

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

Re: MSA2408-R 1408 NE ERNEST WAY, LEE'S SUMMIT

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Quality Truss LLC.

Pages or sheets covered by this seal: I71166308 thru I71166342

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

Missouri COA: Engineering 001193



February 5,2025

**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.

Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	CJ3	Jack-Open	5	1	Job Reference (optional)	171166308

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:22 ID:E6Ob4EvW3MSZNIvUtT0YHcz1iTe-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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### 1-10-15 4-4-9 1-10-15 2-5-10 4-4-9 12 2.83 Г 1.5x4 u 3 2 1-6-5 1-6-5 0-5-15 ð K 4 5 3x4 =



1.5x4 🛚 1-10-15

0-2-8

Scale = 1:18.8

-												
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	0.27	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	0.01	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.02	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP		Wind(LL)	0.00	4-5	>999	360		
BCDL	10.0										Weight: 14 lb	FT = 0%
			7) Provide n	nechanical connection	on (by oth	ers) of truss	to					
TOP CHORD	2x4 SP No 2		bearing p	late capable of withs	standing 1	9 lb uplift at	joint					
BOT CHORD	2x4 SP No.2		3, 12 lb u	plift at joint 4 and 38	lb uplift a	it joint 5.	•					
WEBS	2x4 SP No.2		<ol><li>This truss</li></ol>	is designed in acco	rdance w	ith the 2018						
BRACING			Internatio	nal Residential Code	e sections	s R502.11.1 a	and					
TOP CHORD	Structural wood she	athing directly applie	ed or R802.10.	2 and referenced sta	andard AN	ISI/TPI 1.						
	4-4-9 oc purlins.	3,	LOAD CASE	(S) Standard								
BOT CHORD	Rigid ceiling directly	applied or 10-0-0 o	C									
	bracing.											
REACTIONS	(size) 3= Mecha	nical, 4= Mechanica	al,									
	5=0-4-15											
	Max Horiz 5=27 (LC	8)										
	Max Uplift 3=-19 (LC	5 12), 4=-12 (LC 18)	,									
	0=-38 (LU Max Gray 2=64 (LC	· 8) 19) 1-22 (IC 7) 5.	-450									
	(I C 18)	10), 4=23 (LC 7), 5	=450									
FORCES	(lb) - Maximum Com	pression/Maximum										
- ONOLO	Tension	procolori/maximam										
TOP CHORD	1-2=-25/35, 2-3=-39/	/9										
BOT CHORD	1-5=-4/27, 4-5=0/0											
WEBS	2-5=-320/50											
NOTES												
1) Wind: ASC	CE 7-16; Vult=115mph	(3-second gust)									~	The
Vasd=91n	nph; TCDL=6.0psf; BC	DL=6.0psf; h=20ft; (	Cat.								A	and
II; Exp B;	Enclosed; MWFRS (en	velope) exterior zor	ne;								F. OF I	NISS W
cantilever	left and right exposed	; end vertical left an	d							4		A S
	Sed; Lumber DOL=1.60	o plate grip DOL=1.	0U 1 15							H	SCOT	TM. VEN
2) TOLL AS	-1 15): Pf-25.0 psi (l	um DOL – 1 15 Plat	Δ							Ø	SEV	ER VV
DOL = 1.1	15): Is=1.0: Rough Cat	B: Fully Exp.: Ce=0	.9:							8		
Cs=1.00;	Ct=1.10	,,,,	- /							ax	1 +149	Stor Alland
3) Unbalance	ed snow loads have be	en considered for th	nis						_	K	our -	o yey
design.										2	ST NUM	BER E
4) This trues	has been designed for	a 10.0 nsf bottom								1 1 1	○\ PE_2001	018807 1054

4) chord live load nonconcurrent with any other live loads. 5) Bearings are assumed to be: , Joint 5 SP No.2 .

6) Refer to girder(s) for truss to truss connections.





Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	СЈЗА	Jack-Open	1	1	Job Reference (optional)	171166309

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:23 ID:vKaCW2\_vZclXzN?QsttoADya1jE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



1-10-15

0-2-8

Scale = 1:17.9

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 25.0 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 IRC2018/TPI201	CSI TC BC WB 4 Matrix-MP	0.23 0.22 0.03	DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in 0.00 0.00 -0.01 0.00	(loc) 4-5 4-5 3 4-5	l/defl >999 >999 n/a >999	L/d 240 180 n/a 360	PLATES MT20 Weight: 11 lb	<b>GRIP</b> 244/190 FT = 0%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood she 3-3-8 oc purlins. Rigid ceiling directly bracing	eathing directly applie	7) Provid bearin 3, 61 ll 8) This tr Interna ed or R802. LOAD CA	e mechanical connectio g plate capable of withs o uplift at joint 4 and 45 uss is designed in accor- tional Residential Code 0.2 and referenced sta <b>SE(S)</b> Standard	n (by oth tanding 2 Ib uplift a rdance w sections ndard AN	ers) of truss t ?6 lb uplift at j it joint 5. ith the 2018 § R502.11.1 a ISI/TPI 1.	to oint and					
REACTIONS	(size) 3= Mecha 5=0-4-15 Max Horiz 5=21 (LC Max Uplift 3=-26 (LC (LC 8) Max Grav 3=-2 (LC (LC 18)	anical, 4= Mechanica 8) C 7), 4=-61 (LC 18), 5 8), 4=13 (LC 8), 5=4	ıl, 5=-45 46									
FORCES	(lb) - Maximum Con Tension	npression/Maximum										
TOP CHORD BOT CHORD WEBS	1-2=-17/31, 2-3=-33 1-5=-4/21, 4-5=0/0 2-5=-277/40	3/0										
NOTES 1) Wind: ASC Vasd=91n II; Exp B; cantilever right expo: 2) TCLL: ASC Plate DOL DOL = 1.1 Cs=1.00; 3) Unbalance design. 4) This truss chord live	CE 7-16; Vult=115mpt nph; TCDL=6.0psf; BC Enclosed; MWFRS (ei left and right exposed sed; Lumber DOL=1.6 CE 7-16; Pr=25.0 psf (L 5); Is=1.0; Rough Cat Ct=1.10 ed snow loads have be has been designed fo	n (3-second gust) DL=6.0psf; h=20ft; C nvelope) exterior zon ; end vertical left and 0 plate grip DOL=1.6 (roof LL: Lum DOL=1 .um DOL = 1.15 Plate B; Fully Exp.; Ce=0. een considered for th r a 10.0 psf bottom ith any other live load	Cat. e; d 1.15 e 9; iis						l A		STR OF M SCOTT SEVI NUM PE-20010	MISSOLIE FM. ER DER 018807

chord live load nonconcurrent with any other live load5) Bearings are assumed to be: , Joint 5 SP No.2 .

6) Refer to girder(s) for truss to truss connections.

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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)



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Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	CJ5	Diagonal Hip Girder	2	1	Job Reference (optional)	171166310

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:23 ID:E6Ob4EvW3MSZNIvUtT0YHcz1iTe-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1







0-2-8

Scale = 1:19.4

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	0.36	Vert(LL)	0.01	4-5	>999	240	MT20	244/190	
Snow (Pf)	25.0	Lumber DOL	1.15		BC	0.18	Vert(CT)	0.01	4-5	>999	180			
TCDL	10.0	Rep Stress Incr	NO		WB	0.04	Horz(CT)	-0.01	3	n/a	n/a			
BCLL	0.0	Code	IRC2018	3/TPI2014	Matrix-MP		Wind(LL)	0.00	4-5	>999	360			
BCDL	10.0											Weight: 16 lb	FT = 0%	
LUMBER TOP CHORD 30T CHORD WEBS BRACING TOP CHORD 30T CHORD REACTIONS	$\begin{array}{c} 2x4 \text{ SP No.2} \\ 2x4 \text{ SP No.2} \\ 2x4 \text{ SP No.2} \\ \\ \hline \\ x4 \text{ SP No.2} \\ \\ \hline \\ x1 \text{ oc purlins.} \\ \hline \\ x1 \text{ oc purlins.} \\ \\ x1 \text{ oc purlins.} \\ \hline \\ x2 \text{ oc purlins.} \\ \hline \\ x2 \text{ oc purlins.} \\ \hline \\ x1 \text{ oc purlins.} \\ \hline \\ x2 \text{ oc purlins.} \\ \hline \\ x3 \text{ oc purlins.} \\ \hline \\ x4  oc$	athing directly applie applied or 10-0-0 oc nical, 4= Mechanica 8) 12), 4=-6 (LC 38), 5 2 18), 4=41 (LC 7), 5	7) 8) d or 9) 1, 5=-36 10] =478 LO 1)	Provide mec bearing plate 3, 6 lb uplift a This truss is International R802.10.2 au Hanger(s) or provided suff down and 18 dosign/selec responsibility In the LOAD of the truss a AD CASE(5) Dead 4 Soc	hanical connectic capable of withs at joint 4 and 36 II designed in acco Residential Code and referenced sta other connection ficient to support I bup at 4-5-10 of bup at 4-5-10 of bup at 4-5-10 of bup at 4-5-10 of ton of such conn of others. CASE(S) section re noted as front Standard	n (by oth) standing 2 b uplift at rdance wi e sections indard AN n device(s concentra on top cho on bottom ection devi- n, loads ap (F) or bac	ers) of truss 3 lb uplift at joint 5. th the 2018 R502.11.1 a SI/TPI 1. ) shall be ted load(s) 3 ord, and 5 lb o chord. The vice(s) is the oplied to the ck (B).	to joint and 31 lb face						
FORCES	(LC 18) (Ib) - Maximum Com	pression/Maximum	.,	Increase=1	.15 ads (lb/ft)		0000 1110,	- late						
	Tension	47		Vert: 1-3	=-70, 4-6=-20									
	1-2=-31/39, 2-3=-40/	17		Concentrate	ed Loads (lb)									
MERS	1-5=-7/32, 4-5=0/0 2-5370/61			Vert: 10=	:3 (B)									
	2-3370/01													
<ol> <li>Wind: ASI Vasd=91r</li> <li>II; Exp B; cantilever right expo</li> <li>TCLL: AS Plate DOI DOL = 1.<sup>-</sup> Cs=1.00;</li> <li>Unbalanc design.</li> <li>This truss chord live</li> </ol>	CE 7-16; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (en left and right exposed sed; Lumber DOL=1.6 (CE 7-16; Pr=25.0 psf (L =1.15); Pf=25.0 psf (L 15); Is=1.0; Rough Cat Ct=1.10 ed snow loads have be has been designed for load nonconcurrent wi	(3-second gust) DL=6.0psf; h=20ft; C velope) exterior zon ; end vertical left and 0 plate grip DOL=1.6 roof LL: Lum DOL=1 um DOL = 1.15 Plate B; Fully Exp.; Ce=0. en considered for th : a 10.0 psf bottom th any other live load	Cat. e; d .15 ∋ 9; is								* Ph	STATE OF I SCOT SEVI PE-2001	MISSOUR MISSOUR ER MER MISSOUR ER MISSOUR ER MISSOUR ER MISSOUR ER	

chord live load nonconcurrent with any other live loa5) Bearings are assumed to be: , Joint 5 SP No.2 .

6) Refer to girder(s) for truss to truss connections.

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

February 5,2025

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Job	Truss Truss Type								Qty	Ply	1408 NE I	ERNEST	WAY,	LEE'S SUMMI	Г
MSA2408-F	R	GR1			Hip Gir	rder			1	2	Job Refer	ence (or	tional)		171166311
Quality Truss LL	.C (Smithville, M	D), Smithv	ille, MO - 640	089,			Run: 8.8	B3 S Jan 17 20	25 Print: 8.	330 S Jan 17	2025 MiTek	Industries	s, Inc. M	on Feb 03 11:17:2	25 Page: 1
	4-2-0 4-2-0 4-2-0	4 <sup>12</sup> 3x4 = 2	2-4 0-4 5x5=	<u>13-2-1</u> 5-11-1: <u>31</u>	3 32 32 32 32	19-3- 6-1-9 4= 4_ ⊠ <sup>33</sup> ∞	11 12000 10:000 11 12:000 11 12:000 11 12:000 10:000 10:000 10:000 10:000 10:000 10:000 10:000 10:00000 10:0000 10:00000 10:000000 10:0000000 10:00000000	25-5- 6-1-€ 44-6-0	4 0) M18AHS 37 ⊠ 6	330  s Jain 17 $20Tue-RfC?F$ $31$ $6$ $36x14 =$ $38  s$	-5-6 0-2 39 <sub>⊠</sub>	$_{\text{BX4}=}$	3017XbG 3017XbG 35-10-	$\frac{12}{6} + \frac{40}{3}$	3x4     9     4x8     4x8
<sup>−</sup> <sup>2-1</sup>															
	4 4x5=	2 20 43 2x4 II	3 19 4x8=	44 4	45 1 4	8 46 x4=	47 17 16 4x8= 5x	6 48 6=	49 1 4	1450 5 1450 x4= 4x8=	51	13 5 4x4=	52	53 12 4x4=	54 11 55 ⊠ 2x4 u 4x5=
Scale = 1:74 7	1-3-0 4-2-( 1-3-0 2-11-	) 7- 0 2-1	0-8 0-8	<u>13-2-1</u> 6-1-9		19-3- 6-1-{	11   9	<u>25-5-</u> 6-1-§	4)	<u>31</u> 6	<u>-5-6</u> 0-2	+	<u>37-5-</u> 6-0-2	- <u>8 40-</u> 2 2-1	4-0 + 43-3-0 44-6-0 0-8 2-11-0
Plate Offsets (	X, Y): [1:0-6-	10,0-0-4]	, [1:0-0-4,1	-2-12], [3:0	-2-8,0-2	-11], [10:0-2-6	i,0-0-6], [10	):0-0-4,1-2-12	]						
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 25.0 25.0 10.0 0.0 10.0	Spacing Plate Grip Lumber D Rep Stres Code	DOL OL ss Incr	2-0-0 1.15 1.15 NO IRC2018	8/TPI2014	CSI TC BC WB Matrix-M	0.8 0.3 0.7 IR	6 Vert( 1 Vert( 5 Horz( Wind	- _L) -0. CT) -0. (CT) 0. (LL) 0.	in (loc) 15 16-18 23 16-18 02 10 05 18	l/defl >999 >999 n/a >999	L/d 240 180 n/a 360	PLATES MT20 M18AHS Weight: 502 It	<b>GRIP</b> 244/190 186/179 D FT = 0%
LUMBER TOP CHORD BOT CHORD WEBS WEDGE BRACING TOP CHORD BOT CHORD REACTIONS	No.0         Code         IF           0.0         10.0         Code         IF           0.0         10.0         Code         IF           200         10.0         Code         IF           RD         2x4 SP No.2 *Except*         6-8:2x4 SP No.1         RD           RD         2x6 SP 2400F 2.0E         2x4 SP No.2         Right: 2x4 SP No.2           RD         Structural wood sheathing directly applied or 5-6-0 oc purlins, except         2-0-0 oc purlins (4-11-3 max.): 3-8.           RD         Rigid ceiling directly applied or 10-0-0 oc bracing, Except:         6-0-0 oc bracing: 15-16.           NS         (size)         1=0-3-8, 10=0-3-8, 15=0-3-8           Max Horiz         1=28 (LC 12)         Max Horiz           Max Uplift         1=-94 (LC 12), 10=-75 (LC 13), 15=-190 (LC 8)           Max Grav         1-2348 (L C 36)         10-1581 (L C 36)					DTES 2-ply truss tr (0.148"x3") of Top chords oc. Bottom chor staggered a Web connec All loads are except if not CASE(S) se provided to unless other Unbalanced this design. Wind: ASCE Vasd=91mp II; Exp B; Er cantilever le	b be connect nails as foll connected ds connect t 0-9-0 oc. cted as font e considere- red as front distribute of wise indica roof live lo 57-16; Vult- h; TCDL=6 nclosed; MV ft and right	cted together lows: as follows: 2x ted as follows ows: 2x4 - 1 rd d equally app (F) or back (I o ply connect inly loads note ated. ads have bee =115mph (3-6 0.0psf; BCDL= WFRS (envelo exposed ; en DQL = 1 60 pt	with 10d 4 - 1 row 2x6 - 2 r wat 0-9- lied to all 3) face in ons have d as (F) o n conside second gu 6.0psf; h- ope) exter d vertical	at 0-9-0 ows 0 oc. plies, the LOAD been or (B), ered for ist) =20ft; Cat. ior zone; left and 0 = 1.60	13) Gra	aphical p	ourlin re tation o rd.	presentation do	bes not depict the size
FORCES	(lb) - Maxim	um Com	pression/M	aximum	5)	TCLL: ASCE	ea; Lumber E 7-16; Pr=	25.0 psf (roof	LL: Lum	DOL=1.60 DOL=1.15					
TOP CHORD	$ \begin{array}{llllllllllllllllllllllllllllllllllll$					i.15); Pt=2 ); Is=1.0; Ro =1.10 snow loads	ough Cat B; F s have been o	ully Exp.;	Ce=0.9; d for this				TE OF	MISSO	
BOT CHORD	8-9=-2019/128, 9-10=-2077/129 DRD 1-20=-150/3179, 19-20=-150/3179, 18-19=-159/4689, 16-18=-62/2039, 15-16=-3376/141, 13-15=-40/639, 12-13=-75/1882, 11-12=-90/1899, 10-11=-90/1899				7) 8) 9) 10	<ul> <li>design.</li> <li>7) Provide adequate drainage to prevent water ponding.</li> <li>8) All plates are MT20 plates unless otherwise indicated.</li> <li>9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> </ul>									
WEBS	10-11=-90/1899 3-19=0/455, 8-12=0/465, 2-20=-444/12, 2-19=-10/895, 9-11=-94/48, 9-12=-5/219, 6-15=-3488/256, 7-13=0/718, 7-15=-4645/171, 8-13=-1482/64, 4-18=-825/183, 4-19=-886/29, 5-16=-2156/215, 6-16=-193/5889, 5-18=-108/2864				11	<ul> <li>) Provide mec bearing plate 15, 94 lb upl</li> <li>?) This truss is International R802.10.2 a</li> </ul>	chanical con e capable c lift at joint 1 designed i I Residentia and reference	nnection (by o of withstandin and 75 lb up in accordance al Code section ced standard	bithers) of g 190 lb u lift at joint with the ons R502. ANSI/TPI	 truss to plift at join 10. 2018 11.1 and 1.		4		PE-200 Februa	1018807



Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	GR1	Hip Girder	1	2	Job Reference (optional)	171166311

Run: 8 83 S. Jan 17 2025 Print: 8 830 S. Jan 17 2025 MiTek Industries. Inc. Mon Feb 03 11:17:25

ID:OvBRbz0UWdwxmg5ea\_KzuXz0Tue-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Quality Truss LLC (Smithville, MO), Smithville, MO - 64089,

14) Hanger(s) or other connection device(s) shall be

provided sufficient to support concentrated load(s) 224 Ib down and 46 lb up at 7-2-4, 224 lb down and 45 lb up at 9-3-0, 224 lb down and 45 lb up at 11-3-0, 224 lb down and 45 lb up at 13-3-0, 224 lb down and 45 lb up at 15-3-0, 224 lb down and 45 lb up at 17-3-0, 224 lb down and 45 lb up at 19-3-0, 224 lb down and 45 lb up at 21-3-0, 224 lb down and 45 lb up at 23-3-0, 224 lb down and 45 lb up at 25-3-0, 224 lb down and 45 lb up at 27-3-0, 224 lb down and 45 lb up at 29-3-0, 224 lb down and 45 lb up at 31-3-0, 224 lb down and 45 lb up at 33-3-0, and 224 lb down and 45 lb up at 35-3-0, and 224 lb down and 46 lb up at 37-3-12 on top chord, and 312 lb down and 21 lb up at 3-3-0, 242 lb down and 21 Ib up at 5-3-0, 64 Ib down at 7-3-0, 64 Ib down at 9-3-0, 64 lb down at 11-3-0, 64 lb down at 13-3-0, 64 lb down at 15-3-0, 64 lb down at 17-3-0, 64 lb down at 19-3-0, 64 lb down at 21-3-0, 64 lb down at 23-3-0, 64 Ib down at 25-3-0, 64 lb down at 27-3-0, 64 lb down at 29-3-0, 64 lb down at 31-3-0, 64 lb down at 33-3-0, 64 Ib down at 35-3-0, 64 lb down at 37-3-0, and 242 lb down and 21 lb up at 39-3-0, and 312 lb down and 21 lb up at 41-3-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

### LOAD CASE(S) Standard

 Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (lb/ft)

Vert: 1-3=-70, 3-8=-70, 8-10=-70, 21-26=-20 Concentrated Loads (lb)

Vert: 3=-189 (B), 19=-53 (B), 12=-53 (B), 6=-189 (B), 15=-53 (B), 7=-189 (B), 13=-53 (B), 8=-189 (B), 4=-189 (B), 18=-53 (B), 5=-189 (B), 16=-53 (B), 31=-189 (B), 32=-189 (B), 33=-189 (B), 34=-189 (B), 35=-189 (B), 37=-189 (B), 38=-189 (B), 39=-189 (B), 40=-189 (B), 47=-53 (B), 42=-312 (B), 43=-242 (B), 44=-53 (B), 45=-53 (B), 46=-53 (B), 51=-53 (B), 52=-53 (B), 53=-53 (B), 54=-242 (B), 55=-312 (B)



Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	GR2	Hip Girder	1	2	Job Reference (optional)	171166312

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:27 ID:ICPOvmLIh7FJPuV4HgVb?220U57-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

	4-0-0	7-2-4	11-11-5	16-10-3	21-9-0	26-7-13	31-6-11	36-3-12	39-6-0	43-6-0	1		
Г	4-0-0	3-2-4	4-9-1	4-10-13	4-10-13	4-10-13	4-10-13	4-9-1	3-2-4	4-0-0	1		
		43-6-0											



1 '	2 0									4.	3-6-0
17	4-0-0	7-0-8	11-11-5	16-10-3	21-9-0	26-7-13	31-6-11	36-5-8	39-6-0	42-3-0	1
1-:	3-0 2-9-0	3-0-8	4-10-13	4-10-13	4-10-13	4-10-13	4-10-13	4-10-13	3-0-8	2-9-0	
										1	-3-0

Scale = 1:73.2

Plate Offsets	(X, Y): [1:0-1-7,0-1-8], [1:0-0-8,1-1-4], [3:0-3-	8,0-2-4]	, [10:0-3-8,0-2-	-4], [12:0-1-7,0-1-	8], [12:0-	0-8,1-1-4]							
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf)Spacing25.0Plate Grip DOL25.0Lumber DOL10.0Rep Stress Incr0.0Code10.0Lode	2-0-0 1.15 1.15 NO IRC2018	3/TPI2014	CSI TC BC WB Matrix-MR	0.93 0.68 0.77	DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.85 -1.27 0.19 0.29	(loc) 18 18 12 18	l/defl >613 >411 n/a >999	L/d 240 180 n/a 360	PLATES MT20 M18AHS Weight: 546 lb	<b>GRIP</b> 244/190 186/179 FT = 0%	
LUMBER		NC	DTES					14) Gra	phical p	urlin re	epresentation doe	s not depict the size	
TOP CHORD	2x4 SP No.2 *Except* 3-7,7-10:2x6 SP 240	0F 1)	2-ply truss to	be connected to	gether wi	th 10d		ort	he orient	ation	of the purlin along	the top and/or	
	2.0E		(0.148"x3") n	ails as follows:				bot	om chor	d.			
BOT CHORD	2x6 SP 2400F 2.0E		Top chords of	connected as follo	ws: 2x4	- 1 row at 0-9	-0						
WEBS	2x4 SP No.2		oc, 2x6 - 2 rc	ws staggered at	0-9-0 oc.								
WEDGE	Left: 2x4 SP No.2		Bottom chord	as connected as 1	ollows: 2	x6 - 2 rows							
	Right: 2x4 SP No.2		staggered at	U-9-U OC.	4 1 row	ot 0 0 0 00							
BRACING		2)		considered equa	llv annlie	d to all plies							
TOP CHORD	Structural wood sheathing directly applied	or <del>2</del> )	except if note	ed as front (F) or	hack (B)	face in the I (	DAD						
	2 - 11 - 6  oc purlins, except		CASE(S) sec	ction. Ply to ply co	onnection	s have been	0,12						
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc		provided to d	listribute only loa	ds noted	as (F) or (B),							
BOT ONORD	bracing		unless other	wise indicated.									
REACTIONS	(size) 1=0-3-8 12=0-3-8	3)	Unbalanced	roof live loads ha	ve been	considered fo	or						
	(0.20) 1=0000, 12=0000		this design.										
	Max Uplift         1=-172 (LC 8), 12=-172 (LC 9)         Wind: ASCE 7-16; Vult=115mph (3-second gust)           Viad 01mph TCPL 6 0pet BCPL 6 0pet b 20ft         Cot												
	Max Grav 1=4362 (LC 35), 12=4362 (LC 35)	5)	Vasd=91mph	n; TCDL=6.0psf; I	BCDL=6.	0psf; h=20ft;	Cat.						
FORCES	(lb) - Maximum Compression/Maximum	-,	II; EXP B; En	CIOSED; MIVVERS	(envelope	e) exterior zo	ne;						
1011020	Tension		right exposed	t and fight exposite the second se	eu , enu v l 60 plate	arin DOI = 1	10 60						
TOP CHORD	1-2=-7336/302, 2-3=-9896/377,	5)	TCLL ASCE	7-16: Pr=25.0 p	sf (roof L	· Lum DOL = 1	1 15						
	3-4=-14965/537, 4-5=-14958/535,	0)	Plate DOL=1	.15): Pf=25.0 psf	(Lum DC	DL = 1.15 Pla	te						
	5-6=-19531/661, 6-8=-19531/661,		DOL = 1.15);	Is=1.0; Rough C	at B; Ful	v Exp.; Ce=0	).9;						
	8-9=-14958/535, 9-10=-14965/537,		Cs=1.00; Ct=	=1.10							O DE N	A A A	
	10-11=-9896/377, 11-12=-7336/303	6)	Unbalanced	snow loads have	been co	nsidered for t	his				FE OF M	11SS	
BOT CHORD	1-23=-275/6832, 22-23=-275/6832,		design.							4		NS	
	21-22=-329/9439, 19-21=-59//18429,	7)	Provide adec	quate drainage to	prevent	water ponding	g.			A	SCOTT	M	
	15-19=-597/18429, 17-18=-582/18429, 15-17=-582/18429, 14-15=-308/0430	8)	All plates are	MT20 plates unl	ess othe	wise indicate	ed.			A	SEVI	ER VV	
	13-14255/6832 12-13255/6832	9)	All plates are	2x4 (  ) M120 u	niess oth	erwise indica	ted.			B +	-		
WEBS	2-23=-1638/67, 2-22=-70/2868.	10	) This truss ha	s been designed	ior a 10.	o psi bollom	do			0 0			
	3-22=-275/75. 3-21=-206/6240.	11		are assumed to h	© SD 240		ius.			M	datty	Sound	1
	4-21=-1093/158, 5-21=-3874/133,	12	) Provide med	hanical connectio	n (by oth	ers) of truss	to		-		Stor NUMI	SER /	
	5-19=0/359, 5-18=-76/1230, 6-18=-878/142	<u>2,</u> 12	bearing plate	capable of withs	tanding 1	72 lb uplift at	t ioint			N	OX PE-20010	18807	
	8-18=-77/1230, 8-17=0/359, 8-15=-3874/13	32,	1 and 172 lb	uplift at joint 12.			. ,			V	1 ACT	158	
	9-15=-1093/158, 10-15=-207/6240,	13	) This truss is	designed in acco	rdance w	ith the 2018					13°50	ENU'S	
	10-14=-275/76, 11-14=-71/2868,		International	Residential Code	sections	R502.11.1 a	and				W NA	LEY	
	11-13=-1638/67		R802 10 2 ar	nd referenced sta	ndard AN	JSI/TPI 1					Um		

February 5,2025

Page: 1

Additional Swingley Ridge Rd. Chesterfield, MO 63017 314.434.1200 / MITek-US.com

Continued on page 2
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)

Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	GR2	Hip Girder	1	2	Job Reference (optional)	171166312

15) Hanger(s) or other connection device(s) shall be

provided sufficient to support concentrated load(s) 224
Ib down and 45 lb up at 7-9-0, 224 lb down and 45 lb up
at 9-9-0, 224 lb down and 45 lb up at 11-9-0, 224 lb
down and 45 lb up at 13-9-0, 224 lb down and 45 lb up
at 15-9-0, 224 lb down and 45 lb up at 17-9-0, 224 lb
down and 45 lb up at 19-9-0, 224 lb down and 45 lb up
at 21-9-0, 224 lb down and 45 lb up at 23-9-0, 224 lb
down and 45 lb up at 25-9-0, 224 lb down and 45 lb up
at 27-9-0, 224 lb down and 45 lb up at 29-9-0, 224 lb
down and 45 lb up at 31-9-0, and 224 lb down and 45 lb
up at 33-9-0, and 224 lb down and 45 lb up at 35-9-0
on top chord, and 305 lb down and 25 lb up at 3-9-0,
235 lb down and 22 lb up at 5-9-0, 64 lb down at 7-9-0,
64 lb down at 9-9-0, 64 lb down at 11-9-0, 64 lb down
at 13-9-0, 64 lb down at 15-9-0, 64 lb down at 17-9-0,
64 lb down at 19-9-0, 64 lb down at 21-9-0, 64 lb down
at 23-9-0, 64 lb down at 25-9-0, 64 lb down at 27-9-0,
64 lb down at 29-9-0, 64 lb down at 31-9-0, 64 lb down
at 33-9-0, 64 lb down at 35-9-0, and 235 lb down and
22 lb up at 37-9-0, and 305 lb down and 25 lb up at
39-9-0 on bottom chord. The design/selection of such
connection device(s) is the responsibility of others.

### LOAD CASE(S) Standard

# 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-3=-70, 3-10=-70, 10-12=-70, 24-29=-20

# Concentrated Loads (lb)

 $\begin{array}{l} \mbox{Vert: } 20{=}{-}53\ (F), 23{=}{-}305\ (F), 21{=}{-}53\ (F), 4{=}{-}189\\ (F), 18{=}{-}53\ (F), 6{=}{-}189\ (F), 9{=}{-}189\ (F), 15{=}{-}53\ (F), 13{=}{-}305\ (F), 16{=}{-}53\ (F), 34{=}{-}189\ (F), 35{=}{-}189\ (F), 36{=}{-}189\ (F), 37{=}{-}189\ (F), 39{=}{-}189\ (F), 40{=}{-}189\ (F), 42{=}{-}189\ (F), 44{=}{-}189\ (F), 45{=}{-}189\ (F), 44{=}{-}189\ (F), 44{=}{-}189\ (F), 44{=}{-}189\ (F), 44{=}{-}189\ (F), 45{=}{-}189\ (F), 45{=}{-}53\ (F), 52{=}{-}53\ (F), 53{=}{-}53\ (F), 55{=}{-}53\ (F), 55{=}{-}53\ (F), 57{=}{-}53\ (F), 55{=}{-}53\ (F), 55$ 

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:27 ID:ICPOvmLlh7FJPuV4HgVb?2z0U57-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2



Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	GR3	Half Hip Girder	1	1	Job Reference (optional)	171166313

1-2-0

1-2-0

12 4 Г

1-3-10

2-7-4

2-7-4 1-5-4

1.5x4 II

Quality Truss LLC (Smithville, MO), Smithville, MO - 64089,

TCDL

BCLL

BCDL

1)

2)

Run: 8 83 S. Jan 17 2025 Print: 8 830 S. Jan 17 2025 MiTek Industries. Inc. Mon Feb 03 11:17:28 ID:KO7Uxx5wOgADLuNX\_F5H7Kya1oG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

#### )-10-15 5 10x16 🚽 4x4 = 1-0-4 2-7-4 1 - 7 - 01-0-4 Scale = 1:18.5 Plate Offsets (X, Y): [1:1-0-8,0-1-12] Loading Spacing 2-0-0 CSI DEFL l/defl L/d PLATES GRIP (psf) in (loc) TCLL (roof) 25.0 Plate Grip DOL TC Vert(LL) >999 244/190 1.15 0.11 0.00 5-8 240 MT20 Snow (Pf) 25.0 Lumber DOL 1.15 BC 0.21 Vert(CT) 0.00 5-8 >999 180 10.0 Rep Stress Incr NO WB 0.14 Horz(CT) 0.00 n/a n/a 1 IRC2018/TPI2014 0.0 Matrix-MP Wind(LL) 0.00 >999 360 Code 5 Weight: 15 lb FT = 0% 10.0 LUMBER 3) Unbalanced snow loads have been considered for this TOP CHORD 2x4 SP No 2 desian. BOT CHORD Provide adequate drainage to prevent water ponding. 2x6 SP 2400F 2 0F 4) This truss has been designed for a 10.0 psf bottom WEBS 2x4 SP No.2 5) SLIDER Left 2x4 SP No.2 -- 0-11-10 chord live load nonconcurrent with any other live loads. Bearings are assumed to be: Joint 1 SP 2400F 2.0E . 6) BRACING 7) Refer to girder(s) for truss to truss connections. TOP CHORD Structural wood sheathing directly applied or 8) Provide mechanical connection (by others) of truss to 2-7-4 oc purlins, except end verticals, and bearing plate capable of withstanding 73 lb uplift at joint 2-0-0 oc purlins: 2-3. 1 and 41 lb uplift at joint 4. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc This truss is designed in accordance with the 2018 9) bracing. International Residential Code sections R502.11.1 and REACTIONS (size) 1=0-3-8, 4= Mechanical R802.10.2 and referenced standard ANSI/TPI 1. Max Horiz 1=22 (LC 11) 10) Graphical purlin representation does not depict the size Max Uplift 1=-73 (LC 8), 4=-41 (LC 9) or the orientation of the purlin along the top and/or Max Grav 1=1774 (LC 33), 4=522 (LC 32) bottom chord. FORCES (lb) - Maximum Compression/Maximum 11) Hanger(s) or other connection device(s) shall be Tension provided sufficient to support concentrated load(s) 112 lb TOP CHORD 1-2=-619/35, 2-3=-9/7, 3-4=-71/10 up at 1-2-0 on top chord, and 2089 lb down and 44 lb BOT CHORD 1-5=-52/646, 4-5=-51/558 up at 0-8-0, and 86 lb up at 1-2-0 on bottom chord. WEBS 2-5=-14/574, 2-4=-685/56 The design/selection of such connection device(s) is the NOTES responsibility of others. 12) In the LOAD CASE(S) section, loads applied to the face Wind: ASCE 7-16; Vult=115mph (3-second gust) OF MISS of the truss are noted as front (F) or back (B). Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. F II; Exp B; Enclosed; MWFRS (envelope) exterior zone; LOAD CASE(S) Standard Dead + Snow (balanced): Lumber Increase=1.15, Plate cantilever left and right exposed ; end vertical left and 1) SCOTT M. Increase=1.15 right exposed; Lumber DOL=1.60 plate grip DOL=1.60 SEVIER Uniform Loads (lb/ft) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Vert: 1-2=-70, 2-3=-70, 4-6=-20 Plate DOL=1.15); Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Concentrated Loads (lb) Cs=1.00; Ct=1.10 Vert: 5=34 (F), 2=33 (F), 8=-2089 (B) PE-200101880 SSIONAL

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 trust 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)



February 5,2025

Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	GR4	Hip Girder	1	2	Job Reference (optional)	171166314

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:29 ID:HerTJcOXXwntufBFeVyP6Sya17H-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

	4-0-0	7-2-4	11-10-3	16-7-13	21-3-12	24-6-0	28-6-0
	4-0-0	3-2-4	4-7-15	4-9-11	4-7-15	3-2-4	4-0-0
1	L			28-6-0			



								28-6-0	
1-3-0	4-0-0	7-0-8	11-10-3	16-7-13	21-5-8	24-6-0	27-3-0	1 1	
1-3-0	2-9-0	3-0-8	4-9-11	4-9-11	4-9-11	3-0-8	2-9-0		
								1-3-0	

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Scale = 1:49.8
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Plate Offsets (X, Y)	: [1:0-3-10,0-0-11], [1:0-0-4	1-2-12], [6:0-2-8,0-2-11], [8:0-3-1	10,0-0-11], [8:0-0-4,1-2-12], [10:0-4-0,0-3-8], [12:0-4-0,0-4-8]
----------------------	-------------------------------	-------------------------------------	--

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	0.59	Vert(LL)	-0.22	11-12	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.34	11-12	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.27	Horz(CT)	0.05	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MR		Wind(LL)	0.08	11-12	>999	360		
BCDL	10.0										Weight: 320 lb	FT = 0%
LUMBER 2) All loads are considered equally applied to all plies, 13) Hanger(s) or other connection device(s) shall be												

TOP CHORD 2x4 SP No.2 2x6 SP 2400F 2.0E BOT CHORD WFBS 2x4 SP No.2 WEDGE Left: 2x4 SP No.2 Right: 2x4 SP No.2 BRACING TOP CHORD Structural wood sheathing directly applied or 4-11-2 oc purlins, except 2-0-0 oc purlins (4-0-10 max.): 3-6. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. **REACTIONS** (size) 1=0-3-8.8=0-3-8 Max Horiz 1=28 (LC 57) Max Uplift 1=-113 (LC 8), 8=-113 (LC 9) Max Grav 1=2951 (LC 36), 8=2951 (LC 36) FORCES (Ib) - Maximum Compression/Maximum Tension TOP CHORD 1-2=-4457/193, 2-3=-5593/227, 3-4=-7166/272, 4-5=-7165/272, 5-6=-5195/225, 6-7=-5523/223, 7-8=-4476/195 BOT CHORD 1-14=-172/4127, 13-14=-172/4127, 11-13=-225/7287, 10-11=-225/7287, 9-10=-153/4146, 8-9=-153/4146 WEBS 2-14=-802/39, 2-13=-33/1403, 3-13=0/248, 3-12=-72/2095, 4-12=-869/143, 5-12=-187/50, 5-11=0/361, 5-10=-2362/87, 6-10=0/1072, 7-10=-28/1305, 7-9=-742/35

### NOTES

 2-ply truss to be connected together with 10d (0.148"x3") nails as follows: Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.

Bottom chords connected as follows: 2x6 - 2 rows

staggered at 0-9-0 oc.

Web connected as follows: 2x4 - 1 row at 0-9-0 oc.

All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

- Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

5) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

6) Unbalanced snow loads have been considered for this design.

- 7) Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) All bearings are assumed to be SP 2400F 2.0E .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 113 lb uplift at joint 1 and 113 lb uplift at joint 8.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 224 lb down and 46 lb up at 7-2-4, 224 lb down and 45 lb up at 9-3-0, 224 lb down and 45 lb up at 11-3-0, 224 lb down and 45 lb up at 13-3-0, 224 lb down and 45 lb up at 15-3-0, 224 lb down and 45 lb up at 17-3-0, and 224 lb down and 45 lb up at 19-3-0, and 224 lb down and 46 lb up at 21-3-12 on top chord, and 312 lb down and 21 lb up at 3-3-0, 242 lb down and 21 lb up at 5-3-0, 64 lb down at 7-3-0, 64 lb down at 9-3-0, 64 lb down at 11-3-0, 64 lb down at 13-3-0, 64 lb down at 21-3-0, and 242 lb down and 21 lb up at 23-3-0, 64 lb down at 17-3-0, 64 lb down at 19-3-0, 64 lb down at 21-3-0, and 242 lb down and 21 lb up at 23-3-0, and 312 lb down and 21 lb up at 25-3-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Page: 1

# LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-3=-70, 3-6=-70, 6-8=-70, 15-20=-20 Concentrated Loads (lb)



### Continued on page 2



Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	GR4	Hip Girder	1	2	Job Reference (optional)	171166314

Vert: 6=-189 (B), 13=-53 (B), 3=-189 (B), 10=-53 (B), 25=-189 (B), 26=-189 (B), 27=-189 (B), 29=-189 (B), 30=-189 (B), 31=-189 (B), 32=-312 (B), 33=-242 (B), 34=-53 (B), 35=-53 (B), 36=-53 (B), 37=-53 (B), 38=-53 (B), 39=-53 (B), 40=-242 (B), 41=-312 (B) Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:29 ID:HerTJcOXXwntufBFeVyP6Sya17H-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2



Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	H1	Roof Special	1	1	Job Reference (optional)	171166315

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:29 ID:ET3Ha9\_iFgI9F4QQQnf7RLz1hwh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

1-4-12	5-2-4	7-2-4	14-2-4	21-2-4	25-3-12	31-1-12	37-10-12	43-1-4	44-6-0
1-4-12	3-9-8	2-0-0	7-0-0	7-0-0	4-1-8	5-10-0	6-9-0	5-2-8	1-4-12
					44-6-0				1 1 12



# Plate Offsets (X, Y): [1:Edge,0-0-14], [4:0-5-0,0-2-0], [6:0-5-4,Edge]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 25.0 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 IRC20	18/TPI2014	CSI TC BC WB Matrix-MR	0.96 0.65 0.65	DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.12 -0.21 0.04 0.05	(loc) 22-23 22-23 18 22-23	l/defl >999 >999 n/a >999	L/d 240 180 n/a 360	PLATES MT20 MT20HS Weight: 247 lb	<b>GRIP</b> 244/190 187/143 FT = 0%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP N 2x4 SP N 2x4 SP N Structura 2-2-0 oc   Rigid ceil bracing, 6-0-0 oc	0.2 *Excep 0.2 0.2 I wood shea purlins, exc purlins (2-2 ing directly Except: pracing: 18	t* 4-6,7-9:2x4 SP No athing directly applie ept -0 max.): 3-4, 6-7. applied or 10-0-0 oc -20,15-18,14-15.	2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	<ul> <li>) 2x4 SP No.2 front face wit o.c. 8 Total fr No.2.</li> <li>) Unbalanced this design.</li> <li>) Wind: ASCE Vasd=91mpl II; Exp B; En cantilever lef right expose.</li> </ul>	bearing block 12" h 2 rows of 10d (0 asteners. Bearing i roof live loads have 7-16; Vult=115mpl h; TCDL=6.0psf; BC closed; MWFRS (e t and right exposed d; Lumber DOL=1.0	long at 148"x3 s assum e been o h (3-sec CDL=6. cDL	it. 18 attache ") nails space red to be SP considered for cond gust) Dpsf; h=20ft; exterior zor vertical left an grip DOL=1.	d to ed 3" or Cat. ne; id 60					
WEBS	1 Row at (size) Max Horiz Max Uplift Max Grav	midpt 13=0-3-8, block), (re 25=74 (LC 13=-62 (L 13=645 (L 25=1135)	4-22, 5-20, 6-18, 8-1 10-15 18=(0-3-8 + bearing q. 0-4-2), 25=0-3-8 2 12) C 9), 25=-49 (LC 8) .C 48), 18=3499 (LC (C 40)	18, <sup>4</sup> 1 5 5 40), <del>6</del> 7	<ul> <li>4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10</li> <li>5) Unbalanced snow loads have been considered for this design.</li> <li>6) Provide adequate drainage to prevent water ponding.</li> <li>7) All plates are MT20 plates unless otherwise indicated</li> </ul>									
FORCES	(lb) - Max	imum Com	pression/Maximum	8	<ul> <li>All plates are</li> <li>This truss ha</li> </ul>	s 3x4 (=) MT20 unl s been designed fo	less oth or a 10.0	erwise indica ) psf bottom	ted.					
TOP CHORD	1-2=-114, 4-5=-102 7-8=0/18 11-12=-12	′6, 2-3=-15 0/68, 5-6=0 36, 8-10=-5 26/10	14/57, 3-4=-1368/63 /760, 6-7=0/1698, i1/783, 10-11=-801/2	, 1 281, 1	<ul> <li>chord live load nonconcurrent with any other live loads.</li> <li>10) All bearings are assumed to be SP No.2.</li> <li>11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint</li> </ul>								AISSO	
BOT CHORD	1-25=-2/1 23-24=-1 20-22=-4 15-18=-7 13-14=-1	36, 24-25= 12/1961, 22 6/891, 18-2 06/87, 14-1 0/155, 12-1	-72/160, 2-23=-107/1969, 0=-643/95, 5=-249/715, 3=-10/155	1	<ol> <li>25 and 62 ib</li> <li>2) This truss is International R802.10.2 ar</li> <li>3) Graphical pu</li> </ol>	designed in accord Residential Code s nd referenced stan- rlin representation	lance w sections dard AN does no	ith the 2018 R502.11.1 a ISI/TPI 1. ot depict the s	and size			le le	ST SCOTT	
WEBS	3-24=0/39 4-22=-12 6-20=0/90 8-18=-14 10-14=0/2 11-13=-5	98, 4-24=-8 46/63, 5-22 64, 6-18=-1 57/63, 8-15 232, 2-25=- 75/111, 11-	25/33, 4-23=0/210, 2=0/475, 5-20=-1632, 926/51, 7-18=-863/3 =0/517, 10-15=-1163 1055/91, 2-24=-30/1 14=-253/638	/80, L 37, 3/44, 1256,	bottom chord. LOAD CASE(S) Standard PE-2001018807								L ENGINE	
NOTES													4 mm	

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OTES

Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	H1A	Roof Special	1	1	Job Reference (optional)	171166316

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:30 ID:4uq4K9fSgMCbM\_yeFAxfN8z1hgK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

1-4-12	7-2-4	9-2-4	13-11-11	19-2-4	25-5-4	27-3-12	32-11-4	38-10-7	43-1-4 44-6-0
1-4-12	5-9-8	2-0-0	4-9-7	5-2-9	6-3-0	1-10-8	5-7-8	5-11-3	4-2-13
					44-6-0				1 7 12



1-4-12						07 5 0			43-
1-3-0	7-0-8	9-4-0	13-11-11	19-0-8	25-5-4	27-5-8	32-11-4	38-10-7	43-1-4
1-3-0	5-7-12	2-3-8	4-7-11	5-0-13	6-4-12	2-0-4	5-5-12	5-11-3	4-2-13 0-1
0-1-12									

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Scale = 1:77.8
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# Plate Offsets (X, Y): [4:0-4-12,Edge]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 25.0 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 IRC2018	/TPI2014	CSI TC BC WB Matrix-MR	0.92 0.49 0.92	DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.10 -0.17 0.02 0.04	(loc) 21-22 21-22 13 21-22	l/defl >999 >999 n/a >999	L/d 240 180 n/a 360	PLATES MT20 Weight: 257 lb	<b>GRIP</b> 244/190 FT = 0%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood shea 2-2-0 oc purlins, exce 2-0-0 oc purlins (2-2- Rigid ceiling directly a bracing. 1 Row at midpt S (size) 13=0-3-8, Max Horiz 24=66 (LC Max Uplift 13=-59 (LC	athing directly applied ept 0 max.): 3-4, 6-8. applied or 4-8-11 oc 9-16, 7-18 18=0-3-8, 24=0-3-8 12) 2 9), 18=-6 (LC 8),	1) 2) d or 3) 4) 5)	Unbalanced this design. Wind: ASCE Vasd=91mph II; Exp B; End cantilever left right exposed TCLL: ASCE Plate DOL=1 DOL = 1.15); Cs=1.00; Ct= Unbalanced design. Provide adec	roof live loads hav 7-16; Vult=115mp ; TCDL=6.0psf; B closed; MWFRS (e and right expose ; Lumber DOL=1. 7-16; Pr=25.0 psf (15); Pf=25.0 psf ( Is=1.0; Rough Ca 1.10 snow loads have b uate drainage to p	e been o h (3-sec CDL=6. anvelope d ; end v 60 plate f (roof LL Lum DC tt B; Full peen cor	considered fo cond gust) Dpsf; h=20ft; ( ) exterior zor vertical left an grip DDL=1. .: Lum DOL=: L = 1.15 Plat y Exp.; Ce=0 asidered for the water ponding control produce	or Cat. ne; id 60 1.15 te .9; his g.						
FORCES	24=-52 (LC Max Grav 13=871 (LC 24=1244 (I (Ib) - Maximum Comp Tension 1-2=-322/16, 2-3=-17 4-5=-1188/81, 5-6=-3 7-8=0/872, 8-9=0/101 10-11=-1118/103, 11	2 8) C 40), 18=2914 (LC LC 40) oression/Maximum /89/69, 3-4=-1764/88 /57/129, 6-7=-304/91 15, 9-10=-549/348, -12=-44/12	6) 7) 8) 9) 3, 10]	<ul> <li>6) All plates are 3x4 (=) MT20 unless otherwise indicated.</li> <li>7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> <li>8) All bearings are assumed to be SP No.2.</li> <li>9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 18, 52 lb uplift at joint 24 and 59 lb uplift at joint 13.</li> <li>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.</li> </ul>								and the		
BOT CHORD	$\begin{array}{l} 10.11=.1118/103, 11.\\ 1-24=-8/373, 23-24=.\\ 22-23=.77/1609, 21-2\\ 19-21=-34/1061, 18-1\\ 16-18=-1365/47, 15-1\\ 14-15=-61/1025, 13-1\\ 3-23=-67/82, 4-22=-2\\ 8-16=-67/1/14, 9-16=-\\ 5-21=0/513, 5-19=-12\\ 7-18=-2751/62, 7-16=\\ 7-19=-47/1895, 2-24=\\ 2-23=-21/1241, 9-15=\\ 10-14=-67/149, 11-13\\ 11-14=-57/987\\ \end{array}$	-12=-44/12 -74/373, 22=-72/1757, 19=-1365/47, 16=-311/440, 14=-4/56, 12-13=-4/5 (247/104, 6-19=-432/6 1-281/55, 3-22=-63/3 243/68, 4-21=-871/4 =-14/1510, =-1206/131, =0/406, 10-15=-809/3 3=-787/88,	11) 56 56, 197, 4, 33,	R802.10.2 ar Graphical pu or the orienta bottom chord <b>AD CASE(S)</b>	Id referenced stan rlin representation tion of the purlin a Standard	dard AN does no llong the	ISI/TPI 1. of depict the s of top and/or	size				STE OF M SCOTT SEVI NUM PE-20010 PE-20010	AISSOLD M. ER DISSOT	
NOTES												and	555	

## NOTES

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Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	H1B	Roof Special	1	1	Job Reference (optional)	171166317

Run: 8 83 S. Jan 17 2025 Print: 8 830 S. Jan 17 2025 MiTek Industries. Inc. Mon Feb 03 11:17:30 ID:2zQRZd2VO2dEPpAxFleQOAz0UDG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

1-6-8	5-1-14	9-2-4	11-2-4	17-2-4	21-2-3	25-5-4	29-3-12	36-9-0	42-11-8	44-6-0
1-6-8	3-7-6	4-0-6	2-0-0	6-0-0	3-11-15	4-3-1	3-10-8	7-5-4	6-2-8	1-6-8
						44-6-0				



LOAD CASE(S) Standard



February 5,2025

Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	H1C	Roof Special	1	1	Job Reference (optional)	171166318

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:31 ID:QeVbIS9GAqgPui3a0?HT\_4z0UAX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





Scale = 1:78.1

Plate Offsets (X, Y):	[4:0-2-8,0-1-12]	[5:0-4-12,Edge], [9:0-6-0,0-1-11]
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			-	-										
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 25.0 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	3/TPI2014	CSI TC BC WB Matrix-MR	0.86 0.45 0.85	DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.07 -0.13 0.03 0.03	(loc) 22-23 22-23 17 22-23	l/defl >999 >999 n/a >999	L/d 240 180 n/a 360	PLATES MT20 MT20HS Weight: 252 lb	<b>GRIP</b> 244/190 187/143 FT = 0%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood shea 3-9-13 oc purlins, ex 2-0-0 oc purlins (5-5 Rigid ceiling directly	athing directly applied cept -2 max.): 4-5, 6-9. applied or 10-0-0 oc	WE l or NC	EBS DTES	3-22=-575/44, 4-2 5-21=-23/325, 5-2 6-18=-1156/31, 7- 8-17=-1328/88, 8 9-15=-476/77, 10- 10-14=-12/191, 2- 11-14=-34/958, 1' 2-23=-29/1397	2=0/366, 0=-625/5 18=0/81! 15=-27/1 15=-105 24=-1190 -13=-860	4-21=-393/2 3, 6-20=0/67 5, 7-17=-1744 634, 1/56, 5/114, 3/102, 3-23=-	23, '9, 6/47, -94/91,						_
WEBS REACTIONS	bracing, Except: 6-0-0 oc bracing: 17 5-2-4 oc bracing: 15 1 Row at midpt (size) 13=0-3-8, Max Horiz 24=50 (LC Max Uplift 13=-52 (L 24=-52 (L Max Grav 13=945 (L 24=1266 (	-18 -17. 6-18, 7-17 17=0-3-8, 24=0-3-8 C 12) C 9), 17=-36 (LC 8), C 8) .C 48), 17=2666 (LC 3 (LC 40)	1) 2) 3) 39),	<ul> <li>NOTES</li> <li>1) Unbalanced roof live loads have been considered for this design.</li> <li>2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60</li> <li>3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL = 1.15 Plate DOL=1.15); s=10.2 mouph Cat B: Fully Evo; Ce=0.9;</li> </ul>										
FORCES	(lb) - Maximum Com Tension 1-2=-238/11, 2-3=-13 4-5=-1091/86, 5-6=-1	pression/Maximum 842/69, 3-4=-1294/83 973/82, 6-7=-226/237	4) , 5)	Cs=1.00; Ct Unbalanced design. Provide ade	=1.10 snow loads have	been cor	sidered for the vater ponding	his g <sub>.</sub>					AD2	
BOT CHORD	7-8=0/1255, 8-9=-23 10-11=-1236/85, 11- 1-24=-3/274, 23-24= 22-23=-57/1660, 21- 20-21=-25/1093, 18- 17-18=-236/223, 15- 14-15=-37/1103, 13-	66/164, 9-10=-339/206 12=-130/9 -53/274, 22=-29/1176, 20=-11/945, 17=-1255/47, 14=-4/153, 12-13=-4/	5, 6) 7) 8) 9) 10] 153 11] 12]	All plates ar All plates ar This truss h chord live lo All bearings ) Provide med bearing plat 17, 52 lb up ) This truss is Internationa R802.10.2 a ) Graphical pu	e wi 20 plates unli e 3x4 (=) MT20 ui as been designed ad nonconcurrent are assumed to b chanical connectio e capable of withs lift at joint 24 and 5 designed in accor I Residential Code and referenced sta urlin representation	ess other hless oth for a 10.0 with any e SP No. n (by oth tanding 3 52 lb uplit dance w sections ndard AN n does no	wise indicate erwise indicate of psf bottom other live loa 2. ers) of truss t 6 lb uplift at j t at joint 13. th the 2018 R502.11.1 a ISI/TPI 1. ot depict the s	ads. tods. joint and				STE OF M SCOTT SEVI	11550LP M. ER D18807	

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

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Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	H1D	Нір	1	1	Job Reference (optional)	1/1166319

Run: 8 83 S. Jan 17 2025 Print: 8 830 S. Jan 17 2025 MiTek Industries. Inc. Mon Feb 03 11:17:31 ID:OSMBqS1VgSBQ?XPMb3Zpmmz0U86-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

1-4-12	5-7-9	11-2-4	18-5-12	25-5-4	33-3-12	38-10-8	43-1-4	44-6-0
1-4-12	4-2-13	5-6-11	7-3-8	6-11-8	7-10-8	5-6-12	4-2-12	1-4-12
				44-6-0				



### NOTES

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

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February 5,2025

Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	H1E	Нір	1	1	Job Reference (optional)	171166320

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:32 ID:tp8zaJhQPXSzwaNi6KXxpfz0U5z-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

4 4 4 2								44-6-0	j
4-12 4-7-7	9-2-4	14-6-1	19-11-11	25-5-4	29-11-3	35-3-12	39-10-9	43-1-4	
1-4-12 3-2-11	4-6-13	5-3-13	5-5-9	5-5-9	4-5-15	5-4-9	4-6-13	3-2-11	
								1-4-12	•
				44-6-0					



Scale = 1:77.4

# Plate Offsets (X, Y): [1:Edge,0-0-14], [7:0-2-8,0-1-8], [22:0-3-8,0-1-8]

Loading TCLL (roof) Snow (Pf) TCDL	(psf) 25.0 25.0 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	8/TDI2014	CSI TC BC WB Matrix-MP	0.63 0.50 0.65	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.12 -0.19 0.02	(loc) 24 24-25 20 24-25	I/defl >999 >999 n/a	L/d 240 180 n/a 360	PLATES MT20	<b>GRIP</b> 244/190
BCDL	10.0		11(0201)	0/11/12/014	Widdinx-Wit		WIND(LL)	0.05	24-23	2000	500	Weight: 231 lb	FT = 0%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood she 4-1-9 oc purlins, ex 2-0-0 oc purlins (3- Rigid ceiling directly	eathing directly applie cept 10-7 max.): 4-10. r applied or 4-6-5 oc	N( 1) d or 2) 3)	2x4 SP No.2 front face wit o.c. 8 Total fi No.2. Unbalanced this design. Wind: ASCE Vasd=91mpt	bearing block 12' h 2 rows of 10d ( asteners. Bearing roof live loads hav 7-16; Vult=115m n; TCDL=6.0psf; E	" long at 0.148"x3 is assun ve been o ph (3-sec 3CDL=6.0	it. 20 attache ") nails spac ned to be SP considered fo cond gust) Dpsf; h=20ft;	ed to ed 3" or Cat.					
REACTIONS	bracing. (size) 14=0-3-8 block), 27 Max Horiz 27=-34 (L Max Uplift 14=-45 (L 27=-53 (L Max Grav 14=926 ( 27=1188	, 20=(0-3-8 + bearing 7=0-3-8 .C 13) .C 9), 20=-56 (LC 8), .C 8) .LC 36), 20=3002 (LC (LC 36)	4) 35), 5)	II; EXP B; En cantilever lef right exposed TCLL: ASCE Plate DOL=1 DOL = 1.15); Cs=1.00; Ct= Unbalanced	closed; MWFRS ( t and right expose d; Lumber DOL=1 : 7-16; Pr=25.0 ps .15); Pf=25.0 ps ; Is=1.0; Rough C =1.10 snow loads have	envelope ed ; end \ .60 plate if (roof LL (Lum DC at B; Full been cor	<ul> <li>exterior zo vertical left ar grip DOL=1</li> <li>Lum DOL=</li> <li>L = 1.15 Pla</li> <li>y Exp.; Ce=0</li> <li>nsidered for t</li> </ul>	ne; nd .60 .1.15 .te ).9; his					
FORCES	(lb) - Maximum Con Tension	npression/Maximum	6)	design. Provide adeo	quate drainage to	prevent	water pondin	g.					
TOP CHORD	1-2=-81/12, 2-3=-16 4-5=-1613/97, 5-6=- 7-9=-51/218, 9-10=- 11-12=-1105/86, 12	010/72, 3-4=-1703/87 -1816/99, 6-7=-731/7 -51/220, 10-11=-758/ -13=-27/43	, 7) 3, 8) 106, 9)	All plates are This truss ha chord live loa All bearings	3x4 (=) M120 un s been designed ad nonconcurrent are assumed to be	for a 10.0 with any e SP No.	erwise indica ) psf bottom other live loa 2.	ated. ads.				5000	all
BOT CHORD	1-27=-1/84, 26-27=- 24-25=-54/1816, 22 20-22=-1572/53, 17 16-17=-36/643, 15- 14-15=-3/31, 13-14:	-31/91, 25-26=-71/14 -24=-29/731, -20=-1572/53, 16=-50/1002, =-3/31	79, <sup>TC</sup> 11	<ul> <li>bearing plate</li> <li>27, 45 lb upli</li> <li>This truss is</li> <li>International</li> </ul>	capable of withs ft at joint 14 and 5 designed in accor Residential Code	tanding 5 56 lb upli dance w sections	it at joint 20. R502.11.1 at at joint 20.	joint and			ł	STATE OF I SCOT	MISSOLR I M.
WEBS	3-25=-250/248, 4-2: 11-16=-418/25, 3-2i 2-27=-1067/71, 2-2i 11-15=-160/56, 12- 12-15=-51/1026, 7-; 7-17=-35/1751, 9-1 10-17=-861/18, 7-2: 5-24=-512/82, 5-25: 6-24=-31/1250, 6-2:	5=0/198, 10-16=0/269 6=-258/56, 6=-43/1479, 14=-820/73, 20=-2877/113, 7=-542/75, 2=-64/2655, =-238/310, 2=-1224/99	<sup>9,</sup> 12 LC	R802.10.2 ar (Staphical pu) or the orienta bottom chore DAD CASE(S)	nd referenced star rlin representation ation of the purlin J. Standard	ndard AN n does no along the	iSi/TPT1. of depict the s top and/or	size		۲ بر		PE-2001	L ENGINE

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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.
De	esign valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not
at	truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall
bu	uilding design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing
is a	always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the
fat	brication, 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)
an	nd BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)

Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	H2	Roof Special Girder	1	1	Job Reference (optional)	171166321

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:32 ID:Hz?G0WMoG2uYWpAxnD6WRfz0UCs-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

4-10-4							
<sup>1-4-12</sup> 3-10-4	9-8-3	14-2-4	19-6-3	24-11-13	30-3-12	36-10-7	42-3-0
1-4-12 2-5-8 1-0-0	4-9-15	4-6-1	5-3-15	5-5-11	5-3-15	6-6-11	5-4-9
				42-3-0			

4-10-11 1-9-6 1-7-12 1-7-12 1-7-12 1-7-12 1-7-12	6 <sup>-1</sup> <sup>6</sup> - <sup>1</sup> - <sup>1</sup> - <sup>1</sup> - <sup>2</sup> - <sup>2</sup> - <sup>2</sup> - <sup>2</sup> - <sup>3</sup> - <sup>2</sup> - <sup>3</sup> - <sup>3</sup> - <sup>3</sup> x5= <sup>6</sup> x8 <sub>1</sub>	6x8= 5 5x5= 3 4 22 21 2 7x8= 33 1.5x4 II	5x6 9x4 = 200 19 x4 = 3x8	= 3	IX8= 727 № 55×4 II	3x4= 28 8 5 1615 18HS 3x8 = 3x4=	MT20H	45 7x10 = 9 14 14 3x8=	3x4s 10 13 7x8=	29 4	x8 <b>2</b> 11 -01-0 12 -01-0 12 -01-0 5x4 ∎
Scale = 1:75.9 Plate Offsets (2	1-4-12 1-3-0 <u>3-8-8</u> 1-3-0 2-3-12 0-1-12 X, Y): [4:0-2-12,0-2-0], [§	3 5-0-0 9-8-3 2 1-3-8 4-8-3 9:0-5-4,Edge], [13:0-3-8	14-0-8 4-4-5 3,Edge], [23:0-1-12.	<u>19-6-3</u> 5-5-11 0-3-0]	24-11-13   5-5-11	3   <u>30</u>   5-	)-5-8 5-11	<u>  36</u>   6−	-10-7   4-15	<u>42-3-0</u> 5-4-9	
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) <b>S</b> 25.0 P 25.0 L 10.0 R 0.0 C 10.0	Spacing         2-0           Plate Grip DOL         1.11           .umber DOL         1.11           Rep Stress Incr         NO           Code         IRC	-0 5 5 2018/TPI2014	CSI TC BC WB Matrix-MR	1.00 Vert 0.94 Vert 0.95 Horz Wind	L in LL) -0.47 CT) -0.80 (CT) 0.21 I(LL) 0.21	(loc) 15-17 15-17 12 15-17 15-17	I/defl L/d >999 240 >610 180 n/a n/a >999 360	PLATES MT20 MT20HS MT18HS Weight: 232 lb	<b>GRIP</b> 244/190 187/143 244/190 FT = 0%	
BCDL       10.0       Weight: 232 lb       FT = 0%         LUMBER TOP CHORD       2x4 SP No.2 *Except* 6-9,9-11:2x4 SP No.1       1)       Unbalanced roof live loads have been considered for this design.       Vert: 1-3=-70, 3-4=-70, 4-6=-70, 6-9=-70, 9-11=-70, 12-24=-20         BOT CHORD       2x4 SP No.2       Wind: ASCE 7-16; Vult=115mph (3-second gust)       Variad=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. I; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60       Vert: 1-3=-70, 4-6=-70, 6-9=-70, 9-11=-70, 12-24=-20         BOT CHORD       Structural wood sheathing directly applied, except 2-0-0 oc purtins (2-4-9 max.): 3-4, 6-9.       1)       Unbalanced roof live loads have been considered for this design.       Vert: 1-3=-70, 4-6=-70, 6-9=-70, 9-11=-70, 12-24=-20         BOT CHORD       Structural wood sheathing directly applied, except 2-0-0 oc purtins (2-4-9 max.): 3-4, 6-9.       1)       Unclasser (Lumber DOL=1.60)       Vert: 30=-502 (B)         BOT CHORD       Rigid ceiling directly applied or 10-0-0 oc bracing.       1)       Unbalanced snow loads have been considered for this design.       1)       Unbalanced snow loads have been considered for this design.         WEBS       1 Row at midpt       8-14       5)       Provide adequate drainage to prevent water ponding.       1)       1)       10-blates are MT20 plates unless otherwise indicated.       1)       1)       10-blates are MT20 plates unless otherwise indicated.											
TOP CHORD	1-2=-368/26, 2-3=-3623 4-5=-4524/133, 5-6=-42 6-7=-3969/137, 7-8=-47 8-9=-3767/128, 9-10=-4 10-11=-4098/100 1-23=-17/332, 22-23=-6 21-22=-158/4634, 20-2	3/119, 3-4=-3378/118, 209/132, 754/124, 4012/115, 61/332, 11-152/4634	<ul> <li>9) Provide mec bearing plate</li> <li>23 and 42 lb</li> <li>10) This truss is International R802.10.2 at</li> </ul>	hanical connectio capable of withst uplift at joint 12. designed in accor Residential Code nd referenced star	n (by others) o tanding 117 lb rdance with the sections R502 ndard ANSI/TF	truss to uplift at joint 2018 .11.1 and I 1.			OF OF		
WEBS NOTES	2-122-107/4034, 20-2 19-20=-107/4200, 17-11 15-17=-63/4832, 14-15: 13-14=-66/3839, 12-13: 3-22=-37/1064, 2-23=-2 4-21=-12/126, 4-22=-21 5-20=0/237, 9-14=0/84! 2-22=-88/3224, 7-17=0, 8-15=0/264, 8-14=-127: 4-20=-452/77, 11-12=-1 11-13=-67/3870, 10-14: 7-15=-256/94	102/4034, 9=-63/4832, i=-40/4754, i=0/0 2049/90, 114/113, 6-19=0/937, 9, 10-13=-374/88, 1/224, 7-19=-1118/64, 1/9/59, 5-19=-804/75, 1982/65, i=-496/270,	<ol> <li>Graphical pu or the orienta bottom chorc</li> <li>Hanger(s) or provided suff lb down and design/selec responsibility</li> <li>In the LOAD of the truss a</li> <li>LOAD CASE(S)</li> <li>Dead + Snot Increase=1 Uniform Loc</li> </ol>	rrin representation ation of the purlin 1 other connection ficient to support of 53 lb up at 2-5-1; 53 lb up at 2-5-0; 53 lb up at 2-5-0; of others. CASE(S) section are noted as front Standard ow (balanced): Lu .15 ads (lb/ft)	n does not dep along the top a device(s) shal concentrated lo 2 on bottom ch ection device(s , loads applied (F) or back (B) mber Increase	ct the size nd/or be ad(s) 502 ord. The j is the to the face =1.15, Plate			SCOT SEV NUM PE-2001	T M. HER BER 018807	ter and

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

Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	H2A	Roof Special	1	1	Job Reference (optional)	171166322

Run: 8 83 S. Jan 17 2025 Print: 8 830 S. Jan 17 2025 MiTek Industries. Inc. Mon Feb 03 11:17:33 ID:UoRh?PYLefiskdVjukszHqz0UA1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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this design.

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February 5,2025

Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	H2B	Roof Special	1	1	Job Reference (optional)	171166323

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:34 ID:1l8aTBbLqa\_uWbwCHjObdTz0U7O-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

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Scale = 1:76.4

Plate Offsets (	(X, Y): [2:0-1-12,0-2-1	2], [4:0-2-8,0-1-12],	[5:0-5-0,0-	2-0], [9:0-2-12	2,0-3-0], [11:0-5-4	,Edge], [1	3:0-1-12,0-2-	·12], [19:	0-6-8,Ec	dge]				
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 25.0 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 IRC201	8/TPI2014	CSI TC BC WB Matrix-MR	0.93 0.72 0.82	DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.82 -1.25 0.25 0.28	(loc) 20-21 20-21 15 20-21	l/defl >598 >392 n/a >999	L/d 240 180 n/a 360	PLATES MT20 M18AHS MT20HS Weight: 232 lb	<b>GRIP</b> 244/190 186/179 187/143 FT = 0%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS REACTIONS	2x4 SP No.2 *Excep 2.0E, 9-11:2x4 SP N 2x4 SP 2400F 2.0E 2x4 SP No.2 Structural wood she 1-10-2 oc purlins, ex 2-0-0 oc purlins (2-1 Rigid ceiling directly bracing. 1 Row at midpt (size) 15=0-3-8, Max Horiz 26=-35 (L Max Uplift 15=-73 (C	t* 6-9:2x4 SP 2400i lo.1 athing directly applie ccept -10 max.): 4-5, 6-11 applied or 10-0-0 o 10-17, 7-22 26=0-3-8 C 13) C 9), 26=-75 (LC 8) (LC 39), 26=2142 (L	ed or c N( 1) 2) C 39)	EBS DTES Unbalanced this design. Wind: ASCE Vasd=91mp II; Exp B; Er cantilever le	4-24=-356/41, 4- 5-22=-88/364, 6- 11-17=0/1048, 12 3-24=-12/1013, 3 2-26=-1927/94, 2 7-22=-2554/75, 7 8-20=-211/90, 8- 12-16=-688/62, 1 13-16=-74/3323 roof live loads hat 5-7-16; Vult=115m h; TCDL=6.0psf; hclosed; MWFRS ft and right expos	23=-27/13 22=0/995, 2-17=-25/ -25=-718, -25=-75/3 -21=0/241 18=-1003, 3-15=-19; ave been ( ph (3-sec BCDL=6, (envelope ed ; end v 1 60 plate	<ul> <li>i75, 5-23=-13</li> <li>i75, 5-23=-13</li> <li>i75, 5-23=-13</li> <li>i0-17=-2844</li> <li>i082, '59, '318, '59, '318, '59, '37, 10-18=0, 37/89, '38, '38, '38, '38, '38, '38, '38, '38</li></ul>	392/0, 5/80, 740, /571, or Cat. ne; nd 60						_
FORCES TOP CHORD BOT CHORD	(lb) - Maximum Com Tension 1-2=-308/7, 2-3=-37 4-5=-4985/143, 5-6= 6-7=-5014/149, 7-8= 8-10=-7044/172, 10- 11-12=-4788/128, 12 13-14=-301/8 1-26=-2/303, 25-26= 24-25=-88/3554, 23- 22-23=-100/4912, 2( 18-20=-133/7936, 13- 16-17=-61/3553, 15-	pression/Maximum 80/100, 3-4=-4650/ 5214/142, -7936/187, -11=-4516/136, 2-13=-3780/98, 15/303, -24=-93/4456, -22=-134/7283, 7-18=-100/7044, -16=-3/298, 14-15=-	3) (132, 4) 5) 6) 7) 3/298 9) 10 11	TCLL: ASCI Plate DOL= DOL = 1.15 Cs=1.00; Ct Unbalanced design. Provide ade All plates ar This truss h chord live lo All bearings Provide mer bearing plat 26 and 73 lt )) This truss is Internationa R802.10.2 a () Graphical pl or the orient	eq. cumber D25.0 p 1.15); Pf=25.0 p 1.15); Pf=25.0 ps ); Is=1.0; Rough (2) =1.10 snow loads have quate drainage to e MT20 plates un as been designed ad nonconcurrent are assumed to t chanical connection e capable of withs o uplift at joint 15. designed in acco I Residential Coda und referenced sta urlin representatic ation of the purlin	(Lum DC) (Lum DC) (Lum DC) (Lum DC) (Lum DC) (Lum DC) (Lum C) (Lum C)	grip DOL=1. :: Lum DOL= U = 1.15 Pla y Exp.; Ce=0 asidered for t water pondin, wise indicate 0 psf bottom other live loa 00F 2.0E . ers) of truss : 5 lb uplift at j ith the 2018 R 5002.11.1 a ISI/TPI 1. ot depict the s to p and/or	1.15 te 0.9; his g. ed. ads. to joint and size				STATE OF M SCOTT SEVI SEVI PE-20010	MISSOLA ER DI8807	

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bottom chord. LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	НЗ	Нір	1	1	Job Reference (optional)	171166324

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:34 ID:gSPqfIIYdRVn2QsX0FxRLkz1i5K-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

1-6-8	8-4-12	13-4-4	19-2-4	23-3-12	29-1-12	35-10-10	41-3-0
1-6-8	6-10-4	4-11-8	5-10-0	4-1-8	5-10-0	6-8-14	5-4-6
				41-3-0			



	1-6-8	8-3-0	8-4-12	19-0-8	23-5-8	29-1-12	35-10-10	41-3-0	
	1-6-8	6-8-8	4-11-8 0-1-12	5-8-4	4-5-0	5-8-4	6-8-14	5-4-6	
Scale = 1:74.9									

# Plate Offsets (X, Y): [13:0-3-0,0-2-12], [19:0-3-8,0-1-8]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 25.0 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 BC WB Matrix-MR	0.96 0.98 0.87	DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.24 -0.38 0.08 0.08	(loc) 13-14 13-14 12 13-14	l/defl >999 >999 n/a >999	L/d 240 180 n/a 360	PLATES MT20 MT18HS Weight: 235 lb	<b>GRIP</b> 244/190 244/190 FT = 0%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS REACTIONS	2x4 SP No.2 *Except 2x4 SP No.2 2x4 SP No.2 Structural wood sheat except 2-0-0 oc purlins (3-6- Rigid ceiling directly bracing, Except: 5-2-0 oc bracing: 19- 2-2-0 oc bracing:	t* 1-5:2x4 SP No.1 athing directly applied -12 max.): 6-7. applied or 10-0-0 oc -21 -14. 9-16, 2-21 21=(0-3-8 + bearing q. 0-3-10) 212) C 9), 21=-150 (LC 8) (LC 36), 21=3072 (LC pression/Maximum	1) 2) 4, 3) 4) 5) 5) 5) 8)	2x4 SP No.2 front face with o.c. 8 Total fa No.2. Unbalanced r this design. Wind: ASCE Vasd=91mph II; Exp B; Enc cantilever left right exposed TCLL: ASCE Plate DOL=1 DOL = 1.15); Cs=1.00; Ct= Unbalanced design. Provide adeq All plates are This truss has	bearing block 12"   1 2 rows of 10d (0 isteners. Bearing is oof live loads have 7-16; Vult=115mpl ; TCDL=6.0psf; BC closed; MWFRS (e and right exposed ; Lumber DOL=1.6 7-16; Pr=25.0 psf 15); Pf=25.0 psf 15); Pf=25.0 psf 15); Pf=25.0 psf 1.10 snow loads have b uate drainage to p MT20 plates unlet s been designed for d nonconcurrent w	long at j .148"x3 s assum e been o h (3-sec CDL=6.0 nvelope d ; end v 60 plate (roof LL Lum DC t B; Full een cor revent v ss other or a 10.0 vith any	t. 21 attachee ") nails space hed to be SP considered fo cond gust) Opsf; h=20ft; ( ) exterior zor rertical left an grip DOL=1. Lum DOL=: Lum DOL=: Lum DOL=: sidered for the vater ponding wise indicate 0 psf bottom other live loa	d to ed 3" r Cat. he; d 60 1.15 re .9; nis g. d. ds					
TOP CHORD BOT CHORD WEBS	1-2=-228/36, 2-3=-11 4-6=-1853/87, 6-7=-2 7-9=-2243/100, 9-10 10-11=-3753/80 1-23=-39/288, 21-23 19-21=-1158/138, 17 16-17=0/1672, 14-16 13-14=-47/3513, 12- 4-19=-1256/95, 6-17 -16=0/315, 3-21=-2	78/1343, 3-4=-1208/6 2018/110, =-3220/94, =-39/288, 7-19=0/1055, 5=0/2946, 13=0/0 =-387/61, 6-16=-46/6 763/145, 3-19=-42/25	64, 9) 10) 11) 554, 585,	All bearings a Provide mech bearing plate 12 and 150 lb This truss is o International R802.10.2 an Graphical puu or the orienta bottom chord	d nonconcurrent w irre assumed to be nanical connection capable of withsta o uplift at joint 21. designed in accord Residential Code s d referenced stam- lin representation tion of the purlin al	Vith any SP No. (by oth anding 3 lance w sections dard AN does no long the	other live loa 2. ers) of truss t 3 lb uplift at j ith the 2018 R502.11.1 a ISI/TPI 1. of depict the s top and/or	as. o oint nd size		ç	*	STATE OF M	M. ER
NOTES	4-17=-2/786, 9-14=0 11-12=-1811/56, 10- 10-14=-602/56, 11-1 2-23=-51/242, 2-21=	/350, 9-161189/66, 13=-327/87, 3=-48/3541, -1453/240	LO	AD CASE(S)	Standard					2	OP IN CO	NUME PE-20010	LENGT

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Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	НЗА	Нір	1	1	Job Reference (optional)	171166325

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:35 ID:FcCGSSV?KI\_dfMKhr2alXWz1i5e-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1

1-4-12	8-4-12	12-6-2	17-2-4	21-3-0	25-3-12	30-11-1	36-6-10	41-3-0
1-4-12	7-0-0	4-1-6	4-8-2	4-0-12	4-0-12	5-7-5	5-7-10	4-8-6
				41-3-	0			



	1-4-12	8-3-0	8-4-12	17-0-8	21-3-0	25-5-8	30-11-1	36-6-10	41-3-0	L
Scale = 1:74.4	1-4-12	6-10-4	" 4-1-6 0-1-12	4-6-6	4-2-8	4-2-8	5-5-9	5-7-10	4-8-6	1

## Plate Offsets (X, Y): [1:Edge,0-0-14], [14:0-2-0,0-3-0], [18:0-3-8,0-1-8]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 25.0 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 IRC2018	3/TPI2014	<b>CSI</b> TC BC WB Matrix-MR	0.90 0.85 0.80	DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.19 -0.31 0.08 0.08	(loc) 12-13 13-14 11 13	l/defl >999 >999 n/a >999	L/d 240 180 n/a 360	PLATES MT20 Weight: 242 lb	<b>GRIP</b> 244/190 FT = 0%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS REACTIONS FORCES TOP CHORD	2x4 SP No.2 *Except 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood shea 2-2-0 oc purlins, exce 2-0-0 oc purlins (3-8- Rigid ceiling directly i bracing, Except: 4-8-13 oc bracing: 18 1 Row at midpt 2 (size) 11=0-3-8, i Max Horiz 20=72 (LC Max Uplift 11=-40 (LC Max Grav 11=1748 (I (Ib) - Maximum Comp Tension 1-2=-224/42, 2-3=-17 4-5=-1509/94, 5-6=-1 7-8=-2259/116, 8-9=- 9-10=-3362/91	* 1-5:2x4 SP No.1 thing directly applied of 6 max.): 5-7. applied or 10-0-0 oc 8-20. 20=0-3-8 12) 20=0-3-8 12) C 36), 20=-160 (LC 8) LC 36), 20=2990 (LC 6) pression/Maximum 76/1548, 3-4=-850/78, 419/96, 6-7=-2086/12 3059/110,	1) 2) or 3) 4) 36) 5) 6) 7) 44, 8) 9)	2x4 SP No.2 front face wit o.c. 8 Total fa No.2. Unbalanced I this design. Wind: ASCE Vasd=91mph II; Exp B; Enc cantilever leff right exposed TCLL: ASCE Plate DOL=1 DOL = 1.15); Cs=1.00; Ct= Unbalanced design. Provide adec This truss ha chord live loa All bearings a Provide mecl bearing plate	bearing block 12" I h 2 rows of 10d (0 asteners. Bearing is roof live loads have 7-16; Vult=115mph ; TCDL=6.0psf; BC closed; MWFRS (er and right exposed d; Lumber DOL=1.6 7-16; Pr=25.0 psf (L Is=1.0; Rough Cat 1.10) snow loads have be uate drainage to p s been designed for d nonconcurrent ware assumed to be nanical connection capable of withsta	ong at j 148"x3 s assum a been o c (3-sec CDL=6.0 nvelope ; end v 60 plate (roof LL .um DC B; Full een cor revent v or a 10.0 ith any SP No. (by oth nding 4	t. 20 attache ") nails space led to be SP considered for ond gust) Dpsf; h=20ft; ( ) exterior zor ertical left an grip DOL=1. : Lum DOL= L = 1.15 Plai y Exp.; Ce=0 isidered for th vater ponding ) psf bottom other live loa 2. ers) of truss t 0 lb uplift at j	d to ed 3" r Cat. ne; d 60 1.15 te .9; nis g. ds. o oint					
BOT CHORD WEBS NOTES	1-22=-48/297, 20-22: 18-20=-1351/141, 16 15-16=0/1926, 13-15 12-13=-60/3144, 11- 5-16=-30/196, 6-16=- 7-14=0/308, 8-13=0/2 10-11=-1703/60, 9-12 10-11=-1703/60, 9-12 10-12=-61/3177, 9-12 4-18=-1310/87, 3-20= 4-16=-21/988, 2-22= 2-20=-1655/247, 3-18	=-48/297, -18=0/776, =-28/2813, 12=0/0 869/33, 6-14=-42/553 272, 8-14=-1015/58, 2=-361/77, 3=-355/43, =-2669/150, -70/255, 3=-46/2305, 6-15=0/1	10 5, 11 LC	11 and 160 lt This truss is of International R802.10.2 ar Graphical pu or the orienta bottom chord	o uplift at joint 20. designed in accord Residential Code s ad referenced stand fin representation a tion of the purlin al Standard	ance w sections dard AN does no ong the	th the 2018 R502.11.1 a ISI/TPI 1. It depict the s top and/or	ind		-		STATE OF M SCOTI SEVIL	MISSOLIN M. ER M. ER



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February 5,2025

Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	НЗВ	Нір	1	1	Job Reference (optional)	171166326

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:35 ID:OTplqGGJqoHn6tE7AV3tcEyeynL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





Scale = 1:74.3

Plate Offsets (	(X, Y): [3:0-5-4,Edge], [	5:0-6-0,0-1-11], [9:	:0-3-8,Ed	ge], [11:0-2-8,0-	3-0], [13:0-3-8,Ed	ge]							
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 25.0 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-MR	0.91 0.73 1.00	DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.33 -0.57 0.14 0.14	(loc) 11 10-11 8 11	l/defl >999 >829 n/a >999	L/d 240 180 n/a 360	PLATES MT20HS MT20 Weight: 215 lb	<b>GRIP</b> 187/143 244/190 FT = 0%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD	2x4 SP 2400F 2.0E *F No.2 2x4 SP No.1 2x4 SP No.2 Structural wood sheat 2-2-0 oc purlins, exce	Except* 3-5:2x4 SF thing directly applie	ed or	<ul> <li>) TCLL: ASCE Plate DOL= DOL = 1.15) Cs=1.00; Ct:</li> <li>) Unbalanced design.</li> <li>) Provide ade</li> <li>) All plates are</li> <li>) This truss has</li> </ul>	<ul> <li>F-16; Pr=25.0 ps</li> <li>1.15); Pf=25.0 psf</li> <li>1.10; Rough Ci</li> <li>1.10; Rough Ci</li> <li>1.10</li> <li>snow loads have</li> <li>quate drainage to</li> <li>MT20 plates unlease here designed</li> </ul>	f (roof LI (Lum DC at B; Full been cor prevent ess other	L: Lum DOL= DL = 1.15 Pla y Exp.; Ce=( nsidered for t water pondin wise indicate	=1.15 ate 0.9; this ng. ed.					
BOT CHORD REACTIONS	2-0-0 oc purlins (2-2-0 Rigid ceiling directly a bracing. (size) 8=0-3-8, 14 Max Horiz 14=-54 (LC Max Uplift 8=-35 (LC 9 Max Grav 8=2112 (LC	0 max.): 3-5. applied or 10-0-0 or 4= Mechanical 2 13) 9), 14=-34 (LC 8) C 36), 14=2105 (LC	c & e e 1 C 36) 1	<ul> <li>chord live lo.</li> <li>bearings are</li> <li>Refer to gird</li> <li>Provide med</li> <li>bearing plate</li> <li>14 and 35 lb</li> </ul>	ad nonconcurrent e assumed to be: , ler(s) for truss to tr shanical connection e capable of withst uplift at joint 8.	with any Joint 8 \$ uss conr n (by oth anding 3	other live los SP No.1 . nections. ers) of truss 34 lb uplift at	ads. to joint					
FORCES	(lb) - Maximum Comp Tension	pression/Maximum		International R802.10.2 a	Residential Code	sections	R502.11.1	and					
TOP CHORD	1-2=-4207/85, 2-3=-3 4-5=-3283/112, 5-6=-3	557/97, 3-4=-3247, 3597/99, 6-7=-436	/110, <sub>1</sub> 4/89	<ol> <li>Graphical pu or the orient</li> </ol>	urlin representation ation of the purlin	n does no along the	ot depict the top and/or	size					
WEBS	13-14=-50/54, 12-13= 10-12=-9/3639, 9-10= 2-13=-309/97, 2-12=- 4-12=-717/57, 4-11=0 5-10=0/622, 6-9=-246 7-8=-2050/68, 7-9=-4 1-13=-43/3951	793920, 45/4072, 8-9=0/0 726/73, 3-12=0/60 //243, 4-10=-680/5 5/98, 6-10=-845/74, 5/4090, 1-14=-204	5, 7, , 6/66,	bottom chord	d. Standard						Å	TATE OF M	AISSOLUS
NOTES 1) Unbalance this design	ed roof live loads have b n.	been considered fo	r									SEVI	ER

 Wind: AŠCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

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 **ANSITPTI 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)



February 5,2025

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Page: 1

Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	H4	Нір	1	1	Job Reference (optional)	171166327

# Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:35 ID:UEtmPEaaUSDRDPBvFZJmOEya1CB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



J4zJC?f





Scale = 1:59.6

Loading TCLL (roof)	(psf) 25.0	Spacing Plate Grip DOL	2-0-0 1.15		CSI TC	0.74	DEFL Vert(LL)	in -0.18	(loc) 13-14	l/defl >999	L/d 240	PLATES MT20	<b>GRIP</b> 244/190	
Snow (Pf)	25.0	Lumber DOL	1.15		BC	0.78	Vert(CT)	-0.29	13-14	>999	180	MT18HS	244/190	
TCDL	10.0	Rep Stress Incr	YES		WB	0.58	Horz(CT)	0.07	9	n/a	n/a			
	0.0	Code	IRC2018/1	I PI2014	Matrix-IVIR		vvind(LL)	0.05	13-14	>999	360	Waight: 150 lb	ET _ 0%	
BODL	10.0		-									weight. 150 b	FT = 0.76	
LUMBER			4) l	Unbalanced s	snow loads have b	been cor	nsidered for th	his						
TOP CHOR	D 2x4 SP No.2		C	design.										
BOT CHOR	D 2x4 SP No.2		5) F	Provide adeq	luate drainage to p	orevent	water ponding	g.						
WEBS	2x4 SP No.2		6) /	All plates are	MT20 plates unle	ss other	wise indicate	ed.						
BRACING			7)	This truss ha	s been designed f	or a 10.0	) pst bottom							
TOP CHOR	D Structural wood shear	athing directly applie	ed or	chord live loa	a nonconcurrent v	NITE ANY	other live loa	ads.						
	2-8-12 oc purlins, exe	cept	8) /	All bearings a	are assumed to be	OP NO.	$\angle$ .	to						
	2-0-0 oc purlins (3-1-	-2 max.): 4-5.	9) 1	hearing plate	canable of withst	anding 3	4 lb unlift at i	ioint						
BOT CHOR	D Rigid ceiling directly a bracing.	applied or 10-0-0 of	10) 7	15 and 34 lb	uplift at joint 9.		ith the 2019	joint						
REACTION	<b>S</b> (size) 9=0-3-8, 1	5=0-3-8	10)	International	Residential Code	sections	P502 11 1 2	and						
	Max Horiz 15=50 (LC	2 12)	, F	R802 10 2 ar	nd referenced stan	dard AN	ISI/TPI 1	anu						
	Max Uplift 9=-34 (LC	9), 15=-34 (LC 8)	11) (	Graphical pu	rlin representation	does no	ot depict the s	size						
	Max Grav 9=1774 (L	.C 36), 15=1774 (LC	36)	or the orienta	tion of the purlin a	alona the	top and/or							
FORCES	(lb) - Maximum Comp	pression/Maximum	ł	bottom chord		5								
	Tension		LOA	D CASE(S)	Standard									
TOP CHOR	D 1-2=-381/14, 2-3=-30	043/29, 3-4=-2405/3	34,	(-)										
	4-5=-2180/48, 5-6=-2 7-8=-383/14	2407/34, 6-7=-3042	/29,											
BOT CHOR	D 1-15=-2/422, 14-15=-	-53/422,												
	13-14=-16/2791, 12-	13=0/2178,												
	10-12=0/2789, 9-10=	-5/424, 8-9=-5/424												
WEBS	3-14=-170/104, 3-13=	=-661/63, 4-13=0/3	59,											
	4-12=-244/251, 5-12=	=0/386, 6-12=-658/	63,									COOL	TOP	
	6-10=-171/103, 2-15=	=-1687/106,										A OF M	11Sc D	
	2-14=0/2383, 7-9=-16	687/106, 7-10=0/23	80								1	750	~0,0	K.
NOTES											R	NY SCOTT	IN LON	<i>v</i>
1) Unbala	nced roof live loads have l	been considered fo	r								A	s/ score	M. VY	VY
this des	ign.										8.	/ SEVI	ER	. X
2) Wind: A	SCE 7-16; Vult=115mph	(3-second gust)									<b>0</b> ×			5 12
Vasd=9	1mph; TCDL=6.0psf; BCL	DL=6.0psf; h=20ft; 0	Jat.								NOD -	#	X l.	Y-
II; EXP I	3; Enclosed; MVVFRS (env	velope) exterior zor	ie;							_	SA C		IM	a
right ox	er leit and right exposed ;	; end ventical left an	0								112	DE 20010	18807 15	i H
	SCE 7-16: $Pr=25.0 \text{ pef} (r)$	roof LL · Lum DOL = 1.0	15								N.	-200II		9
Plate D	OI = 1.15) $Pf = 25.0 psf (I)$	Im DOI = 1.15 Plat	e								Y	100	1 ON B	7
DOL =	1.15): Is=1.0: Rough Cat F	B: Fully Exp.: Ce=0	.9:								0	SIONIA	TENA	
Cs=1.0	0; Ct=1.10	_, ·,, 00-0.	-,									Chi A		

February 5,2025



Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	H4A	Нір	1	1	Job Reference (optional)	171166328

Run: 8 83 S. Jan 17 2025 Print: 8 830 S. Jan 17 2025 MiTek Industries. Inc. Mon Feb 03 11:17:36 ID:JktAVMhf2PhWdOeO4AS6aQya1Am-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

28-6-0

22-10-8 27-1-4 5-7-8 11-2-4 17-3-12 4-2-12 5-6-12 6-1-8 5-6-12 4-2-12 1-4-12 28-6-0 6x8= M18AHS 5x8 = 412 4 23 5 3x4 🚅 3x4 🕿 22 24 3 6 4-2-11 4-1-2 4x5 🕿 4x5 🚽 2 7 0-5-15 47 14 13 12 11 10 15 ā 3x4= MT18HS 3x8 = 4x5 =3x4= 3x8= 4x5 =1.5x4 II 1.5x4 🛚 3x4= 28-6-0 1-4-12 27-3-0 -3-0 5-7-8 11-0-8 17-5-8 22-10-8 27-1-4 4-2-12 5-5-0 6-5-0 5 - 5 - 04-2-12 -3-0 0-1-12 0-1-12 1-3-0 Spacing 2-0-0 CSI DEFL l/defl L/d PLATES GRIP (psf) in (loc) 25.0 Plate Grip DOL 1.15 TC 0.93 Vert(LL) -0.14 13-14 >999 240 MT20 244/190 25.0 BC Vert(CT) M18AHS 186/179 Lumber DOL 1 15 0.69 -0.25 12-13 >999 180 10.0 Rep Stress Incr YES WB 0.56 Horz(CT) 0.07 9 MT18HS 244/190 n/a n/a 0.0 Code IRC2018/TPI2014 Matrix-MR Wind(LL) 0.05 13 >999 360 10.0 Weight: 143 lb FT = 0%Unbalanced snow loads have been considered for this 4) design. 2x4 SP No.2 2x4 SP No.2 Provide adequate drainage to prevent water ponding. 5) 2x4 SP No.2 6) All plates are MT20 plates unless otherwise indicated. 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. Structural wood sheathing directly applied or 8) All bearings are assumed to be SP No.2. 2-5-14 oc purlins, except Provide mechanical connection (by others) of truss to 2-0-0 oc purlins (2-2-0 max.): 4-5. 9) bearing plate capable of withstanding 42 lb uplift at joint Rigid ceiling directly applied or 10-0-0 oc 9 and 42 lb uplift at joint 15. bracing 10) This truss is designed in accordance with the 2018 **REACTIONS** (size) 9=0-3-8, 15=0-3-8 International Residential Code sections R502.11.1 and Max Horiz 15=43 (LC 12) R802.10.2 and referenced standard ANSI/TPI 1. Max Uplift 9=-42 (LC 9), 15=-42 (LC 8) 11) Graphical purlin representation does not depict the size Max Grav 9=1624 (LC 36), 15=1624 (LC 36) or the orientation of the purlin along the top and/or (Ib) - Maximum Compression/Maximum bottom chord. Tension LOAD CASE(S) Standard 1-2=-155/4, 2-3=-2624/44, 3-4=-2283/53. 4-5=-2072/68, 5-6=-2283/52, 6-7=-2624/45, 7-8=-155/4



2-15=-1490/77, 2-14=-21/2287

NOTES

Scale = 1:56.9 Loading

TCLL (roof)

Snow (Pf)

LUMBER

TOP CHORD

BOT CHORD

TOP CHORD

BOT CHORD

FORCES

TOP CHORD

BRACING

TCDL

BCLL

BCDL

WFBS

- Unbalanced roof live loads have been considered for 1) this design
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 3) Plate DOL=1.15); Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00: Ct=1.10





Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	H4B	Нір	1	1	Job Reference (optional)	171166329

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:36 ID:CaDOdzZp5XIIGS8EIIk?Vcya19e-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f







Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 25.0 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 IRC20	18/TPI2014	CSI TC BC WB Matrix-MR	0.59 0.72 0.48	DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.16 -0.27 0.07 0.07	(loc) 14 14-15 10 14	l/defl >999 >999 n/a >999	L/d 240 180 n/a 360	PLATES MT20 MT18HS Weight: 144 lb	<b>GRIP</b> 244/190 244/190 FT = 0%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS FORCES	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood shea 3-5-2 oc purlins, exc 2-0-0 oc purlins (3-5 Rigid ceiling directly bracing. (size) 10=0-3-8, Max Horiz 17=34 (LC Max Uplift 10=-49 (LI Max Grav 10=1474 ( (Ib) - Maximum Com Tension	athing directly applied ept -13 max.): 4-6. applied or 10-0-0 oc 17=0-3-8 C 12) C 9), 17=-49 (LC 8) (LC 36), 17=1474 (LC pression/Maximum	3 1 or 5 6 7 8 9 : 36) 1	<ul> <li>) TCLL: ASCE Plate DOL=1</li> <li>DOL = 1.15); Cs=1.00; Ct=</li> <li>) Unbalanced design.</li> <li>) Provide adec</li> <li>) All plates are</li> <li>) All bearings a chord live loa</li> <li>) All bearings a</li> <li>) Provide mech bearing plate 17 and 49 lb</li> <li>0) This truss is International</li> <li>PROVID 20 20</li> </ul>	7-16; Pr=25.0 ps .15); Pf=25.0 psf Is=1.0; Rough C .10 snow loads have upate drainage to .MT20 plates unli- s been designed id nonconcurrent are assumed to b hanical connectio .capable of withs uplift at joint 10. designed in accor Residential Code	If (roof LL (Lum DC at B; Full been cor prevent 1 for a 10.1 with any e SP No. n (by oth tanding 4 rdance w s sections odard Ab	L: Lum DOL= DL = 1.15 Plat y Exp.; Ce=0 asidered for th water ponding wise indicate D psf bottom other live loa 2. ers) of truss t 9 lb uplift at j ith the 2018 R502,11.1 a	1.15 re .9; nis g. d. ds. o oint					
TOP CHORD	1-2=-111/9, 2-3=-215 4-5=-2189/79, 5-6=-2 7-8=-2157/53, 8-9=-1	57/52, 3-4=-2349/68, 2189/79, 6-7=-2349/6 111/9	1 68,	<ol> <li>Graphical pu or the orienta bottom chord</li> </ol>	rlin representation ation of the purlin	n does no along the	ot depict the s top and/or	size					
BOT CHORD	1-17=-2/113, 16-17= 14-15=-18/2771, 12- 11-12=-18/1996, 10-	-27/113, 15-16=-44/1 14=-18/2771, 11=0/113, 9-10=0/11	<sup>996,</sup> L 3	OAD CASE(S)	Standard								
WEBS	3-15=-69/394, 4-15= 5-14=0/207, 5-12=-7 7-12=-69/394, 3-16= 2-17=-1336/67, 2-16 8-10=-1336/67, 8-11	0/343, 5-15=-717/38, 17/37, 6-12=0/343, -366/55, 7-11=-366/5 =-36/1968, =-35/1968	5,								Å	STATE OF M	AISSOUR
NOTES 1) Unbalance this design 2) Wind: ASC Vasd=91m II: Exp B: E	ed roof live loads have CE 7-16; Vult=115mph nph; TCDL=6.0psf; BCI prolosed: MWERS (en	been considered for (3-second gust) DL=6.0psf; h=20ft; Ca	at.							1	C.	SEVI	ER Loute

cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

# ESSIONAL February 5,2025

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Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	J2	Jack-Open	8	1	Job Reference (optional)	171166330

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:37 ID:\_ZmwUjBtBwv4A4JyMsxTryz1iUa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





0-1-12

Scale = 1:18.9

Loa	ding		(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCL	L (roof)		25.0	Plate Grip DOL	1.15		TC	0.14	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
Sno	w (Pf)		25.0	Lumber DOL	1.15		BC	0.11	Vert(CT)	0.00	4-5	>999	180		
TCE	DL		10.0	Rep Stress Incr	YES		WB	0.03	Horz(CT)	-0.01	3	n/a	n/a		
BCL	.L		0.0	Code	IRC2018	3/TPI2014	Matrix-MP		Wind(LL)	0.00	4-5	>999	360		
BCE	DL		10.0											Weight: 10 lb	FT = 0%
I UN	IBER				7)	Provide med	hanical connection	on (by oth	ers) of truss t	to					
TOF	CHORD	2x4 SP No 2	>		.,	bearing plate	e capable of withs	standing 1	7 lb uplift at j	oint					
BOT	CHORD	2x4 SP No.2	2			3, 10 lb uplif	t at joint 4 and 22	2 lb uplift a	t joint 5.						
WE	BS	2x4 SP No.2	2		8)	This truss is	designed in acco	ordance wi	th the 2018						
BP/			-		,	International	Residential Code	e sections	R502.11.1 a	nd					
TOF		Structural w	ood she	athing directly appli	ed or	R802.10.2 a	nd referenced sta	andard AN	ISI/TPI 1.						
101	ONORD	3-2-4 oc pur	rlins	annig anceay appi	LC	AD CASE(S)	Standard								
BOT	CHORD	Rigid ceiling	directly	applied or 10-0-0 o	с	. ,									
		bracing.	,,		-										
REA	CTIONS	(size) 3=	= Mecha	nical, 4= Mechanic	al,										
		5=	=0-3-8												
		Max Horiz 5	=28 (LC	8)											
		Max Uplift 3=	=-17 (LC	12), 4=-10 (LC 18)	,										
		5=	=-22 (LC	8)											
		Max Grav 3=	=46 (LC	18), 4=16 (LC 7), 5	=329										
		(L	_C 18)												
FOF	RCES	(lb) - Maxim Tension	um Com	pression/Maximum											
TOF	P CHORD	1-2=-25/34,	2-3=-38/	9											
BOT	CHORD	1-5=-3/28, 4	-5=0/0												
WE	BS	2-5=-230/34	Ļ												
NOT	TES														
1)	Wind: ASC	CE 7-16; Vult=	115mph	(3-second gust)											The
	Vasd=91m	nph; TCDL=6.0	0psf; BCI	DL=6.0psf; h=20ft;	Cat.									A	all
	II; Exp B; E	Enclosed; MW	/FRS (en	velope) exterior zo	ne;									BR OF I	MISS W
	cantilever	left and right e	exposed	; end vertical left ar	nd								E	7 21	20,0
	right expos	sed; Lumber D	DOL=1.60	) plate grip DOL=1.	60								B	SCOT	M XX
2)	TCLL: ASC	CE 7-16; Pr=2	5.0 pst (r	roof LL: Lum DOL=	1.15								B		
	Plate DOL	=1.15); Pt=25.	.0 pst (Li	um DOL = 1.15 Pla	te								0.	SEVI	
	DOL = 1.1	(5); IS=1.0; RO	ugn Cat i	B; Fully Exp.; Ce=0	.9,								857		
3)	Unhalance	ol=1.10	have be	en considered for t	his								<b>NJX</b>		· Xaula to
5)	design.		nave be		10									Course	- Mary
4)	This truss	has been desi	igned for	a 10.0 psf bottom									N	OX PE-2001	018807

chord live load nonconcurrent with any other live loads.
5) Bearings are assumed to be: , Joint 5 SP No.2 .

6) Refer to girder(s) for truss to truss connections.



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Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	J3	Jack-Open	2	1	Job Reference (optional)	171166331

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:37 ID:\_ZmwUjBtBwv4A4JyMsxTryz1iUa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





0-1-12

Scale = 1:19.5

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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	TC	0.16	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	0.00	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP		Wind(LL)	0.00	4-5	>999	360		
BCDL	10.0										Weight: 12 lb	FT = 0%
LUMBER			7) Provide r	nechanical connectio	on (by oth	ers) of truss	to					
TOP CHORD	2x4 SP No.2		bearing p	late capable of withs	standing 2	0 lb uplift at	joint					
BOT CHORD	2x4 SP No.2		3 and 20	lb uplift at joint 5.								
WEBS	2x4 SP No.2		<ol><li>This trus</li></ol>	s is designed in acco	ordance wi	ith the 2018						
BRACING			Internatio	nal Residential Code	e sections	R502.11.1	and					
TOP CHORD	Structural wood shea	athing directly applie	ed or R802.10	2 and referenced sta	andard AN	ISI/TPI 1.						
	3-8-4 oc purlins.		LOAD CASE	(S) Standard								
BOT CHORD	Rigid ceiling directly bracing.	applied or 10-0-0 o	с									
REACTIONS	(size) 3= Mecha	nical, 4= Mechanica	al,									
	5=0-3-8											
	Max Horiz 5=33 (LC	8)										
	Max Uplift 3=-20 (LC	12), 5=-20 (LC 8)										
	Max Grav 3=76 (LC (LC 18)	18), 4=29 (LC 7), 5	=349									
FORCES	(lb) - Maximum Com Tension	pression/Maximum										
TOP CHORD	1-2=-32/38, 2-3=-45/	/17										
BOT CHORD	1-5=-3/33, 4-5=0/0											
WEBS	2-5=-264/42											
NOTES												
1) Wind: AS	CE 7-16; Vult=115mph	(3-second gust)										
Vasd=91r	mph; TCDL=6.0psf; BC	DL=6.0psf; h=20ft; (	Cat.									
II; Exp B;	Enclosed; MWFRS (en	velope) exterior zor	ne;								O TE I	A BAR
cantilever	left and right exposed	; end vertical left an	d								F.OF I	VIISS
right expo	osed; Lumber DOL=1.60	D plate grip DOL=1.	60							4		N.S.
2) TULL: AS	CE 7-16; Pr=25.0 psr (I		1.15							A	SCOT	TM. PAN
	L=1.15); PI=25.0 pSI (Lt 15): lc=1 0: Rough Cat	P = 1.15 Plat	0.							K	SEV	FR VV
$C_{S}=1.00$	Ct-1 10	B, Fully Exp., Ce=0	.9,							84		
3) Unbalance	ed snow loads have be	en considered for th	nis							ax	hatta	X ISA
design.											our -	HONMIN
<ol> <li>This truss</li> </ol>	s has been designed for	a 10.0 psf bottom								M	NUM	
, chord live	load nonconcurrent wit	th any other live loa	ds.							N'	ON PE-2001	018807

Bearings are assumed to be: , Joint 5 SP No.2 . 5)

Refer to girder(s) for truss to truss connections. 6)



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Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	J3A	Jack-Open	2	1	Job Reference (optional)	171166332

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:37 ID:\_ZmwUjBtBwv4A4JyMsxTryz1iUa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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0-1-12

Scale = 1:18.8

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Loading TCLL (roo Snow (Pf) TCDL BCLL BCDI	(psf) 25.0 25.0 10.0 0.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MP	0.14 0.11 0.03	DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in 0.00 0.00 -0.01 0.00	(loc) 4-5 4-5 3 4-5	l/defl >999 >999 n/a >999	L/d 240 180 n/a 360	PLATES MT20	<b>GRIP</b> 244/190
LUMBER TOP CHO BOT CHO WEBS BRACING TOP CHO	RD 2x4 SP No.2 RD 2x4 SP No.2 2x4 SP No.2 RD Structural wood she 3-1-3 oc purlins.	athing directly applie	<ul> <li>7) Provide me bearing plat</li> <li>3, 13 lb upli</li> <li>8) This truss is Internationa R802.10.2 a</li> <li>LOAD CASE(S</li> </ul>	chanical connection e capable of withst ft at joint 4 and 22 is designed in accor I Residential Code and referenced star Standard	n (by oth anding 1 lb uplift a dance w sections ndard AN	ers) of truss t 6 lb uplift at j t joint 5. ith the 2018 i R502.11.1 a ISI/TPI 1.	o oint Ind					11 = 078
BOT CHO	RD Rigid ceiling directly bracing. <b>VS</b> (size) 3= Mecha 5=0-3-8 Max Horiz 5=27 (LC Max Uplift 3=-16 (LC 5=-22 (LC Max Grav 3=40 (LC (12 C 18)	applied or 10-0-0 or anical, 4= Mechanica 8) 2 12), 4=-13 (LC 18), 2 8) 18), 4=13 (LC 7), 5=	- 1, -326									
FORCES TOP CHO BOT CHO WEBS	(Ib) - Maximum Con Tension RD 1-2=-24/34, 2-3=-37 RD 1-5=-3/27, 4-5=0/0 2-5=-225/33	npression/Maximum /8										
NOTES 1) Wind: Vasd= II; Exp cantile right e 2) TCLL: Plate DOL = Cs=1. 3) Unbal desigr 4) This tr	ASCE 7-16; Vult=115mpt 91mph; TCDL=6.0psf; BC B; Enclosed; MWFRS (er ver left and right exposed kposed; Lumber DOL=1.6 ASCE 7-16; Pr=25.0 psf (L 00L=1.15); Pf=25.0 psf (L 1.15); Is=1.0; Rough Cat 00; Ct=1.10 anced snow loads have be	(3-second gust) DL=6.0psf; h=20ff; ( ivelope) exterior zon ; end vertical leff an 0 plate grip DOL=1.6 roof LL: Lum DOL=1 m DOL = 1.15 Plat B; Fully Exp.; Ce=0. sen considered for th r a 10.0 osf bottom	Cat. e; d 00 1.15 e 9; iis						ر		STATE OF M SEVI	MISSOLA T.M. ER BER BER DISSO7

4) chord live load nonconcurrent with any other live loads. 5) Bearings are assumed to be: , Joint 5 SP No.2 .

6) Refer to girder(s) for truss to truss connections.

February 5,2025

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Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	J6	Jack-Partial	39	1	Job Reference (optional)	171166333

1-4-12 1-4-12

1.5x4 II

2

0

Quality Truss LLC (Smithville, MO), Smithville, MO - 64089,

2-10-11

0-5-15

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:37 ID:8Xn4wBoUWhc2bVlo3OjRi6z1iJS-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



9

2-10-11



Scale = 1:24.1

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	0.87	Vert(LL)	-0.05	4-5	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.11	4-5	>633	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.05	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP		Wind(LL)	0.03	4-5	>999	360		
BCDL	10.0										Weight: 23 lb	FT = 0%
LUMBER			7) Provide me	chanical connectio	on (by oth	ers) of truss	to					
TOP CHORD	2x4 SP No.2		bearing pla	te capable of withs	standing 4	4 lb uplift at j	joint					
BOT CHORD	2x4 SP No.2		3 and 18 lb	uplift at joint 5.								
WEBS	2x4 SP No.2		<ol><li>This truss is</li></ol>	s designed in acco	rdance w	ith the 2018						
BRACING			Internationa	al Residential Code	e sections	R502.11.1 a	and					
TOP CHORD	Structural wood she	athing directly applie	ed or R802.10.2	and referenced sta	andard AN	ISI/TPI 1.						
BOT CHORD	1-11-14 oc purlins. Rigid ceiling directly	applied or 10-0-0 of	C LOAD CASE(S	Jotanuaru								
	bracing.											
REACTIONS	(size) 3= Mecha	inical, 4= Mechanica	al,									
	5=0-3-8	0)										
	Max Holiz 5=04 (LC	8) 5 0) 5 40 (LC 0)										
	Max Opilit 3=-44 (LC	(10, 3), 3 = -18 (10, 3)										
	5-546 (LC	2 18), 4=104 (LC 7), 2 18)	,									
FORCES	(lb) - Maximum Com	pression/Maximum										
TOROLO	Tension	pression/maximum										
TOP CHORD	1-2=-82/96, 2-3=-10	5/63										
BOT CHORD	1-5=-49/64, 4-5=0/0											
WEBS	2-5=-635/135											
NOTES												
1) Wind: AS	CE 7-16; Vult=115mph	(3-second gust)										
Vasd=91r	nph; TCDL=6.0psf; BC	DL=6.0psf; h=20ft; 0	Cat.								~	
II; Exp B;	Enclosed; MWFRS (en	velope) exterior zor	ne;								A	De
cantilever	left and right exposed	; end vertical left an	d								B.F. OF I	MISS W
right expo	sed; Lumber DOL=1.6	0 plate grip DOL=1.0	60							6	- AL	NO
2) TCLL: AS	CE 7-16; Pr=25.0 psf (	root LL: Lum DOL=1	1.15							B	SCOT	TM XPN
Plate DOI	L=1.15); Pt=25.0 psf (Li	um DOL = 1.15 Plat	e							B	SEV	IFR \ X
DOL = 1.7	Ct=1 10	D, Fully Exp.; Ce=0.	.9,							Bos		
3) Unhalanc	ed snow loads have be	en considered for th	nis							ΨX^	1 <b></b>	
design.										XX	our,	Emp

- This truss has been designed for a 10.0 psf bottom 4)
- chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: , Joint 5 SP No.2 . 5)
- Refer to girder(s) for truss to truss connections. 6)



Page: 1



Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	J6A	Half Hip	4	1	Job Reference (optional)	171166334

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:37 ID:JarXyh6kxAQ8GlurDwB4u4z1iKL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



1-4-12 5-2-4 7-2-4 1-4-12 3-9-8 2-0-0 7-2-4 4x4 =3x4 = 4 Г σ 3 4 2 3x4 🚅 ------2-2-11 2-2-11 2-1-2 2 0-5-15 Ľ/ 5  $\mathbb{R}_{7}$ 6 2x4 =4x8 =1.5x4 u 1.5x4 🛚

1-4-12



0-1-12

Coolo	1.0	10
Scale	= 1.2	1.0

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 25.0 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 IRC2018/TPI2014	CSI TC BC WB Matrix-MP	0.33 0.09 0.06	DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in 0.00 -0.01 0.00 0.00	(loc) 6-7 6-7 5 6-7	l/defl >999 >999 n/a >999	L/d 240 180 n/a 360	PLATES MT20 Weight: 36 lb	<b>GRIP</b> 244/190 FT = 0%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood she: 6-0-0 oc purlins, exi 2-0-0 oc purlins (6-0 Rigid ceiling directly bracing.	athing directly applied cept end verticals, an -0 max.): 3-4. applied or 10-0-0 oc	<ul> <li>7) Bearings are</li> <li>8) Refer to gird</li> <li>9) Provide mec bearing plate and 29 lb up</li> <li>10) This truss is International R802.10.2 a</li> <li>11) Graphical pu or the orient</li> </ul>	a assumed to be: er(s) for truss to hanical connection of apable of withs lift at joint 7. designed in accor Residential Cod nd referenced sta Irlin representation ation of the purlin J.	Joint 7 SI truss conr on (by oth standing 9 ordance w e sections andard AN on does no a along the	P No.2 . nections. ers) of truss b lb uplift at jo ith the 2018 \$ R502.11.1 at ISI/TPI 1. bt depict the a top and/or	to bint 5 and size					
REACTIONS	(size) 5= Mecha Max Horiz 7=50 (LC Max Uplift 5=-9 (LC 8 Max Grav 5=262 (LC	nical, 7=0-3-8 11) 3), 7=-29 (LC 8) 32), 7=548 (LC 33)	LOAD CASE(S)	Standard								
FORCES	(lb) - Maximum Com	pression/Maximum										
TOP CHORD	Tension 1-2=-40/8, 2-3=-270/ 4-5=-251/14	/5, 3-4=-189/14,										
BOT CHORD WEBS	1-7=-13/65, 6-7=-47/ 2-7=-518/70, 2-6=0/ 4-6=0/260	/65, 5-6=-17/13 123, 3-6=-136/36,										
NOTES												
<ol> <li>Unbalance this design</li> <li>Wind: ASC Vasd=91m</li> </ol>	ed roof live loads have n. CE 7-16; Vult=115mph nph; TCDL=6.0psf; BC	been considered for (3-second gust) DL=6.0psf; h=20ft; C	at.								TE OF M	AISSO

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads.



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SCOTT M.

SEVIER

Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	J6B	Half Hip Girder	4	1	Job Reference (optional)	171166335

1-6-11

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:38 ID:N?I3FSiTPDbBeG8GbjaZNQz1iJa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





0 4 4 9

Scale = 1:19.3	3			0-1-	12	-							
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	0.59	Vert(LL)	-0.01	5-6	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15		BC	0.33	Vert(CT)	-0.03	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	NO		WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2	018/TPI2014	Matrix-MP		Wind(LL)	0.01	5-6	>999	360		
BCDL	10.0					-						Weight: 31 lb	FT = 0%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	<ul> <li>2x4 SP No.2</li> <li>2x4 SP No.2</li> <li>2x4 SP No.2</li> <li>2x4 SP No.2</li> <li>Structural wood she 6-0-0 oc purlins, exc 2-0-0 oc purlins: 3-4</li> <li>Rigid ceiling directly bracing.</li> <li>(size) 5= Mecha Max Horiz 7=29 (LC</li> </ul>	athing directly appli sept applied or 10-0-0 c anical, 7=0-3-8 71)	ied or oc	<ol> <li>Refer to girc</li> <li>Provide med bearing plate and 29 lb up 10) This truss is International R802.10.2 a</li> <li>Graphical pu or the orient bottom chor</li> <li>Hanger(s) o provided suf</li> </ol>	er(s) for truss to tu chanical connectio e capable of withs lift at joint 7. designed in accor Residential Code nd referenced sta urlin representation ation of the purlin d. r other connection ficient to support of	russ conr in (by oth tanding S rdance w e sections ndard AN n does no along the device(s	nections. ers) of truss b b uplift at jo ith the 2018 s R502.11.1 a JSI/TPI 1. ot depict the b top and/or c) shall be ated load(s) i	to pint 5 and size 75 lb					
FORCES	Max Uplift 5=-9 (LC Max Grav 5=332 (LC (lb) - Maximum Com	9), 7=-29 (LC 8) C 32), 7=474 (LC 33 ppression/Maximum	3)	up at 5-3-0 at 3-2-4, an	on top chord, and d 5 lb down and 1	14 lb do 6 lb up a	wn and 37 lb t 5-3-0 on be	oup ottom					
	Tension	iprocessi in analian		(s) is the res	ponsibility of othe	rs.		VICE					
TOP CHORD	1-2=-234/4, 2-3=-26	1/0, 3-4=0/0		13) In the LOAD	CASE(S) section	, loads a	pplied to the	face					
BOT CHORD	0 1-7=0/233, 6-7=-1/2	22, 5-6=-5/227		of the truss a	are noted as front	(F) or ba	ck (B).						
WEBS	4-5=-212/29, 3-6=-7	1/81, 3-5=-239/6,		LOAD CASE(S)	Standard								
	2-7=-294/30			1) Dead + Sn	ow (balanced): Lu	mber Inc	rease=1.15,	Plate					
NOTES				Increase=1	.15								
1) Unbalance	ced roof live loads have	been considered for	or	Uniform Lo	ads (lb/ft)								
this desig	jn.	( <b>2</b> )		Vert: 1-3	=-70, 3-4=-70, 5-8	8=-20							an
<ol> <li>Wind: AS Vasd=911 II; Exp B; cantileven right expo 3) TCLL: AS Plate DO DOL = 1.</li> </ol>	CCE 7-16; Vult=115mph mph; TCDL=6.0psf; BC E Enclosed; MWFRS (er r left and right exposed osed; Lumber DOL=1.6 SCE 7-16; Pr=25.0 psf ( iL=1.15); Pf=25.0 psf ( 15): ls=1.0; Rough Cat	(3-second gust) :DL=6.0psf; h=20ft; ivelope) exterior zoi ; end vertical left ar 0 plate grip DOL=1. roof LL: Lum DOL= um DOL = 1.15 Pla B: Fully Exp.; Ce=C	Cat. ne; .60 .1.15 te ).9:	Concentrat Vert: 6=	ed Loads (lb) 7 (F), 12=3 (F)							STATE OF J	MISSOLAL TM. HER
Cs=1.00;	Ct=1.10									•	8-	NUM	BER

- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom 6)
- chord live load nonconcurrent with any other live loads.
- 7) Bearings are assumed to be: Joint 7 SP No.2 .

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)



PE-200101880

Page: 1

Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	J6C	Half Hip	2	1	Job Reference (optional)	171166336

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:38 ID:JarXyh6kxAQ8GlurDwB4u4z1iKL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



1-4-12



0-1-12

Scale = 1:22.1

Loading TCLL (roof)	(psf) 25.0	Spacing Plate Grip DOL	2-0-0 1.15	CSI TC	0.43	<b>DEFL</b> Vert(LL)	in -0.01	(loc) 6-7	l/defl >999	L/d 240	PLATES MT20	<b>GRIP</b> 244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.01	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP		Wind(LL)	0.00	6-7	>999	360		
BCDL	10.0										Weight: 37 lb	FT = 0%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood shea 6-0-0 oc purlins, exx	athing directly applie cept end verticals, a	<ul> <li>7) Bearings ar</li> <li>8) Refer to gir</li> <li>9) Provide me bearing plat</li> <li>5 and 29 lb</li> <li>and or</li> <li>10) This truss is</li> <li>nd Internationa R802.10.2 at</li> </ul>	e assumed to be: der(s) for truss to tr chanical connectio e capable of withsi uplift at joint 7. designed in accor I Residential Code and referenced sta	Joint 7 SF russ conr in (by oth tanding 1 rdance w e sections ndard AN	P No.2 . nections. ers) of truss 0 lb uplift at th the 2018 R502.11.1 a ISI/TPI 1.	to joint and					
BOT CHORD	Rigid ceiling directly bracing.	applied or 10-0-0 o	c 11) Graphical p or the orien	urlin representation tation of the purlin	n does no along the	ot depict the top and/or	size					
REACTIONS	(size) 5= Mecha Max Horiz 7=55 (LC Max Uplift 5=-10 (LC Max Grav 5=255 (LC	nical, 7=0-3-8 11) : 8), 7=-29 (LC 8) : 33), 7=559 (LC 33	LOAD CASE(S	o. ) Standard								
FORCES	(lb) - Maximum Com Tension	pression/Maximum										
TOP CHORD	1-2=-90/10, 2-3=-25 4-5=-258/8	2/3, 3-4=-164/13,										
BOT CHORD WEBS	1-7=-14/125, 6-7=-5 2-7=-548/79, 2-6=0/7 4-6=0/280	1/125, 5-6=-18/14 72, 3-6=-157/36,										
NOTES												
<ol> <li>Unbalance this design</li> <li>Wind: ASG Vasd=91n II; Exp B; cantilever right expo</li> </ol>	ed roof live loads have n. CE 7-16; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (en left and right exposed sed; Lumber DOL=1.60	been considered fo (3-second gust) DL=6.0psf; h=20ft; ( velope) exterior zor ; end vertical left an 0 plate grip DOL=1.	r Cat. ne; d 60								STATE OF M	MISSOLUR I M. ER

- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom 6)
- chord live load nonconcurrent with any other live loads.



February 5,2025

E

PE-200101880

RSSIONAL

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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)

Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	J6D	Half Hip Girder	2	1	Job Reference (optional)	171166337

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:38 ID:N?I3FSiTPDbBeG8GbjaZNQz1iJa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





Scale = 1:19.5

Plate Offsets (X, Y): [3:0-2-8,0-2-11]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 25.0 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 IRC2018/	TPI2014	CSI TC BC WB Matrix-MP	0.44 0.10 0.07	DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in 0.00 -0.01 0.00 0.00	(loc) 5-6 5-6 5 5-6	l/defl >999 >999 n/a >999	L/d 240 180 n/a 360	PLATES MT20 Weight: 34 lb	<b>GRIP</b> 244/190 FT = 0%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood she: 6-0-0 oc purlins, exi 2-0-0 oc purlins (6-0 Rigid ceiling directly bracing. (size) 5= Mecha Max Horiz 7=40 (LC Max Uplift 5=-13 (LC Max Grav 5=325 (LC (lb) - Maximum Com Tension 1-2=-18/112, 2-3=-2: 4-5=-295/29 1-7=-68/19, 6-7=-76, 3-6=-139/39, 4-6=-8, 2-7=-454/40	athing directly applie cept end verticals, ai -0 max.): 3-4. applied or 6-0-0 oc anical, 7=0-3-8 11) 2 3), 7=-31 (LC 8) 2 32), 7=516 (LC 33) pression/Maximum 91/6, 3-4=-254/10, /6, 5-6=-13/10 /277, 2-6=0/292,	6) 7) 8) 9) ed or 10) 11) 12) 13)	This truss ha chord live loa Bearings are Refer to girde Provide meci bearing plate 5 and 31 lb u This truss is International R802.10.2 ar Graphical pu or the orienta bottom chorc Hanger(s) or provided suff down and 32 up at 5-3-0 c at 3-8-4, and chord. The c (s) is the resgi In the LOAD of the truss a	is been designed ad nonconcurrent assumed to be: . er(s) for truss to tr hanical connectio o capable of withsi yilif at joint 7. designed in accor Residential Code nd referenced stat rlin representation tion of the purlin d. other connection ficient to support of l b up at 3-8-4, a no top chord, and d 3 lb down and 6 design/selection o ponsibility of other CASE(S) section are noted as front	for a 10.0 with any loint 7 SF uss conr n (by oth tanding 1 dance wi sections ndard AN n does no along the device(s concentra nd 55 lb (the 12 lb door lb up at f such co rs. , loads aş (F) or ba	) psf bottom other live loa P No.2 . ections. ers) of truss i 3 lb uplift at j th the 2018 R502.11.1 a ISI/TPI 1. ot depict the si top and/or ) shall be ted load(s) 5 down and 24 vn and 25 lb 5-3-0 on bot nnection dev oplied to the si	ds. o oint ind size 9 lb lb up ice face						
NOTES 1) Unbaland this desig 2) Wind: AS Vasd=91 II; Exp B; cantileve right expo 3) TCLL: AS Plate DO	eed roof live loads have in. CE 7-16; Vult=115mph mph; TCDL=6.0psf; BC Enclosed; MWFRS (en r left and right exposed seed; Lumber DOL=1.6; OCE 7-16; Pr=25.0 psf (L L=1.15): Pf=25.0 psf (L	been considered for (3-second gust) DL=6.0psf; h=20ft; C tvelope) exterior zon ; end vertical left and 0 plate grip DOL=1. roof LL: Lum DOL=1 um DOL = 1.15 Plat	LOA - 1) Cat. e; d 50 .15 e	AD CASE(S) Dead + Sno Increase=1. Uniform Loa Vert: 1-3: Concentrate Vert: 3=-	Standard ww (balanced): Lu .15 ads (lb/ft) =-70, 3-4=-70, 5-6 ed Loads (lb) 16 (F), 6=4 (F), 1 <sup>-1</sup>	mber Inc 3=-20 1=-13 (F)	rease=1.15,   , 12=2 (F)	Plate		٤		STATE OF M SCOTT	MISSOLA T.M. ER	

- 1 CLL: ASCE 7-16; PT=25.0 psf (root LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.

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)



February 5,2025

E

PE-2001018807

SIONAL

Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	T1	Roof Special Girder	1	1	Job Reference (optional)	171166338

Run: 8 83 S. Jan 17 2025 Print: 8 830 S. Jan 17 2025 MiTek Industries. Inc. Mon Feb 03 11:17:39 ID:5wnyG0D3uwtThAB\_At72HTz1i3Q-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1

February 5,2025

16023 Swingley Ridge Rd. Chesterfield MO 63017

314.434.1200 / MiTek-US.com





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

> 🙏 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 trust 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)

Uniform Loads (lb/ft)

Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	ТЗ	Common	4	1	Job Reference (optional)	171166339

Quality Truss LLC (Smithville, MO), Smithville, MO - 64089,

1-4-12

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:39 ID:FqkHRZ5AvlKhh3O1MSahbzz1iDv-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1

		1-4-12	6-4-12	14-7-9	21-3-0		27-10-7		35-1-8		41-3-0	
		1-4-12	5-0-0	8-2-13	6-7-7	41-3-0	6-7-7	·	7-3-1		6-1-8	
	T			12	3x6 = 3x4 =	5x6= 6		5x8≈				-
	⊢ 7-6-15 ⊖5-15	3x4 1 1 18 3x5= 1.5x4	4x5 3 8 17 4x4=	412 2	2 16 15 4x5= 3x6=	14 3x8=	13 MT18HS 3x	12 8 = 3x4=		3x4 11 6x	8-2 3 1 66=	3x8 <b>≥</b> 9 <b>£</b> 1-01-0 10 1.5x4 ∎
Scale = 1:77.6		1-4-12 ├──	6-4-12 6-3-0 # 4-10-4 0-1-12	<sup>2</sup> <u>14-7-9</u> 8-2-13	<u>21-3-0</u> 6-7-7		<u>27-10-7</u> 6-7-7		<u>35-1-8</u> 7-3-1		<u>41-3-0</u> 6-1-8	
Plate Offsets	(X, Y): [7:0-3	3-12,0-3-0	]									
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDI		(psf) 25.0 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 IRC2018/TPI2014	CSI TC BC WB Matrix-MR	0.96 0.87 0.74	DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.20 -0.39 0.08 0.09	(loc) l/ 11-12 > 11-12 > 10 11-12 >	defl L/c 999 240 999 180 n/a n/a 999 360	d <b>PLATES</b> 0 MT18HS 0 MT20 a 0 Weight: 221 lt	<b>GRIP</b> 244/190 244/190
FORCES FORCES TOP CHORD BOT CHORD WEBS REACTIONS FORCES TOP CHORD BOT CHORD WEBS	2x4 SP Nc 2x4 SP Nc 2x4 SP Nc 2x4 SP Nc 2x4 SP Nc 3x4 SP	       	athing directly ap applied or 6-0-0 4-14, 7-14 17=0-3-8 C 12) C 9), 17=-106 (L0 (LC 19), 17=2191 pression/Maximu 2/697, 3-4=-1924 2814/62, 8-9=-32 100/3, 16-17=-5 4=0/2609, -11=0/0 29/101, 9-10=-150 i=-14/2408, i=0/396, 7-14=-11 -528/63, 9-11=-1 7=-508/153	2009 (100 - 100 -	s are MT20 plates is has been design e load nonconcurrent ngs are assumed t mechanical connee plate capable of wi 06 lb uplift at joint is is designed in ac onal Residential Co 2 and referenced <b>E(S)</b> Standard	unless othe ed for a 10. ent with any o be SP No ction (by oth thstanding 2 17. cordance w ode section: standard Al	rwise indicate 0 psf bottom other live loa .2. ners) of truss : 21 lb uplift at j /ith the 2018 s R502.11.1 a NSI/TPI 1.	ed. to to oint and			THE OF	MISSOU
<ol> <li>Unbalanc this desig</li> <li>Wind: AS</li> <li>Vasd=91r II; Exp B; cantilever right expo</li> <li>TCLL: AS</li> <li>Plate DOI DOL = 1.<sup>-</sup> Cs=1.00;</li> </ol>	ed roof live k n. CE 7-16; Vul mph; TCDL= Enclosed; M left and righ ssed; Lumber CE 7-16; Pr= L=1.15; Pf= 15); Is=1.0; R Ct=1.10	t=115mph 6.0psf; BC WFRS (er t exposed t DOL=1.6 =25.0 psf ( 25.0 psf (L cough Cat	been considered (3-second gust) DL=6.0psf; h=20i ivelope) exterior z ; end vertical left 0 plate grip DOL= roof LL: Lum DOL= 0 m DOL = 1.15 P B; Fully Exp.; Ce	for it; Cat. icone; and if.60 _=1.15 late =0.9;							SEV SEV NUM PE-200 Februa	AL ENGIN
WAR Design v a truss s building is always fabricatic and BCS	NING - Verify de valid for use only ystem. Before u design. Bracing s required for star- n, storage, deliv SI Building Corr	sign parame with MiTek® se, the buildir indicated is t ability and to p very, erection aponent Safe	ters and READ NOTE connectors. This des g designer must verif to prevent buckling of prevent collapse with g and bracing of trusse sty Information ava	S ON THIS AND INCLUDED N ign is based only upon param y the applicability of design pa individual truss web and/or ch oossible personal injury and pr s and truss systems, see AN ilable from the Structural Build	ITEK REFERENCE PAU ters shown, and is for a rameters and properly in ord members only. Add operty damage. For ge SI/TPI1 Quality Criteria ing Component Associa	GE MII-7473 re n individual bu ncorporate this itional tempora neral guidance , and DSB-22 ttion (www.sbc	v. 1/2/2023 BEFC ilding componen design into the c ry and permaner regarding the available from Ti scomponents.com	DRE USE. t, not overall ht bracing russ Plate I m)	nstitute (www.	tpinst.org)	16023 S Cheste 314.434.12	Wingley Ridge Rd. Infield, MO 63017 200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	ТЗА	Common	6	1	Job Reference (optional)	171166340

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:40 ID:eoFsfjv4ELskJrJ?39JT45z1iFS-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

		1-4-12 ┝──┝ 1-4-12 ┝───	<u>8-4-12</u> 7-0-0		14-7-9 6-2-13	<u>21-3-0</u> 6-7-7	41-3-0	<u>27-10-7</u> 6-7-7		<u>35-</u> 7-3	<u>1-8</u> -1		<u>41-3-0</u> 6-1-8	— —
	⊢ 7-6-15 ⊢ ⊢ 15	3x4 1 2 1 2 1 3 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	е 4 п	4x5 = 3 8 17 4x4=	4 <sup>12</sup> 2:	3x6 = 3x4 = 4 5 2 5 16 15 4x5= 3x6=	5x6= 6 14 3x8=	13 3x6=	5x8≈ 723 12 3x4=			3x4 <b>z</b> 8 11 5x55	-	3x8 <i>x</i> 9 51-01-0 10 1.5x4 II
Scale = 1:77.6		1-4-12 ├──┼ 1-4-12	<u>8-3-0</u> 6-10-4	8-4-12 # 0-1-12	14-7-9 6-2-13	<u>21-3-0</u> 6-7-7		<u>27-10-7</u> 6-7-7		<u>35-</u> 7-3	<u>1-8</u> -1		<u>41-3-0</u> 6-1-8	—
Plate Offsets	(X, Y): [7:0-	3-12,0-3-0	]										-	
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 25.0 25.0 10.0 0.0 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Inc Code	2-0- 1.15 1.15 r YES IRC	0 5 5 2018/TPI2014	CSI TC BC WB Matrix-MR	0.88 0.81 0.98	DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.18 -0.34 0.06 0.08	(loc) 11-12 11-12 10 11-12	l/defl >999 >999 n/a >999	L/d 240 180 n/a 360	PLATES MT20 Weight: 223	<b>GRIP</b> 244/190 Ib FT = 0%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS REACTIONS	2x4 SP No 2x4 SP No 2x4 SP No Structural Rigid ceili bracing, 5-9-15 oc 1 Row at (size) Max Horiz Max Uplift Max Grav	5.2 5.2 5.2 mg directly Except: bracing: 1 midpt 10=0-3-8, 17=90 (LC 10=-26 (L 10=1454)	athing directly ap applied or 10-0-0 6-17. 7-14 17=0-3-8 C 12) C 9), 17=-139 (L (LC 19), 17=2324	oplied. 0 oc C 8) 4 (LC 1)	<ol> <li>TCLL: A Plate DC DOL = 1 Cs=1.00</li> <li>Unbalan design.</li> <li>This trus chord liv</li> <li>All bearing 10 and 1</li> <li>This trus Internati R802.10</li> </ol>	SCE 7-16; Pr=25. DL=1.15); Pf=25.0 .15); Is=1.0; Roug ; Ct=1.10 ced snow loads h is has been desig e load nonconcur ngs are assumed mechanical conne plate capable of w 39 lb uplift at join is is designed in a onal Residential 2. and referenced	0 psf (roof LI psf (Lum DC h Cat B; Ful ave been con ned for a 10. rent with any to be SP No cotion (by oth ithstanding 2 ctor (by oth ithstanding 2 cordance w code sections standard AN	L: Lum DOL= DL = 1.15 Pla ly Exp.; Ce=( 0 psf bottom other live loa 2 uers) of truss 26 lb uplift at ith the 2018 s R502.11.1 a SNJTPI 1.	1.15 te ).9; his ads. to joint					
FORCES	(lb) - Max	mum Com	pression/Maximu	um	LOAD CASE	E(S) Standard								
TOP CHORD	1-2=-156/	47, 2-3=-1	79/1057, 3-4=-11	137/50,										
BOT CHORD	4-6=-1552 1-18=-52/ 16-17=-92 12-14=0/2 3-17=-206	2/83, 6-8=-2 200, 17-18 27/131, 14- 2344, 11-12	2535/75, 8-9=-29 3=-52/200, -16=0/1022, 2=-26/2784, 10-1	1=0/0										
NOTES	3-16=-30/ 7-12=0/40 8-12=-560 2-17=-113 9-11=-26/	2138, 6-14 )4, 7-14=-1 )/60, 2-18= 31/253, 9-1 2801	l=0/474, 4-14=0/5  116/77, 8-11=−10 =-17/240,  0=-1403/52,	537, 69/98,									STATE OF	MISSOL DTT M. EVIER
1) Unbalanc	ed roof live l	oads have	been considered	d for								N/		' <b>0</b>

1) Unbalance this design.

Wind: ASCE 7-16; Vult=115mph (3-second gust) 2) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60



February 5,2025

E

NUMBER

PE-2001018807

SSIONAL

ROFT

 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	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	ТЗВ	Common	1	1	Job Reference (optional)	171166341

Run: 8.82 E Aug 30 2024 Print: 8.820 E Aug 30 2024 MiTek Industries, Inc. Tue Feb 04 16:52:32 ID:dMW0YP25GKaRSK7bbX3bNqz1iHr-Ne400?xNubJAEX3J5KJopT1CsIYfz6zzMKQRP?zoShE Page: 1

1	6-10-5	13-5-3	20-0-0	26-6-13	33-1-11	40-0-0		
	6-10-5	6-6-13	6-6-13	6-6-13	6-6-13	6-10-5		
⊢	40-0-0							



	8-1-1		16-	16-0-6 22-2-4			23-11-10 31-10-15				5 40-0-0		
Scale = 1.68 4	8-1	-1	7-1	1-5	- I (	6-1-14	1-9-6		7-11-	5	I	8-1	-1
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 25.0 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 BC WB Matrix-MR	0.85 0.63 0.91	DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.10 -0.22 0.02 0.04	(loc) 11-12 11-12 10 11-12	l/defl >999 >955 n/a >999	L/d 240 180 n/a 360	PLATES MT20 Weight: 214 lb	<b>GRIP</b> 244/190 FT = 0%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS REACTIONS (lb) -	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood she 3-11-2 oc purlins, e Rigid ceiling directly bracing. 1 Row at midpt All bearings 22-4-0. e Max Horiz 17=-62 (L Max Uplift All uplift 1 10, 15, 16 Max Grav All reactio (s) 13 exc 15=1957 17=317 (L	athing directly appli xcept end verticals. applied or 6-0-0 oc 5-15 xcept 10=0-3-8, 13= C 13) 00 (lb) or less at joi 5, 17 ins 250 (lb) or less a iept 10=907 (LC 19) (LC 1), 16=542 (LC LC 31)	3) ed or 5) 6) =0-3-8 7) nt(s) at joint LOA 31),	TCLL: ASCE Plate DOL=1 DOL = 1.15); Cs=1.00; Ct Unbalanced design. This truss ha chord live loa Provide mec bearing plate (s) 17, 10, 16 This truss is International R802.10.2 at AD CASE(S)	7-16; Pr=25.0 .15); Pf=25.0 Is=1.0; Roug e1.10 snow loads has been design d nonconcurr hanical conne o capable of w b, 15. designed in a Residential C had referenced Standard	0 psf (roof LL psf (Lum DC h Cat B; Full ave been con ned for a 10.0 rent with any cction (by oth ithstanding 1 ccordance wi ode sections standard AN	: Lum DOL= IL = 1.15 Pla y Exp.; Ce=0 Isidered for t 0 psf bottom other live loa ers) of truss 00 lb uplift a th the 2018 R502.11.1 a ISI/TPI 1.	1.15 te 0.9; his ads. to t joint					
FORCES TOP CHORD	(lb) - Max. Comp./Ma (lb) or less except w 1-2=-535/39, 3-4=0/ 5-6=-476/101, 6-7=- 8-19=-1491/94, 8-9= 9-10=-435/59	250 3/96, 5/56,									COLORING IN	age	
BOT CHORD         15-16=-563/92, 11-12=0/857, 10-11=-43/1488           WEBS         2-17=-23/402, 8-10=-986/36, 2-16=-490/117, 3-16=-4/538, 3-15=-655/94, 5-15=-1583/64, 5-12=-35/937, 7-12=-891/120, 7-11=-2/720, 8-11=-360/111           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=20ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60			3/1488 //117, //64, 720, /r Cat. ne; id 60							-		STATE OF M SCOT SEVI SEVI NUM PE-20010 PE-20010	MISSOLUTION T.M. ER DISSOT

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

February 5,2025

Job	Truss	Truss Type	Qty	Ply	1408 NE ERNEST WAY, LEE'S SUMMIT	
MSA2408-R	Τ4	Common	1	1	Job Reference (optional)	171166342

Run: 8.83 S Jan 17 2025 Print: 8.830 S Jan 17 2025 MiTek Industries, Inc. Mon Feb 03 11:17:40 ID:GKKd85aO6xrmr8f2AmLNojya1G4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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### Scale = 1:61

Loading TCLL (roof) Snow (Pf) TCDL BCLL	(psf) 25.0 25.0 10.0 0.0	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-MR	0.89 0.69 0.68	DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.12 -0.24 0.05 0.05	(loc) 9-11 9-11 8 11-12	l/defl >999 >999 n/a >999	L/d 240 180 n/a 360	PLATES MT20	<b>GRIP</b> 244/190	
BCDL	10.0										Weight: 140 lb	FT = 0%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2		<ol> <li>This truss h chord live lo</li> <li>All bearings</li> <li>Provide me bearing plat</li> </ol>	as been designe ad nonconcurre are assumed to chanical connec e capable of with	ed for a 10.0 nt with any be SP No. tion (by oth hstanding 2	) psf bottom other live loa 2 . ers) of truss 9 lb uplift at	ads. to joint						

BRACING								
TOP CHORD	Structural wood sheathing directly applied or							
	2-2-0 oc p	ourlins.						
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc							
	bracing.							
REACTIONS	(size)	8=0-3-8, 13=0-3-8						
	Max Horiz	13=55 (LC 12)						
	Max Uplift	8=-29 (LC 9), 13=-29 (LC 8)						
	Max Grav	8=1322 (LC 19), 13=1322 (LC 18)						
FORCES	(lb) - Max	imum Compression/Maximum						
	Tension							
TOP CHORD	1-2=-288/	13, 2-3=-2363/19, 3-4=-1721/25,						
	4-5=-1721	1/25, 5-6=-2363/19, 6-7=-288/13						
BOT CHORD	1-13=0/31	13, 12-13=-54/313, 11-12=-10/2186,						
	9-11=0/21	186, 8-9=-2/313, 7-8=-2/313						
WEBS	3-12=-103	3/121, 3-11=-736/78, 4-11=0/546,						
	5-11=-736	6/78, 5-9=-103/121, 2-13=-1193/101,						

### NOTES

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

2-12=0/1926, 6-8=-1193/101, 6-9=0/1926

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.

13 and 29 lb uplift at joint 8.
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



Atpinst.org) Atpinst.org



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.