

MiTek, Inc. RE: P240285-01 - Roof - HR Lot 160 16023 Swingley Ridge Rd. Site Information: Project Customer: Clayton Properties Project Name: Basswood - Transitional 3Carte. 4.434.1200 Lot/Block: 160 Subdivision: Hawthorne Ridge Model: Address: 1604 SW Buckthorn Dr City: Lee's Summit State: MO General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions): Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.6 Wind Code: ASCE 7-16 Wind Speed: 115 mph Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16 Roof Load: 45.0 psf Floor Load: N/A psf

Mean Roof Height (feet): 35

Exposure Category: C

No.	Seal#	Truss Name	Date
1	165076792	B1	4/23/24
2	165076793 165076794	B2 B3	4/23/24 4/23/24
4	165076795	B3 C1 C2 C3 C4	4/23/24
5	l65076796 l65076797	C2	4/23/24 4/23/24
7	165076798	C3 C4	4/23/24
123456789	165076799	D1	4/23/24
9 10	l65076800 l65076801	D2 D3	4/23/24 4/23/24
11	165076802	E1	4/23/24
12 13	l65076803 l65076804	E4 E5	4/23/24 4/23/24
14	165076805	F6	4/23/24
15 16	165076806 165076807	Ē7 G1 G2	4/23/24 4/23/24
17	165076808	ĞŻ	4/23/24
18 19	l65076809 l65076810	R1 V1	4/23/24 4/23/24
20	165076811	V2	4/23/24
21	l65076812 l65076813	V3 V4	4/23/24 4/23/24
21 22 23	165076814	V7	4/23/24
24 25	l65076815 l65076816	V8 V9	4/23/24
25 26	165076817	V9 V10	4/23/24 4/23/24

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Premier Building Supply (Springhill, KS)20300 W 207th Street.

Truss Design Engineer's Name: Sevier, Scott

My license renewal date for the state of Missouri is December 31, 2025.

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



Sevier, Scott

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	B1	Monopitch Supported Gable	1	1	Job Reference (optional)	165076792

4-11-8

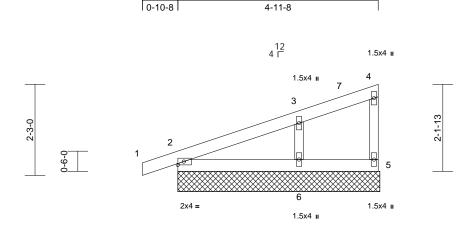
4-11-8

-0-10-8

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8,63 S Apr 5 2024 Print: 8,630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:20 ID:rc4sjKzIJtfsErm8VGMRJ_zwwqN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





Scale = 1:28.5

00010 - 1.20.0												
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 19 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x3 SPF No.2 2x3 SPF No.2 Structural wood she 5-0-0 oc purlins, exi Rigid ceiling directly bracing. (size) 2=5-0-0, 5 Max Horiz 2=85 (LC	cept end verticals. applied or 10-0-0 oc 5=5-0-0, 6=5-0-0	capacity of 7) Provide m bearing pla 5, 49 lb up 8) This truss Internation R802.10.2	echanical connect ate capable of with ift at joint 2 and is designed in ac al Residential Co and referenced	ction (by oth hstanding f 78 lb uplift a cordance w ode sections	ers) of truss to 4 lb uplift at jo tt joint 6. ith the 2018 5 R502.11.1 a	oint					
	Max Uplift 2=-49 (LC (LC 12)	,	-78									

2=182 (LC 1), 5=47 (LC 1), 6=269 (LC 1) FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=0/6, 2-3=-141/58, 3-4=-29/8, 4-5=-37/47 BOT CHORD 2-6=0/0, 5-6=0/0

Max Grav

3-6=-205/304

WEBS

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) 1) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 4-10-4 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. 3) Gable requires continuous bottom chord bearing.

Gable studs spaced at 2-0-0 oc. 4)

- 5) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads.

OF MISSO TE SCOTT M. SEVIER MUMBE PE-200101880' SSIONAL E

April 23,2024



Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	B2	Monopitch	3	1	Job Reference (optional)	165076793

4-11-8

4-11-8

4-11-8

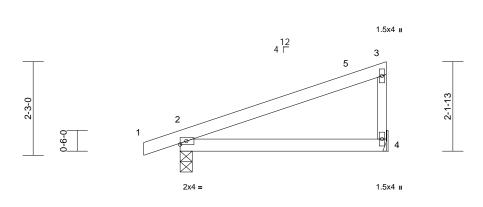
-0-10-8

0-10-8

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:21 ID:4QEzufucAXMxzh8xWxEVwDzwwpA-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





Scale = 1:	27.7
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		1			-							
Loading	(psf)	Spacing	2-0-0	csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	тс	0.49	Vert(LL)	-0.03	2-4	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06	2-4	>958	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 20%
LUMBER												
TOP CHORD	2x4 SP No.2											
BOT CHORD	2x4 SP No.2											
WEBS	2x3 SPF No.2											
BRACING												
TOP CHORD	Structural wood she	athing directly applie	ed or									
	5-0-0 oc purlins, ex											
BOT CHORD	Rigid ceiling directly	applied or 10-0-0 o	с									
	bracing.											
	· · · ·	4= Mechanical										
	Max Horiz 2=85 (LC											
	Max Uplift 2=-83 (LC											
	Max Grav 2=291 (L0											
FORCES	(lb) - Maximum Com	npression/Maximum										
	Tension	E 0 4 4EZ/000										
TOP CHORD BOT CHORD	1-2=0/6, 2-3=-100/4 2-4=0/0	5, 3-4=-157/228										
	2-4=0/0											
NOTES	CE 7-16; Vult=115mph	(2 cocord suct)										
	ph; TCDL=6.0psf; BC											
	Cat. II; Exp C; Enclose		(عد									
	one and C-C Exterior(2		50)									
	4-1-8 to 4-10-4 zone;		iaht									
exposed ; e	end vertical left expos	ed;C-C for members	5									~
and forces	& MWFRS for reaction	ons shown; Lumber									Sol	AD2
	plate grip DOL=1.60										B F OF I	MISS
	has been designed fo									6	TATE OF I	N.V.
	load nonconcurrent wi									B	SCOT	TM XX
	are assumed to be: Joi	int 2 SP No.2 crushi	ng							. 8	SEV	
capacity of 4) Refer to gir	rder(s) for truss to trus	connections								8.		
	echanical connection		0							10	· ·	
	ate capable of withstar									X.		Thank and
	o uplift at joint 2.								/	W S	NUM	
	is designed in accorda	ance with the 2018								N	PE-2001	018807 / 5 8
	al Residential Code s		nd							(V	15	1×A
R802.10.2	and referenced stand	lard ANSI/TPI 1.									0.500	ENO'B
LOAD CASE(S	 Standard 										C'SSIONA	LEY

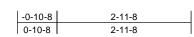
April 23,2024

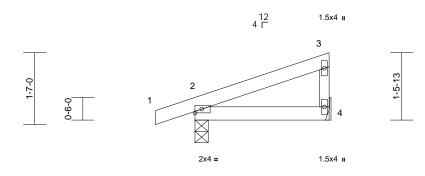
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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	B3	Monopitch	7	1	Job Reference (optional)	165076794

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:21 ID:k?UxzaFoLR0qy8sWjXGlcLzwwoj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





2-11-8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	тс	0.13	Vert(LL)	0.00	2-4	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	2-4	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb	FT = 20%

LUMBER

Scale - 1.25.4

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
BRACING	
TOP CHORD	Structural wood sheathing directly applied or
	3-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc
	bracing.

 REACTIONS
 (size)
 2=0-3-8, 4= Mechanical

 Max Horiz
 2=56 (LC 8)

 Max Uplift
 2=-72 (LC 8), 4=-32 (LC 12)

 Max Grav
 2=207 (LC 1), 4=108 (LC 1)

 FORCES
 (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-3=-61/28, 3-4=-81/124 BOT CHORD 2-4=0/0

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 4 and 72 lb uplift at joint 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

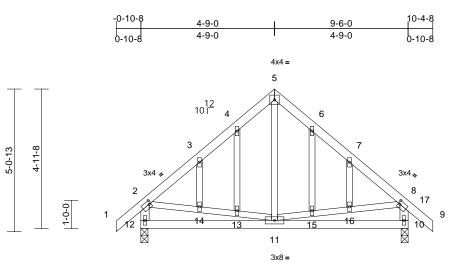


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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	C1	Common	1	1	Job Reference (optional)	165076795

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:21 ID:1UOMuHZ78REuJFMprXQMmpybQTN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



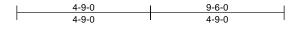


Plate Offsets (X, Y):	[2:0-0-12,0-1-8],	[8:0-0-12,0-1-8]

Lumber DOL=1.60 plate grip DOL=1.60

Scale = 1:41

Plate Offsets ((X, Y): [2:0-0-12,0-1-8], [8:0-0-12,0-1-8]											
Loading TCLL (roof) TCDL BCLL BCDL	(psf) 25.0 10.0 0.0 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-S	0.29 0.19 0.15	DEFL Vert(LL) Vert(CT) Horz(CT)		(loc) 11-12 11-12 10	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 56 lb	GRIP 197/144 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x3 SPF No.2 *Exce No.2 2x3 SPF No.2 Structural wood shea 6-0-0 oc purlins, exc Rigid ceiling directly bracing. (size) 10=0-3-0, Max Horiz 12=163 (L Max Uplift 10=-75 (L Max Grav 10=486 (L	athing directly applie cept end verticals. applied or 10-0-0 oc 12=0-3-0 .C 11) C 13), 12=-75 (LC 1: .C 1), 12=486 (LC 1)	4) 5) 6d or 6) 7) 6 8) 9) 2)	only. For stu see Standarr or consult qu) All plates are) Truss to be f braced agair) Gable studs) This truss ha chord live loa) All bearings capacity of 5) Provide mec bearing plate 12 and 75 lb 0) This truss is	hanical connection capable of withstaut uplift at joint 10. designed in accord	nd (norm ind Deta signer a ss other one factor for a 10. with any SP No n (by oth anding 7 dance w	al to the face ils as applica s per ANSI/TI wise indicate e or securely liagonal web) 0 psf bottom other live loa 2 crushing ers) of truss i 75 lb uplift at j ith the 2018), ble, PI 1. d. ds.					
FORCES	Tension 1-2=0/46, 2-3=-395/ 4-5=-257/178, 5-6=-2	ximum Compression/Maximum International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 5, 2-3=-395/132, 3-4=-314/154, //178, 5-6=-257/178, 6-7=-314/154, //178, 5-6=-257/178, 6-7=-314/154, //178, 2-9=0/46, 2-12=-441/233, //178 LOAD CASE(S) Standard											
BOT CHORD WEBS		60/183, 13-14=-61/ 5=-74/198, 5=-67/187, 4-13=-20/	,									THE OF	MISSO
this design 2) Wind: ASC Vasd=91n Ke=1.00; exterior zc Interior (1) Interior (1) exposed ;	ed roof live loads have	been considered for (3-second gust) DL=6.0psf; h=35ft; d; MWFRS (envelop E) -0-10-8 to 4-1-8, or(2R) 4-9-0 to 9-9-0 cantilever left and rig pht exposed,C-C for	be) , ght							-	B	SCOT SEV NUM PE-2001	T M. IER BER 018807

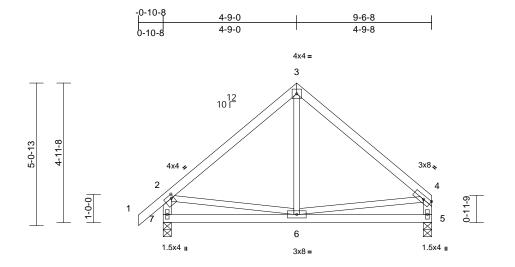
April 23,2024

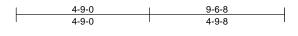
Page: 1



Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	C2	Common	1	1	Job Reference (optional)	165076796

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Scale = 1:41

Plate Offsets (X, Y): [2:0-1-0,0-1-8]

	(7, 1). [2.0 1 0,0 1 0]				-							
Loading	(psf)	Spacing	2-0-0	csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.01	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.02	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2	014 Matrix-S							Weight: 47 lb	FT = 20%
LUMBER			6) This	truss is designed in acco	ordance w	ith the 2018						
TOP CHORD	2x4 SP No.2			national Residential Code			and					
BOT CHORD			R802	2.10.2 and referenced sta	andard AN	ISI/TPI 1.						
WEBS	2x3 SPF No.2 *Exce	ept* 7-2,5-4:2x4 SP	No.2 LOAD C	ASE(S) Standard								
BRACING		. ,										
TOP CHORD	Structural wood she	athing directly appli	ed or									
	6-0-0 oc purlins, ex											
BOT CHORD	Rigid ceiling directly	applied or 10-0-0 o	C									
	bracing.											
REACTIONS	(size) 5=0-3-8, 7	7=0-3-8										
	Max Horiz 7=154 (LC											
	Max Uplift 5=-49 (LC	<i>,,</i> , , , , , , , , , , , , , , , , , ,	1									
	Max Grav 5=412 (L0	C 1), 7=492 (LC 1)										
FORCES	(lb) - Maximum Corr	pression/Maximum										
TOPOLODD	Tension											
TOP CHORD	,	, , ,										
BOT CHORD	2-7=-450/221, 4-5=- 6-7=-232/259, 5-6=-											
WEBS	3-6=0/180, 2-6=-74/											
NOTES	0 0=0/100, 2 0= 14/	204, 4 0= 33/101										
	ed roof live loads have	been considered fo	r									
this design			, , , , , , , , , , , , , , , , , , ,									
	CE 7-16; Vult=115mph	(3-second gust)										The second
Vasd=91n	nph; TCDL=6.0psf; BC	DL=6.0psf; h=35ft;									OF I	ALL
,	Cat. II; Exp C; Enclose	, , , , , , , , , , , , , , , , , , , ,	, ,							6	ACEOTI	MISSO
	one and C-C Exterior(2									A	A.M.	NSY
) 4-1-8 to 4-9-0, Exterio	()								R	STATE OF I	TM. VEN
	tilever left and right exp		lett							0	SEV	LER \ Υ
	exposed;C-C for memb for reactions shown; Lu		ato							0+		1 * 1
	,									Ko.	-	0

grip DOL=1.60 This truss has been designed for a 10.0 psf bottom 3) chord live load nonconcurrent with any other live loads.

All bearings are assumed to be SP No.2 crushing 4) capacity of 565 psi.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint 7 and 49 lb uplift at joint 5.

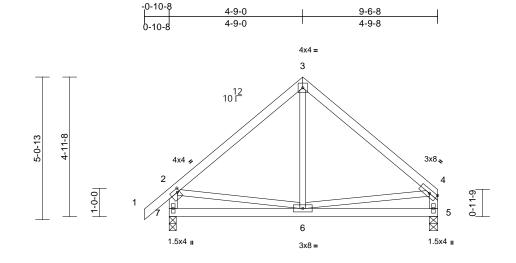


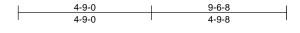


Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	C3	Common	1	1	Job Reference (optional)	165076797

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Page: 1





Sc	ale =	1:41		

Plate Offsets (X, Y): [2:0-1-0,0-1-8]

						-	-	-					-
Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15		TC	0.33	Vert(LL)	-0.01	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15		BC	0.19	Vert(CT)	-0.02	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES		WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/T	PI2014	Matrix-S							Weight: 47 lb	FT = 20%
LUMBER			6) T	his truss is d	esigned in acco	ordance wi	th the 2018						
TOP CHORD	2x4 SP No.2		. Ir	nternational R	Residential Cod	le sections	R502.11.1 a	and					
BOT CHORD	2x4 SP No.2		F	802.10.2 and	d referenced sta	andard AN	ISI/TPI 1.						
WEBS	2x3 SPF No.2 *Exce	pt* 7-2,5-4:2x4 SP	No.2 LOA	D CASE(S)	Standard								
BRACING													
TOP CHORD	Structural wood she		ed or										
	6-0-0 oc purlins, ex		_										
BOT CHORD	Rigid ceiling directly bracing.	applied or 10-0-0 o	С										
REACTIONS	(size) 5=0-3-8, 7	7 0 2 0											
	Max Horiz 7=154 (LC												
	Max Uplift 5=-49 (LC	,											
	Max Grav 5=412 (LC	,, , , ,											
FORCES	(lb) - Maximum Com	,, ()											
	Tension												
TOP CHORD	1-2=0/46, 2-3=-409/	155, 3-4=-403/161,											
	2-7=-450/221, 4-5=-	370/172											
BOT CHORD	6-7=-232/259, 5-6=-												
WEBS	3-6=0/180, 2-6=-74/	204, 4-6=-53/161											
NOTES													
,	ed roof live loads have	been considered fo	r										
this design													
	CE 7-16; Vult=115mph											San	alle
	nph; TCDL=6.0psf; BC Cat. II; Exp C; Enclose		20)									OF I	MISO
,	one and C-C Exterior(2	· · · ·	Je)									4 SE	
	4-1-8 to 4-9-0, Exterio		2								A	NY SCOT	New /
	tilever left and right exp										A	STATE OF I	IM. YAY
	exposed;C-C for memb										A.	/ SEV	

MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 This truss has been designed for a 10.0 psf bottom

3) chord live load nonconcurrent with any other live loads. All bearings are assumed to be SP No.2 crushing 4)

capacity of 565 psi. 5) Provide mechanical connection (by others) of truss to

bearing plate capable of withstanding 75 lb uplift at joint 7 and 49 lb uplift at joint 5.

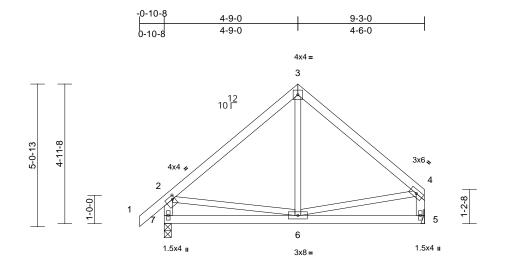


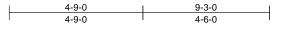
 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not besign value for use only with with twit even connectors. This design is based only upon parameters shown, and is for an individual building designer must verify the applicability of design parameters and properly incorporate this design into the overall building designer must verify the applicability of design parameters and properly incorporate this design into the overall building designer. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)



Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	C4	Common	1	1	Job Reference (optional)	165076798

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:21 ID:VxU9gQnQvzVKU0kGuJkbVcybQT5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





Scale = 1:41

Plate Offsets (X, Y): [2:0-1-0,0-1-8]

Loading TCLL (roof)	(psf) 25.0	Spacing Plate Grip DOL	2-0-0 1.15	CSI TC	0.29	DEFL Vert(LL)	in -0.01	(loc) 6-7	l/defl >999	L/d 240	PLATES MT20	GRIP 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(LL)	-0.01	6-7	>999	240 180	101120	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TP		0.00	11012(01)	0.00	0	n/a	n/u	Weight: 47 lb	FT = 20%
LUMBER			6) Pro	ovide mechanical connec	tion (by oth	ers) of truss	to					
TOP CHORD	2x4 SP No.2		be	aring plate capable of wit	hstanding 7	3 lb uplift at	joint					
BOT CHORD	2x4 SP No.2			nd 47 lb uplift at joint 5.								
WEBS	2x3 SPF No.2 *Exce	pt* 7-2,5-4:2x4 SP		is truss is designed in ac								
BRACING				ernational Residential Co			and					
TOP CHORD	 Structural wood she 6-0-0 oc purlins, ex 		ed or	02.10.2 and referenced s CASE(S) Standard	standard AN	ISI/TPI 1.						
BOT CHORD			C									
REACTIONS	0	nical, 7=0-3-0										
	Max Horiz 7=158 (LO	C 9)										
	Max Uplift 5=-47 (LC	: 13), 7=-73 (LC 12)	1									
	Max Grav 5=399 (L0	C 1), 7=479 (LC 1)										
FORCES	(lb) - Maximum Com Tension	pression/Maximum										
TOP CHORD		150. 3-4=-376/160.										
	2-7=-436/223, 4-5=-	, , ,										
BOT CHORD	6-7=-257/260, 5-6=-	77/99										
WEBS	3-6=0/166, 2-6=-81/2	215, 4-6=-43/181										
NOTES												
1) Unbalanc	ed roof live loads have	been considered for	or									
this desig												
	CE 7-16; Vult=115mph											TOP
	mph; TCDL=6.0psf; BC										STATE OF	MISCH
,	Cat. II; Exp C; Enclose one and C-C Exterior(2	· · · · ·	. /								4 SE	-0.0
) 4-1-8 to 4-9-0, Exterio									A	NY and	New
· · ·	ntilever left and right exp									a	S/ SCOT	TM. YA
	exposed;C-C for memb									Br.	-/ SEV	
	for reactions shown; Lu		ate							80*	1 11-	
grip DOL:	=1.60									DX_	ANTS	Som Math
O) This tours	a la se la serve al serve a al des	- 40.0 (41										

- This truss has been designed for a 10.0 psf bottom 3) chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 7 SP No.2 crushing 4) capacity of 565 psi.
- 5) Refer to girder(s) for truss to truss connections.



E

April 23,2024

NUMBER

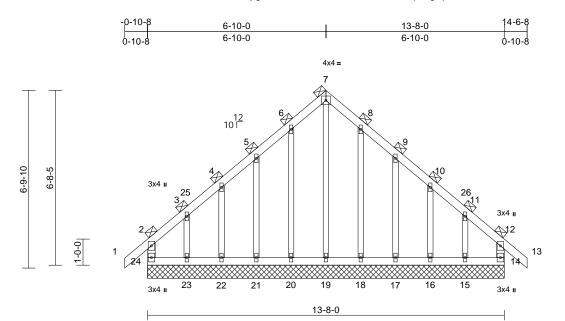
PE-200101880'

DELL'SSIONAL

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	D1	Roof Special Supported Gable	1	1	Job Reference (optional)	165076799

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:21 ID:wijvgVRNMEbdXh3iv6zXHnzww7s-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



<u> </u>		
Scale	= 1	:44.1

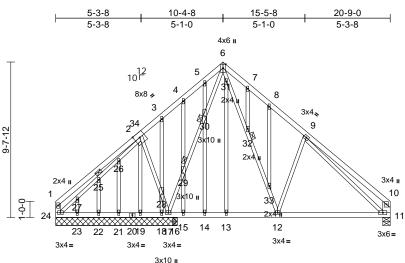
Loading TCLL (roof) TCDL BCLL BCDL	(psf) 25.0 10.0 0.0 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	4-0-0 1.15 1.15 NO IRC20)18/TPI2014	CSI TC BC WB Matrix-R	0.20 0.17 0.45	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 14	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 79 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x3 SPF No.2 2-0-0 oc purlins (6-0 verticals (Switched from shee	eted: Spacing > 2-8-0	d	NOTES 1) Unbalanced this design. 2) Wind: ASCE Vasd=91mp	7-16; Vult=115 h; TCDL=6.0psf	4-22=-200/ 8-18=-212/ 10-16=-202 have been of mph (3-sec ; BCDL=6.0	172, 121, 2/173, considered fo cond gust) Dpsf; h=35ft;		Inte R80 12) Gra or th	rnationa 2.10.2 a phical p ne orient om chor	I Resid and ref urlin re tation o d.	erenced standar presentation doe of the purlin along	tions R502.11.1 and d ANSI/TPI 1. es not depict the size
REACTIONS	$\begin{array}{c} \mbox{(Switched from sheeted: Spacing > 2-8-0).} \\ \mbox{Rigid ceiling directly applied or 6-0-0 oc} \\ \mbox{bracing.} \\ \mbox{EACTIONS} & (size) & 14=13-8-0, 15=13-8-0, 16=13-8-0 \\ 17=13-8-0, 18=13-8-0, 19=13-8-0 \\ 20=13-8-0, 21=13-8-0, 22=13-8-0 \\ 23=13-8-0, 24=13-8-0 \\ \mbox{Max Horiz} & 24=-423 (LC 10) \\ \mbox{Max Horiz} & 24=-423 (LC 10) \\ \mbox{Max Uplift} & 14=-161 (LC 9), 15=-275 (LC 13), \\ 16=-98 (LC 13), 20=-85 (LC 12), \\ 21=-161 (LC 12), 22=-94 (LC 12), \\ 23=-289 (LC 12), 24=-215 (LC 8) \\ \mbox{Max Grav} & 14=364 (LC 19), 15=336 (LC 20), \\ 16=249 (LC 20), 19=395 (LC 13), \\ 20=269 (LC 19), 21=266 (LC 19), \\ 22=249 (LC 25), 23=-361 (LC 19), \\ 22=240 (LC 20) \\ \mbox{Max Grav} & 24=407 (LC 20) \\ \end{tabular}$				t. II; Exp C; Enc and C-C Exter -2-0 to 6-10-0, E rior (1) 11-10-0 exposed; end C for members a bwn; Lumber D(ned for wind loa ids exposed to d Industry Gable ualified building a 1.5x4 MT20 u es continuous E ully sheathed fr ist lateral move spaced at 1-4-0	ior(2E) -0-1 Exterior(2R) to 14-6-8 z vertical left out-one for DL=1.60 pla adds in the pl wind (norm e End Deta designer as nless other bottom chor oom one fac om one fac one fac	0-8 to 4-2-0, 0-8 to 4-2-0, 0-10-0 to ione; cantilev and right & MWFRS for ate grip ane of the tru, al to the face is as applical s per ANSI/TF wise indicated d bearing. e or securely iagonal web)	er ss , ole, Pl 1. I.				SSE OF I	MISSOL
FORCES TOP CHORD	6-7=-284/479, 7-8=- 9-10=-146/252, 10-1 11-12=-217/203, 12- 12-14=-292/155	=0/91, 2-3=-273/261, 157/267, 5-6=-233/4 284/471, 8-9=-233/3 1=-135/169, -13=0/91,	101,	chord live lo. 9) All bearings capacity of 5 10) Provide mec bearing plate joint 24, 161 161 lb uplift	65 psi.	nt with any be SP No. tion (by oth nstanding 2 14, 85 lb up uplift at joi	other live loa 2 crushing ers) of truss t 15 lb uplift at blift at joint 20 nt 22, 289 lb	D ,		4			T M. HER HER
BOT CHORD	23-24=-200/222, 22- 21-22=-200/222, 20- 19-20=-200/222, 18- 17-18=-200/222, 16- 15-16=-200/222, 14-	-21=-200/222, -19=-200/222, -17=-200/222,			b uplift at joint 1						Ø	RIPSSIONA	L ENGINE



Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	D2	Roof Special Structural Gable	1	1	Job Reference (optional)	165076800

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:21 ID:0Un07T0ZcCLyQZnshImJUDzwwdO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f _





						3x10 u								
				 	<u>6-11-13</u> 6-11-13	7-4-12	<u>13-9-3</u> 6-4-7			-9-0				
Scale = 1:71.5					0-11-13	0-4-15	0-4-7		0-1	1-13				
Loading TCLL (roof) TCDL		(psf) 25.0 10.0	Spacing Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15		CSI TC BC	0.36 0.36	DEFL Vert(LL) Vert(CT)	-0.11	11-12 11-12	l/defl >999 >999	L/d 240 180	PLATES MT20	GRIP 244/190
BCLL BCDL		0.0 10.0	Rep Stress Incr Code	YES IRC201	8/TPI2014	WB Matrix-S	0.44	Horz(CT)	0.01	11	n/a	n/a	Weight: 148 lb	FT = 20%
BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD JOINTS	LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x3 SPF No.2 *Except* 24-1:2x4 SP No.2, 11-10:2x6 SPF No.2 OTHERS 2x3 SPF No.2 BRACING TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. JOINTS 1 Brace at Jt(s): 25, 29, 30, 32 REACTIONS (size) 11=0-5-8, 16=0-3-8, 17=7-6-8, 18=7-6-8, 19=7-6-8, 21=7-6-8, 22=7-6-8, 23=7-6-8, 24=7-6-8 Max Horiz 24=271 (LC 9) Max Uplift 11=-86 (LC 13), 16=-182 (LC 12), 17=-120 (LC 13), 19=-83 (LC 12), 21=-5 (LC 8), 23=-22 (LC 12), 17=220 (LC 26), 18=83 (LC 3), 19=197 (LC 19), 21=60 (LC 3), 22=51 (LC 3), 23=55 (LC 10), 24=276 (LC 20) FORCES (lb) - Maximum Compression/Maximum Tension					6-31=-224/510. 32-33=-240/490 9-12=-295/265. 6-30=-392/6, 2- 17-28=-211/25. 25-27=-185/121 2-26=-216/150. 21-26=-41/27, 1 3-28=-2/17, 18: 15-29=-151/101 13-31=-3/54, 7- d roof live loads E 7-16; Vult=11f ph; TCDL=6.0ps iat. II; Exp C; En e and C-C Exte 5-0-2 to 10-4-8, rior (1) 15-6-2 tc xposed ; end ver C for members hown; Lumber D gned for wind loa tuds exposed to ind Industry Gabi qualified building re 1.5x4 MT20 u fully sheathed f inst lateral move s spaced at 1-4-), 12-33=-1 17-29=-39 28=-160/15 3, 24-27=-1 3, 25-26=-1 9-11=-370 23-27=-2/2, 28=-70/58, 32=-6/6, 8- have been timph (3-sec f; BCDL=6, closed; MW rior(2E) 0-1 Exterior(2R 0L=1.60 pl ads in the p wind (norm e End Deta designer a nless other rom one fac ment (i.e. c	89/430, 1/6, 29-30=-5 1/6, 29-30=-5 86/130, 86/130, 70, 22-25=-3/ 2-19=-174/1 4-29=-158/1 755, 14-30=-1 33=-63/64 considered for cond gust) Dpsf; h=35ft; FRS (envelo -12 to 5-0-2,) 10-4-8 to e; cantilever d right & MWFRS for ate grip lane of the tr al to the face ils as applicat wise indicate te or securely	/4, 02, 03, 11/38, or ppe) r left or uss ∋), able, PI 1. sd. y	bea join upli 19 10) This Inte R80	tring plat t 17, 65 ft at join and 182 s truss is ernationa	te capa Ib uplit t 21, 2 Ib upli s desig al Resid and ref	able of withstandi ft at joint 24, 86 lk 2 lb uplift at joint 1 ft at joint 16. Ined in accordanc dential Code sect ferenced standard ndard	INSSOLUTION
BOT CHORD	23-24=-12 21-22=-12 18-19=-11 16-17=-20 14-15=-20	0/208, 22- 0/208, 19- 8/199, 17- /231, 15-1 /231, 13-1	1=-324/168 23=-120/208, 21=-120/208, 18=-118/199, 6=-20/231, 4=-20/231, 2=-24/425	(1 – , 6) 7) 8)	This truss h chord live le	has been design bad nonconcurre s are assumed to	ed for a 10. Int with any	other live loa			-		PE-2001	018807



Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	D3	Common	7	1	Job Reference (optional)	165076801

10-4-8

5-1-0

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

9-7-12

3x4

Run: 8,63 S Apr 5 2024 Print: 8,630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:22 ID:pwt0jO1hEphDIMFL4rqrrezwwfy-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

3x4、

4

20-9-0

5-3-8

3x4 II

5

6 Ø

4x4 =

L/d

240

180

n/a

PLATES

Weight: 108 lb

MT20

GRIP

244/190

FT = 20%

15-5-8

5-1-0

4x6 **I** 3

Page: 1

----10 9 8 7 4x4 =3x4= 3x4= 3x4= 6-11-13 13-9-3 20-9-0 6-11-13 6-9-5 6-11-13 Spacing 2-0-0 CSI DEFL in l/defl (psf) (loc) 25.0 Plate Grip DOL 1.15 тс 0.39 Vert(LL) -0.05 6-7 >999 BC 10.0 Lumber DOL 1 15 Vert(CT) 0.43 -0.11 8-10 >999 0.0 Rep Stress Incr YES WB 0.93 Horz(CT) 0.02 6 n/a IRC2018/TPI2014 10.0 Code Matrix-S This truss is designed in accordance with the 2018 6) TOP CHORD 2x4 SP No.2 International Residential Code sections R502.11.1 and 2x4 SP No.2 R802.10.2 and referenced standard ANSI/TPI 1. BOT CHORD 2x3 SPF No.2 *Except* 10-1,6-5:2x4 SP No.2 LOAD CASE(S) Standard TOP CHORD Structural wood sheathing directly applied or 5-6-4 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. REACTIONS (size) 6=0-3-8, 10=0-5-8 Max Horiz 10=262 (LC 11) Max Uplift 6=-113 (LC 13), 10=-113 (LC 12) Max Grav 6=921 (LC 1), 10=921 (LC 1) (Ib) - Maximum Compression/Maximum

5-3-8

5-3-8

12 10

3x4 2

- Tension TOP CHORD 1-2=-351/173, 2-3=-970/312, 3-4=-970/310, 4-5=-361/166, 1-10=-328/165, 5-6=-334/161 BOT CHORD 8-10=-166/796, 7-8=-19/537, 6-7=-89/731 WEBS 3-7=-210/461 4-7=-311/300 3-8=-211/460 2-8=-310/300, 2-10=-761/79, 4-6=-761/70
- NOTES

FORCES

Scale = 1:63 Loading

TCLL (roof)

TCDI

BCLL

BCDL

WEBS BRACING

LUMBER

- 1) Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) 2) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 5-2-14, Interior (1) 5-2-14 to 10-4-8, Exterior(2R) 10-4-8 to 15-6-2, Interior (1) 15-6-2 to 20-7-4 zone; cantilever left and right exposed ; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom 3) chord live load nonconcurrent with any other live loads. 4) All bearings are assumed to be SP No.2 crushing

capacity of 565 psi. 5) Provide mechanical connection (by others) of truss to

bearing plate capable of withstanding 113 lb uplift at joint 10 and 113 lb uplift at joint 6.



April 23,2024

 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponent.com)

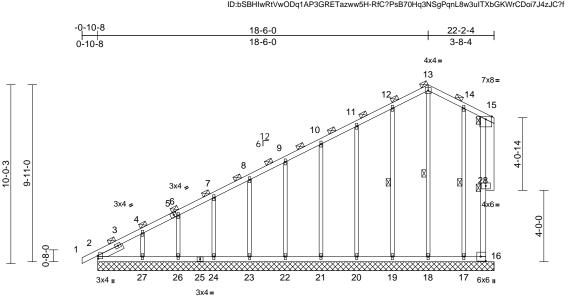


Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	E1	Common Supported Gable	1	1	Job Reference (optional)	165076802

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:22 ID:bSBHIwRtVwODq1AP3GRETazww5H-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

22-2-4

0-5-8



21-8-12 21-8-12

Scale = 1:64.5 Plate Offsets (X, Y): [2:0-2-1,0-0-5], [5:0-1-12,0-1-8], [16:Edge,0-3-8]

				-		1		i						-
Loading		(psf)	Spacing	4-0-0		csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)		25.0	Plate Grip DOL	1.15		тс	0.87	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL		10.0	Lumber DOL	1.15		BC	0.51	Vert(CT)	n/a	-	n/a	999		
BCLL		0.0	Rep Stress Incr	NO		WB	0.40	Horz(CT)	0.01	16	n/a	n/a		
BCDL		10.0	Code	IRC201	8/TPI2014	Matrix-S							Weight: 138 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS SLIDER BRACING TOP CHORD BOT CHORD	2x4 SP No 2x4 SP 165 2x3 SPF N Left 2x4 SF 2-0-0 oc pu verticals (Switched	.2 50F 1.5E o.2 *Exce P No.2 ^ urlins (5-6 from shee	ept* 28-15:2x6 SPF N 1-6-7 i-9 max.), except en eted: Spacing > 2-8-(applied or 9-7-14 or	lo.2 B ⁱ d	OT CHORD	1-2=0/11, 2-4=-99 6-7=-690/525, 7-8 9-10=-397/410, 10 11-12=-365/540, 13-14=-395/613, 15-16=-388/528 2-27=-305/391, 26 24-26=-305/391, 26 22-23=-305/391, 20 22-23=-305/391, 18-19=-305/391, 12-19=-305/391, 20	=-578/48 -11=-36 12-13=-3 14-15=-4 -27=-30 23-24=-3 21-22=-3 19-20=-3	5, 8-9=-471/4 5/426, 96/635, 50/603, 5/391, 05/391, 05/391, 05/391,	48,	9) Pro bea 16, upl joir 129 upl 10) Thi Inte	bacity of povide me aring pla 36 lb up ift at join at 21, 12 9 lb upliff ift at join s truss is pernationa	565 ps echanic te capa blift at j at 19, 1 3 lb up t at joir at 27 ar s desig al Resi	al connection (by able of withstandi oint 2, 126 lb upli 26 lb uplift at join lift at joint 22, 12 ² tt 24, 91 lb uplift at dd 77 lb uplift at jo ned in accordance dential Code sect	v others) of truss to ng 91 lb uplift at joint ff at joint 18, 123 lb t 20, 122 lb uplift at 1 lb uplift at joint 23, at joint 26, 261 lb oint 17. se with the 2018 tions R502.11.1 and
WEBS	bracing. 1 Row at m	nidpt	15-16, 13-18, 12-19 14-17	14		16-17=-305/391 13-18=-377/221, 11-20=-279/206, 2002	10-21=-2	80/193,		11) Gra	aphical p the orien	ourlin re tation	ferenced standar epresentation doe of the purlin along	es not depict the size
REACTIONS		18=22-2-4 21=22-2-4	16=22-2-4, 17=22-2 4, 19=22-2-4, 20=22 4, 22=22-2-4, 23=22 4, 26=22-2-4, 27=22	2-4, 2-4,		9-22=-280/193, 8- 7-24=-282/202, 6- 4-27=-326/416, 14	26=-270	/208,			tom cho CASE(S		ndard	
	Max Horiz	2=759 (L0 2=-36 (LC 17=-77 (L 19=-123 (21=-122 (23=-121 (C 9) S 8), 16=-91 (LC 8), C 13), 18=-126 (LC LC 12), 20=-126 (LC LC 12), 22=-123 (LC LC 12), 24=-129 (LC	1) 11), 2) ≑12), ≑12), ≑12),	this design. Wind: ASCE Vasd=91mp Ke=1.00; Ca exterior zon	I roof live loads ha 5 7-16; Vult=115m b; TCDL=6.0psf; E at. II; Exp C; Enclo e and C-C Corneri) 4-1-8 to 18-6-0, C	ph (3-seo 3CDL=6. sed; MW (3E) -0-1	cond gust) 0psf; h=35ft; /FRS (envelop 0-8 to 4-1-8,						
FORCES	Max Grav	2=475 (LC 17=310 (L 19=377 (L 21=360 (L 23=359 (L 26=341 (L	C 12), 27=-261 (LC C 20), 16=144 (LC 2) C 26), 18=370 (LC C 25), 20=359 (LC C 1), 22=360 (LC 2) C 1), 24=365 (LC 2) LC 1), 27=432 (LC 2) apression/Maximum)), 19), 25), 5), 3)	21-8-12 zon vertical left forces & MV DOL=1.60 p Truss desig only. For st see Standal	e; cantilever left a and right exposed; VFRS for reactions plate grip DOL=1.6 gned for wind loads uds exposed to wi rd Industry Gable B	nd right e C-C for r s shown; 0 s in the p nd (norm End Deta	exposed ; end nembers and Lumber lane of the true al to the face) ils as applicab	, ole,		c	8	Str SCOT SEVI	Server
	Tension			4) 5) 6) 7)	 All plates ar Gable requi Gable studs This truss h 	ualified building de e 1.5x4 MT20 unle res continuous bot s spaced at 2-0-0 c as been designed bad nonconcurrent	ess other tom choi ic. for a 10.	wise indicated d bearing. 0 psf bottom			_	SASA LINE	PE-2001	018807

> 16023 Swingley Ridge Rd. Chesterfield, MO 63017 314.434.1200 / MiTek-US.com

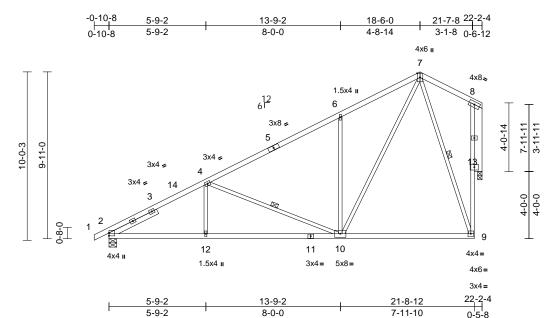
April 23,2024

Page: 1

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	E4	Roof Special	8	1	Job Reference (optional)	165076803

Run: 8,63 S Apr 5 2024 Print: 8,630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:22 ID:X3j9csSdTd?hyQgxh8rn6OzwvzW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Loading	(psf)	Spacing	2-0-0	csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	тс	0.79	Vert(LL)	-0.11	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.23	9-10	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.96	Horz(CT)	-0.03	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 121 lb	FT = 20%

LUMBER

Scale - 1.68 5

LUWIDER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except* 9-8:2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except* 13-8:2x6 SPF No.2
SLIDER	Left 2x4 SP No.2 3-2-3
BRACING	
TOP CHORD	Structural wood sheathing directly applied or
	3-5-6 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 8-4-8 oc
	bracing.
WEBS	1 Row at midpt 4-10, 7-9
REACTIONS	(size) 2=0-5-8, 13=0-3-2
	Max Horiz 2=384 (LC 12)
	Max Uplift 2=-153 (LC 12), 13=-235 (LC 12)
	Max Grav 2=1036 (LC 1), 13=972 (LC 1)
FORCES	(lb) - Maximum Compression/Maximum
	Tension
TOP CHORD	1-2=0/6, 2-4=-1623/208, 4-6=-943/120,
	6-7=-924/276, 7-8=-64/49, 9-13=-212/848,
	8-13=-124/66

BOT CHORD 2-12=-483/1364, 10-12=-483/1364, 9-10 = -82/264WEBS 6-10=-521/308, 7-10=-338/1066, 4-12=0/277, 4-10=-680/274, 7-9=-822/263

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 18-6-0, Exterior(2E) 18-6-0 to 21-7-8 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 4) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi, Joint 13 SPF No.2 crushing capacity of 425 psi.
- Bearing at joint(s) 13 considers parallel to grain value 5) using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to 6) bearing plate capable of withstanding 153 lb uplift at joint 2 and 235 lb uplift at joint 13.
- This truss is designed in accordance with the 2018 7) International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S) Standard

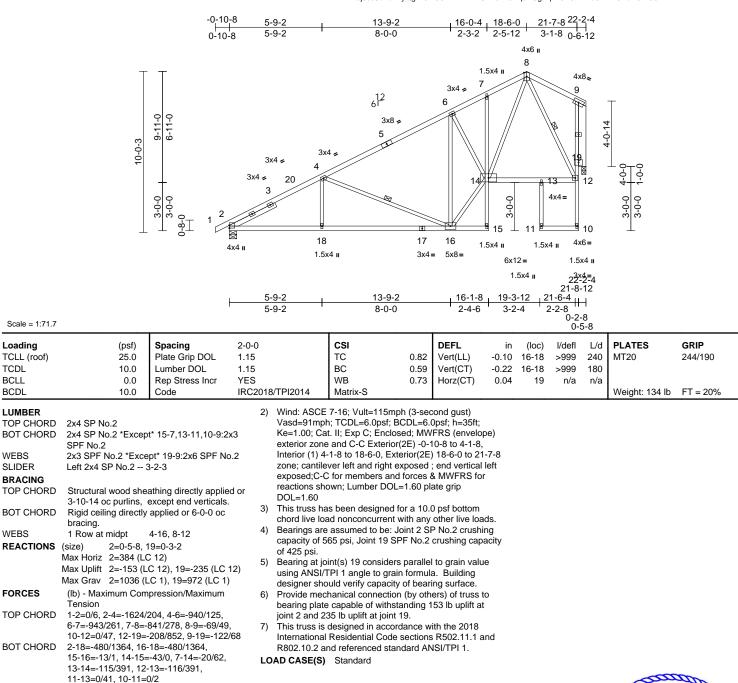




Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	E5	Roof Special	2	1	Job Reference (optional)	165076804

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Page: 1



NOTES

WEBS

Loading

TCDI

BCLL

BCDL

LUMBER

WEBS

WFBS

FORCES

SLIDER

BRACING

1) Unbalanced roof live loads have been considered for this design.

4-16=-682/265, 8-12=-875/265, 14-16=-374/1218, 6-14=-16/34

6-16=-566/285, 8-14=-303/1001, 4-18=0/294,



April 23,2024



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponent.com)

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	E6	Common	7	1	Job Reference (optional)	165076805

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:22 ID:TnZ3x61kRmd3IVZaqXdQQ5zwvtc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-10-8 37-10-8 5-9-2 18-6-0 23-2-14 31-2-14 37-0-0 13-9-2 0-10-8 5-9-2 8-0-0 4-8-14 4-8-14 8-0-0 5-9-2 0-10-8 5x5= 6 1.5x4 🛚 1.5x4 u 12 6 5 7 3x8 3x8. Δ 8 10-0-3 9-11-0 3x4 -3x4. 3 9 20 10 0-8-0 11 12 ⊠ 18 17 16 15 14 13 7x8 🞜 7x8 II 4x6= 4x8= 3x6= 4x6= 3x6= 4x8= 5-9-2 13-9-2 23-2-14 31-2-14 37-0-0 5-9-2 8-0-0 9-5-12 8-0-0 5-9-2 Scale = 1:67.8 Plate Offsets (X, Y): [12:Edge,0-3-8], [13:0-2-8,0-2-0], [18:0-2-8,0-2-0], [19:0-3-8,0-3-4] Loading Spacing 2-0-0 CSI DEFL in l/defl L/d PLATES GRIP (psf) (loc) TCLL (roof) 25.0 Plate Grip DOL 1.15 тс 0.64 Vert(LL) -0.19 15-16 >999 240 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.90 Vert(CT) -0.44 15-16 >993 180 BCLL Rep Stress Incr WB Horz(CT) 0.0 YES 0.92 0.10 12 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-S Weight: 176 lb FT = 20% LUMBER 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; TOP CHORD 2x4 SP 1650F 1.5E Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) BOT CHORD 2x4 SP No.2 exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, 2x3 SPF No.2 *Except* 19-2:2x6 SPF No.2, WEBS Interior (1) 4-1-8 to 18-6-0, Exterior(2R) 18-6-0 to 12-10:2x4 SP 1650F 1.5E 23-2-14, Interior (1) 23-2-14 to 37-10-8 zone; cantilever BRACING left and right exposed ; end vertical left and right TOP CHORD Structural wood sheathing directly applied or exposed;C-C for members and forces & MWFRS for 3-4-13 oc purlins, except end verticals. reactions shown; Lumber DOL=1.60 plate grip BOT CHORD Rigid ceiling directly applied or 10-0-0 oc DOL=1.60 bracing, Except: The Fabrication Tolerance at joint 10 = 16% 3) 4) This truss has been designed for a 10.0 psf bottom

chord live load nonconcurrent with any other live loads.

Provide mechanical connection (by others) of truss to

bearing plate capable of withstanding 276 lb uplift at

This truss is designed in accordance with the 2018

R802.10.2 and referenced standard ANSI/TPI 1.

International Residential Code sections R502.11.1 and

joint 12 and 278 lb uplift at joint 19.

All bearings are assumed to be SP No.2 crushing

8-5-5 oc bracing: 16-18. WEBS 1 Row at midpt 3-16, 9-15 REACTIONS (size) 12=0-5-8, 19=0-5-8 Max Horiz 19=-166 (LC 17) Max Uplift 12=-276 (LC 13), 19=-278 (LC 12) Max Grav 12=1719 (LC 1), 19=1726 (LC 1) FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=0/35, 2-3=-2848/431, 3-5=-2360/418, 5-6=-2337/549, 6-7=-2343/549, 7-9=-2365/419.9-10=-2884/437.10-11=0/32. 2-19=-1661/338, 10-12=-1654/334 BOT CHORD 18-19=-249/555, 16-18=-474/2474, 15-16=-102/1561, 13-15=-312/2506, 12-13=-114/613 WEBS 5-16=-512/308, 6-16=-325/1012, 9-13=-32/166, 7-15=-511/308, 3-18=-52/151, 10-13=-208/1899, 3-16=-556/246, 6-15=-327/1021, 2-18=-225/1934, 9-15=-581/251

NOTES

 Unbalanced roof live loads have been considered for this design. SCOTT M. SCOTT M. SEVIER NUMBER PE-2001018807 SSIONAL ENGLISH April 23,2024

Page: 1

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TPI1 Quality Criteria, and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)

5)

6)

capacity of 565 psi.

LOAD CASE(S) Standard



Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	E7	Common Supported Gable	1	1	Job Reference (optional)	165076806

18-6-0

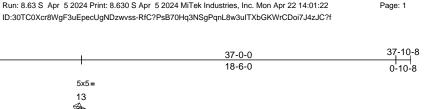
18-6-0

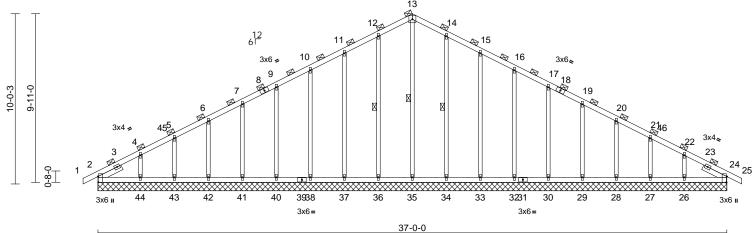
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

-0-10-8

0-10-8

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:22





Scale = 1:67.8

Plate Offsets (X, Y): [2:0-4-1,Edge], [18:0-0-0,0-0-0], [24:0-4-1,Edge]

				-										
Loading	((psf)	Spacing	4-0-0		csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)		25.0	Plate Grip DOL	1.15		TC	0.20	Vert(LL)	n/a	(100)		999	MT20	244/190
()													101120	244/130
								· · ·						
						1	0.40	HOIZ(CT)	0.02	24	· n/a	n/a		
BCDL		10.0	Code	IRC2018/TPI2	014	Matrix-S							Weight: 195 lb	FI = 20%
	2x4 SP No.2 2x3 SPF No.2 2x3 SPF No.2 Left 2x4 SP N 1-6-7 2-0-0 oc purlii (Switched from Rigid ceiling of bracing. 1 Row at mid, (size) 2=: 30: 34: 41: Max Horiz 2=: Max Uplift 2=: Max Uplift 2=: 32: 34: 34: 37: 29: 32: 34: 37: 29: 32: 34: 37: 29: 32: 34: 37: 29: 32: 34: 37: 29: 32: 34: 37: 29: 32: 34: 37: 29: 32: 34: 34: 37: 29: 32: 34: 34: 37: 29: 32: 34: 34: 37: 29: 32: 34: 34: 34: 37: 34: 34: 34: 34: 34: 34: 34: 34: 34: 34	lo.2 1 ins (6-0 m shee directly pt 37-0-0, =37-0-0 =37-0-0 =37-0-0 =37-0-0 =37-0-0 =37-0-0 =37-0-0 =37-0-0 =-365 (L1 -53 (L0 =-121 (1 =-121 (1 =-123 (1 =-123 (1)	tted: Spacing > 2-8-0) applied or 10-0-0 oc 13-35, 12-36, 14-34 24=37-0-0, 26=37-0- 0, 28=37-0-0, 29=37-0 0, 32=37-0-0, 33=37-0 0, 35=37-0-0, 36=37-0 0, 38=37-0-0, 40=37-0 0, 42=37-0-0, 43=37-0	BOT CH 0, -0, -0, -0, -0, -0, WEBS 13), 13), 13), 13), 12), 12),	S ORD	BC WB Matrix-S (lb) - Maximum Cr Tension 1-2=0/11, 2-4=-4£ 5-6=-257/209, 6-7 9-10=-146/373, 11 11-12=-222/588, 13-14=-257/681, 15-16=-183/473, 17-19=-117/259, 20-21=-147/62, 2 22-24=-331/100, 1 2-44=-96/385, 43 42-43=-96/385, 43 40-41=-96/385, 31 35-36=-96/385, 31 35-36=-96/385, 32 35-36=-96/385, 22 26-27=-96/385, 22 26-27=-96/385, 22 13-35=-425/84, 11 11-37=-279/208, 9-40=-280/193, 7 6-42=-282/197, 5 4-44=-321/414, 1 15-33=-279/208, 17-30=-280/193, 20-28=-282/197, 5	36/167, 4 7=-204/20 0-11=-18 12-13=-2 14-15=-2 14-15=-2 14-15=-2 1-22=-19 24-25=0/ -44=-96/2 1-42=-96/2 1-42=-96/2 1-42=-96/2 1-42=-96 2-33=-96 9-30=-96 9-30=-96 2-33=-96 9-30=-96 2-33=-96 2-36=-29 10-38=-2 2-41=-280 4-32=-271 4-34=-29 10-32=-27 10-32	Horz(CT) on/Maximum -5=-324/179, 52, 7-9=-165/3 3/473, 57/681, 22/588, 46/367, 17/151, 7/144, 11 385, /392, /393, /39, /304, /		V: V: Ki ex E: 23 le ex re D 3) T or se 3) T 4) AI 5) G 7) ch 8) AI	n/a ind: ASC asd=91mj ≥=1.00; C tterior zor tterior zor tterior(2N 3-6-0, Ext ft and righ prosed;C- actions sl DL=1.60 russ desi ily. For s e Standa consult c I plates a able stud: his truss h is truss h	bh; TC at. II; I he and) 4-1-8 erior(2 ht expo C for r hown; gned fi tuds e: rd Indu jualifie re 1.5x ires co s spac has be bad no s are a	C-C Corner(3E) 3 to 18-6-0, Corner N) 23-6-0 to 37-1 sed ; end vertica members and forc Lumber DOL=1.6 or wind loads in ti xposed to wind (r ustry Gable End I d building design (4 MT20 unless o ntinuous bottom ed at 2-0-0 oc. en designed for a nconcurrent with ssumed to be SP si.	B-second gust) L=6.0psf; h=35ft; MWFRS (envelope) -0-10-8 to 4-1-8, er(3R) 18-6-0 to 0-8 zone; cantilever I left and right ces & MWFRS for 30 plate grip he plane of the truss he plane of the truss
	44: Max Grav 2= 26: 28: 30: 33: 35: 37: 40: 42:	=-238 () 372 (LC =426 (L =364 (L =360 (L =359 (L =359 (L =359 (L =360 (L	LC 12) C 21), 24=368 (LC 1), C 26), 27=343 (LC 1), C 26), 29=359 (LC 1), C 26), 32=360 (LC 1), C 26), 34=376 (LC 22), C 22), 38=376 (LC 22), C 25), 38=360 (LC 1), C 25), 43=343 (LC 1), C 25), C 25), 43=343 (LC 1), C 25), C 2	NOTES 1) Unb , this , , , , , ,	alance design	22-26=-321/407 d roof live loads ha	ve been (considered fo	r		2		NUM PE-2001	IER BER 018807



Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	E7	Common Supported Gable	1	1	Job Reference (optional)	165076806

- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 2, 109 lb uplift at joint 36, 131 lb uplift at joint 37, 121 lb uplift at joint 38, 123 lb uplift at joint 40, 121 lb uplift at joint 41, 128 lb uplift at joint 42, 96 lb uplift at joint 43, 238 lb uplift at joint 44, 101 lb uplift at joint 34, 134 lb uplift at joint 33, 120 lb uplift at joint 32, 123 lb uplift at joint 30, 121 lb uplift at joint 29, 127 lb uplift at joint 28, 102 lb uplift at joint 27 and 211 lb uplift at joint 26.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

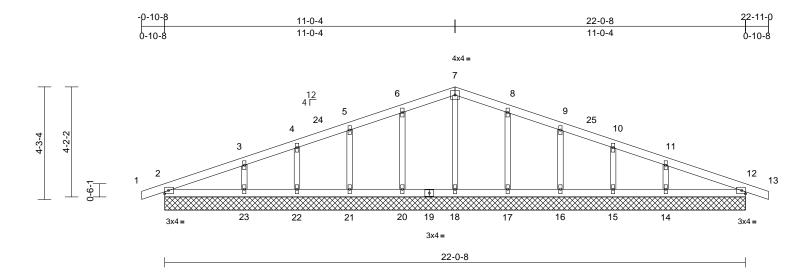
LOAD CASE(S) Standard

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:22 ID:30TC0Xcr8WgF3uEpecUgNDzwvss-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2



Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	G1	Common Supported Gable	1	1	Job Reference (optional)	165076807

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:23 ID:OniToTBJcu5e4i7ZBJU?9SypbwQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:43.7

Loading	(psf)	Spacing	2-0-0		csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15		тс	0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15		вс	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES		WB	0.05	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC20	18/TPI2014	Matrix-S							Weight: 86 lb	FT = 20%
TCDL BCLL BCDL LUMBER TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD REACTIONS	$\begin{array}{c} 10.0\\ 0.0\\ 10.0\\ \hline \\ 2x4 \ SP \ No.2\\ 2x4 \ SP \ No.2\\ 2x3 \ SPF \ No.2\\ \hline \\ 2x3 \ SPF \ No.2\\ \hline \\ Structural \ wood \ she.\\ 6-0-0 \ oc \ purlins.\\ Rigid \ ceiling \ directly \ bracing.\\ (size) 2=22-0-8\\ 15=22-0-8\\ 15=22-0-8\\ 22=22-0-8\\ 15=22-0-8\\ 15=22-0-8\\ 15=22-0-8\\ 15=22-0-8\\ 15=22-0-8\\ 15=22-0-8\\ 15=22-0-8\\ 15=22-0-8\\ 15=22-0-8\\ 15=22-0-8\\ 15=22-0-8\\ 15=22-0-8\\ 15=22-0-8\\ 15=22-0-8\\ 15=22-0-8\\ 15=22-0-8\\ 15=22-0-8\\ 15=22-0-8\\ 15=22-0-8\\ 12=2-0-8\\ 12=20-8\\ 12=2-0-8\\ 12=20-8\\ 12=2-0-8\\ 12=20-$	Lumber DOL Rep Stress Incr Code applied or 10-0-0 oc 12=22-0-8, 14=22-0- 3, 16=22-0-8, 14=22-0- 3, 16=22-0-8, 17=22-0 3, 20=220-8, 21=22-0 3, 20=22-0-8, 21=22-0 5, 20=22-0-8, 21=22-0 5, 20=22-0-8, 21=22-0 C 13, 17=-52 (LC 13) C 13), 17=-52 (LC 12) C 13), 12=-188 (LC 14), C 26), 15=151 (LC 26) LC 13, 20=189 (LC 26) LC 13, 20=189 (LC 26) LC 13, 20=189 (LC 25) Dipression/Maximum , 3-4=-50/62, 4-5=-31/ 5/159, 7-8=-55/154, 31/74, 10-11=-37/41, 8=0/6 =-16/67, 17-18=-16/6 =-16/67, 14-15=-16/6 150/135, 5-21=-143/1 =-196/126, 5=-143/129,	1.15 YES IRC20 1 1 or 8, 8, 8, 8, 8, 8, 8, 8,	 Unbalanced this design. Wind: ASCE Vasd=91mpl Ke=1.00; Ca exterior zone Exterior (2N) 16-0-4, Exter left and right exposed; C-C reactions sho DOL=1.60 Truss design only. For stu- see Standard or consult qu All plates are Gable require Gable studs This truss ha chord live loc bearing plate 2, 52 lb uplift uplift at joint 17, 51 lb uplift This truss is International 	BC WB Matrix-S roof live loads have 7-16; Vult=115mp ; TCDL=6.0psf; Bt t. II; Exp C; Enclos and C-C Corner(2 4-1-8 to 11-0-4, Co for(2N) 16-0-4 to 2 exposed; end ver for members and yow; Lumber DOL= the for wind loads the seposed to wind a Industry Gable En alified building des secontinuous botto spaced at 2-0-0 oc s been designed for ad nonconcurrent v are assumed to be 65 psi. hanical connections at joint 20, 51 lb uu 22, 77 lb uplift at jo ft at joint 16, 43 lb 14 and 60 lb uplift designed in accord Residential Codes and referenced stam	0.06 0.05 e been h (3-sec CDL=6. eed; MW 3E) -0-1 ormer(3F 22-11-0 tical left forces a =1.60 pl in the p d (norm nd Deta signer a: so other or a 10. vith any s SP No. h (by oth anding 5 piplift at jp int 23, s uplift at joint dance w sections	Vert(CT) Horz(CT) Horz(CT) Dpsf; h=35ft; FRS (envelog 0-8 to 4-1-8, R) 11-0-4 to zone; cantilev and right & MWFRS for ate grip lane of the tru al to the face by er ANS/TI wise indicated d bearing. D psf bottom other live loa 2 crushing ers) of truss t joint 21, 43 lb 52 lb uplift at joint 15, 75 lf 12. ith the 2018 5 R502.11.1 a	n/a 0.00 or pe) ver r uss ble, Pl 1. d. d. ds. to oint point p	-	n/a	999 n/a	Weight: 86 lb	FT = 20%
NOTES	,											and	123,2024

16023 Swingley Ridge Rd. Chesterfield, MO 63017 314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	G2	Common	5	1	Job Reference (optional)	165076808

-p-10-8

d-10-8

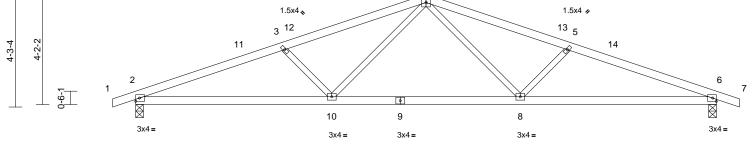
Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:23 ID:dFDR6k5IVQ5m7TW0jeK7qmypbwY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

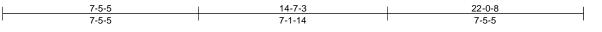
Page: 1

22-11-ρ

0-10-8

11-0-4 16-4-11 5-7-13 22-0-8 5-7-13 5-4-7 5-4-7 5-7-13 4x4 = 12 4 Г 4 1.5x4 💊 1.5x4 🖌





Scale = 1:43.7

Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15		TC	0.46	Vert(LL)	-0.11	8-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15		BC	0.72	Vert(CT)	-0.22	8-10	>999	180		
BCLL	0.0	Rep Stress Incr	YES		WB	0.20	Horz(CT)	0.06	6	n/a	n/a		
BCDL	10.0	Code	IRC201	8/TPI2014	Matrix-S							Weight: 83 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x3 SPF No.2 Structural wood she 3-5-3 oc purlins. Rigid ceiling directly bracing.	applied or 8-4-1 oc	LC	bearing plate joint 2 and 2 This truss is International	hanical connect capable of with 19 lb uplift at jo designed in ac Residential Co nd referenced s Standard	thstanding 2 bint 6. cordance wo	19 lb uplift a ith the 2018 R502.11.1	it					
	(size) 2=0-3-8, 6 Max Horiz 2=-75 (LC Max Uplift 2=-219 (L Max Grav 2=1050 (L (b) Maximum Com	C 17) .C 8), 6=-219 (LC 9) .C 1), 6=1050 (LC 1											
FUNCES	(lb) - Maximum Com Tension	ipression/iviaximum											

- TOP CHORD 1-2=0/6, 2-3=-2188/584, 3-4=-1917/518, 4-5=-1917/518, 5-6=-2188/584, 6-7=0/6 BOT CHORD 2-10=-486/1992, 8-10=-269/1376, 6-8=-494/1992
- WEBS 4-8=-103/589, 5-8=-376/227, 4-10=-103/589, 3-10=-376/227

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 11-0-4, Exterior(2R) 11-0-4 to 16-0-4, Interior (1) 16-0-4 to 22-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom 3) chord live load nonconcurrent with any other live loads.
- 4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

OF MISSO F SCOTT M. SEVIER 41 PE-2001018807 SSIONAL E

April 23,2024

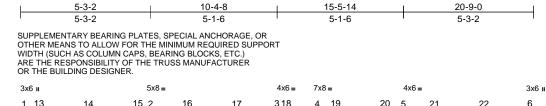


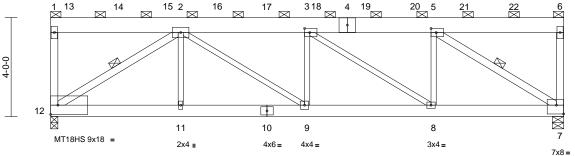
 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not besign value to dury with with where outputs into design is based only door parameters shown, and is for an individual building design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members and property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANS/TPH1 Quality Criteria**, and **DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

Job	Truss	Truss Type	uss Type Qty Ply Roof - HR Lot 160			
P240285-01	R1	Flat Girder	1	2	Job Reference (optional)	165076809

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:23 ID:X3j9csSdTd?hyQgxh8rn6OzwvzW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





	5-3-2	10-4-8	15-5-14	20-9-0
	5-3-2	5-1-6	5-1-6	5-3-2
Scale = 1:46.6				

Plate Offsets (X, Y): [3:0-2-8,0-2-0], [5:0-2-8,0-2-0], [7:Edge,0-4-4]

	() , E , 3,	, E	3.,.											
Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15		TC	0.42	Vert(LL)	-0.11	9	>999	240	MT18HS	197/144	
TCDL	10.0	Lumber DOL	1.15		BC	0.85	Vert(CT)	-0.20	9	>999	180	MT20	197/144	
BCLL	0.0	Rep Stress Incr	NO		WB	0.62	Horz(CT)	0.07	7	n/a	n/a			
BCDL	10.0	Code	IRC20	18/TPI2014	Matrix-S							Weight: 257 lb	FT = 20%	
FORCES TOP CHORD BOT CHORD WEBS NOTES 1) 2-ply truss (0.131"x3' Top chord oc, 2x8 - 2 Bottom ch staggered	(size) 7=0-5-8, ' Max Uplift 7=-1154 (Max Grav 7=5155 (L (lb) - Maximum Com Tension 1-12=-1320/361, 1-2 2-3=-8293/2099, 3-5 5-6=-72/17, 6-7=-76 11-12=-1628/6426, 9 8-9=-2099/8293, 7-6 5-7=-7649/1939, 2-1 2-12=-7674/1945, 2- 3-9=-1153/373, 3-8= 5-8=-239/1336 s to be connected toget 'n nails as follows: ts connected as follows: ts connected as follows: 2 rows staggered at 0-5 rords connected as follows: 2 rows staggered at 0-5	10-6 max.): 1-6, exce applied or 10-0-0 or 5-7, 2-12 12=0-3-8, (req. 0-4-8 (LC 8), 12=-1281 (LC LC 1), 12=5719 (LC npression/Maximum 2=-76/18, 5=-6403/1622, 88/252 9-11=-1628/6426, 3=-1622/6403 11=0/188, 9=-570/2256, =-2284/577, ther with 10d s: 2x4 - 1 row at 0-9- 9-0 oc. lows: 2x6 - 2 rows	(4 SP ept 3) (2 8) (1) (2 8) (3 5 (5 7) (4 5 (5 7) (5 7) (6 7) (7 7) (8 8) (7 7) (8 9) (1 7) (1 7	 except if not CASE(S) se provided to d unless other Wind: ASCE Vasd=91mpl Ke=1.00; Ca exterior zone and right exp MWFRS for grip DOL=1. Provide aded All plates are chord live loc WARNING: than input be capacity of 4 Provide mec bearing plate joint 12 and This truss is International R802.10.2 a 	quate drainage to a MT20 plates un as been designec ad nonconcurren Required bearing earing size. are assumed to b 125 psi. thanical connectii e capable of with 1154 lb uplift at ju designed in acco Residential Cod nd referenced sta riln representatic ation of the purlin	back (B) connection dds noted nph (3-sec BCDL=6. osed; MW r (3) zone embers a ; Lumber i o prevent less othe d for a 10. t with any g size at jc be SPF N on (by oth standing oint 7. ordance w e sections andard AH	face in the Li is have been as (F) or (B), cond gust) 0psf; h=35ft; /FRS (envelo ; cantilever le nd forces & DOL=1.60 pl: water pondin rwise indicate 0 psf bottom other live loz pint(s) 12 gre- o.2 crushing ers) of truss 1281 lb uplift rith the 2018 s R502.11.1 a vSI/TP1 1. ot depict the	ppe) sft g. g. ed. ads. ater to at	pro lb c up dov at dov up anc The res LOAD 1) Dr PI	vided su down and at 2-9-0 wn and 2 8-9-0, 9 wn and 2 at 14-9 d 902 lb e design ponsibili CASE(S ead + Re late Incre niform L Vert: 1- vert: 13	ufficien d 206 l 0, 902 l 203 lb 02 lb d 203 lb -0, and down a /select ity of o ;) Sta oof Liv ease= oads (1 6=-70, ated Lc 3=-916	b up at 0-9-0, 90 b down and 203 up at 6-9-0, 902 lown and 203 b up at 12-9-0, 902 l 902 lb down and and 203 lb up at 1 ion of such conn thers. undard e (balanced): Lui 1.15 lb/ft) 7-12=-20 bads (lb) , 14=-902, 15=-9 -902, 20=-902, 2 SEV SEV SEV DE STONA	entrated load(s) 9 12 lb down and 20 lb up at 4-9-0, 90 lb down and 203 l up at 10-9-0, 902 2 lb down and 203 4 203 lb up at 16-1 18-9-0 on top cho ection device(s) is mber Increase=1.1 02, 16=-902, 17=- 1=-902, 22=-902 MISSOLUT T M. ER 018807	93 lb 92 lb 1b up 1b 9-0, ord. 5 the 15,

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 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not besign value for use only with with twit even connectors. This design is based only upon parameters shown, and is for an individual building designer must verify the applicability of design parameters and properly incorporate this design into the overall building designer must verify the applicability of design parameters and properly incorporate this design into the overall building designer. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

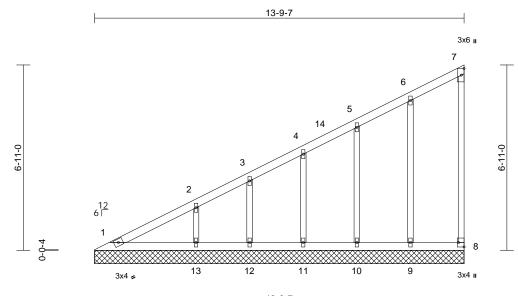
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April 23,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	V1	Valley	1	1	Job Reference (optional)	165076810

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:23 ID:9TR7X_t7mZkbh6rSl1VQ2DzJtkh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



13-9-7

Scale = 1:43

Plate Offsets (X, Y): [8:Edge,0-2-8]

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Loading	(psf)	Spacing	2-0-0		csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15		тс	0.55	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15		BC	0.18	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES		WB	0.12	Horiz(TL)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC201	8/TPI2014	Matrix-S							Weight: 61 lb	FT = 20%
	6-0-0 oc purlins, exe Rigid ceiling directly bracing. (size) 1=13-9-7, 10=13-9-7 13=13-9-7 Max Horiz 1=292 (LC Max Uplift 8=-38 (LC 10=-58 (L 12=-47 (L Max Grav 1=156 (LC 9=193 (LC 11=190 (L 13=294 (L	applied or 10-0-0 oc 8=13-9-7, 9=13-9-7, 7, 11=13-9-7, 12=13-7 5 9) 9), 9=-67 (LC 12), C 12), 11=-65 (LC 12), C 12), 13=-100 (LC 12), C 12), 13=-100 (LC 12), C 13, 10=176 (LC 1), C 1, 10=176 (LC 1), LC 1), 12=138 (LC 1), LC 1),	2) 9-7, 3) 4) 5) 2), 6) (2) 7) 8)	Vasd=91mph Ke=1.00; Ca exterior zone Interior (1) 5- right exposed for members Lumber DOL Truss design only. For stu see Standard or consult qu All plates are Gable requirin Gable studs This truss ha chord live loa All bearings a capacity of 5 Provide mec	7-16; Vult=115mp 7; TCDL=6.0psf; E t. II; Exp C; Enclose and C-C Exterior 9-15 to 13-8-11 z d; end vertical left and forces & MW =1.60 plate grip E ned for wind loads uds exposed to wind l ndustry Gable E alified building de a 1.5x4 MT20 unle es continuous bot spaced at 2-0-0 o is been designed ad onconcurrent are assumed to be 65 psi. hanical connection e capable of withst at joint 9, 58 lb u	BCDL=6. sed; MW (2E) 0-7 one; can t and righ (FRS for DOL=1.66 is in the p nd (norm and not signer as signer a	Dpsf; h=35ft; FRS (envelop -9 to 5-9-15, tilever left anut t exposed;C- reactions sho) lane of the tru al to the face ills as applical s per ANSI/TF wise indicated d bearing. D psf bottom other live loa 2 crushing ers) of truss t 8 lb uplift at j	d C own; iss), ole, PI 1. ds. ds.					
FORCES	(lb) - Maximum Com Tension				7 lb uplift at joint 1							~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
TOP CHORD	1-2=-441/258, 2-3=- 4-5=-254/175, 5-6=- 7-8=-54/50	357/213, 3-4=-312/19 198/158, 6-7=-124/11		This truss is International	designed in accor Residential Code nd referenced star	sections	R502.11.1 a	nd				STATE OF I	MISSO
BOT CHORD	1-13=-132/143, 12-1 11-12=-132/143, 10- 9-10=-132/143, 8-9=	-11=-132/143,	L	DAD CASE(S)		iuaiu Ar	0/1111.				A	S SCOT	I M.
WEBS	6-9=-149/167, 5-10= 4-11=-146/104, 3-12	138/110, 2=-112/84, 2-13=-219	/173								HA.		
NOTES		,									K	PE-2001	018807 Z

April 23,2024

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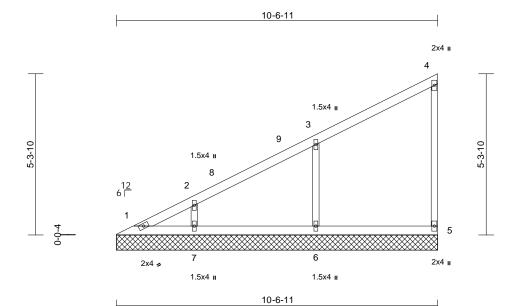
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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	V2	Valley	1	1	Job Reference (optional)	165076811

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:23 ID:k9HPTm2vTtVcNGw8ZzmicAzJtkT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 39 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS			chord liv 6) All bear	ss has been designe ve load nonconcurrer ings are assumed to v of 565 psi.	nt with any	other live loa	ds.					
OTHERS	2x3 SPF No.2			mechanical connect	ion (by oth	ers) of truss t	0					
BRACING TOP CHORD			ed or 5, 137 I 8) This tru	plate capable of with o uplift at joint 6 and ss is designed in acc	101 lb upli ordance w	ft at joint 7. ith the 2018						
BOT CHORD			R802.1	ional Residential Cod 0.2 and referenced si			nd					
REACTIONS	(size) 1=10-6-1 7=10-6-1	1, 5=10-6-11, 6=10- 1	6-11, LOAD CAS	E(S) Standard								
	Max Horiz 1=220 (L0											
	Max Uplift 5=-37 (LC	,	۱.									
	7=-101 (L	.C 12)										
	Max Grav 1=88 (LC	20), 5=140 (LC 1), =296 (LC 1)	6=405									
FORCES	(lb) - Maximum Com Tension	. ,										
TOP CHORD		294/184, 3-4=-137/*	111,									
BOT CHORD WEBS	1-7=-99/110, 6-7=-9 3-6=-315/302, 2-7=-											
NOTES												
1) Wind: AS Vasd=91I Ke=1.00; exterior z Interior (1 right expo for memb	CE 7-16; Vult=115mph mph; TCDL=6.0psf; BC Cat. II; Exp C; Enclose cone and C-C Exterior(2 I) 5-7-9 to 10-5-15 zone osed; end vertical left a vers and forces & MWF DOL=1.60 plate grip DC	EL=6.0psf; h=35ft; ed; MWFRS (envelop 2E) 0-7-9 to 5-7-9, e; cantilever left and and right exposed;C- RS for reactions sho	-C								STATE OF SCOT	
 Truss de only. For see Stand 	esigned for wind loads in r studs exposed to wind dard Industry Gable En t qualified building desi	n the plane of the tru I (normal to the face Id Details as applica), ble,								NUM PE-2001	018807

- fied building designer a er ANSI/TPL1. onsuit qua Gable requires continuous bottom chord bearing. 3)
- 4) Gable studs spaced at 4-0-0 oc.



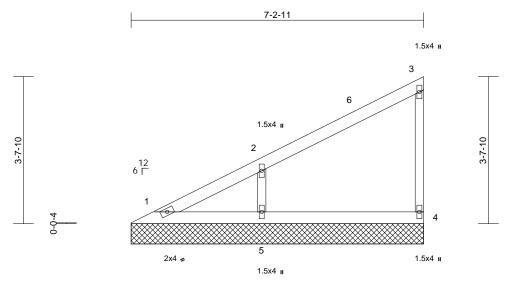
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SSIONAL E

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	V3	Valley	1	1	Job Reference (optional)	165076812

Run: 8,63 S Apr 5 2024 Print: 8,630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:23 ID:hYPAuS3A?UIKca3XhOoAhbzJtkR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



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(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
0.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	4	n/a	n/a		
10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 25 lb	FT = 20%
	25.0 10.0 0.0	25.0Plate Grip DOL10.0Lumber DOL0.0Rep Stress Incr	25.0 Plate Grip DOL 1.15 10.0 Lumber DOL 1.15 0.0 Rep Stress Incr YES	25.0 Plate Grip DOL 1.15 TC 10.0 Lumber DOL 1.15 BC 0.0 Rep Stress Incr YES WB	25.0 Plate Grip DOL 1.15 TC 0.23 10.0 Lumber DOL 1.15 BC 0.12 0.0 Rep Stress Incr YES WB 0.08	25.0 Plate Grip DOL 1.15 TC 0.23 Vert(LL) 10.0 Lumber DOL 1.15 BC 0.12 Vert(TL) 0.0 Rep Stress Incr YES WB 0.08 Horiz(TL)	25.0 Plate Grip DOL 1.15 TC 0.23 Vert(LL) n/a 10.0 Lumber DOL 1.15 BC 0.12 Vert(TL) n/a 0.0 Rep Stress Incr YES WB 0.08 Horiz(TL) 0.00	25.0 Plate Grip DOL 1.15 TC 0.23 Vert(LL) n/a - 10.0 Lumber DOL 1.15 BC 0.12 Vert(TL) n/a - 0.0 Rep Stress Incr YES WB 0.08 Horiz(TL) 0.00 4	Z5.0 Plate Grip DOL 1.15 TC 0.23 Vert(LL) n/a - n/a 10.0 Lumber DOL 1.15 BC 0.12 Vert(TL) n/a - n/a 0.0 Rep Stress Incr YES WB 0.08 Horiz(TL) 0.00 4 n/a	25.0 Plate Grip DOL 1.15 TC 0.23 Vert(LL) n/a - n/a 999 10.0 Lumber DOL 1.15 BC 0.12 Vert(TL) n/a - n/a 999 0.0 Rep Stress Incr YES WB 0.08 Horiz(TL) 0.00 4 n/a n/a	Z5.0 Plate Grip DOL 1.15 TC 0.23 Vert(LL) n/a - n/a 999 MT20 10.0 Lumber DOL 1.15 BC 0.12 Vert(TL) n/a - n/a 999 0.0 Rep Stress Incr YES WB 0.08 Horiz(TL) 0.00 4 n/a n/a

7-2-11

This truss is designed in accordance with the 2018 8) International Residential Code sections R502.11.1 and

R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Append
OF MISSOL
SCOTT M.
Scott - Server
NUMBER PE-2001018807
STONAL ENGL
NAL C. E

April 23,2024

16023 Swingley Ridge Rd. Chesterfield MO 63017 314.434.1200 / MiTek-US.com

TOP CHORD	2x4 SP N	0.2							
BOT CHORD	2x4 SP N	0.2							
WEBS	2x3 SPF I	No.2							
OTHERS	2x3 SPF I	No.2							
BRACING									
TOP CHORD	P CHORD Structural wood sheathing directly applied or								
	6-0-0 oc purlins, except end verticals.								
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc									
	bracing.								
REACTIONS	(size)	1=7-2-11, 4=7-2-11, 5=7-2-11							
	Max Horiz	1=146 (LC 9)							
	Max Uplift	4=-31 (LC 12), 5=-128 (LC 12)							
	Max Grav	1=85 (LC 20), 4=141 (LC 1), 5=378 (LC 1)							
500050	(11-)	()							
FORCES	(Ib) - Max Tension	imum Compression/Maximum							
TOP CHORD	1-2=-280/	/164, 2-3=-126/93, 3-4=-111/141							
BOT CHORD	1-5=-67/7	3, 4-5=-67/73							
WEBS	2-5=-294/	/316							
NOTES									

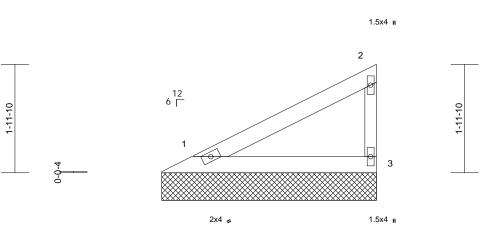
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-7-9 to 5-7-9, Interior (1) 5-7-9 to 7-1-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing. 3)
- Gable studs spaced at 4-0-0 oc. 4)
- This truss has been designed for a 10.0 psf bottom 5)
- chord live load nonconcurrent with any other live loads. All bearings are assumed to be SP No.2 crushing 6)
- capacity of 565 psi.

 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not besign value to dury with with where outputs into design is based only door parameters shown, and is for an individual building design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members and property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANS/TPH1 Quality Criteria**, and **DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	V4	Valley	1	1	Job Reference (optional)	165076813

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:23 ID:9kzY5o4omouBEjejF6JPEpzJtkQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



3-10-11

3-10-11

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Loading	(psf)	Spacing	2-0-0	csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	тс	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999	-	
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P	0.00	1.10112(1.2)	0.00	0		, a	Weight: 12 lb	FT = 20%
		0000		induise							inoigini iz io	
LUMBER				s designed in acc								
TOP CHORD	2x4 SP No.2			al Residential Coc			and					
BOT CHORD	2x4 SP No.2			and referenced st	andard AN	NSI/TPI 1.						
WEBS	2x3 SPF No.2		LOAD CASE(S) Standard								
BRACING												
TOP CHORD	Structural wood she	athing directly appli	ed or									
	3-11-3 oc purlins, e											
BOT CHORD	Rigid ceiling directly	applied or 10-0-0 o	С									
	bracing.											
REACTIONS	(size) 1=3-10-1	1, 3=3-10-11										
	Max Horiz 1=71 (LC											
	Max Uplift 1=-22 (LC											
	Max Grav 1=144 (L0	C 1), 3=144 (LC 1)										
FORCES	(lb) - Maximum Corr	npression/Maximum										
	Tension											
TOP CHORD	1-2=-101/68, 2-3=-1	12/145										
BOT CHORD	1-3=-33/36											
NOTES												
1) Wind: ASC	CE 7-16; Vult=115mph	(3-second gust)										
Vasd=91m	nph; TCDL=6.0psf; BC	DL=6.0psf; h=35ft;										
	Cat. II; Exp C; Enclose											
	one and C-C Exterior(2		left									
	exposed ; end vertical											
	C-C for members and f		r									an
	shown; Lumber DOL=	1.60 plate grip									OF	MIGH
DOL=1.60											TE OF	ISS W
	igned for wind loads in									6		N.S.
	studs exposed to wind ard Industry Gable En									A	SCOT	TM. CRN
	qualified building desi									H	SEV	
	uires continuous botto		11.							8 +		
	is spaced at 4-0-0 oc.									2/		
	has been designed fo									W.		Nor All
	load nonconcurrent w		ds.						-	The second	NUM	
	is are assumed to be									N	O PE-2001	018807
capacity of										N	PE-2001	12A
	echanical connection	(by others) of truss t	0							٩	1080	G
	ate capable of withsta										SSIONA	LEFE
	o uplift at joint 3.	5 , ,									Un	The second secon
	-										Ann	il 23,2024
											Арі	11 20,2024

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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	V7	Valley	1	1	Job Reference (optional)	165076814

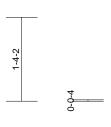
2-7-11

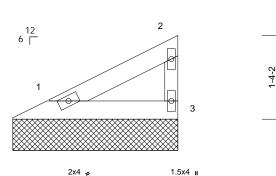
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:23 ID:X3j9csSdTd?hyQgxh8rn6OzwvzW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Page: 1





2-7-11

Scale = 1:18.4

Scale = 1:18.4									
Loading TCLL (roof) TCDL BCLL BCDL	(psf)Spacing25.0Plate Grip DOL10.0Lumber DOL0.0Rep Stress Incr10.0Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	BC 0	.07 DEFL .04 Vert(LL) .04 Vert(TL) .00 Horiz(TL)	in (lo n/a n/a n/a	c) l/defl - n/a - n/a - n/a	L/d 999 999 n/a	PLATES MT20 Weight: 8 lb	GRIP 244/190 FT = 20%
2-8-3 oc pu BOT CHORD Rigid ceilin bracing. REACTIONS (size) Max Horiz Max Uplift Max Grav FORCES (lb) - Maxin Tension	.2	Internationa R802.10.2 a LOAD CASE(S	a designed in accordan il Residential Code sec and referenced standar) Standard	tions R502.11.1 a	nd				
 Ke=1.00; Cat. II; Exp C exterior zone and C-C and right exposed; end members and forces & Lumber DOL=1.60 plat Truss designed for wir only. For studs expose see Standard Industry or consult qualified buil Gable requires continu Gable studs spaced at This truss has been de chord live load noncon- All bearings are assum capacity of 565 psi. Provide mechanical co 	:0psf; BCDL=6.0psf; h=35ft ;; Enclosed; MWFRS (envel) Exterior(2E) zone; cantileve d vertical left exposed;C-C ft MWFRS for reactions show e grip DOL=1.60 d loads in the plane of the t d to wind (normal to the fac Gable End Details as applic ding designer as per ANSI/ ous bottom chord bearing. 4-0-0 oc. signed for a 10.0 psf bottom current with any other live lo ed to be SP No.2 crushing nnection (by others) of truss of withstanding 8 lb uplift at j	ope) r left or russ e), able, FPI 1.				•	H it	STATE OF SCOT SEV DE DE SOUTONA	T M. HER 018807

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)



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Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	V8	Valley	1	1	Job Reference (optional)	165076815

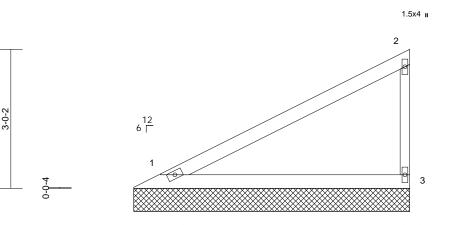
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5-11-11

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:23 ID:X3j9csSdTd?hyQgxh8rn6OzwvzW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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2x4 🍃

1.5x4 u

3-0-2

Scale = 1:24.9											
Loading (psf) TCLL (roof) 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-P	0.65 0.35 0.00	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a n/a	(loc) - - -	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 20 lb	GRIP 244/190 FT = 20%
Max Horiz 1=116 (LC Max Uplift 1=-23 (LC	cept end verticals. applied or 10-0-0 or 1, 3=5-11-11 C 12) : 12), 3=-81 (LC 12)	Internationa R802.10.2 a LOAD CASE(S) ed or	designed in accc I Residential Cod and referenced sta) Standard	e sections	s R502.11.1 ar	nd					
Max Grav 1=238 (L0 FORCES (b) - Maximum Com Tension TOP CHORD 1-2=-121/66, 2-3=-1 BOT CHORD 1-3=0/0 NOTES 1) Wind: ASCE 7-16; Vult=115mph Vasd=91mph; TCDL=6.0psf; BC Ke=1.00; Cat. II; Exp C; Enclose exterior zone and C-C Exterior(2 and right exposed; end vertical members and forces & MWFRS Lumber DOL=1.60 plate grip DC 2) Truss designed for wind loads ir only. For studs exposed to wind see Standard Industry Gable En or consult qualified building desi 3) Gable requires continuous bottou 4) Gable studs spaced at 4-0-0 oc. 5) This truss has been designed for chord live load nonconcurrent wi 6) All bearings are assumed to be S capacity of 565 psi.	(3-second gust) DL=6.0psf; h=35ft; d; MWFRS (envelop E) zone; cantilever l eft exposed;C-C for for reactions shown L=1.60 the plane of the tru (normal to the face) d Details as applicat gner as per ANSI/TF n chord bearing.	left ;), ole, PI 1. ds.								PE-2001	ER *

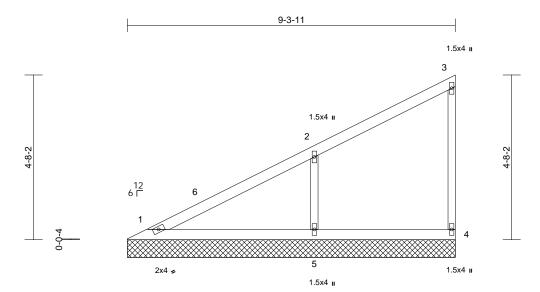
April 23,2024



Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	V9	Valley	1	1	Job Reference (optional)	165076816

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:23 ID:X3j9csSdTd?hyQgxh8rn6OzwvzW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



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00010 = 1.02.1				-							-	
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 33 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 4 and 164 lb uplift at joint 5. 2x3 SPF No.2 8) 2x3 SPF No.2 8) 2x3 SPF No.2 1his truss is designed in accordance with the 2018 2x3 SPF No.2 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. LOAD CASE(S)											
REACTIONS	(size) 1=9-3-11, Max Horiz 1=188 (L0	4=9-3-11, 5=9-3-1 ⁻ C 12)	1									
	Max Uplift 4=-42 (LC	2 12), 5=-164 (LC 12	2)									

9-3-11

FORCES (Ib) - Maximum Compression/Maximum Tension

 TOP CHORD
 1-2=-241/113, 2-3=-84/29, 3-4=-97/97

 BOT CHORD
 1-5=-2/3, 4-5=-2/3

 WEBS
 2-5=-366/342

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-7-9 to 5-4-3, Interior (1) 5-4-3 to 9-2-15 zone; cantilever left and right exposed; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 4-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads.All bearings are assumed to be SP No.2 crushing
- capacity of 565 psi.

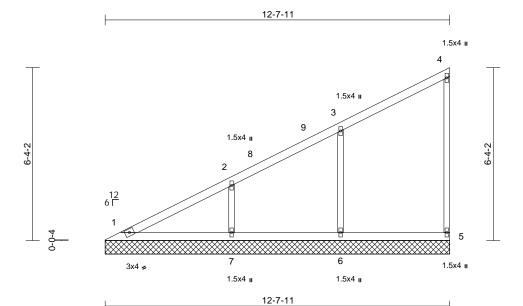


EFORE USE. nent, not he overall anent bracing e m Truss Plate Institute (www.tpinst.org) s.com) MITEKER 16023 Swingley Ridge Rd. Chesterfield, MO 63017 314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 160	
P240285-01	V10	Valley	1	1	Job Reference (optional)	165076817

Run: 8.63 S Apr 5 2024 Print: 8.630 S Apr 5 2024 MiTek Industries, Inc. Mon Apr 22 14:01:23 ID:X3j9csSdTd?hyQgxh8rn6OzwvzW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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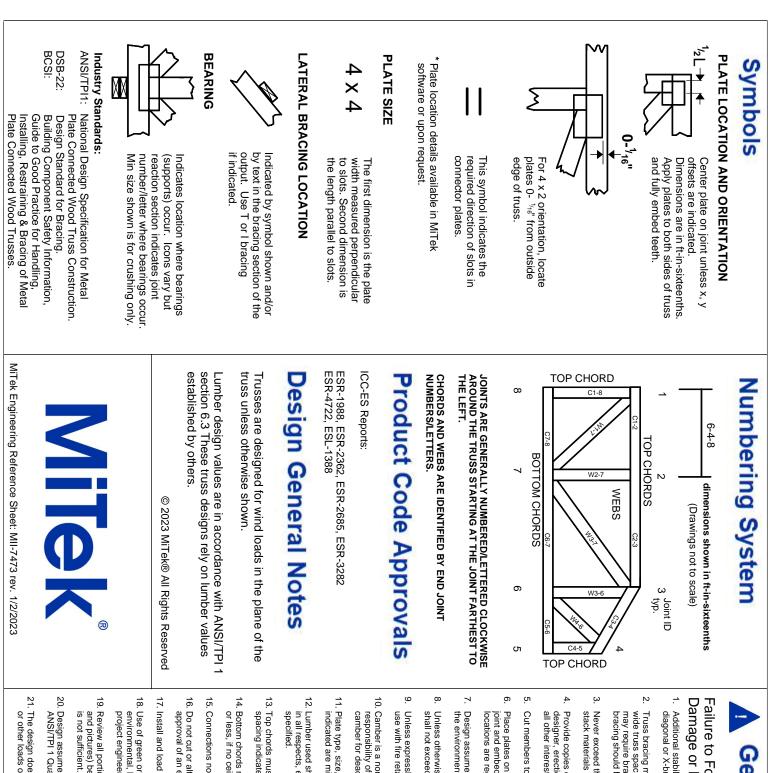
					·								
Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15		тс	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15		BC	0.13	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES		WB	0.12	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018	8/TPI2014	Matrix-S							Weight: 48 lb	FT = 20%
LUMBER			5)	This truss ha	s been designed	for a 10.0) psf bottom						
TOP CHORD	2x4 SP No.2			chord live loa	ad nonconcurrent	t with any	other live loa	ds.					
BOT CHORD	2x4 SP No.2		6)		are assumed to b	be SP No.	2 crushing						
WEBS	2x3 SPF No.2			capacity of 5									
OTHERS	2x3 SPF No.2		7)		hanical connection								
BRACING					capable of withs ft at joint 6 and 1			oint					
TOP CHORD	Structural wood she		ed or		designed in acco								
	6-0-0 oc purlins, ex		0)		Residential Code			nd					
BOT CHORD	Rigid ceiling directly	applied or 10-0-0 o	C		nd referenced sta								
	bracing.		LO	DAD CASE(S)									
REACTIONS	(size) 1=12-7-1 7=12-7-1	1, 5=12-7-11, 6=12- 1	-7-11,	5/12 6/102(0)	olandara								
	Max Horiz 1=261 (L												
	Max Uplift 5=-49 (LC		2)										
	7=-138 (L		_),										
	Max Grav 1=149 (L												
	(C 1), 7=403 (LC 1)	,										
FORCES	(lb) - Maximum Con	npression/Maximum											
	Tension	100/00 0 4 04/05											
TOP CHORD	1-2=-310/137, 2-3=- 4-5=-111/94	193/83, 3-4=-81/35	,										
BOT CHORD	1-7=-2/3, 6-7=-2/3,	5-6=-2/3											
WEBS	3-6=-299/245, 2-7=-	305/244											
NOTES													
	CE 7-16; Vult=115mph	(3-second aust)											TOD
	nph; TCDL=6.0psf; BC											OF	MISCH
	Cat. II; Exp C; Enclose		pe)									TATE OF	-0.0.0
	one and C-C Exterior(2										A	NY and	New York
) 5-7-9 to 12-6-15 zone										a	S/ BCOI	
	sed ; end vertical left e										8	SEV	
	and forces & MWFRS OL=1.60 plate grip DC		1;								8		1 * 2
	signed for wind loads i		196									A ser	0
	studs exposed to wind										1	COLINIM	per al
0			<i>'</i> ,''								117		AT I

see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. Gable requires continuous bottom chord bearing. 3)

4) Gable studs spaced at 4-0-0 oc.



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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- 1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor1 bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- 5. Cut members to bear tightly against each other
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- 11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- 12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- 14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- 15. Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- 20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.