.998
467	93	S7	SL	-6.744	430.527	0	430.527
468	93	S7	OL3	-25.015	0	-0.715	0
469	93	S7	OL11	-3.243	206.654	0	206.654
470	94	S1	DL	717.65	14069.196	-17.143	14069.196
471	94	S1	SL	404.132	2022.211	-8.954	2022.211
472	94	S1	OL4	-4899.402	0	1.308	0
473	94	S2	DL	-532.732	12090.67	-63.218	12090.67
474	94	S2	SL	-298.495	1354.361	-37.699	1354.361
475	94	S2	OL4	-2142.536	6.921	5.308	6.921
476	94	S3	DL	-13.531	20219.694	151.778	20219.694
477	94	S3	SL	-8.464	2562.863	94.514	2562.863
478	94	S3	OL4	-26.614	1.159	-575.013	1.159
479	94	S4	DL	-320.02	13381.554	6.239	13381.554
480	94	S4	SL	-143.607	1109.24	4.166	1109.24
481	94	S4	OL4	-3683.577	64.702	-7.856	64.702
482	94	S5	DL	-29.427	9043.817	-2.537	9043.817

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
483	94	S5	SL	-17.676	776.567	-10.619	776.567
484	94	S5	OL4	69.888	4.096	537.216	4.096
485	94	S6	DL	144.371	19210.2	-60.321	19210.2
486	94	S6	SL	58.011	1824.085	-13.137	1824.085
487	94	S6	OL4	-5165.187	0	-6.044	0
488	94	S7	DL	-11.773	3513.998	-1.499	3513.998
489	94	S7	SL	-6.744	430.527	0	430.527
490	94	S7	OL4	-18.704	0	-0.524	0
491	95	S1	DL	717.65	14069.196	-17.143	14069.196
492	95	S1	SL	404.132	2022.211	-8.954	2022.211
493	95	S1	OL5	597.298	0	-19.904	0
494	95	S1	OL11	193.263	970.677	-4.315	970.677
495	95	S2	DL	-532.732	12090.67	-63.218	12090.67
496	95	S2	SL	-298.495	1354.361	-37.699	1354.361
497	95	S2	OL5	1461.118	0	-81.041	0
498	95	S2	OL11	-147.449	650.112	-18.088	650.112
499	95	S3	DL	-13.531	20219.694	151.778	20219.694
500	95	S3	SL	-8.464	2562.863	94.514	2562.863
501	95	S3	OL5	28.195	0	9244.25	0
502	95	S3	OL11	-4.121	1230.178	27.676	1230.178
503	95	S4	DL	-320.02	13381.554	6.239	13381.554
504	95	S4	SL	-143.607	1109.24	4.166	1109.24
505	95	S4	OL5	-1405.512	50.017	-12.382	50.017
506	95	S4	OL11	-61.346	532.803	2.505	532.803
507	95	S5	DL	-29.427	9043.817	-2.537	9043.817
508	95	S5	SL	-17.676	776.567	-10.619	776.567
509	95	S5	OL5	0.725	1.999	2476.985	1.999
510	95	S5	OL11	-8.485	372.751	-6.764	372.751
511	95	S6	DL	144.371	19210.2	-60.321	19210.2
512	95	S6	SL	58.011	1824.085	-13.137	1824.085
513	95	S6	OL5	-863.674	0	-108.948	0
514	95	S6	OL11	28.944	877.283	2.806	877.283
515	95	S7	DL	-11.773	3513.998	-1.499	3513.998
516	95	S7	SL	-6.744	430.527	0	430.527
517	95	S7	OL5	0.952	0	-23.187	0
518	95	S7	OL11	-3.243	206.654	0	206.654
519	96	S1	DL	717.65	14069.196	-17.143	14069.196
520	96	S1	SL	404.132	2022.211	-8.954	2022.211
521	96	S1	OL6	633.123	0	-19.664	0
522	96	S2	DL	-532.732	12090.67	-63.218	12090.67
523	96	S2	SL	-298.495	1354.361	-37.699	1354.361
524	96	S2	OL6	1387.281	0	-83.685	0
525	96	S3	DL	-13.531	20219.694	151.778	20219.694
526	96	S3	SL	-8.464	2562.863	94.514	2562.863
527	96	S3	OL6	29.406	0	9197.297	0
528	96	S4	DL	-320.02	13381.554	6.239	13381.554
529	96	S4	SL	-143.607	1109.24	4.166	1109.24
530	96	S4	OL6	-1390.675	49.331	-11.464	49.331
531	96	S5	DL	-29.427	9043.817	-2.537	9043.817
532	96	S5	SL	-17.676	776.567	-10.619	776.567
533	96	S5	OL6	0.772	1.915	2365.569	1.915
534	96	S6	DL	144.371	19210.2	-60.321	19210.2
535	96	S6	SL	58.011	1824.085	-13.137	1824.085
536	96	S6	OL6	-839.704	0	-111.571	0
537	96	S7	DL	-11.773	3513.998	-1.499	3513.998

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
538	96	S7	SL	-6.744	430.527	0	430.527
539	96	S7	OL6	1.596	0	-22.929	0
540	97	S1	DL	717.65	14069.196	-17.143	14069.196
541	97	S1	SL	404.132	2022.211	-8.954	2022.211
542	97	S1	OL7	-617.566	14.238	5.512	14.238
543	97	S1	OL11	193.263	970.677	-4.315	970.677
544	97	S2	DL	-532.732	12090.67	-63.218	12090.67
545	97	S2	SL	-298.495	1354.361	-37.699	1354.361
546	97	S2	OL7	-1388.383	13.816	48.988	13.816
547	97	S2	OL11	-147.449	650.112	-18.088	650.112
548	97	S3	DL	-13.531	20219.694	151.778	20219.694
549	97	S3	SL	-8.464	2562.863	94.514	2562.863
550	97	S3	OL7	-28.129	2.384	-9118.951	2.384
551	97	S3	OL11	-4.121	1230.178	27.676	1230.178
552	97	S4	DL	-320.02	13381.554	6.239	13381.554
553	97	S4	SL	-143.607	1109.24	4.166	1109.24
554	97	S4	OL7	1308.956	0	-35.948	0
555	97	S4	OL11	-61.346	532.803	2.505	532.803
556	97	S5	DL	-29.427	9043.817	-2.537	9043.817
557	97	S5	SL	-17.676	776.567	-10.619	776.567
558	97	S5	OL7	-2.715	0	-2530.49	0
559	97	S5	OL11	-8.485	372.751	-6.764	372.751
560	97	S6	DL	144.371	19210.2	-60.321	19210.2
561	97	S6	SL	58.011	1824.085	-13.137	1824.085
562	97	S6	OL7	718.861	107.128	7.51	107.128
563	97	S6	OL11	28.944	877.283	2.806	877.283
564	97	S7	DL	-11.773	3513.998	-1.499	3513.998
565	97	S7	SL	-6.744	430.527	0	430.527
566	97	S7	OL7	-3.565	3.856	14.877	3.856
567	97	S7	OL11	-3.243	206.654	0	206.654
568	98	S1	DL	717.65	14069.196	-17.143	14069.196
569	98	S1	SL	404.132	2022.211	-8.954	2022.211
570	98	S1	OL8	-582.04	14.297	5.69	14.297
571	98	S2	DL	-532.732	12090.67	-63.218	12090.67
572	98	S2	SL	-298.495	1354.361	-37.699	1354.361
573	98	S2	OL8	-1460.926	13.104	47.01	13.104
574	98	S3	DL	-13.531	20219.694	151.778	20219.694
575	98	S3	SL	-8.464	2562.863	94.514	2562.863
576	98	S3	OL8	-26.87	2.316	-9174.983	2.316
577	98	S4	DL	-320.02	13381.554	6.239	13381.554
578	98	S4	SL	-143.607	1109.24	4.166	1109.24
579	98	S4	OL8	1322.871	0	-35.782	0
580	98	S5	DL	-29.427	9043.817	-2.537	9043.817
581	98	S5	SL	-17.676	776.567	-10.619	776.567
582	98	S5	OL8	-2.757	0	-2651.822	0
583	98	S6	DL	144.371	19210.2	-60.321	19210.2
584	98	S6	SL	58.011	1824.085	-13.137	1824.085
585	98	S6	OL8	741.486	108.367	3.624	108.367
586	98	S7	DL	-11.773	3513.998	-1.499	3513.998
587	98	S7	SL	-6.744	430.527	0	430.527
588	98	S7	OL8	-3.299	4.243	14.813	4.243
589	99	S1	DL	717.65	14069.196	-17.143	14069.196
590	99	S1	SLN	380.481	1922.852	-5.877	1922.852
591	99	S1	OL1	5069.378	0.523	-2.71	0.523
592	99	S1	OL11	193.263	970.677	-4.315	970.677

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
593	99	S2	DL	-532.732	12090.67	-63.218	12090.67
594	99	S2	SLN	-302.354	2061.162	-39.162	2061.162
595	99	S2	OL1	2198.421	0	-13.125	0
596	99	S2	OL11	-147.449	650.112	-18.088	650.112
597	99	S3	DL	-13.531	20219.694	151.778	20219.694
598	99	S3	SLN	-6.708	2972.874	69.315	2972.874
599	99	S3	OL1	108.663	0	739.965	0
600	99	S3	OL11	-4.121	1230.178	27.676	1230.178
601	99	S4	DL	-320.02	13381.554	6.239	13381.554
602	99	S4	SLN	-148.341	1714.756	5.269	1714.756
603	99	S4	OL1	4356.384	0	-54.693	0
604	99	S4	OL11	-61.346	532.803	2.505	532.803
605	99	S5	DL	-29.427	9043.817	-2.537	9043.817
606	99	S5	SLN	-12.463	755.966	-22.553	755.966
607	99	S5	OL1	-112.332	0	-710.755	0
608	99	S5	OL11	-8.485	372.751	-6.764	372.751
609	99	S6	DL	144.371	19210.2	-60.321	19210.2
610	99	S6	SLN	87.903	2322.65	4.738	2322.65
611	99	S6	OL1	5192.269	8.767	-3.26	8.767
612	99	S6	OL11	28.944	877.283	2.806	877.283
613	99	S7	DL	-11.773	3513.998	-1.499	3513.998
614	99	S7	SLN	-4.826	349.215	0	349.215
615	99	S7	OL1	21.603	0.667	0	0.667
616	99	S7	OL11	-3.243	206.654	0	206.654
617	100	S1	DL	717.65	14069.196	-17.143	14069.196
618	100	S1	SLN	380.481	1922.852	-5.877	1922.852
619	100	S1	OL2	5015.234	0	-3.024	0
620	100	S2	DL	-532.732	12090.67	-63.218	12090.67
621	100	S2	SLN	-302.354	2061.162	-39.162	2061.162
622	100	S2	OL2	2219.892	0	-13.663	0
623	100	S3	DL	-13.531	20219.694	151.778	20219.694
624	100	S3	SLN	-6.708	2972.874	69.315	2972.874
625	100	S3	OL2	201.155	0	935.509	0
626	100	S4	DL	-320.02	13381.554	6.239	13381.554
627	100	S4	SLN	-148.341	1714.756	5.269	1714.756
628	100	S4	OL2	4826.316	0	-49.603	0
629	100	S5	DL	-29.427	9043.817	-2.537	9043.817
630	100	S5	SLN	-12.463	755.966	-22.553	755.966
631	100	S5	OL2	-110.035	0	-911.778	0
632	100	S6	DL	144.371	19210.2	-60.321	19210.2
633	100	S6	SLN	87.903	2322.65	4.738	2322.65
634	100	S6	OL2	4869.493	6.468	-1.968	6.468
635	100	S7	DL	-11.773	3513.998	-1.499	3513.998
636	100	S7	SLN	-4.826	349.215	0	349.215
637	100	S7	OL2	27.849	0.861	0	0.861
638	101	S1	DL	717.65	14069.196	-17.143	14069.196
639	101	S1	SLN	380.481	1922.852	-5.877	1922.852
640	101	S1	OL3	-4838.194	0	2.129	0
641	101	S1	OL11	193.263	970.677	-4.315	970.677
642	101	S2	DL	-532.732	12090.67	-63.218	12090.67
643	101	S2	SLN	-302.354	2061.162	-39.162	2061.162
644	101	S2	OL3	-2162.859	7.314	5.429	7.314
645	101	S2	OL11	-147.449	650.112	-18.088	650.112
646	101	S3	DL	-13.531	20219.694	151.778	20219.694
647	101	S3	SLN	-6.708	2972.874	69.315	2972.874

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
648	101	S3	OL3	-118.199	1.485	-767.332	1.485
649	101	S3	OL11	-4.121	1230.178	27.676	1230.178
650	101	S4	DL	-320.02	13381.554	6.239	13381.554
651	101	S4	SLN	-148.341	1714.756	5.269	1714.756
652	101	S4	OL3	-4136.015	60.406	-8.69	60.406
653	101	S4	OL11	-61.346	532.803	2.505	532.803
654	101	S5	DL	-29.427	9043.817	-2.537	9043.817
655	101	S5	SLN	-12.463	755.966	-22.553	755.966
656	101	S5	OL3	66.914	4.818	733.978	4.818
657	101	S5	OL11	-8.485	372.751	-6.764	372.751
658	101	S6	DL	144.371	19210.2	-60.321	19210.2
659	101	S6	SLN	87.903	2322.65	4.738	2322.65
660	101	S6	OL3	-4834.974	0	-5.043	0
661	101	S6	OL11	28.944	877.283	2.806	877.283
662	101	S7	DL	-11.773	3513.998	-1.499	3513.998
663	101	S7	SLN	-4.826	349.215	0	349.215
664	101	S7	OL3	-25.015	0	-0.715	0
665	101	S7	OL11	-3.243	206.654	0	206.654
666	102	S1	DL	717.65	14069.196	-17.143	14069.196
667	102	S1	SLN	380.481	1922.852	-5.877	1922.852
668	102	S1	OL4	-4899.402	0	1.308	0
669	102	S2	DL	-532.732	12090.67	-63.218	12090.67
670	102	S2	SLN	-302.354	2061.162	-39.162	2061.162
671	102	S2	OL4	-2142.536	6.921	5.308	6.921
672	102	S3	DL	-13.531	20219.694	151.778	20219.694
673	102	S3	SLN	-6.708	2972.874	69.315	2972.874
674	102	S3	OL4	-26.614	1.159	-575.013	1.159
675	102	S4	DL	-320.02	13381.554	6.239	13381.554
676	102	S4	SLN	-148.341	1714.756	5.269	1714.756
677	102	S4	OL4	-3683.577	64.702	-7.856	64.702
678	102	S5	DL	-29.427	9043.817	-2.537	9043.817
679	102	S5	SLN	-12.463	755.966	-22.553	755.966
680	102	S5	OL4	69.888	4.096	537.216	4.096
681	102	S6	DL	144.371	19210.2	-60.321	19210.2
682	102	S6	SLN	87.903	2322.65	4.738	2322.65
683	102	S6	OL4	-5165.187	0	-6.044	0
684	102	S7	DL	-11.773	3513.998	-1.499	3513.998
685	102	S7	SLN	-4.826	349.215	0	349.215
686	102	S7	OL4	-18.704	0	-0.524	0
687	103	S1	DL	717.65	14069.196	-17.143	14069.196
688	103	S1	SLN	380.481	1922.852	-5.877	1922.852
689	103	S1	OL5	597.298	0	-19.904	0
690	103	S1	OL11	193.263	970.677	-4.315	970.677
691	103	S2	DL	-532.732	12090.67	-63.218	12090.67
692	103	S2	SLN	-302.354	2061.162	-39.162	2061.162
693	103	S2	OL5	1461.118	0	-81.041	0
694	103	S2	OL11	-147.449	650.112	-18.088	650.112
695	103	S3	DL	-13.531	20219.694	151.778	20219.694
696	103	S3	SLN	-6.708	2972.874	69.315	2972.874
697	103	S3	OL5	28.195	0	9244.25	0
698	103	S3	OL11	-4.121	1230.178	27.676	1230.178
699	103	S4	DL	-320.02	13381.554	6.239	13381.554
700	103	S4	SLN	-148.341	1714.756	5.269	1714.756
701	103	S4	OL5	-1405.512	50.017	-12.382	50.017
702	103	S4	OL11	-61.346	532.803	2.505	532.803

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
703	103	S5	DL	-29.427	9043.817	-2.537	9043.817
704	103	S5	SLN	-12.463	755.966	-22.553	755.966
705	103	S5	OL5	0.725	1.999	2476.985	1.999
706	103	S5	OL11	-8.485	372.751	-6.764	372.751
707	103	S6	DL	144.371	19210.2	-60.321	19210.2
708	103	S6	SLN	87.903	2322.65	4.738	2322.65
709	103	S6	OL5	-863.674	0	-108.948	0
710	103	S6	OL11	28.944	877.283	2.806	877.283
711	103	S7	DL	-11.773	3513.998	-1.499	3513.998
712	103	S7	SLN	-4.826	349.215	0	349.215
713	103	S7	OL5	0.952	0	-23.187	0
714	103	S7	OL11	-3.243	206.654	0	206.654
715	104	S1	DL	717.65	14069.196	-17.143	14069.196
716	104	S1	SLN	380.481	1922.852	-5.877	1922.852
717	104	S1	OL6	633.123	0	-19.664	0
718	104	S2	DL	-532.732	12090.67	-63.218	12090.67
719	104	S2	SLN	-302.354	2061.162	-39.162	2061.162
720	104	S2	OL6	1387.281	0	-83.685	0
721	104	S3	DL	-13.531	20219.694	151.778	20219.694
722	104	S3	SLN	-6.708	2972.874	69.315	2972.874
723	104	S3	OL6	29.406	0	9197.297	0
724	104	S4	DL	-320.02	13381.554	6.239	13381.554
725	104	S4	SLN	-148.341	1714.756	5.269	1714.756
726	104	S4	OL6	-1390.675	49.331	-11.464	49.331
727	104	S5	DL	-29.427	9043.817	-2.537	9043.817
728	104	S5	SLN	-12.463	755.966	-22.553	755.966
729	104	S5	OL6	0.772	1.915	2365.569	1.915
730	104	S6	DL	144.371	19210.2	-60.321	19210.2
731	104	S6	SLN	87.903	2322.65	4.738	2322.65
732	104	S6	OL6	-839.704	0	-111.571	0
733	104	S7	DL	-11.773	3513.998	-1.499	3513.998
734	104	S7	SLN	-4.826	349.215	0	349.215
735	104	S7	OL6	1.596	0	-22.929	0
736	105	S1	DL	717.65	14069.196	-17.143	14069.196
737	105	S1	SLN	380.481	1922.852	-5.877	1922.852
738	105	S1	OL7	-617.566	14.238	5.512	14.238
739	105	S1	OL11	193.263	970.677	-4.315	970.677
740	105	S2	DL	-532.732	12090.67	-63.218	12090.67
741	105	S2	SLN	-302.354	2061.162	-39.162	2061.162
742	105	S2	OL7	-1388.383	13.816	48.988	13.816
743	105	S2	OL11	-147.449	650.112	-18.088	650.112
744	105	S3	DL	-13.531	20219.694	151.778	20219.694
745	105	S3	SLN	-6.708	2972.874	69.315	2972.874
746	105	S3	OL7	-28.129	2.384	-9118.951	2.384
747	105	S3	OL11	-4.121	1230.178	27.676	1230.178
748	105	S4	DL	-320.02	13381.554	6.239	13381.554
749	105	S4	SLN	-148.341	1714.756	5.269	1714.756
750	105	S4	OL7	1308.956	0	-35.948	0
751	105	S4	OL11	-61.346	532.803	2.505	532.803
752	105	S5	DL	-29.427	9043.817	-2.537	9043.817
753	105	S5	SLN	-12.463	755.966	-22.553	755.966
754	105	S5	OL7	-2.715	0	-2530.49	0
755	105	S5	OL11	-8.485	372.751	-6.764	372.751
756	105	S6	DL	144.371	19210.2	-60.321	19210.2
757	105	S6	SLN	87.903	2322.65	4.738	2322.65

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
758	105	S6	OL7	718.861	107.128	7.51	107.128
759	105	S6	OL11	28.944	877.283	2.806	877.283
760	105	S7	DL	-11.773	3513.998	-1.499	3513.998
761	105	S7	SLN	-4.826	349.215	0	349.215
762	105	S7	OL7	-3.565	3.856	14.877	3.856
763	105	S7	OL11	-3.243	206.654	0	206.654
764	106	S1	DL	717.65	14069.196	-17.143	14069.196
765	106	S1	SLN	380.481	1922.852	-5.877	1922.852
766	106	S1	OL8	-582.04	14.297	5.69	14.297
767	106	S2	DL	-532.732	12090.67	-63.218	12090.67
768	106	S2	SLN	-302.354	2061.162	-39.162	2061.162
769	106	S2	OL8	-1460.926	13.104	47.01	13.104
770	106	S3	DL	-13.531	20219.694	151.778	20219.694
771	106	S3	SLN	-6.708	2972.874	69.315	2972.874
772	106	S3	OL8	-26.87	2.316	-9174.983	2.316
773	106	S4	DL	-320.02	13381.554	6.239	13381.554
774	106	S4	SLN	-148.341	1714.756	5.269	1714.756
775	106	S4	OL8	1322.871	0	-35.782	0
776	106	S5	DL	-29.427	9043.817	-2.537	9043.817
777	106	S5	SLN	-12.463	755.966	-22.553	755.966
778	106	S5	OL8	-2.757	0	-2651.822	0
779	106	S6	DL	144.371	19210.2	-60.321	19210.2
780	106	S6	SLN	87.903	2322.65	4.738	2322.65
781	106	S6	OL8	741.486	108.367	3.624	108.367
782	106	S7	DL	-11.773	3513.998	-1.499	3513.998
783	106	S7	SLN	-4.826	349.215	0	349.215
784	106	S7	OL8	-3.299	4.243	14.813	4.243
785	107	S1	DL	430.59	8441.518	-10.286	8441.518
786	107	S1	OL1	6759.171	0.698	-3.614	0.698
787	107	S1	OL9	-2046.595	0	-1698.521	0
788	107	S2	DL	-319.639	7254.402	-37.931	7254.402
789	107	S2	OL1	2931.228	0	-17.5	0
790	107	S2	OL9	-883.85	0	-1111.308	0
791	107	S3	DL	-8.119	12131.817	91.067	12131.817
792	107	S3	OL1	144.884	0	986.62	0
793	107	S3	OL9	-2155.817	0	-2211.727	0
794	107	S4	DL	-192.012	8028.932	3.744	8028.932
795	107	S4	OL1	5808.511	0	-72.924	0
796	107	S4	OL9	-828.979	0	-941.251	0
797	107	S5	DL	-17.656	5426.29	-1.522	5426.29
798	107	S5	OL1	-149.776	0	-947.673	0
799	107	S5	OL9	-640.5	0	-643.527	0
800	107	S6	DL	86.623	11526.12	-36.193	11526.12
801	107	S6	OL1	6923.025	11.689	-4.346	11.689
802	107	S6	OL9	-1593.448	0	-1547.489	0
803	107	S7	DL	-7.064	2108.399	-0.9	2108.399
804	107	S7	OL1	28.804	0.889	0	0.889
805	107	S7	OL9	-357.665	0	-363.366	0
806	108	S1	DL	430.59	8441.518	-10.286	8441.518
807	108	S1	OL2	6686.979	0	-4.031	0
808	108	S1	OL10	-1551.92	0	-1288.483	0
809	108	S2	DL	-319.639	7254.402	-37.931	7254.402
810	108	S2	OL2	2959.856	0	-18.217	0
811	108	S2	OL10	-670.218	0	-842.698	0
812	108	S3	DL	-8.119	12131.817	91.067	12131.817

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
813	108	S3	OL2	268.207	0	1247.345	0
814	108	S3	OL10	-1634.743	0	-1677.139	0
815	108	S4	DL	-192.012	8028.932	3.744	8028.932
816	108	S4	OL2	6435.088	0	-66.137	0
817	108	S4	OL10	-628.61	0	-713.745	0
818	108	S5	DL	-17.656	5426.29	-1.522	5426.29
819	108	S5	OL2	-146.713	0	-1215.704	0
820	108	S5	OL10	-485.687	0	-487.983	0
821	108	S6	DL	86.623	11526.12	-36.193	11526.12
822	108	S6	OL2	6492.657	8.624	-2.624	8.624
823	108	S6	OL10	-1208.302	0	-1173.451	0
824	108	S7	DL	-7.064	2108.399	-0.9	2108.399
825	108	S7	OL2	37.132	1.148	0	1.148
826	108	S7	OL10	-271.215	0	-275.539	0
827	109	S1	DL	430.59	8441.518	-10.286	8441.518
828	109	S1	OL3	-6450.925	0	2.839	0
829	109	S1	OL9	-2046.595	0	-1698.521	0
830	109	S2	DL	-319.639	7254.402	-37.931	7254.402
831	109	S2	OL3	-2883.812	9.752	7.239	9.752
832	109	S2	OL9	-883.85	0	-1111.308	0
833	109	S3	DL	-8.119	12131.817	91.067	12131.817
834	109	S3	OL3	-157.599	1.98	-1023.11	1.98
835	109	S3	OL9	-2155.817	0	-2211.727	0
836	109	S4	DL	-192.012	8028.932	3.744	8028.932
837	109	S4	OL3	-5514.687	80.542	-11.587	80.542
838	109	S4	OL9	-828.979	0	-941.251	0
839	109	S5	DL	-17.656	5426.29	-1.522	5426.29
840	109	S5	OL3	89.218	6.425	978.637	6.425
841	109	S5	OL9	-640.5	0	-643.527	0
842	109	S6	DL	86.623	11526.12	-36.193	11526.12
843	109	S6	OL3	-6446.632	0	-6.724	0
844	109	S6	OL9	-1593.448	0	-1547.489	0
845	109	S7	DL	-7.064	2108.399	-0.9	2108.399
846	109	S7	OL3	-33.354	0	-0.954	0
847	109	S7	OL9	-357.665	0	-363.366	0
848	110	S1	DL	430.59	8441.518	-10.286	8441.518
849	110	S1	OL4	-6532.536	0	1.743	0
850	110	S1	OL10	-1551.92	0	-1288.483	0
851	110	S2	DL	-319.639	7254.402	-37.931	7254.402
852	110	S2	OL4	-2856.715	9.228	7.078	9.228
853	110	S2	OL10	-670.218	0	-842.698	0
854	110	S3	DL	-8.119	12131.817	91.067	12131.817
855	110	S3	OL4	-35.485	1.545	-766.684	1.545
856	110	S3	OL10	-1634.743	0	-1677.139	0
857	110	S4	DL	-192.012	8028.932	3.744	8028.932
858	110	S4	OL4	-4911.436	86.27	-10.475	86.27
859	110	S4	OL10	-628.61	0	-713.745	0
860	110	S5	DL	-17.656	5426.29	-1.522	5426.29
861	110	S5	OL4	93.184	5.462	716.288	5.462
862	110	S5	OL10	-485.687	0	-487.983	0
863	110	S6	DL	86.623	11526.12	-36.193	11526.12
864	110	S6	OL4	-6886.916	0	-8.059	0
865	110	S6	OL10	-1208.302	0	-1173.451	0
866	110	S7	DL	-7.064	2108.399	-0.9	2108.399
867	110	S7	OL4	-24.938	0	-0.699	0

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
868	110	S7	OL10	-271.215	0	-275.539	0
869	111	S1	DL	430.59	8441.518	-10.286	8441.518
870	111	S1	OL5	796.397	0	-26.539	0
871	111	S1	OL9	-2046.595	0	-1698.521	0
872	111	S2	DL	-319.639	7254.402	-37.931	7254.402
873	111	S2	OL5	1948.157	0	-108.055	0
874	111	S2	OL9	-883.85	0	-1111.308	0
875	111	S3	DL	-8.119	12131.817	91.067	12131.817
876	111	S3	OL5	37.593	0	12325.667	0
877	111	S3	OL9	-2155.817	0	-2211.727	0
878	111	S4	DL	-192.012	8028.932	3.744	8028.932
879	111	S4	OL5	-1874.016	66.689	-16.51	66.689
880	111	S4	OL9	-828.979	0	-941.251	0
881	111	S5	DL	-17.656	5426.29	-1.522	5426.29
882	111	S5	OL5	0.967	2.665	3302.647	2.665
883	111	S5	OL9	-640.5	0	-643.527	0
884	111	S6	DL	86.623	11526.12	-36.193	11526.12
885	111	S6	OL5	-1151.565	0	-145.264	0
886	111	S6	OL9	-1593.448	0	-1547.489	0
887	111	S7	DL	-7.064	2108.399	-0.9	2108.399
888	111	S7	OL5	1.269	0	-30.916	0
889	111	S7	OL9	-357.665	0	-363.366	0
890	112	S1	DL	430.59	8441.518	-10.286	8441.518
891	112	S1	OL6	844.164	0	-26.219	0
892	112	S1	OL10	-1551.92	0	-1288.483	0
893	112	S2	DL	-319.639	7254.402	-37.931	7254.402
894	112	S2	OL6	1849.708	0	-111.58	0
895	112	S2	OL10	-670.218	0	-842.698	0
896	112	S3	DL	-8.119	12131.817	91.067	12131.817
897	112	S3	OL6	39.208	0	12263.062	0
898	112	S3	OL10	-1634.743	0	-1677.139	0
899	112	S4	DL	-192.012	8028.932	3.744	8028.932
900	112	S4	OL6	-1854.233	65.775	-15.286	65.775
901	112	S4	OL10	-628.61	0	-713.745	0
902	112	S5	DL	-17.656	5426.29	-1.522	5426.29
903	112	S5	OL6	1.03	2.554	3154.092	2.554
904	112	S5	OL10	-485.687	0	-487.983	0
905	112	S6	DL	86.623	11526.12	-36.193	11526.12
906	112	S6	OL6	-1119.606	0	-148.761	0
907	112	S6	OL10	-1208.302	0	-1173.451	0
908	112	S7	DL	-7.064	2108.399	-0.9	2108.399
909	112	S7	OL6	2.128	0	-30.573	0
910	112	S7	OL10	-271.215	0	-275.539	0
911	113	S1	DL	430.59	8441.518	-10.286	8441.518
912	113	S1	OL7	-823.422	18.984	7.35	18.984
913	113	S1	OL9	-2046.595	0	-1698.521	0
914	113	S2	DL	-319.639	7254.402	-37.931	7254.402
915	113	S2	OL7	-1851.178	18.421	65.317	18.421
916	113	S2	OL9	-883.85	0	-1111.308	0
917	113	S3	DL	-8.119	12131.817	91.067	12131.817
918	113	S3	OL7	-37.505	3.179	-12158.602	3.179
919	113	S3	OL9	-2155.817	0	-2211.727	0
920	113	S4	DL	-192.012	8028.932	3.744	8028.932
921	113	S4	OL7	1745.275	0	-47.93	0
922	113	S4	OL9	-828.979	0	-941.251	0

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
923	113	S5	DL	-17.656	5426.29	-1.522	5426.29
924	113	S5	OL7	-3.62	0	-3373.986	0
925	113	S5	OL9	-640.5	0	-643.527	0
926	113	S6	DL	86.623	11526.12	-36.193	11526.12
927	113	S6	OL7	958.481	142.837	10.014	142.837
928	113	S6	OL9	-1593.448	0	-1547.489	0
929	113	S7	DL	-7.064	2108.399	-0.9	2108.399
930	113	S7	OL7	-4.753	5.142	19.836	5.142
931	113	S7	OL9	-357.665	0	-363.366	0
932	114	S1	DL	430.59	8441.518	-10.286	8441.518
933	114	S1	OL8	-776.053	19.062	7.587	19.062
934	114	S1	OL10	-1551.92	0	-1288.483	0
935	114	S2	DL	-319.639	7254.402	-37.931	7254.402
936	114	S2	OL8	-1947.902	17.472	62.68	17.472
937	114	S2	OL10	-670.218	0	-842.698	0
938	114	S3	DL	-8.119	12131.817	91.067	12131.817
939	114	S3	OL8	-35.827	3.088	-12233.31	3.088
940	114	S3	OL10	-1634.743	0	-1677.139	0
941	114	S4	DL	-192.012	8028.932	3.744	8028.932
942	114	S4	OL8	1763.828	0	-47.709	0
943	114	S4	OL10	-628.61	0	-713.745	0
944	114	S5	DL	-17.656	5426.29	-1.522	5426.29
945	114	S5	OL8	-3.676	0	-3535.763	0
946	114	S5	OL10	-485.687	0	-487.983	0
947	114	S6	DL	86.623	11526.12	-36.193	11526.12
948	114	S6	OL8	988.649	144.489	4.832	144.489
949	114	S6	OL10	-1208.302	0	-1173.451	0
950	114	S7	DL	-7.064	2108.399	-0.9	2108.399
951	114	S7	OL8	-4.399	5.657	19.751	5.657
952	114	S7	OL10	-271.215	0	-275.539	0
953	115	S1	DL	717.65	14069.196	-17.143	14069.196
954	115	S1	ELX	-325.497	0.126	0.082	0.126
955	115	S2	DL	-532.732	12090.67	-63.218	12090.67
956	115	S2	ELX	-8.266	0.298	0.529	0.298
957	115	S3	DL	-13.531	20219.694	151.778	20219.694
958	115	S3	ELX	-17.568	0.059	-83.302	0.059
959	115	S4	DL	-320.02	13381.554	6.239	13381.554
960	115	S4	ELX	-129.339	0	-1.955	0
961	115	S5	DL	-29.427	9043.817	-2.537	9043.817
962	115	S5	ELX	-1.368	0.317	83.422	0.317
963	115	S6	DL	144.371	19210.2	-60.321	19210.2
964	115	S6	ELX	-155.219	1	-1.464	1
965	115	S7	DL	-11.773	3513.998	-1.499	3513.998
966	115	S7	ELX	-2.977	0	-0.093	0
967	116	S1	DL	717.65	14069.196	-17.143	14069.196
968	116	S1	ELX	325.37	0	-0.209	0
969	116	S2	DL	-532.732	12090.67	-63.218	12090.67
970	116	S2	ELX	7.968	0	-0.827	0
971	116	S3	DL	-13.531	20219.694	151.778	20219.694
972	116	S3	ELX	17.509	0	83.243	0
973	116	S4	DL	-320.02	13381.554	6.239	13381.554
974	116	S4	ELX	128.288	1.051	0.904	1.051
975	116	S5	DL	-29.427	9043.817	-2.537	9043.817
976	116	S5	ELX	1.051	0	-83.739	0
977	116	S6	DL	144.371	19210.2	-60.321	19210.2

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
978	116	S6	ELX	154.219	0	0.463	0
979	116	S7	DL	-11.773	3513.998	-1.499	3513.998
980	116	S7	ELX	2.868	0.11	-0.017	0.11
981	117	S1	DL	717.65	14069.196	-17.143	14069.196
982	117	S1	ELZ	-4.675	0	-4.568	0
983	117	S2	DL	-532.732	12090.67	-63.218	12090.67
984	117	S2	ELZ	15.35	0	-1.707	0
985	117	S3	DL	-13.531	20219.694	151.778	20219.694
986	117	S3	ELZ	-1.375	0.159	-497.487	0.159
987	117	S4	DL	-320.02	13381.554	6.239	13381.554
988	117	S4	ELZ	23.558	0	-1.129	0
989	117	S5	DL	-29.427	9043.817	-2.537	9043.817
990	117	S5	ELZ	-0.056	0	-120.214	0
991	117	S6	DL	144.371	19210.2	-60.321	19210.2
992	117	S6	ELZ	-32.457	2.799	-30.134	2.799
993	117	S7	DL	-11.773	3513.998	-1.499	3513.998
994	117	S7	ELZ	-0.171	0.18	-0.077	0.18
995	118	S1	DL	717.65	14069.196	-17.143	14069.196
996	118	S1	ELZ	3.651	1.024	3.544	1.024
997	118	S2	DL	-532.732	12090.67	-63.218	12090.67
998	118	S2	ELZ	-15.448	0.098	1.609	0.098
999	118	S3	DL	-13.531	20219.694	151.778	20219.694
1000	118	S3	ELZ	1.216	0	497.328	0
1001	118	S4	DL	-320.02	13381.554	6.239	13381.554
1002	118	S4	ELZ	-23.972	0.415	0.714	0.415
1003	118	S5	DL	-29.427	9043.817	-2.537	9043.817
1004	118	S5	ELZ	0.033	0.023	120.191	0.023
1005	118	S6	DL	144.371	19210.2	-60.321	19210.2
1006	118	S6	ELZ	29.659	0	27.335	0
1007	118	S7	DL	-11.773	3513.998	-1.499	3513.998
1008	118	S7	ELZ	-0.009	0	-0.103	0
1009	119	S1	DL	717.65	14069.196	-17.143	14069.196
1010	119	S1	SL	404.132	2022.211	-8.954	2022.211
1011	119	S1	ELX	-244.123	0.095	0.062	0.095
1012	119	S2	DL	-532.732	12090.67	-63.218	12090.67
1013	119	S2	SL	-298.495	1354.361	-37.699	1354.361
1014	119	S2	ELX	-6.2	0.224	0.397	0.224
1015	119	S3	DL	-13.531	20219.694	151.778	20219.694
1016	119	S3	SL	-8.464	2562.863	94.514	2562.863
1017	119	S3	ELX	-13.176	0.044	-62.476	0.044
1018	119	S4	DL	-320.02	13381.554	6.239	13381.554
1019	119	S4	SL	-143.607	1109.24	4.166	1109.24
1020	119	S4	ELX	-97.004	0	-1.466	0
1021	119	S5	DL	-29.427	9043.817	-2.537	9043.817
1022	119	S5	SL	-17.676	776.567	-10.619	776.567
1023	119	S5	ELX	-1.026	0.238	62.567	0.238
1024	119	S6	DL	144.371	19210.2	-60.321	19210.2
1025	119	S6	SL	58.011	1824.085	-13.137	1824.085
1026	119	S6	ELX	-116.414	0.75	-1.098	0.75
1027	119	S7	DL	-11.773	3513.998	-1.499	3513.998
1028	119	S7	SL	-6.744	430.527	0	430.527
1029	119	S7	ELX	-2.233	0	-0.07	0
1030	120	S1	DL	717.65	14069.196	-17.143	14069.196
1031	120	S1	SL	404.132	2022.211	-8.954	2022.211
1032	120	S1	ELX	244.028	0	-0.157	0

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
1033	120	S2	DL	-532.732	12090.67	-63.218	12090.67
1034	120	S2	SL	-298.495	1354.361	-37.699	1354.361
1035	120	S2	ELX	5.976	0	-0.62	0
1036	120	S3	DL	-13.531	20219.694	151.778	20219.694
1037	120	S3	SL	-8.464	2562.863	94.514	2562.863
1038	120	S3	ELX	13.132	0	62.432	0
1039	120	S4	DL	-320.02	13381.554	6.239	13381.554
1040	120	S4	SL	-143.607	1109.24	4.166	1109.24
1041	120	S4	ELX	96.216	0.788	0.678	0.788
1042	120	S5	DL	-29.427	9043.817	-2.537	9043.817
1043	120	S5	SL	-17.676	776.567	-10.619	776.567
1044	120	S5	ELX	0.788	0	-62.804	0
1045	120	S6	DL	144.371	19210.2	-60.321	19210.2
1046	120	S6	SL	58.011	1824.085	-13.137	1824.085
1047	120	S6	ELX	115.664	0	0.348	0
1048	120	S7	DL	-11.773	3513.998	-1.499	3513.998
1049	120	S7	SL	-6.744	430.527	0	430.527
1050	120	S7	ELX	2.151	0.082	-0.012	0.082
1051	121	S1	DL	717.65	14069.196	-17.143	14069.196
1052	121	S1	SL	404.132	2022.211	-8.954	2022.211
1053	121	S1	ELZ	-3.506	0	-3.426	0
1054	121	S2	DL	-532.732	12090.67	-63.218	12090.67
1055	121	S2	SL	-298.495	1354.361	-37.699	1354.361
1056	121	S2	ELZ	11.513	0	-1.28	0
1057	121	S3	DL	-13.531	20219.694	151.778	20219.694
1058	121	S3	SL	-8.464	2562.863	94.514	2562.863
1059	121	S3	ELZ	-1.031	0.119	-373.115	0.119
1060	121	S4	DL	-320.02	13381.554	6.239	13381.554
1061	121	S4	SL	-143.607	1109.24	4.166	1109.24
1062	121	S4	ELZ	17.668	0	-0.847	0
1063	121	S5	DL	-29.427	9043.817	-2.537	9043.817
1064	121	S5	SL	-17.676	776.567	-10.619	776.567
1065	121	S5	ELZ	-0.042	0	-90.161	0
1066	121	S6	DL	144.371	19210.2	-60.321	19210.2
1067	121	S6	SL	58.011	1824.085	-13.137	1824.085
1068	121	S6	ELZ	-24.343	2.099	-22.6	2.099
1069	121	S7	DL	-11.773	3513.998	-1.499	3513.998
1070	121	S7	SL	-6.744	430.527	0	430.527
1071	121	S7	ELZ	-0.128	0.135	-0.058	0.135
1072	122	S1	DL	717.65	14069.196	-17.143	14069.196
1073	122	S1	SL	404.132	2022.211	-8.954	2022.211
1074	122	S1	ELZ	2.738	0.768	2.658	0.768
1075	122	S2	DL	-532.732	12090.67	-63.218	12090.67
1076	122	S2	SL	-298.495	1354.361	-37.699	1354.361
1077	122	S2	ELZ	-11.586	0.073	1.207	0.073
1078	122	S3	DL	-13.531	20219.694	151.778	20219.694
1079	122	S3	SL	-8.464	2562.863	94.514	2562.863
1080	122	S3	ELZ	0.912	0	372.996	0
1081	122	S4	DL	-320.02	13381.554	6.239	13381.554
1082	122	S4	SL	-143.607	1109.24	4.166	1109.24
1083	122	S4	ELZ	-17.979	0.311	0.536	0.311
1084	122	S5	DL	-29.427	9043.817	-2.537	9043.817
1085	122	S5	SL	-17.676	776.567	-10.619	776.567
1086	122	S5	ELZ	0.025	0.017	90.144	0.017
1087	122	S6	DL	144.371	19210.2	-60.321	19210.2

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
1088	122	S6	SL	58.011	1824.085	-13.137	1824.085
1089	122	S6	ELZ	22.244	0	20.501	0
1090	122	S7	DL	-11.773	3513.998	-1.499	3513.998
1091	122	S7	SL	-6.744	430.527	0	430.527
1092	122	S7	ELZ	-0.007	0	-0.077	0
1093	123	S1	DL	717.65	14069.196	-17.143	14069.196
1094	123	S1	SLN	380.481	1922.852	-5.877	1922.852
1095	123	S1	ELX	-244.123	0.095	0.062	0.095
1096	123	S2	DL	-532.732	12090.67	-63.218	12090.67
1097	123	S2	SLN	-302.354	2061.162	-39.162	2061.162
1098	123	S2	ELX	-6.2	0.224	0.397	0.224
1099	123	S3	DL	-13.531	20219.694	151.778	20219.694
1100	123	S3	SLN	-6.708	2972.874	69.315	2972.874
1101	123	S3	ELX	-13.176	0.044	-62.476	0.044
1102	123	S4	DL	-320.02	13381.554	6.239	13381.554
1103	123	S4	SLN	-148.341	1714.756	5.269	1714.756
1104	123	S4	ELX	-97.004	0	-1.466	0
1105	123	S5	DL	-29.427	9043.817	-2.537	9043.817
1106	123	S5	SLN	-12.463	755.966	-22.553	755.966
1107	123	S5	ELX	-1.026	0.238	62.567	0.238
1108	123	S6	DL	144.371	19210.2	-60.321	19210.2
1109	123	S6	SLN	87.903	2322.65	4.738	2322.65
1110	123	S6	ELX	-116.414	0.75	-1.098	0.75
1111	123	S7	DL	-11.773	3513.998	-1.499	3513.998
1112	123	S7	SLN	-4.826	349.215	0	349.215
1113	123	S7	ELX	-2.233	0	-0.07	0
1114	124	S1	DL	717.65	14069.196	-17.143	14069.196
1115	124	S1	SLN	380.481	1922.852	-5.877	1922.852
1116	124	S1	ELX	244.028	0	-0.157	0
1117	124	S2	DL	-532.732	12090.67	-63.218	12090.67
1118	124	S2	SLN	-302.354	2061.162	-39.162	2061.162
1119	124	S2	ELX	5.976	0	-0.62	0
1120	124	S3	DL	-13.531	20219.694	151.778	20219.694
1121	124	S3	SLN	-6.708	2972.874	69.315	2972.874
1122	124	S3	ELX	13.132	0	62.432	0
1123	124	S4	DL	-320.02	13381.554	6.239	13381.554
1124	124	S4	SLN	-148.341	1714.756	5.269	1714.756
1125	124	S4	ELX	96.216	0.788	0.678	0.788
1126	124	S5	DL	-29.427	9043.817	-2.537	9043.817
1127	124	S5	SLN	-12.463	755.966	-22.553	755.966
1128	124	S5	ELX	0.788	0	-62.804	0
1129	124	S6	DL	144.371	19210.2	-60.321	19210.2
1130	124	S6	SLN	87.903	2322.65	4.738	2322.65
1131	124	S6	ELX	115.664	0	0.348	0
1132	124	S7	DL	-11.773	3513.998	-1.499	3513.998
1133	124	S7	SLN	-4.826	349.215	0	349.215
1134	124	S7	ELX	2.151	0.082	-0.012	0.082
1135	125	S1	DL	717.65	14069.196	-17.143	14069.196
1136	125	S1	SLN	380.481	1922.852	-5.877	1922.852
1137	125	S1	ELZ	-3.506	0	-3.426	0
1138	125	S2	DL	-532.732	12090.67	-63.218	12090.67
1139	125	S2	SLN	-302.354	2061.162	-39.162	2061.162
1140	125	S2	ELZ	11.513	0	-1.28	0
1141	125	S3	DL	-13.531	20219.694	151.778	20219.694
1142	125	S3	SLN	-6.708	2972.874	69.315	2972.874

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
1143	125	S3	ELZ	-1.031	0.119	-373.115	0.119
1144	125	S4	DL	-320.02	13381.554	6.239	13381.554
1145	125	S4	SLN	-148.341	1714.756	5.269	1714.756
1146	125	S4	ELZ	17.668	0	-0.847	0
1147	125	S5	DL	-29.427	9043.817	-2.537	9043.817
1148	125	S5	SLN	-12.463	755.966	-22.553	755.966
1149	125	S5	ELZ	-0.042	0	-90.161	0
1150	125	S6	DL	144.371	19210.2	-60.321	19210.2
1151	125	S6	SLN	87.903	2322.65	4.738	2322.65
1152	125	S6	ELZ	-24.343	2.099	-22.6	2.099
1153	125	S7	DL	-11.773	3513.998	-1.499	3513.998
1154	125	S7	SLN	-4.826	349.215	0	349.215
1155	125	S7	ELZ	-0.128	0.135	-0.058	0.135
1156	126	S1	DL	717.65	14069.196	-17.143	14069.196
1157	126	S1	SLN	380.481	1922.852	-5.877	1922.852
1158	126	S1	ELZ	2.738	0.768	2.658	0.768
1159	126	S2	DL	-532.732	12090.67	-63.218	12090.67
1160	126	S2	SLN	-302.354	2061.162	-39.162	2061.162
1161	126	S2	ELZ	-11.586	0.073	1.207	0.073
1162	126	S3	DL	-13.531	20219.694	151.778	20219.694
1163	126	S3	SLN	-6.708	2972.874	69.315	2972.874
1164	126	S3	ELZ	0.912	0	372.996	0
1165	126	S4	DL	-320.02	13381.554	6.239	13381.554
1166	126	S4	SLN	-148.341	1714.756	5.269	1714.756
1167	126	S4	ELZ	-17.979	0.311	0.536	0.311
1168	126	S5	DL	-29.427	9043.817	-2.537	9043.817
1169	126	S5	SLN	-12.463	755.966	-22.553	755.966
1170	126	S5	ELZ	0.025	0.017	90.144	0.017
1171	126	S6	DL	144.371	19210.2	-60.321	19210.2
1172	126	S6	SLN	87.903	2322.65	4.738	2322.65
1173	126	S6	ELZ	22.244	0	20.501	0
1174	126	S7	DL	-11.773	3513.998	-1.499	3513.998
1175	126	S7	SLN	-4.826	349.215	0	349.215
1176	126	S7	ELZ	-0.007	0	-0.077	0
1177	127	S1	DL	430.59	8441.518	-10.286	8441.518
1178	127	S1	ELX	-325.497	0.126	0.082	0.126
1179	127	S2	DL	-319.639	7254.402	-37.931	7254.402
1180	127	S2	ELX	-8.266	0.298	0.529	0.298
1181	127	S3	DL	-8.119	12131.817	91.067	12131.817
1182	127	S3	ELX	-17.568	0.059	-83.302	0.059
1183	127	S4	DL	-192.012	8028.932	3.744	8028.932
1184	127	S4	ELX	-129.339	0	-1.955	0
1185	127	S5	DL	-17.656	5426.29	-1.522	5426.29
1186	127	S5	ELX	-1.368	0.317	83.422	0.317
1187	127	S6	DL	86.623	11526.12	-36.193	11526.12
1188	127	S6	ELX	-155.219	1	-1.464	1
1189	127	S7	DL	-7.064	2108.399	-0.9	2108.399
1190	127	S7	ELX	-2.977	0	-0.093	0
1191	128	S1	DL	430.59	8441.518	-10.286	8441.518
1192	128	S1	ELX	325.37	0	-0.209	0
1193	128	S2	DL	-319.639	7254.402	-37.931	7254.402
1194	128	S2	ELX	7.968	0	-0.827	0
1195	128	S3	DL	-8.119	12131.817	91.067	12131.817
1196	128	S3	ELX	17.509	0	83.243	0
1197	128	S4	DL	-192.012	8028.932	3.744	8028.932

Slab Stability - Sliding by Category (Continued)

	LC	Slab	Category	Va-xx[lb]	Vr-xx[lb]	Va-zz[lb]	Vr-zz[lb]
1198	128	S4	ELX	128.288	1.051	0.904	1.051
1199	128	S5	DL	-17.656	5426.29	-1.522	5426.29
1200	128	S5	ELX	1.051	0	-83.739	0
1201	128	S6	DL	86.623	11526.12	-36.193	11526.12
1202	128	S6	ELX	154.219	0	0.463	0
1203	128	S7	DL	-7.064	2108.399	-0.9	2108.399
1204	128	S7	ELX	2.868	0.11	-0.017	0.11
1205	129	S1	DL	430.59	8441.518	-10.286	8441.518
1206	129	S1	ELZ	-4.675	0	-4.568	0
1207	129	S2	DL	-319.639	7254.402	-37.931	7254.402
1208	129	S2	ELZ	15.35	0	-1.707	0
1209	129	S3	DL	-8.119	12131.817	91.067	12131.817
1210	129	S3	ELZ	-1.375	0.159	-497.487	0.159
1211	129	S4	DL	-192.012	8028.932	3.744	8028.932
1212	129	S4	ELZ	23.558	0	-1.129	0
1213	129	S5	DL	-17.656	5426.29	-1.522	5426.29
1214	129	S5	ELZ	-0.056	0	-120.214	0
1215	129	S6	DL	86.623	11526.12	-36.193	11526.12
1216	129	S6	ELZ	-32.457	2.799	-30.134	2.799
1217	129	S7	DL	-7.064	2108.399	-0.9	2108.399
1218	129	S7	ELZ	-0.171	0.18	-0.077	0.18
1219	130	S1	DL	430.59	8441.518	-10.286	8441.518
1220	130	S1	ELZ	3.651	1.024	3.544	1.024
1221	130	S2	DL	-319.639	7254.402	-37.931	7254.402
1222	130	S2	ELZ	-15.448	0.098	1.609	0.098
1223	130	S3	DL	-8.119	12131.817	91.067	12131.817
1224	130	S3	ELZ	1.216	0	497.328	0
1225	130	S4	DL	-192.012	8028.932	3.744	8028.932
1226	130	S4	ELZ	-23.972	0.415	0.714	0.415
1227	130	S5	DL	-17.656	5426.29	-1.522	5426.29
1228	130	S5	ELZ	0.033	0.023	120.191	0.023
1229	130	S6	DL	86.623	11526.12	-36.193	11526.12
1230	130	S6	ELZ	29.659	0	27.335	0
1231	130	S7	DL	-7.064	2108.399	-0.9	2108.399
1232	130	S7	ELZ	-0.009	0	-0.103	0

Strip Reinforcing

	Label	UC Top	LC	Top Bars	Gov Design Cut	UC Top	UC Bot	LC	Bot Bars/Mid Bars	Gov Design Cut	UC Bot	UC Shear	LC	Gov Design Cut	UC Shear
1	DS1	0	N/A		NA	0.058	13	#5@10in	DS1-X26	0.04	13	DS1-X50			
2	DS2	0	N/A		NA	0.003	7	#5@10in	DS2-X26	0.002	7	DS2-X50			
3	DS3	0	N/A		NA	0.037	29	#5@10in	DS3-X25	0.031	29	DS3-X25			
4	DS4	0.185	53	#5@8in	DS4-X35	0.74	59	#5@8in	DS4-X35	0.379	59	DS4-X45			
5	DS5	0.011	56	#5@8in	DS5-X30	0.025	25	#5@8in	DS5-X14	0.04	47	DS5-X29			
6	DS6	0	N/A		NA	0.048	13	#5@12in	DS6-X26	0.038	13	DS6-X25			
7	DS7	0.032	35	#5@8in	DS7-X17	0.066	35	#5@8in	DS7-X42	0.072	35	DS7-X50			
8	DS8	0.121	9	#5@8in	DS8-X25	0.246	55	#5@8in	DS8-X26	0.132	33	DS8-X13			
9	DS9	0.09	25	#5@8in	DS9-X25	0.133	47	#5@8in	DS9-X40	0.141	49	DS9-X15			
10	DS10	0.137	23	#5@8in	DS10-X30	0.073	23	#5@8in	DS10-X45	0.128	23	DS10-X45			
11	DS11	0	N/A		NA	0.105	29	#5@10in	DS11-X25	0.078	29	DS11-X18			
12	DS12	0.08	23	#5@8in	DS12-X25	0.076	47	#5@8in	DS12-X40	0.153	47	DS12-X39			
13	DS13	0.001	55	#5@12in	DS13-X13	0.036	7	#5@12in	DS13-X37	0.04	7	DS13-X50			
14	DS14	0	N/A		NA	0.035	9	#5@10in	DS14-X26	0.024	9	DS14-X50			

Spread Footing Geometry Results

	Node	Footing	Length[ft]	Width[ft]	Thickness[in]	ex[in]	ez[in]	Pedestal Ht[in]	Ped Xdim[in]	Ped Zdim[in]
1	R3D_N27	Footing 1	4	4	12	0	0	24	12	12
2	R3D_N21	Footing 1	4	4	12	0	0	24	12	12
3	R3D_N23	Footing 1	4	4	12	0	0	24	12	12
4	R3D_N29	Footing 1	4	4	12	0	0	24	12	12
5	R3D_N26	Footing 1	4	4	12	0	0	24	12	12
6	R3D_N20	Footing 1	4	4	12	0	0	24	12	12
7	R3D_N5	Footing 1	4	4	12	0	0	24	12	12
8	R3D_N4	Footing 1	4	4	12	0	0	24	12	12
9	R3D_N6	Footing 1	4	4	12	0	0	24	12	12
10	R3D_N9	Footing 1	4	4	12	0	0	24	12	12
11	R3D_N10	Footing 1	4	4	12	0	0	24	12	12
12	R3D_N11	Footing 1	4	4	12	0	0	24	12	12
13	R3D_N18	Footing 1	4	4	12	0	0	24	12	12
14	R3D_N12	Footing 1	4	4	12	0	0	24	12	12

Spread Footing Code Check

	Node	Footing	Bearing Ratio	Bearing Pressure[psf]	Gov LC	UC Max	Muxx[lb-ft]	Gov LC	UC Max	Muzz[lb-ft]	Gov LC
1	R3D_N27	Footing 1	0.31	620.615	74	0.042	1878.499	29	0.042	1877.022	29
2	R3D_N21	Footing 1	0.462	924.08	103	0.088	3944.724	27	0.087	3890.183	29
3	R3D_N23	Footing 1	0.705	1409.723	87	0.158	7042.848	9	0.158	7054.419	13
4	R3D_N29	Footing 1	0.434	867.136	101	0.077	3432.608	27	0.078	3464.926	25
5	R3D_N26	Footing 1	0.365	730.117	103	0.055	2440.509	27	0.052	2325.308	27
6	R3D_N20	Footing 1	0.287	573.55	74	0.031	1360.624	27	0.031	1391.432	23
7	R3D_N5	Footing 1	0.332	664.696	101	0.048	2138.21	25	0.049	2163.297	25
8	R3D_N4	Footing 1	0.425	849.221	99	0.07	3132.844	25	0.072	3231.759	23
9	R3D_N6	Footing 1	0.279	557.73	85	0.028	1265.239	11	0.029	1315.146	9
10	R3D_N9	Footing 1	0.565	1129.289	99	0.114	5098.351	27	0.115	5138.02	25
11	R3D_N10	Footing 1	0.598	1195.415	83	0.126	5596.391	11	0.125	5571.157	7
12	R3D_N11	Footing 1	0.537	1074.505	89	0.108	4796.921	13	0.107	4758.806	13
13	R3D_N18	Footing 1	0.771	1541.803	99	0.177	7894.183	27	0.179	7963.585	23
14	R3D_N12	Footing 1	0.425	849.775	101	0.074	3283.207	27	0.074	3297.946	25

Spread Footing Shear Code Check

	Node	Footing	UC Shear	Vux[lb]	Gov LC	UC Shear	Vuz[lb]	Gov LC
1	R3D_N27	Footing 1	0.041	1339.445	29	0.041	1338.322	29
2	R3D_N21	Footing 1	0.085	2815.478	27	0.084	2773.629	29
3	R3D_N23	Footing 1	0.152	5021.584	9	0.152	5030.577	13
4	R3D_N29	Footing 1	0.074	2448.025	27	0.075	2473.836	25
5	R3D_N26	Footing 1	0.053	1746.413	27	0.05	1658.861	27
6	R3D_N20	Footing 1	0.029	971.316	27	0.03	995.154	23
7	R3D_N5	Footing 1	0.046	1524.555	25	0.047	1543.621	25
8	R3D_N4	Footing 1	0.068	2233.674	25	0.07	2309.357	23
9	R3D_N6	Footing 1	0.027	902.806	11	0.028	940.726	9
10	R3D_N9	Footing 1	0.11	3638.995	27	0.111	3668.77	25
11	R3D_N10	Footing 1	0.121	3991.759	11	0.12	3972.835	7
12	R3D_N11	Footing 1	0.104	3422.632	13	0.103	3393.664	13
13	R3D_N18	Footing 1	0.17	5628.454	27	0.172	5681.429	23
14	R3D_N12	Footing 1	0.071	2341.712	27	0.071	2353.535	25

Spread Footing Reinforcement

	Node	Footing	Bot x Steel[in^2]	Bot z Steel[in^2]	Top x Steel[in^2]	Top z Steel[in^2]	Ped Long	Ped Shear
1	R3D_N27	Footing 1	1.227	1.227	0	0	4#6	#4@12 in
2	R3D_N21	Footing 1	1.227	1.227	0	0	4#6	#4@12 in
3	R3D_N23	Footing 1	1.227	1.227	0	0	4#6	#4@12 in
4	R3D_N29	Footing 1	1.227	1.227	0	0	4#6	#4@12 in
5	R3D_N26	Footing 1	1.227	1.227	0	0	4#6	#4@12 in
6	R3D_N20	Footing 1	1.227	1.227	0	0	4#6	#4@12 in
7	R3D_N5	Footing 1	1.227	1.227	0	0	4#6	#4@12 in
8	R3D_N4	Footing 1	1.227	1.227	0	0	4#6	#4@12 in
9	R3D_N6	Footing 1	1.227	1.227	0	0	4#6	#4@12 in
10	R3D_N9	Footing 1	1.227	1.227	0	0	4#6	#4@12 in
11	R3D_N10	Footing 1	1.227	1.227	0	0	4#6	#4@12 in
12	R3D_N11	Footing 1	1.227	1.227	0	0	4#6	#4@12 in
13	R3D_N18	Footing 1	1.227	1.227	0	0	4#6	#4@12 in
14	R3D_N12	Footing 1	1.227	1.227	0	0	4#6	#4@12 in

Spread Footing Stability

	Node	Footing	OSF-xx	LC	OSF-zz	LC	SR-xx	LC	SR-zz	LC
1	R3D_N27	Footing 1	6.274	111	6.326	111	549.721	111	187.999	111
2	R3D_N21	Footing 1	3.099	111	3.204	111	624.925	111	30.563	111
3	R3D_N23	Footing 1	1.963	111	1.959	107	152.091	107	124.262	111
4	R3D_N29	Footing 1	3.54	113	3.444	109	16.255	109	71.462	111
5	R3D_N26	Footing 1	4.185	113	4.791	113	108.494	111	10.095	111
6	R3D_N20	Footing 1	11.756	113	11.724	113	26.453	108	51.001	72
7	R3D_N5	Footing 1	5.142	107	4.864	107	30.967	107	402.477	108
8	R3D_N4	Footing 1	3.235	107	2.963	107	11.095	107	549.809	108
9	R3D_N6	Footing 1	6.705	111	6.095	109	15.29	108	58.716	111
10	R3D_N9	Footing 1	2.735	111	2.673	109	11.346	108	27.211	112
11	R3D_N10	Footing 1	2.188	113	2.194	113	120.854	108	195.566	89
12	R3D_N11	Footing 1	2.296	111	2.308	111	117.931	108	112.29	87
13	R3D_N18	Footing 1	2.192	113	2.134	109	11.866	108	197.966	107
14	R3D_N12	Footing 1	2.96	113	2.963	113	28.045	109	239.166	111

BASE PLATE AND ANCHORAGE CALCULATIONS

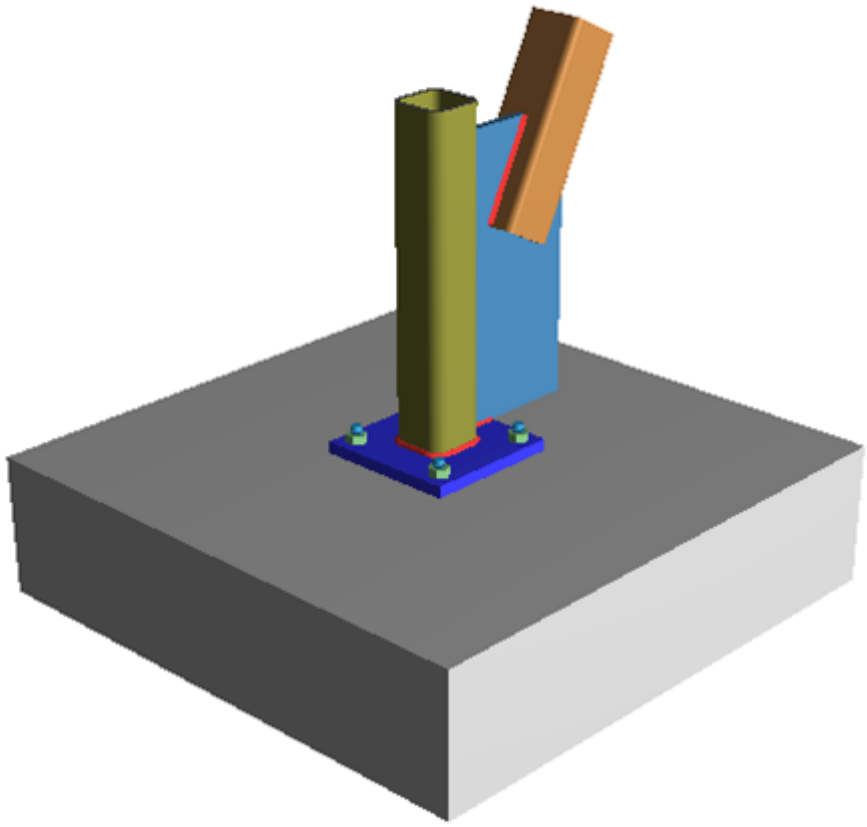
NOTE:
BRACE FRAME BASE PLATES RUN AS 4 BOLT.
BASE PLATE OK FOR 6 BOLT.
PROFIS EMPLOYED TO CHECK BOLTS.

Global Parameters - Description:

Project Title	BOA Chipman semi rigid submesh final for permit
Company	<Licensed Company>
Designer	Brett_Rylands
Job Number	
Notes	

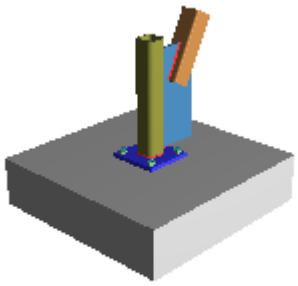
Global Parameters - Solution:

Design Method	AISC 15th (360-16): LRFD
Bolt Group Analysis Method	Center of Rotation
Weld Analysis Method	Elastic
Consider Bolt Hole Deformation?	Yes
Check Rotational Ductility?	Yes
Check Weld Filler Metal Matching?	Yes
Full Shear Eccentricity Considered?	No
Panel-Zone Shear Deformation Considered?	No
Check Weld Base Material Thickness?	Yes
Reduce Available Bolt Strength by Prying Effects Factor Q?	No



M190 I: Summary Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x11.52x24.45	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

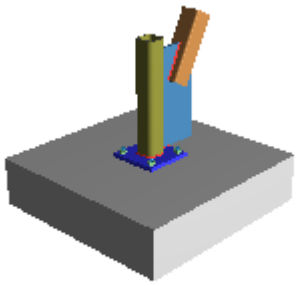
Input Data:		
Brace Axial	6612.15 lbs	*Brace Axial (compression)*
Column Axial	6290.79 lbs	*Axial load on the column*
Column Strong Axis Shear	-2.82 lbs	*Shear load on the column that causes strong axis bending*
Column Weak Axis Shear	-5.87 lbs	*Shear load on the column that causes weak axis bending*
Column Strong Axis Moment	-0.00 lb-ft	*Column moment about the strong axis*
Column Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 59 - LC 59: dl+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.59**	**PASS**
Gusset/Column connection	Column Weld Strength	**0.02**	**PASS**
Gusset/Brace connection	Gusset Plate Compression (Whitmore)	**0.06**	**PASS**

M190 I: Base Plate Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x11.52x24.45	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Design Axial	12191.89 lbs	*Axial load on the column*
Design Strong Axis Shear	-2.82 lbs	*Shear load on the column that causes strong axis bending*
Design Weak Axis Shear	2977.01 lbs	*Shear load on the column that causes weak axis bending*
Design Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Design Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

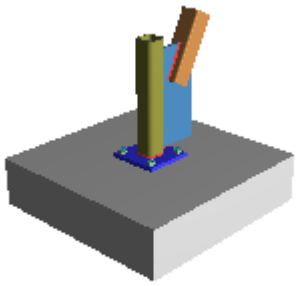
Governing LC: 3D - 59 - LC 59: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Loading at Base Plate				**n/a**
Gusset Shear Yield	1800.52 lbs	178562.92 lbs	**0.01**	**PASS**
Gusset Shear Rupture	1800.52 lbs	215763.53 lbs	**0.01**	**PASS**
Concrete Bearing	0.08 ksi	4.42 ksi	**0.02**	**PASS**
Lateral Slip	2977.01 lbs	5029.15 lbs	**0.59**	**PASS**
Plate Flexural Yielding(Compression)	46.36 lb-ft/in	675.00 lb-ft/in	**0.07**	**PASS**
Column Weld Limitations				**PASS**
Weld Limitations at Gusset				**PASS**
Column Flange Weld Strength	2248.07 lbs/ft	83520.00 lbs/ft	**0.03**	**PASS**
Column Web Weld Strength	5.38 lbs/ft	83520.00 lbs/ft	**0.00**	**PASS**
Gusset Weld Strength	1800.52 lbs	33408.00 lbs	**0.05**	**PASS**

M190 I: Gusset/Column Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x11.52x24.45	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	5901.10 lbs	*Calculated Shear Load*
Axial Load	1182.36 lbs	*Calculated Axial Load (compression)*
Moment Load	0.00 lb-ft	*Calculated Moment*

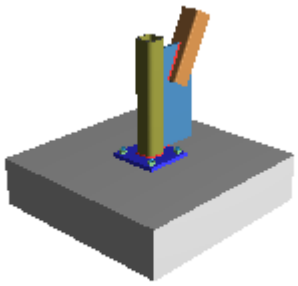
Governing LC: 3D - 59 - LC 59: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
HSS Limitations				**PASS**
Column Weld Limitations				**PASS**
Loading at Gusset to Column				**n/a**
Gusset Shear Yield	5901.10 lbs	388066.02 lbs	**0.02**	**PASS**
Gusset Shear Rupture	5901.10 lbs	468913.11 lbs	**0.01**	**PASS**
Gusset Axial Yield	1182.36 lbs	582099.04 lbs	**0.00**	**PASS**
Gusset Flexural Yield			**0.00**	**PASS**
Gusset Flexural Rupture			**0.00**	**PASS**
Column Weld Strength	5901.10 lbs	266759.46 lbs	**0.02**	**PASS**
Column Web Bending	1229.40 lb-ft	278768.17 lb-ft	**0.00**	**PASS**
HSS Punching Shear	1229.40 lb-ft	215515.78 lb-ft	**0.01**	**PASS**
HSS Column Transverse Plastification	1182.36 lbs	171322.63 lbs	**0.01**	**PASS**

M190 I: Gusset/Brace Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x11.52x24.45	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Brace Axial	6612.15 lbs	*Brace Axial (compression)*

Governing LC: 3D - 59 - LC 59: dl+wl

Note: Unless specified, all code references are from AISC 360-16

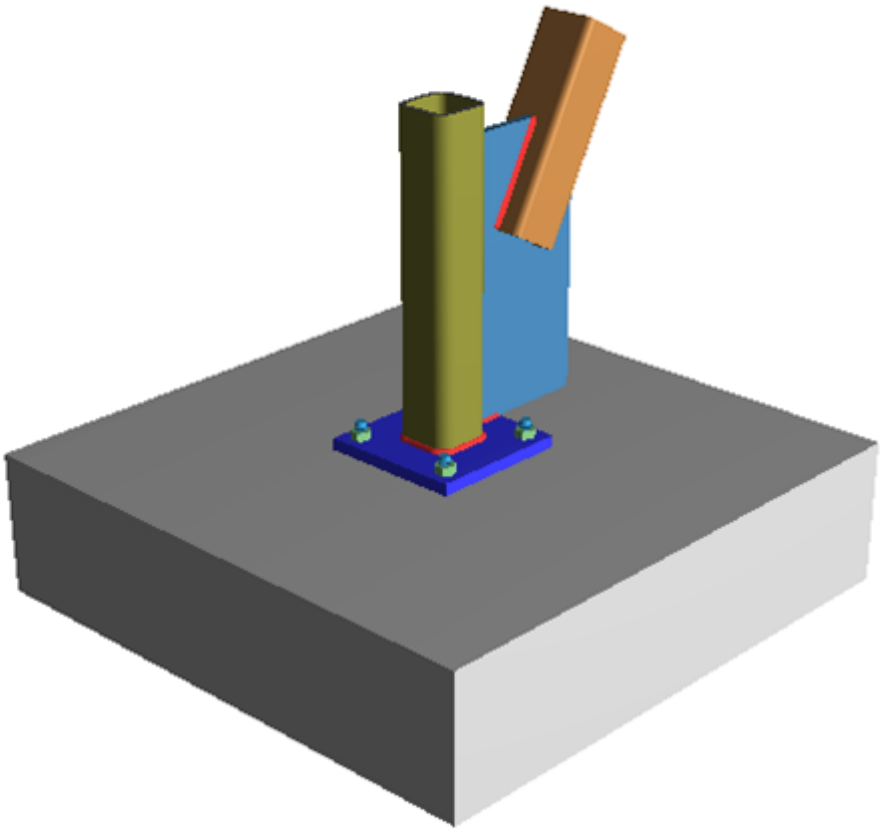
Limit State	Required	Available	Unity Check	Result
Brace Weld Limitations				**PASS**
Gusset Plate Compression (Whitmore)	6612.15 lbs	116998.42 lbs	**0.06**	**PASS**
Brace Weld Strength	6612.15 lbs	234005.62 lbs	**0.03**	**PASS**

Connection	
Connection Title	M190 I
Connection Type	Brace to Column Base Plate Connection
Connection Category	
Gusset to Column Orientation	Weak Axis
Brace Location	Right
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Brace Axial	6612.154 lbs
Column Axial	6290.789 lbs
Column Strong Axis Shear	-2.817 lbs
Column Weak Axis Shear	-5.874 lbs
Column Strong Axis Moment	0.000 lb-ft
Column Weak Axis Moment	0.000 lb-ft
Qf	1.000 Coeff
Components	
Brace Section	HSS5X5X4
Material	A500 Gr.C
Member Orientation	Long Side Vertical
Column Section	HSS5X5X8
Material	A500 Gr.C
Gusset	P0.75x11.52x24.45
Material	A36
Tapered ?	No
Thickness	0.750 in
Width	11.522 in
Length	24.455 in
Base Plate	P1.00x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	1.000 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Anchor Bolts	1" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	1"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Brace-Gusset Connection	

continued on next page...

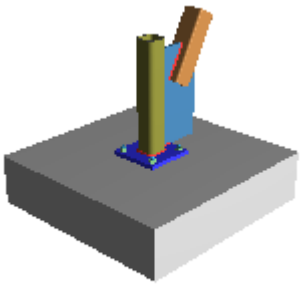
M190 I: Connection Properties Report (continued):

Connection Type	Slotted Around Gusset
Brace Gusset Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Gusset-Column Connection	
Type	Direct Weld
Column Weld	E70
Type	Double Fillet
Fillet Size	5.000 Sixteenths
Gusset-Base Plate Connection	
Type	Direct Weld
Gusset Baseplate Weld	E70
Type	Double Fillet
Fillet Size	4.000 Sixteenths
Assembly	
Auto-Update Connection	No
WorkPoint Location	Concentric
Brace Clearance	3.000 in
Brace WorkPoint Distance	17.138 in
Brace/Gusset Overlap	9.000 in
Gusset Clip	
Horizontal Clip	4.462 in
Vertical Clip	2.256 in
Brace/Clip Edge Dist	0.000 in
Gusset to Column Clip	
Vertical Clip	0.500 in
Horizontal Clip	0.500 in
Brace Angle from Vertical	26.816
Edge Distance y	1.500 in
Edge Distance z	1.500 in



M194 I: Summary Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x11.67x23.44	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

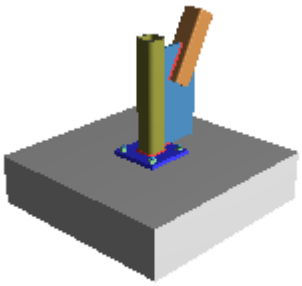
Input Data:		
Brace Axial	-21223.10 lbs	*Brace Axial (tension)*
Column Axial	-26047.68 lbs	*Axial load on the column*
Column Strong Axis Shear	33.55 lbs	*Shear load on the column that causes strong axis bending*
Column Weak Axis Shear	2.22 lbs	*Shear load on the column that causes weak axis bending*
Column Strong Axis Moment	-0.00 lb-ft	*Column moment about the strong axis*
Column Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 57 - LC 57: dl+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Plate Flexural Yielding(Tension)	**0.81**	**PASS**
Gusset/Column connection	Column Weld Strength	**0.07**	**PASS**
Gusset/Brace connection	Gusset Plate Tensile Yield (Whitmore)	**0.17**	**PASS**

M194 I: Base Plate Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x11.67x23.44	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Design Axial	-44740.17 lbs	*Axial load on the column*
Design Strong Axis Shear	33.55 lbs	*Shear load on the column that causes strong axis bending*
Design Weak Axis Shear	-10048.19 lbs	*Shear load on the column that causes weak axis bending*
Design Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Design Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

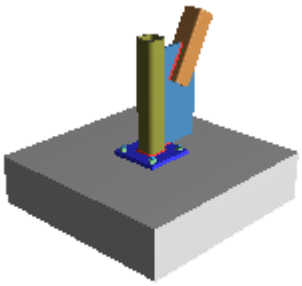
Governing LC: 3D - 57 - LC 57: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Loading at Base Plate				**n/a**
Gusset Shear Yield	6145.62 lbs	180886.76 lbs	**0.03**	**PASS**
Gusset Shear Rupture	6145.62 lbs	218571.50 lbs	**0.03**	**PASS**
Plate Flexural Yielding(Tension)	1980.68 lb-ft	2446.88 lb-ft	**0.81**	**PASS**
Anchor Bolt Tension	11185.04 lbs	25623.62 lbs	**0.44**	**PASS**
Anchor Bolt Shear	10048.25 lbs	30748.34 lbs	**0.33**	**PASS**
Anchor Bolt Bearing on Base Plate	10048.25 lbs	30748.34 lbs	**0.33**	**PASS**
Column Weld Limitations				**PASS**
Weld Limitations at Gusset				**PASS**
Column Flange Weld Strength	43390.98 lbs/ft	83520.00 lbs/ft	**0.52**	**PASS**
Column Web Weld Strength	42745.43 lbs/ft	83520.00 lbs/ft	**0.51**	**PASS**
Gusset Weld Strength	6145.62 lbs	33408.00 lbs	**0.18**	**PASS**

M194 I: Gusset/Column Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x11.67x23.44	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	-18692.49 lbs	*Calculated Shear Load*
Axial Load	-3904.79 lbs	*Calculated Axial Load (tension)*
Moment Load	-0.00 lb-ft	*Calculated Moment*

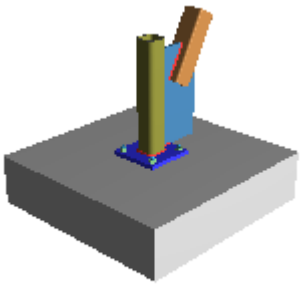
Governing LC: 3D - 57 - LC 57: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
HSS Limitations				**PASS**
Column Weld Limitations				**PASS**
Loading at Gusset to Column				**n/a**
Gusset Shear Yield	18692.49 lbs	371552.00 lbs	**0.05**	**PASS**
Gusset Shear Rupture	18692.49 lbs	448958.67 lbs	**0.04**	**PASS**
Gusset Axial Yield	3904.79 lbs	557328.00 lbs	**0.01**	**PASS**
Gusset Tensile Rupture	3904.79 lbs	748264.44 lbs	**0.01**	**PASS**
Gusset Flexural Yield			**0.00**	**PASS**
Gusset Flexural Rupture			**0.00**	**PASS**
Column Weld Strength	19095.98 lbs	255407.60 lbs	**0.07**	**PASS**
Column Web Bending	3894.27 lb-ft	257663.43 lb-ft	**0.02**	**PASS**
HSS Punching Shear	3894.27 lb-ft	197922.88 lb-ft	**0.02**	**PASS**
HSS Column Transverse Plastification	3904.79 lbs	166136.37 lbs	**0.02**	**PASS**

M194 I: Gusset/Brace Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x11.67x23.44	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Brace Axial	-21223.10 lbs	*Brace Axial (tension)*

Governing LC: 3D - 57 - LC 57: dl+wl

Note: Unless specified, all code references are from AISC 360-16

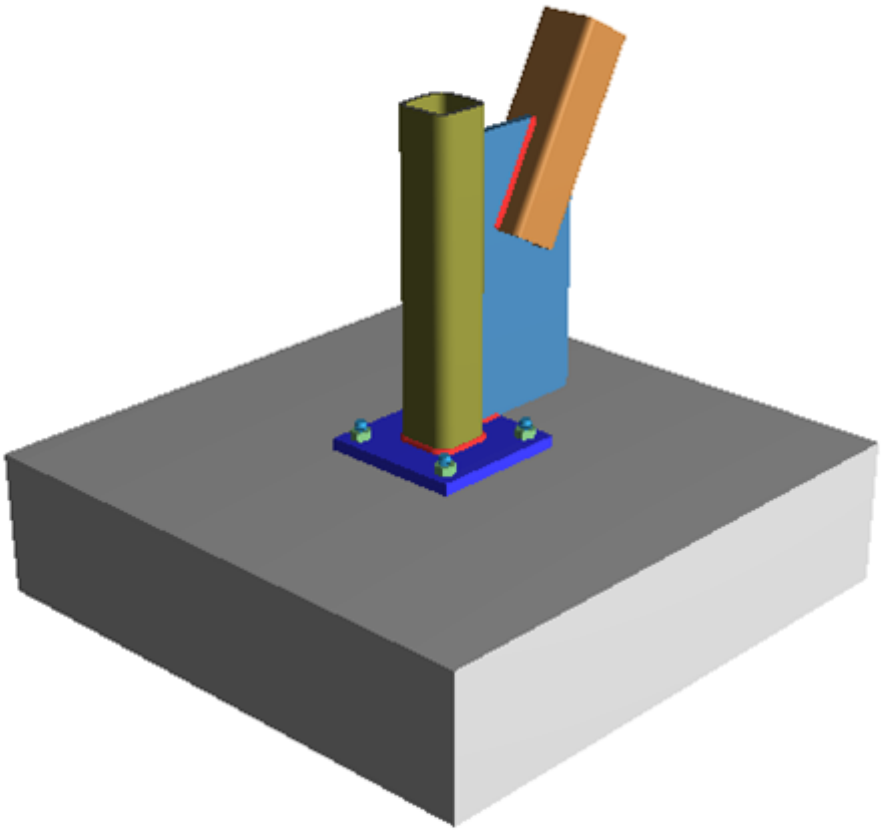
Limit State	Required	Available	Unity Check	Result
Brace Weld Limitations				**PASS**
Gusset Plate Tensile Yield (Whitmore)	21223.10 lbs	121500.00 lbs	**0.17**	**PASS**
Gusset Plate Tensile Rupture (Whitmore)	21223.10 lbs	163125.00 lbs	**0.13**	**PASS**
Brace Tensile Yield	21223.10 lbs	193500.00 lbs	**0.11**	**PASS**
Brace Tensile Rupture	21223.10 lbs	143283.45 lbs	**0.15**	**PASS**
Brace Weld Strength	21223.10 lbs	234005.62 lbs	**0.09**	**PASS**

Connection	
Connection Title	M194 I
Connection Type	Brace to Column Base Plate Connection
Connection Category	
Gusset to Column Orientation	Weak Axis
Brace Location	Right
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Brace Axial	-21223.098 lbs
Column Axial	-26047.683 lbs
Column Strong Axis Shear	33.551 lbs
Column Weak Axis Shear	2.224 lbs
Column Strong Axis Moment	0.000 lb-ft
Column Weak Axis Moment	0.000 lb-ft
Qf	1.000 Coeff
Components	
Brace Section	HSS5X5X4
Material	A500 Gr.C
Member Orientation	Long Side Vertical
Column Section	HSS5X5X8
Material	A500 Gr.C
Gusset	P0.75x11.67x23.44
Material	A36
Tapered ?	No
Thickness	0.750 in
Width	11.666 in
Length	23.435 in
Base Plate	P1.00x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	1.000 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Anchor Bolts	1" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	1"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Brace-Gusset Connection	

continued on next page...

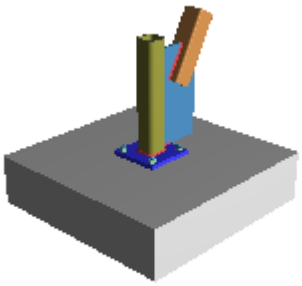
M194 I: Connection Properties Report (continued):

Connection Type	Slotted Around Gusset
Brace Gusset Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Gusset-Column Connection	
Type	Direct Weld
Column Weld	E70
Type	Double Fillet
Fillet Size	5.000 Sixteenths
Gusset-Base Plate Connection	
Type	Direct Weld
Gusset Baseplate Weld	E70
Type	Double Fillet
Fillet Size	4.000 Sixteenths
Assembly	
Auto-Update Connection	No
WorkPoint Location	Concentric
Brace Clearance	3.000 in
Brace WorkPoint Distance	16.264 in
Brace/Gusset Overlap	9.000 in
Gusset Clip	
Horizontal Clip	4.404 in
Vertical Clip	2.368 in
Brace/Clip Edge Dist	0.000 in
Gusset to Column Clip	
Vertical Clip	0.500 in
Horizontal Clip	0.500 in
Brace Angle from Vertical	28.266
Edge Distance y	1.500 in
Edge Distance z	1.500 in



M223 I: Summary Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x11.67x23.44	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

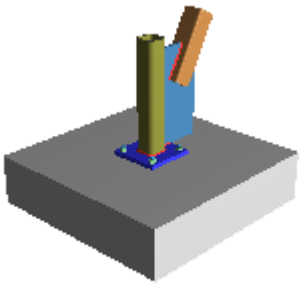
Input Data:		
Brace Axial	-20737.13 lbs	*Brace Axial (tension)*
Column Axial	-25960.12 lbs	*Axial load on the column*
Column Strong Axis Shear	-30.49 lbs	*Shear load on the column that causes strong axis bending*
Column Weak Axis Shear	-0.18 lbs	*Shear load on the column that causes weak axis bending*
Column Strong Axis Moment	-0.00 lb-ft	*Column moment about the strong axis*
Column Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 59 - LC 59: dl+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Plate Flexural Yielding(Tension)	**0.80**	**PASS**
Gusset/Column connection	Column Weld Strength	**0.07**	**PASS**
Gusset/Brace connection	Gusset Plate Tensile Yield (Whitmore)	**0.17**	**PASS**

M223 I: Base Plate Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x11.67x23.44	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Design Axial	-44224.58 lbs	*Axial load on the column*
Design Strong Axis Shear	-30.49 lbs	*Shear load on the column that causes strong axis bending*
Design Weak Axis Shear	-9820.46 lbs	*Shear load on the column that causes weak axis bending*
Design Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Design Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

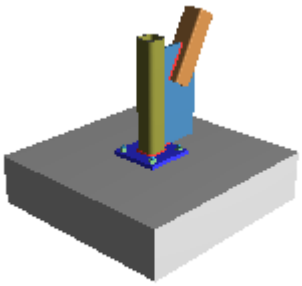
Governing LC: 3D - 59 - LC 59: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Loading at Base Plate				**n/a**
Gusset Shear Yield	6004.90 lbs	180886.76 lbs	**0.03**	**PASS**
Gusset Shear Rupture	6004.90 lbs	218571.50 lbs	**0.03**	**PASS**
Plate Flexural Yielding(Tension)	1957.86 lb-ft	2446.88 lb-ft	**0.80**	**PASS**
Anchor Bolt Tension	11056.15 lbs	25623.62 lbs	**0.43**	**PASS**
Anchor Bolt Shear	9820.51 lbs	30748.34 lbs	**0.32**	**PASS**
Anchor Bolt Bearing on Base Plate	9820.51 lbs	30748.34 lbs	**0.32**	**PASS**
Column Weld Limitations				**PASS**
Weld Limitations at Gusset				**PASS**
Column Flange Weld Strength	42877.21 lbs/ft	83520.00 lbs/ft	**0.51**	**PASS**
Column Web Weld Strength	42252.83 lbs/ft	83520.00 lbs/ft	**0.51**	**PASS**
Gusset Weld Strength	6004.90 lbs	33408.00 lbs	**0.18**	**PASS**

M223 I: Gusset/Column Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x11.67x23.44	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	-18264.47 lbs	*Calculated Shear Load*
Axial Load	-3815.38 lbs	*Calculated Axial Load (tension)*
Moment Load	-0.00 lb-ft	*Calculated Moment*

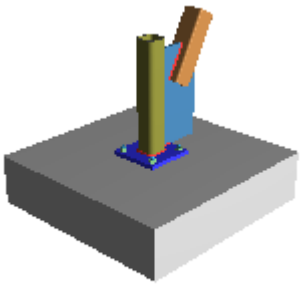
Governing LC: 3D - 59 - LC 59: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
HSS Limitations				**PASS**
Column Weld Limitations				**PASS**
Loading at Gusset to Column				**n/a**
Gusset Shear Yield	18264.47 lbs	371552.00 lbs	**0.05**	**PASS**
Gusset Shear Rupture	18264.47 lbs	448958.67 lbs	**0.04**	**PASS**
Gusset Axial Yield	3815.38 lbs	557328.00 lbs	**0.01**	**PASS**
Gusset Tensile Rupture	3815.38 lbs	748264.44 lbs	**0.01**	**PASS**
Gusset Flexural Yield			**0.00**	**PASS**
Gusset Flexural Rupture			**0.00**	**PASS**
Column Weld Strength	18658.72 lbs	255407.60 lbs	**0.07**	**PASS**
Column Web Bending	3805.10 lb-ft	257663.43 lb-ft	**0.01**	**PASS**
HSS Punching Shear	3805.10 lb-ft	197922.88 lb-ft	**0.02**	**PASS**
HSS Column Transverse Plastification	3815.38 lbs	166136.37 lbs	**0.02**	**PASS**

M223 I: Gusset/Brace Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x11.67x23.44	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Brace Axial	-20737.13 lbs	*Brace Axial (tension)*

Governing LC: 3D - 59 - LC 59: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Brace Weld Limitations				**PASS**
Gusset Plate Tensile Yield (Whitmore)	20737.13 lbs	121500.00 lbs	**0.17**	**PASS**
Gusset Plate Tensile Rupture (Whitmore)	20737.13 lbs	163125.00 lbs	**0.13**	**PASS**
Brace Tensile Yield	20737.13 lbs	193500.00 lbs	**0.11**	**PASS**
Brace Tensile Rupture	20737.13 lbs	143283.45 lbs	**0.14**	**PASS**
Brace Weld Strength	20737.13 lbs	234005.62 lbs	**0.09**	**PASS**

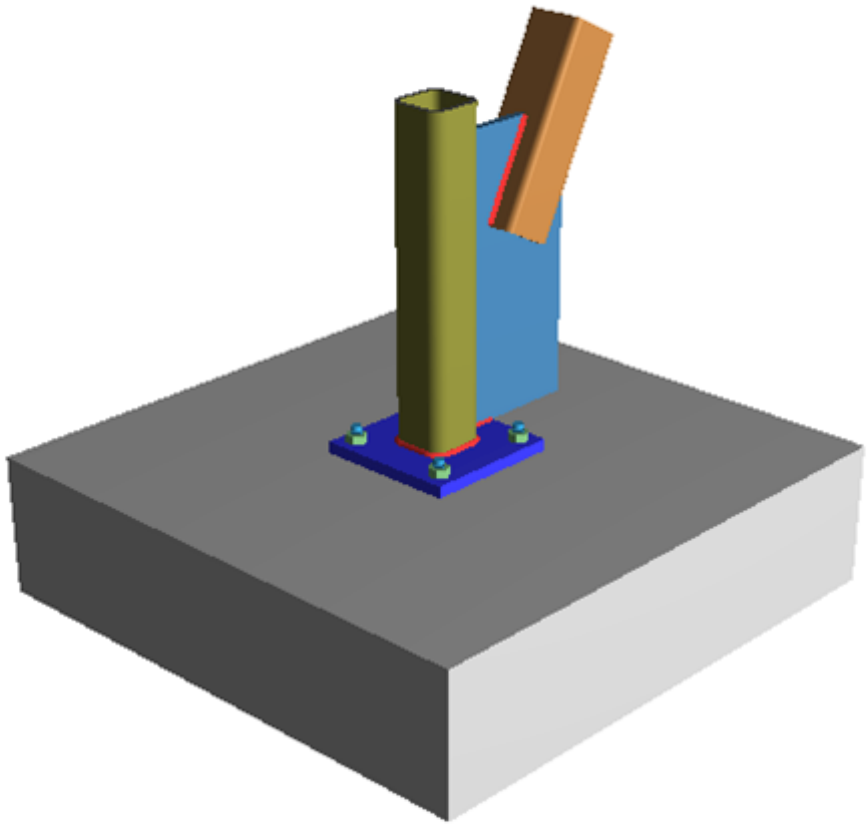
M223 I: Connection Properties Report

Connection	
Connection Title	M223 I
Connection Type	Brace to Column Base Plate Connection
Connection Category	
Gusset to Column Orientation	Weak Axis
Brace Location	Right
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Brace Axial	-20737.132 lbs
Column Axial	-25960.117 lbs
Column Strong Axis Shear	-30.493 lbs
Column Weak Axis Shear	-0.180 lbs
Column Strong Axis Moment	0.000 lb-ft
Column Weak Axis Moment	0.000 lb-ft
Qf	1.000 Coeff
Components	
Brace Section	HSS5X5X4
Material	A500 Gr.C
Member Orientation	Long Side Vertical
Column Section	HSS5X5X8
Material	A500 Gr.C
Gusset	P0.75x11.67x23.44
Material	A36
Tapered ?	No
Thickness	0.750 in
Width	11.666 in
Length	23.435 in
Base Plate	P1.00x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	1.000 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Anchor Bolts	1" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	1"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Brace-Gusset Connection	

continued on next page...

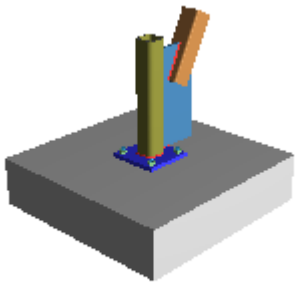
M223 I: Connection Properties Report (continued):

Connection Type	Slotted Around Gusset
Brace Gusset Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Gusset-Column Connection	
Type	Direct Weld
Column Weld	E70
Type	Double Fillet
Fillet Size	5.000 Sixteenths
Gusset-Base Plate Connection	
Type	Direct Weld
Gusset Baseplate Weld	E70
Type	Double Fillet
Fillet Size	4.000 Sixteenths
Assembly	
Auto-Update Connection	No
WorkPoint Location	Concentric
Brace Clearance	3.000 in
Brace WorkPoint Distance	16.264 in
Brace/Gusset Overlap	9.000 in
Gusset Clip	
Horizontal Clip	4.404 in
Vertical Clip	2.368 in
Brace/Clip Edge Dist	0.000 in
Gusset to Column Clip	
Vertical Clip	0.500 in
Horizontal Clip	0.500 in
Brace Angle from Vertical	28.266
Edge Distance y	1.500 in
Edge Distance z	1.500 in



M225 J: Summary Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x11.52x24.45	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

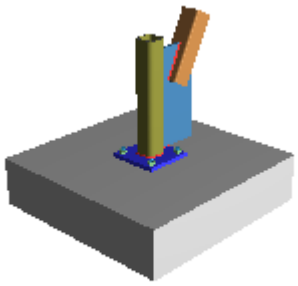
Input Data:		
Brace Axial	-1280.66 lbs	*Brace Axial (tension)*
Column Axial	2901.09 lbs	*Axial load on the column*
Column Strong Axis Shear	-38.45 lbs	*Shear load on the column that causes strong axis bending*
Column Weak Axis Shear	-0.63 lbs	*Shear load on the column that causes weak axis bending*
Column Strong Axis Moment	-0.00 lb-ft	*Column moment about the strong axis*
Column Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 28 - LC 28: dl+sln+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.80**	**PASS**
Gusset/Column connection	Column Weld Strength	**0.00**	**PASS**
Gusset/Brace connection	Gusset Plate Tensile Yield (Whitmore)	**0.01**	**PASS**

M225 J: Base Plate Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x11.52x24.45	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Design Axial	1758.14 lbs	*Axial load on the column*
Design Strong Axis Shear	-38.45 lbs	*Shear load on the column that causes strong axis bending*
Design Weak Axis Shear	-578.37 lbs	*Shear load on the column that causes weak axis bending*
Design Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Design Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

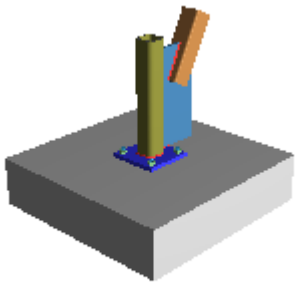
Governing LC: 3D - 28 - LC 28: dl+sln+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Loading at Base Plate				**n/a**
Gusset Shear Yield	348.73 lbs	178562.92 lbs	**0.00**	**PASS**
Gusset Shear Rupture	348.73 lbs	215763.53 lbs	**0.00**	**PASS**
Concrete Bearing	0.01 ksi	4.42 ksi	**0.00**	**PASS**
Lateral Slip	579.65 lbs	725.23 lbs	**0.80**	**PASS**
Plate Flexural Yielding(Compression)	6.68 lb-ft/in	675.00 lb-ft/in	**0.01**	**PASS**
Column Weld Limitations				**PASS**
Weld Limitations at Gusset				**PASS**
Column Flange Weld Strength	438.80 lbs/ft	83520.00 lbs/ft	**0.01**	**PASS**
Column Web Weld Strength	73.46 lbs/ft	83520.00 lbs/ft	**0.00**	**PASS**
Gusset Weld Strength	348.73 lbs	33408.00 lbs	**0.01**	**PASS**

M225 J: Gusset/Column Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x11.52x24.45	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	-1142.95 lbs	*Calculated Shear Load*
Axial Load	-229.00 lbs	*Calculated Axial Load (tension)*
Moment Load	-0.00 lb-ft	*Calculated Moment*

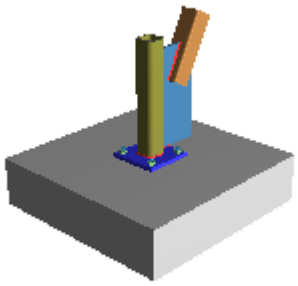
Governing LC: 3D - 28 - LC 28: dl+sln+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
HSS Limitations				**PASS**
Column Weld Limitations				**PASS**
Loading at Gusset to Column				**n/a**
Gusset Shear Yield	1142.95 lbs	388066.02 lbs	**0.00**	**PASS**
Gusset Shear Rupture	1142.95 lbs	468913.11 lbs	**0.00**	**PASS**
Gusset Axial Yield	229.00 lbs	582099.04 lbs	**0.00**	**PASS**
Gusset Tensile Rupture	229.00 lbs	781521.86 lbs	**0.00**	**PASS**
Gusset Flexural Yield			**0.00**	**PASS**
Gusset Flexural Rupture			**0.00**	**PASS**
Column Weld Strength	1165.66 lbs	266759.46 lbs	**0.00**	**PASS**
Column Web Bending	238.11 lb-ft	278768.17 lb-ft	**0.00**	**PASS**
HSS Punching Shear	238.11 lb-ft	215515.78 lb-ft	**0.00**	**PASS**
HSS Column Transverse Plastification	229.00 lbs	171322.63 lbs	**0.00**	**PASS**

M225 J: Gusset/Brace Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x11.52x24.45	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Brace Axial	-1280.66 lbs	*Brace Axial (tension)*

Governing LC: 3D - 28 - LC 28: dl+sln+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Brace Weld Limitations				**PASS**
Gusset Plate Tensile Yield (Whitmore)	1280.66 lbs	121500.00 lbs	**0.01**	**PASS**
Gusset Plate Tensile Rupture (Whitmore)	1280.66 lbs	163125.00 lbs	**0.01**	**PASS**
Brace Tensile Yield	1280.66 lbs	193500.00 lbs	**0.01**	**PASS**
Brace Tensile Rupture	1280.66 lbs	143283.45 lbs	**0.01**	**PASS**
Brace Weld Strength	1280.66 lbs	234005.62 lbs	**0.01**	**PASS**

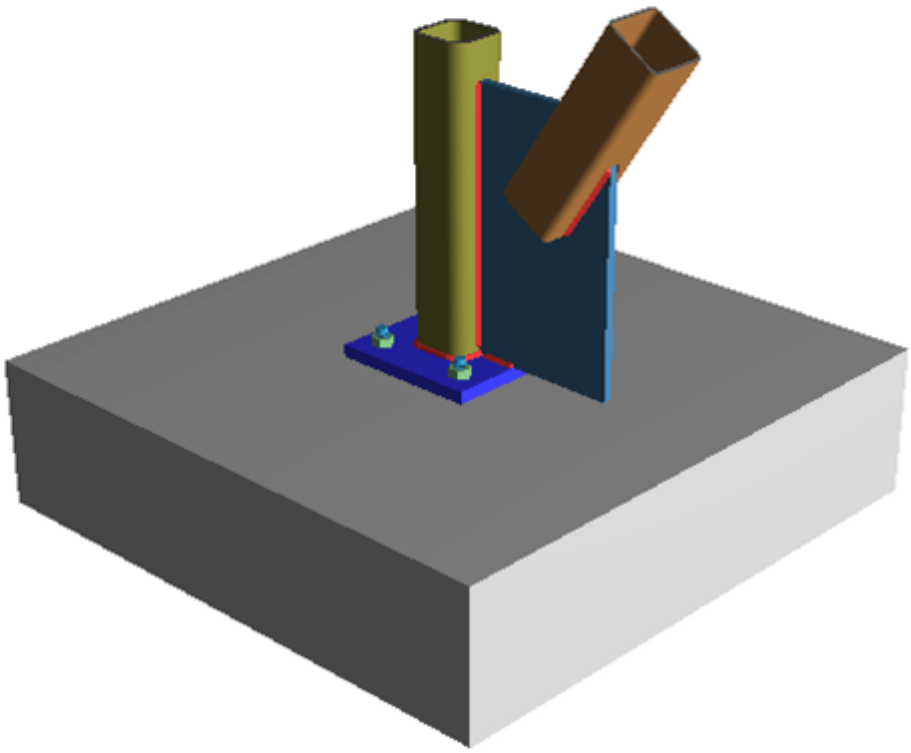
M225 J: Connection Properties Report

Connection	
Connection Title	M225 J
Connection Type	Brace to Column Base Plate Connection
Connection Category	
Gusset to Column Orientation	Weak Axis
Brace Location	Right
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Brace Axial	-1280.665 lbs
Column Axial	2901.088 lbs
Column Strong Axis Shear	-38.446 lbs
Column Weak Axis Shear	-0.634 lbs
Column Strong Axis Moment	0.000 lb-ft
Column Weak Axis Moment	0.000 lb-ft
Qf	1.000 Coeff
Components	
Brace Section	HSS5X5X4
Material	A500 Gr.C
Member Orientation	Long Side Vertical
Column Section	HSS5X5X8
Material	A500 Gr.C
Gusset	P0.75x11.52x24.45
Material	A36
Tapered ?	No
Thickness	0.750 in
Width	11.522 in
Length	24.455 in
Base Plate	P1.00x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	1.000 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Anchor Bolts	1" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	1"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Brace-Gusset Connection	

continued on next page...

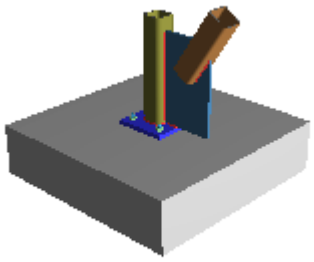
M225 J: Connection Properties Report (continued):

Connection Type	Slotted Around Gusset
Brace Gusset Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Gusset-Column Connection	
Type	Direct Weld
Column Weld	E70
Type	Double Fillet
Fillet Size	5.000 Sixteenths
Gusset-Base Plate Connection	
Type	Direct Weld
Gusset Baseplate Weld	E70
Type	Double Fillet
Fillet Size	4.000 Sixteenths
Assembly	
Auto-Update Connection	No
WorkPoint Location	Concentric
Brace Clearance	3.000 in
Brace WorkPoint Distance	17.138 in
Brace/Gusset Overlap	9.000 in
Gusset Clip	
Horizontal Clip	4.462 in
Vertical Clip	2.256 in
Brace/Clip Edge Dist	0.000 in
Gusset to Column Clip	
Vertical Clip	0.500 in
Horizontal Clip	0.500 in
Brace Angle from Vertical	26.816
Edge Distance y	1.500 in
Edge Distance z	1.500 in



M191 I: Summary Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x12.13x21.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

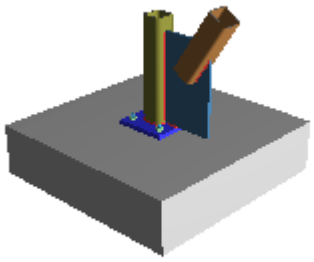
Input Data:		
Brace Axial	3121.04 lbs	*Brace Axial (compression)*
Column Axial	1771.50 lbs	*Axial load on the column*
Column Strong Axis Shear	19.99 lbs	*Shear load on the column that causes strong axis bending*
Column Weak Axis Shear	30.23 lbs	*Shear load on the column that causes weak axis bending*
Column Strong Axis Moment	-318.42 lb-ft	*Column moment about the strong axis*
Column Weak Axis Moment	-6.22 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 58 - LC 58: dl+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.94**	**PASS**
Gusset/Column connection	Column Weld Strength	**0.01**	**PASS**
Gusset/Brace connection	Brace Weld Strength	**0.02**	**PASS**

M191 I: Base Plate Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x12.13x21.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Design Axial	4377.14 lbs	*Axial load on the column*
Design Strong Axis Shear	-1698.01 lbs	*Shear load on the column that causes strong axis bending*
Design Weak Axis Shear	30.23 lbs	*Shear load on the column that causes weak axis bending*
Design Strong Axis Moment	-318.42 lb-ft	*Column moment about the strong axis*
Design Weak Axis Moment	-6.22 lb-ft	*Column moment about the weak axis*

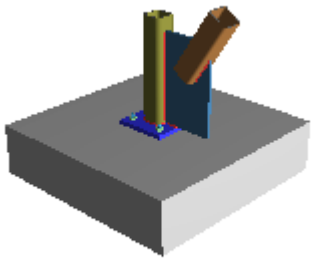
Governing LC: 3D - 58 - LC 58: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Loading at Base Plate				**n/a**
Load Distribution (Strong Axis)				**n/a**
Load Distribution (Weak Axis)				**n/a**
Gusset Shear Yield	1112.04 lbs	188380.77 lbs	**0.01**	**PASS**
Gusset Shear Rupture	1112.04 lbs	227626.76 lbs	**0.00**	**PASS**
Concrete Bearing			**0.01**	**PASS**
Lateral Slip			**0.94**	**PASS**
Plate Flexural Yielding(Compression)(Strong Axis)	19.48 lb-ft/in	675.00 lb-ft/in	**0.03**	**PASS**
Plate Flexural Yielding(Compression)(Weak Axis)	16.69 lb-ft/in	675.00 lb-ft/in	**0.02**	**PASS**
Column Weld Limitations				**PASS**
Weld Limitations at Gusset				**PASS**
Column Flange Weld Strength	1376.80 lbs/ft	83520.00 lbs/ft	**0.02**	**PASS**
Column Web Weld Strength	1120.01 lbs/ft	83520.00 lbs/ft	**0.01**	**PASS**
Gusset Weld Strength	1112.04 lbs	41760.00 lbs	**0.03**	**PASS**

M191 I: Gusset/Column Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x12.13x21.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	2605.64 lbs	*Calculated Shear Load*
Axial Load	605.96 lbs	*Calculated Axial Load (compression)*
Moment Load	0.00 lb-ft	*Calculated Moment*

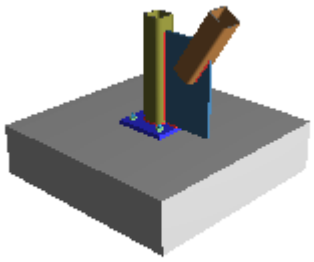
Governing LC: 3D - 58 - LC 58: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
HSS Limitations				**PASS**
Column Weld Limitations				**PASS**
Loading at Gusset to Column				**n/a**
Gusset Shear Yield	2605.64 lbs	332100.00 lbs	**0.01**	**PASS**
Gusset Shear Rupture	2605.64 lbs	401287.50 lbs	**0.01**	**PASS**
Gusset Axial Yield	605.96 lbs	498150.00 lbs	**0.00**	**PASS**
Gusset Flexural Yield			**0.00**	**PASS**
Gusset Flexural Rupture			**0.00**	**PASS**
Column Weld Strength	2605.64 lbs	228288.00 lbs	**0.01**	**PASS**
Column Web Bending	542.84 lb-ft	210596.49 lb-ft	**0.00**	**PASS**
HSS Punching Shear	542.84 lb-ft	158925.38 lb-ft	**0.00**	**PASS**
HSS Column Transverse Plastification	605.96 lbs	153746.38 lbs	**0.00**	**PASS**

M191 I: Gusset/Brace Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x12.13x21.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Brace Axial	3121.04 lbs	*Brace Axial (compression)*

Governing LC: 3D - 58 - LC 58: dl+wl

Note: Unless specified, all code references are from AISC 360-16

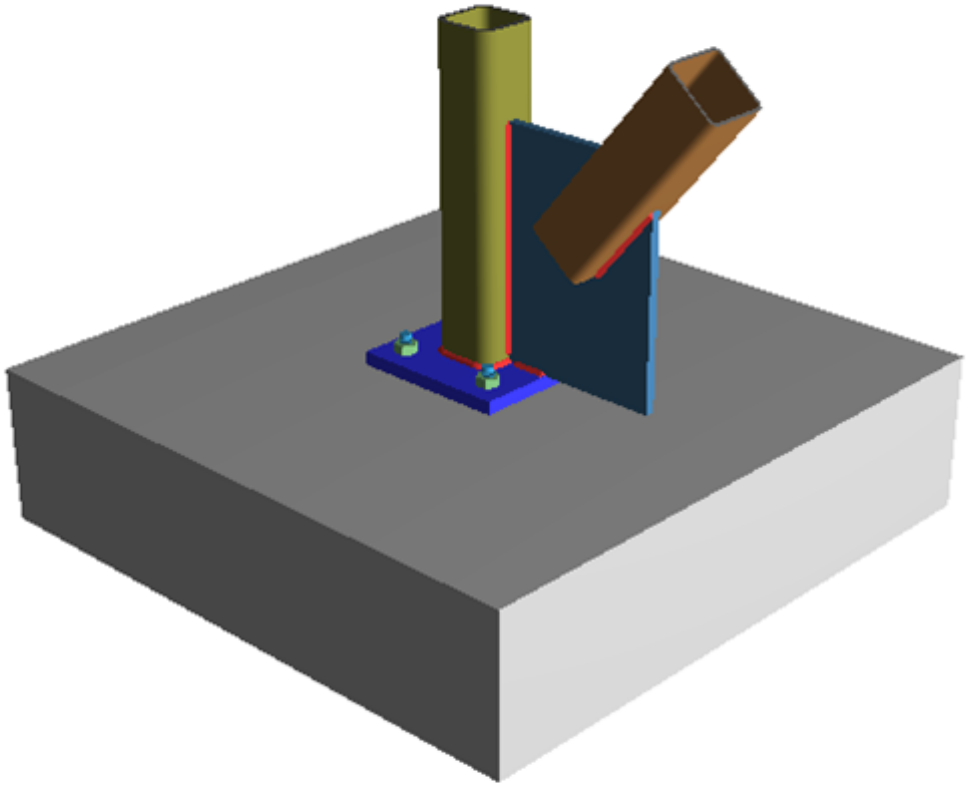
Limit State	Required	Available	Unity Check	Result
Brace Weld Limitations				**PASS**
Gusset Plate Compression (Whitmore)	3121.04 lbs	312155.01 lbs	**0.01**	**PASS**
Brace Weld Strength	3121.04 lbs	186771.18 lbs	**0.02**	**PASS**

Connection	
Connection Title	M191 I
Connection Type	Brace to Column Base Plate Connection
Connection Category	
Gusset to Column Orientation	Strong Axis
Brace Location	Front
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Brace Axial	3121.039 lbs
Column Axial	1771.499 lbs
Column Strong Axis Shear	19.994 lbs
Column Weak Axis Shear	30.226 lbs
Column Strong Axis Moment	-318.424 lb-ft
Column Weak Axis Moment	-6.219 lb-ft
Qf	1.000 Coeff
Components	
Brace Section	HSS5X5X4
Material	A500 Gr.C
Member Orientation	Long Side Vertical
Column Section	HSS5X5X8
Material	A500 Gr.C
Gusset	P0.75x12.13x21.00
Material	A36
Tapered ?	No
Thickness	0.750 in
Width	12.128 in
Length	21.000 in
Base Plate	P1.00x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	1.000 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Anchor Bolts	1" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	1"
Embedment depth	9.000 in
Bolt Spacing y	8.000 in
Bolt Spacing z	8.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Brace-Gusset Connection	

continued on next page...

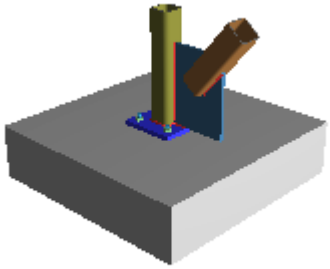
M191 I: Connection Properties Report (continued):

Connection Type	Slotted Around Gusset
Brace Gusset Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Gusset-Column Connection	
Type	Direct Weld
Column Weld	E70
Type	Double Fillet
Fillet Size	5.000 Sixteenths
Gusset-Base Plate Connection	
Type	Direct Weld
Gusset Baseplate Weld	E70
Type	Double Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Auto-Update Connection	No
WorkPoint Location	Concentric
Brace Clearance	4.000 in
Brace WorkPoint Distance	15.600 in
Brace/Gusset Overlap	7.183 in
Gusset Clip	
Horizontal Clip	4.174 in
Vertical Clip	2.752 in
Brace/Clip Edge Dist	0.332 in
Gusset to Column Clip	
Vertical Clip	0.500 in
Horizontal Clip	0.500 in
Brace Angle from Vertical	33.399
Edge Distance y	2.000 in
Edge Distance z	2.000 in



M193 I: Summary Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x12.58x17.56	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

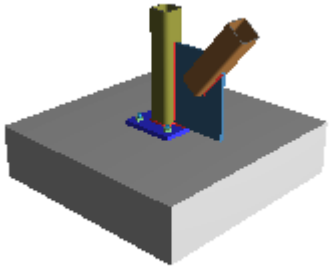
Input Data:		
Brace Axial	6154.39 lbs	*Brace Axial (compression)*
Column Axial	5226.90 lbs	*Axial load on the column*
Column Strong Axis Shear	33.87 lbs	*Shear load on the column that causes strong axis bending*
Column Weak Axis Shear	-13.15 lbs	*Shear load on the column that causes weak axis bending*
Column Strong Axis Moment	-0.00 lb-ft	*Column moment about the strong axis*
Column Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 33 - LC 33: dl+wl+rll

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.94**	**PASS**
Gusset/Column connection	Column Weld Strength	**0.03**	**PASS**
Gusset/Brace connection	Brace Weld Strength	**0.03**	**PASS**

M193 I: Base Plate Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x12.58x17.56	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Design Axial	9978.23 lbs	*Axial load on the column*
Design Strong Axis Shear	-3877.84 lbs	*Shear load on the column that causes strong axis bending*
Design Weak Axis Shear	-13.15 lbs	*Shear load on the column that causes weak axis bending*
Design Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Design Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

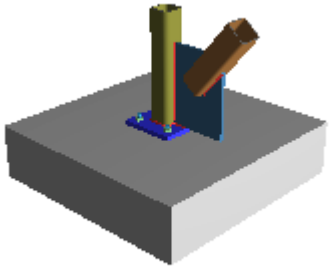
Governing LC: 3D - 33 - LC 33: dl+wl+rll

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Loading at Base Plate				**n/a**
Gusset Shear Yield	2596.43 lbs	195703.66 lbs	**0.01**	**PASS**
Gusset Shear Rupture	2596.43 lbs	236475.26 lbs	**0.01**	**PASS**
Concrete Bearing	0.07 ksi	4.42 ksi	**0.02**	**PASS**
Lateral Slip	3877.86 lbs	4116.02 lbs	**0.94**	**PASS**
Plate Flexural Yielding(Compression)	37.94 lb-ft/in	675.00 lb-ft/in	**0.06**	**PASS**
Column Weld Limitations				**PASS**
Weld Limitations at Gusset				**PASS**
Column Flange Weld Strength	25.13 lbs/ft	83520.00 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	2448.56 lbs/ft	83520.00 lbs/ft	**0.03**	**PASS**
Gusset Weld Strength	2596.43 lbs	41760.00 lbs	**0.06**	**PASS**

M193 I: Gusset/Column Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x12.58x17.56	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	4751.33 lbs	*Calculated Shear Load*
Axial Load	1315.28 lbs	*Calculated Axial Load (compression)*
Moment Load	0.00 lb-ft	*Calculated Moment*

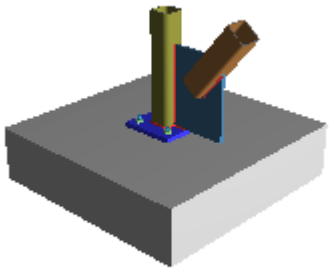
Governing LC: 3D - 33 - LC 33: dl+wl+rll

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
HSS Limitations				**PASS**
Column Weld Limitations				**PASS**
Loading at Gusset to Column				**n/a**
Gusset Shear Yield	4751.33 lbs	276405.18 lbs	**0.02**	**PASS**
Gusset Shear Rupture	4751.33 lbs	333989.59 lbs	**0.01**	**PASS**
Gusset Axial Yield	1315.28 lbs	414607.77 lbs	**0.00**	**PASS**
Gusset Flexural Yield			**0.00**	**PASS**
Gusset Flexural Rupture			**0.00**	**PASS**
Column Weld Strength	4751.33 lbs	190002.97 lbs	**0.03**	**PASS**
Column Web Bending	989.86 lb-ft	152197.04 lb-ft	**0.01**	**PASS**
HSS Punching Shear	989.86 lb-ft	111148.85 lb-ft	**0.01**	**PASS**
HSS Column Transverse Plastification	1315.28 lbs	136255.29 lbs	**0.01**	**PASS**

M193 I: Gusset/Brace Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x12.58x17.56	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Brace Axial	6154.39 lbs	*Brace Axial (compression)*

Governing LC: 3D - 33 - LC 33: dl+wl+rll

Note: Unless specified, all code references are from AISC 360-16

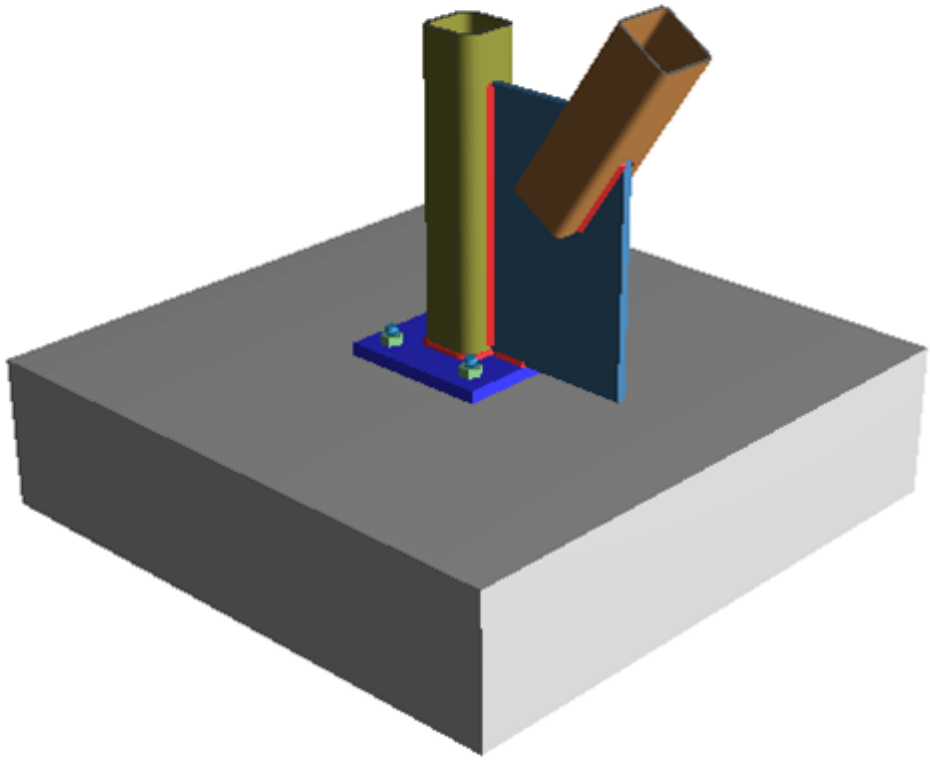
Limit State	Required	Available	Unity Check	Result
Brace Weld Limitations				**PASS**
Gusset Plate Compression (Whitmore)	6154.39 lbs	329886.68 lbs	**0.02**	**PASS**
Brace Weld Strength	6154.39 lbs	193098.14 lbs	**0.03**	**PASS**

Connection	
Connection Title	M193 I
Connection Type	Brace to Column Base Plate Connection
Connection Category	
Gusset to Column Orientation	Strong Axis
Brace Location	Front
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Brace Axial	6154.392 lbs
Column Axial	5226.901 lbs
Column Strong Axis Shear	33.867 lbs
Column Weak Axis Shear	-13.153 lbs
Column Strong Axis Moment	0.000 lb-ft
Column Weak Axis Moment	0.000 lb-ft
Qf	1.000 Coeff
Components	
Brace Section	HSS5X5X4
Material	A500 Gr.C
Member Orientation	Long Side Vertical
Column Section	HSS5X5X8
Material	A500 Gr.C
Gusset	P0.75x12.58x17.56
Material	A36
Tapered ?	No
Thickness	0.750 in
Width	12.580 in
Length	17.562 in
Base Plate	P1.00x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	1.000 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Anchor Bolts	1" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	1"
Embedment depth	9.000 in
Bolt Spacing y	8.000 in
Bolt Spacing z	8.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Brace-Gusset Connection	

continued on next page...

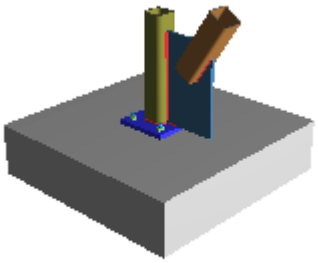
M193 I: Connection Properties Report (continued):

Connection Type	Slotted Around Gusset
Brace Gusset Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Gusset-Column Connection	
Type	Direct Weld
Column Weld	E70
Type	Double Fillet
Fillet Size	5.000 Sixteenths
Gusset-Base Plate Connection	
Type	Direct Weld
Gusset Baseplate Weld	E70
Type	Double Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Auto-Update Connection	No
WorkPoint Location	Concentric
Brace Clearance	4.000 in
Brace WorkPoint Distance	13.263 in
Brace/Gusset Overlap	7.427 in
Gusset Clip	
Horizontal Clip	3.860 in
Vertical Clip	3.178 in
Brace/Clip Edge Dist	0.000 in
Gusset to Column Clip	
Vertical Clip	0.500 in
Horizontal Clip	0.500 in
Brace Angle from Vertical	39.464
Edge Distance y	2.000 in
Edge Distance z	2.000 in



M212 I: Summary Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x12.13x20.40	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

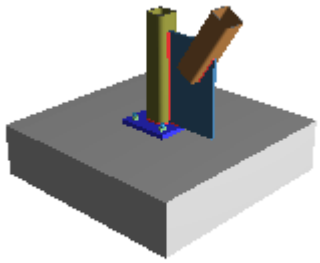
Input Data:		
Brace Axial	3597.79 lbs	*Brace Axial (compression)*
Column Axial	2114.64 lbs	*Axial load on the column*
Column Strong Axis Shear	5.81 lbs	*Shear load on the column that causes strong axis bending*
Column Weak Axis Shear	-13.06 lbs	*Shear load on the column that causes weak axis bending*
Column Strong Axis Moment	-0.00 lb-ft	*Column moment about the strong axis*
Column Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 52 - LC 52: dl+wl+sln

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.94**	**PASS**
Gusset/Column connection	Column Weld Strength	**0.01**	**PASS**
Gusset/Brace connection	Brace Weld Strength	**0.02**	**PASS**

M212 I: Base Plate Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x12.13x20.40	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Design Axial	5118.30 lbs	*Axial load on the column*
Design Strong Axis Shear	-1974.63 lbs	*Shear load on the column that causes strong axis bending*
Design Weak Axis Shear	-13.06 lbs	*Shear load on the column that causes weak axis bending*
Design Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Design Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

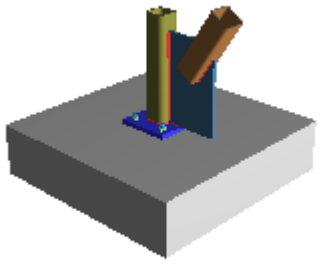
Governing LC: 3D - 52 - LC 52: dl+wl+sln

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Loading at Base Plate				**n/a**
Gusset Shear Yield	1261.76 lbs	188380.77 lbs	**0.01**	**PASS**
Gusset Shear Rupture	1261.76 lbs	227626.76 lbs	**0.01**	**PASS**
Concrete Bearing	0.04 ksi	4.42 ksi	**0.01**	**PASS**
Lateral Slip	1974.67 lbs	2111.30 lbs	**0.94**	**PASS**
Plate Flexural Yielding(Compression)	19.46 lb-ft/in	675.00 lb-ft/in	**0.03**	**PASS**
Column Weld Limitations				**PASS**
Weld Limitations at Gusset				**PASS**
Column Flange Weld Strength	24.95 lbs/ft	83520.00 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	1362.17 lbs/ft	83520.00 lbs/ft	**0.02**	**PASS**
Gusset Weld Strength	1261.76 lbs	41760.00 lbs	**0.03**	**PASS**

M212 I: Gusset/Column Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x12.13x20.40	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	3003.66 lbs	*Calculated Shear Load*
Axial Load	718.68 lbs	*Calculated Axial Load (compression)*
Moment Load	0.00 lb-ft	*Calculated Moment*

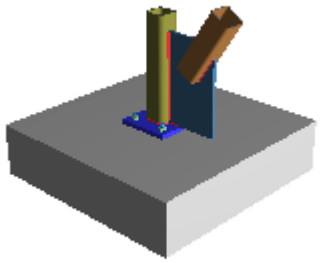
Governing LC: 3D - 52 - LC 52: dl+wl+sln

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
HSS Limitations				**PASS**
Column Weld Limitations				**PASS**
Loading at Gusset to Column				**n/a**
Gusset Shear Yield	3003.66 lbs	322332.72 lbs	**0.01**	**PASS**
Gusset Shear Rupture	3003.66 lbs	389485.37 lbs	**0.01**	**PASS**
Gusset Axial Yield	718.68 lbs	483499.08 lbs	**0.00**	**PASS**
Gusset Flexural Yield			**0.00**	**PASS**
Gusset Flexural Rupture			**0.00**	**PASS**
Column Weld Strength	3003.66 lbs	221573.90 lbs	**0.01**	**PASS**
Column Web Bending	625.76 lb-ft	199673.82 lb-ft	**0.00**	**PASS**
HSS Punching Shear	625.76 lb-ft	149930.75 lb-ft	**0.00**	**PASS**
HSS Column Transverse Plastification	718.68 lbs	150678.94 lbs	**0.00**	**PASS**

M212 I: Gusset/Brace Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x12.13x20.40	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Brace Axial	3597.79 lbs	*Brace Axial (compression)*

Governing LC: 3D - 52 - LC 52: dl+wl+sln

Note: Unless specified, all code references are from AISC 360-16

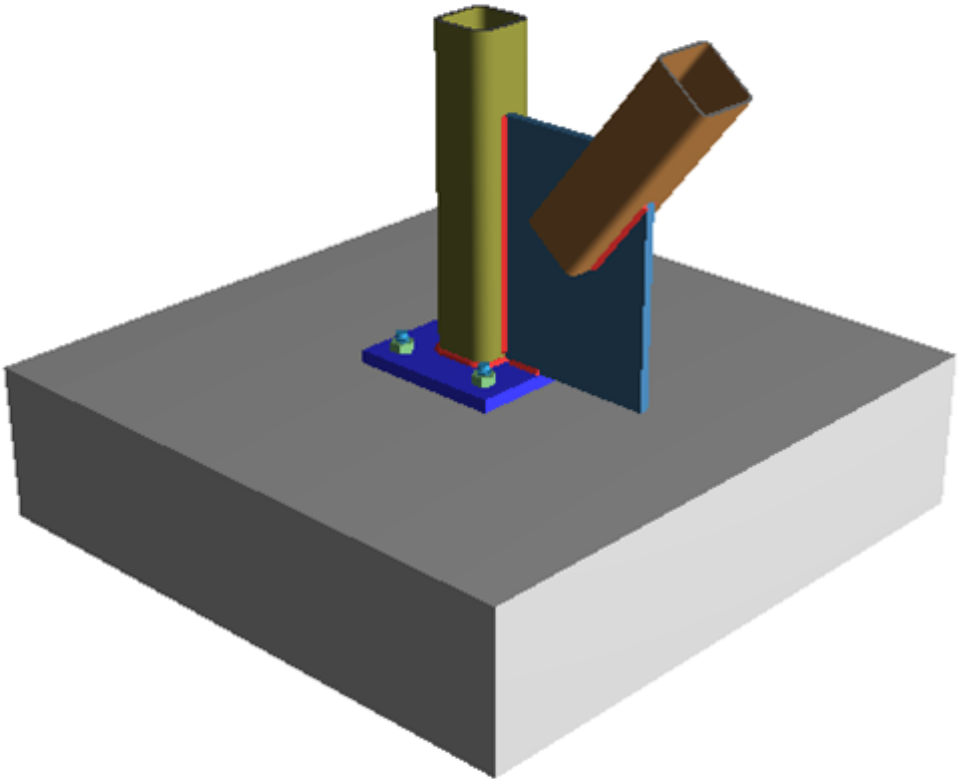
Limit State	Required	Available	Unity Check	Result
Brace Weld Limitations				**PASS**
Gusset Plate Compression (Whitmore)	3597.79 lbs	312155.01 lbs	**0.01**	**PASS**
Brace Weld Strength	3597.79 lbs	186771.18 lbs	**0.02**	**PASS**

Connection	
Connection Title	M212 I
Connection Type	Brace to Column Base Plate Connection
Connection Category	
Gusset to Column Orientation	Strong Axis
Brace Location	Front
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Brace Axial	3597.789 lbs
Column Axial	2114.640 lbs
Column Strong Axis Shear	5.808 lbs
Column Weak Axis Shear	-13.059 lbs
Column Strong Axis Moment	0.000 lb-ft
Column Weak Axis Moment	0.000 lb-ft
Qf	1.000 Coeff
Components	
Brace Section	HSS5X5X4
Material	A500 Gr.C
Member Orientation	Long Side Vertical
Column Section	HSS5X5X8
Material	A500 Gr.C
Gusset	P0.75x12.13x20.40
Material	A36
Tapered ?	No
Thickness	0.750 in
Width	12.128 in
Length	20.397 in
Base Plate	P1.00x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	1.000 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Anchor Bolts	1" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	1"
Embedment depth	9.000 in
Bolt Spacing y	8.000 in
Bolt Spacing z	8.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Brace-Gusset Connection	

continued on next page...

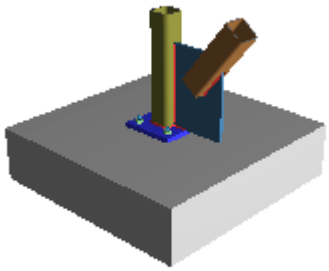
M212 I: Connection Properties Report (continued):

Connection Type	Slotted Around Gusset
Brace Gusset Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Gusset-Column Connection	
Type	Direct Weld
Column Weld	E70
Type	Double Fillet
Fillet Size	5.000 Sixteenths
Gusset-Base Plate Connection	
Type	Direct Weld
Gusset Baseplate Weld	E70
Type	Double Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Auto-Update Connection	No
WorkPoint Location	Concentric
Brace Clearance	4.000 in
Brace WorkPoint Distance	15.600 in
Brace/Gusset Overlap	7.183 in
Gusset Clip	
Horizontal Clip	4.174 in
Vertical Clip	2.752 in
Brace/Clip Edge Dist	0.000 in
Gusset to Column Clip	
Vertical Clip	0.500 in
Horizontal Clip	0.500 in
Brace Angle from Vertical	33.399
Edge Distance y	2.000 in
Edge Distance z	2.000 in



M224 I: Summary Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x12.51x18.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

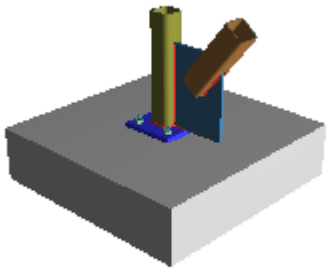
Input Data:		
Brace Axial	6082.61 lbs	*Brace Axial (compression)*
Column Axial	4725.98 lbs	*Axial load on the column*
Column Strong Axis Shear	3.36 lbs	*Shear load on the column that causes strong axis bending*
Column Weak Axis Shear	77.45 lbs	*Shear load on the column that causes weak axis bending*
Column Strong Axis Moment	-0.00 lb-ft	*Column moment about the strong axis*
Column Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 8 - LC 8: dl+rll+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.97**	**PASS**
Gusset/Column connection	Column Weld Strength	**0.02**	**PASS**
Gusset/Brace connection	Brace Weld Strength	**0.03**	**PASS**

M224 I: Base Plate Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x12.51x18.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Design Axial	9489.71 lbs	*Axial load on the column*
Design Strong Axis Shear	-3778.84 lbs	*Shear load on the column that causes strong axis bending*
Design Weak Axis Shear	77.45 lbs	*Shear load on the column that causes weak axis bending*
Design Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Design Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

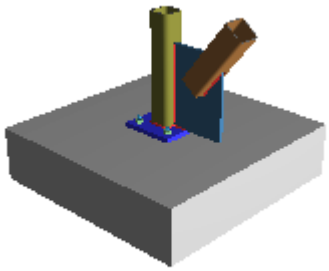
Governing LC: 3D - 8 - LC 8: dl+rll+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Loading at Base Plate				**n/a**
Gusset Shear Yield	2494.45 lbs	194596.11 lbs	**0.01**	**PASS**
Gusset Shear Rupture	2494.45 lbs	235136.97 lbs	**0.01**	**PASS**
Concrete Bearing	0.07 ksi	4.42 ksi	**0.01**	**PASS**
Lateral Slip	3779.63 lbs	3914.50 lbs	**0.97**	**PASS**
Plate Flexural Yielding(Compression)	36.08 lb-ft/in	675.00 lb-ft/in	**0.05**	**PASS**
Column Weld Limitations				**PASS**
Weld Limitations at Gusset				**PASS**
Column Flange Weld Strength	148.00 lbs/ft	83520.00 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	2454.23 lbs/ft	83520.00 lbs/ft	**0.03**	**PASS**
Gusset Weld Strength	2494.45 lbs	41760.00 lbs	**0.06**	**PASS**

M224 I: Gusset/Column Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x12.51x18.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	4763.73 lbs	*Calculated Shear Load*
Axial Load	1287.74 lbs	*Calculated Axial Load (compression)*
Moment Load	0.00 lb-ft	*Calculated Moment*

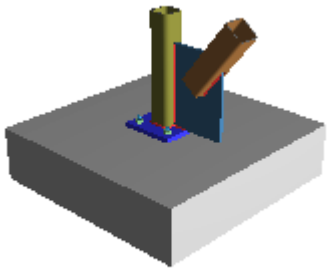
Governing LC: 3D - 8 - LC 8: dl+rll+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
HSS Limitations				**PASS**
Column Weld Limitations				**PASS**
Loading at Gusset to Column				**n/a**
Gusset Shear Yield	4763.73 lbs	283442.12 lbs	**0.02**	**PASS**
Gusset Shear Rupture	4763.73 lbs	342492.57 lbs	**0.01**	**PASS**
Gusset Axial Yield	1287.74 lbs	425163.19 lbs	**0.00**	**PASS**
Gusset Flexural Yield			**0.00**	**PASS**
Gusset Flexural Rupture			**0.00**	**PASS**
Column Weld Strength	4763.73 lbs	194840.22 lbs	**0.02**	**PASS**
Column Web Bending	992.44 lb-ft	159055.86 lb-ft	**0.01**	**PASS**
HSS Punching Shear	992.44 lb-ft	116715.16 lb-ft	**0.01**	**PASS**
HSS Column Transverse Plastification	1287.74 lbs	138465.26 lbs	**0.01**	**PASS**

M224 I: Gusset/Brace Report

Brace to Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P1.00x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Brace	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Gusset	P0.75x12.51x18.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Brace Axial	6082.61 lbs	*Brace Axial (compression)*

Governing LC: 3D - 8 - LC 8: dl+rll+wl

Note: Unless specified, all code references are from AISC 360-16

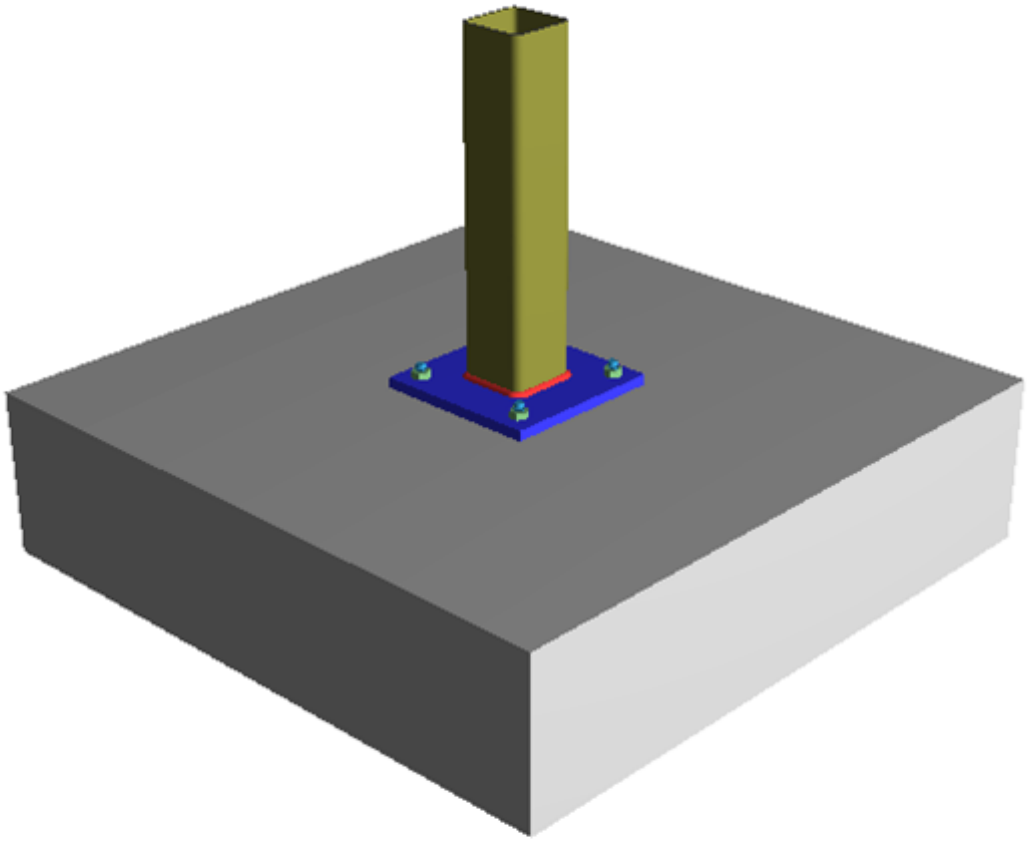
Limit State	Required	Available	Unity Check	Result
Brace Weld Limitations				**PASS**
Gusset Plate Compression (Whitmore)	6082.61 lbs	328907.57 lbs	**0.02**	**PASS**
Brace Weld Strength	6082.61 lbs	192190.87 lbs	**0.03**	**PASS**

Connection	
Connection Title	M224 I
Connection Type	Brace to Column Base Plate Connection
Connection Category	
Gusset to Column Orientation	Strong Axis
Brace Location	Front
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Brace Axial	6082.611 lbs
Column Axial	4725.978 lbs
Column Strong Axis Shear	3.362 lbs
Column Weak Axis Shear	77.454 lbs
Column Strong Axis Moment	0.000 lb-ft
Column Weak Axis Moment	0.000 lb-ft
Qf	1.000 Coeff
Components	
Brace Section	HSS5X5X4
Material	A500 Gr.C
Member Orientation	Long Side Vertical
Column Section	HSS5X5X8
Material	A500 Gr.C
Gusset	P0.75x12.51x18.00
Material	A36
Tapered ?	No
Thickness	0.750 in
Width	12.512 in
Length	17.996 in
Base Plate	P1.00x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	1.000 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Anchor Bolts	1" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	1"
Embedment depth	9.000 in
Bolt Spacing y	8.000 in
Bolt Spacing z	8.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Brace-Gusset Connection	

continued on next page...

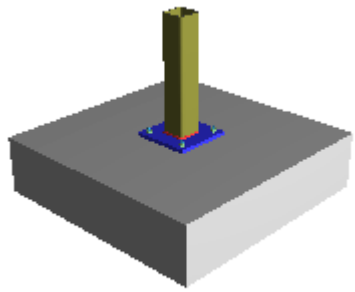
M224 I: Connection Properties Report (continued):

Connection Type	Slotted Around Gusset
Brace Gusset Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Gusset-Column Connection	
Type	Direct Weld
Column Weld	E70
Type	Double Fillet
Fillet Size	5.000 Sixteenths
Gusset-Base Plate Connection	
Type	Direct Weld
Gusset Baseplate Weld	E70
Type	Double Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Auto-Update Connection	No
WorkPoint Location	Concentric
Brace Clearance	4.000 in
Brace WorkPoint Distance	13.602 in
Brace/Gusset Overlap	7.392 in
Gusset Clip	
Horizontal Clip	3.916 in
Vertical Clip	3.109 in
Brace/Clip Edge Dist	0.000 in
Gusset to Column Clip	
Vertical Clip	0.500 in
Horizontal Clip	0.500 in
Brace Angle from Vertical	38.448
Edge Distance y	2.000 in
Edge Distance z	2.000 in



column4 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

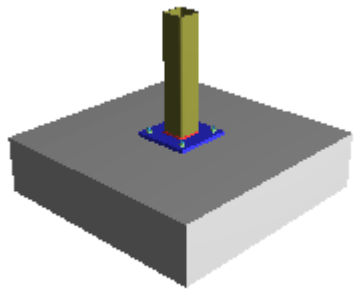
Input Data:		
Axial	627.68 lbs	*Axial load on the column*
Strong Axis Shear	-71.89 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-1.16 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 53 - LC 53: dl+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.28**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Strong Axis)	**0.01**	**PASS**

column4 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	627.68 lbs	*Axial load on the column*
Strong Axis Shear	-71.89 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-1.16 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

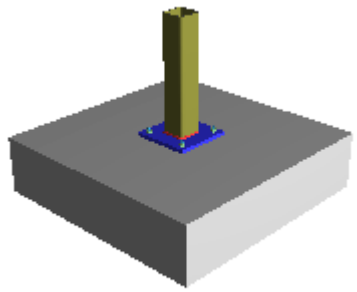
Governing LC: 3D - 53 - LC 53: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.00 ksi	4.42 ksi	**0.00**	**PASS**
Lateral Slip	71.90 lbs	258.92 lbs	**0.28**	**PASS**
Plate Flexural Yielding(Compression)	2.39 lb-ft/in	379.69 lb-ft/in	**0.01**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	1.71 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	106.03 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**

column4 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	627.68 lbs	*Axial load on the column*
Strong Axis Shear	-71.89 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-1.16 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

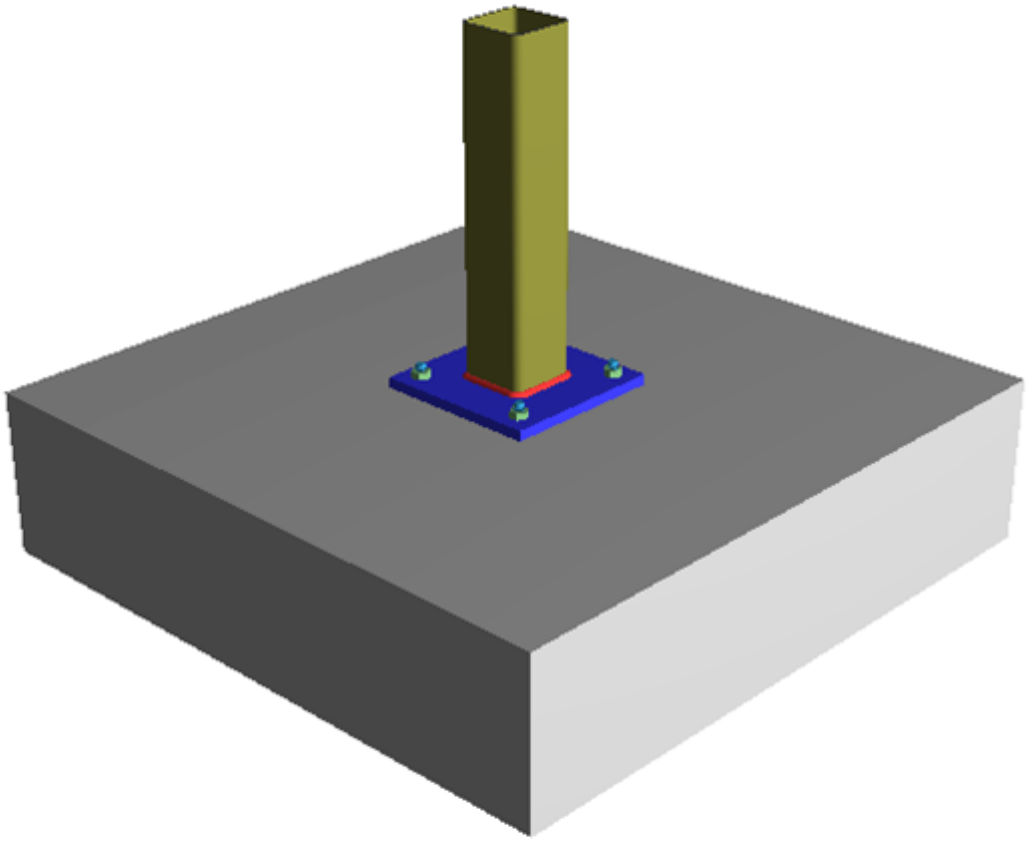
Governing LC: 3D - 53 - LC 53: dl+wl

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	35.95 lbs	7555.08 lbs	**0.00**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.01**	**PASS**
Concrete Pryout in Shear	35.95 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	71.90 lbs	57378.23 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

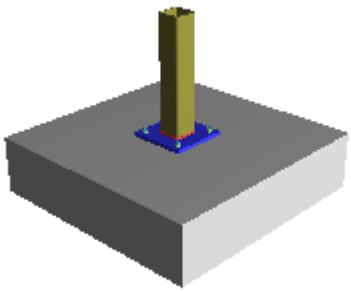
column4 I: Connection Properties Report

Connection	
Connection Title	column4 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	627.679 lbs
Strong Axis Shear	-71.887 lbs
Weak Axis Shear	-1.159 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X4
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M1 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

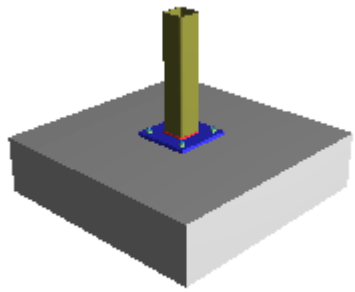
Input Data:		
Axial	659.74 lbs	*Axial load on the column*
Strong Axis Shear	-104.42 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	1.69 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 55 - LC 55: dl+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.38**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Strong Axis)	**0.01**	**PASS**

M1 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	659.74 lbs	*Axial load on the column*
Strong Axis Shear	-104.42 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	1.69 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

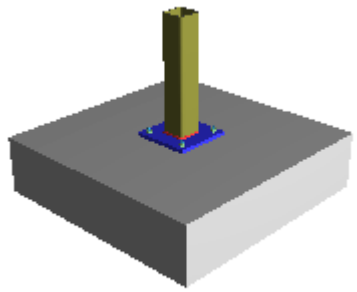
Governing LC: 3D - 55 - LC 55: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.00 ksi	4.42 ksi	**0.00**	**PASS**
Lateral Slip	104.43 lbs	272.14 lbs	**0.38**	**PASS**
Plate Flexural Yielding(Compression)	2.51 lb-ft/in	379.69 lb-ft/in	**0.01**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	2.49 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	154.01 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**

M1 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	659.74 lbs	*Axial load on the column*
Strong Axis Shear	-104.42 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	1.69 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

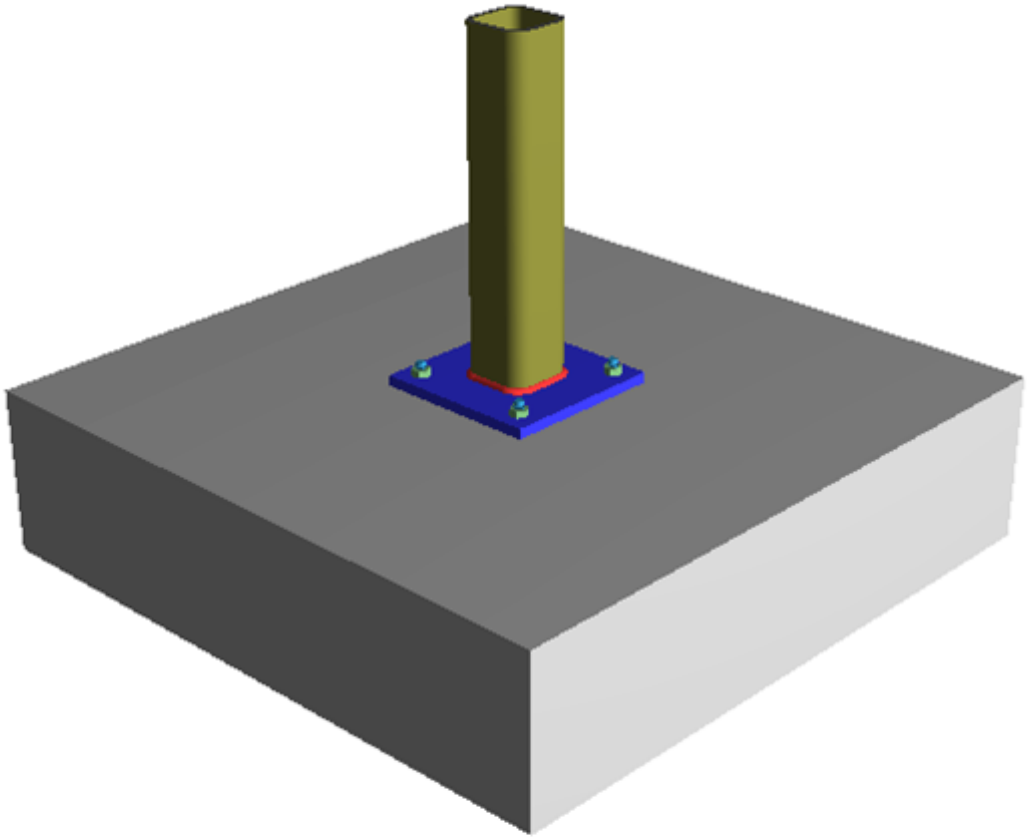
Governing LC: 3D - 55 - LC 55: dl+wl

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	52.22 lbs	7555.08 lbs	**0.01**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.01**	**PASS**
Concrete Pryout in Shear	52.22 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	104.43 lbs	57378.24 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

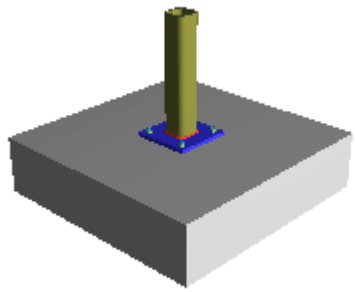
M1 I: Connection Properties Report

Connection	
Connection Title	M1 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	659.736 lbs
Strong Axis Shear	-104.417 lbs
Weak Axis Shear	1.686 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X4
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M14 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

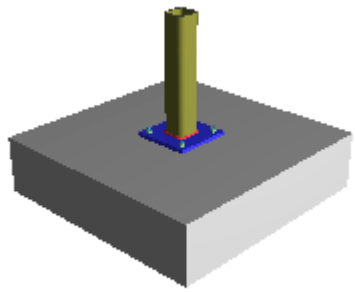
Input Data:		
Axial	1684.27 lbs	*Axial load on the column*
Strong Axis Shear	-188.28 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-52.79 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 55 - LC 55: dl+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.28**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Strong Axis)	**0.02**	**PASS**

M14 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	1684.27 lbs	*Axial load on the column*
Strong Axis Shear	-188.28 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-52.79 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

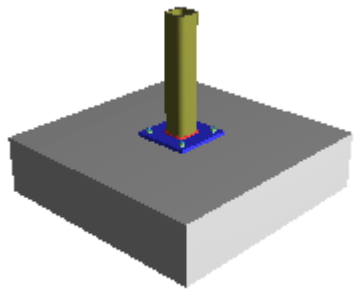
Governing LC: 3D - 55 - LC 55: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.01 ksi	4.42 ksi	**0.00**	**PASS**
Lateral Slip	195.54 lbs	694.76 lbs	**0.28**	**PASS**
Plate Flexural Yielding(Compression)	6.40 lb-ft/in	379.69 lb-ft/in	**0.02**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	100.88 lbs/ft	83520.00 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	359.76 lbs/ft	83520.00 lbs/ft	**0.00**	**PASS**

M14 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	1684.27 lbs	*Axial load on the column*
Strong Axis Shear	-188.28 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-52.79 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

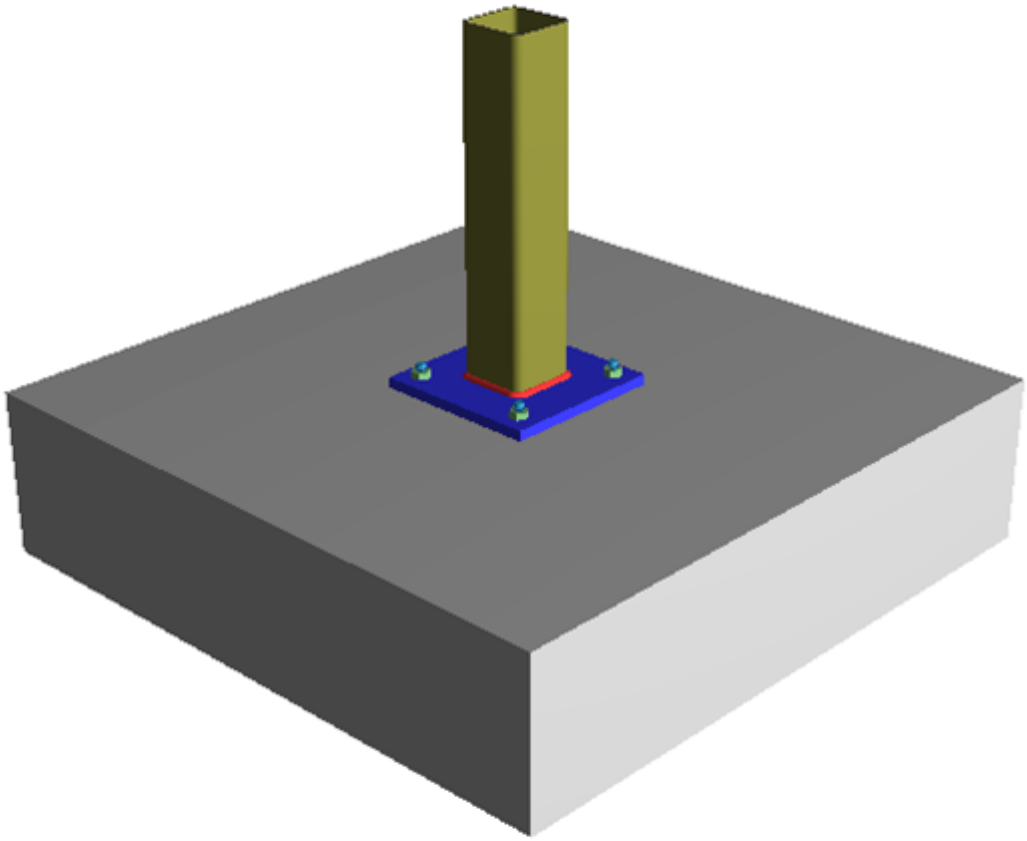
Governing LC: 3D - 55 - LC 55: dl+wl

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	97.77 lbs	7555.08 lbs	**0.01**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.01**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.02**	**PASS**
Concrete Pryout in Shear	97.77 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	195.54 lbs	57914.07 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

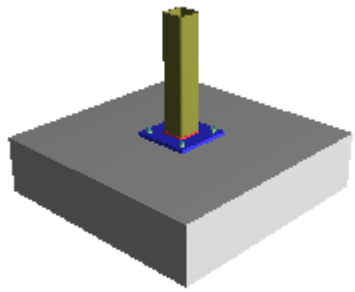
M14 I: Connection Properties Report

Connection	
Connection Title	M14 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	1684.269 lbs
Strong Axis Shear	-188.275 lbs
Weak Axis Shear	-52.794 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X8
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M15 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

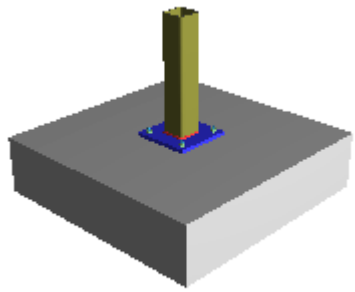
Input Data:		
Axial	19658.82 lbs	*Axial load on the column*
Strong Axis Shear	10.16 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	38.92 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 9 - LC 9: dl+rll+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Plate Flexural Yielding(Compression)	**0.20**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Weak Axis)	**0.00**	**PASS**

M15 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	19658.82 lbs	*Axial load on the column*
Strong Axis Shear	10.16 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	38.92 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

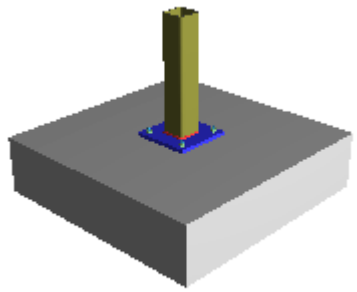
Governing LC: 3D - 9 - LC 9: dl+rll+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.14 ksi	4.42 ksi	**0.03**	**PASS**
Lateral Slip	40.22 lbs	8109.26 lbs	**0.00**	**PASS**
Plate Flexural Yielding(Compression)	74.75 lb-ft/in	379.69 lb-ft/in	**0.20**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	57.40 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	14.98 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**

M15 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	19658.82 lbs	*Axial load on the column*
Strong Axis Shear	10.16 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	38.92 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

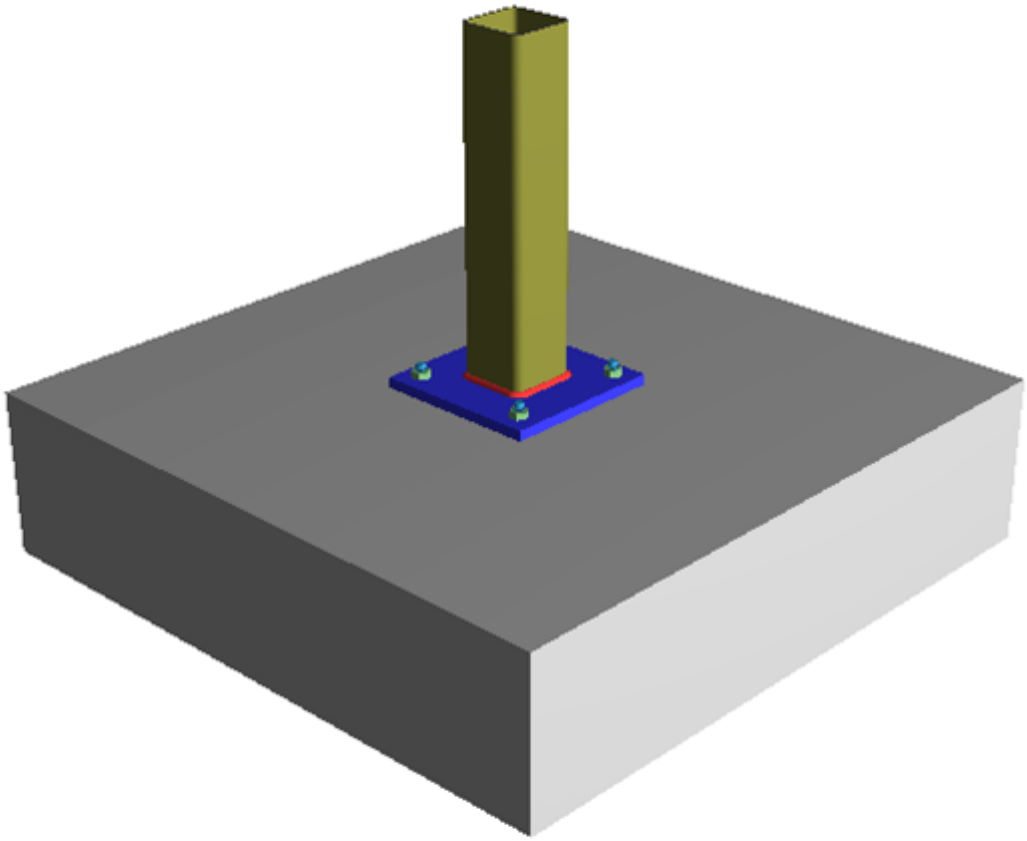
Governing LC: 3D - 9 - LC 9: dl+rll+wl

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	20.11 lbs	7555.08 lbs	**0.00**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Concrete Pryout in Shear	20.11 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	40.22 lbs	57845.10 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

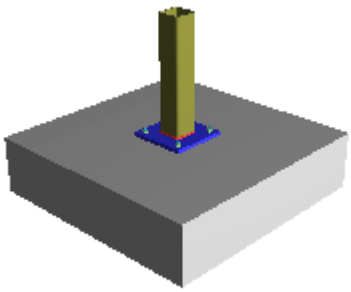
M15 I: Connection Properties Report

Connection	
Connection Title	M15 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	19658.822 lbs
Strong Axis Shear	10.158 lbs
Weak Axis Shear	38.920 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X4
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M16 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

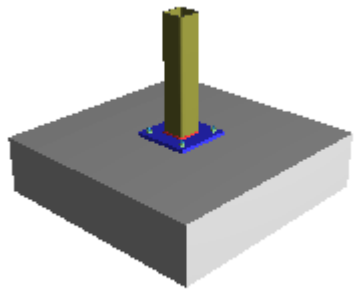
Input Data:		
Axial	16749.59 lbs	*Axial load on the column*
Strong Axis Shear	18.09 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-58.26 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 11 - LC 11: dl+rll+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Plate Flexural Yielding(Compression)	**0.17**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Weak Axis)	**0.00**	**PASS**

M16 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	16749.59 lbs	*Axial load on the column*
Strong Axis Shear	18.09 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-58.26 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

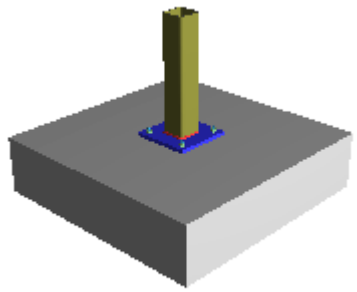
Governing LC: 3D - 11 - LC 11: dl+rll+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.12 ksi	4.42 ksi	**0.03**	**PASS**
Lateral Slip	61.00 lbs	6909.21 lbs	**0.01**	**PASS**
Plate Flexural Yielding(Compression)	63.69 lb-ft/in	379.69 lb-ft/in	**0.17**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	85.92 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	26.68 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**

M16 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	16749.59 lbs	*Axial load on the column*
Strong Axis Shear	18.09 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-58.26 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 11 - LC 11: dl+rll+wl

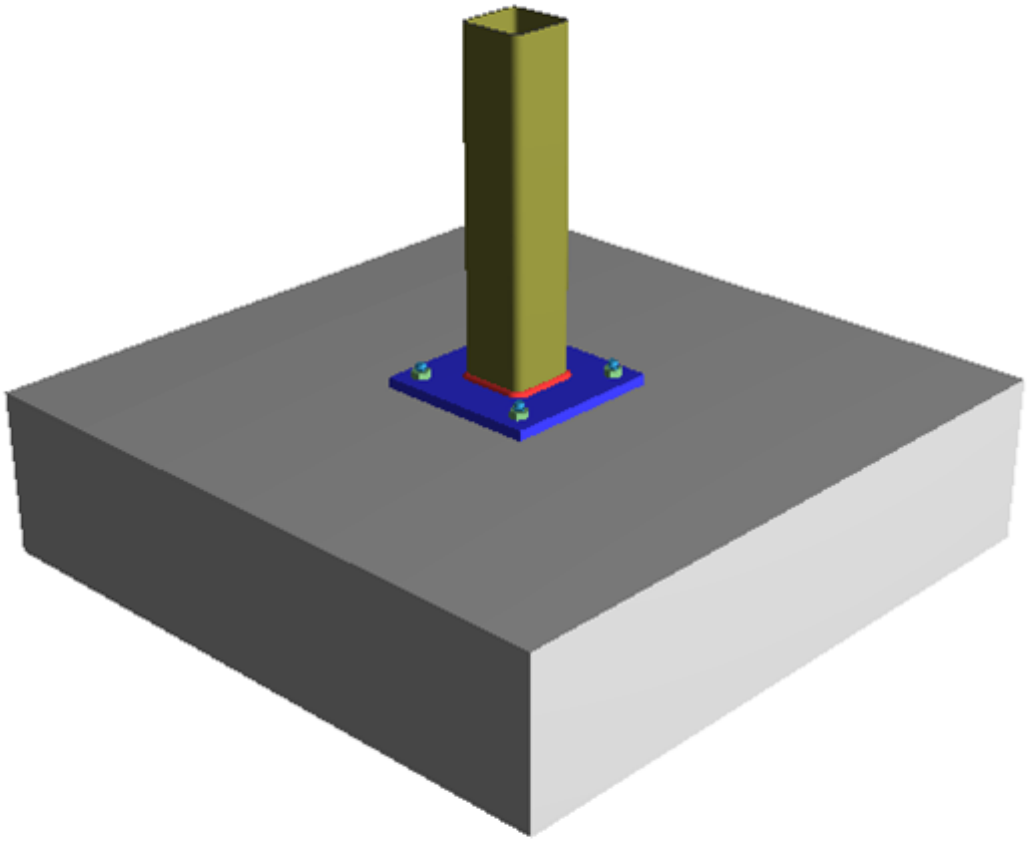
Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	30.50 lbs	7555.08 lbs	**0.00**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Concrete Pryout in Shear	30.50 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	61.00 lbs	58028.99 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

M16 I: Connection Properties Report

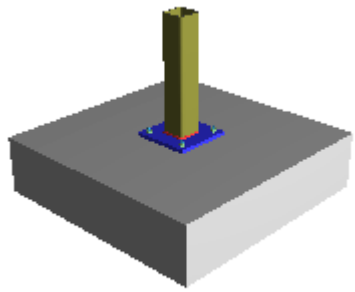
Single Column Base Plate Connection

Connection	
Connection Title	M16 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	16749.591 lbs
Strong Axis Shear	18.090 lbs
Weak Axis Shear	-58.255 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X4
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M19 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

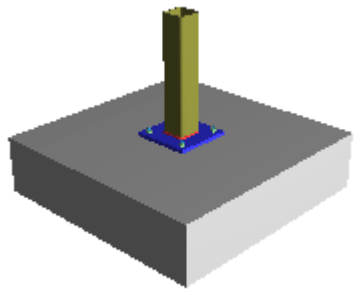
Input Data:		
Axial	644.47 lbs	*Axial load on the column*
Strong Axis Shear	-63.60 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-0.54 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 53 - LC 53: dl+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.24**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Strong Axis)	**0.01**	**PASS**

M19 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	644.47 lbs	*Axial load on the column*
Strong Axis Shear	-63.60 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-0.54 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

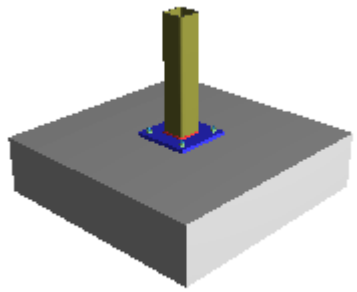
Governing LC: 3D - 53 - LC 53: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.00 ksi	4.42 ksi	**0.00**	**PASS**
Lateral Slip	63.60 lbs	265.84 lbs	**0.24**	**PASS**
Plate Flexural Yielding(Compression)	2.45 lb-ft/in	379.69 lb-ft/in	**0.01**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	0.79 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	93.81 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**

M19 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	644.47 lbs	*Axial load on the column*
Strong Axis Shear	-63.60 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-0.54 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

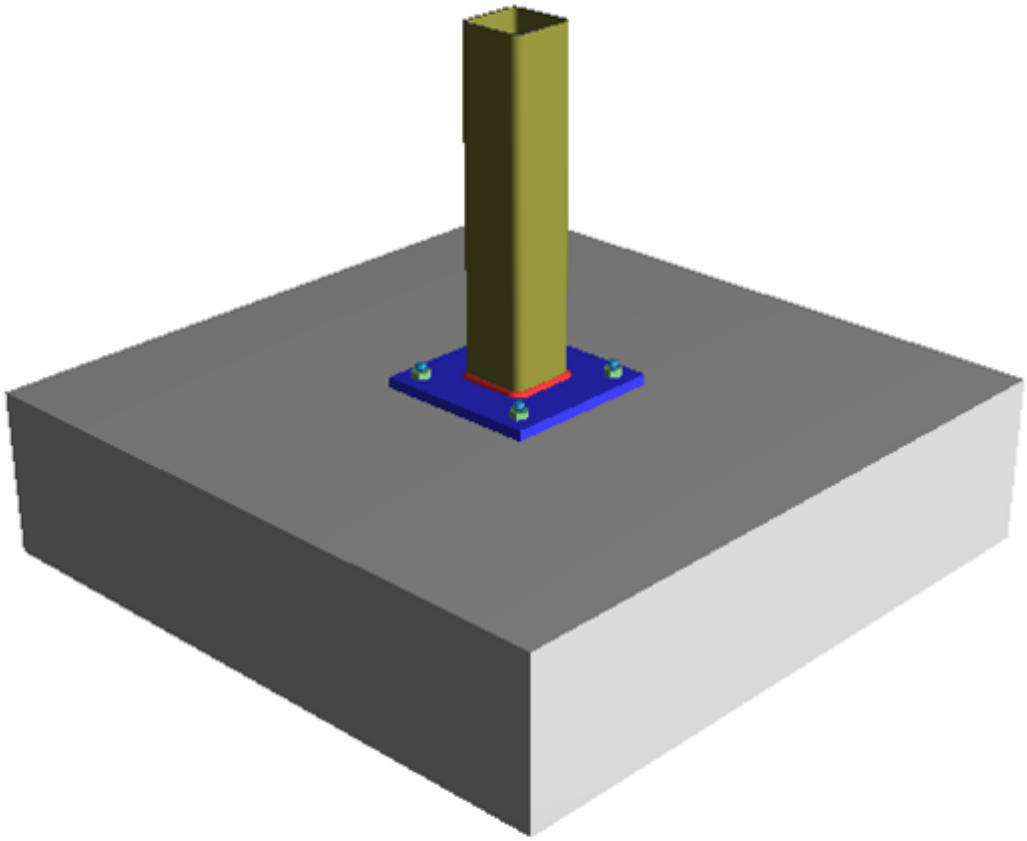
Governing LC: 3D - 53 - LC 53: dl+wl

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	31.80 lbs	7555.08 lbs	**0.00**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.01**	**PASS**
Concrete Pryout in Shear	31.80 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	63.60 lbs	57376.88 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

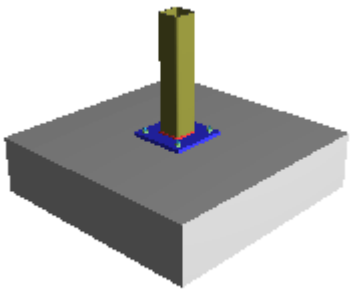
M19 I: Connection Properties Report

Connection	
Connection Title	M19 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	644.471 lbs
Strong Axis Shear	-63.601 lbs
Weak Axis Shear	-0.539 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X4
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M2 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

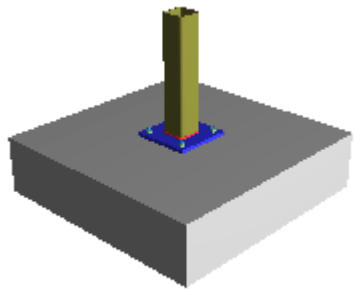
Input Data:		
Axial	657.96 lbs	*Axial load on the column*
Strong Axis Shear	3.33 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	45.48 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 57 - LC 57: dl+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.17**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Weak Axis)	**0.00**	**PASS**

M2 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	657.96 lbs	*Axial load on the column*
Strong Axis Shear	3.33 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	45.48 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

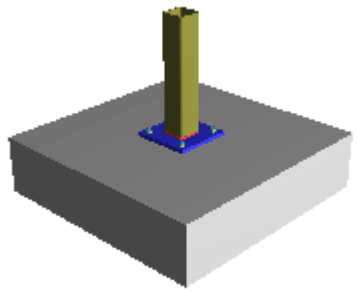
Governing LC: 3D - 57 - LC 57: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.00 ksi	4.42 ksi	**0.00**	**PASS**
Lateral Slip	45.60 lbs	271.41 lbs	**0.17**	**PASS**
Plate Flexural Yielding(Compression)	2.50 lb-ft/in	379.69 lb-ft/in	**0.01**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	67.07 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	4.91 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**

M2 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	657.96 lbs	*Axial load on the column*
Strong Axis Shear	3.33 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	45.48 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

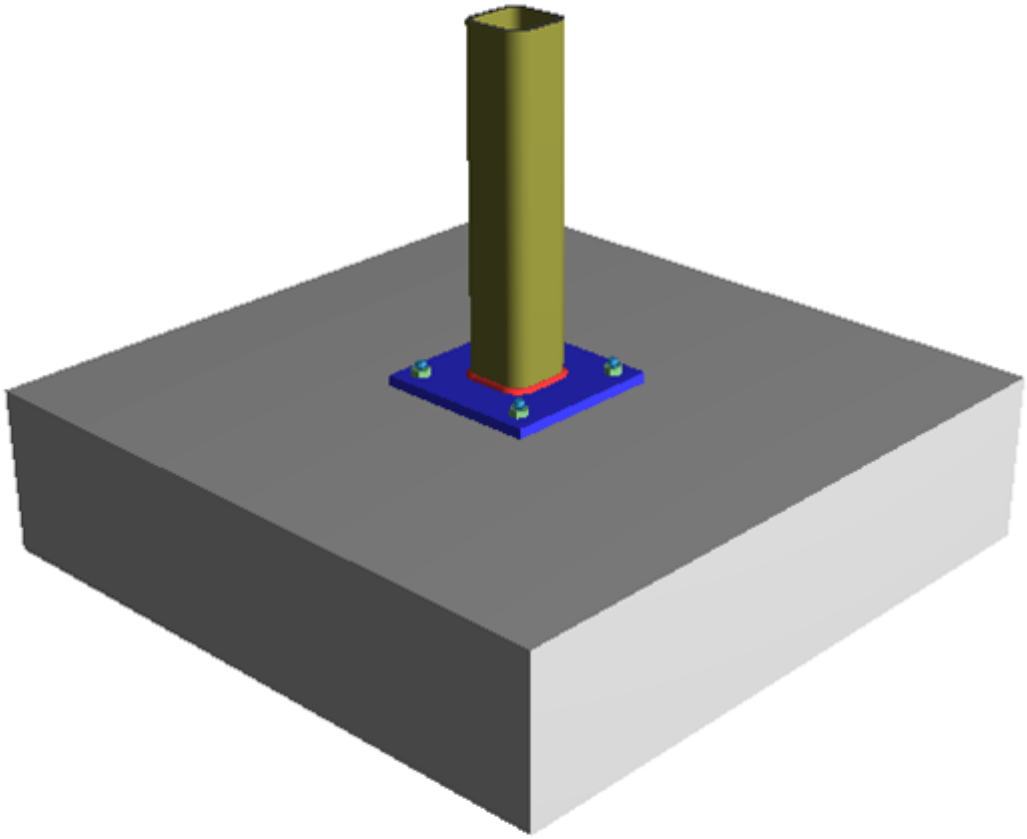
Governing LC: 3D - 57 - LC 57: dl+wl

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	22.80 lbs	7555.08 lbs	**0.00**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Concrete Pryout in Shear	22.80 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	45.60 lbs	57414.65 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

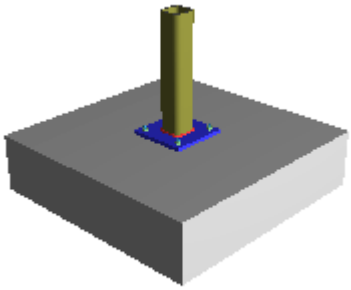
M2 I: Connection Properties Report

Connection	
Connection Title	M2 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	657.959 lbs
Strong Axis Shear	3.328 lbs
Weak Axis Shear	45.475 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X4
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M25 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

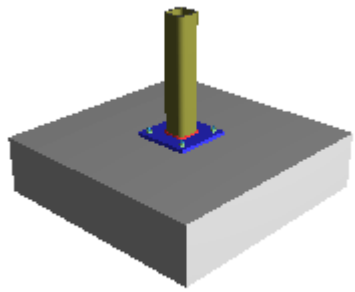
Input Data:		
Axial	-9090.89 lbs	*Axial load on the column*
Strong Axis Shear	-68.31 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	20.46 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 55 - LC 55: dl+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Plate Flexural Yielding(Tension)	**0.29**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Tension	**0.18**	**PASS**

M25 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	-9090.89 lbs	*Axial load on the column*
Strong Axis Shear	-68.31 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	20.46 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

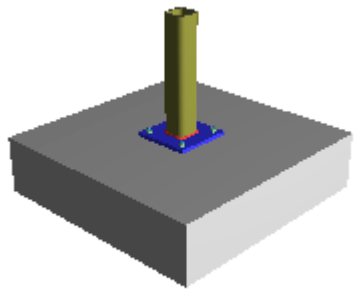
Governing LC: 3D - 55 - LC 55: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Plate Flexural Yielding(Tension)	402.46 lb-ft	1376.37 lb-ft	**0.29**	**PASS**
Anchor Bolt Tension	2272.72 lbs	14413.28 lbs	**0.16**	**PASS**
Anchor Bolt Shear	71.31 lbs	17295.94 lbs	**0.00**	**PASS**
Anchor Bolt Bearing on Base Plate	71.31 lbs	17295.94 lbs	**0.00**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	8685.65 lbs/ft	83520.00 lbs/ft	**0.10**	**PASS**
Column Web Weld Strength	8686.54 lbs/ft	83520.00 lbs/ft	**0.10**	**PASS**

M25 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	-9090.89 lbs	*Axial load on the column*
Strong Axis Shear	-68.31 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	20.46 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

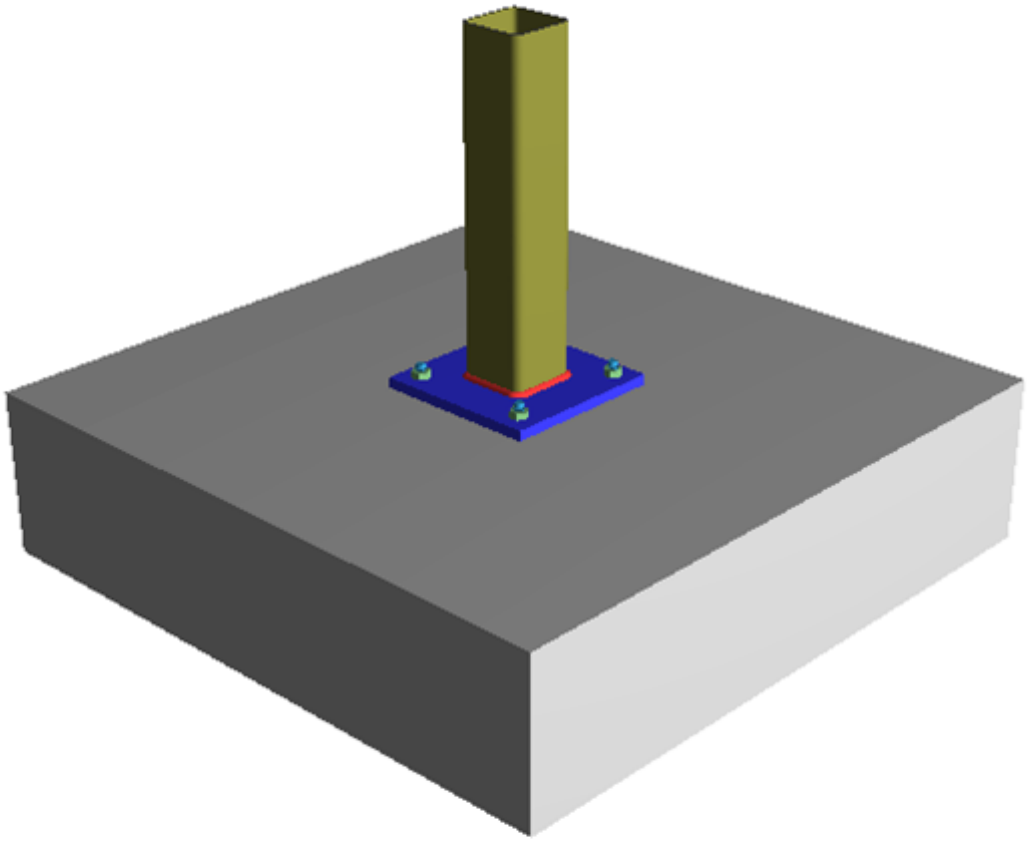
Governing LC: 3D - 55 - LC 55: dl+wl

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	2272.72 lbs	14529.00 lbs	**0.16**	**PASS**
Concrete Breakout (Tension)	2272.72 lbs	28688.18 lbs	**0.08**	**PASS**
Anchor group effect for Concrete Breakout in Tension	9090.89 lbs	51001.21 lbs	**0.18**	**PASS**
Concrete Pullout	2272.72 lbs	14649.60 lbs	**0.16**	**PASS**
Concrete Side-Face Blowout				**n/a**
Steel Shear	35.66 lbs	7555.08 lbs	**0.00**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.01**	**PASS**
Concrete Pryout in Shear	35.66 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	71.31 lbs	57986.07 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

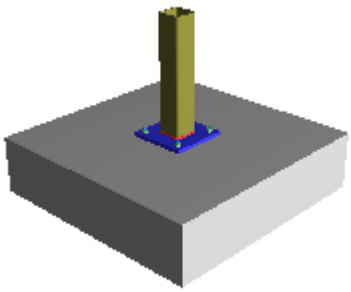
M25 I: Connection Properties Report

Connection	
Connection Title	M25 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	-9090.890 lbs
Strong Axis Shear	-68.313 lbs
Weak Axis Shear	20.464 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X8
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M29 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

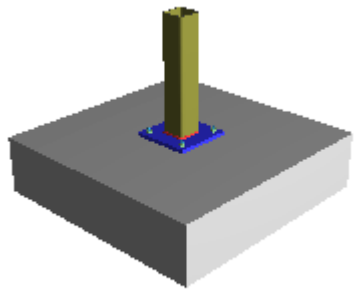
Input Data:		
Axial	1540.17 lbs	*Axial load on the column*
Strong Axis Shear	80.45 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	28.12 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 54 - LC 54: dl+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.13**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Strong Axis)	**0.01**	**PASS**

M29 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	1540.17 lbs	*Axial load on the column*
Strong Axis Shear	80.45 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	28.12 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

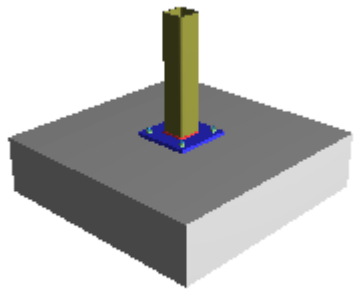
Governing LC: 3D - 54 - LC 54: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.01 ksi	4.42 ksi	**0.00**	**PASS**
Lateral Slip	85.22 lbs	635.32 lbs	**0.13**	**PASS**
Plate Flexural Yielding(Compression)	5.86 lb-ft/in	379.69 lb-ft/in	**0.02**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	41.47 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	118.65 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**

M29 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	1540.17 lbs	*Axial load on the column*
Strong Axis Shear	80.45 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	28.12 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

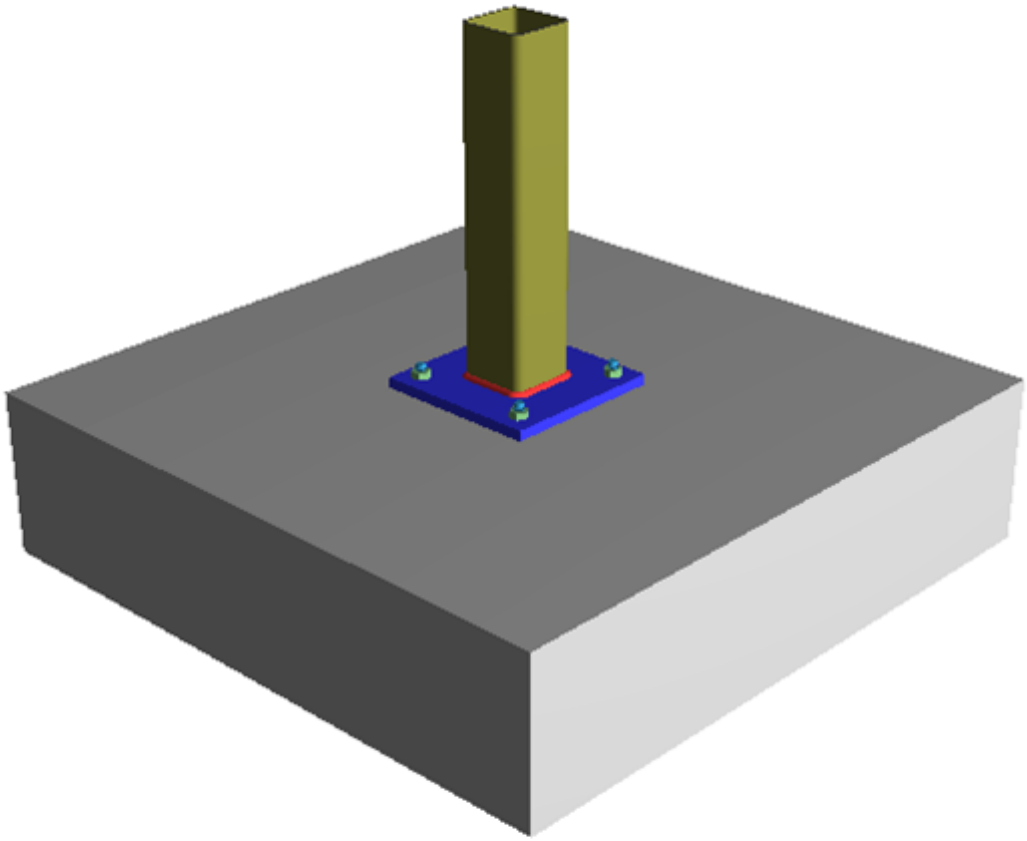
Governing LC: 3D - 54 - LC 54: dl+wl

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	42.61 lbs	7555.08 lbs	**0.01**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.01**	**PASS**
Concrete Pryout in Shear	42.61 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	85.22 lbs	58191.15 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

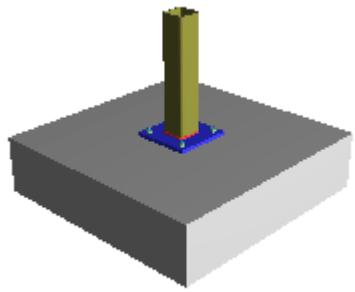
M29 I: Connection Properties Report

Connection	
Connection Title	M29 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	1540.170 lbs
Strong Axis Shear	80.445 lbs
Weak Axis Shear	28.119 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X4
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M3 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

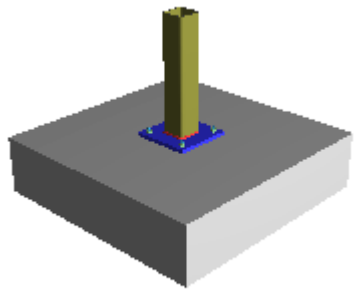
Input Data:		
Axial	894.11 lbs	*Axial load on the column*
Strong Axis Shear	29.25 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	1.39 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 46 - LC 46: dl+wl+sln

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.08**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Strong Axis)	**0.00**	**PASS**

M3 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	894.11 lbs	*Axial load on the column*
Strong Axis Shear	29.25 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	1.39 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

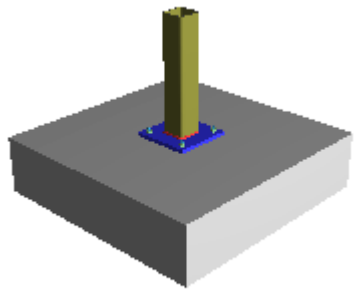
Governing LC: 3D - 46 - LC 46: dl+wl+sln

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.01 ksi	4.42 ksi	**0.00**	**PASS**
Lateral Slip	29.29 lbs	368.82 lbs	**0.08**	**PASS**
Plate Flexural Yielding(Compression)	3.40 lb-ft/in	379.69 lb-ft/in	**0.01**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	2.05 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	43.15 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**

M3 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	894.11 lbs	*Axial load on the column*
Strong Axis Shear	29.25 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	1.39 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

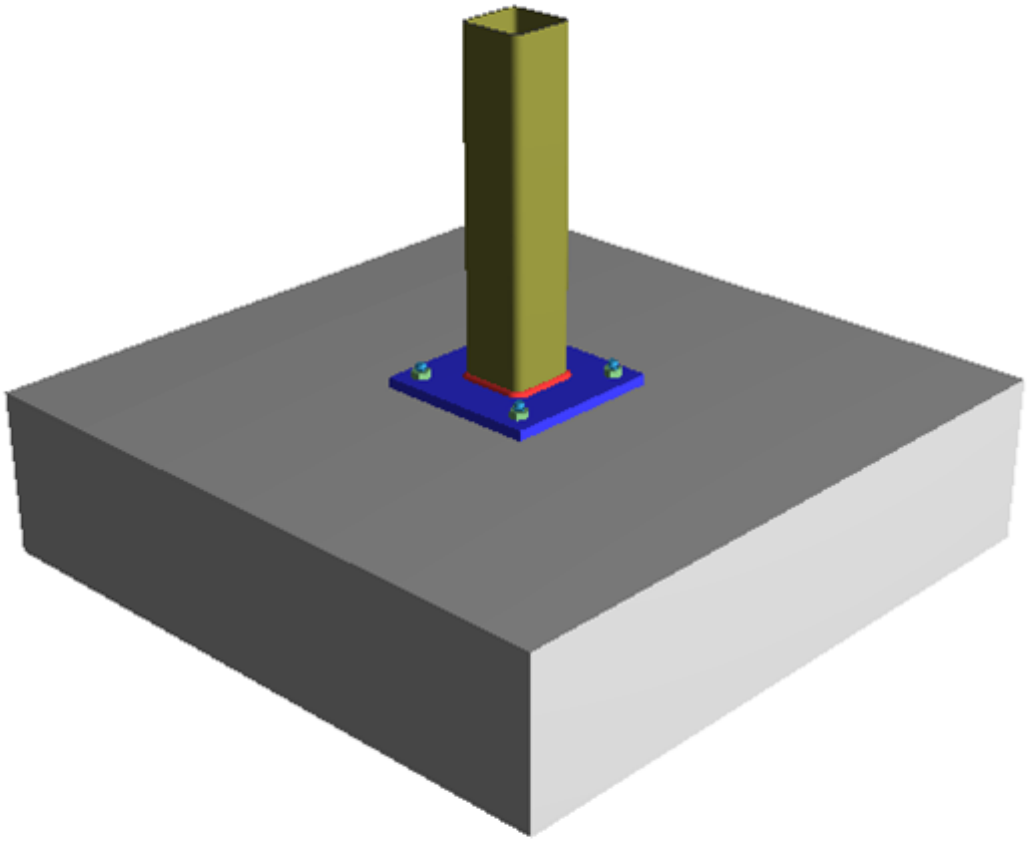
Governing LC: 3D - 46 - LC 46: dl+wl+sln

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	14.64 lbs	7555.08 lbs	**0.00**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Concrete Pryout in Shear	14.64 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	29.29 lbs	57392.56 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

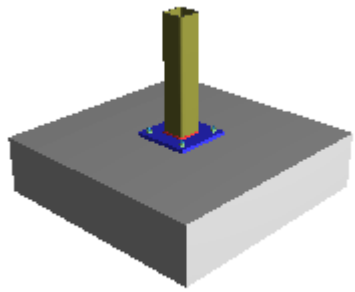
M3 I: Connection Properties Report

Connection	
Connection Title	M3 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	894.109 lbs
Strong Axis Shear	29.255 lbs
Weak Axis Shear	1.391 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X4
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M30 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

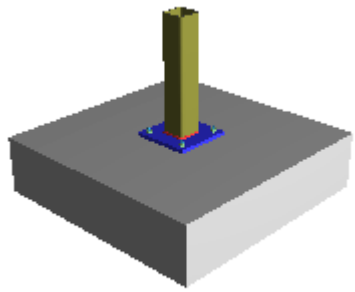
Input Data:		
Axial	920.68 lbs	*Axial load on the column*
Strong Axis Shear	-1.10 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	161.75 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 59 - LC 59: dl+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.43**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Weak Axis)	**0.01**	**PASS**

M30 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	920.68 lbs	*Axial load on the column*
Strong Axis Shear	-1.10 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	161.75 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

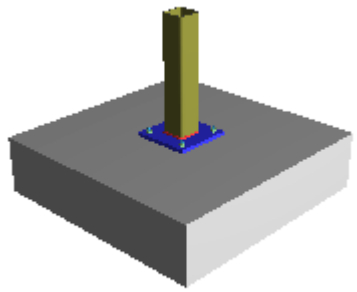
Governing LC: 3D - 59 - LC 59: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.01 ksi	4.42 ksi	**0.00**	**PASS**
Lateral Slip	161.76 lbs	379.78 lbs	**0.43**	**PASS**
Plate Flexural Yielding(Compression)	3.50 lb-ft/in	379.69 lb-ft/in	**0.01**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	238.57 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	1.62 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**

M30 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	920.68 lbs	*Axial load on the column*
Strong Axis Shear	-1.10 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	161.75 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

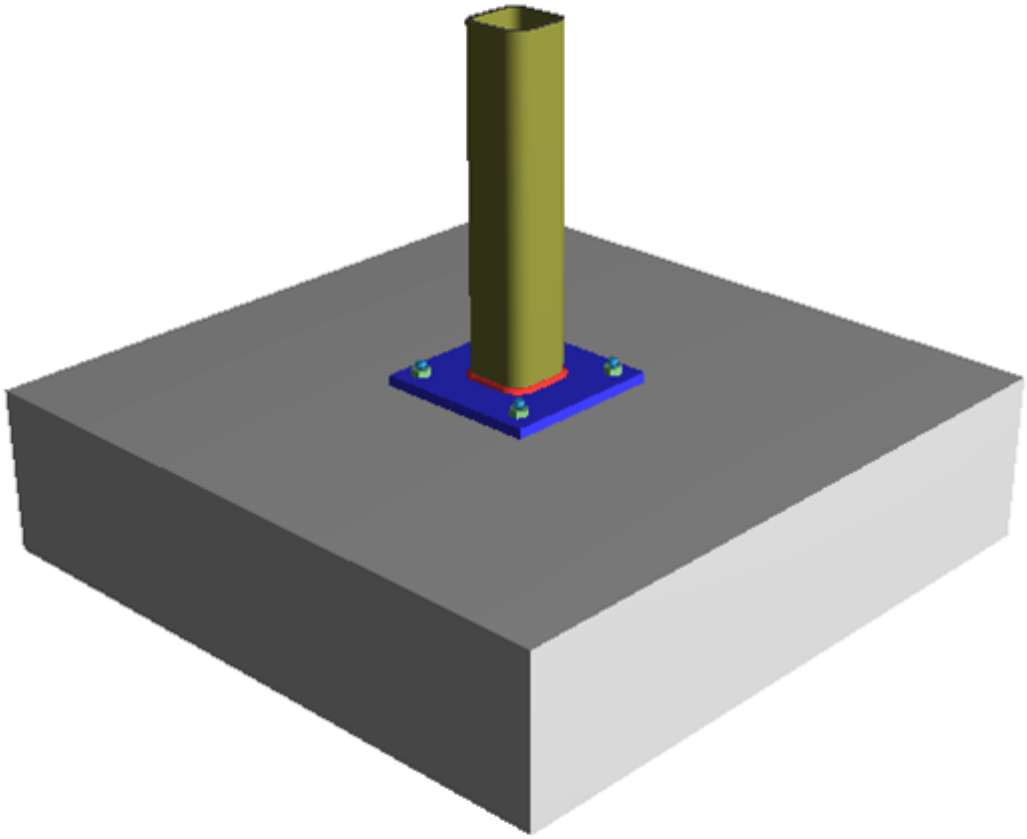
Governing LC: 3D - 59 - LC 59: dl+wl

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	80.88 lbs	7555.08 lbs	**0.01**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.01**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.01**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Concrete Pryout in Shear	80.88 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	161.76 lbs	57376.70 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

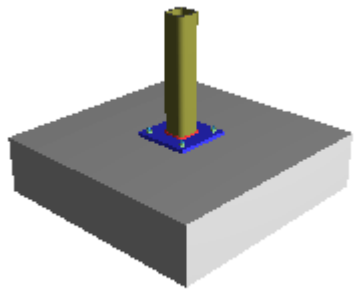
M30 I: Connection Properties Report

Connection	
Connection Title	M30 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	920.678 lbs
Strong Axis Shear	-1.101 lbs
Weak Axis Shear	161.753 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X4
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M31 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

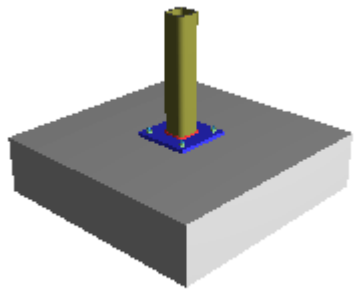
Input Data:		
Axial	27945.33 lbs	*Axial load on the column*
Strong Axis Shear	8.26 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	2.77 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 25 - LC 25: dl+sln+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Plate Flexural Yielding(Compression)	**0.28**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Strong Axis)	**0.00**	**PASS**

M31 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	27945.33 lbs	*Axial load on the column*
Strong Axis Shear	8.26 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	2.77 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

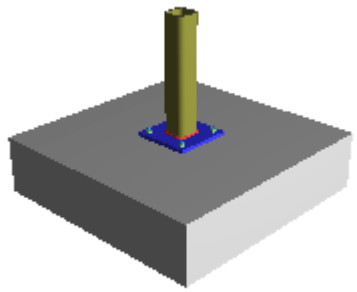
Governing LC: 3D - 25 - LC 25: dl+sln+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.19 ksi	4.42 ksi	**0.04**	**PASS**
Lateral Slip	8.71 lbs	11527.45 lbs	**0.00**	**PASS**
Plate Flexural Yielding(Compression)	106.26 lb-ft/in	379.69 lb-ft/in	**0.28**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	5.29 lbs/ft	83520.00 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	15.79 lbs/ft	83520.00 lbs/ft	**0.00**	**PASS**

M31 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	27945.33 lbs	*Axial load on the column*
Strong Axis Shear	8.26 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	2.77 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

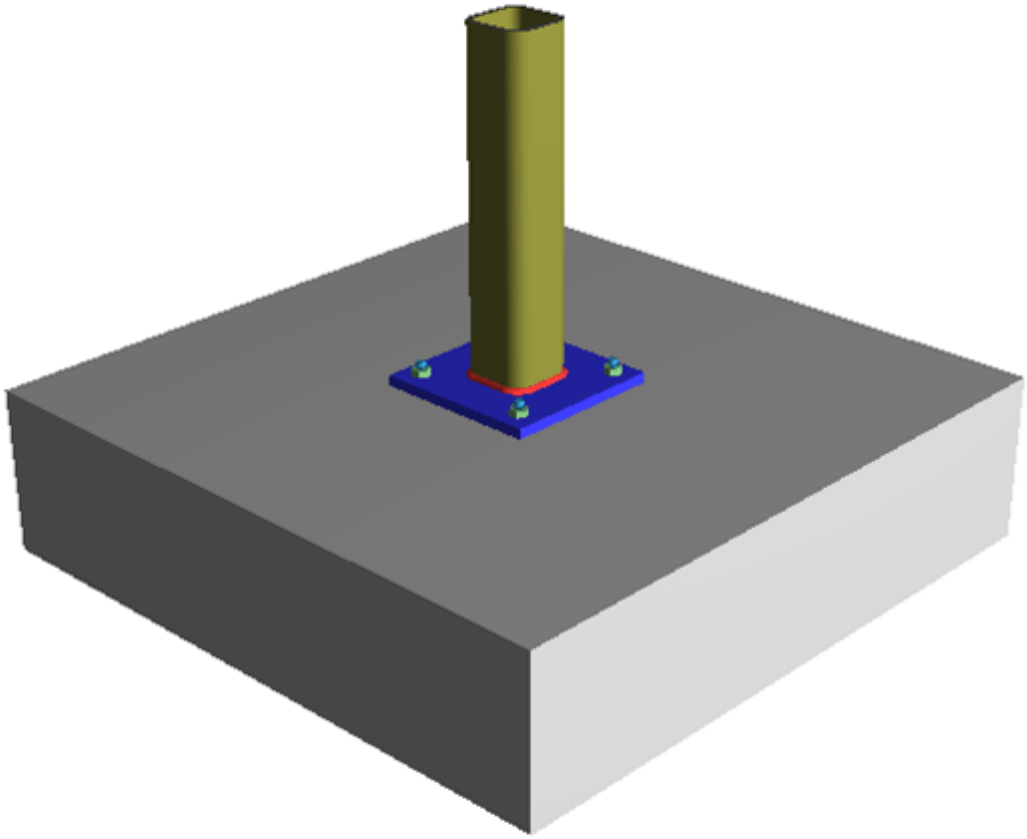
Governing LC: 3D - 25 - LC 25: dl+sln+wl

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	4.36 lbs	7555.08 lbs	**0.00**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Concrete Pryout in Shear	4.36 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	8.71 lbs	58129.98 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

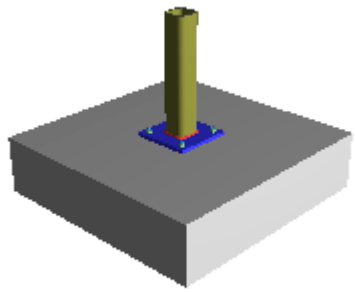
M31 I: Connection Properties Report

Connection	
Connection Title	M31 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	27945.328 lbs
Strong Axis Shear	8.263 lbs
Weak Axis Shear	2.770 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X8
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M43 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

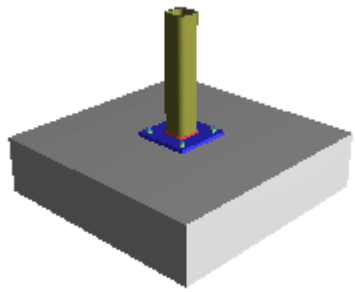
Input Data:		
Axial	23201.84 lbs	*Axial load on the column*
Strong Axis Shear	-4.19 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	94.10 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 21 - LC 21: dl+sln+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Plate Flexural Yielding(Compression)	**0.23**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Weak Axis)	**0.01**	**PASS**

M43 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	23201.84 lbs	*Axial load on the column*
Strong Axis Shear	-4.19 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	94.10 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

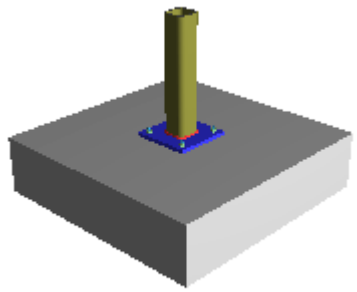
Governing LC: 3D - 21 - LC 21: dl+sln+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.16 ksi	4.42 ksi	**0.04**	**PASS**
Lateral Slip	94.19 lbs	9570.76 lbs	**0.01**	**PASS**
Plate Flexural Yielding(Compression)	88.22 lb-ft/in	379.69 lb-ft/in	**0.23**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	179.81 lbs/ft	83520.00 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	8.00 lbs/ft	83520.00 lbs/ft	**0.00**	**PASS**

M43 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	23201.84 lbs	*Axial load on the column*
Strong Axis Shear	-4.19 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	94.10 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 21 - LC 21: dl+sln+wl

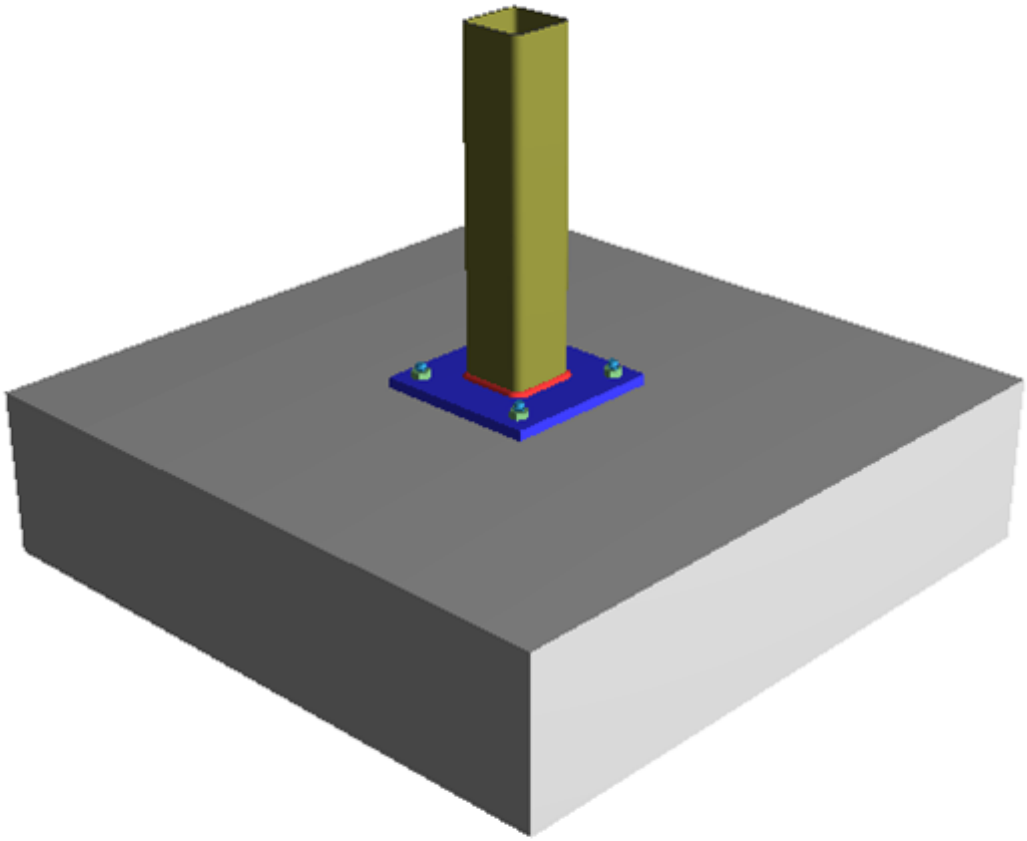
Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	47.10 lbs	7555.08 lbs	**0.01**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.01**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Concrete Pryout in Shear	47.10 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	94.19 lbs	57390.55 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

M43 I: Connection Properties Report

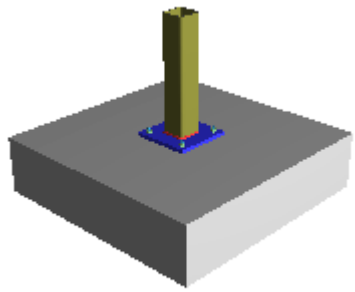
Single Column Base Plate Connection

Connection	
Connection Title	M43 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	23201.841 lbs
Strong Axis Shear	-4.187 lbs
Weak Axis Shear	94.099 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X8
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M44 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

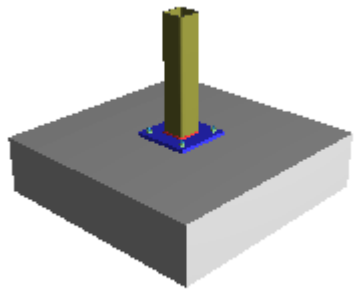
Input Data:		
Axial	950.27 lbs	*Axial load on the column*
Strong Axis Shear	3.16 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	68.02 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 57 - LC 57: dl+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.17**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Weak Axis)	**0.01**	**PASS**

M44 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	950.27 lbs	*Axial load on the column*
Strong Axis Shear	3.16 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	68.02 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

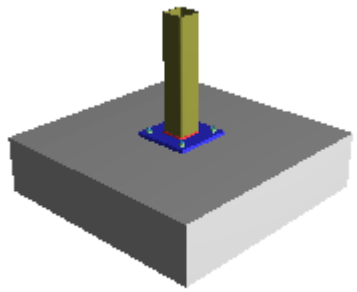
Governing LC: 3D - 57 - LC 57: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.01 ksi	4.42 ksi	**0.00**	**PASS**
Lateral Slip	68.09 lbs	391.99 lbs	**0.17**	**PASS**
Plate Flexural Yielding(Compression)	3.61 lb-ft/in	379.69 lb-ft/in	**0.01**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	100.33 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	4.66 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**

M44 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	950.27 lbs	*Axial load on the column*
Strong Axis Shear	3.16 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	68.02 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 57 - LC 57: dl+wl

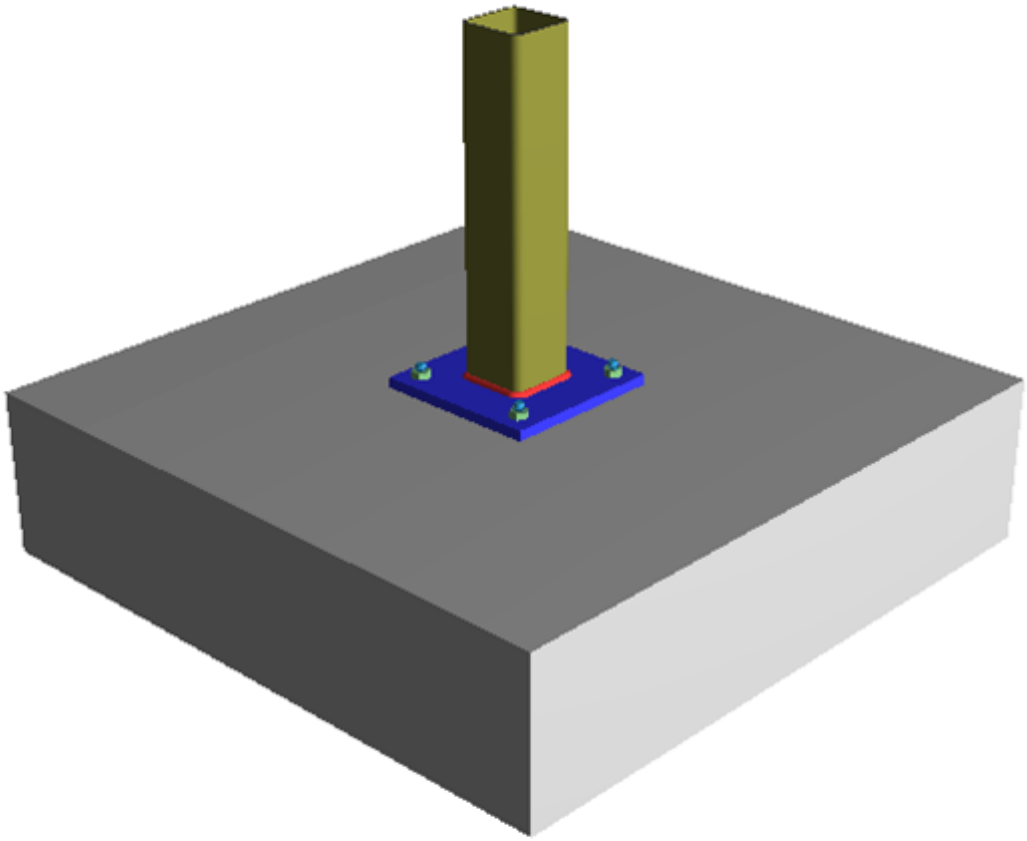
Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	34.05 lbs	7555.08 lbs	**0.00**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.01**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Concrete Pryout in Shear	34.05 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	68.09 lbs	57391.80 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

M44 I: Connection Properties Report

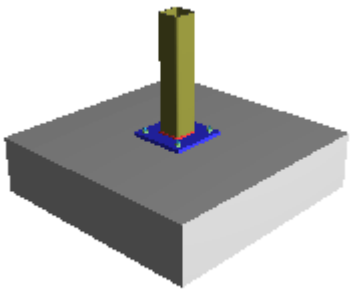
Single Column Base Plate Connection

Connection	
Connection Title	M44 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	950.269 lbs
Strong Axis Shear	3.158 lbs
Weak Axis Shear	68.021 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X4
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M45 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

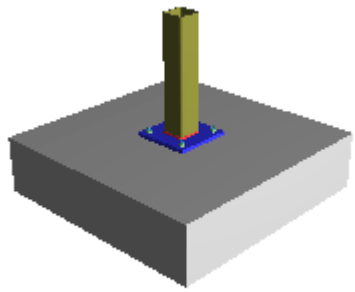
Input Data:		
Axial	6561.36 lbs	*Axial load on the column*
Strong Axis Shear	-0.85 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-1.58 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 27 - LC 27: dl+sln+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Plate Flexural Yielding(Compression)	**0.07**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Weak Axis)	**0.00**	**PASS**

M45 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	6561.36 lbs	*Axial load on the column*
Strong Axis Shear	-0.85 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-1.58 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

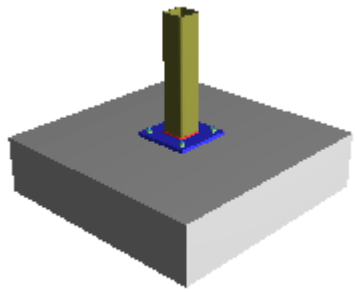
Governing LC: 3D - 27 - LC 27: dl+sln+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.05 ksi	4.42 ksi	**0.01**	**PASS**
Lateral Slip	1.80 lbs	2706.56 lbs	**0.00**	**PASS**
Plate Flexural Yielding(Compression)	24.95 lb-ft/in	379.69 lb-ft/in	**0.07**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	2.34 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	1.25 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**

M45 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	6561.36 lbs	*Axial load on the column*
Strong Axis Shear	-0.85 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-1.58 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

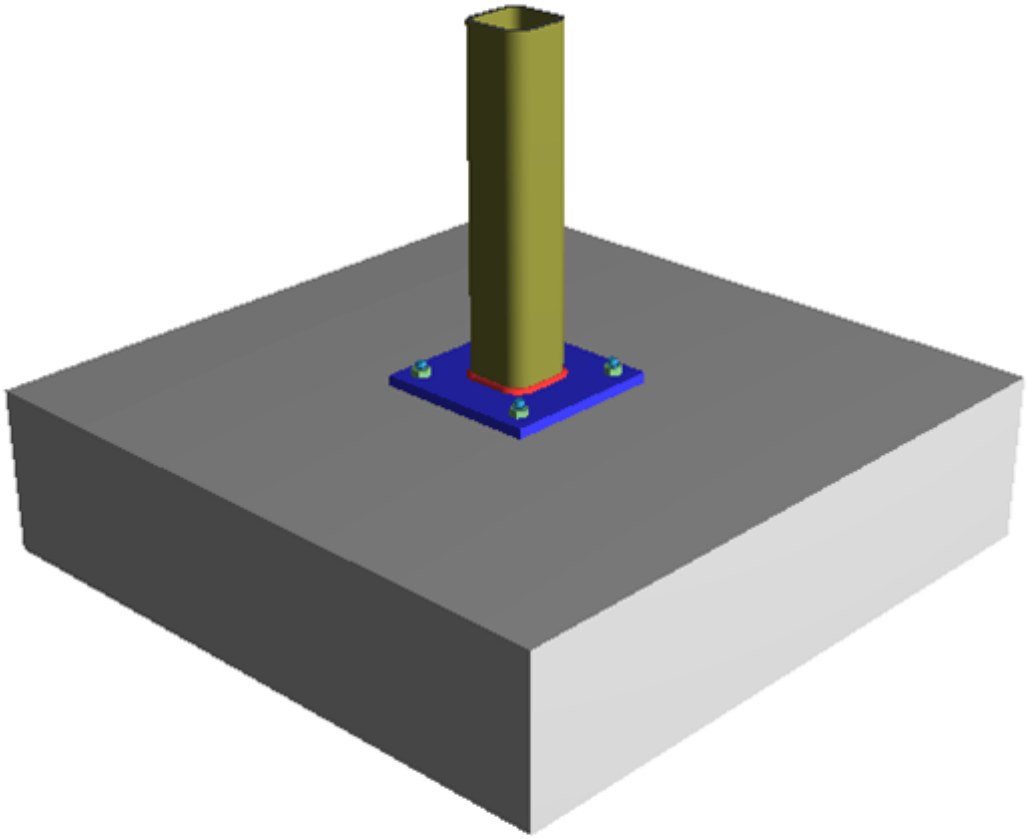
Governing LC: 3D - 27 - LC 27: dl+sln+wl

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	0.90 lbs	7555.08 lbs	**0.00**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Concrete Pryout in Shear	0.90 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	1.80 lbs	59124.44 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

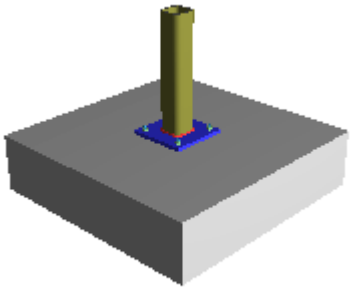
M45 I: Connection Properties Report

Connection	
Connection Title	M45 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	6561.360 lbs
Strong Axis Shear	-0.848 lbs
Weak Axis Shear	-1.585 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X4
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M47 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

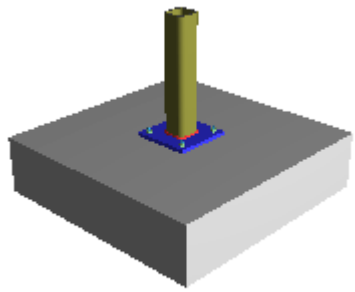
Input Data:		
Axial	1264.40 lbs	*Axial load on the column*
Strong Axis Shear	135.01 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-2.98 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 55 - LC 55: dl+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.26**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Strong Axis)	**0.01**	**PASS**

M47 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	1264.40 lbs	*Axial load on the column*
Strong Axis Shear	135.01 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-2.98 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

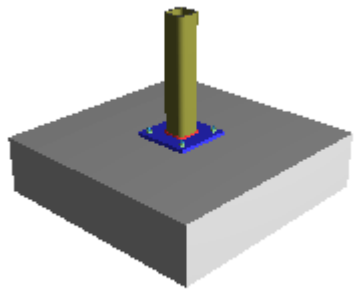
Governing LC: 3D - 55 - LC 55: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.01 ksi	4.42 ksi	**0.00**	**PASS**
Lateral Slip	135.05 lbs	521.56 lbs	**0.26**	**PASS**
Plate Flexural Yielding(Compression)	4.81 lb-ft/in	379.69 lb-ft/in	**0.01**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	5.70 lbs/ft	83520.00 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	257.99 lbs/ft	83520.00 lbs/ft	**0.00**	**PASS**

M47 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	1264.40 lbs	*Axial load on the column*
Strong Axis Shear	135.01 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-2.98 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

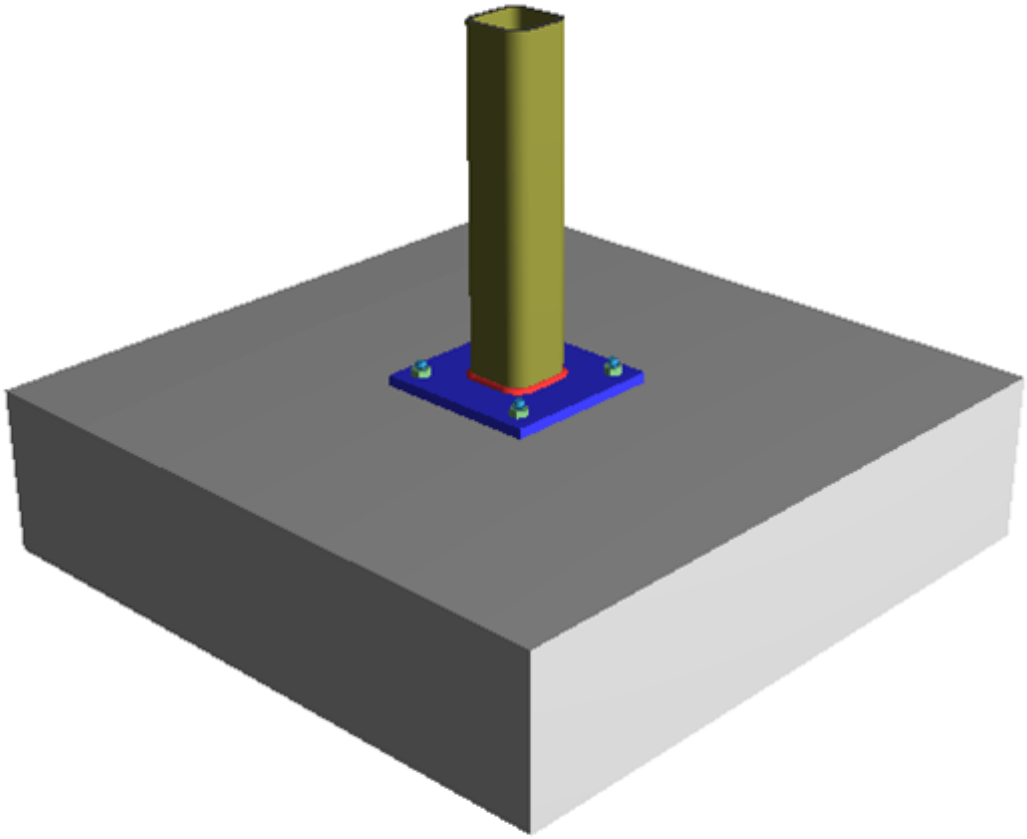
Governing LC: 3D - 55 - LC 55: dl+wl

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	67.52 lbs	7555.08 lbs	**0.01**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.01**	**PASS**
Concrete Pryout in Shear	67.52 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	135.05 lbs	57379.87 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

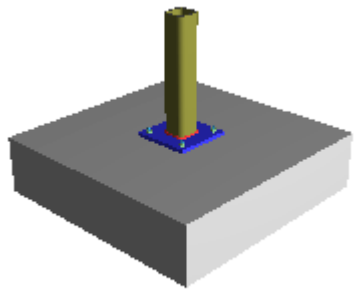
M47 I: Connection Properties Report

Connection	
Connection Title	M47 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	1264.396 lbs
Strong Axis Shear	135.015 lbs
Weak Axis Shear	-2.984 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X8
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M48 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

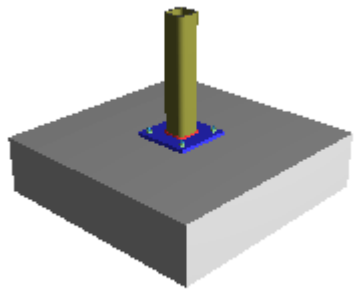
Input Data:		
Axial	9703.55 lbs	*Axial load on the column*
Strong Axis Shear	9.41 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-6.89 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 27 - LC 27: dl+sln+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Plate Flexural Yielding(Compression)	**0.10**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Strong Axis)	**0.00**	**PASS**

M48 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	9703.55 lbs	*Axial load on the column*
Strong Axis Shear	9.41 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-6.89 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

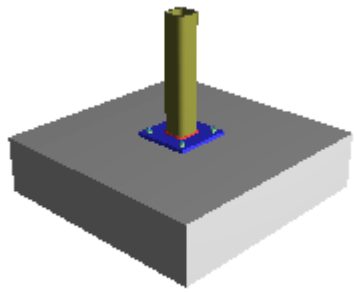
Governing LC: 3D - 27 - LC 27: dl+sln+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.07 ksi	4.42 ksi	**0.02**	**PASS**
Lateral Slip	11.66 lbs	4002.72 lbs	**0.00**	**PASS**
Plate Flexural Yielding(Compression)	36.90 lb-ft/in	379.69 lb-ft/in	**0.10**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	13.16 lbs/ft	83520.00 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	17.98 lbs/ft	83520.00 lbs/ft	**0.00**	**PASS**

M48 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	9703.55 lbs	*Axial load on the column*
Strong Axis Shear	9.41 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-6.89 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

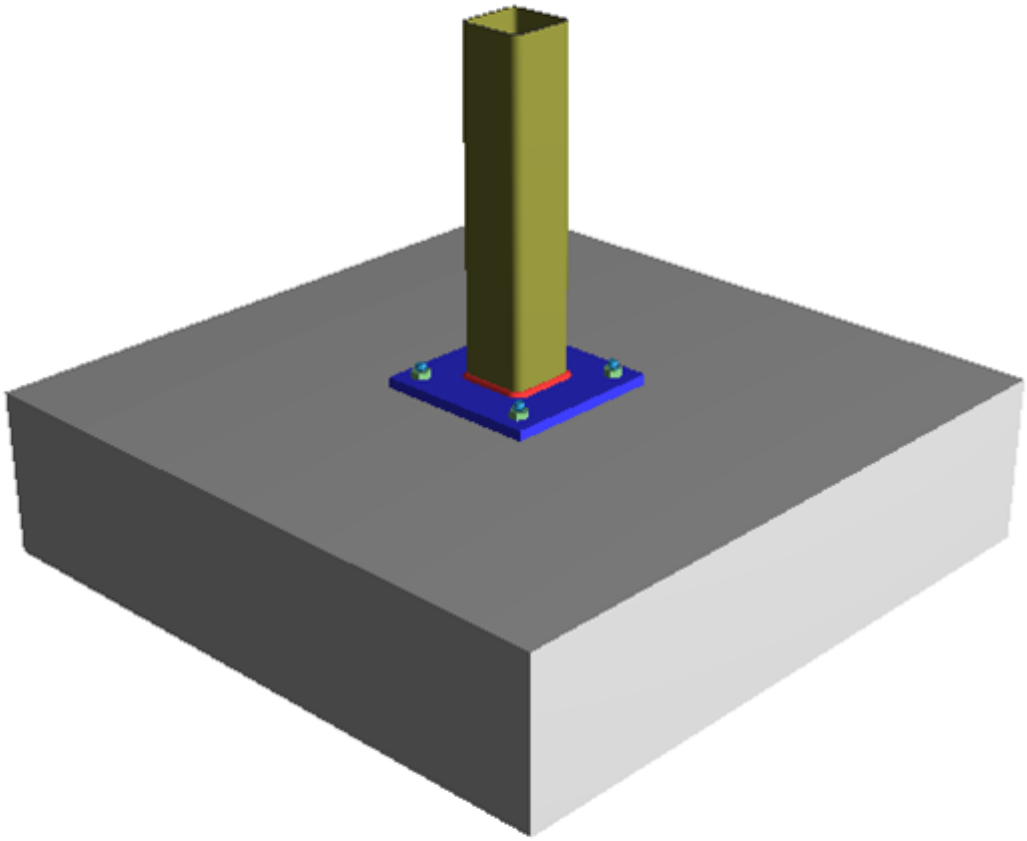
Governing LC: 3D - 27 - LC 27: dl+sln+wl

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	5.83 lbs	7555.08 lbs	**0.00**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Concrete Pryout in Shear	5.83 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	11.66 lbs	60284.58 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

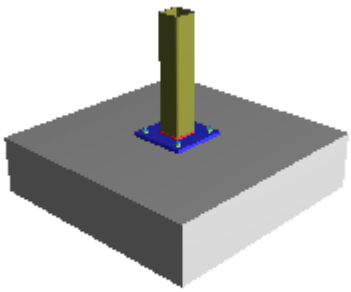
M48 I: Connection Properties Report

Connection	
Connection Title	M48 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	9703.552 lbs
Strong Axis Shear	9.411 lbs
Weak Axis Shear	-6.886 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X8
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M55 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

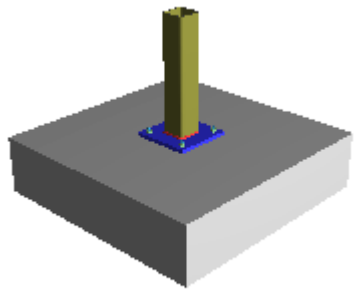
Input Data:		
Axial	108.86 lbs	*Axial load on the column*
Strong Axis Shear	30.48 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	6.32 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 32 - LC 32: dl+wl+rll

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.69**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Strong Axis)	**0.00**	**PASS**

M55 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	108.86 lbs	*Axial load on the column*
Strong Axis Shear	30.48 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	6.32 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

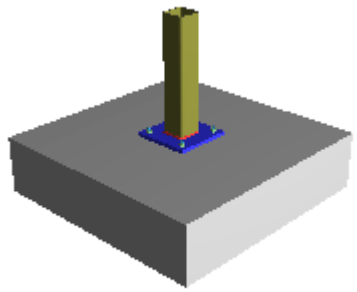
Governing LC: 3D - 32 - LC 32: dl+wl+rll

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.00 ksi	4.42 ksi	**0.00**	**PASS**
Lateral Slip	31.13 lbs	44.91 lbs	**0.69**	**PASS**
Plate Flexural Yielding(Compression)	0.41 lb-ft/in	379.69 lb-ft/in	**0.00**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	9.32 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	44.95 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**

M55 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	108.86 lbs	*Axial load on the column*
Strong Axis Shear	30.48 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	6.32 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 32 - LC 32: dl+wl+rll

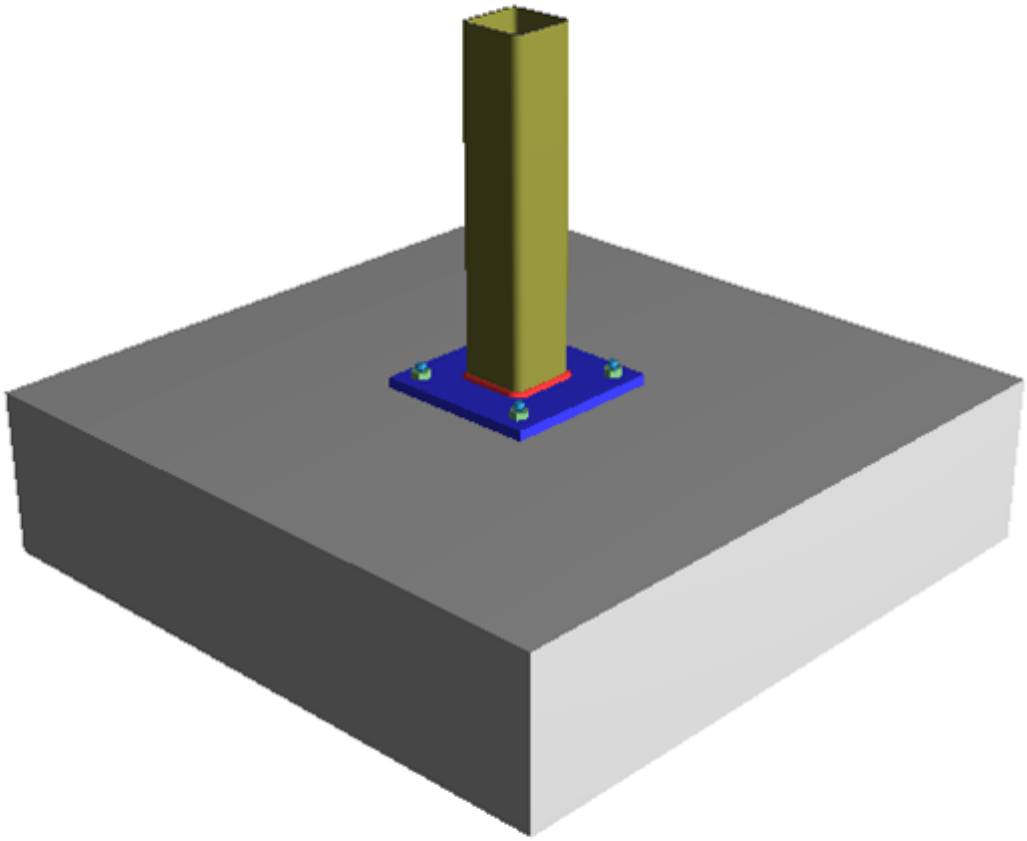
Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	15.56 lbs	7555.08 lbs	**0.00**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Concrete Pryout in Shear	15.56 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	31.13 lbs	57676.83 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

M55 I: Connection Properties Report

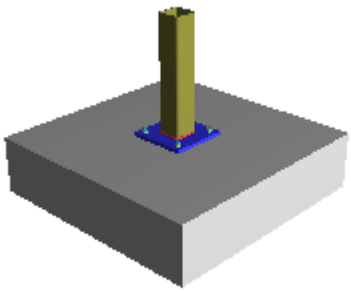
Single Column Base Plate Connection

Connection	
Connection Title	M55 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	108.862 lbs
Strong Axis Shear	30.477 lbs
Weak Axis Shear	6.321 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X4
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M56 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

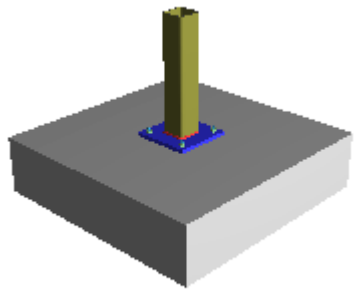
Input Data:		
Axial	100.12 lbs	*Axial load on the column*
Strong Axis Shear	32.00 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	6.34 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 48 - LC 48: dl+wl+sln

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.79**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Strong Axis)	**0.00**	**PASS**

M56 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	100.12 lbs	*Axial load on the column*
Strong Axis Shear	32.00 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	6.34 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

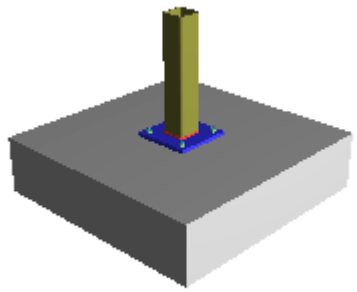
Governing LC: 3D - 48 - LC 48: dl+wl+sln

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.00 ksi	4.42 ksi	**0.00**	**PASS**
Lateral Slip	32.62 lbs	41.30 lbs	**0.79**	**PASS**
Plate Flexural Yielding(Compression)	0.38 lb-ft/in	379.69 lb-ft/in	**0.00**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	9.35 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	47.20 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**

M56 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	100.12 lbs	*Axial load on the column*
Strong Axis Shear	32.00 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	6.34 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 48 - LC 48: dl+wl+sln

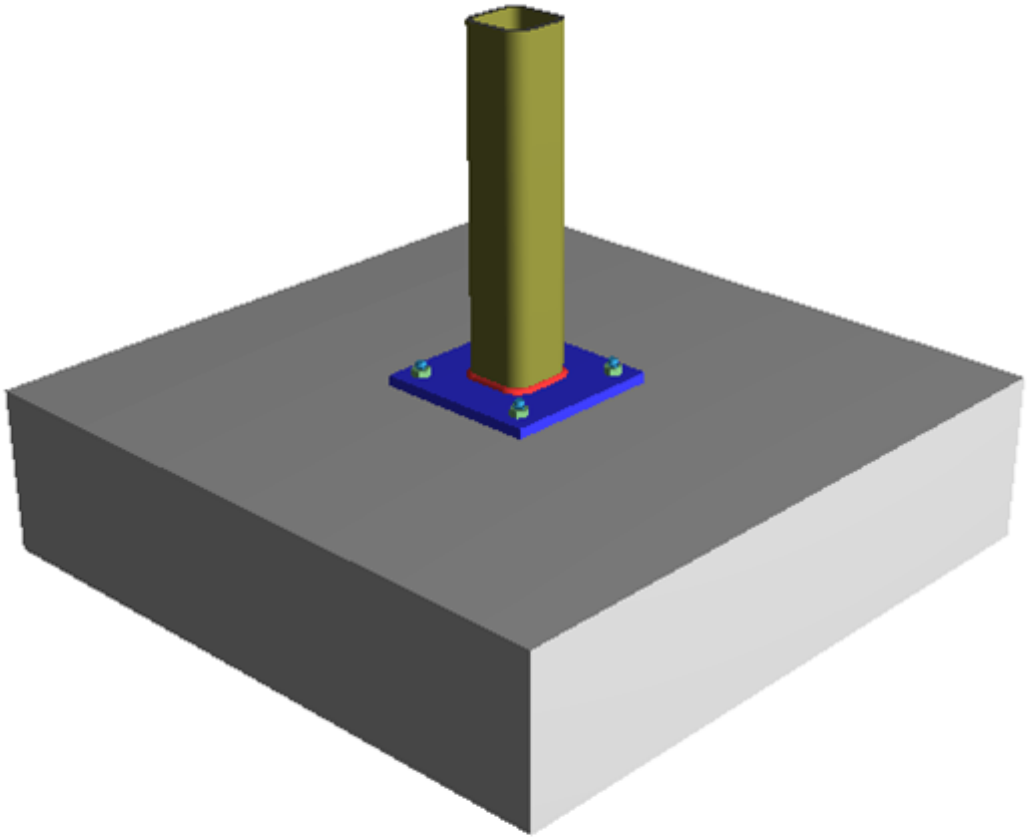
Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	16.31 lbs	7555.08 lbs	**0.00**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Concrete Pryout in Shear	16.31 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	32.62 lbs	57650.82 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

M56 I: Connection Properties Report

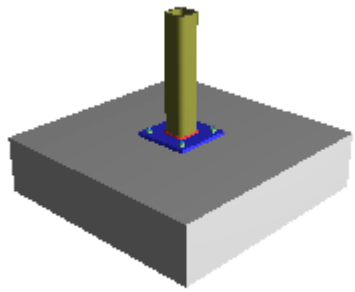
Single Column Base Plate Connection

Connection	
Connection Title	M56 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	100.125 lbs
Strong Axis Shear	32.001 lbs
Weak Axis Shear	6.336 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X4
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M58 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

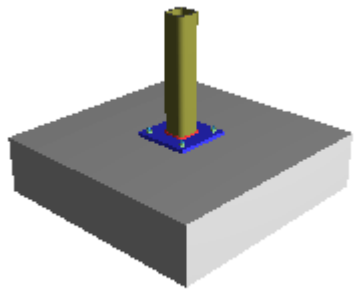
Input Data:		
Axial	1042.30 lbs	*Axial load on the column*
Strong Axis Shear	-0.46 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	121.80 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 57 - LC 57: dl+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.28**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Weak Axis)	**0.01**	**PASS**

M58 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	1042.30 lbs	*Axial load on the column*
Strong Axis Shear	-0.46 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	121.80 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

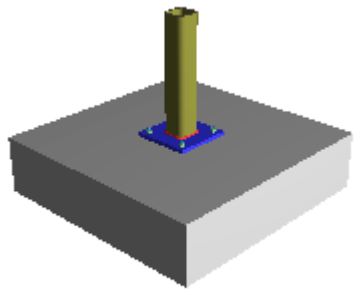
Governing LC: 3D - 57 - LC 57: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.01 ksi	4.42 ksi	**0.00**	**PASS**
Lateral Slip	121.80 lbs	429.95 lbs	**0.28**	**PASS**
Plate Flexural Yielding(Compression)	3.96 lb-ft/in	379.69 lb-ft/in	**0.01**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	232.75 lbs/ft	83520.00 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	0.87 lbs/ft	83520.00 lbs/ft	**0.00**	**PASS**

M58 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	1042.30 lbs	*Axial load on the column*
Strong Axis Shear	-0.46 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	121.80 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

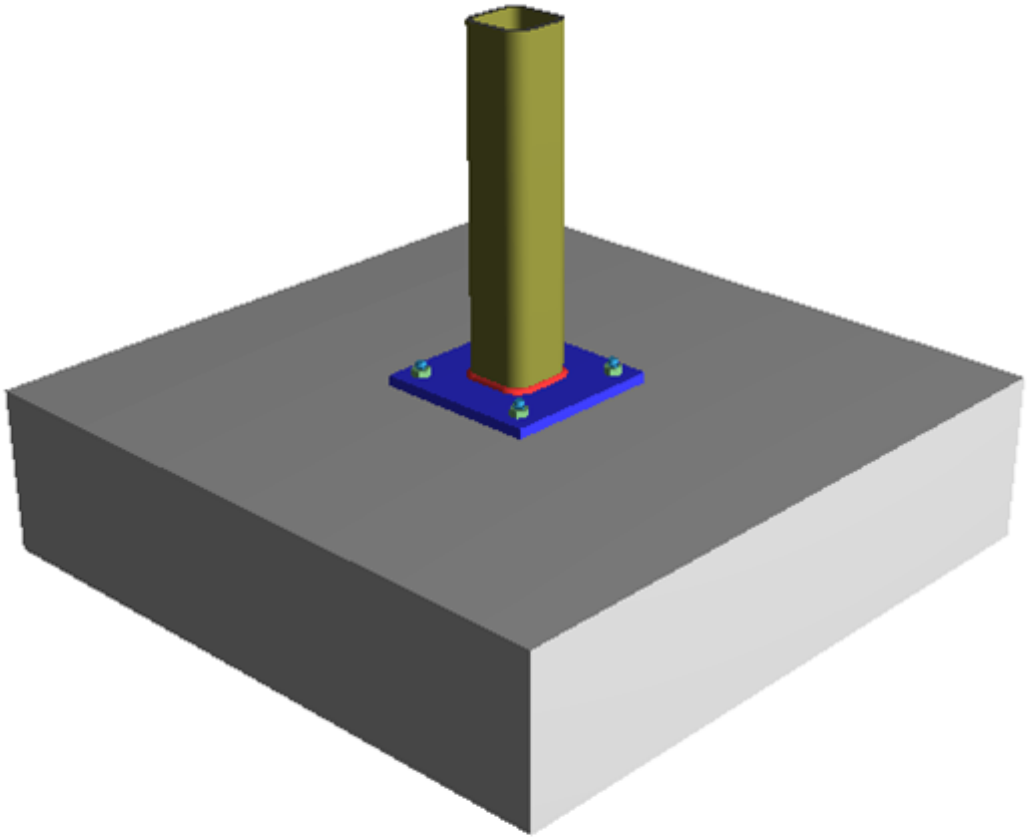
Governing LC: 3D - 57 - LC 57: dl+wl

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	60.90 lbs	7555.08 lbs	**0.01**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.01**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Concrete Pryout in Shear	60.90 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	121.80 lbs	57376.47 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

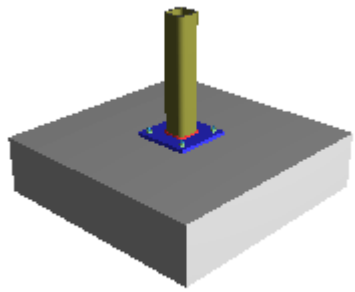
M58 I: Connection Properties Report

Connection	
Connection Title	M58 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	1042.304 lbs
Strong Axis Shear	-0.457 lbs
Weak Axis Shear	121.804 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X8
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M59 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

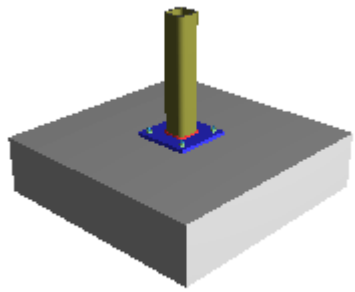
Input Data:		
Axial	384.27 lbs	*Axial load on the column*
Strong Axis Shear	-8.05 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	84.33 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 22 - LC 22: dl+sln+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.53**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Weak Axis)	**0.01**	**PASS**

M59 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	384.27 lbs	*Axial load on the column*
Strong Axis Shear	-8.05 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	84.33 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

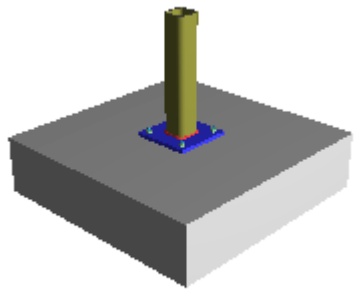
Governing LC: 3D - 22 - LC 22: dl+sln+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.00 ksi	4.42 ksi	**0.00**	**PASS**
Lateral Slip	84.72 lbs	158.51 lbs	**0.53**	**PASS**
Plate Flexural Yielding(Compression)	1.46 lb-ft/in	379.69 lb-ft/in	**0.00**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	161.15 lbs/ft	83520.00 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	15.39 lbs/ft	83520.00 lbs/ft	**0.00**	**PASS**

M59 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	384.27 lbs	*Axial load on the column*
Strong Axis Shear	-8.05 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	84.33 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

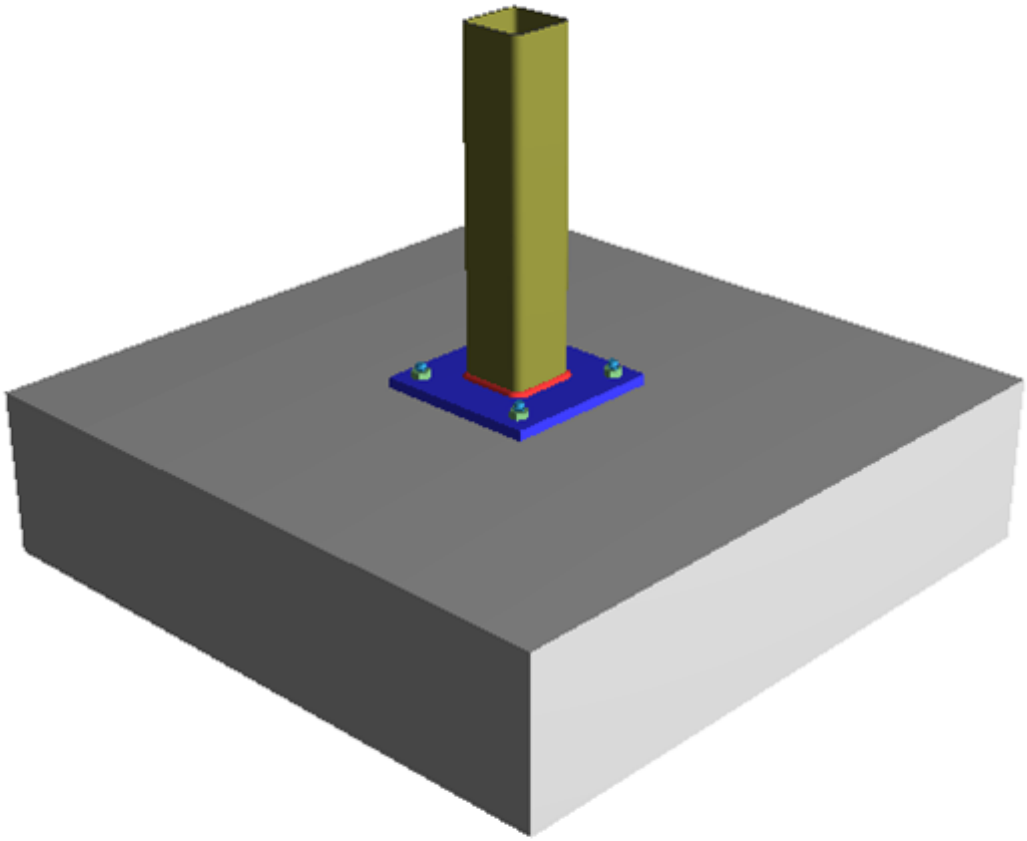
Governing LC: 3D - 22 - LC 22: dl+sln+wl

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	42.36 lbs	7555.08 lbs	**0.01**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.01**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Concrete Pryout in Shear	42.36 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	84.72 lbs	57441.42 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

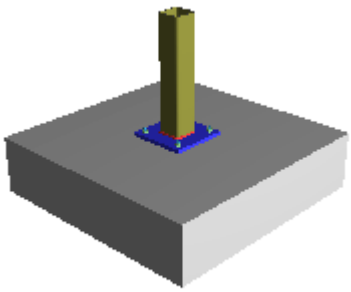
M59 I: Connection Properties Report

Connection	
Connection Title	M59 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	384.271 lbs
Strong Axis Shear	-8.055 lbs
Weak Axis Shear	84.335 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X8
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M6 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

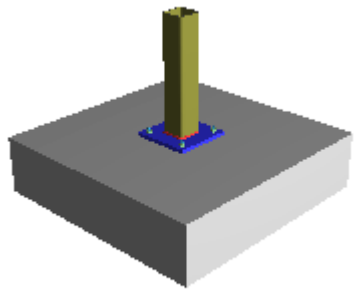
Input Data:		
Axial	814.96 lbs	*Axial load on the column*
Strong Axis Shear	-184.84 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	3.64 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 53 - LC 53: dl+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.55**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Strong Axis)	**0.02**	**PASS**

M6 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	814.96 lbs	*Axial load on the column*
Strong Axis Shear	-184.84 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	3.64 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

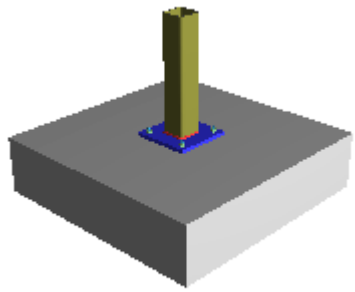
Governing LC: 3D - 53 - LC 53: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.01 ksi	4.42 ksi	**0.00**	**PASS**
Lateral Slip	184.87 lbs	336.17 lbs	**0.55**	**PASS**
Plate Flexural Yielding(Compression)	3.10 lb-ft/in	379.69 lb-ft/in	**0.01**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	5.37 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	272.62 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**

M6 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	814.96 lbs	*Axial load on the column*
Strong Axis Shear	-184.84 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	3.64 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

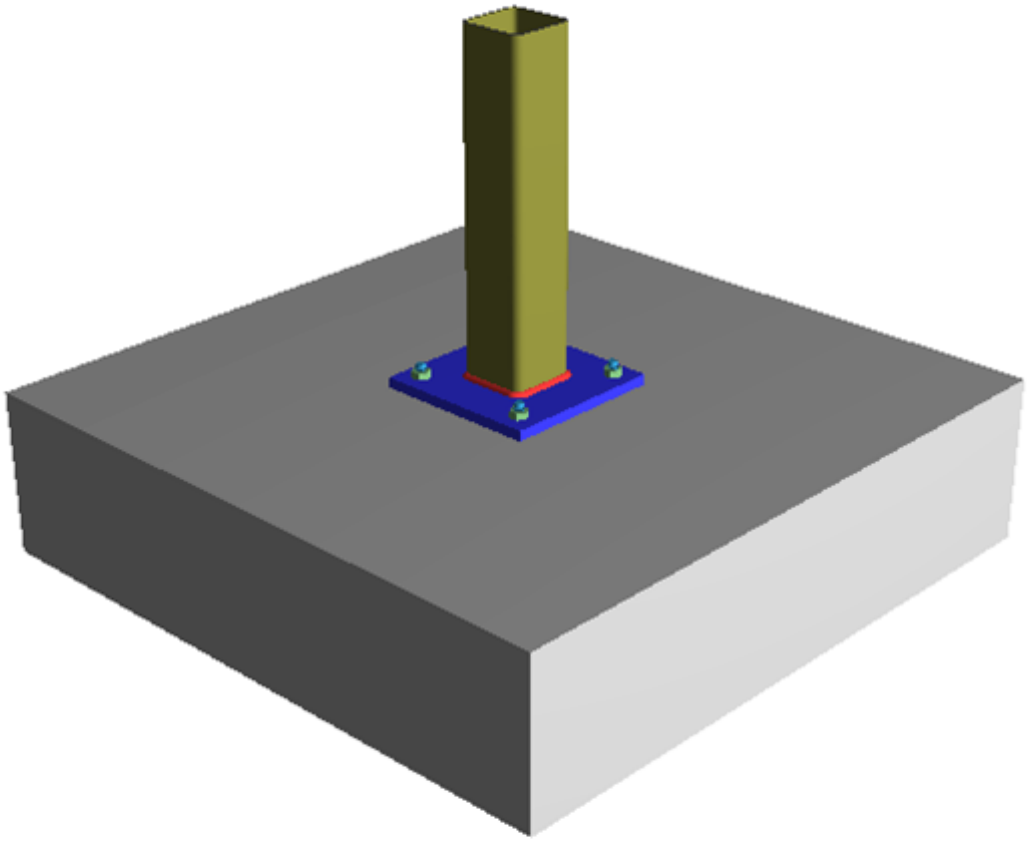
Governing LC: 3D - 53 - LC 53: dl+wl

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	92.44 lbs	7555.08 lbs	**0.01**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.01**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.02**	**PASS**
Concrete Pryout in Shear	92.44 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	184.87 lbs	57379.15 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

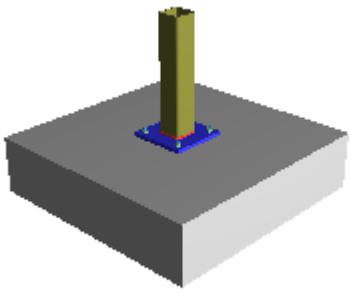
M6 I: Connection Properties Report

Connection	
Connection Title	M6 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	814.961 lbs
Strong Axis Shear	-184.837 lbs
Weak Axis Shear	3.642 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X4
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M7 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

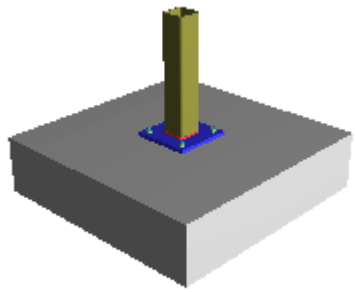
Input Data:		
Axial	747.15 lbs	*Axial load on the column*
Strong Axis Shear	-64.36 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	5.12 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 53 - LC 53: dl+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Lateral Slip	**0.21**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Strong Axis)	**0.01**	**PASS**

M7 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	747.15 lbs	*Axial load on the column*
Strong Axis Shear	-64.36 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	5.12 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

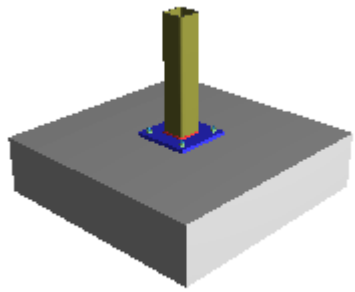
Governing LC: 3D - 53 - LC 53: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.01 ksi	4.42 ksi	**0.00**	**PASS**
Lateral Slip	64.57 lbs	308.20 lbs	**0.21**	**PASS**
Plate Flexural Yielding(Compression)	2.84 lb-ft/in	379.69 lb-ft/in	**0.01**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	7.55 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	94.93 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**

M7 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	747.15 lbs	*Axial load on the column*
Strong Axis Shear	-64.36 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	5.12 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

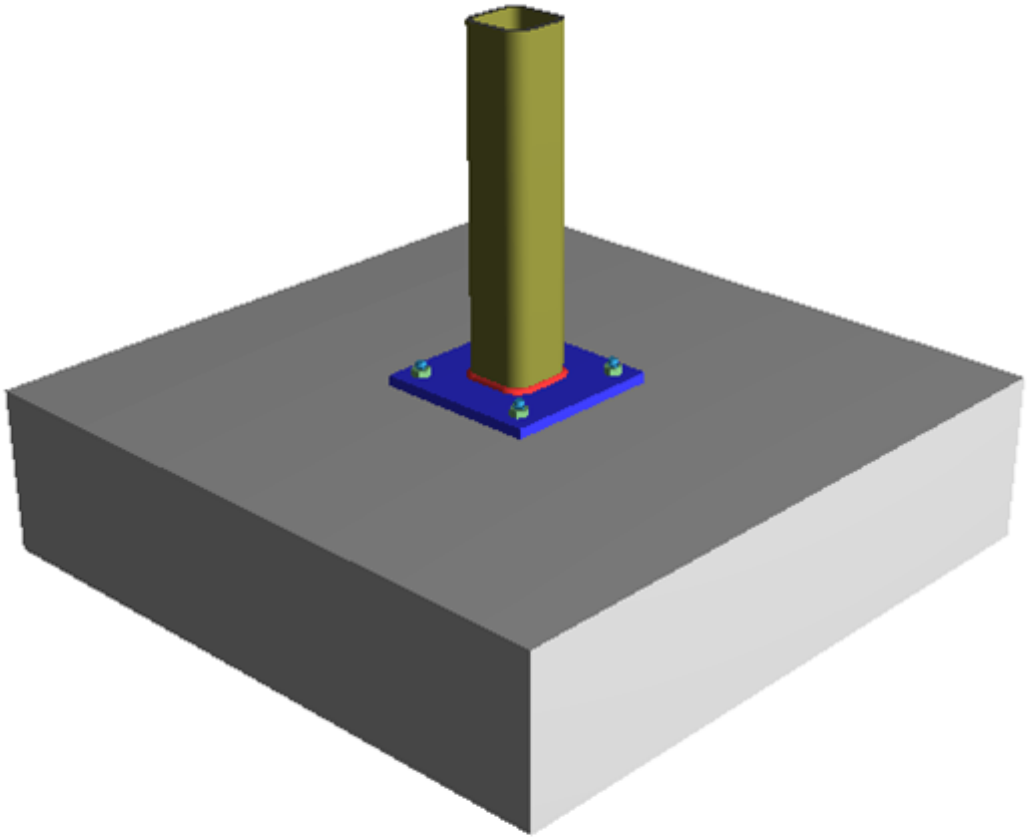
Governing LC: 3D - 53 - LC 53: dl+wl

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	32.28 lbs	7555.08 lbs	**0.00**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.01**	**PASS**
Concrete Pryout in Shear	32.28 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	64.57 lbs	57421.55 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

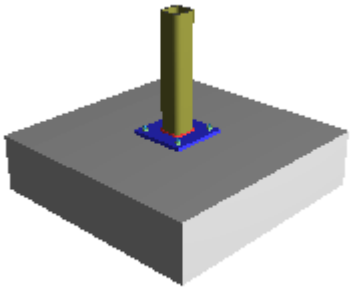
M7 I: Connection Properties Report

Connection	
Connection Title	M7 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	747.150 lbs
Strong Axis Shear	-64.363 lbs
Weak Axis Shear	5.119 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X4
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M73 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

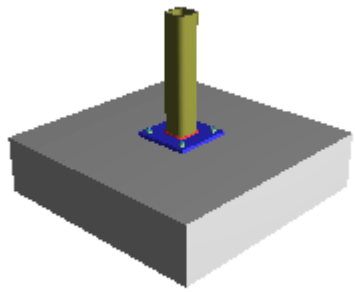
Input Data:		
Axial	-16218.84 lbs	*Axial load on the column*
Strong Axis Shear	5.11 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	1.42 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 53 - LC 53: dl+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Plate Flexural Yielding(Tension)	**0.52**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Tension	**0.32**	**PASS**

M73 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	-16218.84 lbs	*Axial load on the column*
Strong Axis Shear	5.11 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	1.42 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

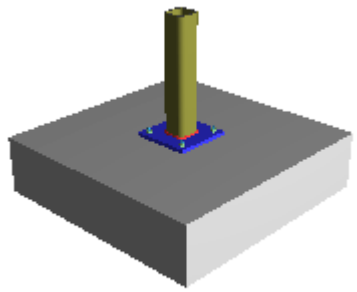
Governing LC: 3D - 53 - LC 53: dl+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Plate Flexural Yielding(Tension)	718.02 lb-ft	1376.37 lb-ft	**0.52**	**PASS**
Anchor Bolt Tension	4054.71 lbs	14413.28 lbs	**0.28**	**PASS**
Anchor Bolt Shear	5.30 lbs	17295.94 lbs	**0.00**	**PASS**
Anchor Bolt Bearing on Base Plate	5.30 lbs	17295.94 lbs	**0.00**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	15495.71 lbs/ft	83520.00 lbs/ft	**0.19**	**PASS**
Column Web Weld Strength	15495.71 lbs/ft	83520.00 lbs/ft	**0.19**	**PASS**

M73 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X8	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	-16218.84 lbs	*Axial load on the column*
Strong Axis Shear	5.11 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	1.42 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

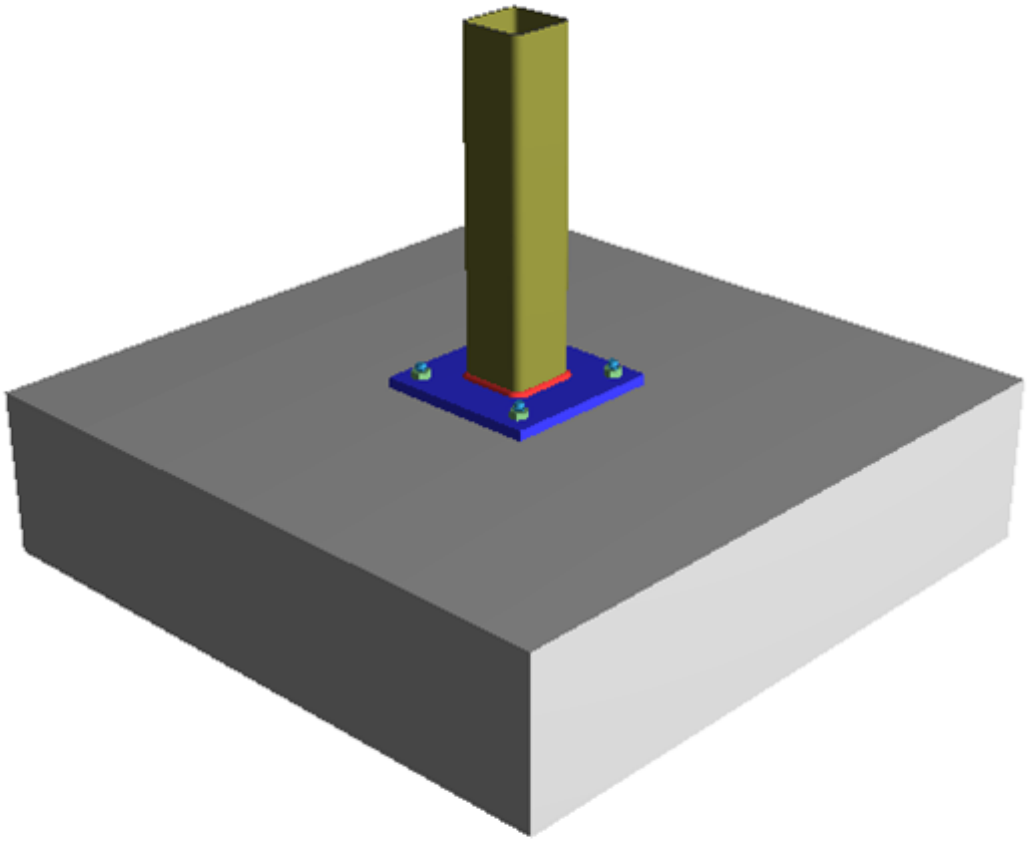
Governing LC: 3D - 53 - LC 53: dl+wl

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	4054.71 lbs	14529.00 lbs	**0.28**	**PASS**
Concrete Breakout (Tension)	4054.71 lbs	28688.18 lbs	**0.14**	**PASS**
Anchor group effect for Concrete Breakout in Tension	16218.84 lbs	51001.21 lbs	**0.32**	**PASS**
Concrete Pullout	4054.71 lbs	14649.60 lbs	**0.28**	**PASS**
Concrete Side-Face Blowout				**n/a**
Steel Shear	2.65 lbs	7555.08 lbs	**0.00**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Concrete Pryout in Shear	2.65 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	5.30 lbs	57902.24 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

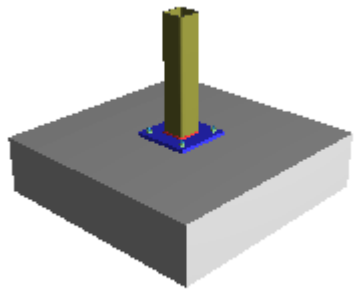
M73 I: Connection Properties Report

Connection	
Connection Title	M73 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	-16218.839 lbs
Strong Axis Shear	5.109 lbs
Weak Axis Shear	1.416 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X8
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in



M74 I: Summary Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

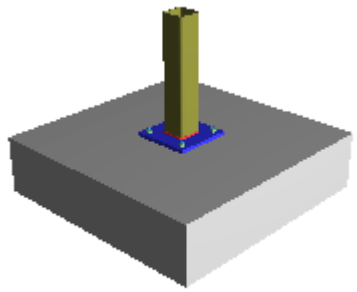
Input Data:		
Axial	24911.23 lbs	*Axial load on the column*
Strong Axis Shear	16.96 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-6.98 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 7 - LC 7: dl+rll+wl

Connection	Required	Max Unity Check	Result
Column/Base Plate connection	Plate Flexural Yielding(Compression)	**0.25**	**PASS**
Anchorage Design	Anchor group effect for Concrete Breakout in Shear (Strong Axis)	**0.00**	**PASS**

M74 I: Base Plate Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	24911.23 lbs	*Axial load on the column*
Strong Axis Shear	16.96 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-6.98 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

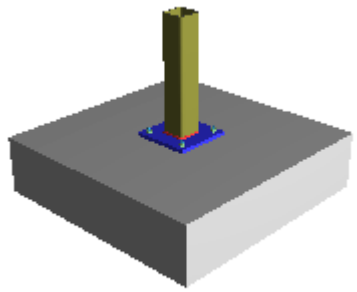
Governing LC: 3D - 7 - LC 7: dl+rll+wl

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Concrete Bearing	0.17 ksi	4.42 ksi	**0.04**	**PASS**
Lateral Slip	18.35 lbs	10275.88 lbs	**0.00**	**PASS**
Plate Flexural Yielding(Compression)	94.72 lb-ft/in	379.69 lb-ft/in	**0.25**	**PASS**
Column Weld Limitations				**PASS**
Column Flange Weld Strength	10.30 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**
Column Web Weld Strength	25.02 lbs/ft	78001.87 lbs/ft	**0.00**	**PASS**

M74 I: Anchorage Design Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS5X5X4	A500 Gr.C	F_y = 50.00 ksi	F_u = 62.00 ksi
Base Plate	P0.75x12.00x12.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Axial	24911.23 lbs	*Axial load on the column*
Strong Axis Shear	16.96 lbs	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-6.98 lbs	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	0.00 lb-ft	*Column moment about the strong axis*
Weak Axis Moment	0.00 lb-ft	*Column moment about the weak axis*

Governing LC: 3D - 7 - LC 7: dl+rll+wl

Note: Unless specified, all code references are from ACI 318-19 (22)

Limit State	Required	Available	Unity Check	Result
Steel Tension	0.00 lbs	14529.00 lbs	**0.00**	**PASS**
Steel Shear	9.17 lbs	7555.08 lbs	**0.00**	**PASS**
Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Weak Axis)			**0.00**	**PASS**
Anchor group effect for Concrete Breakout in Shear (Strong Axis)			**0.00**	**PASS**
Concrete Pryout in Shear	9.17 lbs	57376.37 lbs	**0.00**	**PASS**
Anchor group effect for Concrete Pryout in Shear	18.35 lbs	58476.79 lbs	**0.00**	**PASS**
Tension and Shear Interaction				**n/a**
Concrete Splitting				**PASS**

M74 I: Connection Properties Report

Connection	
Connection Title	M74 I
Connection Type	Single Column Base Plate Connection
Anchorage	
Anchorage Type	Cast-in-place
Perform Anchorage Calc	Yes
Connection Category	
Bolt Layout	Four
Plate Washers	No
Loading (LRFD)	
Custom?	No
Axial	24911.232 lbs
Strong Axis Shear	16.965 lbs
Weak Axis Shear	-6.983 lbs
Strong Axis Moment	0.000 lb-ft
Weak Axis Moment	0.000 lb-ft
Components	
Column Section	HSS5X5X4
Material	A500 Gr.C
Base Plate	P0.75x12.00x12.00
Material	A36
Length	12.000 in
Width	12.000 in
Thickness	0.750 in
Static Friction Coefficient	0.550 Coeff
Hole Type	OVS
Concrete Support	C48.00x48.00x12.00
Length	48.000 in
Width	48.000 in
Thickness	12.000 in
Compressive Strength (f'c)	4.000 ksi
Concrete Weight	Normal Weight
Cracked Concrete	Yes
Edge Reinforcement	None or < no. 4 bar
Anchor Bolts	3/4" F1554 Gr.36-N
Material	F1554 Gr.36-N
Head Type	Hex Bolt
Torque Type	Untorqued Anchor
Diameter, in.	3/4"
Embedment depth	9.000 in
Bolt Spacing y	9.000 in
Bolt Spacing z	9.000 in
Column Weld	E70
Type	Fillet
Fillet Size	5.000 Sixteenths
Assembly	
Edge Distance y	1.500 in
Edge Distance z	1.500 in
Edge Distance +y	18.000 in
Edge Distance -y	18.000 in
Edge Distance +z	18.000 in
Edge Distance -z	18.000 in

PROFIS VERIFICATION USING MAX REACTIONS

Node Reactions

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
1	1	N1	6.553	1665.208	2.22	0	0	0
2	1	N5	-1.731	4140.115	0.085	0	0	0
3	1	N4	23.5	8230.29	1.367	0	-1.096	0
4	1	N6	8.837	2695.437	0.213	0	0	0
5	1	N7	9.569	3114.829	-0.738	0	0	0
6	1	N15	-0.646	9979.247	42.124	0	-16.842	0
7	1	N9	15.515	9292.169	25.55	0	9.102	0
8	1	N20	-43.616	2979.465	38.718	0	0	0
9	1	N23	-11.875	12641.12	-3.286	0	0	0
10	1	N27	-0.604	2830.881	1.517	0	0	0
11	1	N30	-4.434	4894.776	1.166	0	0	0
12	1	N19	40.689	7094.229	2.174	0	0	0
13	1	N32	-2.344	553.635	0.843	0	0	0
14	1	N10	-6.214	10144.089	20.389	0	0	0
15	1	N11	-21.905	10227.317	-30.323	0	0	0
16	1	N12	-22.094	7825.308	-12.818	0	0	0
17	1	N14	-4.161	1361.043	-12.589	0	0	0
18	1	N21	0.486	6419.81	16.949	0	-6.379	0
19	1	N22	-17.187	11229.062	21.02	0	0	0
20	1	N24	-5.02	8461.973	-8.639	0	0	0
21	1	N26	-15.953	4208.047	-46.317	0	0	0
22	1	N25	-9.062	5966.434	91.454	0	0	0
23	1	N29	-5.074	6169.818	1.426	0	0.873	0
24	1	N33	-3.531	520.869	0.842	0	0	0
25	1	COG (ft):	X: 32.005	Y: 14.119	Z: 24.934			
26	2	N1	11.078	2363.666	2.391	0	0	0
27	2	N5	-2.868	5925.624	-0.989	0	0	0
28	2	N4	33.493	11632	1.78	0	-0.426	0
29	2	N6	15.128	3931.935	0.28	0	0	0
30	2	N7	16.429	4795.127	-1.406	0	0	0
31	2	N15	0.502	15570.391	71.624	0	-32.459	0
32	2	N9	25.945	14466.427	47.497	0	14.215	0
33	2	N20	-47.856	3908.5	69.231	0	0	0
34	2	N23	-21.552	22077.642	-5.692	0	0	0
35	2	N27	-0.392	4110.347	2.032	0	0	0
36	2	N30	-7.92	7068.359	1.063	0	0	0
37	2	N19	44.552	10513.005	4.035	0	0	0
38	2	N32	-4.118	218.588	1.084	0	0	0
39	2	N10	-11.626	17429.018	35.144	0	0	0
40	2	N11	-28.258	16268.409	-54.791	0	0	0
41	2	N12	-27.643	11549.618	-19.582	0	0	0
42	2	N14	-7.105	1550.689	-19.609	0	0	0
43	2	N21	0.69	10269.193	29.826	0	-11.716	0
44	2	N22	-30.238	18965.507	37.225	0	0	0
45	2	N24	-8.988	13571.607	-15.375	0	0	0
46	2	N26	-27.338	6068.277	-38.684	0	0	0
47	2	N25	-16.448	8283.672	114.445	0	0	0
48	2	N29	-10.853	9309.424	1.993	0	-2.475	0
49	2	N33	-6.296	161.854	1.081	0	0	0
50	2	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
51	3	N1	11.078	2363.666	2.391	0	0	0
52	3	N5	-2.868	5925.624	-0.989	0	0	0
53	3	N4	33.493	11632	1.78	0	-0.426	0
54	3	N6	15.128	3931.935	0.28	0	0	0
55	3	N7	16.429	4795.127	-1.406	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
56	3	N15	0.502	15570.391	71.624	0	-32.459	0
57	3	N9	25.945	14466.427	47.497	0	14.215	0
58	3	N20	-47.856	3908.5	69.231	0	0	0
59	3	N23	-21.552	22077.642	-5.692	0	0	0
60	3	N27	-0.392	4110.347	2.032	0	0	0
61	3	N30	-7.92	7068.359	1.063	0	0	0
62	3	N19	44.552	10513.005	4.035	0	0	0
63	3	N32	-4.118	218.588	1.084	0	0	0
64	3	N10	-11.626	17429.018	35.144	0	0	0
65	3	N11	-28.258	16268.409	-54.791	0	0	0
66	3	N12	-27.643	11549.618	-19.582	0	0	0
67	3	N14	-7.105	1550.689	-19.609	0	0	0
68	3	N21	0.69	10269.193	29.826	0	-11.716	0
69	3	N22	-30.238	18965.507	37.225	0	0	0
70	3	N24	-8.988	13571.607	-15.375	0	0	0
71	3	N26	-27.338	6068.277	-38.684	0	0	0
72	3	N25	-16.448	8283.672	114.445	0	0	0
73	3	N29	-10.853	9309.424	1.993	0	-2.475	0
74	3	N33	-6.296	161.854	1.081	0	0	0
75	3	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
76	4	N1	9.335	2413.033	2.395	0	0	0
77	4	N5	-3.255	7316.537	-1.258	0	0	0
78	4	N4	29.528	11751.772	1.915	0	-1.371	0
79	4	N6	15.131	3443.702	0.245	0	0	0
80	4	N7	14.307	4167.53	-1.199	0	0	0
81	4	N15	1.317	18336.248	74.782	0	-30.862	0
82	4	N9	25.611	16115.533	45.712	0	15.09	0
83	4	N20	-47.781	4393.557	30.843	0	0	0
84	4	N23	-18.81	19210.181	-1.187	0	0	0
85	4	N27	-0.425	6095.657	2.7	0	0	0
86	4	N30	-8.544	8844.424	0.79	0	0	0
87	4	N19	24.226	13078.308	0.165	0	0	0
88	4	N32	-4.329	347.35	1.134	0	0	0
89	4	N10	-10.244	15220.556	29.474	0	0	0
90	4	N11	-25.567	14325.368	-45.66	0	0	0
91	4	N12	-24.066	11853.881	-18.483	0	0	0
92	4	N14	-9.059	2077.043	-18.631	0	0	0
93	4	N21	0.516	12513.642	31.054	0	-12.802	0
94	4	N22	-29.323	16671.008	28.408	0	0	0
95	4	N24	-9.035	14806.338	-15.402	0	0	0
96	4	N26	-16.061	7342.272	-41.634	0	0	0
97	4	N25	-13.025	8792.26	76.056	0	0	0
98	4	N29	-8.835	10969.406	2.329	0	-0.742	0
99	4	N33	-5.674	249.34	1.132	0	0	0
100	4	COG (ft):	X: 32.57	Y: 14.527	Z: 24.107			
101	5	N1	0.228	2224.544	2.205	0	0	0
102	5	N5	30.6	6512.002	0.608	0	0	0
103	5	N4	140.052	12753.695	3.131	0	18.482	0
104	5	N6	-31.67	4338.851	-0.146	0	0	0
105	5	N7	13.84	5700.374	-0.698	0	0	0
106	5	N15	6.968	20434.864	80.836	0	-57.342	0
107	5	N9	-52.804	16079.988	82.399	0	98.215	0
108	5	N20	-69.034	4119.302	70.099	0	0	0
109	5	N23	-9.273	24872.642	-6.96	0	0	0
110	5	N27	0.747	4537.874	4.428	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
111	5	N30	14.208	7681.676	0.672	0	0	0
112	5	N19	25.472	17441.251	-5.772	0	0	0
113	5	N32	7.512	287.623	-1.719	0	0	0
114	5	N10	-0.431	19646.484	39.869	0	0	0
115	5	N11	-21.812	18158.632	-61.932	0	0	0
116	5	N12	14.386	12761.961	-22.031	0	0	0
117	5	N14	24.277	1654.78	-22.245	0	0	0
118	5	N21	3.366	11466.381	33.662	0	-17.645	0
119	5	N22	-31.872	12556.189	41.781	0	0	0
120	5	N24	17.259	15129.833	-18.398	0	0	0
121	5	N26	-26.806	6777.164	-31.512	0	0	0
122	5	N25	2.465	124.769	123.473	0	0	0
123	5	N29	38.543	10341.16	3.356	0	-33.824	0
124	5	N33	4.937	222.569	-1.723	0	0	0
125	5	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
126	6	N1	-4.85	1940.333	2.043	0	0	0
127	6	N5	31.039	5917.691	1.367	0	0	0
128	6	N4	137.347	11607.667	3.309	0	30.55	0
129	6	N6	-51.686	3934.3	-0.301	0	0	0
130	6	N7	9.06	5219.567	-0.379	0	0	0
131	6	N15	5.772	18714.611	72.154	0	-51.935	0
132	6	N9	-88.118	14461.026	76.485	0	115.596	0
133	6	N20	-75.375	3929.119	70.138	0	0	0
134	6	N23	-9.454	22057.525	-5.898	0	0	0
135	6	N27	0.373	4115.465	4.128	0	0	0
136	6	N30	14.902	6964.117	0.588	0	0	0
137	6	N19	18.302	16972.096	-6.242	0	0	0
138	6	N32	8.159	347.516	-1.804	0	0	0
139	6	N10	1.111	17471.984	35.57	0	0	0
140	6	N11	-19.643	16288.26	-54.688	0	0	0
141	6	N12	15.809	11551.55	-19.891	0	0	0
142	6	N14	25.315	1559.027	-20.093	0	0	0
143	6	N21	2.749	10274.286	29.9	0	-15.548	0
144	6	N22	-28.594	10314.432	37.095	0	0	0
145	6	N24	17.417	13547.657	-16.083	0	0	0
146	6	N26	-30.331	6264.691	-32.05	0	0	0
147	6	N25	4.526	-119.052	122.962	0	0	0
148	6	N29	39.386	9332.662	3.088	0	-31.102	0
149	6	N33	5.701	290.49	-1.808	0	0	0
150	6	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
151	7	N1	25.14	2925.172	2.785	0	0	0
152	7	N5	-29.688	6526.248	-3.054	0	0	0
153	7	N4	-34.835	12795.565	0.81	0	-26.932	0
154	7	N6	68.087	4335.619	0.764	0	0	0
155	7	N7	25.69	4998.078	-2.323	0	0	0
156	7	N15	-4.279	14265.576	80.083	0	-18.266	0
157	7	N9	114.932	16099.969	26.536	0	-37.783	0
158	7	N20	-31.557	4114.653	67.678	0	0	0
159	7	N23	-38.837	24911.26	-6.051	0	0	0
160	7	N27	-1.332	4525.214	0.199	0	0	0
161	7	N30	-35.258	7899.572	1.573	0	0	0
162	7	N19	60.383	6190.131	13.411	0	0	0
163	7	N32	-18.672	15.125	3.92	0	0	0
164	7	N10	-26.078	19581.172	39.085	0	0	0
165	7	N11	-39.261	18132.152	-62.202	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
166	7	N12	-73.597	12760.043	-21.531	0	0	0
167	7	N14	-33.134	1639.859	-21.376	0	0	0
168	7	N21	-1.565	11455.721	33.67	0	-9.581	0
169	7	N22	-41.552	29692.756	42.737	0	0	0
170	7	N24	-40.489	15174.171	-16.692	0	0	0
171	7	N26	-27.287	6337.616	-46.993	0	0	0
172	7	N25	-45.51	17441.232	104.909	0	0	0
173	7	N29	-88.841	10283.478	1.161	0	30.849	0
174	7	N33	-21.059	-48.961	3.918	0	0	0
175	7	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
176	8	N1	20.796	2640.472	2.602	0	0	0
177	8	N5	-28.965	5932.665	-2.344	0	0	0
178	8	N4	-35.62	11649.251	0.896	0	-14.756	0
179	8	N6	48.494	3931.022	0.666	0	0	0
180	8	N7	21.743	4517.363	-1.948	0	0	0
181	8	N15	-5.146	12549.571	71.39	0	-12.896	0
182	8	N9	81.708	14478.63	20.809	0	-20.839	0
183	8	N20	-37.692	3924.284	67.722	0	0	0
184	8	N23	-34.168	22096.509	-5.189	0	0	0
185	8	N27	-1.611	4102.934	-0.163	0	0	0
186	8	N30	-33.863	7181.818	1.407	0	0	0
187	8	N19	53.091	5720.065	12.797	0	0	0
188	8	N32	-18.034	75.351	3.829	0	0	0
189	8	N10	-19.797	17407.841	34.889	0	0	0
190	8	N11	-33.675	16262.34	-54.884	0	0	0
191	8	N12	-70.561	11549.792	-19.341	0	0	0
192	8	N14	-32.055	1544.142	-19.223	0	0	0
193	8	N21	-1.918	10263.483	29.839	0	-7.535	0
194	8	N22	-36.853	27437.756	38.109	0	0	0
195	8	N24	-38.86	13592.291	-14.476	0	0	0
196	8	N26	-30.645	5825.823	-47.513	0	0	0
197	8	N25	-43.593	17187.789	104.546	0	0	0
198	8	N29	-86.254	9276.304	0.758	0	33.54	0
199	8	N33	-20.277	19.309	3.828	0	0	0
200	8	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
201	9	N1	10.433	2557.983	2.987	0	0	0
202	9	N5	-3.175	6521.783	-1.621	0	0	0
203	9	N4	36.908	12787.112	3.261	0	8.638	0
204	9	N6	8.71	4335.099	18.262	0	0	0
205	9	N7	17.038	5355.281	22.9	0	0	0
206	9	N15	1.584	19429.63	154.179	0	81.316	0
207	9	N9	15.12	16060.776	98.949	0	18.672	0
208	9	N20	-55.844	4152.857	68.841	0	0	0
209	9	N23	-24.409	24881.294	13.776	0	0	0
210	9	N27	-1.82	4485.125	12.65	0	0	0
211	9	N30	-8.889	7641.655	19.152	0	0	0
212	9	N19	33.381	9853.228	32.027	0	0	0
213	9	N32	-4.458	-1.436	9.679	0	0	0
214	9	N10	-11.953	19659.032	46.178	0	0	0
215	9	N11	-30.683	18088.405	-57.974	0	0	0
216	9	N12	-30.272	12808.226	-20.325	0	0	0
217	9	N14	-7.523	1675.051	-26.969	0	0	0
218	9	N21	-0.054	11443.174	80.686	0	-20.667	0
219	9	N22	-33.718	20254.051	57.402	0	0	0
220	9	N24	-10.354	15035.777	61.653	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
221	9	N26	-33.427	6812.897	-136.899	0	0	0
222	9	N25	-22.694	10060.911	24.919	0	0	0
223	9	N29	-12.41	10385.237	31.706	0	1.246	0
224	9	N33	-7.296	234.904	10.017	0	0	0
225	9	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
226	10	N1	8.923	2323.011	2.768	0	0	0
227	10	N5	-2.815	5927.875	-1.039	0	0	0
228	10	N4	33.683	11642.371	3.177	0	8.723	0
229	10	N6	7.483	3929.611	17.93	0	0	0
230	10	N7	14.887	4826.235	23.173	0	0	0
231	10	N15	1.067	17571.091	144.995	0	80.458	0
232	10	N9	13.328	14432.004	100.759	0	15.795	0
233	10	N20	-53.861	3944.495	69.86	0	0	0
234	10	N23	-21.483	22069.976	11.076	0	0	0
235	10	N27	-1.79	4064.919	11.576	0	0	0
236	10	N30	-7.787	6923.645	17.925	0	0	0
237	10	N19	35.499	8762.408	30.075	0	0	0
238	10	N32	-3.923	62.754	10.123	0	0	0
239	10	N10	-10.257	17481.538	40.734	0	0	0
240	10	N11	-28.179	16213.606	-51.65	0	0	0
241	10	N12	-28.022	11596.848	-18.473	0	0	0
242	10	N14	-6.616	1578.322	-24.288	0	0	0
243	10	N21	-0.192	10252.063	75.205	0	-19.602	0
244	10	N22	-29.757	17858.88	49.77	0	0	0
245	10	N24	-9.006	13456.292	61.578	0	0	0
246	10	N26	-32.786	6326.815	-133.723	0	0	0
247	10	N25	-21.575	9227.926	27.61	0	0	0
248	10	N29	-10.755	9379.409	30.15	0	2.206	0
249	10	N33	-6.59	305.758	10.467	0	0	0
250	10	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
251	11	N1	14.326	2640.595	0.932	0	0	0
252	11	N5	-3.206	6516.929	-2.047	0	0	0
253	11	N4	36.683	12762.873	-0.733	0	-9.074	0
254	11	N6	25.586	4338.935	-11.537	0	0	0
255	11	N7	19.756	5298.607	-18.532	0	0	0
256	11	N15	0.431	15328.578	28.73	0	-122.269	0
257	11	N9	43.21	16124.639	5.91	0	14.702	0
258	11	N20	-43.524	4081.255	63.679	0	0	0
259	11	N23	-24.558	24895.487	-26.141	0	0	0
260	11	N27	1.079	4575.921	-7.996	0	0	0
261	11	N30	-9.061	7927.554	-16.524	0	0	0
262	11	N19	51.814	13341.283	-24.947	0	0	0
263	11	N32	-4.822	306.495	-7.622	0	0	0
264	11	N10	-14.938	19563.867	32.781	0	0	0
265	11	N11	-30.811	18217.924	-66.202	0	0	0
266	11	N12	-29.426	12696.308	-25.858	0	0	0
267	11	N14	-8.437	1614.001	-18.779	0	0	0
268	11	N21	1.65	11474.806	0.092	0	-26.114	0
269	11	N22	-34.917	22365.331	24.606	0	0	0
270	11	N24	-10.09	15268.317	-98.442	0	0	0
271	11	N26	-22.08	6294.288	51.233	0	0	0
272	11	N25	-13.644	8148.304	196.289	0	0	0
273	11	N29	-12.632	10246.554	-26.059	0	-7.808	0
274	11	N33	-6.892	-49.7	-7.138	0	0	0
275	11	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
276	12	N1	12.859	2405.419	0.766	0	0	0
277	12	N5	-2.982	5922.784	-1.313	0	0	0
278	12	N4	33.43	11618.154	-0.546	0	-8.934	0
279	12	N6	24.308	3933.516	-11.595	0	0	0
280	12	N7	17.72	4769.649	-17.914	0	0	0
281	12	N15	0.213	13486.133	20.946	0	-122.71	0
282	12	N9	41.539	14495.513	9.365	0	11.862	0
283	12	N20	-41.663	3873.217	64.999	0	0	0
284	12	N23	-21.545	22084.464	-22.281	0	0	0
285	12	N27	1.161	4155.568	-7.945	0	0	0
286	12	N30	-8.025	7209.16	-15.834	0	0	0
287	12	N19	53.779	12242.092	-25.886	0	0	0
288	12	N32	-4.293	370.133	-7.371	0	0	0
289	12	N10	-12.814	17386.32	29.217	0	0	0
290	12	N11	-28.277	16343.389	-58.26	0	0	0
291	12	N12	-27.252	11484.924	-22.961	0	0	0
292	12	N14	-7.548	1517.297	-16.018	0	0	0
293	12	N21	1.685	10283.523	-2.545	0	-24.969	0
294	12	N22	-30.768	19964.559	22.581	0	0	0
295	12	N24	-8.867	13688.869	-94.595	0	0	0
296	12	N26	-21.497	5808.972	54.91	0	0	0
297	12	N25	-12.606	7321.627	200.176	0	0	0
298	12	N29	-10.947	9240.977	-24.878	0	-6.818	0
299	12	N33	-6.179	21.573	-6.889	0	0	0
300	12	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
301	13	N1	0.228	2224.544	2.205	0	0	0
302	13	N5	30.6	6512.002	0.608	0	0	0
303	13	N4	140.052	12753.695	3.131	0	18.482	0
304	13	N6	-31.67	4338.851	-0.146	0	0	0
305	13	N7	13.84	5700.374	-0.698	0	0	0
306	13	N15	6.968	20434.864	80.836	0	-57.342	0
307	13	N9	-52.804	16079.988	82.399	0	98.215	0
308	13	N20	-69.034	4119.302	70.099	0	0	0
309	13	N23	-9.273	24872.642	-6.96	0	0	0
310	13	N27	0.747	4537.874	4.428	0	0	0
311	13	N30	14.208	7681.676	0.672	0	0	0
312	13	N19	25.472	17441.251	-5.772	0	0	0
313	13	N32	7.512	287.623	-1.719	0	0	0
314	13	N10	-0.431	19646.484	39.869	0	0	0
315	13	N11	-21.812	18158.632	-61.932	0	0	0
316	13	N12	14.386	12761.961	-22.031	0	0	0
317	13	N14	24.277	1654.78	-22.245	0	0	0
318	13	N21	3.366	11466.381	33.662	0	-17.645	0
319	13	N22	-31.872	12556.189	41.781	0	0	0
320	13	N24	17.259	15129.833	-18.398	0	0	0
321	13	N26	-26.806	6777.164	-31.512	0	0	0
322	13	N25	2.465	124.769	123.473	0	0	0
323	13	N29	38.543	10341.16	3.356	0	-33.824	0
324	13	N33	4.937	222.569	-1.723	0	0	0
325	13	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
326	14	N1	-4.85	1940.333	2.043	0	0	0
327	14	N5	31.039	5917.691	1.367	0	0	0
328	14	N4	137.347	11607.667	3.309	0	30.55	0
329	14	N6	-51.686	3934.3	-0.301	0	0	0
330	14	N7	9.06	5219.567	-0.379	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
331	14	N15	5.772	18714.611	72.154	0	-51.935	0
332	14	N9	-88.118	14461.026	76.485	0	115.596	0
333	14	N20	-75.375	3929.119	70.138	0	0	0
334	14	N23	-9.454	22057.525	-5.898	0	0	0
335	14	N27	0.373	4115.465	4.128	0	0	0
336	14	N30	14.902	6964.117	0.588	0	0	0
337	14	N19	18.302	16972.096	-6.242	0	0	0
338	14	N32	8.159	347.516	-1.804	0	0	0
339	14	N10	1.111	17471.984	35.57	0	0	0
340	14	N11	-19.643	16288.26	-54.688	0	0	0
341	14	N12	15.809	11551.55	-19.891	0	0	0
342	14	N14	25.315	1559.027	-20.093	0	0	0
343	14	N21	2.749	10274.286	29.9	0	-15.548	0
344	14	N22	-28.594	10314.432	37.095	0	0	0
345	14	N24	17.417	13547.657	-16.083	0	0	0
346	14	N26	-30.331	6264.691	-32.05	0	0	0
347	14	N25	4.526	-119.052	122.962	0	0	0
348	14	N29	39.386	9332.662	3.088	0	-31.102	0
349	14	N33	5.701	290.49	-1.808	0	0	0
350	14	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
351	15	N1	25.14	2925.172	2.785	0	0	0
352	15	N5	-29.688	6526.248	-3.054	0	0	0
353	15	N4	-34.835	12795.565	0.81	0	-26.932	0
354	15	N6	68.087	4335.619	0.764	0	0	0
355	15	N7	25.69	4998.078	-2.323	0	0	0
356	15	N15	-4.279	14265.576	80.083	0	-18.266	0
357	15	N9	114.932	16099.969	26.536	0	-37.783	0
358	15	N20	-31.557	4114.653	67.678	0	0	0
359	15	N23	-38.837	24911.26	-6.051	0	0	0
360	15	N27	-1.332	4525.214	0.199	0	0	0
361	15	N30	-35.258	7899.572	1.573	0	0	0
362	15	N19	60.383	6190.131	13.411	0	0	0
363	15	N32	-18.672	15.125	3.92	0	0	0
364	15	N10	-26.078	19581.172	39.085	0	0	0
365	15	N11	-39.261	18132.152	-62.202	0	0	0
366	15	N12	-73.597	12760.043	-21.531	0	0	0
367	15	N14	-33.134	1639.859	-21.376	0	0	0
368	15	N21	-1.565	11455.721	33.67	0	-9.581	0
369	15	N22	-41.552	29692.756	42.737	0	0	0
370	15	N24	-40.489	15174.171	-16.692	0	0	0
371	15	N26	-27.287	6337.616	-46.993	0	0	0
372	15	N25	-45.51	17441.232	104.909	0	0	0
373	15	N29	-88.841	10283.478	1.161	0	30.849	0
374	15	N33	-21.059	-48.961	3.918	0	0	0
375	15	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
376	16	N1	20.796	2640.472	2.602	0	0	0
377	16	N5	-28.965	5932.665	-2.344	0	0	0
378	16	N4	-35.62	11649.251	0.896	0	-14.756	0
379	16	N6	48.494	3931.022	0.666	0	0	0
380	16	N7	21.743	4517.363	-1.948	0	0	0
381	16	N15	-5.146	12549.571	71.39	0	-12.896	0
382	16	N9	81.708	14478.63	20.809	0	-20.839	0
383	16	N20	-37.692	3924.284	67.722	0	0	0
384	16	N23	-34.168	22096.509	-5.189	0	0	0
385	16	N27	-1.611	4102.934	-0.163	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
386	16	N30	-33.863	7181.818	1.407	0	0	0
387	16	N19	53.091	5720.065	12.797	0	0	0
388	16	N32	-18.034	75.351	3.829	0	0	0
389	16	N10	-19.797	17407.841	34.889	0	0	0
390	16	N11	-33.675	16262.34	-54.884	0	0	0
391	16	N12	-70.561	11549.792	-19.341	0	0	0
392	16	N14	-32.055	1544.142	-19.223	0	0	0
393	16	N21	-1.918	10263.483	29.839	0	-7.535	0
394	16	N22	-36.853	27437.756	38.109	0	0	0
395	16	N24	-38.86	13592.291	-14.476	0	0	0
396	16	N26	-30.645	5825.823	-47.513	0	0	0
397	16	N25	-43.593	17187.789	104.546	0	0	0
398	16	N29	-86.254	9276.304	0.758	0	33.54	0
399	16	N33	-20.277	19.309	3.828	0	0	0
400	16	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
401	17	N1	10.433	2557.983	2.987	0	0	0
402	17	N5	-3.175	6521.783	-1.621	0	0	0
403	17	N4	36.908	12787.112	3.261	0	8.638	0
404	17	N6	8.71	4335.099	18.262	0	0	0
405	17	N7	17.038	5355.281	22.9	0	0	0
406	17	N15	1.584	19429.63	154.179	0	81.316	0
407	17	N9	15.12	16060.776	98.949	0	18.672	0
408	17	N20	-55.844	4152.857	68.841	0	0	0
409	17	N23	-24.409	24881.294	13.776	0	0	0
410	17	N27	-1.82	4485.125	12.65	0	0	0
411	17	N30	-8.889	7641.655	19.152	0	0	0
412	17	N19	33.381	9853.228	32.027	0	0	0
413	17	N32	-4.458	-1.436	9.679	0	0	0
414	17	N10	-11.953	19659.032	46.178	0	0	0
415	17	N11	-30.683	18088.405	-57.974	0	0	0
416	17	N12	-30.272	12808.226	-20.325	0	0	0
417	17	N14	-7.523	1675.051	-26.969	0	0	0
418	17	N21	-0.054	11443.174	80.686	0	-20.667	0
419	17	N22	-33.718	20254.051	57.402	0	0	0
420	17	N24	-10.354	15035.777	61.653	0	0	0
421	17	N26	-33.427	6812.897	-136.899	0	0	0
422	17	N25	-22.694	10060.911	24.919	0	0	0
423	17	N29	-12.41	10385.237	31.706	0	1.246	0
424	17	N33	-7.296	234.904	10.017	0	0	0
425	17	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
426	18	N1	8.923	2323.011	2.768	0	0	0
427	18	N5	-2.815	5927.875	-1.039	0	0	0
428	18	N4	33.683	11642.371	3.177	0	8.723	0
429	18	N6	7.483	3929.611	17.93	0	0	0
430	18	N7	14.887	4826.235	23.173	0	0	0
431	18	N15	1.067	17571.091	144.995	0	80.458	0
432	18	N9	13.328	14432.004	100.759	0	15.795	0
433	18	N20	-53.861	3944.495	69.86	0	0	0
434	18	N23	-21.483	22069.976	11.076	0	0	0
435	18	N27	-1.79	4064.919	11.576	0	0	0
436	18	N30	-7.787	6923.645	17.925	0	0	0
437	18	N19	35.499	8762.408	30.075	0	0	0
438	18	N32	-3.923	62.754	10.123	0	0	0
439	18	N10	-10.257	17481.538	40.734	0	0	0
440	18	N11	-28.179	16213.606	-51.65	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
441	18	N12	-28.022	11596.848	-18.473	0	0	0
442	18	N14	-6.616	1578.322	-24.288	0	0	0
443	18	N21	-0.192	10252.063	75.205	0	-19.602	0
444	18	N22	-29.757	17858.88	49.77	0	0	0
445	18	N24	-9.006	13456.292	61.578	0	0	0
446	18	N26	-32.786	6326.815	-133.723	0	0	0
447	18	N25	-21.575	9227.926	27.61	0	0	0
448	18	N29	-10.755	9379.409	30.15	0	2.206	0
449	18	N33	-6.59	305.758	10.467	0	0	0
450	18	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
451	19	N1	14.326	2640.595	0.932	0	0	0
452	19	N5	-3.206	6516.929	-2.047	0	0	0
453	19	N4	36.683	12762.873	-0.733	0	-9.074	0
454	19	N6	25.586	4338.935	-11.537	0	0	0
455	19	N7	19.756	5298.607	-18.532	0	0	0
456	19	N15	0.431	15328.578	28.73	0	-122.269	0
457	19	N9	43.21	16124.639	5.91	0	14.702	0
458	19	N20	-43.524	4081.255	63.679	0	0	0
459	19	N23	-24.558	24895.487	-26.141	0	0	0
460	19	N27	1.079	4575.921	-7.996	0	0	0
461	19	N30	-9.061	7927.554	-16.524	0	0	0
462	19	N19	51.814	13341.283	-24.947	0	0	0
463	19	N32	-4.822	306.495	-7.622	0	0	0
464	19	N10	-14.938	19563.867	32.781	0	0	0
465	19	N11	-30.811	18217.924	-66.202	0	0	0
466	19	N12	-29.426	12696.308	-25.858	0	0	0
467	19	N14	-8.437	1614.001	-18.779	0	0	0
468	19	N21	1.65	11474.806	0.092	0	-26.114	0
469	19	N22	-34.917	22365.331	24.606	0	0	0
470	19	N24	-10.09	15268.317	-98.442	0	0	0
471	19	N26	-22.08	6294.288	51.233	0	0	0
472	19	N25	-13.644	8148.304	196.289	0	0	0
473	19	N29	-12.632	10246.554	-26.059	0	-7.808	0
474	19	N33	-6.892	-49.7	-7.138	0	0	0
475	19	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
476	20	N1	12.859	2405.419	0.766	0	0	0
477	20	N5	-2.982	5922.784	-1.313	0	0	0
478	20	N4	33.43	11618.154	-0.546	0	-8.934	0
479	20	N6	24.308	3933.516	-11.595	0	0	0
480	20	N7	17.72	4769.649	-17.914	0	0	0
481	20	N15	0.213	13486.133	20.946	0	-122.71	0
482	20	N9	41.539	14495.513	9.365	0	11.862	0
483	20	N20	-41.663	3873.217	64.999	0	0	0
484	20	N23	-21.545	22084.464	-22.281	0	0	0
485	20	N27	1.161	4155.568	-7.945	0	0	0
486	20	N30	-8.025	7209.16	-15.834	0	0	0
487	20	N19	53.779	12242.092	-25.886	0	0	0
488	20	N32	-4.293	370.133	-7.371	0	0	0
489	20	N10	-12.814	17386.32	29.217	0	0	0
490	20	N11	-28.277	16343.389	-58.26	0	0	0
491	20	N12	-27.252	11484.924	-22.961	0	0	0
492	20	N14	-7.548	1517.297	-16.018	0	0	0
493	20	N21	1.685	10283.523	-2.545	0	-24.969	0
494	20	N22	-30.768	19964.559	22.581	0	0	0
495	20	N24	-8.867	13688.869	-94.595	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
496	20	N26	-21.497	5808.972	54.91	0	0	0
497	20	N25	-12.606	7321.627	200.176	0	0	0
498	20	N29	-10.947	9240.977	-24.878	0	-6.818	0
499	20	N33	-6.179	21.573	-6.889	0	0	0
500	20	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
501	21	N1	-1.472	2273.847	2.208	0	0	0
502	21	N5	30.575	7903.641	0.279	0	0	0
503	21	N4	136.2	12873.709	3.259	0	17.547	0
504	21	N6	-32.079	3850.63	-0.226	0	0	0
505	21	N7	11.073	5072.945	-0.551	0	0	0
506	21	N15	8.139	23201.268	83.97	0	-55.775	0
507	21	N9	-52.082	17728.47	80.724	0	99.043	0
508	21	N20	-68.842	4604.212	31.739	0	0	0
509	21	N23	-9.033	22005.312	-2.382	0	0	0
510	21	N27	0.962	6523.001	4.927	0	0	0
511	21	N30	14.355	9457.422	0.279	0	0	0
512	21	N19	5.862	20007.892	-9.457	0	0	0
513	21	N32	7.335	416.291	-1.666	0	0	0
514	21	N10	-1.387	17437.539	34.151	0	0	0
515	21	N11	-20.878	16215.093	-52.833	0	0	0
516	21	N12	18.192	13066.044	-20.933	0	0	0
517	21	N14	22.45	2181.19	-21.259	0	0	0
518	21	N21	3.483	13710.799	34.794	0	-18.776	0
519	21	N22	-31.718	10260.321	33.146	0	0	0
520	21	N24	17.734	16364.614	-18.488	0	0	0
521	21	N26	-15.26	8051.864	-34.159	0	0	0
522	21	N25	6.057	630.798	84.787	0	0	0
523	21	N29	42.031	12000.841	3.558	0	-32.081	0
524	21	N33	5.566	309.925	-1.672	0	0	0
525	21	COG (ft):	X: 32.533	Y: 14.559	Z: 24.012			
526	22	N1	-6.551	1989.573	2.046	0	0	0
527	22	N5	31.026	7309.482	1.021	0	0	0
528	22	N4	133.498	11727.733	3.438	0	29.628	0
529	22	N6	-52.233	3446.085	-0.389	0	0	0
530	22	N7	6.13	4592.221	-0.24	0	0	0
531	22	N15	6.901	21481.186	75.369	0	-50.373	0
532	22	N9	-87.21	16109.419	74.82	0	116.426	0
533	22	N20	-75.207	4414.085	31.776	0	0	0
534	22	N23	-9.135	19189.396	-1.314	0	0	0
535	22	N27	0.567	6100.649	4.659	0	0	0
536	22	N30	15.013	8740.075	0.225	0	0	0
537	22	N19	-1.265	19539.556	-9.887	0	0	0
538	22	N32	7.98	476.167	-1.751	0	0	0
539	22	N10	-0.411	15262.96	29.842	0	0	0
540	22	N11	-19.119	14344.638	-45.596	0	0	0
541	22	N12	19.636	11855.597	-18.785	0	0	0
542	22	N14	23.494	2085.442	-19.103	0	0	0
543	22	N21	2.827	12518.58	31.07	0	-16.654	0
544	22	N22	-28.497	8018.445	28.46	0	0	0
545	22	N24	17.868	14782.217	-16.13	0	0	0
546	22	N26	-18.757	7539.259	-34.708	0	0	0
547	22	N25	8.107	388.302	84.298	0	0	0
548	22	N29	42.812	10992.927	3.323	0	-29.354	0
549	22	N33	6.327	377.84	-1.757	0	0	0
550	22	COG (ft):	X: 32.57	Y: 14.527	Z: 24.107			

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
551	23	N1	23.362	2974.574	2.789	0	0	0
552	23	N5	-30.37	7916.484	-3.259	0	0	0
553	23	N4	-38.874	12915.117	0.947	0	-27.883	0
554	23	N6	68.554	3847.377	0.771	0	0	0
555	23	N7	24.254	4370.346	-2.063	0	0	0
556	23	N15	-3.719	17030.986	83.143	0	-16.627	0
557	23	N9	113.499	17749.596	24.629	0	-36.85	0
558	23	N20	-31.605	4599.862	29.271	0	0	0
559	23	N23	-33.671	22043.463	-1.67	0	0	0
560	23	N27	-1.566	6510.717	1.01	0	0	0
561	23	N30	-36.61	9675.97	1.394	0	0	0
562	23	N19	39.474	8754.787	9.362	0	0	0
563	23	N32	-18.911	144.006	3.971	0	0	0
564	23	N10	-22.231	17373.072	33.472	0	0	0
565	23	N11	-34.789	16189.522	-53.029	0	0	0
566	23	N12	-70.202	13064.465	-20.446	0	0	0
567	23	N14	-35.195	2166.161	-20.412	0	0	0
568	23	N21	-1.95	13700.227	34.954	0	-10.668	0
569	23	N22	-39.777	27398.674	33.7	0	0	0
570	23	N24	-41.026	16408.801	-16.724	0	0	0
571	23	N26	-16.247	7610.878	-50.243	0	0	0
572	23	N25	-42.24	17951.975	66.8	0	0	0
573	23	N29	-88.221	11943.847	1.595	0	32.572	0
574	23	N33	-20.44	38.674	3.97	0	0	0
575	23	COG (ft):	X: 32.533	Y: 14.559	Z: 24.012			
576	24	N1	19.018	2689.81	2.606	0	0	0
577	24	N5	-29.636	7323.051	-2.566	0	0	0
578	24	N4	-39.656	11768.854	1.034	0	-15.695	0
579	24	N6	48.822	3442.785	0.666	0	0	0
580	24	N7	20.142	3889.715	-1.697	0	0	0
581	24	N15	-4.628	15315.147	74.529	0	-11.262	0
582	24	N9	80.465	16128.167	18.912	0	-19.905	0
583	24	N20	-37.763	4409.548	29.315	0	0	0
584	24	N23	-28.924	19227.91	-0.801	0	0	0
585	24	N27	-1.867	6088.495	0.68	0	0	0
586	24	N30	-35.25	8958.429	1.257	0	0	0
587	24	N19	32.223	8285.539	8.787	0	0	0
588	24	N32	-18.275	204.213	3.881	0	0	0
589	24	N10	-16.522	15199.663	29.266	0	0	0
590	24	N11	-29.615	14319.628	-45.719	0	0	0
591	24	N12	-67.143	11854.179	-18.248	0	0	0
592	24	N14	-34.111	2070.45	-18.255	0	0	0
593	24	N21	-2.341	12507.865	31.16	0	-8.597	0
594	24	N22	-35.135	25143.552	29.073	0	0	0
595	24	N24	-39.421	14826.7	-14.465	0	0	0
596	24	N26	-19.577	7098.956	-50.774	0	0	0
597	24	N25	-40.334	17699.852	66.459	0	0	0
598	24	N29	-85.694	10937.26	1.224	0	35.268	0
599	24	N33	-19.661	106.936	3.879	0	0	0
600	24	COG (ft):	X: 32.57	Y: 14.527	Z: 24.107			
601	25	N1	8.695	2607.308	2.995	0	0	0
602	25	N5	-3.702	7912.506	-1.724	0	0	0
603	25	N4	32.96	12906.926	3.407	0	7.712	0
604	25	N6	8.642	3846.852	18.061	0	0	0
605	25	N7	14.863	4727.799	22.896	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
606	25	N15	2.688	22201.691	158.289	0	83.038	0
607	25	N9	14.889	17709.776	98.05	0	19.555	0
608	25	N20	-55.905	4638.207	30.963	0	0	0
609	25	N23	-21.681	22013.428	14.92	0	0	0
610	25	N27	-1.681	6470.309	16.006	0	0	0
611	25	N30	-9.577	9417.762	21.259	0	0	0
612	25	N19	12.918	12416.335	29.22	0	0	0
613	25	N32	-4.67	127.256	9.868	0	0	0
614	25	N10	-10.687	17450.865	39.569	0	0	0
615	25	N11	-27.955	16145.194	-49.671	0	0	0
616	25	N12	-26.689	13112.475	-19.105	0	0	0
617	25	N14	-9.529	2201.417	-25.774	0	0	0
618	25	N21	-0.017	13687.337	84.603	0	-21.785	0
619	25	N22	-32.838	17956.98	45.892	0	0	0
620	25	N24	-10.447	16270.271	63.071	0	0	0
621	25	N26	-22.208	8086.784	-138.798	0	0	0
622	25	N25	-19.33	10574.09	-13.016	0	0	0
623	25	N29	-10.371	12045.331	34.268	0	2.991	0
624	25	N33	-6.68	322.429	10.145	0	0	0
625	25	COG (ft):	X: 32.533	Y: 14.559	Z: 24.012			
626	26	N1	7.182	2372.368	2.776	0	0	0
627	26	N5	-3.357	7318.618	-1.153	0	0	0
628	26	N4	29.717	11762.17	3.323	0	7.794	0
629	26	N6	7.398	3441.362	17.715	0	0	0
630	26	N7	12.681	4198.743	23.152	0	0	0
631	26	N15	2.11	20342.888	149.178	0	82.159	0
632	26	N9	13.11	16081.024	99.895	0	16.671	0
633	26	N20	-53.913	4429.823	31.945	0	0	0
634	26	N23	-18.793	19202.189	12.285	0	0	0
635	26	N27	-1.68	6050.116	14.907	0	0	0
636	26	N30	-8.47	8699.772	20.005	0	0	0
637	26	N19	14.993	11325.242	27.257	0	0	0
638	26	N32	-4.137	191.436	10.31	0	0	0
639	26	N10	-9.106	15273.357	34.148	0	0	0
640	26	N11	-25.51	14270.426	-43.318	0	0	0
641	26	N12	-24.457	11901.11	-17.252	0	0	0
642	26	N14	-8.625	2104.687	-23.099	0	0	0
643	26	N21	-0.202	12496.262	79.12	0	-20.696	0
644	26	N22	-28.949	15562.089	38.295	0	0	0
645	26	N24	-9.097	14690.839	63.005	0	0	0
646	26	N26	-21.575	7600.78	-135.64	0	0	0
647	26	N25	-18.199	9741.029	-10.328	0	0	0
648	26	N29	-8.708	11039.441	32.691	0	3.953	0
649	26	N33	-5.972	393.279	10.593	0	0	0
650	26	COG (ft):	X: 32.57	Y: 14.527	Z: 24.107			
651	27	N1	12.585	2689.964	0.931	0	0	0
652	27	N5	-3.42	7908.031	-2.483	0	0	0
653	27	N4	32.736	12882.598	-0.614	0	-10.03	0
654	27	N6	25.7	3850.724	-11.41	0	0	0
655	27	N7	17.738	4670.931	-18.12	0	0	0
656	27	N15	1.07	18088.535	30.775	0	-120.746	0
657	27	N9	42.728	17773.82	3.213	0	15.584	0
658	27	N20	-43.332	4566.045	24.799	0	0	0
659	27	N23	-21.742	22028.353	-18.434	0	0	0
660	27	N27	0.925	6561.364	-9.943	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
661	27	N30	-9.639	9703.573	-19.115	0	0	0
662	27	N19	31.706	15909.431	-29.862	0	0	0
663	27	N32	-5.031	435.336	-7.704	0	0	0
664	27	N10	-13.251	17355.092	28.065	0	0	0
665	27	N11	-28.055	16275.076	-56.23	0	0	0
666	27	N12	-25.82	13000.584	-24.896	0	0	0
667	27	N14	-10.33	2140.34	-18.026	0	0	0
668	27	N21	1.349	13719.557	-1.305	0	-27.249	0
669	27	N22	-33.833	20072.66	18.339	0	0	0
670	27	N24	-10.104	16503.287	-99.942	0	0	0
671	27	N26	-10.733	7568.31	47.268	0	0	0
672	27	N25	-10.169	8652.415	157.446	0	0	0
673	27	N29	-10.641	11906.448	-27.9	0	-6.085	0
674	27	N33	-6.264	37.766	-7.16	0	0	0
675	27	COG (ft):	X: 32.533	Y: 14.559	Z: 24.012			
676	28	N1	11.116	2454.819	0.765	0	0	0
677	28	N5	-3.211	7313.906	-1.762	0	0	0
678	28	N4	29.465	11737.862	-0.425	0	-9.893	0
679	28	N6	24.405	3445.302	-11.481	0	0	0
680	28	N7	15.67	4141.965	-17.518	0	0	0
681	28	N15	0.793	16245.881	23.066	0	-121.204	0
682	28	N9	41.072	16144.714	6.706	0	12.736	0
683	28	N20	-41.462	4357.988	26.084	0	0	0
684	28	N23	-18.767	19217.407	-14.514	0	0	0
685	28	N27	0.978	6141.022	-9.902	0	0	0
686	28	N30	-8.599	8985.201	-18.436	0	0	0
687	28	N19	33.628	14809.957	-30.809	0	0	0
688	28	N32	-4.505	498.962	-7.456	0	0	0
689	28	N10	-11.242	15177.533	24.524	0	0	0
690	28	N11	-25.581	14400.572	-48.259	0	0	0
691	28	N12	-23.664	11789.213	-21.996	0	0	0
692	28	N14	-9.445	2043.636	-15.271	0	0	0
693	28	N21	1.339	12528.307	-3.924	0	-26.084	0
694	28	N22	-29.757	17672.149	16.346	0	0	0
695	28	N24	-8.88	14923.891	-96.072	0	0	0
696	28	N26	-10.158	7083.07	50.932	0	0	0
697	28	N25	-9.12	7825.706	161.333	0	0	0
698	28	N29	-8.949	10900.809	-26.723	0	-5.094	0
699	28	N33	-5.549	109.035	-6.913	0	0	0
700	28	COG (ft):	X: 32.57	Y: 14.527	Z: 24.107			
701	29	N1	-15.84	1443.905	1.72	0	0	0
702	29	N5	64.436	5462.923	2.989	0	0	0
703	29	N4	234.02	10728.906	4.18	0	36.535	0
704	29	N6	-83.816	3631.009	-0.706	0	0	0
705	29	N7	4.712	5142.959	0.516	0	0	0
706	29	N15	12.489	20463.104	66.009	0	-69.809	0
707	29	N9	-142.515	13228.022	99.453	0	178.215	0
708	29	N20	-83.148	3398.844	46.308	0	0	0
709	29	N23	2.27	19937.783	-5.873	0	0	0
710	29	N27	1.609	3807.483	6.41	0	0	0
711	29	N30	37.884	6320.815	0.381	0	0	0
712	29	N19	0.856	21293.492	-16.361	0	0	0
713	29	N32	20.772	531.495	-4.752	0	0	0
714	29	N10	7.321	15856.767	32.478	0	0	0
715	29	N11	-14.693	14890.025	-49.227	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
716	29	N12	59.549	10644.998	-18.54	0	0	0
717	29	N14	58.01	1494.742	-18.81	0	0	0
718	29	N21	5.288	9386.94	27.051	0	-19.022	0
719	29	N22	-30.399	-232.776	34.172	0	0	0
720	29	N24	44.191	12343.452	-15.731	0	0	0
721	29	N26	-16.983	5792.69	-24.737	0	0	0
722	29	N25	22.245	-10182.687	108.12	0	0	0
723	29	N29	89.398	8606.055	4.386	0	-62.891	0
724	29	N33	18.211	477.21	-4.755	0	0	0
725	29	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
726	30	N1	-26.888	878.488	1.432	0	0	0
727	30	N5	64.972	4273.104	4.583	0	0	0
728	30	N4	225.514	8437.369	4.7	0	60.03	0
729	30	N6	-123.805	2822.072	-1.108	0	0	0
730	30	N7	-6.25	4179.13	1.043	0	0	0
731	30	N15	9.872	17013.266	48.385	0	-58.869	0
732	30	N9	-215.348	9993.652	87.227	0	213.346	0
733	30	N20	-95.804	3018.187	46.351	0	0	0
734	30	N23	-2.582	14305.296	-3.711	0	0	0
735	30	N27	0.815	2962.931	5.85	0	0	0
736	30	N30	38.618	4886.427	0.265	0	0	0
737	30	N19	-13.221	20324.021	-17.194	0	0	0
738	30	N32	22.073	650.975	-4.91	0	0	0
739	30	N10	2.628	11505.302	23.614	0	0	0
740	30	N11	-15.921	11148.147	-34.938	0	0	0
741	30	N12	59.883	8223.918	-14.387	0	0	0
742	30	N14	60.04	1303.164	-14.507	0	0	0
743	30	N21	3.88	7002.904	19.564	0	-14.872	0
744	30	N22	-25.435	-4687.891	24.6	0	0	0
745	30	N24	43.129	9178.187	-11.101	0	0	0
746	30	N26	-24.193	4767.311	-25.838	0	0	0
747	30	N25	26.553	-10654.265	106.975	0	0	0
748	30	N29	89.48	6589.22	3.935	0	-57.439	0
749	30	N33	19.719	612.659	-4.913	0	0	0
750	30	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
751	31	N1	35.533	2839.915	2.828	0	0	0
752	31	N5	-55.135	5493.984	-4.48	0	0	0
753	31	N4	-108.964	10811.544	-0.767	0	-53.165	0
754	31	N6	116.065	3624.407	1.344	0	0	0
755	31	N7	31.933	3742.21	-2.437	0	0	0
756	31	N15	-8.811	8146.661	64.67	0	8.096	0
757	31	N9	198.338	13259.973	-11.395	0	-94.594	0
758	31	N20	-7.843	3389.691	41.426	0	0	0
759	31	N23	-39.877	20015.868	-4.75	0	0	0
760	31	N27	-2.252	3782.586	-2.253	0	0	0
761	31	N30	-58.578	6755.704	1.875	0	0	0
762	31	N19	71.619	-1148.574	22.091	0	0	0
763	31	N32	-31.675	-12.086	6.51	0	0	0
764	31	N10	-27.168	15730.874	31.275	0	0	0
765	31	N11	-37.517	14839.306	-49.509	0	0	0
766	31	N12	-110.771	10641.72	-17.371	0	0	0
767	31	N14	-56.669	1465.058	-17.073	0	0	0
768	31	N21	-3.681	9365.004	26.829	0	-3.1	0
769	31	N22	-43.995	33954.366	35.236	0	0	0
770	31	N24	-66.152	12432.998	-12.711	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
771	31	N26	-17.299	4915.706	-56.588	0	0	0
772	31	N25	-71.357	24386.485	71.543	0	0	0
773	31	N29	-159.289	8495.404	-0.466	0	66.319	0
774	31	N33	-33.713	-64.265	6.511	0	0	0
775	31	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
776	32	N1	27.249	2270.633	2.454	0	0	0
777	32	N5	-53.459	4307.077	-3.061	0	0	0
778	32	N4	-109.798	8518.814	-0.6	0	-28.831	0
779	32	N6	77.139	2815.3	1.167	0	0	0
780	32	N7	24.184	2780.663	-1.679	0	0	0
781	32	N15	-10.132	4718.024	47.019	0	18.824	0
782	32	N9	132.695	10016.313	-22.768	0	-60.897	0
783	32	N20	-19.933	3008.715	41.49	0	0	0
784	32	N23	-25.393	14384.653	-3.376	0	0	0
785	32	N27	-2.686	2938.515	-3.054	0	0	0
786	32	N30	-55.053	5320.478	1.428	0	0	0
787	32	N19	56.815	-2086.86	20.644	0	0	0
788	32	N32	-30.416	108.813	6.323	0	0	0
789	32	N10	-13.027	11384.406	22.82	0	0	0
790	32	N11	-25.159	11099.799	-34.929	0	0	0
791	32	N12	-104.027	8221.284	-13.026	0	0	0
792	32	N14	-54.474	1273.642	-12.769	0	0	0
793	32	N21	-4.049	6980.388	19.065	0	0.847	0
794	32	N22	-33.377	29424.313	25.887	0	0	0
795	32	N24	-61.346	9268.801	-8.476	0	0	0
796	32	N26	-23.909	3893.108	-57.612	0	0	0
797	32	N25	-67.605	23859.324	70.982	0	0	0
798	32	N29	-152.274	6483.873	-1.451	0	71.63	0
799	32	N33	-32.141	72.664	6.323	0	0	0
800	32	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
801	33	N1	6.016	2108.768	3.148	0	0	0
802	33	N5	-2.338	5484.236	-1.78	0	0	0
803	33	N4	31.302	10795.149	3.834	0	17.287	0
804	33	N6	-2.787	3623.349	35.713	0	0	0
805	33	N7	11.962	4454.38	47.149	0	0	0
806	33	N15	1.565	18436.929	211.81	0	206.783	0
807	33	N9	-4.201	13185.955	130.281	0	18.615	0
808	33	N20	-56.346	3465.199	42.74	0	0	0
809	33	N23	-19.39	19955.114	23.577	0	0	0
810	33	N27	-3.484	3702.472	20.628	0	0	0
811	33	N30	-6.861	6240.558	33.378	0	0	0
812	33	N19	15.739	6163.017	55.376	0	0	0
813	33	N32	-3.344	-44.381	17.926	0	0	0
814	33	N10	-8.023	15884.489	42.005	0	0	0
815	33	N11	-26.341	14750.415	-44.071	0	0	0
816	33	N12	-26.745	10737.749	-16.797	0	0	0
817	33	N14	-5.484	1535.227	-28.32	0	0	0
818	33	N21	-1.424	9340.491	115.937	0	-25.47	0
819	33	N22	-26.539	15131.603	52.272	0	0	0
820	33	N24	-8.164	12155.862	137.052	0	0	0
821	33	N26	-30.138	5864.148	-236.485	0	0	0
822	33	N25	-22.834	9646.803	-89.13	0	0	0
823	33	N29	-9.479	8696.129	56.193	0	7.134	0
824	33	N33	-6.016	503.034	19.479	0	0	0
825	33	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
826	34	N1	2.911	1639.397	2.671	0	0	0
827	34	N5	-1.461	4296.566	-0.718	0	0	0
828	34	N4	24.793	8505.707	3.463	0	17.35	0
829	34	N6	-5.222	2812.233	34.708	0	0	0
830	34	N7	7.423	3395.944	47.252	0	0	0
831	34	N15	0.37	14705.2	191.811	0	204.736	0
832	34	N9	-8.158	9928.461	132.181	0	12.885	0
833	34	N20	-52.249	3048.19	44.552	0	0	0
834	34	N23	-13.8	14332.573	11.792	0	0	0
835	34	N27	-3.44	2862.123	17.395	0	0	0
836	34	N30	-4.651	4804.863	29.096	0	0	0
837	34	N19	20.195	3987.798	50.511	0	0	0
838	34	N32	-2.276	84.479	19.009	0	0	0
839	34	N10	-5.58	11529.473	29.271	0	0	0
840	34	N11	-21.586	11000.752	-32.959	0	0	0
841	34	N12	-22.214	8314.919	-14.068	0	0	0
842	34	N14	-3.647	1341.698	-23.004	0	0	0
843	34	N21	-1.776	6958.084	102.18	0	-23.481	0
844	34	N22	-19.067	10348.43	31.507	0	0	0
845	34	N24	-5.449	8996.822	133.105	0	0	0
846	34	N26	-28.738	4890.932	-230.553	0	0	0
847	34	N25	-20.523	7976.104	-84.876	0	0	0
848	34	N29	-6.262	6684.169	50.45	0	9.031	0
849	34	N33	-4.616	644.252	20.569	0	0	0
850	34	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
851	35	N1	13.938	2272.964	-0.791	0	0	0
852	35	N5	-2.87	5473.689	-2.142	0	0	0
853	35	N4	30.754	10746.812	-3.222	0	-17.905	0
854	35	N6	30.864	3631.259	-22.935	0	0	0
855	35	N7	17.794	4341.498	-34.467	0	0	0
856	35	N15	0.181	10288.649	-34.365	0	-199.062	0
857	35	N9	52.537	13312.515	-50.427	0	10.741	0
858	35	N20	-32.183	3323.2	34.385	0	0	0
859	35	N23	-19.382	19984.563	-33.324	0	0	0
860	35	N27	2.5	3883.539	-16.723	0	0	0
861	35	N30	-7.364	6810.852	-31.254	0	0	0
862	35	N19	52.078	13110.517	-54.94	0	0	0
863	35	N32	-4.05	569.559	-17.32	0	0	0
864	35	N10	-12.486	15693.801	21.852	0	0	0
865	35	N11	-26.494	15010.192	-54.848	0	0	0
866	35	N12	-25.321	10514.058	-24.249	0	0	0
867	35	N14	-7.373	1413.409	-11.761	0	0	0
868	35	N21	2.593	9403.174	-35.328	0	-35.998	0
869	35	N22	-28.313	19332.862	5.802	0	0	0
870	35	N24	-8.001	12620.883	-169.457	0	0	0
871	35	N26	-7.634	4829.87	142.457	0	0	0
872	35	N25	-5.043	5842.569	256.859	0	0	0
873	35	N29	-9.82	8419.665	-49.803	0	-10.893	0
874	35	N33	-5.231	-64.718	-15.584	0	0	0
875	35	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
876	36	N1	10.999	1802.635	-1.066	0	0	0
877	36	N5	-2.532	4285.068	-0.498	0	0	0
878	36	N4	24.129	8457.511	-2.519	0	-17.606	0
879	36	N6	28.275	2820.407	-22.853	0	0	0
880	36	N7	13.702	3283.467	-32.97	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
881	36	N15	0.165	6619.032	-48.774	0	-199.506	0
882	36	N9	49.128	10053.669	-42.189	0	5.119	0
883	36	N20	-28.566	2907.47	37.385	0	0	0
884	36	N23	-13.443	14363.193	-19.14	0	0	0
885	36	N27	2.75	3042.602	-15.504	0	0	0
886	36	N30	-5.415	5373.596	-27.95	0	0	0
887	36	N19	55.924	10902.642	-55.835	0	0	0
888	36	N32	-3.007	696.202	-17.009	0	0	0
889	36	N10	-8.364	11338.477	16.619	0	0	0
890	36	N11	-21.631	11261.474	-37.29	0	0	0
891	36	N12	-21.093	8091.295	-17.389	0	0	0
892	36	N14	-5.611	1220.089	-6.184	0	0	0
893	36	N21	2.925	7020.1	-37.826	0	-33.681	0
894	36	N22	-20.098	14526.728	7.233	0	0	0
895	36	N24	-5.777	9461.959	-157.877	0	0	0
896	36	N26	-6.468	3859.938	150.284	0	0	0
897	36	N25	-3.052	4196.151	265.759	0	0	0
898	36	N29	-6.485	6408.712	-44.713	0	-8.879	0
899	36	N33	-3.802	78.2	-15.293	0	0	0
900	36	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
901	37	N1	-15.84	1443.905	1.72	0	0	0
902	37	N5	64.436	5462.923	2.989	0	0	0
903	37	N4	234.02	10728.906	4.18	0	36.535	0
904	37	N6	-83.816	3631.009	-0.706	0	0	0
905	37	N7	4.712	5142.959	0.516	0	0	0
906	37	N15	12.489	20463.104	66.009	0	-69.809	0
907	37	N9	-142.515	13228.022	99.453	0	178.215	0
908	37	N20	-83.148	3398.844	46.308	0	0	0
909	37	N23	2.27	19937.783	-5.873	0	0	0
910	37	N27	1.609	3807.483	6.41	0	0	0
911	37	N30	37.884	6320.815	0.381	0	0	0
912	37	N19	0.856	21293.492	-16.361	0	0	0
913	37	N32	20.772	531.495	-4.752	0	0	0
914	37	N10	7.321	15856.767	32.478	0	0	0
915	37	N11	-14.693	14890.025	-49.227	0	0	0
916	37	N12	59.549	10644.998	-18.54	0	0	0
917	37	N14	58.01	1494.742	-18.81	0	0	0
918	37	N21	5.288	9386.94	27.051	0	-19.022	0
919	37	N22	-30.399	-232.776	34.172	0	0	0
920	37	N24	44.191	12343.452	-15.731	0	0	0
921	37	N26	-16.983	5792.69	-24.737	0	0	0
922	37	N25	22.245	-10182.687	108.12	0	0	0
923	37	N29	89.398	8606.055	4.386	0	-62.891	0
924	37	N33	18.211	477.21	-4.755	0	0	0
925	37	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
926	38	N1	-26.888	878.488	1.432	0	0	0
927	38	N5	64.972	4273.104	4.583	0	0	0
928	38	N4	225.514	8437.369	4.7	0	60.03	0
929	38	N6	-123.805	2822.072	-1.108	0	0	0
930	38	N7	-6.25	4179.13	1.043	0	0	0
931	38	N15	9.872	17013.266	48.385	0	-58.869	0
932	38	N9	-215.348	9993.652	87.227	0	213.346	0
933	38	N20	-95.804	3018.187	46.351	0	0	0
934	38	N23	-2.582	14305.296	-3.711	0	0	0
935	38	N27	0.815	2962.931	5.85	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
936	38	N30	38.618	4886.427	0.265	0	0	0
937	38	N19	-13.221	20324.021	-17.194	0	0	0
938	38	N32	22.073	650.975	-4.91	0	0	0
939	38	N10	2.628	11505.302	23.614	0	0	0
940	38	N11	-15.921	11148.147	-34.938	0	0	0
941	38	N12	59.883	8223.918	-14.387	0	0	0
942	38	N14	60.04	1303.164	-14.507	0	0	0
943	38	N21	3.88	7002.904	19.564	0	-14.872	0
944	38	N22	-25.435	-4687.891	24.6	0	0	0
945	38	N24	43.129	9178.187	-11.101	0	0	0
946	38	N26	-24.193	4767.311	-25.838	0	0	0
947	38	N25	26.553	-10654.265	106.975	0	0	0
948	38	N29	89.48	6589.22	3.935	0	-57.439	0
949	38	N33	19.719	612.659	-4.913	0	0	0
950	38	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
951	39	N1	35.533	2839.915	2.828	0	0	0
952	39	N5	-55.135	5493.984	-4.48	0	0	0
953	39	N4	-108.964	10811.544	-0.767	0	-53.165	0
954	39	N6	116.065	3624.407	1.344	0	0	0
955	39	N7	31.933	3742.21	-2.437	0	0	0
956	39	N15	-8.811	8146.661	64.67	0	8.096	0
957	39	N9	198.338	13259.973	-11.395	0	-94.594	0
958	39	N20	-7.843	3389.691	41.426	0	0	0
959	39	N23	-39.877	20015.868	-4.75	0	0	0
960	39	N27	-2.252	3782.586	-2.253	0	0	0
961	39	N30	-58.578	6755.704	1.875	0	0	0
962	39	N19	71.619	-1148.574	22.091	0	0	0
963	39	N32	-31.675	-12.086	6.51	0	0	0
964	39	N10	-27.168	15730.874	31.275	0	0	0
965	39	N11	-37.517	14839.306	-49.509	0	0	0
966	39	N12	-110.771	10641.72	-17.371	0	0	0
967	39	N14	-56.669	1465.058	-17.073	0	0	0
968	39	N21	-3.681	9365.004	26.829	0	-3.1	0
969	39	N22	-43.995	33954.366	35.236	0	0	0
970	39	N24	-66.152	12432.998	-12.711	0	0	0
971	39	N26	-17.299	4915.706	-56.588	0	0	0
972	39	N25	-71.357	24386.485	71.543	0	0	0
973	39	N29	-159.289	8495.404	-0.466	0	66.319	0
974	39	N33	-33.713	-64.265	6.511	0	0	0
975	39	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
976	40	N1	27.249	2270.633	2.454	0	0	0
977	40	N5	-53.459	4307.077	-3.061	0	0	0
978	40	N4	-109.798	8518.814	-0.6	0	-28.831	0
979	40	N6	77.139	2815.3	1.167	0	0	0
980	40	N7	24.184	2780.663	-1.679	0	0	0
981	40	N15	-10.132	4718.024	47.019	0	18.824	0
982	40	N9	132.695	10016.313	-22.768	0	-60.897	0
983	40	N20	-19.933	3008.715	41.49	0	0	0
984	40	N23	-25.393	14384.653	-3.376	0	0	0
985	40	N27	-2.686	2938.515	-3.054	0	0	0
986	40	N30	-55.053	5320.478	1.428	0	0	0
987	40	N19	56.815	-2086.86	20.644	0	0	0
988	40	N32	-30.416	108.813	6.323	0	0	0
989	40	N10	-13.027	11384.406	22.82	0	0	0
990	40	N11	-25.159	11099.799	-34.929	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
991	40	N12	-104.027	8221.284	-13.026	0	0	0
992	40	N14	-54.474	1273.642	-12.769	0	0	0
993	40	N21	-4.049	6980.388	19.065	0	0.847	0
994	40	N22	-33.377	29424.313	25.887	0	0	0
995	40	N24	-61.346	9268.801	-8.476	0	0	0
996	40	N26	-23.909	3893.108	-57.612	0	0	0
997	40	N25	-67.605	23859.324	70.982	0	0	0
998	40	N29	-152.274	6483.873	-1.451	0	71.63	0
999	40	N33	-32.141	72.664	6.323	0	0	0
1000	40	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
1001	41	N1	6.016	2108.768	3.148	0	0	0
1002	41	N5	-2.338	5484.236	-1.78	0	0	0
1003	41	N4	31.302	10795.149	3.834	0	17.287	0
1004	41	N6	-2.787	3623.349	35.713	0	0	0
1005	41	N7	11.962	4454.38	47.149	0	0	0
1006	41	N15	1.565	18436.929	211.81	0	206.783	0
1007	41	N9	-4.201	13185.955	130.281	0	18.615	0
1008	41	N20	-56.346	3465.199	42.74	0	0	0
1009	41	N23	-19.39	19955.114	23.577	0	0	0
1010	41	N27	-3.484	3702.472	20.628	0	0	0
1011	41	N30	-6.861	6240.558	33.378	0	0	0
1012	41	N19	15.739	6163.017	55.376	0	0	0
1013	41	N32	-3.344	-44.381	17.926	0	0	0
1014	41	N10	-8.023	15884.489	42.005	0	0	0
1015	41	N11	-26.341	14750.415	-44.071	0	0	0
1016	41	N12	-26.745	10737.749	-16.797	0	0	0
1017	41	N14	-5.484	1535.227	-28.32	0	0	0
1018	41	N21	-1.424	9340.491	115.937	0	-25.47	0
1019	41	N22	-26.539	15131.603	52.272	0	0	0
1020	41	N24	-8.164	12155.862	137.052	0	0	0
1021	41	N26	-30.138	5864.148	-236.485	0	0	0
1022	41	N25	-22.834	9646.803	-89.13	0	0	0
1023	41	N29	-9.479	8696.129	56.193	0	7.134	0
1024	41	N33	-6.016	503.034	19.479	0	0	0
1025	41	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
1026	42	N1	2.911	1639.397	2.671	0	0	0
1027	42	N5	-1.461	4296.566	-0.718	0	0	0
1028	42	N4	24.793	8505.707	3.463	0	17.35	0
1029	42	N6	-5.222	2812.233	34.708	0	0	0
1030	42	N7	7.423	3395.944	47.252	0	0	0
1031	42	N15	0.37	14705.2	191.811	0	204.736	0
1032	42	N9	-8.158	9928.461	132.181	0	12.885	0
1033	42	N20	-52.249	3048.19	44.552	0	0	0
1034	42	N23	-13.8	14332.573	11.792	0	0	0
1035	42	N27	-3.44	2862.123	17.395	0	0	0
1036	42	N30	-4.651	4804.863	29.096	0	0	0
1037	42	N19	20.195	3987.798	50.511	0	0	0
1038	42	N32	-2.276	84.479	19.009	0	0	0
1039	42	N10	-5.58	11529.473	29.271	0	0	0
1040	42	N11	-21.586	11000.752	-32.959	0	0	0
1041	42	N12	-22.214	8314.919	-14.068	0	0	0
1042	42	N14	-3.647	1341.698	-23.004	0	0	0
1043	42	N21	-1.776	6958.084	102.18	0	-23.481	0
1044	42	N22	-19.067	10348.43	31.507	0	0	0
1045	42	N24	-5.449	8996.822	133.105	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
1046	42	N26	-28.738	4890.932	-230.553	0	0	0
1047	42	N25	-20.523	7976.104	-84.876	0	0	0
1048	42	N29	-6.262	6684.169	50.45	0	9.031	0
1049	42	N33	-4.616	644.252	20.569	0	0	0
1050	42	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
1051	43	N1	13.938	2272.964	-0.791	0	0	0
1052	43	N5	-2.87	5473.689	-2.142	0	0	0
1053	43	N4	30.754	10746.812	-3.222	0	-17.905	0
1054	43	N6	30.864	3631.259	-22.935	0	0	0
1055	43	N7	17.794	4341.498	-34.467	0	0	0
1056	43	N15	0.181	10288.649	-34.365	0	-199.062	0
1057	43	N9	52.537	13312.515	-50.427	0	10.741	0
1058	43	N20	-32.183	3323.2	34.385	0	0	0
1059	43	N23	-19.382	19984.563	-33.324	0	0	0
1060	43	N27	2.5	3883.539	-16.723	0	0	0
1061	43	N30	-7.364	6810.852	-31.254	0	0	0
1062	43	N19	52.078	13110.517	-54.94	0	0	0
1063	43	N32	-4.05	569.559	-17.32	0	0	0
1064	43	N10	-12.486	15693.801	21.852	0	0	0
1065	43	N11	-26.494	15010.192	-54.848	0	0	0
1066	43	N12	-25.321	10514.058	-24.249	0	0	0
1067	43	N14	-7.373	1413.409	-11.761	0	0	0
1068	43	N21	2.593	9403.174	-35.328	0	-35.998	0
1069	43	N22	-28.313	19332.862	5.802	0	0	0
1070	43	N24	-8.001	12620.883	-169.457	0	0	0
1071	43	N26	-7.634	4829.87	142.457	0	0	0
1072	43	N25	-5.043	5842.569	256.859	0	0	0
1073	43	N29	-9.82	8419.665	-49.803	0	-10.893	0
1074	43	N33	-5.231	-64.718	-15.584	0	0	0
1075	43	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
1076	44	N1	10.999	1802.635	-1.066	0	0	0
1077	44	N5	-2.532	4285.068	-0.498	0	0	0
1078	44	N4	24.129	8457.511	-2.519	0	-17.606	0
1079	44	N6	28.275	2820.407	-22.853	0	0	0
1080	44	N7	13.702	3283.467	-32.97	0	0	0
1081	44	N15	0.165	6619.032	-48.774	0	-199.506	0
1082	44	N9	49.128	10053.669	-42.189	0	5.119	0
1083	44	N20	-28.566	2907.47	37.385	0	0	0
1084	44	N23	-13.443	14363.193	-19.14	0	0	0
1085	44	N27	2.75	3042.602	-15.504	0	0	0
1086	44	N30	-5.415	5373.596	-27.95	0	0	0
1087	44	N19	55.924	10902.642	-55.835	0	0	0
1088	44	N32	-3.007	696.202	-17.009	0	0	0
1089	44	N10	-8.364	11338.477	16.619	0	0	0
1090	44	N11	-21.631	11261.474	-37.29	0	0	0
1091	44	N12	-21.093	8091.295	-17.389	0	0	0
1092	44	N14	-5.611	1220.089	-6.184	0	0	0
1093	44	N21	2.925	7020.1	-37.826	0	-33.681	0
1094	44	N22	-20.098	14526.728	7.233	0	0	0
1095	44	N24	-5.777	9461.959	-157.877	0	0	0
1096	44	N26	-6.468	3859.938	150.284	0	0	0
1097	44	N25	-3.052	4196.151	265.759	0	0	0
1098	44	N29	-6.485	6408.712	-44.713	0	-8.879	0
1099	44	N33	-3.802	78.2	-15.293	0	0	0
1100	44	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
1101	45	N1	-16.361	1459.312	1.722	0	0	0
1102	45	N5	64.521	5898.039	2.866	0	0	0
1103	45	N4	232.836	10766.487	4.22	0	36.243	0
1104	45	N6	-84.085	3478.442	-0.746	0	0	0
1105	45	N7	3.628	4946.921	0.543	0	0	0
1106	45	N15	12.913	21327.688	67.039	0	-69.337	0
1107	45	N9	-141.952	13742.994	98.974	0	178.454	0
1108	45	N20	-83.049	3550.323	34.315	0	0	0
1109	45	N23	1.545	19041.805	-4.393	0	0	0
1110	45	N27	1.727	4427.771	6.517	0	0	0
1111	45	N30	38.177	6875.636	0.226	0	0	0
1112	45	N19	-5.097	22095.626	-17.453	0	0	0
1113	45	N32	20.727	571.67	-4.736	0	0	0
1114	45	N10	6.225	15166.325	30.67	0	0	0
1115	45	N11	-14.983	14282.507	-46.399	0	0	0
1116	45	N12	60.792	10739.968	-18.191	0	0	0
1117	45	N14	57.473	1659.264	-18.496	0	0	0
1118	45	N21	5.374	10088.3	27.387	0	-19.369	0
1119	45	N22	-30.636	-950.331	31.555	0	0	0
1120	45	N24	44.507	12729.335	-15.752	0	0	0
1121	45	N26	-13.302	6191.285	-25.474	0	0	0
1122	45	N25	23.422	-10025.345	95.955	0	0	0
1123	45	N29	90.946	9124.606	4.416	0	-62.343	0
1124	45	N33	18.408	504.463	-4.74	0	0	0
1125	45	COG (ft):	X: 32.246	Y: 14.439	Z: 24.208			
1126	46	N1	-27.409	893.857	1.434	0	0	0
1127	46	N5	65.065	4708.314	4.45	0	0	0
1128	46	N4	224.331	8474.982	4.741	0	59.746	0
1129	46	N6	-124.158	2669.509	-1.152	0	0	0
1130	46	N7	-7.433	3983.14	1.065	0	0	0
1131	46	N15	10.27	17877.955	49.464	0	-58.399	0
1132	46	N9	-214.674	10508.569	86.753	0	213.586	0
1133	46	N20	-95.72	3169.701	34.357	0	0	0
1134	46	N23	-3.255	13408.82	-2.225	0	0	0
1135	46	N27	0.92	3583.256	5.976	0	0	0
1136	46	N30	38.889	5441.38	0.128	0	0	0
1137	46	N19	-19.148	21126.648	-18.262	0	0	0
1138	46	N32	22.027	691.14	-4.894	0	0	0
1139	46	N10	1.186	10814.811	21.8	0	0	0
1140	46	N11	-16.462	10540.577	-32.114	0	0	0
1141	46	N12	61.139	8318.866	-14.033	0	0	0
1142	46	N14	59.506	1467.689	-14.19	0	0	0
1143	46	N21	3.942	7704.187	19.923	0	-15.203	0
1144	46	N22	-25.707	-5405.52	21.982	0	0	0
1145	46	N24	43.429	9563.933	-11.094	0	0	0
1146	46	N26	-20.494	5165.823	-26.581	0	0	0
1147	46	N25	27.724	-10496.109	94.823	0	0	0
1148	46	N29	90.989	7108.135	3.985	0	-56.888	0
1149	46	N33	19.916	639.908	-4.898	0	0	0
1150	46	COG (ft):	X: 32.267	Y: 14.309	Z: 24.55			
1151	47	N1	34.964	2855.381	2.83	0	0	0
1152	47	N5	-55.459	5928.226	-4.525	0	0	0
1153	47	N4	-110.264	10848.837	-0.722	0	-53.467	0
1154	47	N6	116.339	3471.826	1.358	0	0	0
1155	47	N7	31.677	3545.986	-2.341	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
1156	47	N15	-8.769	9010.616	65.653	0	8.613	0
1157	47	N9	197.562	13775.658	-12.019	0	-94.291	0
1158	47	N20	-7.893	3541.357	29.404	0	0	0
1159	47	N23	-37.531	19119.593	-3.392	0	0	0
1160	47	N27	-2.414	4403.11	-1.953	0	0	0
1161	47	N30	-59.22	7310.932	1.852	0	0	0
1162	47	N19	64.857	-347.662	20.774	0	0	0
1163	47	N32	-31.758	28.221	6.525	0	0	0
1164	47	N10	-25.278	15040.959	29.532	0	0	0
1165	47	N11	-35.606	14232.356	-46.635	0	0	0
1166	47	N12	-109.783	10736.902	-17.03	0	0	0
1167	47	N14	-57.351	1629.512	-16.772	0	0	0
1168	47	N21	-3.909	10066.418	27.259	0	-3.42	0
1169	47	N22	-43.221	33237.921	32.368	0	0	0
1170	47	N24	-66.468	12818.787	-12.696	0	0	0
1171	47	N26	-13.933	5313.407	-57.699	0	0	0
1172	47	N25	-70.379	24546.773	59.735	0	0	0
1173	47	N29	-159.53	9014.387	-0.292	0	66.854	0
1174	47	N33	-33.522	-36.84	6.526	0	0	0
1175	47	COG (ft):	X: 32.246	Y: 14.439	Z: 24.208			
1176	48	N1	26.679	2286.06	2.455	0	0	0
1177	48	N5	-53.777	4741.413	-3.117	0	0	0
1178	48	N4	-111.097	8556.139	-0.554	0	-29.125	0
1179	48	N6	77.326	2662.724	1.177	0	0	0
1180	48	N7	23.825	2584.492	-1.587	0	0	0
1181	48	N15	-10.117	5582.079	48.049	0	19.34	0
1182	48	N9	132.038	10531.941	-23.385	0	-60.594	0
1183	48	N20	-19.998	3160.413	29.468	0	0	0
1184	48	N23	-22.999	13487.875	-2.014	0	0	0
1185	48	N27	-2.861	3559.075	-2.735	0	0	0
1186	48	N30	-55.716	5875.84	1.424	0	0	0
1187	48	N19	50.077	-1285.441	19.351	0	0	0
1188	48	N32	-30.501	149.108	6.338	0	0	0
1189	48	N10	-11.494	10694.442	21.071	0	0	0
1190	48	N11	-23.506	10492.798	-32.06	0	0	0
1191	48	N12	-103.025	8316.445	-12.68	0	0	0
1192	48	N14	-55.154	1438.1	-12.466	0	0	0
1193	48	N21	-4.301	7681.725	19.518	0	0.541	0
1194	48	N22	-32.64	28707.787	23.019	0	0	0
1195	48	N24	-61.676	9654.451	-8.434	0	0	0
1196	48	N26	-20.525	4290.73	-58.731	0	0	0
1197	48	N25	-66.635	24020.425	59.187	0	0	0
1198	48	N29	-152.551	7003.225	-1.258	0	72.168	0
1199	48	N33	-31.951	100.084	6.338	0	0	0
1200	48	COG (ft):	X: 32.267	Y: 14.309	Z: 24.55			
1201	49	N1	5.471	2124.188	3.153	0	0	0
1202	49	N5	-2.566	5918.78	-1.761	0	0	0
1203	49	N4	30.058	10832.605	3.884	0	17	0
1204	49	N6	-2.844	3470.766	35.598	0	0	0
1205	49	N7	11.247	4258.31	47.082	0	0	0
1206	49	N15	1.946	19305.006	213.45	0	207.35	0
1207	49	N9	-4.231	13701.25	130.284	0	18.888	0
1208	49	N20	-56.404	3616.95	31.047	0	0	0
1209	49	N23	-18.564	19058.801	22.917	0	0	0
1210	49	N27	-3.414	4322.798	22.508	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
1211	49	N30	-7.088	6795.603	34.773	0	0	0
1212	49	N19	9.255	6962.963	54.828	0	0	0
1213	49	N32	-3.41	-4.19	18.027	0	0	0
1214	49	N10	-7.736	15194.531	39.642	0	0	0
1215	49	N11	-25.514	14143.103	-41.739	0	0	0
1216	49	N12	-25.639	10832.823	-16.372	0	0	0
1217	49	N14	-6.132	1699.72	-27.875	0	0	0
1218	49	N21	-1.389	10041.694	118.001	0	-25.808	0
1219	49	N22	-26.323	14413.307	47.858	0	0	0
1220	49	N24	-8.202	12541.567	137.965	0	0	0
1221	49	N26	-26.661	6262.239	-236.755	0	0	0
1222	49	N25	-21.799	9808.581	-100.83	0	0	0
1223	49	N29	-8.835	9214.939	57.686	0	7.682	0
1224	49	N33	-5.827	530.391	19.542	0	0	0
1225	49	COG (ft):	X: 32.246	Y: 14.439	Z: 24.208			
1226	50	N1	2.365	1654.838	2.675	0	0	0
1227	50	N5	-1.698	4731.123	-0.708	0	0	0
1228	50	N4	23.538	8543.153	3.514	0	17.061	0
1229	50	N6	-5.29	2659.649	34.585	0	0	0
1230	50	N7	6.688	3199.867	47.174	0	0	0
1231	50	N15	0.712	15573.095	193.495	0	205.291	0
1232	50	N9	-8.181	10443.769	132.205	0	13.153	0
1233	50	N20	-52.301	3199.927	32.835	0	0	0
1234	50	N23	-12.998	13436.31	11.174	0	0	0
1235	50	N27	-3.389	3482.457	19.256	0	0	0
1236	50	N30	-4.874	5359.921	30.47	0	0	0
1237	50	N19	13.684	4787.58	49.954	0	0	0
1238	50	N32	-2.344	124.664	19.107	0	0	0
1239	50	N10	-5.364	10839.507	26.923	0	0	0
1240	50	N11	-20.796	10393.459	-30.608	0	0	0
1241	50	N12	-21.119	8410.002	-13.643	0	0	0
1242	50	N14	-4.298	1506.192	-22.563	0	0	0
1243	50	N21	-1.771	7659.309	104.237	0	-23.805	0
1244	50	N22	-18.896	9630.312	27.117	0	0	0
1245	50	N24	-5.484	9382.561	134.02	0	0	0
1246	50	N26	-25.266	5289.073	-230.834	0	0	0
1247	50	N25	-19.48	8137.822	-96.58	0	0	0
1248	50	N29	-5.613	7202.94	51.926	0	9.58	0
1249	50	N33	-4.425	671.606	20.631	0	0	0
1250	50	COG (ft):	X: 32.267	Y: 14.309	Z: 24.55			
1251	51	N1	13.392	2288.41	-0.793	0	0	0
1252	51	N5	-2.903	5908.469	-2.331	0	0	0
1253	51	N4	29.511	10784.213	-3.188	0	-18.21	0
1254	51	N6	30.92	3478.699	-22.846	0	0	0
1255	51	N7	17.176	4145.309	-34.276	0	0	0
1256	51	N15	0.274	11149.235	-34.014	0	-198.615	0
1257	51	N9	52.354	13827.921	-51.542	0	11.013	0
1258	51	N20	-32.085	3474.606	22.069	0	0	0
1259	51	N23	-18.5	19088.705	-29.893	0	0	0
1260	51	N27	2.388	4504.025	-18.136	0	0	0
1261	51	N30	-7.524	7365.843	-32.773	0	0	0
1262	51	N19	45.815	13913.599	-56.798	0	0	0
1263	51	N32	-4.115	609.841	-17.387	0	0	0
1264	51	N10	-11.938	15003.466	20.668	0	0	0
1265	51	N11	-25.651	14403.106	-51.476	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
1266	51	N12	-24.202	10609.149	-23.983	0	0	0
1267	51	N14	-7.952	1577.887	-11.592	0	0	0
1268	51	N21	2.418	10104.741	-36.561	0	-36.35	0
1269	51	N22	-27.971	18617.29	4.657	0	0	0
1270	51	N24	-7.99	13006.884	-170.35	0	0	0
1271	51	N26	-4.077	5228.042	140.904	0	0	0
1272	51	N25	-3.939	5998.741	244.596	0	0	0
1273	51	N29	-9.206	8938.35	-51.039	0	-10.358	0
1274	51	N33	-5.034	-37.398	-15.614	0	0	0
1275	51	COG (ft):	X: 32.246	Y: 14.439	Z: 24.208			
1276	52	N1	10.451	1818.1	-1.068	0	0	0
1277	52	N5	-2.574	4719.86	-0.695	0	0	0
1278	52	N4	22.875	8494.901	-2.484	0	-17.913	0
1279	52	N6	28.319	2667.844	-22.772	0	0	0
1280	52	N7	13.064	3087.272	-32.789	0	0	0
1281	52	N15	0.223	7479.504	-48.377	0	-199.068	0
1282	52	N9	48.954	10569.087	-43.28	0	5.385	0
1283	52	N20	-28.463	3058.865	25.048	0	0	0
1284	52	N23	-12.585	13467.382	-15.673	0	0	0
1285	52	N27	2.62	3663.095	-16.919	0	0	0
1286	52	N30	-5.571	5928.6	-29.472	0	0	0
1287	52	N19	49.634	11705.543	-57.697	0	0	0
1288	52	N32	-3.073	736.476	-17.079	0	0	0
1289	52	N10	-7.888	10648.135	15.45	0	0	0
1290	52	N11	-20.825	10654.407	-33.9	0	0	0
1291	52	N12	-19.985	8186.395	-17.122	0	0	0
1292	52	N14	-6.192	1384.567	-6.018	0	0	0
1293	52	N21	2.723	7721.686	-39.042	0	-34.022	0
1294	52	N22	-19.801	13811.313	6.106	0	0	0
1295	52	N24	-5.765	9847.992	-158.752	0	0	0
1296	52	N26	-2.915	4258.158	148.724	0	0	0
1297	52	N25	-1.941	4352.314	253.497	0	0	0
1298	52	N29	-5.866	6927.359	-45.948	0	-8.344	0
1299	52	N33	-3.604	105.519	-15.325	0	0	0
1300	52	COG (ft):	X: 32.267	Y: 14.309	Z: 24.55			
1301	53	N1	-28.282	-280.585	0.627	0	0	0
1302	53	N5	64.677	1071.959	4.832	0	0	0
1303	53	N4	194.608	2230.266	3.634	0	33.819	0
1304	53	N6	-97.863	666.877	-1.445	0	0	0
1305	53	N7	-16.986	1339.608	1.086	0	0	0
1306	53	N15	8.808	7980.463	4.102	0	-38.176	0
1307	53	N9	-175.795	1683.462	54.442	0	168.562	0
1308	53	N20	-62.858	1372.948	29.24	0	0	0
1309	53	N23	-12.418	679.559	0.561	0	0	0
1310	53	N27	0.957	721.403	5.374	0	0	0
1311	53	N30	39.572	1045.116	0.579	0	0	0
1312	53	N19	-5.267	13098.227	-16.743	0	0	0
1313	53	N32	24.384	785.413	-5.55	0	0	0
1314	53	N10	-15.607	817.964	1.114	0	0	0
1315	53	N11	-20.656	1651.308	-1.072	0	0	0
1316	53	N12	65.193	1839.798	-3.659	0	0	0
1317	53	N14	63.697	637.539	-3.192	0	0	0
1318	53	N21	3.102	996.753	1.438	0	-7.834	0
1319	53	N22	-14.82	-16217.779	2.493	0	0	0
1320	53	N24	41.409	1227.313	-1.063	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
1321	53	N26	-8.814	1872.761	-10.696	0	0	0
1322	53	N25	31.739	-16008.794	82.41	0	0	0
1323	53	N29	87.327	1356.696	3.871	0	-58.04	0
1324	53	N33	23.364	781.225	-5.55	0	0	0
1325	53	COG (ft):	X: 31.607	Y: 12.425	Z: 29.118			
1326	54	N1	-34.929	-230.319	0.643	0	0	0
1327	54	N5	64.949	1450.807	5.671	0	0	0
1328	54	N4	198.32	2956.418	4.438	0	58.005	0
1329	54	N6	-132.242	927.298	-1.627	0	0	0
1330	54	N7	-20.595	1778.347	1.306	0	0	0
1331	54	N15	7.748	9153.692	9.907	0	-39.821	0
1332	54	N9	-236.762	2731.772	59.662	0	207.267	0
1333	54	N20	-79.84	1540.131	27.86	0	0	0
1334	54	N23	-10.792	2457.889	-0.023	0	0	0
1335	54	N27	0.497	988.14	5.131	0	0	0
1336	54	N30	39.67	1505.3	0.253	0	0	0
1337	54	N19	-23.255	15092.142	-18.224	0	0	0
1338	54	N32	24.222	737.949	-5.415	0	0	0
1339	54	N10	-15.537	2227.53	4.192	0	0	0
1340	54	N11	-21.929	2857.469	-5.562	0	0	0
1341	54	N12	62.716	2611.777	-5.017	0	0	0
1342	54	N14	63.482	699.246	-4.671	0	0	0
1343	54	N21	2.556	1755.201	3.741	0	-8.16	0
1344	54	N22	-15.89	-14572.021	4.979	0	0	0
1345	54	N24	41.607	2228.595	-2.313	0	0	0
1346	54	N26	-16.616	2126.123	-14.119	0	0	0
1347	54	N25	32.713	-14436.314	78.247	0	0	0
1348	54	N29	88.147	1996.801	3.484	0	-54.878	0
1349	54	N33	22.845	730.144	-5.415	0	0	0
1350	54	COG (ft):	X: 31.81	Y: 13.291	Z: 26.98			
1351	55	N1	28.927	1094.873	1.528	0	0	0
1352	55	N5	-50.648	1112.933	-3.225	0	0	0
1353	55	N4	-120.076	2308.279	-2.565	0	-51.517	0
1354	55	N6	103.708	659.729	1.593	0	0	0
1355	55	N7	24.601	-45.968	-0.555	0	0	0
1356	55	N15	-7.648	-4250	3.398	0	38.665	0
1357	55	N9	186.277	1684.245	-52.923	0	-107.349	0
1358	55	N20	13.119	1364.127	24.289	0	0	0
1359	55	N23	11.024	760.64	-0.981	0	0	0
1360	55	N27	-1.671	698.163	-4.126	0	0	0
1361	55	N30	-46.664	1475.638	0.833	0	0	0
1362	55	N19	70.941	-9109.015	22.679	0	0	0
1363	55	N32	-28.027	248.352	5.634	0	0	0
1364	55	N10	14.164	710.477	1.311	0	0	0
1365	55	N11	3.913	1609.208	-0.343	0	0	0
1366	55	N12	-82.075	1839.035	-1.812	0	0	0
1367	55	N14	-50.173	608.489	-1.449	0	0	0
1368	55	N21	-2.306	972.422	0.247	0	7.327	0
1369	55	N22	-7.609	17629.958	1.574	0	0	0
1370	55	N24	-48.413	1320.101	0.563	0	0	0
1371	55	N26	-7.358	1005.28	-42.757	0	0	0
1372	55	N25	-55.787	18303.147	45.497	0	0	0
1373	55	N29	-136.722	1264.394	-2.842	0	70.626	0
1374	55	N33	-27.842	247.182	5.633	0	0	0
1375	55	COG (ft):	X: 31.607	Y: 12.425	Z: 29.118			

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
1376	56	N1	22.898	1148.933	1.533	0	0	0
1377	56	N5	-50.733	1490.9	-2.351	0	0	0
1378	56	N4	-118.717	3034.88	-1.667	0	-28.138	0
1379	56	N6	69.825	920.195	1.279	0	0	0
1380	56	N7	18.872	389.469	-0.587	0	0	0
1381	56	N15	-9.203	-3088.193	8.969	0	37.199	0
1382	56	N9	124.544	2735.179	-48.152	0	-68.847	0
1383	56	N20	-3.406	1530.847	22.936	0	0	0
1384	56	N23	6.639	2539.048	-1.322	0	0	0
1385	56	N27	-2.219	964.731	-4.305	0	0	0
1386	56	N30	-47.465	1936.421	0.627	0	0	0
1387	56	N19	50.258	-7171.255	20.242	0	0	0
1388	56	N32	-28.115	200.058	5.775	0	0	0
1389	56	N10	8.312	2118.01	4.258	0	0	0
1390	56	N11	-1.592	2814.421	-4.922	0	0	0
1391	56	N12	-86.503	2610.819	-3.225	0	0	0
1392	56	N14	-50.44	670.125	-2.925	0	0	0
1393	56	N21	-3.155	1731.203	2.637	0	7.09	0
1394	56	N22	-11.021	19328.948	4.93	0	0	0
1395	56	N24	-50.048	2321.185	-0.57	0	0	0
1396	56	N26	-15.121	1257.82	-46.345	0	0	0
1397	56	N25	-57.501	19915.837	42.3	0	0	0
1398	56	N29	-138.043	1902.716	-3.072	0	73.854	0
1399	56	N33	-28.464	194.984	5.775	0	0	0
1400	56	COG (ft):	X: 31.81	Y: 13.291	Z: 26.98			
1401	57	N1	-3.787	376.049	1.608	0	0	0
1402	57	N5	1.107	1100.107	-1.231	0	0	0
1403	57	N4	6.692	2293.83	0.741	0	16.293	0
1404	57	N6	-15.779	658.569	33.507	0	0	0
1405	57	N7	-3.197	657.618	45.852	0	0	0
1406	57	N15	-1.617	5891.31	140.825	0	234.982	0
1407	57	N9	-27.96	1626.858	76.354	0	7.354	0
1408	57	N20	-34.807	1437.13	22.73	0	0	0
1409	57	N23	-0.949	696.951	-15.9	0	0	0
1410	57	N27	-3.893	618.352	11.04	0	0	0
1411	57	N30	0.434	965.901	19.086	0	0	0
1412	57	N19	13.629	-1855.639	48.399	0	0	0
1413	57	N32	0.246	216.689	17.996	0	0	0
1414	57	N10	-1.195	856.014	-1.444	0	0	0
1415	57	N11	-8.239	1515.098	-6.65	0	0	0
1416	57	N12	-8.695	1933.555	-8.899	0	0	0
1417	57	N14	0.792	677.798	-13.169	0	0	0
1418	57	N21	-3.023	950.269	69.922	0	-15.149	0
1419	57	N22	-1.728	-985.7	-17.646	0	0	0
1420	57	N24	0.399	1042.329	123.666	0	0	0
1421	57	N26	-20.573	1943.041	-226.58	0	0	0
1422	57	N25	-9.452	3644.799	-123.073	0	0	0
1423	57	N29	0.892	1453.999	35.282	0	11.536	0
1424	57	N33	-0.523	807.457	19.637	0	0	0
1425	57	COG (ft):	X: 31.607	Y: 12.425	Z: 29.118			
1426	58	N1	-3.185	523.435	1.588	0	0	0
1427	58	N5	0.693	1479.009	-0.465	0	0	0
1428	58	N4	8.909	3022.85	1.527	0	16.838	0
1429	58	N6	-13.21	916.73	33.196	0	0	0
1430	58	N7	-2.008	1000.827	46.278	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
1431	58	N15	-1.361	6811.045	147.665	0	221.669	0
1432	58	N9	-22.871	2655.495	98.939	0	5.77	0
1433	58	N20	-35.602	1569.233	24.087	0	0	0
1434	58	N23	-2.651	2488.645	-12.181	0	0	0
1435	58	N27	-3.61	887.855	11.336	0	0	0
1436	58	N30	-0.22	1423.461	20.059	0	0	0
1437	58	N19	12.878	-1113.092	45.457	0	0	0
1438	58	N32	-0.082	175.845	18.873	0	0	0
1439	58	N10	-1.74	2259.501	2.691	0	0	0
1440	58	N11	-9.65	2713.051	-9.982	0	0	0
1441	58	N12	-10.121	2703.564	-8.931	0	0	0
1442	58	N14	0.241	737.691	-13.489	0	0	0
1443	58	N21	-2.712	1709.772	73.773	0	-17.302	0
1444	58	N22	-3.955	378.653	-11.4	0	0	0
1445	58	N24	-0.264	2049.763	124.725	0	0	0
1446	58	N26	-20.132	2248.265	-221.86	0	0	0
1447	58	N25	-11.971	4089.657	-118.716	0	0	0
1448	58	N29	-0.117	2093.833	37.406	0	11.37	0
1449	58	N33	-1.213	761.983	20.483	0	0	0
1450	58	COG (ft):	X: 31.81	Y: 13.291	Z: 26.98			
1451	59	N1	4.689	536.259	-1.628	0	0	0
1452	59	N5	-1.373	1086.248	0.44	0	0	0
1453	59	N4	5.707	2246.055	-2.411	0	-17.979	0
1454	59	N6	17.516	667.397	-21.224	0	0	0
1455	59	N7	4.177	546.547	-30.715	0	0	0
1456	59	N15	0.736	-2044.948	-86.416	0	-165.476	0
1457	59	N9	30.938	1748.96	-82.908	0	-0.251	0
1458	59	N20	-12.41	1299.78	20.081	0	0	0
1459	59	N23	0.248	730.411	14.918	0	0	0
1460	59	N27	2.836	797.249	-10.323	0	0	0
1461	59	N30	-0.727	1529.983	-18.276	0	0	0
1462	59	N19	47.788	4978.413	-47.662	0	0	0
1463	59	N32	-0.404	822.756	-18.989	0	0	0
1464	59	N10	-0.003	664.077	4.046	0	0	0
1465	59	N11	-8.06	1777.617	5.114	0	0	0
1466	59	N12	-8.363	1710.468	-1.663	0	0	0
1467	59	N14	-1.426	557.111	4.335	0	0	0
1468	59	N21	3.357	1010.78	-42.298	0	-24.381	0
1469	59	N22	-1.096	3132.115	9.567	0	0	0
1470	59	N24	-0.864	1506.322	-128.892	0	0	0
1471	59	N26	1.139	920.634	160.217	0	0	0
1472	59	N25	7.004	-75.405	238.552	0	0	0
1473	59	N29	0.97	1181.254	-32.523	0	-6.166	0
1474	59	N33	0.165	245.764	-17.427	0	0	0
1475	59	COG (ft):	X: 31.607	Y: 12.425	Z: 29.118			
1476	60	N1	5.256	684.185	-1.699	0	0	0
1477	60	N5	-1.624	1465.449	1.059	0	0	0
1478	60	N4	7.961	2975.012	-1.939	0	-17.542	0
1479	60	N6	20.075	925.469	-21.865	0	0	0
1480	60	N7	5.234	889.495	-30.763	0	0	0
1481	60	N15	0.772	-1142.282	-81.017	0	-179.187	0
1482	60	N9	35.755	2777.952	-61.982	0	-1.815	0
1483	60	N20	-13.037	1431.452	21.032	0	0	0
1484	60	N23	-1.563	2521.703	10.585	0	0	0
1485	60	N27	3.052	1066.934	-11.416	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
1486	60	N30	-1.398	1988.199	-19.669	0	0	0
1487	60	N19	47.23	5730.544	-51.888	0	0	0
1488	60	N32	-0.782	782.531	-17.901	0	0	0
1489	60	N10	-1.062	2067.773	5.817	0	0	0
1490	60	N11	-9.493	2975.428	-0.236	0	0	0
1491	60	N12	-9.693	2480.33	-2.916	0	0	0
1492	60	N14	-1.956	616.793	4.017	0	0	0
1493	60	N21	3.455	1770.453	-41.923	0	-26.665	0
1494	60	N22	-3.509	4504.835	9.603	0	0	0
1495	60	N24	-1.474	2514.056	-132.665	0	0	0
1496	60	N26	1.637	1224.648	164.511	0	0	0
1497	60	N25	4.656	363.033	242.041	0	0	0
1498	60	N29	-0.075	1820.761	-33.735	0	-6.336	0
1499	60	N33	-0.471	199.823	-16.292	0	0	0
1500	60	COG (ft):	X: 31.81	Y: 13.291	Z: 26.98			
1501	61	N1	8.388	1573.849	2.001	0	0	0
1502	61	N5	-1.819	3845.667	-0.364	0	0	0
1503	61	N4	21.331	7627.445	1.032	0	-8.31	0
1504	61	N6	14.264	2512.809	0.298	0	0	0
1505	61	N7	10.915	2905.451	-0.821	0	0	0
1506	61	N15	-0.295	9415.071	40.522	0	-14.944	0
1507	61	N9	25.078	8776.959	21.976	0	8.013	0
1508	61	N20	-35.735	2716.423	37.067	0	0	0
1509	61	N23	-11.855	12242.18	-3.228	0	0	0
1510	61	N27	-0.4	2637.556	1.215	0	0	0
1511	61	N30	9.961	4510.079	1.162	0	0	0
1512	61	N19	39.399	6402.752	3.276	0	0	0
1513	61	N32	6.513	490.98	1.054	0	0	0
1514	61	N10	-6.186	9783.099	19.711	0	0	0
1515	61	N11	-19.99	9702.967	-29.543	0	0	0
1516	61	N12	-19.751	7312.577	-11.959	0	0	0
1517	61	N14	-4.15	1214.392	-11.785	0	0	0
1518	61	N21	0.548	6098.604	16.422	0	-6.302	0
1519	61	N22	-16.705	11514.343	20.394	0	0	0
1520	61	N24	9.619	8041.402	-8.277	0	0	0
1521	61	N26	-17.106	3924.445	-38.59	0	0	0
1522	61	N25	5.911	5738.811	83.898	0	0	0
1523	61	N29	-4.615	5790.173	1.279	0	-4.533	0
1524	61	N33	5.367	459.593	1.054	0	0	0
1525	61	COG (ft):	X: 32.029	Y: 14.183	Z: 24.793			
1526	62	N1	4.241	1514.677	1.922	0	0	0
1527	62	N5	-1.535	3845.932	0.233	0	0	0
1528	62	N4	22.353	7625.964	1.438	0	6.594	0
1529	62	N6	2.799	2513.34	0.099	0	0	0
1530	62	N7	7.65	2965.761	-0.627	0	0	0
1531	62	N15	-0.685	9446.07	40.738	0	-18.486	0
1532	62	N9	4.939	8778.027	28.324	0	9.153	0
1533	62	N20	-41.675	2729.855	38.376	0	0	0
1534	62	N23	-11.219	12238.837	-3.147	0	0	0
1535	62	N27	-0.639	2636.335	1.55	0	0	0
1536	62	N30	-18.533	4599.101	0.821	0	0	0
1537	62	N19	32.707	6867.691	1.025	0	0	0
1538	62	N32	-11.053	394.211	0.476	0	0	0
1539	62	N10	-5.669	9790.256	19.775	0	0	0
1540	62	N11	-19.756	9705.147	-29.538	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
1541	62	N12	-20.269	7312.807	-12.089	0	0	0
1542	62	N14	-3.877	1214.853	-11.992	0	0	0
1543	62	N21	0.269	6098.394	16.405	0	-6.108	0
1544	62	N22	-16.452	10070.223	20.413	0	0	0
1545	62	N24	-19.295	8044.417	-8.529	0	0	0
1546	62	N26	-13.761	3904.792	-40.545	0	0	0
1547	62	N25	-23.612	5280.771	81.886	0	0	0
1548	62	N29	-5.653	5791.901	1.316	0	5.218	0
1549	62	N33	-12.21	362.285	0.475	0	0	0
1550	62	COG (ft):	X: 32.029	Y: 14.183	Z: 24.793			
1551	63	N1	6.442	1546.684	2.034	0	0	0
1552	63	N5	-1.713	3845.786	0.072	0	0	0
1553	63	N4	21.85	7626.351	1.329	0	-1.492	0
1554	63	N6	9.629	2513.095	0.212	0	0	0
1555	63	N7	9.38	2934.095	-0.748	0	0	0
1556	63	N15	-0.412	9458.908	40.683	0	-19.598	0
1557	63	N9	16.935	8775.927	30.819	0	9.274	0
1558	63	N20	-38.993	2723.572	40.848	0	0	0
1559	63	N23	-11.537	12239.615	-3.361	0	0	0
1560	63	N27	-0.567	2633.384	4.034	0	0	0
1561	63	N30	-4.282	4544.134	5.207	0	0	0
1562	63	N19	35.747	6676.142	1.431	0	0	0
1563	63	N32	-2.265	430.03	4.598	0	0	0
1564	63	N10	-5.969	9788.93	19.461	0	0	0
1565	63	N11	-19.875	9706.338	-29.6	0	0	0
1566	63	N12	-19.972	7310.911	-11.318	0	0	0
1567	63	N14	-4.065	1212.351	-10.852	0	0	0
1568	63	N21	0.388	6098.675	17.316	0	-2.689	0
1569	63	N22	-16.573	10800.881	20.274	0	0	0
1570	63	N24	-4.833	8031.869	2.442	0	0	0
1571	63	N26	-15.757	3905.436	-24.056	0	0	0
1572	63	N25	-8.204	5601.463	99.273	0	0	0
1573	63	N29	-5.111	5796.796	6.428	0	0.567	0
1574	63	N33	-3.342	423.299	4.598	0	0	0
1575	63	COG (ft):	X: 32.029	Y: 14.183	Z: 24.793			
1576	64	N1	6.195	1541.843	1.889	0	0	0
1577	64	N5	-1.641	3845.813	-0.203	0	0	0
1578	64	N4	21.835	7627.058	1.142	0	-0.224	0
1579	64	N6	7.435	2513.054	0.184	0	0	0
1580	64	N7	9.178	2937.117	-0.702	0	0	0
1581	64	N15	-0.569	9402.234	40.575	0	-13.832	0
1582	64	N9	13.082	8779.058	19.481	0	7.89	0
1583	64	N20	-38.418	2722.709	34.598	0	0	0
1584	64	N23	-11.536	12241.403	-3.014	0	0	0
1585	64	N27	-0.471	2640.507	-1.269	0	0	0
1586	64	N30	-4.291	4565.054	-3.225	0	0	0
1587	64	N19	36.352	6594.312	2.864	0	0	0
1588	64	N32	-2.273	455.153	-3.067	0	0	0
1589	64	N10	-5.886	9784.425	20.024	0	0	0
1590	64	N11	-19.871	9701.776	-29.481	0	0	0
1591	64	N12	-20.048	7314.474	-12.73	0	0	0
1592	64	N14	-3.962	1216.894	-12.925	0	0	0
1593	64	N21	0.429	6098.323	15.512	0	-9.721	0
1594	64	N22	-16.548	10783.694	20.539	0	0	0
1595	64	N24	-4.843	8053.95	-19.247	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
1596	64	N26	-15.106	3923.798	-55.074	0	0	0
1597	64	N25	-9.474	5418.119	66.498	0	0	0
1598	64	N29	-5.157	5785.277	-3.833	0	0.118	0
1599	64	N33	-3.505	398.563	-3.068	0	0	0
1600	64	COG (ft):	X: 32.029	Y: 14.183	Z: 24.793			
1601	65	N1	6.352	1099.789	1.461	0	0	0
1602	65	N5	-1.285	2661.443	-0.259	0	0	0
1603	65	N4	14.833	5291.644	0.644	0	-8.1	0
1604	65	N6	11.433	1732.543	0.251	0	0	0
1605	65	N7	7.951	1972.528	-0.553	0	0	0
1606	65	N15	-0.321	6399.944	27.09	0	-9.095	0
1607	65	N9	20.315	5973.078	13.338	0	5.248	0
1608	65	N20	-25.1	1908.669	24.284	0	0	0
1609	65	N23	-7.582	8128.123	-2.153	0	0	0
1610	65	N27	-0.296	1820.43	0.795	0	0	0
1611	65	N30	11.425	3102.193	0.899	0	0	0
1612	65	N19	29.459	4330.434	2.555	0	0	0
1613	65	N32	7.259	404.185	0.825	0	0	0
1614	65	N10	-3.62	6517.609	13.158	0	0	0
1615	65	N11	-13.771	6573.597	-19.418	0	0	0
1616	65	N12	-13.777	5030.447	-8.114	0	0	0
1617	65	N14	-2.819	874.734	-7.98	0	0	0
1618	65	N21	0.391	4127.112	10.874	0	-4.14	0
1619	65	N22	-10.964	7938.763	13.497	0	0	0
1620	65	N24	11.309	5438.328	-5.421	0	0	0
1621	65	N26	-11.97	2715.013	-28.794	0	0	0
1622	65	N25	8.992	4063.353	59.798	0	0	0
1623	65	N29	-2.579	3965.415	0.871	0	-4.304	0
1624	65	N33	6.5	383.374	0.825	0	0	0
1625	65	COG (ft):	X: 32.005	Y: 14.119	Z: 24.934			
1626	66	N1	2.118	1040.951	1.386	0	0	0
1627	66	N5	-1.001	2661.588	0.35	0	0	0
1628	66	N4	15.454	5290.118	1.076	0	6.733	0
1629	66	N6	-0.03	1733.031	0.031	0	0	0
1630	66	N7	4.483	2032.476	-0.384	0	0	0
1631	66	N15	-0.712	6430.071	27.28	0	-12.627	0
1632	66	N9	-0.031	5974.173	19.636	0	6.408	0
1633	66	N20	-31.012	1922.004	25.585	0	0	0
1634	66	N23	-7.519	8124.659	-2.106	0	0	0
1635	66	N27	-0.532	1819.256	1.127	0	0	0
1636	66	N30	-17.034	3190.987	0.549	0	0	0
1637	66	N19	22.755	4791.668	0.281	0	0	0
1638	66	N32	-10.259	307.771	0.248	0	0	0
1639	66	N10	-3.931	6524.736	13.194	0	0	0
1640	66	N11	-14.172	6575.842	-19.439	0	0	0
1641	66	N12	-14.586	5030.697	-8.263	0	0	0
1642	66	N14	-2.547	875.192	-8.189	0	0	0
1643	66	N21	0.114	4126.911	10.842	0	-3.947	0
1644	66	N22	-10.902	6498.147	13.489	0	0	0
1645	66	N24	-17.615	5441.299	-5.693	0	0	0
1646	66	N26	-8.689	2695.472	-30.741	0	0	0
1647	66	N25	-20.617	3606.312	57.781	0	0	0
1648	66	N29	-3.862	3967.192	0.898	0	5.416	0
1649	66	N33	-10.998	286.468	0.248	0	0	0
1650	66	COG (ft):	X: 32.005	Y: 14.119	Z: 24.934			

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
1651	67	N1	4.364	1072.779	1.499	0	0	0
1652	67	N5	-1.188	2661.48	0.191	0	0	0
1653	67	N4	15.154	5290.522	0.969	0	-1.315	0
1654	67	N6	6.799	1732.805	0.169	0	0	0
1655	67	N7	6.32	2000.99	-0.475	0	0	0
1656	67	N15	-0.441	6443.643	27.319	0	-13.737	0
1657	67	N9	12.083	5972.059	22.272	0	6.516	0
1658	67	N20	-28.345	1915.772	28.08	0	0	0
1659	67	N23	-7.543	8125.487	-2.158	0	0	0
1660	67	N27	-0.463	1816.286	3.613	0	0	0
1661	67	N30	-2.798	3136.146	4.944	0	0	0
1662	67	N19	25.796	4601.818	0.765	0	0	0
1663	67	N32	-1.494	343.427	4.363	0	0	0
1664	67	N10	-3.798	6523.44	13.049	0	0	0
1665	67	N11	-13.966	6576.981	-19.34	0	0	0
1666	67	N12	-14.144	5028.796	-7.376	0	0	0
1667	67	N14	-2.737	872.694	-7.035	0	0	0
1668	67	N21	0.229	4127.187	11.826	0	-0.527	0
1669	67	N22	-10.927	7226.98	13.488	0	0	0
1670	67	N24	-3.143	5428.784	5.334	0	0	0
1671	67	N26	-10.654	2696.05	-14.236	0	0	0
1672	67	N25	-5.163	3926.459	75.225	0	0	0
1673	67	N29	-3.194	3972.054	6.02	0	0.781	0
1674	67	N33	-2.169	347.264	4.363	0	0	0
1675	67	COG (ft):	X: 32.005	Y: 14.119	Z: 24.934			
1676	68	N1	4.113	1067.961	1.349	0	0	0
1677	68	N5	-1.098	2661.552	-0.1	0	0	0
1678	68	N4	15.134	5291.24	0.75	0	-0.052	0
1679	68	N6	4.604	1732.769	0.112	0	0	0
1680	68	N7	6.107	2004.014	-0.464	0	0	0
1681	68	N15	-0.592	6386.374	27.05	0	-7.985	0
1682	68	N9	8.201	5975.193	10.702	0	5.138	0
1683	68	N20	-27.767	1914.905	21.79	0	0	0
1684	68	N23	-7.558	8127.296	-2.101	0	0	0
1685	68	N27	-0.365	1823.4	-1.692	0	0	0
1686	68	N30	-2.812	3157.041	-3.496	0	0	0
1687	68	N19	26.41	4520.295	2.065	0	0	0
1688	68	N32	-1.503	368.521	-3.289	0	0	0
1689	68	N10	-3.754	6518.905	13.302	0	0	0
1690	68	N11	-13.977	6572.458	-19.518	0	0	0
1691	68	N12	-14.22	5032.348	-9.001	0	0	0
1692	68	N14	-2.629	877.231	-9.133	0	0	0
1693	68	N21	0.276	4126.835	9.89	0	-7.56	0
1694	68	N22	-10.903	7209.939	13.503	0	0	0
1695	68	N24	-3.163	5450.843	-16.446	0	0	0
1696	68	N26	-10.001	2714.433	-45.294	0	0	0
1697	68	N25	-6.439	3743.206	42.34	0	0	0
1698	68	N29	-3.247	3960.553	-4.252	0	0.331	0
1699	68	N33	-2.332	322.561	-3.289	0	0	0
1700	68	COG (ft):	X: 32.005	Y: 14.119	Z: 24.934			

Node Reactions

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
1	1	N215	-172.087	3136.096	1.703	0	0	0
2	1	N13	420.091	4743.209	-3.307	0	0	0
3	1	N8	746.803	4572.895	46.226	0	0	0
4	1	N28	-984.537	7595.076	3.197	0	0	0
5	1	COG (ft):	X: 32.005	Y: 14.119	Z: 24.934			
6	2	N215	-246.305	3838.73	1.953	0	0	0
7	2	N13	665.309	7137.734	-5.461	0	0	0
8	2	N8	1277.959	6535.999	84.209	0	0	0
9	2	N28	-1689.136	11546.249	4.456	0	0	0
10	2	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
11	3	N215	-246.305	3838.73	1.953	0	0	0
12	3	N13	665.309	7137.734	-5.461	0	0	0
13	3	N8	1277.959	6535.999	84.209	0	0	0
14	3	N28	-1689.136	11546.249	4.456	0	0	0
15	3	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
16	4	N215	-313.347	3648.511	2.034	0	0	0
17	4	N13	695.652	8352.06	-6.607	0	0	0
18	4	N8	1285.714	8795.987	84	0	0	0
19	4	N28	-1640.807	13133.887	4.856	0	0	0
20	4	COG (ft):	X: 32.57	Y: 14.527	Z: 24.107			
21	5	N215	-6179.594	12975.232	1.572	0	0	0
22	5	N13	-4255.938	1836.778	-6.375	0	0	0
23	5	N8	-1025.868	4063.753	102.667	0	0	0
24	5	N28	-7592.42	21536.864	6.818	0	0	0
25	5	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
26	6	N215	-5786.374	12133.646	1.433	0	0	0
27	6	N13	-4847.223	444.154	-5.828	0	0	0
28	6	N8	-1213.918	3374.488	91.526	0	0	0
29	6	N28	-7319.49	20181.655	6.442	0	0	0
30	6	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
31	7	N215	5242.814	-4115.457	2.105	0	0	0
32	7	N13	5406.381	13573.974	-6.462	0	0	0
33	7	N8	3861.656	10266.457	88.315	0	0	0
34	7	N28	3538.424	4424.992	2.67	0	0	0
35	7	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
36	8	N215	5631.202	-4948.82	1.68	0	0	0
37	8	N13	4816.308	12181.298	-5.651	0	0	0
38	8	N8	3672.462	9575.301	77.406	0	0	0
39	8	N28	3805.27	3080.089	1.909	0	0	0
40	8	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
41	9	N215	595.02	3006.726	14.203	0	0	0
42	9	N13	2342.935	9836.351	-6.683	0	0	0
43	9	N8	-246.693	5043.7	106.038	0	0	0
44	9	N28	-2594.132	13794.511	36.783	0	0	0
45	9	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
46	10	N215	593.487	2758.435	14.847	0	0	0
47	10	N13	2249.246	9047.549	-6.291	0	0	0
48	10	N8	-323.912	4490.429	96.7	0	0	0
49	10	N28	-2422.461	12596.192	34.383	0	0	0
50	10	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
51	11	N215	-1099.821	5195.282	-12.194	0	0	0
52	11	N13	-813.907	6032.645	-3.823	0	0	0
53	11	N8	3033.12	9226.576	82.014	0	0	0
54	11	N28	-1196.925	11798.829	-23.345	0	0	0
55	11	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
56	12	N215	-1096.124	4939.733	-10.919	0	0	0
57	12	N13	-900.196	5253.051	-2.749	0	0	0
58	12	N8	2944.998	8659.569	73.401	0	0	0
59	12	N28	-1028.298	10604.851	-22.584	0	0	0
60	12	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
61	13	N215	-6179.594	12975.232	1.572	0	0	0
62	13	N13	-4255.938	1836.778	-6.375	0	0	0
63	13	N8	-1025.868	4063.753	102.667	0	0	0
64	13	N28	-7592.42	21536.864	6.818	0	0	0
65	13	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
66	14	N215	-5786.374	12133.646	1.433	0	0	0
67	14	N13	-4847.223	444.154	-5.828	0	0	0
68	14	N8	-1213.918	3374.488	91.526	0	0	0
69	14	N28	-7319.49	20181.655	6.442	0	0	0
70	14	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
71	15	N215	5242.814	-4115.457	2.105	0	0	0
72	15	N13	5406.381	13573.974	-6.462	0	0	0
73	15	N8	3861.656	10266.457	88.315	0	0	0
74	15	N28	3538.424	4424.992	2.67	0	0	0
75	15	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
76	16	N215	5631.202	-4948.82	1.68	0	0	0
77	16	N13	4816.308	12181.298	-5.651	0	0	0
78	16	N8	3672.462	9575.301	77.406	0	0	0
79	16	N28	3805.27	3080.089	1.909	0	0	0
80	16	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
81	17	N215	595.02	3006.726	14.203	0	0	0
82	17	N13	2342.935	9836.351	-6.683	0	0	0
83	17	N8	-246.693	5043.7	106.038	0	0	0
84	17	N28	-2594.132	13794.511	36.783	0	0	0
85	17	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
86	18	N215	593.487	2758.435	14.847	0	0	0
87	18	N13	2249.246	9047.549	-6.291	0	0	0
88	18	N8	-323.912	4490.429	96.7	0	0	0
89	18	N28	-2422.461	12596.192	34.383	0	0	0
90	18	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
91	19	N215	-1099.821	5195.282	-12.194	0	0	0
92	19	N13	-813.907	6032.645	-3.823	0	0	0
93	19	N8	3033.12	9226.576	82.014	0	0	0
94	19	N28	-1196.925	11798.829	-23.345	0	0	0
95	19	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
96	20	N215	-1096.124	4939.733	-10.919	0	0	0
97	20	N13	-900.196	5253.051	-2.749	0	0	0
98	20	N8	2944.998	8659.569	73.401	0	0	0
99	20	N28	-1028.298	10604.851	-22.584	0	0	0
100	20	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
101	21	N215	-6248.519	12787.802	1.534	0	0	0
102	21	N13	-4227.129	3048.347	-7.468	0	0	0
103	21	N8	-1017.893	6323.811	102.869	0	0	0
104	21	N28	-7544.126	23124.798	6.946	0	0	0
105	21	COG (ft):	X: 32.533	Y: 14.559	Z: 24.012			
106	22	N215	-5854.391	11944.858	1.403	0	0	0
107	22	N13	-4819.023	1654.855	-6.903	0	0	0
108	22	N8	-1206.03	5634.523	91.682	0	0	0
109	22	N28	-7270.818	21769.484	6.608	0	0	0
110	22	COG (ft):	X: 32.57	Y: 14.527	Z: 24.107			

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
111	23	N215	5177.383	-4308.069	2.289	0	0	0
112	23	N13	5437.713	14790.287	-7.681	0	0	0
113	23	N8	3869.215	12526.257	87.809	0	0	0
114	23	N28	3586.337	6013.083	3.293	0	0	0
115	23	COG (ft):	X: 32.533	Y: 14.559	Z: 24.012			
116	24	N215	5566.677	-5142.783	1.871	0	0	0
117	24	N13	4847.032	13396.744	-6.852	0	0	0
118	24	N8	3679.939	11835.083	76.855	0	0	0
119	24	N28	3853.561	4668.077	2.568	0	0	0
120	24	COG (ft):	X: 32.57	Y: 14.527	Z: 24.107			
121	25	N215	531.565	2811.268	13.956	0	0	0
122	25	N13	2375.401	11053.407	-7.326	0	0	0
123	25	N8	-243.045	7298.23	107.251	0	0	0
124	25	N28	-2547.503	15384.745	39.315	0	0	0
125	25	COG (ft):	X: 32.533	Y: 14.559	Z: 24.012			
126	26	N215	530.001	2563.005	14.606	0	0	0
127	26	N13	2281.941	10264.903	-6.943	0	0	0
128	26	N8	-320.058	6745.298	97.954	0	0	0
129	26	N28	-2375.68	14186.144	36.9	0	0	0
130	26	COG (ft):	X: 32.57	Y: 14.527	Z: 24.107			
131	27	N215	-1170.355	5010.166	-11.816	0	0	0
132	27	N13	-786.16	7243.63	-5.492	0	0	0
133	27	N8	3044.771	11491.612	80.445	0	0	0
134	27	N28	-1147.337	13384.55	-25.028	0	0	0
135	27	COG (ft):	X: 32.533	Y: 14.559	Z: 24.012			
136	28	N215	-1166.655	4754.594	-10.536	0	0	0
137	28	N13	-872.205	6464.35	-4.427	0	0	0
138	28	N8	2956.815	10924.892	71.877	0	0	0
139	28	N28	-978.569	12190.309	-24.265	0	0	0
140	28	COG (ft):	X: 32.57	Y: 14.527	Z: 24.107			
141	29	N215	-12020.739	21293.644	0.177	0	0	0
142	29	N13	-9365.597	-5545.438	-6.065	0	0	0
143	29	N8	-3763.901	-199.979	89.79	0	0	0
144	29	N28	-12886.273	28029.415	7.515	0	0	0
145	29	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
146	30	N215	-11225.285	19595.869	0.176	0	0	0
147	30	N13	-10522.828	-8297.93	-5.298	0	0	0
148	30	N8	-4135.856	-1572.418	67.33	0	0	0
149	30	N28	-12323.822	25293.504	7.083	0	0	0
150	30	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
151	31	N215	10784.009	-12829.044	1.406	0	0	0
152	31	N13	9909.078	17864.599	-6.03	0	0	0
153	31	N8	6001.34	12191.534	61.765	0	0	0
154	31	N28	9327.483	-6118.924	-1.064	0	0	0
155	31	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
156	32	N215	11548.8	-14476.886	0.274	0	0	0
157	32	N13	8727.574	15076.564	-4.229	0	0	0
158	32	N8	5621.396	10807.236	40.254	0	0	0
159	32	N28	9851.174	-8791.708	-3.011	0	0	0
160	32	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
161	33	N215	1494.382	1397.541	22.313	0	0	0
162	33	N13	3795.534	10404.5	-5.583	0	0	0
163	33	N8	-2191.927	1775.933	93.922	0	0	0
164	33	N28	-2912.476	12573.056	64.29	0	0	0
165	33	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
166	34	N215	1487.016	906.849	23.044	0	0	0
167	34	N13	3602.386	8819.67	-5.459	0	0	0
168	34	N8	-2336.3	681.775	74.581	0	0	0
169	34	N28	-2565.074	10170.178	56.398	0	0	0
170	34	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
171	35	N215	-1877.72	5750.361	-27.776	0	0	0
172	35	N13	-2492.797	2828.487	2.357	0	0	0
173	35	N8	4331.837	10096.385	48.581	0	0	0
174	35	N28	-129.752	8598.499	-44.443	0	0	0
175	35	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
176	36	N215	-1864.698	5231.455	-24.555	0	0	0
177	36	N13	-2657.066	1279.528	5.181	0	0	0
178	36	N8	4145.598	8949.52	32.037	0	0	0
179	36	N28	205.078	6213.586	-39.818	0	0	0
180	36	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
181	37	N215	-12020.739	21293.644	0.177	0	0	0
182	37	N13	-9365.597	-5545.438	-6.065	0	0	0
183	37	N8	-3763.901	-199.979	89.79	0	0	0
184	37	N28	-12886.273	28029.415	7.515	0	0	0
185	37	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
186	38	N215	-11225.285	19595.869	0.176	0	0	0
187	38	N13	-10522.828	-8297.93	-5.298	0	0	0
188	38	N8	-4135.856	-1572.418	67.33	0	0	0
189	38	N28	-12323.822	25293.504	7.083	0	0	0
190	38	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
191	39	N215	10784.009	-12829.044	1.406	0	0	0
192	39	N13	9909.078	17864.599	-6.03	0	0	0
193	39	N8	6001.34	12191.534	61.765	0	0	0
194	39	N28	9327.483	-6118.924	-1.064	0	0	0
195	39	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
196	40	N215	11548.8	-14476.886	0.274	0	0	0
197	40	N13	8727.574	15076.564	-4.229	0	0	0
198	40	N8	5621.396	10807.236	40.254	0	0	0
199	40	N28	9851.174	-8791.708	-3.011	0	0	0
200	40	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
201	41	N215	1494.382	1397.541	22.313	0	0	0
202	41	N13	3795.534	10404.5	-5.583	0	0	0
203	41	N8	-2191.927	1775.933	93.922	0	0	0
204	41	N28	-2912.476	12573.056	64.29	0	0	0
205	41	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
206	42	N215	1487.016	906.849	23.044	0	0	0
207	42	N13	3602.386	8819.67	-5.459	0	0	0
208	42	N8	-2336.3	681.775	74.581	0	0	0
209	42	N28	-2565.074	10170.178	56.398	0	0	0
210	42	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
211	43	N215	-1877.72	5750.361	-27.776	0	0	0
212	43	N13	-2492.797	2828.487	2.357	0	0	0
213	43	N8	4331.837	10096.385	48.581	0	0	0
214	43	N28	-129.752	8598.499	-44.443	0	0	0
215	43	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
216	44	N215	-1864.698	5231.455	-24.555	0	0	0
217	44	N13	-2657.066	1279.528	5.181	0	0	0
218	44	N8	4145.598	8949.52	32.037	0	0	0
219	44	N28	205.078	6213.586	-39.818	0	0	0
220	44	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
221	45	N215	-12042.864	21235.944	0.13	0	0	0
222	45	N13	-9356.803	-5167.333	-6.38	0	0	0
223	45	N8	-3761.302	506.432	89.944	0	0	0
224	45	N28	-12871.01	28525.442	7.48	0	0	0
225	45	COG (ft):	X: 32.246	Y: 14.439	Z: 24.208			
226	46	N215	-11246.852	19537.334	0.134	0	0	0
227	46	N13	-10514.398	-7920.347	-5.602	0	0	0
228	46	N8	-4133.312	-866.022	67.455	0	0	0
229	46	N28	-12308.325	25789.467	7.073	0	0	0
230	46	COG (ft):	X: 32.267	Y: 14.309	Z: 24.55			
231	47	N215	10764.067	-12889.982	1.498	0	0	0
232	47	N13	9919.431	18245.644	-6.424	0	0	0
233	47	N8	6003.686	12897.792	61.479	0	0	0
234	47	N28	9342.51	-5622.798	-0.791	0	0	0
235	47	COG (ft):	X: 32.246	Y: 14.439	Z: 24.208			
236	48	N215	11529.418	-14538.657	0.369	0	0	0
237	48	N13	8737.55	15457.071	-4.61	0	0	0
238	48	N8	5623.693	11513.486	39.94	0	0	0
239	48	N28	9866.435	-8295.641	-2.716	0	0	0
240	48	COG (ft):	X: 32.267	Y: 14.309	Z: 24.55			
241	49	N215	1475.651	1334.858	22.132	0	0	0
242	49	N13	3806.592	10786.008	-5.616	0	0	0
243	49	N8	-2192.002	2478.929	94.703	0	0	0
244	49	N28	-2898.244	13070.509	65.749	0	0	0
245	49	COG (ft):	X: 32.246	Y: 14.439	Z: 24.208			
246	50	N215	1468.256	844.198	22.867	0	0	0
247	50	N13	3613.581	9201.356	-5.498	0	0	0
248	50	N8	-2336.235	1384.998	75.386	0	0	0
249	50	N28	-2550.745	10667.451	57.843	0	0	0
250	50	COG (ft):	X: 32.267	Y: 14.309	Z: 24.55			
251	51	N215	-1900.829	5694.075	-27.567	0	0	0
252	51	N13	-2484.669	3206.224	1.685	0	0	0
253	51	N8	4336.711	10805.88	47.631	0	0	0
254	51	N28	-113.687	9093.155	-45.595	0	0	0
255	51	COG (ft):	X: 32.246	Y: 14.439	Z: 24.208			
256	52	N215	-1887.796	5175.142	-24.343	0	0	0
257	52	N13	-2648.782	1657.467	4.504	0	0	0
258	52	N8	4150.565	9659.179	31.117	0	0	0
259	52	N28	221.227	6708.083	-40.965	0	0	0
260	52	COG (ft):	X: 32.267	Y: 14.309	Z: 24.55			
261	53	N215	-11747.982	18793.513	-0.619	0	0	0
262	53	N13	-9783.538	-10929.857	-1.962	0	0	0
263	53	N8	-4864.755	-5030.719	13.028	0	0	0
264	53	N28	-11338.088	18839.886	5.576	0	0	0
265	53	COG (ft):	X: 31.607	Y: 12.425	Z: 29.118			
266	54	N215	-11056.464	17911.981	-0.462	0	0	0
267	54	N13	-10771.085	-11696.85	-2.77	0	0	0
268	54	N8	-4809.544	-4669.847	20.411	0	0	0
269	54	N28	-11363.526	19475.691	5.618	0	0	0
270	54	COG (ft):	X: 31.81	Y: 13.291	Z: 26.98			
271	55	N215	10898.782	-15093.397	-0.211	0	0	0
272	55	N13	9294.441	12228.621	-1.114	0	0	0
273	55	N8	4862.597	7306.977	-12.153	0	0	0
274	55	N28	10688.476	-15010.563	-5.471	0	0	0
275	55	COG (ft):	X: 31.607	Y: 12.425	Z: 29.118			

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
276	56	N215	11618.378	-16012.714	-0.775	0	0	0
277	56	N13	8355.703	11519.726	-1.231	0	0	0
278	56	N8	4924.141	7676.34	-4.882	0	0	0
279	56	N28	10694.99	-14423.981	-5.91	0	0	0
280	56	COG (ft):	X: 31.81	Y: 13.291	Z: 26.98			
281	57	N215	1649.806	-931.231	15.489	0	0	0
282	57	N13	3226.788	4829.211	-5.696	0	0	0
283	57	N8	-3239.85	-2991.008	13.447	0	0	0
284	57	N28	-1436.881	3502.796	37.619	0	0	0
285	57	COG (ft):	X: 31.607	Y: 12.425	Z: 29.118			
286	58	N215	1586.136	-675.352	18.555	0	0	0
287	58	N13	3242.914	5280.289	-5.459	0	0	0
288	58	N8	-2978.823	-2379.248	25.15	0	0	0
289	58	N28	-1653.156	4429.763	39.728	0	0	0
290	58	COG (ft):	X: 31.81	Y: 13.291	Z: 26.98			
291	59	N215	-1652.221	3325.045	-23.254	0	0	0
292	59	N13	-2960.895	-2622.188	11.25	0	0	0
293	59	N8	3142.099	5150.422	-21.278	0	0	0
294	59	N28	1299.821	-405.72	-25.313	0	0	0
295	59	COG (ft):	X: 31.607	Y: 12.425	Z: 29.118			
296	60	N215	-1721.294	3588.309	-21.534	0	0	0
297	60	N13	-2953.289	-2181.575	10.831	0	0	0
298	60	N8	3413.97	5775.997	-10.684	0	0	0
299	60	N28	1088.163	514.523	-27.766	0	0	0
300	60	COG (ft):	X: 31.81	Y: 13.291	Z: 26.98			
301	61	N215	5.007	2557.586	1.696	0	0	0
302	61	N13	585.188	4676.767	-3.123	0	0	0
303	61	N8	732.352	4263.19	44.382	0	0	0
304	61	N28	-474.916	6419.405	2.767	0	0	0
305	61	COG (ft):	X: 32.029	Y: 14.183	Z: 24.793			
306	62	N215	-325.354	3107.2	1.333	0	0	0
307	62	N13	210.452	4221.519	-3.168	0	0	0
308	62	N8	707.187	4230.112	45.904	0	0	0
309	62	N28	-1424.609	7860.787	3.105	0	0	0
310	62	COG (ft):	X: 32.029	Y: 14.183	Z: 24.793			
311	63	N215	-113.841	2776.079	5.826	0	0	0
312	63	N13	363.078	4408.46	-2.862	0	0	0
313	63	N8	697.711	4217.483	47.101	0	0	0
314	63	N28	-944.27	7126.397	7.772	0	0	0
315	63	COG (ft):	X: 32.029	Y: 14.183	Z: 24.793			
316	64	N215	-206.518	2888.722	-2.795	0	0	0
317	64	N13	432.557	4489.817	-3.424	0	0	0
318	64	N8	741.826	4275.816	43.186	0	0	0
319	64	N28	-955.289	7153.787	-1.905	0	0	0
320	64	COG (ft):	X: 32.029	Y: 14.183	Z: 24.793			
321	65	N215	53.738	1742.577	1.266	0	0	0
322	65	N13	455.457	3274.419	-2.074	0	0	0
323	65	N8	492.33	2955.963	28.903	0	0	0
324	65	N28	-159.326	4163.964	1.862	0	0	0
325	65	COG (ft):	X: 32.005	Y: 14.119	Z: 24.934			
326	66	N215	-275.942	2290.97	0.897	0	0	0
327	66	N13	83.701	2822.886	-2.132	0	0	0
328	66	N8	467.687	2923.487	30.386	0	0	0
329	66	N28	-1107.019	5602.348	2.187	0	0	0
330	66	COG (ft):	X: 32.005	Y: 14.119	Z: 24.934			

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
331	67	N215	-64.767	1960.439	5.392	0	0	0
332	67	N13	234.955	3008.13	-1.762	0	0	0
333	67	N8	457.811	2910.378	31.626	0	0	0
334	67	N28	-627.752	4869.581	6.881	0	0	0
335	67	COG (ft):	X: 32.005	Y: 14.119	Z: 24.934			
336	68	N215	-157.449	2073.123	-3.227	0	0	0
337	68	N13	304.198	3089.165	-2.439	0	0	0
338	68	N8	502.205	2969.07	27.665	0	0	0
339	68	N28	-638.627	4896.723	-2.838	0	0	0
340	68	COG (ft):	X: 32.005	Y: 14.119	Z: 24.934			

Node Reactions

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
1	1	N16	7.385	13941.301	1586.772	0	-3.071	0
2	1	N17	10.362	10979.719	-1796.301	0	6.361	0
3	1	COG (ft):	X: 32.005	Y: 14.119	Z: 24.934			
4	2	N16	11.994	22277.098	2548.498	0	-6.962	0
5	2	N17	18.269	17310.124	-2923.506	0	10.505	0
6	2	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
7	3	N16	11.994	22277.098	2548.498	0	-6.962	0
8	3	N17	18.269	17310.124	-2923.506	0	10.505	0
9	3	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
10	4	N16	10.776	24422.637	2780.541	0	-2.025	0
11	4	N17	15.937	18080.859	-3101.179	0	10.487	0
12	4	COG (ft):	X: 32.57	Y: 14.527	Z: 24.107			
13	5	N16	-35.809	23415.708	2411.594	0	-125.642	0
14	5	N17	-17.324	20729.122	-3670.743	0	-89.314	0
15	5	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
16	6	N16	-86.461	20358.253	1987.373	0	-111.974	0
17	6	N17	-73.693	19228.184	-3444.76	0	-84.74	0
18	6	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
19	7	N16	65.285	26465.365	3314.445	0	104.475	0
20	7	N17	65.456	17678.436	-2831.898	0	86.735	0
21	7	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
22	8	N16	21.249	23405.76	2889.034	0	118.064	0
23	8	N17	11.315	16180.91	-2607.317	0	91.239	0
24	8	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
25	9	N16	0.27	1123.226	-2389.458	0	-3.264	0
26	9	N17	2.999	43008.721	-8471.115	0	14.302	0
27	9	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
28	10	N16	-2.179	-1473.94	-2658.925	0	-1.277	0
29	10	N17	0.524	41048.469	-8101.419	0	13.363	0
30	10	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
31	11	N16	20.515	48410.207	8010.71	0	-12.63	0
32	11	N17	41.984	-4250.756	1899.88	0	9.262	0
33	11	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
34	12	N16	19.867	45738.331	7727.829	0	-10.645	0
35	12	N17	38.275	-6137.78	2255.493	0	8.285	0
36	12	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
37	13	N16	-35.809	23415.708	2411.594	0	-125.642	0
38	13	N17	-17.324	20729.122	-3670.743	0	-89.314	0
39	13	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
40	14	N16	-86.461	20358.253	1987.373	0	-111.974	0
41	14	N17	-73.693	19228.184	-3444.76	0	-84.74	0
42	14	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
43	15	N16	65.285	26465.365	3314.445	0	104.475	0
44	15	N17	65.456	17678.436	-2831.898	0	86.735	0
45	15	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
46	16	N16	21.249	23405.76	2889.034	0	118.064	0
47	16	N17	11.315	16180.91	-2607.317	0	91.239	0
48	16	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
49	17	N16	0.27	1123.226	-2389.458	0	-3.264	0
50	17	N17	2.999	43008.721	-8471.115	0	14.302	0
51	17	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
52	18	N16	-2.179	-1473.94	-2658.925	0	-1.277	0
53	18	N17	0.524	41048.469	-8101.419	0	13.363	0
54	18	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
55	19	N16	20.515	48410.207	8010.71	0	-12.63	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
56	19	N17	41.984	-4250.756	1899.88	0	9.262	0
57	19	COG (ft):	X: 32.131	Y: 14.475	Z: 24.129			
58	20	N16	19.867	45738.331	7727.829	0	-10.645	0
59	20	N17	38.275	-6137.78	2255.493	0	8.285	0
60	20	COG (ft):	X: 32.125	Y: 14.432	Z: 24.243			
61	21	N16	-34.975	25561.31	2643.369	0	-120.711	0
62	21	N17	-18.838	21501.481	-3848.957	0	-89.344	0
63	21	COG (ft):	X: 32.533	Y: 14.559	Z: 24.012			
64	22	N16	-85.316	22502.491	2218.816	0	-107.029	0
65	22	N17	-75.14	20002.337	-3623.382	0	-84.788	0
66	22	COG (ft):	X: 32.57	Y: 14.527	Z: 24.107			
67	23	N16	62.07	28612.229	3546.927	0	109.424	0
68	23	N17	62.373	18446.582	-3008.896	0	86.736	0
69	23	COG (ft):	X: 32.533	Y: 14.559	Z: 24.012			
70	24	N16	18.354	25551.262	3121.183	0	123.027	0
71	24	N17	8.294	16950.848	-2784.724	0	91.221	0
72	24	COG (ft):	X: 32.57	Y: 14.527	Z: 24.107			
73	25	N16	-1.32	3236.625	-2163.359	0	1.695	0
74	25	N17	1.265	43811.585	-8655.631	0	14.29	0
75	25	COG (ft):	X: 32.533	Y: 14.559	Z: 24.012			
76	26	N16	-3.756	639.033	-2432.861	0	3.682	0
77	26	N17	-1.22	41851.581	-8285.954	0	13.349	0
78	26	COG (ft):	X: 32.57	Y: 14.527	Z: 24.107			
79	27	N16	19.647	50588.438	8248.64	0	-7.708	0
80	27	N17	39.106	-3512.505	1729.08	0	9.241	0
81	27	COG (ft):	X: 32.533	Y: 14.559	Z: 24.012			
82	28	N16	19.014	47915.857	7965.67	0	-5.724	0
83	28	N17	35.389	-5399	2084.616	0	8.262	0
84	28	COG (ft):	X: 32.57	Y: 14.527	Z: 24.107			
85	29	N16	-97.662	17465.394	1462.168	0	-240.981	0
86	29	N17	-61.725	18703.869	-3461.853	0	-192.606	0
87	29	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
88	30	N16	-206.887	11376.995	621.533	0	-213.763	0
89	30	N17	-177.008	15674.362	-3002.245	0	-183.229	0
90	30	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
91	31	N16	119.54	23529.527	3255.683	0	218.568	0
92	31	N17	115.151	12642.093	-1796.235	0	159.274	0
93	31	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
94	32	N16	35.203	17418.155	2406.238	0	245.255	0
95	32	N17	7.513	9640.491	-1346.01	0	168.404	0
96	32	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
97	33	N16	-22.222	-26965.892	-8130.307	0	3.41	0
98	33	N17	-11.934	63113.389	-13015.267	0	14.65	0
99	33	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
100	34	N16	-29.209	-32064.456	-8650.13	0	7.346	0
101	34	N17	-16.066	59099.611	-12256.848	0	12.845	0
102	34	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
103	35	N16	23.573	67273.804	12604.294	0	-15.227	0
104	35	N17	62.635	-31076.522	7658.868	0	4.466	0
105	35	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
106	36	N16	23.628	61840.983	12021.15	0	-11.246	0
107	36	N17	53.642	-34761.992	8351.624	0	2.528	0
108	36	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
109	37	N16	-97.662	17465.394	1462.168	0	-240.981	0
110	37	N17	-61.725	18703.869	-3461.853	0	-192.606	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
111	37	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
112	38	N16	-206.887	11376.995	621.533	0	-213.763	0
113	38	N17	-177.008	15674.362	-3002.245	0	-183.229	0
114	38	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
115	39	N16	119.54	23529.527	3255.683	0	218.568	0
116	39	N17	115.151	12642.093	-1796.235	0	159.274	0
117	39	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
118	40	N16	35.203	17418.155	2406.238	0	245.255	0
119	40	N17	7.513	9640.491	-1346.01	0	168.404	0
120	40	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
121	41	N16	-22.222	-26965.892	-8130.307	0	3.41	0
122	41	N17	-11.934	63113.389	-13015.267	0	14.65	0
123	41	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
124	42	N16	-29.209	-32064.456	-8650.13	0	7.346	0
125	42	N17	-16.066	59099.611	-12256.848	0	12.845	0
126	42	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
127	43	N16	23.573	67273.804	12604.294	0	-15.227	0
128	43	N17	62.635	-31076.522	7658.868	0	4.466	0
129	43	COG (ft):	X: 32.088	Y: 14.405	Z: 24.257			
130	44	N16	23.628	61840.983	12021.15	0	-11.246	0
131	44	N17	53.642	-34761.992	8351.624	0	2.528	0
132	44	COG (ft):	X: 32.059	Y: 14.26	Z: 24.623			
133	45	N16	-96.777	18135.49	1534.479	0	-239.444	0
134	45	N17	-61.959	18946.09	-3517.749	0	-192.619	0
135	45	COG (ft):	X: 32.246	Y: 14.439	Z: 24.208			
136	46	N16	-205.817	12046.271	693.645	0	-212.218	0
137	46	N17	-177.2	15917.67	-3058.387	0	-183.254	0
138	46	COG (ft):	X: 32.267	Y: 14.309	Z: 24.55			
139	47	N16	117.909	24200.395	3328.429	0	220.116	0
140	47	N17	113.941	12881.708	-1851.379	0	159.279	0
141	47	COG (ft):	X: 32.246	Y: 14.439	Z: 24.208			
142	48	N16	33.773	18088.188	2478.779	0	246.81	0
143	48	N17	6.341	9881.211	-1401.408	0	168.398	0
144	48	COG (ft):	X: 32.267	Y: 14.309	Z: 24.55			
145	49	N16	-22.848	-26315.74	-8061.526	0	4.965	0
146	49	N17	-12.302	63374.494	-13075.051	0	14.647	0
147	49	COG (ft):	X: 32.246	Y: 14.439	Z: 24.208			
148	50	N16	-29.827	-31414.483	-8581.354	0	8.899	0
149	50	N17	-16.442	59360.785	-12316.624	0	12.841	0
150	50	COG (ft):	X: 32.267	Y: 14.309	Z: 24.55			
151	51	N16	23.397	67964.106	12680.4	0	-13.696	0
152	51	N17	61.558	-30855.426	7607.579	0	4.457	0
153	51	COG (ft):	X: 32.246	Y: 14.439	Z: 24.208			
154	52	N16	23.46	62530.769	12097.186	0	-9.716	0
155	52	N17	52.561	-34540.49	8300.27	0	2.519	0
156	52	COG (ft):	X: 32.267	Y: 14.309	Z: 24.55			
157	53	N16	-138.92	-877.63	-647.999	0	-232.5	0
158	53	N17	-100.474	4871.108	-1061.811	0	-200.994	0
159	53	COG (ft):	X: 31.607	Y: 12.425	Z: 29.118			
160	54	N16	-234.761	-30.67	-681.907	0	-209.133	0
161	54	N17	-202.422	6927.406	-1491.481	0	-188.226	0
162	54	COG (ft):	X: 31.81	Y: 13.291	Z: 26.98			
163	55	N16	138.719	5050.87	1098.15	0	224.176	0
164	55	N17	119.09	-1037.492	556.676	0	150.065	0
165	55	COG (ft):	X: 31.607	Y: 12.425	Z: 29.118			

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
166	56	N16	44.476	5925.417	1073.179	0	248.067	0
167	56	N17	9.123	989.563	135.31	0	162.899	0
168	56	COG (ft):	X: 31.81	Y: 13.291	Z: 26.98			
169	57	N16	-42.361	-44709.592	-10131.797	0	10.174	0
170	57	N17	-22.934	48700.552	-10504.86	0	6.096	0
171	57	COG (ft):	X: 31.607	Y: 12.425	Z: 29.118			
172	58	N16	-41.855	-43120.004	-9891.777	0	11.357	0
173	58	N17	-23.031	50013.865	-10683.285	0	7.544	0
174	58	COG (ft):	X: 31.81	Y: 13.291	Z: 26.98			
175	59	N16	22.884	48214.028	10343.621	0	-8.095	0
176	59	N17	39.478	-44193.853	9902.943	0	-4.461	0
177	59	COG (ft):	X: 31.607	Y: 12.425	Z: 29.118			
178	60	N16	22.84	49960.419	10616.74	0	-7.006	0
179	60	N17	39.321	-43035.462	9758.268	0	-2.997	0
180	60	COG (ft):	X: 31.81	Y: 13.291	Z: 26.98			
181	61	N16	18.695	13459.275	1572.536	0	4.98	0
182	61	N17	22.239	10179.906	-1653.397	0	5.371	0
183	61	COG (ft):	X: 32.029	Y: 14.183	Z: 24.793			
184	62	N16	-4.326	13019.222	1444.136	0	-11.323	0
185	62	N17	-1.858	10619.64	-1772.452	0	6.752	0
186	62	COG (ft):	X: 32.029	Y: 14.183	Z: 24.793			
187	63	N16	8.093	14752.582	1872.684	0	-2.598	0
188	63	N17	11.202	8887.349	-1352.51	0	6.421	0
189	63	COG (ft):	X: 32.029	Y: 14.183	Z: 24.793			
190	64	N16	6.312	11725.923	1143.914	0	-3.745	0
191	64	N17	9.144	11912.186	-2073.26	0	5.702	0
192	64	COG (ft):	X: 32.029	Y: 14.183	Z: 24.793			
193	65	N16	16.819	9178.852	1083.412	0	6.177	0
194	65	N17	19.135	6841.807	-1096.019	0	3.368	0
195	65	COG (ft):	X: 32.005	Y: 14.119	Z: 24.934			
196	66	N16	-6.942	8742.381	955.99	0	-10.127	0
197	66	N17	-5.481	7277.875	-1214.128	0	4.755	0
198	66	COG (ft):	X: 32.005	Y: 14.119	Z: 24.934			
199	67	N16	5.913	10471.14	1383.501	0	-1.402	0
200	67	N17	7.797	5550.18	-795.229	0	4.419	0
201	67	COG (ft):	X: 32.005	Y: 14.119	Z: 24.934			
202	68	N16	4	7450.1	655.827	0	-2.547	0
203	68	N17	5.822	8569.492	-1514.839	0	3.705	0
204	68	COG (ft):	X: 32.005	Y: 14.119	Z: 24.934			

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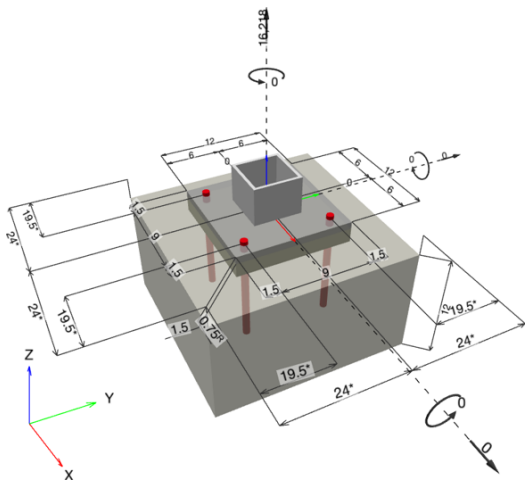
Specifier's comments:

1 Input data

Anchor type and diameter:	**Heavy Hex Head ASTM F 1554 GR. 36 3/4**
Item number:	not available
Specification text:	∅ 3/4 in Heavy Hex Head ASTM F 1554 GR. 36 with 9 in nominal embedment depth per Technical data , cast in place installation per MPII
Effective embedment depth:	h_{ef} = 9.000 in.
Material:	ASTM F 1554
Evaluation Service Report:	Hilti Technical Data
Issued I Valid:	- | -
Proof:	Design Method ACI 318-19 / CIP
Shear edge breakout verification:	Row closest to edge (Case 3 only from ACI 318-19 Fig. R.17.7.2.1b)
Stand-off installation:	grouted standoff; restraint level (anchor plate): 2.00; e_b = 1.500 in.; t = 0.750 in. grout compressive strength > f_c' = 4,000 psi
Anchor plate[R] :	l_x x l_y x t = 12.000 in. x 12.000 in. x 0.750 in.; (Recommended plate thickness: not calculated)
Profile:	Square HSS (AISC), HSS5X5X.3125; (L x W x T) = 5.000 in. x 5.000 in. x 0.312 in.
Base material:	cracked concrete, 4000, f_c' = 4,000 psi; h = 12.000 in.
Reinforcement:	tension: not present, shear: not present; edge reinforcement: none or < No. 4 bar

[R] - The anchor calculation is based on a rigid anchor plate assumption.

Geometry [in.] & Loading [lb, in.lb]



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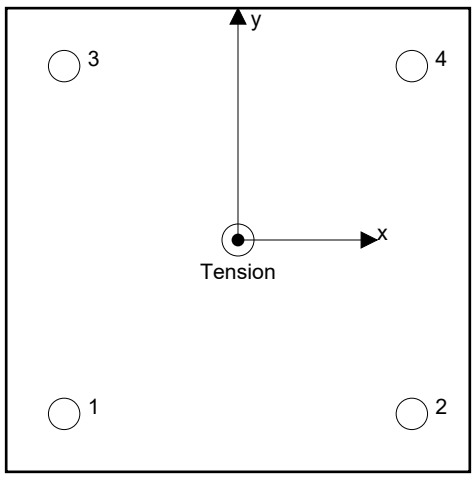
1.1 Design results

Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = 16,218; V_x = 0; V_y = 0; M_x = 0; M_y = 0; M_z = 0;	no	32

2 Load case/Resulting anchor forces



Anchor reactions [lb]
Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	4,055	0	0	0
2	4,055	0	0	0
3	4,055	0	0	0
4	4,055	0	0	0

Max. concrete compressive strain: - [‰]
Max. concrete compressive stress: - [psi]
Resulting tension force in (x/y)=(0.000/0.000): 16,218 [lb]
Resulting compression force in (x/y)=(-/-): 0 [lb]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

3 Tension load

	Load N_{ua} [lb]	Capacity ϕ N_n [lb]	Utilization $\beta_N = N_{ua}/\phi$ N_n	Status
Steel Strength*	4,055	14,529	28	OK
Pullout Strength*	4,055	20,406	20	OK
Concrete Breakout Failure**	16,218	51,001	32	OK
Concrete Side-Face Blowout, direction **	N/A	N/A	N/A	N/A

* highest loaded anchor **anchor group (anchors in tension)

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3.1 Steel Strength

$N_{sa} = A_{se,N} f_{uta}$ ACI 318-19 Eq. (17.6.1.2)
$\phi N_{sa} \geq N_{ua}$ ACI 318-19 Table 17.5.2

Variables

$A_{se,N}$ [in.^{2}]	f_{uta} [psi]
0.33	58,000

Calculations

N_{sa} [lb]
19,372

Results

N_{sa} [lb]	ϕ_{steel}	ϕN_{sa} [lb]	N_{ua} [lb]
19,372	0.750	14,529	4,055

3.2 Pullout Strength

$N_{pN} = \psi_{c,p} N_p$ ACI 318-19 Eq. (17.6.3.1)
$N_p = 8 A_{brg} f'_c$ ACI 318-19 Eq. (17.6.3.2.2a)
$\phi N_{pN} \geq N_{ua}$ ACI 318-19 Table 17.5.2

Variables

$\psi_{c,p}$	A_{brg} [in.^{2}]	λ_a	f'_c [psi]
1.000	0.91	1.000	4,000

Calculations

N_p [lb]
29,152

Results

N_{pn} [lb]	$\phi_{concrete}$	ϕN_{pn} [lb]	N_{ua} [lb]
29,152	0.700	20,406	4,055

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3.3 Concrete Breakout Failure

$N_{cbg} = \left(\frac{A_{Nc}}{A_{Nc0}}\right) \psi_{ec,N}\ \psi_{ed,N}\ \psi_{c,N}\ \psi_{cp,N}\ N_b$ — ACI 318-19 Eq. (17.6.2.1b)

$\phi\ N_{cbg} \geq N_{ua}$ — ACI 318-19 Table 17.5.2

A_{Nc} see ACI 318-19, Section 17.6.2.1, Fig. R 17.6.2.1(b)

$A_{Nc0} = 9\ h_{ef}^2$ — ACI 318-19 Eq. (17.6.2.1.4)

$\psi_{ec,N} = \left(\frac{1}{1 + \frac{2\ e'_N}{3\ h_{ef}}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.6.2.3.1)

$\psi_{ed,N} = 0.7 + 0.3\left(\frac{c_{a,min}}{1.5h_{ef}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.6.2.4.1b)

$\psi_{cp,N} = \text{MAX}\left(\frac{c_{a,min}}{c_{ac}}, \frac{1.5h_{ef}}{c_{ac}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.6.2.6.1b)

$N_b = k_c\ \lambda_a\ \sqrt{f'_c}\ h_{ef}^{1.5}$ — ACI 318-19 Eq. (17.6.2.2.1)

Variables

h_{ef} [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]	$\psi_{c,N}$
9.000	0.000	0.000	19.500	1.000

c_{ac} [in.]	k_c	λ_a	f'_c [psi]
-	24	1.000	4,000

Calculations

A_{Nc} [in.^{2}]	A_{Nc0} [in.^{2}]	$\psi_{ec1,N}$	$\psi_{ec2,N}$	$\psi_{ed,N}$	$\psi_{cp,N}$	N_b [lb]
1,296.00	729.00	1.000	1.000	1.000	1.000	40,983

Results

N_{cbg} [lb]	$\phi_{concrete}$	$\phi\ N_{cbg}$ [lb]	N_{ua} [lb]
72,859	0.700	51,001	16,218

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4 Shear load

	Load V_{ua} [lb]	Capacity ϕ V_n [lb]	Utilization $\beta_V = V_{ua}/\phi$ V_n	Status
Steel Strength*	N/A	N/A	N/A	N/A
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength*	N/A	N/A	N/A	N/A
Concrete edge failure in direction **	N/A	N/A	N/A	N/A

* highest loaded anchor **anchor group (relevant anchors)

5 Warnings

- The anchor design methods in PROFIS Engineering require rigid anchor plates per current regulations (EN1992-4, AS5216, etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Engineering calculates the minimum required anchor plate thickness with FEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Engineering. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- The equations presented in this report are based on imperial units. When inputs are displayed in metric units, the user should be aware that the equations remain in their imperial format.
- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- For additional information about ACI 318 strength design provisions, please go to https://viewer.joomag.com/profis-design-guide-us-en-summer-2021/0841849001625154758?short&/

Fastening meets the design criteria!

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6 Installation data

Profile: Square HSS (AISC), HSS5X5X.3125; (L x W x T) = 5.000 in. x 5.000 in. x 0.312 in.

Hole diameter in the fixture: d_f = 0.812 in.

Plate thickness (input): 0.750 in.

Recommended plate thickness: not calculated

Anchor type and diameter: Heavy Hex Head ASTM F 1554 GR. 36 3/4

Item number: not available

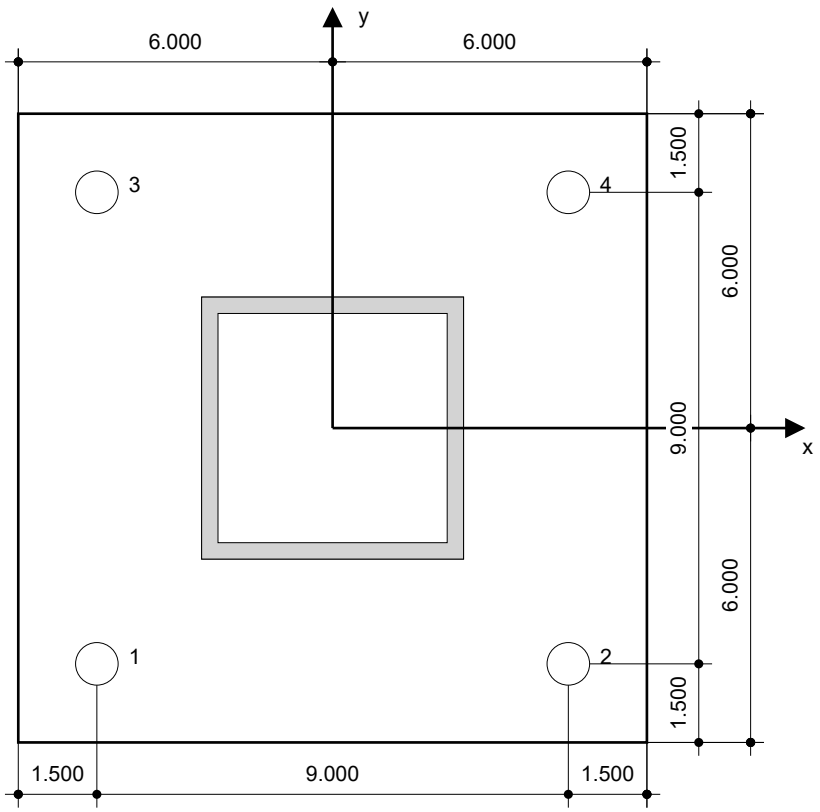
Maximum installation torque: -

Hole diameter in the base material: - in.

Hole depth in the base material: 9.000 in.

Minimum thickness of the base material: 10.000 in.

⌀ 3/4 in Heavy Hex Head ASTM F 1554 GR. 36 with 9 in nominal embedment depth per Technical data , cast in place installation per MPII



Coordinates Anchor [in.]

Anchor	x	y	c_{-x}	c_{+x}	c_{-y}	c_{+y}
1	-4.500	-4.500	19.500	28.500	19.500	28.500
2	4.500	-4.500	28.500	19.500	19.500	28.500
3	-4.500	4.500	19.500	28.500	28.500	19.500
4	4.500	4.500	28.500	19.500	28.500	19.500

7 Remarks; Your Cooperation Duties

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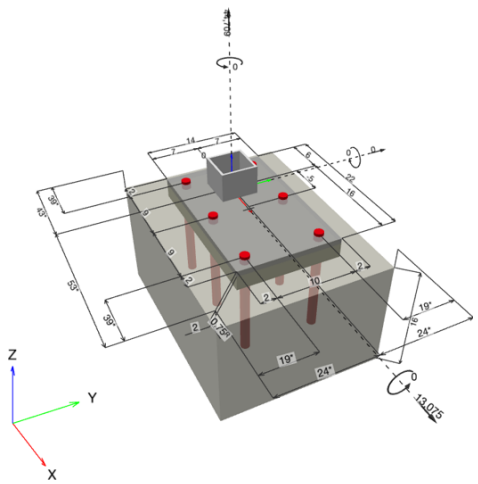
Specifier's comments:

1 Input data

Anchor type and diameter:	**Heavy Hex Head ASTM F 1554 GR. 55 1 1/4**
Item number:	not available
Specification text:	∅ 1 1/4 in Heavy Hex Head ASTM F 1554 GR. 55 with 12 in nominal embedment depth per Technical data , cast in place installation per MPII
Effective embedment depth:	h_{ef} = 12.000 in.
Material:	ASTM F 1554
Evaluation Service Report:	Hilti Technical Data
Issued I Valid:	- | -
Proof:	Design Method ACI 318-19 / CIP
Shear edge breakout verification:	Row closest to edge (Case 3 only from ACI 318-19 Fig. R.17.7.2.1b)
Stand-off installation:	grouted standoff; restraint level (anchor plate): 2.00; e_b = 2.000 in.; t = 0.750 in. grout compressive strength > f_c' = 4,000 psi
Anchor plate[R] :	l_x x l_y x t = 22.000 in. x 14.000 in. x 0.750 in.; (Recommended plate thickness: not calculated)
Profile:	Square HSS (AISC), HSS5X5X.3125; (L x W x T) = 5.000 in. x 5.000 in. x 0.312 in.
Base material:	cracked concrete, 4000, f_c' = 4,000 psi; h = 16.000 in.
Reinforcement:	tension: not present, shear: not present; edge reinforcement: none or < No. 4 bar

[R] - The anchor calculation is based on a rigid anchor plate assumption.

Geometry [in.] & Loading [lb, in.lb]



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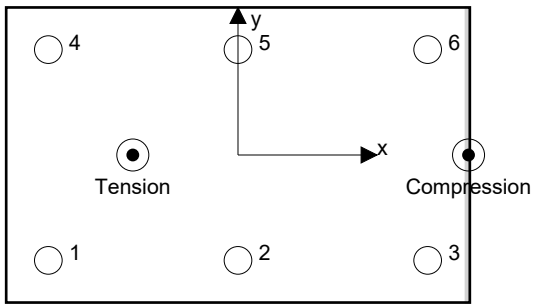
1.1 Design results

Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = 44,709; V_x = 13,075; V_y = 0; M_x = 0; M_y = 0; M_z = 0;	no	98

2 Load case/Resulting anchor forces

Anchor reactions [lb]
Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	13,658	2,179	2,179	0
2	7,456	2,179	2,179	0
3	1,253	2,179	2,179	0
4	13,658	2,179	2,179	0
5	7,456	2,179	2,179	0
6	1,253	2,179	2,179	0



Max. concrete compressive strain: 0.00 [‰]
Max. concrete compressive stress: 19 [psi]
Resulting tension force in (x/y)=(-4.991/0.000): 44,733 [lb]
Resulting compression force in (x/y)=(10.940/0.000): 24 [lb]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

3 Tension load

	Load N_{ua} [lb]	Capacity ϕ N_n [lb]	Utilization $\beta_N = N_{ua}/\phi$ N_n	Status
Steel Strength*	13,658	54,506	26	OK
Pullout Strength*	13,658	50,109	28	OK
Concrete Breakout Failure**	44,733	66,856	67	OK
Concrete Side-Face Blowout, direction **	N/A	N/A	N/A	N/A

* highest loaded anchor **anchor group (anchors in tension)

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3.1 Steel Strength

$N_{sa} = A_{se,N} f_{uta}$ ACI 318-19 Eq. (17.6.1.2)
$\phi N_{sa} \geq N_{ua}$ ACI 318-19 Table 17.5.2

Variables

$A_{se,N}$ [in.^{2}]	f_{uta} [psi]
0.97	75,000

Calculations

N_{sa} [lb]
72,675

Results

N_{sa} [lb]	ϕ_{steel}	ϕN_{sa} [lb]	N_{ua} [lb]
72,675	0.750	54,506	13,658

3.2 Pullout Strength

$N_{pN} = \psi_{c,p} N_p$ ACI 318-19 Eq. (17.6.3.1)
$N_p = 8 A_{brg} f'_c$ ACI 318-19 Eq. (17.6.3.2.2a)
$\phi N_{pN} \geq N_{ua}$ ACI 318-19 Table 17.5.2

Variables

$\psi_{c,p}$	A_{brg} [in.^{2}]	λ_a	f'_c [psi]
1.000	2.24	1.000	4,000

Calculations

N_p [lb]
71,584

Results

N_{pn} [lb]	$\phi_{concrete}$	ϕN_{pn} [lb]	N_{ua} [lb]
71,584	0.700	50,109	13,658

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3.3 Concrete Breakout Failure

$N_{cbg} = \left(\frac{A_{Nc}}{A_{Nc0}}\right) \psi_{ec,N}\ \psi_{ed,N}\ \psi_{c,N}\ \psi_{cp,N}\ N_b$ — ACI 318-19 Eq. (17.6.2.1b)

$\phi\ N_{cbg} \geq N_{ua}$ — ACI 318-19 Table 17.5.2

A_{Nc} see ACI 318-19, Section 17.6.2.1, Fig. R 17.6.2.1(b)

$A_{Nc0} = 9\ h_{ef}^2$ — ACI 318-19 Eq. (17.6.2.1.4)

$\psi_{ec,N} = \left(\frac{1}{1 + \frac{2\ e'_N}{3\ h_{ef}}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.6.2.3.1)

$\psi_{ed,N} = 0.7 + 0.3\left(\frac{c_{a,min}}{1.5h_{ef}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.6.2.4.1b)

$\psi_{cp,N} = \text{MAX}\left(\frac{c_{a,min}}{c_{ac}}, \frac{1.5h_{ef}}{c_{ac}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.6.2.6.1b)

$N_b = 16\ \lambda_a\ \sqrt{f'_c}\ h_{ef}^{5/3}$ — ACI 318-19 Eq. (17.6.2.2.3)

Variables

h_{ef} [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]	$\psi_{c,N}$
12.000	4.991	0.000	19.000	1.000

c_{ac} [in.]	k_c	λ_a	f'_c [psi]
-	16	1.000	4,000

Calculations

A_{Nc} [in.^{2}]	A_{Nc0} [in.^{2}]	$\psi_{ec1,N}$	$\psi_{ec2,N}$	$\psi_{ed,N}$	$\psi_{cp,N}$	N_b [lb]
2,484.00	1,296.00	0.783	1.000	1.000	1.000	63,648

Results

N_{cbg} [lb]	$\phi_{concrete}$	$\phi\ N_{cbg}$ [lb]	N_{ua} [lb]
95,508	0.700	66,856	44,733

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4 Shear load

	Load V_{ua} [lb]	Capacity ϕ V_n [lb]	Utilization $\beta_V = V_{ua}/\phi$ V_n	Status
Steel Strength*	2,179	22,675	10	OK
Steel failure (with lever arm)*	2,179	3,772	58	OK
Pryout Strength**	13,075	170,789	8	OK
Concrete edge failure in direction x+**	13,075	20,821	63	OK

* highest loaded anchor **anchor group (relevant anchors)

4.1 Steel Strength

$V_{sa} = 0.6\ A_{se,V}\ f_{uta}$ ACI 318-19 Eq. (17.7.1.2b)
$\phi\ V_{steel} \geq V_{ua}$ ACI 318-19 Table 17.5.2

Variables

$A_{se,V}$ [in.^{2}]	f_{uta} [psi]
0.97	75,000

Calculations

V_{sa} [lb]
43,605

Results

V_{sa} [lb]	ϕ_{steel}	ϕ_{eb}	$\phi\ V_{sa}$ [lb]	V_{ua} [lb]
43,605	0.650	0.800	22,675	2,179

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4.2 Steel failure (with lever arm)

V_s^M	$= \frac{\alpha_M \cdot M_s}{L_b}$	bending equation for stand-off
M_s	$= M_s^0 \left(1 - \frac{N_{ua}}{\phi N_{sa}}\right)$	resultant flexural resistance of anchor
M_s^0	$= (1.2)\ (S)\ (f_{u,min})$	characteristic flexural resistance of anchor
$\left(1 - \frac{N_{ua}}{\phi N_{sa}}\right)$		reduction for tensile force acting simultaneously with a shear force on the anchor
S	$= \frac{\pi (d)^3}{32}$	elastic section modulus of anchor bolt at concrete surface
L_b	$= z + (n)(d_0)$	internal lever arm adjusted for spalling of the surface concrete
ϕV_s^M	$\geq V_{ua}$	ACI 318-19 Table 17.5.2

Variables

α_M	$f_{u,min}$ [psi]	N_{ua} [lb]	ϕN_{sa} [lb]	z [in.]	n	d_0 [in.]
2.00	75,000	13,658	54,506	2.375	0.500	1.250

Calculations

M_s^0 [in.lb]	$\left(1 - \frac{N_{ua}}{\phi N_{sa}}\right)$	M_s [in.lb]	L_b [in.]
11,614	0.749	8,703	3.000

Results

V_s^M [lb]	ϕ_{steel}	ϕV_s^M [lb]	V_{ua} [lb]
5,802	0.650	3,772	2,179

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4.3 Pryout Strength

$V_{cpg} = k_{cp} \left[\left(\frac{A_{Nc}}{A_{Nc0}} \right) \psi_{ec,N} \psi_{ed,N} \psi_{c,N} \psi_{cp,N} N_b \right]$ ACI 318-19 Eq. (17.7.3.1b)

$\phi V_{cpg} \geq V_{ua}$ ACI 318-19 Table 17.5.2

A_{Nc} see ACI 318-19, Section 17.6.2.1, Fig. R 17.6.2.1(b)

$A_{Nc0} = 9 h_{ef}^2$ ACI 318-19 Eq. (17.6.2.1.4)

$\psi_{ec,N} = \left(\frac{1}{1 + \frac{2 e'_N}{3 h_{ef}}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.3.1)

$\psi_{ed,N} = 0.7 + 0.3 \left(\frac{c_{a,min}}{1.5 h_{ef}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.4.1b)

$\psi_{cp,N} = \text{MAX}\left(\frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.6.1b)

$N_b = 16 \lambda_a \sqrt{f'_c} h_{ef}^{5/3}$ ACI 318-19 Eq. (17.6.2.2.3)

Variables

k_{cp}	h_{ef} [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]
2	12.000	0.000	0.000	19.000

$\psi_{c,N}$	c_{ac} [in.]	k_c	λ_a	f'_c [psi]
1.000	-	16	1.000	4,000

Calculations

A_{Nc} [in.^{2}]	A_{Nc0} [in.^{2}]	$\psi_{ec1,N}$	$\psi_{ec2,N}$	$\psi_{ed,N}$	$\psi_{cp,N}$	N_b [lb]
2,484.00	1,296.00	1.000	1.000	1.000	1.000	63,648

Results

V_{cpg} [lb]	$\phi_{concrete}$	ϕV_{cpg} [lb]	V_{ua} [lb]
243,984	0.700	170,789	13,075

4.4 Concrete edge failure in direction x+

$V_{cbg} = \left(\frac{A_{Vc}}{A_{Vc0}}\right) \psi_{ec,V} \psi_{ed,V} \psi_{c,V} \psi_{h,V} \psi_{parallel,V} V_b$ — ACI 318-19 Eq. (17.7.2.1b)

$\phi V_{cbg} \geq V_{ua}$ — ACI 318-19 Table 17.5.2

A_{Vc} see ACI 318-19, Section 17.7.2.1, Fig. R 17.7.2.1(b)*

$A_{Vc0} = 4.5 c_{a1}^2$ — ACI 318-19 Eq. (17.7.2.1.3)

$\psi_{ec,V} = \left(\frac{1}{1 + \frac{e'_v}{1.5c_{a1}}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.7.2.3.1)

$\psi_{ed,V} = 0.7 + 0.3\left(\frac{c_{a2}}{1.5c_{a1}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.7.2.4.1b)

$\psi_{h,V} = \sqrt{\frac{1.5c_{a1}}{h_a}} \geq 1.0$ — ACI 318-19 Eq. (17.7.2.6.1)

$V_b = 9 \lambda_a \sqrt{f'_c} c_{a1}^{1.5}$ — ACI 318-19 Eq. (17.7.2.2.1b)

Variables

c_{a1} [in.]	c_{a2} [in.]	e_{cV} [in.]	$\psi_{c,V}$	h_a [in.]
12.667	19.000	0.000	1.000	16.000

l_e [in.]	λ_a	d_a [in.]	f'_c [psi]	$\psi_{parallel,V}$
10.000	1.000	1.250	4,000	1.000

Calculations

A_{Vc} [in.^{2}]	A_{Vc0} [in.^{2}]	$\psi_{ec,V}$	$\psi_{ed,V}$	$\psi_{h,V}$	V_b [lb]
768.00	722.00	1.000	1.000	1.090	25,661

Results

V_{cbg} [lb]	$\phi_{concrete}$	ϕV_{cbg} [lb]	V_{ua} [lb]
29,745	0.700	20,821	13,075

*Anchor row defined by: Anchor 3, 6; Case 3 controls

5 Combined tension and shear loads, per ACI 318-19 section 17.8

β_N	β_V	ζ	Utilization $\beta_{N,V}$ [%]	Status
0.669	0.628	5/3	98	OK

$\beta_{NV} = \beta_N^{\zeta} + \beta_V^{\zeta} <= 1$

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6 Warnings

- The anchor design methods in PROFIS Engineering require rigid anchor plates per current regulations (EN1992-4, AS5216, etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Engineering calculates the minimum required anchor plate thickness with FEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Engineering. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- The equations presented in this report are based on imperial units. When inputs are displayed in metric units, the user should be aware that the equations remain in their imperial format.
- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- ACI 318 does not specifically address anchor bending when a stand-off condition exists. PROFIS Engineering calculates a shear load corresponding to anchor bending when stand-off exists and includes the results as a shear Design Strength!
- For additional information about ACI 318 strength design provisions, please go to https://viewer.joomag.com/profis-design-guide-us-en-summer-2021/0841849001625154758?short&/

Fastening meets the design criteria!

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7 Installation data

Profile: Square HSS (AISC), HSS5X5X.3125; (L x W x T) = 5.000 in. x 5.000 in. x 0.312 in.

Hole diameter in the fixture: d_f = 1.312 in.

Plate thickness (input): 0.750 in.

Recommended plate thickness: not calculated

Anchor type and diameter: Heavy Hex Head ASTM F 1554 GR. 55 1 1/4

Item number: not available

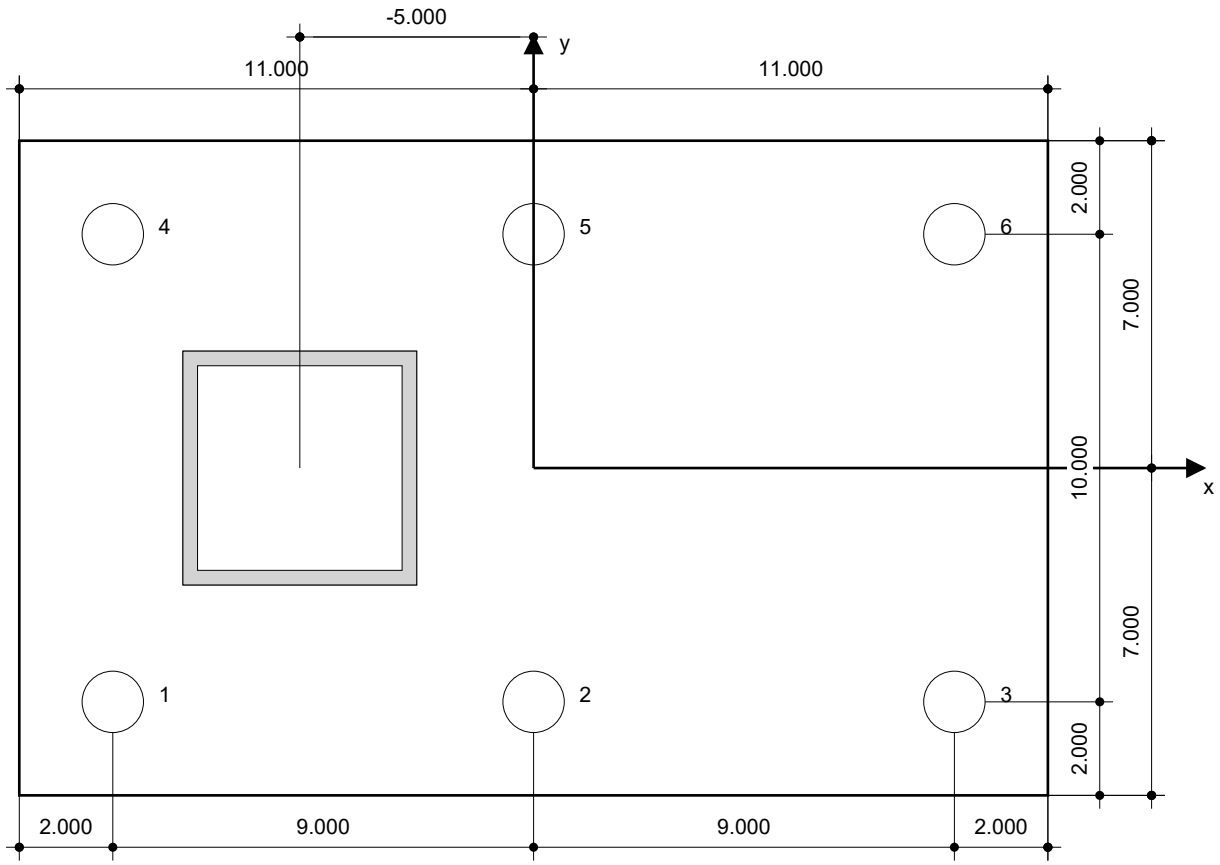
Maximum installation torque: -

Hole diameter in the base material: - in.

Hole depth in the base material: 12.000 in.

Minimum thickness of the base material: 13.344 in.

⌀ 1 1/4 in Heavy Hex Head ASTM F 1554 GR. 55 with 12 in nominal embedment depth per Technical data , cast in place installation per MPII



Coordinates Anchor [in.]

Anchor	x	y	c_{-x}	c_{+x}	c_{-y}	c_{+y}
1	-9.000	-5.000	39.000	57.000	19.000	29.000
2	-0.000	-5.000	48.000	48.000	19.000	29.000
3	9.000	-5.000	57.000	39.000	19.000	29.000

Anchor	x	y	c_{-x}	c_{+x}	c_{-y}	c_{+y}
4	-9.000	5.000	39.000	57.000	29.000	19.000
5	-0.000	5.000	48.000	48.000	29.000	19.000
6	9.000	5.000	57.000	39.000	29.000	19.000

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