

RE: P240300 Roof

Site Information:

Customer: Clover & Hive Project Name: P240300 Lot/Block: 64 Model: Address: 3820 SW Ravensgate Place Subdivis City: Lee's Summit State: M

P240300 Model: Subdivision: Osage State: MO

## General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2018/TPI2014 Wind Code: ASCE 7-16 Roof Load: 45.0 psf Design Program: MiTek 20/20 8.6 Wind Speed: 115 mph Floor Load: N/A psf

This package includes 25 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	164525071	B1	3/28/2024	21	164525091	V6	3/28/2024
2	164525072	B2	3/28/2024	22	164525092	V7	3/28/2024
3	164525073	B3	3/28/2024	23	164525093	V8	3/28/2024
4	164525074	C1	3/28/2024	24	164525094	V9	3/28/2024
5	164525075	C2	3/28/2024	25	164525095	V10	3/28/2024
6	164525076	C3	3/28/2024				
7	164525077	D1	3/28/2024				
8	164525078	D2	3/28/2024				
9	164525079	D3	3/28/2024				
10	164525080	E1	3/28/2024				
11	l64525081	E4	3/28/2024				
12	164525082	E5	3/28/2024				
13	164525083	E6	3/28/2024				
14	164525084	E7	3/28/2024				
15	164525085	R1	3/28/2024				
16	164525086	V1	3/28/2024				
17	164525087	V2	3/28/2024				
18	164525088	V3	3/28/2024				
19	164525089	V4	3/28/2024				
20	164525090	V5	3/28/2024				

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by . Truss Design Engineer's Name: Nathan Fox

My license renewal date for the state of Missouri is December 31, 2024. Missouri COA: 001193

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. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek 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.



MiTek, Inc. 16023 Swingley Ridge Rd. Chesterfield, MO 63017 314.434.1200

Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	B1	Monopitch Supported Gable	1	1	Job Reference (optional)	164525071

4-11-8

4-11-8

-0-10-8

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

Run; 8.63 S Nov 1 2023 Print; 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 13:59:16 ID:rc4sjKzIJtfsErm8VGMRJ\_zwwqN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





Scale = 1:28.5

00010 - 112010													
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	IRC20 <sup>2</sup>	18/TPI2014	Matrix-P							Weight: 19 lb	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 2x3 SPF No.2 Structural wood she 5-0-0 oc purlins, ex Rigid ceiling directly bracing.	cept end verticals.		<ul> <li>capacity of \$</li> <li>Provide means</li> <li>bearing plat</li> <li>5, 49 lb uplit</li> <li>This truss is</li> <li>International</li> </ul>	chanical connect e capable of wit ft at joint 2 and designed in ac I Residential Co and referenced s	tion (by oth hstanding 1 78 lb uplift a cordance w ode sections	ers) of truss t 4 lb uplift at j it joint 6. ith the 2018 5 R502.11.1 a	joint					
REACTIONS	(size) 2=5-0-0, \$	5=5-0-0, 6=5-0-0											

EACTIONS	(size)	2=5-0-0, 5=5-0-0, 6=5-0-0
	Max Horiz	2=85 (LC 8)
	Max Uplift	2=-49 (LC 8), 5=-14 (LC 8), 6=-78
		(LC 12)
	Max Grav	2=182 (LC 1), 5=47 (LC 1), 6=269
		(LC 1)
ORCES	(lb) - Max	imum 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 WEBS 3-6=-205/304

#### NOTES

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- 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.



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

Job	Truss	Truss Type	Qty Ply Roof		Roof	
P240300	B2	Monopitch	3	1	Job Reference (optional)	164525072

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 Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 13:59:17 ID:4QEzufucAXMxzh8xWxEVwDzwwpA-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





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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												
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 bracing.	applied or 10-0-0 or	С									
REACTIONS	0	4= Mechanical										
	Max Horiz 2=85 (LC											
	Max Uplift 2=-83 (LC	2 8), 4=-59 (LC 12)										
	Max Grav 2=291 (L0	C 1), 4=204 (LC 1)										
FORCES												
TOP CHORD	1-2=0/6, 2-3=-100/4	5, 3-4=-157/228										
BOT CHORD	2-4=0/0											
NOTES												
1) Wind: ASC	CE 7-16; Vult=115mph	(3-second gust)										
	nph; TCDL=6.0psf; BC											
	Cat. II; Exp C; Enclose		be)									
	one and C-C Exterior(2											
	) 4-1-8 to 4-10-4 zone; end vertical left expos											
	s & MWFRS for reaction		5								an	ADD
	) plate grip DOL=1.60	nis snown, Euriber									S OF I	MISSIN
	has been designed for	r a 10.0 psf bottom									4 TE	-050 M
	load nonconcurrent wi									A	TATE OF I	Mary Carl
	are assumed to be: Joi	int 2 SP No.2 crushi	ng							A	NATHA	
capacity o											FU	A A A A A A A A A A A A A A A A A A A
	irder(s) for truss to trus echanical connection (		0							W	4	KAN
	ate capable of withstar									N/		1 Stands
	b uplift at joint 2.	<u>.</u>								N	y mana	ER C PAR
	is designed in accorda									N	O PE-2022	042259
	nal Residential Code s		nd							0	The last	158
	2 and referenced stand	lard ANSI/TPI 1.								0	Vision .	FNUE
LOAD CASE(	5) Standard										PE-2022	L

## March 28,2024

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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)

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

Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	В3	Monopitch	7	1	Job Reference (optional)	164525073

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 13:59:17 ID:k?UxzaFoLR0qy8sWjXGlcLzwwoj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





2-11-8

Scale = 1:25.4							I					
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	0.13	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

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



Page: 1



Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	C1	Common Structural Gable	1	1	Job Reference (optional)	164525074

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 13:59:17 ID:EiusZUx23f\_KaFqBj9FMc9zwwlF-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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	9-6-8
Scale = 1:35.4	
Plate Offsets (X, Y): [1:0-2-11,0-4-1], [5:0-2-0,Edge]	

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	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15		BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES		WB	0.03	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code		8/TPI2014	Matrix-S	0.00		0.00			, a	Weight: 45 lb	FT = 20%
JODE	10.0	Obac	11(0201	0/11/2014	Matrix 0							Weight. 40 lb	11 = 2070
LUMBER TOP CHORD BOT CHORD WEBS OTHERS WEDGE BRACING	2x4 SP No.2 2x6 SPF No.2 2x3 SPF No.2 Left: 2x6 SPF No.2		,	Vasd=91mpl Ke=1.00; Ca exterior zone Exterior(2R) 10-5-0 zone vertical left a	7-16; Vult=115r h; TCDL=6.0psf; it. II; Exp C; Encl and C-C Exteri- 4-11-0 to 9-11-0 ; cantilever left a ind right exposed /RRS for reaction	BCDL=6.0 losed; MW or(2E) 0-0 ), Interior ( nd right ex d;C-C for n	Dpsf; h=35ft; FRS (envelop -0 to 4-11-0, 1) 9-11-0 to posed ; end nembers and	be)					
FOP CHORD		eathing directly applie	ed or		late grip DOL=1.		2011001						
BOT CHORD		xcept end verticals. y applied or 6-0-0 oc	3)	Truss desig only. For stu	ned for wind load uds exposed to w d Industry Gable	ds in the p vind (norm	al to the face	),					
REACTIONS	13=9-6-6 16=9-6-1 Max Horiz 1=117 (L Max Uplift 1=-30 (L (LC 13), 9), 16=-1 Max Grav 1=85 (LC 12=94 (L 14=116 16=119	C 8), 11=-4 (LC 9), 13 13=-60 (LC 13), 15=- 57 (LC 12), 17=-84 (L C 20), 11=160 (LC 1), C 20), 13=139 (LC 2 (LC 1), 15=131 (LC 1 (LC 19), 17=170 (LC	(1) 2=-77 6) 2=-77 7) 9 (LC 7) C 12) 8) 0), 9) 9), 9)	All plates are Gable requin Gable studs This truss ha chord live loo All bearings capacity of 5 Provide med bearing plate	alified building c a 1.5x4 MT20 un es continuous bo spaced at 2-0-0 as been designed ad nonconcurren are assumed to 165 psi. chanical connecti e capable of with iff at joint 1, 9 lb	less other ottom chor oc. d for a 10.1 it with any be SP No. on (by oth standing 4	vise indicated d bearing. ) psf bottom other live loa 2 crushing ers) of truss t lb uplift at jo	ds. o nt					
FORCES	(lb) - Maximum Co Tension	mpression/Maximum		at joint 17, 7	7 lb uplift at joint							000	alle
TOP CHORD		)/43, 1-2=-101/97,		) This truss is International R802.10.2 a	lift at joint 13. designed in accord Residential Cod nd referenced st	le sections	R502.11.1 a	nd			A	STATE OF	MISSOLANIEL
BOT CHORD	1-17=-46/98, 16-17	′=-46/98, 15-16=-46/9 4=-46/98, 12-13=-46,	18,	DAD CASE(S)	Standard					•	1	FO	
WEBS		l=-91/1, 2-17=-131/11 -96/96, 7-13=-110/10								,	184	Man	ER DE
NOTES 1) Unbalance this design		e been considered fo	r								N.	PE-2022	L ENGIL

Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	C2	Common	1	1	Job Reference (optional)	164525075

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 13:59:17 ID:jF5Ncuz?p4p7vTPjIDnW5Hzwwjv-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



1	4-11-0	9-6-8
I	4-11-0	4-7-8

Scale = 1:36.5	
Plate Offsets (X, Y):	[5:0-5-10,0-1-8]

Flate Olisets	(X, Y): [5:0-5-10,0-1-8											
Loading TCLL (roof) TCDL BCLL	(psf) 25.0 10.0 0.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI TC BC WB	0.42 0.54 0.11	<b>DEFL</b> Vert(LL) Vert(CT) Horz(CT)	in 0.06 -0.04 0.00	(loc) 1-6 1-6 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	<b>GRIP</b> 197/144
BCDL	10.0	Code	IRC2018/TPI	2014 Matrix-S							Weight: 37 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS WEDGE BRACING TOP CHORD BOT CHORD	<ul> <li>2x4 SP No.2</li> <li>2x3 SPF No.2 *Exce Left: 2x4 SPF No.3</li> <li>Structural wood she 6-0-0 oc purlins, ex</li> </ul>	athing directly applic	bea 5 a 2 6) This Inte R80 ed or <b>LOAD (</b>	vide mechanical connect ring plate capable of wit of 57 lb uplift at joint 1. a truss is designed in act rmational Residential Co 2.10.2 and referenced at CASE(S) Standard	thstanding 8 cordance w	2 lb uplift at ith the 2018 R502.11.1 a	joint					
REACTIONS	0	5=0-3-0										
	Max Horiz 1=116 (LC	C 11)										
	Max Uplift 1=-57 (LC											
FORCES	Max Grav 1=412 (L0 (lb) - Maximum Com	,, , ,										
FUNCES	Tension	pression/maximum										
TOP CHORD	2-3=-452/479, 3-4=0 3-5=-445/419	0/40, 1-2=-465/468,										
BOT CHORD WEBS	1-6=-266/295, 5-6=- 2-6=-342/207	266/295										
NOTES	20012/201											
	ced roof live loads have	been considered fo	r									<u> </u>
Vasd=91 Ke=1.00; exterior z Exterior(2 10-5-0 zc vertical le exposed;	CE 7-16; Vult=115mph mph; TCDL=6.0psf; BC Cat. II; Exp C; Enclose cone and C-C Exterior(2 2R) 4-11-0 to 9-11-0, In one; cantilever left and r oft and right exposed; p (C-C for members and f shown; Lumber DOL=	DL=6.0psf; h=35ft; d; MWFRS (envelop E) 0-1-12 to 4-11-0, terior (1) 9-11-0 to ight exposed ; end orch left and right orces & MWFRS for	,								STITE OF NATH	



capacity of 565 psi.

DOL=1.60

March 28,2024

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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) 16023 Swingley Ridge Rd. 314.434.1200 / MiTek-US.com

Chesterfield, MO 63017

PE-2022042259

Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	C3	Common	1	1	Job Reference (optional)	164525076

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 13:59:18 ID:omfbAuONF0YWRSsC6HOyKzzwwi4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





#### Scale = 1:36.5 Plate Offsets (X, Y): [5:0-4-12.0-1-8]

Plate Offsets (	(X, Y): [5:0-4-12,0-1-8											-	
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	0.32	Vert(LL)	0.03	5-6	>999	240	MT20	197/144
ICDL (	10.0	Lumber DOL	1.15		BC	0.19	Vert(CT)	-0.03	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES		WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018	/TPI2014	Matrix-R							Weight: 37 lb	FT = 20%
UMBER			6)	Provide mec	hanical connectio	n (by oth	ers) of truss	to					
FOP CHORD	2x4 SP No.2		,		capable of withs								
BOT CHORD	2x4 SP No.2			5 and 54 lb u	plift at joint 7.	-							
VEBS	2x3 SPF No.2 *Exce	ept* 7-1:2x6 SPF No	o.2, 7)		designed in acco								
	5-3:2x4 SP No.2	-			Residential Code			and					
BRACING					nd referenced sta	ndard AN	ISI/TPI 1.						
TOP CHORD	Structural wood she	athing directly appli	ed or LO	AD CASE(S)	Standard								
	6-0-0 oc purlins, ex												
BOT CHORD	Rigid ceiling directly	applied or 10-0-0 o	C										
	bracing.												
REACTIONS	( )	7= Mechanical											
	Max Horiz 7=-122 (L	,											
	Max Uplift 5=-81 (LC		)										
	Max Grav 5=475 (LC	<i>,,</i>											
FORCES	(lb) - Maximum Com	pression/Maximum											
	Tension												
TOP CHORD	2-3=-411/435, 3-4=0												
	1-7=-339/330, 3-5=-												
BOT CHORD	6-7=-230/259, 5-6=-	230/259											
WEBS	2-6=-298/175												
NOTES		h											
this design	ed roof live loads have n.	been considered to	or										
	CE 7-16; Vult=115mph	(3-second gust)										AT	All and a second
Vasd=91n	nph; TCDL=6.0psf; BC	DL=6.0psf; h=35ft;										FE OF	MISS W
	Cat. II; Exp C; Enclose		pe)								4	TATE OF I	N.S.
	one and C-C Exterior(2										H	S NATHA	NIEL CAN
	R) 4-7-8 to 9-7-8, Inter										H	FO	
	tilever left and right exp									•	NA.	111	
	exposed; porch left and												1 178
mempers	and forces & MWFRS	ior reactions shown	1;								NI.	AILA	SI SILANA

- 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. 3)
- Bearings are assumed to be: , Joint 5 SP No.2 crushing 4) capacity of 565 psi.
- 5) Refer to girder(s) for truss to truss connections.

March 28,2024

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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 oulgase 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)

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Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	D1	Roof Special Supported Gable	1	1	Job Reference (optional)	164525077

#### Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 13:59:18 ID:wijvgVRNMEbdXh3iv6zXHnzww7s-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f







#### Scale = 1:53.2 Plate Offsets (X, Y): [2:0-1-12,0-3-6], [10:0-1-12,0-3-6], [15:0-4-8,0-4-12]

	,, ,). [2:0 : .2,0 0 0	];[:0:0 : : <b>⊥</b> ;0 0 0];[		/=]									
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	0.55	Vert(LL)	-0.11	15-16	>999	240		197/144
TCDL	10.0	Lumber DOL	1.15		BC	0.75	Vert(CT)	-0.20	15-16	>785	180		
BCLL	0.0	Rep Stress Incr	NO		WB	0.49	Horz(CT)	0.24	10	n/a	n/a		
BCDL	10.0	Code	IRC201	8/TPI2014	Matrix-S							Weight: 77 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS	2.0E 2x3 SPF No.2 2x3 SPF No.2	ept* 15-13:2x6 SP 24(		Vasd=91mp Ke=1.00; Ca exterior zon Interior (1) 4 11-10-0, Inte	F7-16; Vult=115m h; TCDL=6.0psf; E at. II; Exp C; Enclo e and C-C Exterior -1-8 to 6-10-0, Ex erior (1) 11-10-0 to t exposed ; end ve	3CDL=6. sed; MW r(2E) -0- terior(2R o 14-6-8 ;	0psf; h=35ft; /FRS (envelop 10-8 to 4-1-8, ) 6-10-0 to zone; cantilev						
SLIDER	No.2 4-1-3	4-1-3, Right 2x6 SPI	-		C for members and			r					
	2-0-0 oc purlins (3-2 (Switched from shee Rigid ceiling directly bracing. (size) 2=0-3-8, 7 Max Horiz 2=287 (LC Max Uplift 2=-219 (L Max Grav 2=1344 (L	eted: Spacing > 2-8-0 applied or 10-0-0 oc 10=0-3-8 C 11) C 12), 10=-219 (LC 1 _C 1), 10=1344 (LC 1	4) 3)	reactions sh DOL=1.60 Truss desig only. For st see Standar or consult q Gable studs This truss h chord live lo All bearings	own; Lumber DOL ned for wind loads uds exposed to wi d Industry Gable E Jalified building de spaced at 1-4-0 c as been designed ad nonconcurrent are assumed to b	=1.60 pl s in the p nd (norm End Deta esigner a bc. for a 10. with any	ate grip lane of the tru lal to the face ils as applical s per ANSI/TF 0 psf bottom other live loa	uss ), ble, PI 1.					
FORCES	(lb) - Maximum Com Tension	pression/Maximum	7)	capacity of 4	125 psi. pint(s) 2, 10 consic	lers nara	llel to grain v	alue					
TOP CHORD	1-2=0/19, 2-4=-3165 5-6=-2667/579, 6-7=	5/323, 4-5=-2827/528, 2685/550, )=-3192/316, 10-11=0	,	using ANSI/ designer she	TPI 1 angle to gra ould verify capacity chanical connection	in formul y of bear	a. Building ing surface.						
BOT CHORD		-16=-338/2767, 3-14=-93/2122,	9)	bearing plat joint 2 and 2	e capable of withs 19 lb uplift at joint designed in accor	tanding 2 10.	219 lb uplift at					OF	ALL STA
WEBS	6-13=-426/1370, 6-1		39,	Internationa R802.10.2 a ) Graphical p	Residential Code nd referenced sta urlin representation	e sections ndard AN n does n	s R502.11.1 a NSI/TPI 1. ot depict the s					STATE OF I	
NOTES					ation of the purlin	along the	e iop and/or				D.	1 A	
,	) Unbalanced roof live loads have been considered for this design.				bottom chord. LOAD CASE(S) Standard								



March 28,2024

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Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	D2	Roof Special Structural Gable	1	1	Job Reference (optional)	164525078

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries. Inc. Wed Mar 27 13:59:18 ID:0Un07T0ZcCLyQZnshImJUDzwwdO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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	7-4-8	10-4-8	13-6-0 14-4-0	20-5-8	20-9-0
Scale = 1:56.7	7-4-8	3-0-0	3-1-8 0-10-0	6-1-8	0-3-8

#### Plate Offsets (X, Y): [1:Edge,0-6-2], [14:0-2-8,0-6-0], [21:0-4-4,0-2-8]

	(X, T): [1:Edge,0 0 2];	, [14.0 2 0,0 0 0], [21	.0 + +,0 2	0]									
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	0.51 0.47 0.60	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.09 -0.17 0.07	(loc) 21-22 21-22 15	l/defl >999 >500 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 124 lb	<b>GRIP</b> 197/144 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD JOINTS REACTIONS FORCES TOP CHORD BOT CHORD	<ul> <li>2x4 SP No.2</li> <li>2x3 SPF No.2 *Exce 15-14:2x6 SPF No.2</li> <li>2x3 SPF No.2</li> <li>Structural wood she 6-0-0 oc purlins, ex</li> <li>Rigid ceiling directly bracing.</li> <li>1 Brace at Jt(s): 23, 26, 30</li> <li>(size) 15=0-3-8.</li> <li>Max Horiz 22=217 (I Max Uplift 15=-84 (L 22=-242 ( Max Grav 15=367 (I) 15=367 (I)</li> <li>(Ib) - Maximum Com Tension</li> <li>1-2=-73/574, 2-3=-8 4-5=-50/658, 5-6=-2 7-8=-46/219, 8-9=-1 10-11=0/231, 11-12 13-14=-221/49, 1-22</li> </ul>	eathing directly applied cept end verticals. applied or 6-0-0 oc 21=7-4-8, 22=7-4-8 LC 11) C 13), 21=-141 (LC (LC 26) LC 1), 21=1549 (LC - LC 25) apression/Maximum 45/606, 3-4=-63/619, 17/698, 6-7=-13/643, /183, 9-10=0/192, =-5/13/309, 14-15=-15 -21=-658/155, -19=-594/194,	2, d or 1) 2) 12), 1), 33/60 4) 5) 6) 7)	OTES Unbalanced this design. Wind: ASCE Vasd=91mp Ke=1.00; Ca exterior zom- Interior (1) 5 15-4-8, Inter and right ext exposed; C-C- reactions sh DOL=1.60 Truss desig only. For str see Standar or consult qu All plates arr Truss to be braced agaii Gable studs This truss ha chord live lo All bearings capacity of 5 Bearing at ju using ANSI/	7-21=-856/219, 12- 23-25=-883/290, 23 24-26=-886/292, 26 21-27=-913/293, 13 7-28=0/549, 28-29= 10-18=-304/0, 18-3 12-30=-517/132, 13 3-23=-46/33, 4-24= 5-26=-36/30, 6-27= 20-28=-132/0, 9-29 11-30=0/3 roof live loads have 5 7-16; Vult=115mpf h; TCDL=6.0psf; BC at. II; Exp C; Encloss e and C-C Exterior( i-2-15 to 10-4-8, Ext ior (1) 15-4-8 to 20- posed ; end vertical C for members and own; Lumber DOL= gned for wind loads i uds exposed to vinc d Industry Gable Er ualified building des e 1.5x4 MT20 unles fully sheathed from nst lateral movemer spaced at 1-4-0 oc as been designed fo ad nonconcurrent w are assumed to be 565 psi. pint(s) 15 considers TPI 1 angle to grain pould verify capacity	-24=-8 -27=-8 -27=-8 -0/613, 00-613, 00-613, 00-517, -16=-3 -23/15, -152/9, -1	85/292, 88/293, 20/207, 18-29=0/586, (132, 09/285, 2-25=-48/83, 8-28=-115/50 considered for cond gust) 0psf; h=35ft; FRS (envelop -12 to 5-2-15, R) 10-4-8 to le; cantilever I 4 right & MWFRS for ate grip lane of the tru al to the face) ils as applicat b per ANS/TF wise indicated e or securely iagonal web). D psf bottom other live load 2 crushing to grain value a. Building	, 1, ne) eft ss , ple, 11. I.	bea join 15. 11) Thi Inte	aring pla at 22, 14 s truss is ernationa 02.10.2	te capa 1 lb up s desig al Resi and ref ) Sta	able of withstandii lift at joint 21 and ined in accordance dential Code sect ferenced standard indard	ANSI/TPI 1.

March 28,2024



Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	D3	Roof Special	7	1	Job Reference (optional)	164525079

Run: 8,63 S Nov 1 2023 Print: 8,630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 13:59:18 ID:pwt0jO1hEphDIMFL4rqrrezwwfy-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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		7-4-8
Scale = 1:54.3		
Plate Offsets (X, Y):	[1:Edge,0-6-2], [6:0-2-8,	0-6-0], [11:0-4-4,0-2-8]

oading CLL (roof)	(psf) 25.0	Spacing Plate Grip DOL	2-0-0 1.15		CSI TC	0.74	DEFL Vert(LL)	in -0.16	(loc) 9	l/defl >999	L/d 240	PLATES MT20	<b>GRIP</b> 197/144
CDL	10.0	Lumber DOL	1.15		BC	0.66	· · ·	-0.28	9	>865	180	101120	137/144
BCLL	0.0	Rep Stress Incr	YES		WB	0.92	Horz(CT)	0.25	7	n/a	n/a		
BCDL	10.0	Code	IRC201	8/TPI2014	Matrix-S		- (- )					Weight: 104 lb	FT = 20%
	2x4 SP No.2 2x4 SP No.2 2x3 SPF No.2 *Exce 7-6:2x6 SPF No.2 Structural wood she 2-2-0 oc purlins, exi Rigid ceiling directly bracing. 1 Row at midpt (size) 7=0-3-8, 1 Max Horiz 12=210 (L Max Grav 7=917 (LC (lb) - Maximum Com Tension 1-2=-1150/198, 2-3= 3-4=-1028/245, 4-5= 1-12=-840/173, 6-7= 11-12=-235/537, 10	athing directly applie cept end verticals. applied or 9-8-11 oc 4-10 (12=0-3-8 .C 11) C 13), 12=-127 (LC C 13), 12=917 (LC 1) pression/Maximum 1063/260, 2782/359, 5-6=-408 326/71	d or 3) 4) 12) 5) 6)	Vasd=91mpf Ke=1.00; Car exterior zone Interior (1) 5- 15-4-8, Interi and right exp members ann Lumber DOL This truss ha chord live loa All bearings a capacity of 5 Bearing at jo using ANSI/T designer sho Provide mect bearing plate joint 12 and ^ This truss is a International	nt(s) 7 considers PI 1 angle to gra uld verify capacit nanical connection capable of withs 127 lb uplift at join designed in accor Residential Code	BCDL=6. seet; MW r(2E) 0-1- :xterior(2F 0-6-4 zor al right ex- S for rea DOL=1.60 for a 10.0 with any e SP No. parallel t in formula y of beari on (by oth tanding 1 nt 7. rdance we s sections	Dpsf; h=35ft; FRS (envelo -12 to 5-1-12 R) 10-4-8 to e; cantilever cposed;C-C f ctions showr ) p sf bottom other live loa 2 crushing o grain value a. Building ng surface. ers) of truss i 27 lb uplift ar ith the 2018 R502.11.1 a	to					
	9-10=-207/2186, 8-9 7-8=-357/2139	,	LC	DAD CASE(S)	nd referenced sta Standard	nuaru An	131/1711.						
EBS	2-11=-363/123, 4-8= 5-7=-2189/386, 2-10 3-10=-232/934, 4-10 4-9=-88/959	=-161/181,									ä	STATE OF M	AISSOUR

#### NOTES

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





Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	E1	Common Supported Gable	1	1	Job Reference (optional)	164525080

Run: 8,63 S Nov 1 2023 Print: 8,630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 13:59:18 ID:bSBHIwRtVwODq1AP3GRETazww5H-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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#### Plate Offsets (X, Y): [2:0-2-1,0-0-5], [16:Edge,0-3-8]

Scale = 1:64.5

			1												
Loading		(psf)	Spacing	4-0-0		CSI		DEFL	in	(lc	oc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)		25.0	Plate Grip DOL	1.15		TC	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	18/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 16 2x3 SPF 1 Left 2x4 S 2-0-0 oc p verticals (Switched	o.2 650F 1.5E No.2 *Exce 6P No.2 purlins (5-6	ept* 28-15:2x6 SPF N 1-6-7 5-9 max.), except en eted: Spacing > 2-8-0 r applied or 9-7-14 oc	ю.2 В 1 ).	SOT CHORD	1-2=0/11, 2-4=-990 5-6=-690/525, 6-7= 9-10=-397/410, 10- 11-12=-365/540, 12 13-14=-395/613, 14 15-16=-388/528 2-27=-305/391, 26 25-26=-305/391, 27 20-21=-305/391, 12 18-19=-305/391, 13 16-17=-305/391	578/48 -11=-36 2-13=-3 4-15=-4 -27=-30 4-25=-3 1-23=-3 9-20=-3	35, 7-9=-471/4 5/426, 96/635, 50/603, 5/391, 05/391, 05/391, 05/391,	48,	9) 10)	capa Prov bear 16, 1 uplifi joint 91 lk at jo This Inter	acity of a ride me ing plat 126 lb u t at join 23, 12 o uplift a int 17 a truss is nationa	565 ps chanic te capa uplift at t 20, 12 1 lb up at joint at joint and 36 s desig al Resid	al connection (by able of withstandi joint 18, 123 lb u 22 lb uplift at joint lift at joint 24, 125 26, 261 lb uplift a lb uplift at joint 2. ned in accordance	others) of truss to ng 91 lb uplift at joint plift at joint 19, 126 lb : 21, 123 lb uplift at 0 lb uplift at joint 25, it joint 27, 77 lb uplift ev with the 2018 ions R502.11.1 and
WEBS	1 Row at	•	13-18, 12-19, 14-17, 15-16			13-18=-377/221, 12 11-20=-279/206, 10 9-23=-280/193, 7-2	)-21=-2	80/193,		,	or th		tation	epresentation doe of the purlin along	es not depict the size g the top and/or
Ib-16           REACTIONS (size)         2=22-2-4, 16=22-2-4, 17=22-2-4, 18=22-2-4, 19=22-2-4, 20=22-2-4, 21=22-2-4, 23=22-2-4, 24=22-2-4, 25=22-2-4, 26=22-2-4, 27=22-2-4           Max Horiz         2=759 (LC 9)           Max Uplift         2=-59 (LC 9)           Max Uplift         2=-36 (LC 8), 16=-91 (LC 8), 17=-77 (LC 13), 18=-126 (LC 11), 19=-123 (LC 12), 20=-126 (LC 12), 21=-122 (LC 12), 23=-123 (LC 12), 24=-121 (LC 12), 25=-129 (LC 12), 26=-91 (LC 12), 25=-129 (LC 12), 26=-91 (LC 12), 27=-261 (LC 12)           Max Grav         2=475 (LC 20), 16=144 (LC 20), 17=-310 (LC 26), 18=370 (LC 19), 21=-360 (LC 25), 21=-				2-4, 2-4, <b>N</b> 2-4 <b>N</b> 11), 2 12), 12), 12), 12), 12), 12), 12), 12)	IOTES ) Unbalanced this design. ) Wind: ASCE Vasd=91mpl Ke=1.00; Ca exterior zone Exterior(2N) 21-8-12 zon- vertical left a forces & MW DOL=1.60 p	Unbalanced roof live loads have been considered for									
FORCES	(lb) - Max Tension	26=341 (I	LC 1), 25=365 (LC 25 LC 1), 27=432 (LC 25 pression/Maximum		<ul> <li>only. For str see Standary</li> <li>or consult qu</li> <li>All plates are</li> <li>Gable requiri</li> <li>Gable studs</li> <li>This truss has</li> </ul>		d (norm nd Deta signer a ss other om chor s. or a 10.	al to the face), ils as applicab s per ANSI/TP wise indicated rd bearing. 0 psf bottom	, le, l 1.					PE-2022	LENGINE

- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



March 28,2024

Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	E4	Roof Special	8	1	Job Reference (optional)	164525081

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 13:59:18 ID:X3j9csSdTd?hyQgxh8rn6OzwvzW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scal	e =	1:68.5	

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 IRC20	18/TPI2014	CSI TC BC WB Matrix-S	0.79 0.71 0.96	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.11 -0.23 -0.03	(loc) 9-10 9-10 13	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 121 lb	<b>GRIP</b> 244/190 FT = 20%
	2x4 SP No.2 2x4 SP No.2 *Excep 2x3 SPF No.2 *Excep Left 2x4 SP No.2 - 3 Structural wood she 3-5-6 oc purlins, exi Rigid ceiling directly bracing. 1 Row at midpt (size) 2=0-3-8, 1 Max Horiz 2=384 (LC Max Uplift 2=-153 (L Max Grav 2=1036 (L (lb) - Maximum Com Tension	pt* 13-8:2x6 SPF No 3-2-3 athing directly applie cept end verticals. applied or 8-4-8 oc 4-10, 7-9 13=0-3-2 5 (12) C 12), 13=-235 (LC 1) .C 1), 13=972 (LC 1)	o.2 5 d or 6 7 L 12)	<ul> <li>capacity of 5 of 425 psi.</li> <li>Bearing at jo using ANSI/ designer sho</li> <li>Provide mec bearing plate joint 2 and 2:</li> <li>This truss is International</li> </ul>	assumed to be: J 65 psi, Joint 13 SF int(s) 13 considers IPI 1 angle to grain vald verify capacity hanical connection capable of withsta 35 lb uplift at joint designed in accorr Residential Code nd referenced stan Standard	PF No.2 parallel of formula of beari (by oth anding 1 13. dance w sections	crushing cap to grain valu a. Building ng surface. ers) of truss 53 lb uplift a ith the 2018 5 R502.11.1 a	bacity ue to t					
TOP CHORD	1-2=0/6, 2-4=-1623/2 6-7=-924/276, 7-8=-		8,										

 8-13=-124/66

 BOT CHORD
 2-12=-483/1364, 10-12=-483/1364, 9-10=-82/264

 WEBS
 6-10=-521/308, 7-10=-338/1066, 4-12=0/277, 4-10=-680/274, 7-9=-822/263

NOTES

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





Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	E5	Roof Special	2	1	Job Reference (optional)	164525082

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 13:59:19 ID:X3j9csSdTd?hyQgxh8rn6OzwvzW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:71.7	0-2-8 0-5-8											
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	0.82	Vert(LL)	-0.10	16-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.22	16-18	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.04	19	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 134 lb	FT = 20%

8-0-0

2-4-6

3-2-4

2-2-8

L	ι	J	N	в	Е	R

LOWIDER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except* 15-7,13-11,10-9:2x3
	SPF No.2
WEBS	2x3 SPF No.2 *Except* 19-9:2x6 SPF No.2
SLIDER	Left 2x4 SP No.2 3-2-3
BRACING	
TOP CHORD	Structural wood sheathing directly applied or
	3-10-14 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc
	bracing.
WEBS	1 Row at midpt 4-16, 8-12
REACTIONS	(size) 2=0-3-8, 19=0-3-2
	Max Horiz 2=384 (LC 12)
	Max Uplift 2=-153 (LC 12), 19=-235 (LC 12)
	Max Grav 2=1036 (LC 1), 19=972 (LC 1)
FORCES	(lb) - Maximum Compression/Maximum
	Tension
TOP CHORD	1-2=0/6, 2-4=-1624/204, 4-6=-940/125,
	6-7=-943/261, 7-8=-841/278, 8-9=-69/49,
	10-12=0/47, 12-19=-208/852, 9-19=-122/68
BOT CHORD	2-18=-480/1364, 16-18=-480/1364,
	15-16=-13/1, 14-15=-43/0, 7-14=-20/62,
	13-14=-115/391, 12-13=-116/391,
	11-13=0/41, 10-11=0/2
WEBS	6-16=-566/285, 8-14=-303/1001, 4-18=0/294,
	4-16=-682/265, 8-12=-875/265,
	14-16=-374/1218, 6-14=-16/34
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

- 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 2 SP No.2 crushing 4) capacity of 565 psi, Joint 19 SPF No.2 crushing capacity of 425 psi.
- Bearing at joint(s) 19 considers parallel to grain value 5) using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 153 lb uplift at joint 2 and 235 lb uplift at joint 19.
- 7) 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

5-9-2





Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	E6	Common	7	1	Job Reference (optional)	164525083

Run: 8.63 S. Nov. 1 2023 Print: 8.630 S.Nov. 1 2023 MiTek Industries. Inc. Wed Mar 27 13:59:19 ID:TnZ3x61kRmd3IVZaqXdQQ5zwvtc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



#### NOTES

1) Unbalanced roof live loads have been considered for

9-15=-581/251

10-13=-208/1899, 3-16=-556/246, 6-15=-327/1021, 2-18=-225/1934,

this design.



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 and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponent.com)



Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	E7	Common Supported Gable	1	1	Job Reference (optional)	164525084

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 13:59:19 ID:30TC0Xcr8WgF3uEpecUgNDzwvss-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:67.8

Plate Offsets (X, Y): [17:0-0-0,0-0-0]

Plate Offsets ()	x, y): [17:0-0-0	0,0-0-0]									-			
Loading TCLL (roof) TCDL BCLL BCDL		(psf) 25.0 10.0 0.0 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	4-0-0 1.15 1.15 NO IRC2	018/TPI2014	<b>CSI</b> TC BC WB Matrix-R	0.22 0.16 0.40	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.02	(lo 2	c) l/det - n/a - n/a 24 n/a	a 999 a 999	PLATES MT20 Weight: 191 lb	<b>GRIP</b> 244/190 FT = 20%
	verticals (Switched fro Rigid ceiling c bracing. 1 Row at mid (size) 24: 31: 34: 43: 44: Max Horiz 44: Max Uplift 24: 26: 28: 31: 33: 36: 39: 41: 43: Max Grav 24: 26: 28: 31: 33: 36: 37: 40: 42: 42: 44: 43: 44: 44: 44: 44: 44: 44: 44: 44	2 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 =-334 (l =-123 (l =-359 (	LC 17) C 9), 25=-225 (LC 13 C 13), 27=-129 (LC 1 LC 13), 32=-133 (LC C 13), 35=-105 (LC 1 LC 12), 35=-105 (LC 1 LC 12), 40=-120 (LC LC 12), 42=-83 (LC 1 LC 12), 42=-83 (LC 1 LC 12), 42=-83 (LC 1 LC 12), 25=397 (LC 26 C 1), 25=397 (LC 26 C 1), 25=397 (LC 26 C 1), 23=359 (LC 26 C 26), 34=431 (LC 2 C 1), 39=360 (LC 25 C 1), 43=397 (LC 25 C 2), 43=39	). 0-0, 0-0, 0-0, 0-0, 0-0, 12), 12	FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalancer this design.	(lb) - Maximum Co Tension 2-44=-331/145, 1-2 3-4=-263/184, 4-5= 6-8=-139/343, 8-9= 10-11=-248/646, 1 12-13=-282/738, 1. 16-18=-133/316, 1 19-20=-128/127, 2 21-22=-285/79, 22 43-44=-78/318, 40 39-40=-78/318, 41 43-44=-78/318, 35 34-35=-78/318, 35 32-33=-78/318, 26 25-26=-78/318, 24 12-34=-472/99, 11. 10-36=-279/210, 9 8-39=-280/193, 6-2 5-41=-281/197, 4-2 3-43=-302/378, 13 14-32=-279/210, 11 16-29=-280/193, 1- 19-27=-281/197, 2 21-25=-302/375 d roof live loads hav	2=0/64, : -207/23 -171/42 1-12=-2: 3-14=-2: 5-16=-1 8-19=-90 -21=-1 -23=0/6- 41=-78, -39=-78, -39=-78, -39=-78, -39=-78, -29=-78, -29=-78, -27=-78, -27=-78, -35=-29; -37=-28; 40=-280, -27=-25; -33=-29; -	2-3=-395/168, 2-3=-395/168, 32/738, 48/646, 71/424, 5/209, 77/81, 4, 22-24=-331 (318,	287, /531, /154	<ul> <li>A</li> <li>A</li> <li>B</li> <li>C</li> <li>C</li></ul>	Vasd=91n Ke=1.00; exterior z Exterior (2 23-6-0, E Estrerior (2 23-6-0, E eft and ri exposed; reactions DOL=1.6 Truss de DOL=1.6 All plates Gable rec Truss to b praced a Gable stu This truss chord live	nph; TC Cat. II; I one and N) 4-1-8 kterior(2) ght expo C-C for shown; ) signed f studs e lard Ind qualifie are 1.5 uires cc e fully s jainst la ds spac has be load nc gs are a of 565 p	C-C Corner(3E) to 18-6-0, Corner N) 23-6-0 to 37-1 sed ; end vertical members and forc Lumber DOL=1.6 or wind loads in th posed to wind (n ustry Gable End I d building design t4 MT20 unless o ntinuous bottom heathed from one teral movement (i ed at 2-0-0 oc. en designed for a nconcurrent with ssumed to be SP	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 zes & MWFRS for i0 plate grip the plane of the truss the
		,	-										March	า 28,2024

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Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	E7	Common Supported Gable	1	1	Job Reference (optional)	164525084

- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 78 lb uplift at joint 44, 20 lb uplift at joint 24, 105 lb uplift at joint 35, 132 lb uplift at joint 36, 120 lb uplift at joint 37, 123 lb uplift at joint 39, 120 lb uplift at joint 40, 132 lb uplift at joint 41, 83 lb uplift at joint 42, 254 lb uplift at joint 43, 99 lb uplift at joint 33, 135 lb uplift at joint 32, 120 lb uplift at joint 31, 123 lb uplift at joint 29, 121 lb uplift at joint 28, 129 lb uplift at joint 27, 92 lb uplift at joint 26 and 225 lb uplift at joint 25.
- 11) 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.
- 12) 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 Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 13:59:19 ID:30TC0Xcr8WgF3uEpecUgNDzwvss-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2



Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	R1	Flat Girder	1	2	Job Reference (optional)	164525085

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 13:59:19 ID:X3j9csSdTd?hyQgxh8rn6OzwvzW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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March 28,2024

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	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 = 1:45.4	5 5 Z	010	010	5-5-2	
30ale = 1.45.4					

#### Plate Offsets (X, Y): [3:0-2-8,0-2-0], [5:0-2-8,0-2-0], [7:Edge,0-4-4], [12:Edge,0-4-4]

				, <b>t</b>									
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 NO IRC201	8/TPI2014	CSI TC BC WB Matrix-S	0.42 0.85 0.62	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.11 -0.20 0.07	(loc) 9 9 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT18HS MT20 Weight: 257 lb	<b>GRIP</b> 197/144 197/144 FT = 20%
No.2 OTHERS 2x4 SP No.: BRACING TOP CHORD 2-0-0 oc pu end vertical BOT CHORD Rigid ceiling bracing. WEBS 1 Row at m REACTIONS (size) 7 (in Max Uplift 7 Max Grav 7 FORCES (lb) - Maxim Tension TOP CHORD 1-12=-1320 2-3=-8293/2 5-6=-72/17, BOT CHORD 1-12=-162 8-9=-2099/8 WEBS 5-7=-7649/	2.2 2.2 *Exce 2 rlins (5-1 ls. g directly idpt '=0-3-8, ( req. 0-4-1 '=-1154 ( '=-1154 ( '=-5155 (I num Corr //361, 1-2 2099, 3-5 6-7=-76 8/6426, : 3/33, 3-8= 3/36 cted toge bys: as follows red as foll	(LC 8), 12=-1281 (LC LC 1), 12=5719 (LC 1) pression/Maximum 2=-76/18, 5=-6403/1622, 18/252 9-11=-1628/6426, 3=-1622/6403 11=0/188, -9=-570/2256, =-2284/577, ther with 10d s: 2x4 - 1 row at 0-9-0 9-0 oc. lows: 2x6 - 2 rows	SP 3) pt ( ( ( ( ( ( ) ( ) ( ) ( ) ( ) ( ) ( )	except if note CASE(S) sec provided to c unless othen Wind: ASCE Vasd=91mpl Ke=1.00; Ca exterior zone and right exp MWFRS for I grip DOL=1.( Provide adec All plates are This truss ha chord live loa WARNING: I greater than All bearings a capacity of 4 Provide mec bearing plate joint 12 and 3 )) This truss is International R802.10.2 ar	uate drainage to MT20 plates unlo s been designed ad nonconcurrent Required bearing input bearing size are assumed to b 25 psi. hanical connectio capable of withs 1154 lb uplift at jo designed in accor Residential Code and referenced sta rlin representation tion of the purlin	back (B) phonection ds noted ph (3-see BCDL=6. sed; MW (3) zone embers a Lumber I prevent · ess other for a 10. with any size at jc e SPF N- n (by oth tanding 1 int 7. rdance w e sections ndard AH n does no	face in the LC is have been as (F) or (B), cond gust) 0psf; h=35ft; (FRS (envelop ; cantilever le nd forces & DOL=1.60 pla water ponding wise indicate 0 psf bottom other live loa bint(s) 12, 7 o.2 crushing ers) of truss t l281 lb uplift a ith the 2018 s R502.11.1 a SI/TP11.	pe) ft ate g. d. ds. ds. o at	prov lb d up a dow at a dow up a and The resy LOAD ( 1) De Pl; Ur Co	vided su down and at 2-9-0 vn and 2 8-9-0, 90 vn and 2 at 14-9- d 902 lb e design ponsibili <b>CASE(S</b> ead + Re ate Incre- niform Li Vert: 1- oncentra Vert: 13	afficient d 206 ll 0, 902 ll 0.03 lb $0.02$ lb $0.0$	b up at 0-9-0, 90 b down and 203 up at 6-9-0, 902 own and 203 lb up at 12-9-0, 902 902 lb down and and 203 lb up at ion of such connithers. Indard e (balanced): Lur 1.15 b/ft) 7-12=-20 iads (lb) , 14=-902, 15=-9 902, 20=-902, 21 STATE OF STATE OF	A service of the serv

Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	V1	Valley	1	1	Job Reference (optional)	164525086

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 13:59:20 ID:9TR7X\_t7mZkbh6rSI1VQ2DzJtkh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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SIONAL ET and March 28,2024

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14-2-1

Scale = 1:43.8

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

			-										
Loading TCLL (roof) TCDL BCLL BCDL LUMBER TOP CHORD	(psf) 25.0 10.0 0.0 10.0 2x4 SP No.2	Lumber DOL Rep Stress Incr	-		CSI TC BC WB Matrix-S 7-16; Vult=115mp ; TCDL=6.0psf; E			in n/a n/a 0.00	(loc) - - 8	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 63 lb	<b>GRIP</b> 244/190 FT = 20%
BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x3 SPF No.2 2x3 SPF No.2 Structural wood she 6-0-0 oc purlins, ex	athing directly applied cept end verticals. applied or 10-0-0 oc	or 2)	Ke=1.00; Ca exterior zone Interior (1) 5- exposed ; en members an Lumber DOL Truss design	t. II; Exp C; Enclose and C-C Exterior -7-9 to 14-1-5 zon d vertical left and d forces & MWFR =1.60 plate grip D ned for wind loads ds exposed to wind	sed; MW r(2E) 0-7 e; cantile right exp S for rea OOL=1.60 s in the p	FRS (envelop -9 to 5-7-9, ever left and riposed;C-C for ctions shown ) lane of the tru	ght ; iss					
	(size) 1=14-2-1, 10=14-2 13=14-2 Max Horiz 1=300 (LC Max Uplift 8=-39 (LC 10=-57 (L 10=-57 (L 10=-58 (LC 9=193 (LC	C 9) S 9), 9=-68 (LC 12), C 12), 11=-67 (LC 12) C 12), 13=-111 (LC 12) C 20), 8=73 (LC 19), C 1), 10=175 (LC 1), C 1), 12=121 (LC 1),	3) 4) 5) 6)	or consult qu All plates are Gable require Gable studs This truss ha chord live loa All bearings a capacity of 5 Provide mec bearing plate	d Industry Gable E alified building de e 1.5x4 MT20 unle es continuous bott spaced at 2-0-0 o is been designed i ad nonconcurrent are assumed to be 65 psi. hanical connection e capable of withst at joint 9, 57 lb u	signer as ess other tom chor c. for a 10.0 with any e SP No. n (by oth tanding 3	s per ANSI/TF wise indicated d bearing. ) psf bottom other live loa 2 crushing ers) of truss t 9 lb uplift at j	PI 1. J. ds. o pint					
FORCES	(lb) - Maximum Com Tension	pression/Maximum 354/211, 3-4=-312/20 <sup>.</sup>	1	at joint 11, 42 13.	2 lb uplift at joint 1	2 and 11	1 lb uplift at j						M
BOT CHORD		200/161, 6-7=-126/118 3=-135/147,	в, <sup>э</sup> )	International	designed in accor Residential Code nd referenced star Standard	sections	R502.11.1 a	nd			A	STATE OF I	MISSOLAN
WEBS	9-10=-135/147, 8-9= 6-9=-149/167, 5-10= 4-11=-149/105, 3-12		189								-	FO.	× Ju An
NOTES											AL A	PE-2022	BER 042259



Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	V2	Valley	1	1	Job Reference (optional)	164525087

Run: 8,63 S Nov 1 2023 Print: 8,630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 13:59:20 ID:k9HPTm2vTtVcNGw8ZzmicAzJtkT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:40.1

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

	, i): [0:Edg0;0 E 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		тс	0.39	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	0.10	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC20	18/TPI2014	Matrix-S							Weight: 43 lb	FT = 20%
LUMBER TOP CHORD	2x4 SP No.2			chord live loa	as been designed fo ad nonconcurrent w	ith any	other live load	ds.					
BOT CHORD	2x4 SP No.2		6		are assumed to be	SP No	2 crushing						
WEBS	2x3 SPF No.2		-	capacity of 5		(h dh		_					
OTHERS	2x3 SPF No.2		(		hanical connection e capable of withsta								
BRACING					ift at joint 6 and 116			Jint					
TOP CHORD	Structural wood she 6-0-0 oc purlins, ex		ed or 8	) This truss is	designed in accord	lance w	ith the 2018						
BOT CHORD	Rigid ceiling directly bracing.		с		Residential Code s nd referenced stand			nd					
REACTIONS	0	5=11-7-1, 6=11-7-1	I, L	OAD CASE(S)	Standard								
	7=11-7-1												
	Max Horiz 1=243 (LC	,											
	Max Uplift 5=-39 (LC 7=-116 (L		,										
	Max Grav 1=132 (LC												
FORCES	(lb) - Maximum Com Tension	pression/Maximum											
TOP CHORD	1-2=-385/228, 2-3=- 4-5=-109/121	294/188, 3-4=-142/1	118,										
BOT CHORD WEBS	1-7=-110/120, 6-7=- 3-6=-311/291, 2-7=-	,	120										
NOTES												and	alle
1) Wind: ASC Vasd=91m Ke=1.00; C exterior zo Interior (1) exposed ;	CE 7-16; Vult=115mph nph; TCDL=6.0psf; BC Cat. II; Exp C; Enclose one and C-C Exterior(2 ) 5-7-9 to 11-6-5 zone; end vertical left and right	DL=6.0psf; h=35ft; d; MWFRS (envelop E) 0-7-9 to 5-7-9, cantilever left and ri ght exposed;C-C for	ight									STATE OF NATH	
Lumber D0	and forces & MWFRS OL=1.60 plate grip DO	L=1.60	,								14	athans	Ver Jacob
<ol><li>Truss des</li></ol>	signed for wind loads ir	n the plane of the tru	ISS								217	DE 0000	010050 149

2) 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.



March 28,2024

PE-2022042259

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Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	V3	Valley	1	1	Job Reference (optional)	164525088

#### Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries. Inc. Wed Mar 27 13:59:20 ID:hYPAuS3A?UIKca3XhOoAhbzJtkR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





OTHERS

Scale = 1:31.9									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	0.34	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 32 lb	FT = 20%
	2x4 SP No.2 2x4 SP No.2	•	bearing pla 4 and 157 l	chanical connec te capable of wit b uplift at joint 5.	hstanding 3	32 lb uplift at j						
WEBS	2x3 SPF No.2		<ol><li>This truss is</li></ol>	s designed in ac	cordance w	ith the 2018						

8-11-1

8) 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

BRACING		
TOP CHORD	Structural	wood sheathing directly applied or
	6-0-0 oc p	ourlins, except end verticals.
BOT CHORD	0	ing directly applied or 10-0-0 oc
	bracing.	
REACTIONS	(size)	1=8-11-1, 4=8-11-1, 5=8-11-1
	Max Horiz	1=183 (LC 9)
	Max Uplift	4=-32 (LC 9), 5=-157 (LC 12)
	Max Grav	1=153 (LC 20), 4=126 (LC 1),
		5=463 (LC 1)
FORCES	(lb) - Max	imum Compression/Maximum
	Tension	
	4 0 000	400 0 0 404/400 0 4 405/407

2x3 SPF No.2

TOP CHORD 1-2=-308/189, 2-3=-131/103, 3-4=-105/127 BOT CHORD 1-5=-85/92. 4-5=-85/92 2-5=-360/350 WFBS

#### 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 8-10-5 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.



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Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	V4	Valley	1	1	Job Reference (optional)	164525089

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 13:59:20 ID:9kzY5o4omouBEjejF6JPEpzJtkQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Page: 1



6-3-1

3x4 🍃

1.5x4 🛚

Scale = 1:2	5.5

					-							
Loading TCLL (roof)	(psf) 25.0	Spacing Plate Grip DOL	2-0-0 1.15	CSI TC	0.73	DEFL Vert(LL)	in n/a	(loc) -	l/defl n/a	L/d 999	PLATES MT20	<b>GRIP</b> 244/190
TCDL BCLL	10.0 0.0	Lumber DOL Rep Stress Incr	1.15 YES	BC WB	0.39 0.00	Vert(TL) Horiz(TL)	n/a 0.00	- 3	n/a n/a	999 n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 20%
LUMBER				designed in acco								
TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2			I Residential Code and referenced sta			and					
WEBS	2x3 SPF No.2		LOAD CASE(S			0,1111.						
BRACING												
TOP CHORD	Structural wood she		ed or									
BOT CHORD	6-0-0 oc purlins, exe Rigid ceiling directly bracing.		;									
	(size) 1=6-3-1, 3 Max Horiz 1=124 (LC Max Uplift 1=-39 (LC Max Grav 1=250 (LC	C 9) 5 12), 3=-70 (LC 12)										
FORCES	(lb) - Maximum Com Tension	pression/Maximum										
TOP CHORD BOT CHORD	1-2=-170/115, 2-3=- 1-3=-57/62	195/241										
NOTES												
Vasd=91m Ke=1.00; ( exterior zo Interior (1) exposed; members a Lumber DC 2) Truss des only. For s see Stand or consult 3) Gable requ	E 7-16; Vult=115mph pph; TCDL=6.0psf; BC Cat. II; Exp C; Enclose ne and C-C Exterior(2 5-7-9 to 6-2-5 zone; c end vertical left and rig and forces & MWFRS DL=1.60 plate grip DO igned for wind loads ir studs exposed to wind ard Industry Gable En- qualified building desiguires continuous botton	DL=6.0psf; h=35ft; d; MWFRS (envelop E) 0-7-9 to 5-7-9, antilever left and rig ght 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	ht ss ,							HA	STATE OF I	NIEL YE V
<ul> <li>5) This truss chord live</li> <li>6) All bearing capacity of</li> </ul>	Is spaced at 4-0-0 oc. has been designed for load nonconcurrent wi ls are assumed to be \$ f 565 psi. echanical connection (	th any other live load SP No.2 crushing									PE-2022	18B
bearing pla	ate capable of withstar o uplift at joint 3.										SSIONA	L EN
											March	28,2024

Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	V5	Valley	1	1	Job Reference (optional)	164525090

3-7-1

3-7-1

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 13:59:20 ID:X3j9csSdTd?hyQgxh8rn6OzwvzW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

1.5x4 🛚 2







Scale = 1:20.4 CSI (nsf) Spacing 2-0-0 DEFI in (loc) l/defl nnihen

<b>Loading</b> TCLL (roof) TCDL BCLL BCDL	(psf) 25.0 10.0 0.0 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI           TC         0.3           BC         0.1           WB         0.0           Matrix-P         0.0	9 Ver	FL in t(LL) n/a t(TL) n/a riz(TL) n/a	-	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 7 lb	<b>GRIP</b> 197/144 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x3 SPF No.2 2x3 SPF No.2 2x3 SPF No.2 Structural wood she 3-7-9 oc purlins, ex Rigid ceiling directly bracing.	cept end verticals.	International R802.10.2 a LOAD CASE(S) d or	designed in accordance Residential Code section nd referenced standard Standard	ons R50	2.11.1 and					
FORCES	(size) 1=3-7-9, 3 Max Horiz 1=67 (LC Max Uplift 1=-13 (LC Max Grav 1=138 (LC (Ib) - Maximum Com Tension	12) : 12), 3=-47 (LC 12) C 1), 3=138 (LC 1) pression/Maximum									
Vasd=91m Ke=1.00; C exterior zo and right e	TOP CHORD 1-2=-72/39, 2-3=-107/128 BOT CHORD 1-3=0/0 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) zone; cantilever left and right exposed ; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown;										
<ol> <li>Truss desionly. For sise Standator consult</li> <li>Gable required</li> <li>Gable studies</li> <li>Gable studies</li> <li>This truss lichord live list</li> <li>All bearing capacity of provide me bearing place</li> </ol>	igned for wind loads ir studs exposed to wind ard Industry Gable En- qualified building desig irres continuous bottoo Is spaced at 4-0-0 oc. has been designed for load nonconcurrent wi s are assumed to be s	n the plane of the true (normal to the face) d Details as applicab gner as per ANSI/TP n chord bearing. • a 10.0 psf bottom th any other live load SPF No.2 crushing by others) of truss to	, le, l 1. ls.							PE-2022	BER 042259

March 28,2024

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Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	V6	Valley	1	1	Job Reference (optional)	164525091

2-7-1

2-7-1

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

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1.5x4 u

1-3-12

Page: 1





1.5x4 u

Scale = 1:18.4												
Loading TCLL (roof) TCDL BCLL BCDL	(psf) 25.0 10.0 0.0 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	<b>CSI</b> TC BC WB Matrix-P	0.15 0.08 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: 5 lb	<b>GRIP</b> 197/144 FT = 20%
	2x3 SPF No.2 2x3 SPF No.2 Structural wood she 2-7-9 oc purlins, ex Rigid ceiling directly bracing.	cept end verticals. v applied or 10-0-0 or 3=2-7-9 12) 12), 3=-32 (LC 12)	Internationa R802.10.2 a LOAD CASE(S) ed or	designed in accord I Residential Code and referenced stan Standard	sections	8 R502.11.1 and	d					
FORCES TOP CHORD BOT CHORD NOTES	(lb) - Maximum Com Tension 1-2=-49/26, 2-3=-72 1-3=0/0	npression/Maximum										
<ol> <li>Wind: ASC Vasd=91m Ke=1.00; 0 exterior zo and right e members a Lumber D0</li> </ol>	CE 7-16; Vult=115mph nph; TCDL=6.0psf; BC Cat. II; Exp C; Enclose one and C-C Exterior(2 exposed ; end vertical and forces & MWFRS OL=1.60 plate grip DC	DL=6.0psf; h=35ft; ed; MWFRS (envelop 2E) zone; cantilever l left exposed;C-C for for reactions shown DL=1.60	left ;								5055	all
only. For see Standa	signed for wind loads in studs exposed to wind lard Industry Gable En qualified building desi	l (normal to the face) d Details as applical	), ble,							A	STATE OF NATH	ANIEL
<ol><li>Gable requ</li></ol>	uires continuous botto	m chord bearing.							C	Br.	FC	X
5) This truss chord live	ds spaced at 4-0-0 oc. has been designed fo load nonconcurrent wigs are assumed to be \$	r a 10.0 psf bottom ith any other live loa	ds.							MA	Than	FR Tiop
capacity of 7) Provide me bearing pla		(by others) of truss t								AS.	PE-2022	ENGL



March 28,2024

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Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	V7	Valley	1	1	Job Reference (optional)	164525092

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Page: 1



5-0-0

Scale = 1:23.5			I					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	0.89	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 10 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD	2x3 SPF No.2 2x3 SPF No.2 2x3 SPF No.2		Internationa R802.10.2 LOAD CASE(S	<ul> <li>designed in ac</li> <li>al Residential Cc</li> <li>and referenced s</li> <li>Standard</li> </ul>	ode sections	R502.11.1 a	and					
I OP CHORD	Structural wood she except end verticals		ea,									
BOT CHORD	Rigid ceiling directly bracing.	applied or 10-0-0 o										
	(size) 1=5-3-9, 3 Max Horiz 1=104 (L0 Max Uplift 1=-20 (L0	C 12)										

5-0-0

	Max Uplift	1=-20 (LC 12), 3=-72 (LC 12)
	Max Grav	1=213 (LC 1), 3=213 (LC 1)
FORCES	(lb) - Max Tension	imum Compression/Maximum
		50 2-3165/107

#### TOP CHORD 1-2=-111/59, 2-3=-165/197 BOT CHORD 1-3=0/0

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) 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 2) 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 SPF No.2 crushing 6) capacity of 425 psi.
- Provide mechanical connection (by others) of truss to 7) bearing plate capable of withstanding 20 lb uplift at joint 1 and 72 lb uplift at joint 3.



 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	
P240300	V8	Valley	1	1	Job Reference (optional)	164525093

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(psf) Spacin	<b>a</b> 2-0-0										
	g 2-0-0	[ C	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
25.0 Plate G	rip DOL 1.15	Т	тс с	0.43	Vert(LL)	n/a	-	n/a	999	MT20	197/144
10.0 Lumbe	DOL 1.15	E	3C (	0.23	Vert(TL)	n/a	-	n/a	999		
0.0 Rep St	ess Incr YES	v	NB (	80.0	Horiz(TL)	n/a	-	n/a	n/a		
10.0 Code	IRC201	8/TPI2014 N	Matrix-P							Weight: 17 lb	FT = 20%
	10.0 Lumber 0.0 Rep Str	10.0Lumber DOL1.150.0Rep Stress IncrYES	10.0         Lumber DOL         1.15         E           0.0         Rep Stress Incr         YES         V           10.0         Code         IRC2018/TPI2014         N	10.0         Lumber DOL         1.15         BC           0.0         Rep Stress Incr         YES         WB           10.0         Code         IRC2018/TPI2014         Matrix-P	10.0         Lumber DOL         1.15         BC         0.23           0.0         Rep Stress Incr         YES         WB         0.08           10.0         Code         IRC2018/TPI2014         Matrix-P	10.0         Lumber DOL         1.15         BC         0.23         Vert(TL)           0.0         Rep Stress Incr         YES         WB         0.08         Horiz(TL)           10.0         Code         IRC2018/TPI2014         Matrix-P         Horiz(TL)	10.0         Lumber DOL         1.15         BC         0.23         Vert(TL)         n/a           0.0         Rep Stress Incr         YES         WB         0.08         Horiz(TL)         n/a	10.0         Lumber DOL         1.15         BC         0.23         Vert(TL)         n/a         -           0.0         Rep Stress Incr         YES         WB         0.08         Horiz(TL)         n/a         -           10.0         Code         IRC2018/TPI2014         Matrix-P         -         -         -	10.0         Lumber DOL         1.15         BC         0.23         Vert(TL)         n/a         -         n/a           0.0         Rep Stress Incr         YES         WB         0.08         Horiz(TL)         n/a         -         n/a           10.0         Code         IRC2018/TPI2014         Matrix-P         -         n/a         -         n/a	10.0         Lumber DOL         1.15         BC         0.23         Vert(TL)         n/a         -         n/a         999           0.0         Rep Stress Incr         YES         WB         0.08         Horiz(TL)         n/a         -         n/a         n/a         1/a           10.0         Code         IRC2018/TPI2014         Matrix-P	10.0         Lumber DOL         1.15         BC         0.23         Vert(TL)         n/a         -         n/a         999           0.0         Rep Stress Incr         YES         WB         0.08         Horiz(TL)         n/a         -         n/a         n/a           10.0         Code         IRC2018/TPI2014         Matrix-P         Weight: 17 lb

WEBS	2x3 SPF I	No.2
OTHERS	2x3 SPF I	No.2
BRACING		
TOP CHORD	Structural	wood sheathing directly applied or
	6-0-0 oc p	ourlins, except end verticals.
BOT CHORD	Rigid ceili	ng directly applied or 10-0-0 oc
	bracing.	
REACTIONS	(size)	1=7-11-9, 4=7-11-9, 5=7-11-9
	Max Horiz	1=162 (LC 12)
	Max Linlift	4 = -46 (  C   12) = -142 (  C   12)

	wax upint	4=-46 (LC 12), 5=-142 (LC 12)
	Max Grav	1=113 (LC 1), 4=136 (LC 1), 5=417
		(LC 1)
FORCES	(lb) - Max	imum Compression/Maximum
	Tension	

TOP CHORD 1-2=-237/110, 2-3=-81/35, 3-4=-105/109 BOT CHORD 1-5=0/0 4-5=0/0 WFBS 2-5=-324/335

#### 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) 0-5-9 to 5-5-9, Interior (1) 5-5-9 to 7-10-5 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.
- 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 SPF No.2 crushing 6)
- capacity of 425 psi.

8) 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



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

Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	V9	Valley	1	1	Job Reference (optional)	164525094

Run: 8,63 S Nov 1 2023 Print: 8,630 S Nov 1 2023 MiTek Industries, Inc. Wed Mar 27 13:59:20 ID:X3j9csSdTd?hyQgxh8rn6OzwvzW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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10-7-1

Scale = 1:38

ocale = 1.50													
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	18/TPI2014	CSI TC BC WB Matrix-S	0.41 0.21 0.09	<b>DEFL</b> Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 5	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 25 lb	<b>GRIP</b> 197/144 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	<ul> <li>2x3 SPF No.2</li> <li>Structural wood sheat</li> <li>6-0-0 oc purlins, exc</li> <li>Rigid ceiling directly bracing.</li> <li>(size) 1=10-7-9, 7=10-7-9</li> </ul>	athing directly applie sept end verticals. applied or 10-0-0 or 5=10-7-9, 6=10-7-9	5 6 7 ed or 8 c	<ul> <li>This truss ha chord live loa</li> <li>All bearings capacity of 4</li> <li>Provide mec bearing plate 5, 135 lb upl</li> <li>This truss is International</li> </ul>	as been designed ad nonconcurren are assumed to b 25 psi. hanical connection e capable of with- ift at joint 6 and 1 designed in acco Residential Cod nd referenced sta	t with any be SPF No on (by oth standing 4 105 lb uplit ordance w le sections	other live loa b.2 crushing ers) of truss t 9 lb uplift at j t at joint 7. th the 2018 R502.11.1 a	to joint				Trogn. 2018	
	Max Horiz 1=220 (LC Max Uplift 5=-49 (LC 7=-105 (L0 Max Grav 1=91 (LC (LC 1), 7=	: 12), 6=-135 (LC 12 C 12)											
FORCES	(lb) - Maximum Com	. ,											
TOP CHORD	Tension 1-2=-299/129, 2-3=-2 4-5=-110/101	212/91, 3-4=-83/44,											
BOT CHORD WEBS													
NOTES	5-0=-511/205, 2-7=-2	2001220											
<ol> <li>Wind: AS Vasd=91 Ke=1.00; exterior z Interior (1 exposed and force DOL=1.6</li> <li>Truss de only. For</li> </ol>	SCE 7-16; Vult=115mph mph; TCDL=6.0psf; BCI ; Cat. II; Exp C; Enclosecone and C-C Exterior(2 1) 5-5-9 to 10-6-5 zone; ; end vertical left expose es & MWFRS for reactio 00 plate grip DOL=1.60 ssigned for wind loads ir s tuds exposed to wind dard Industry Gable Enc	DL=6.0psf; h=35ft; d; MWFRS (envelop E) 0-5-9 to 5-5-9, cantilever left and ri ed;C-C for members ns shown; Lumber the plane of the tru (normal to the face)	ight s iss ),							-	Ma		NIEL YZY

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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March 28,2024

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Job	Truss	Truss Type	Qty	Ply	Roof	
P240300	V10	Valley	1	1	Job Reference (optional)	164525095

13-3-1

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

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> 1.5x4 II 5



1.5x4 u 3x4 🧔 Δ 10 3 6-7-12 6-7-12 1.5x4 u 2 12 61 0-0-4 6 9 8 7 3x4 1.5x4 II 1.5x4 🛚 3x4 = 1.5x4 II 13-3-1 Scale = 1:46.5 Plate Offsets (X, Y): [3:0-2-0,Edge] Loading Spacing 2-0-0 CSI DEFL l/defl L/d (psf) in (loc) Plate Grip DOL TCLL (roof) 25.0 1.15 тс 0.59 Vert(LL) n/a 999 n/a 10.0 Lumber DOL 1.15 BC 0.32 Vert(TL) n/a n/a 999 0.0 Rep Stress Incr YES WB Horiz(TL) 6 0.14 0.00 n/a n/a 10.0 Code IRC2018/TPI2014 Matrix-S LUMBER 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. TOP CHORD 2x3 SPF No.2 All bearings are assumed to be SPF No.2 crushing 6) BOT CHORD 2x3 SPF No.2 capacity of 425 psi. 2x3 SPF No.2 WEBS Provide mechanical connection (by others) of truss to 2x3 SPF No.2 7) OTHERS bearing plate capable of withstanding 52 lb uplift at joint BRACING 6, 121 lb uplift at joint 7 and 157 lb uplift at joint 9. TOP CHORD Structural wood sheathing directly applied or 8) This truss is designed in accordance with the 2018 6-0-0 oc purlins, except end verticals. International Residential Code sections R502.11.1 and BOT CHORD Rigid ceiling directly applied or 10-0-0 oc R802.10.2 and referenced standard ANSI/TPI 1. bracing. LOAD CASE(S) Standard **REACTIONS** (size) 1=13-3-9, 6=13-3-9, 7=13-3-9, 9=13-3-9 Max Horiz 1=278 (LC 12) Max Uplift 6=-52 (LC 12), 7=-121 (LC 12), 9=-157 (LC 12) 1=179 (LC 1), 6=151 (LC 1), 7=357 Max Grav (LC 1), 9=459 (LC 1) FORCES (lb) - Maximum Compression/Maximum Tension



NOTES

TCDL

BCLL

BCDL

- 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) 0-5-9 to 5-3-9, Interior (1) 5-3-9 to 13-2-5 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 2) 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)



PLATES

Weight: 33 lb

MT20

GRIP

197/144

FT = 20%

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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.