



08/05/2020

RE: 400422 Lot 77 RR MiTek USA, Inc. 16023 Swingley Ridge Rd Chesterfield, MO 63017 314-434-1200

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

Design Code: IRC2018/TPI2014 Wind Code: N/A Roof Load: 45.0 psf

Design Program: MiTek 20/20 8.4 Wind Speed: 115 mph Floor Load: N/A psf

This package includes 68 individual, dated Truss Design Drawings and 0 Additional Drawings.

Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
142065388	B1A	7/17/2020	27	l42065414	D8	7/17/2020
142065389	B2A	7/17/2020	28	l42065415	D9	7/17/2020
142065390	B3A	7/17/2020	29	l42065416	E1	7/17/2020
I42065391	B4A	7/17/2020	30	l42065417	E2	7/17/2020
142065392	B5	7/17/2020	31	l42065418	E3	7/17/2020
142065393	B6	7/17/2020	32	l42065419	E4	7/17/2020
142065394	B7	7/17/2020	33	142065420	J2	7/17/2020
142065395	B8	7/17/2020	34	l42065421	J5	7/17/2020
142065396	B9	7/17/2020	35	142065422	J6A	7/17/2020
142065397	B10	7/17/2020	36	142065423	J7A	7/17/2020
142065398	B11	7/17/2020	37	142065424	J8	7/17/2020
142065399	B12	7/17/2020	38	142065425	J9	7/17/2020
142065400	B13	7/17/2020	39	142065426	J10	7/17/2020
I42065401	B14	7/17/2020	40	142065427	J11	7/17/2020
142065402	C1	7/17/2020	41	142065428	J12	7/17/2020
142065403	C2	7/17/2020	42	142065429	J13	7/17/2020
142065404	C3	7/17/2020	43	142065430	J14	7/17/2020
142065405	C4	7/17/2020	44	l42065431	J15	7/17/2020
142065406	C5	7/17/2020	45	142065432	J16	7/17/2020
142065407	D1	7/17/2020	46	142065433	J17	7/17/2020
142065408	D2	7/17/2020	47	142065434	J18	7/17/2020
142065409	D3	7/17/2020	48	142065435	J19	7/17/2020
I42065410	D4	7/17/2020	49	142065436	J20	7/17/2020
I42065411	D5	7/17/2020	50	142065437	J21	7/17/2020
I42065412	D6	7/17/2020	51	142065438	J22	7/17/2020
142065413	D7	7/17/2020	52	142065439	J23	7/17/2020
	Seal# I42065388 I42065390 I42065391 I42065391 I42065393 I42065393 I42065394 I42065395 I42065396 I42065397 I42065398 I42065400 I42065400 I42065401 I42065403 I42065403 I42065404 I42065405 I42065406 I42065406 I42065407 I42065408 I42065409 I42065410 I42065412 I42065413	Seal#Truss NameI42065388B1AI42065389B2AI42065390B3AI42065391B4AI42065392B5I42065393B6I42065394B7I42065395B8I42065396B9I42065397B10I42065398B11I42065399B12I42065399B12I42065400B13I42065401B14I42065402C1I42065403C2I42065404C3I42065405C4I42065406C5I42065407D1I42065408D2I42065409D3I42065411D5I42065412D6I42065413D7	Seal# Truss Name Date I42065388 B1A 7/17/2020 I42065389 B2A 7/17/2020 I42065390 B3A 7/17/2020 I42065391 B4A 7/17/2020 I42065392 B5 7/17/2020 I42065393 B6 7/17/2020 I42065393 B6 7/17/2020 I42065393 B6 7/17/2020 I42065394 B7 7/17/2020 I42065395 B8 7/17/2020 I42065396 B9 7/17/2020 I42065397 B10 7/17/2020 I42065398 B11 7/17/2020 I42065400 B13 7/17/2020 I42065401 B14 7/17/2020 I42065403 C2 7/17/2020 I42065404 C3 7/17/2020 I42065405 C4 7/17/2020 I42065406 C5 7/17/2020 I42065407 D1 7/17/2020 I42065408 D2 7/17/2020	$\begin{array}{llllllllllllllllllllllllllllllllllll$	Seal#Truss NameDateNo.Seal# $ 42065388$ B1A $7/17/2020$ 27 $ 42065414$ $ 42065389$ B2A $7/17/2020$ 28 $ 42065415$ $ 42065390$ B3A $7/17/2020$ 29 $ 42065416$ $ 42065391$ B4A $7/17/2020$ 30 $ 42065417$ $ 42065392$ B5 $7/17/2020$ 31 $ 42065418$ $ 42065393$ B6 $7/17/2020$ 32 $ 42065419$ $ 42065394$ B7 $7/17/2020$ 33 $ 42065422$ $ 42065395$ B8 $7/17/2020$ 34 $ 42065422$ $ 42065396$ B9 $7/17/2020$ 35 $ 42065423$ $ 42065397$ B10 $7/17/2020$ 36 $ 42065423$ $ 42065398$ B11 $7/17/2020$ 37 $ 42065422$ $ 42065400$ B13 $7/17/2020$ 38 $ 42065425$ $ 42065401$ B14 $7/17/2020$ 40 $ 42065427$ $ 42065403$ C2 $7/17/2020$ 41 $ 42065430$ $ 42065403$ C2 $7/17/2020$ 43 $ 42065432$ $ 42065405$ C4 $7/17/2020$ 45 $ 42065432$ $ 42065407$ D1 $7/17/2020$ 46 $ 42065433$ $ 42065408$ D2 $7/17/2020$ 48 $ 42065433$ $ 42065410$ D4 $7/17/2020$ 48 $ 42065435$ $ 42065411$ D5 $7/17/2020$ 50 $ 42065438$ $ 42065412$ D6 $7/17/2020$ 51 $ 42065438$ $ 42065413$ D7 <t< td=""><td>Seal#Truss NameDateNo.Seal#Truss Name$I42065388$B1A$7/17/2020$27$I42065414$D8$I42065389$B2A$7/17/2020$28$I42065415$D9$I42065390$B3A$7/17/2020$29$I42065416$E1$I42065391$B4A$7/17/2020$30$I42065416$E1$I42065392$B5$7/17/2020$30$I42065417$E2$I42065393$B6$7/17/2020$31$I42065419$E4$I42065394$B7$7/17/2020$33$I42065420$J2$I42065395$B8$7/17/2020$34$I42065422$J6A$I42065396$B9$7/17/2020$35$I42065422$J6A$I42065397$B10$7/17/2020$36$I42065423$J7A$I42065398$B11$7/17/2020$37$I42065424$J8$I42065400$B13$7/17/2020$38$I42065425$J9$I42065401$B14$7/17/2020$41$I42065427$J11$I42065403$C2$7/17/2020$41$I42065423$J14$I42065404$C3$7/17/2020$42$I42065433$J14$I42065405$C4$7/17/2020$43$I42065433$J14$I42065406$C5$7/17/2020$44$I42065433$J16$I42065406$C5$7/17/2020$45$I42065432$J16$I42065406$D1$7/17/2020$48$I42065433$</td></t<>	Seal#Truss NameDateNo.Seal#Truss Name $I42065388$ B1A $7/17/2020$ 27 $I42065414$ D8 $I42065389$ B2A $7/17/2020$ 28 $I42065415$ D9 $I42065390$ B3A $7/17/2020$ 29 $I42065416$ E1 $I42065391$ B4A $7/17/2020$ 30 $I42065416$ E1 $I42065392$ B5 $7/17/2020$ 30 $I42065417$ E2 $I42065393$ B6 $7/17/2020$ 31 $I42065419$ E4 $I42065394$ B7 $7/17/2020$ 33 $I42065420$ J2 $I42065395$ B8 $7/17/2020$ 34 $I42065422$ J6A $I42065396$ B9 $7/17/2020$ 35 $I42065422$ J6A $I42065397$ B10 $7/17/2020$ 36 $I42065423$ J7A $I42065398$ B11 $7/17/2020$ 37 $I42065424$ J8 $I42065400$ B13 $7/17/2020$ 38 $I42065425$ J9 $I42065401$ B14 $7/17/2020$ 41 $I42065427$ J11 $I42065403$ C2 $7/17/2020$ 41 $I42065423$ J14 $I42065404$ C3 $7/17/2020$ 42 $I42065433$ J14 $I42065405$ C4 $7/17/2020$ 43 $I42065433$ J14 $I42065406$ C5 $7/17/2020$ 44 $I42065433$ J16 $I42065406$ C5 $7/17/2020$ 45 $I42065432$ J16 $I42065406$ D1 $7/17/2020$ 48 $I42065433$

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision

based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Liu, Xuegang

My license renewal date for the state of Kansas is April 30, 2022. Kansas COA: E-943

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



Liu, Xuegang



RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

08/05/2020

Subdivision:

State:

RE: 400422 - Lot 77 RR

Site Information:

Project Customer: Project Name: Lot/Block: Address: City, County:

No.	Seal#	Truss Name	Date
53	142000440	JZ4	7/17/2020
54	142065441	J25	7/17/2020
55	142065442	J26	7/17/2020
56	142065443	J27	7/17/2020
57	142065444	J28	7/17/2020
58	142065445	J29	7/17/2020
59	142065446	J30	7/17/2020
60	142065447	LAY2	7/17/2020
61	142065448	LAY3	7/17/2020
62	142065449	LAY4	7/17/2020
63	142065450	LAY5	7/17/2020
64	142065451	LAY6	7/17/2020
65	142065452	LAY7	7/17/2020
66	142065453	V5	7/17/2020
67	142065454	V6	7/17/2020
68	142065455	V7	7/17/2020

MiTek USA, Inc. 16023 Swingley Ridge Rd Chesterfield, MO 63017 314-434-1200





08/05/2020

RE: 400422 Lot 77 RR MiTek USA, Inc. 16023 Swingley Ridge Rd Chesterfield, MO 63017 314-434-1200

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

Design Code: IRC2018/TPI2014 Wind Code: N/A Roof Load: 45.0 psf Design Program: MiTek 20/20 8.4 Wind Speed: 115 mph Floor Load: N/A psf

This package includes 68 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	142065388	B1A	7/17/2020	27	l42065414	D8	7/17/2020
2	142065389	B2A	7/17/2020	28	l42065415	D9	7/17/2020
3	142065390	B3A	7/17/2020	29	I42065416	E1	7/17/2020
4	I42065391	B4A	7/17/2020	30	I42065417	E2	7/17/2020
5	142065392	B5	7/17/2020	31	l42065418	E3	7/17/2020
6	142065393	B6	7/17/2020	32	l42065419	E4	7/17/2020
7	142065394	B7	7/17/2020	33	I42065420	J2	7/17/2020
8	142065395	B8	7/17/2020	34	l42065421	J5	7/17/2020
9	142065396	B9	7/17/2020	35	I42065422	J6A	7/17/2020
10	142065397	B10	7/17/2020	36	I42065423	J7A	7/17/2020
11	142065398	B11	7/17/2020	37	142065424	J8	7/17/2020
12	142065399	B12	7/17/2020	38	142065425	J9	7/17/2020
13	142065400	B13	7/17/2020	39	142065426	J10	7/17/2020
14	I42065401	B14	7/17/2020	40	142065427	J11	7/17/2020
15	142065402	C1	7/17/2020	41	I42065428	J12	7/17/2020
16	142065403	C2	7/17/2020	42	I42065429	J13	7/17/2020
17	142065404	C3	7/17/2020	43	142065430	J14	7/17/2020
18	142065405	C4	7/17/2020	44	l42065431	J15	7/17/2020
19	142065406	C5	7/17/2020	45	142065432	J16	7/17/2020
20	142065407	D1	7/17/2020	46	142065433	J17	7/17/2020
21	142065408	D2	7/17/2020	47	142065434	J18	7/17/2020
22	142065409	D3	7/17/2020	48	142065435	J19	7/17/2020
23	I42065410	D4	7/17/2020	49	142065436	J20	7/17/2020
24	I42065411	D5	7/17/2020	50	142065437	J21	7/17/2020
25	I42065412	D6	7/17/2020	51	142065438	J22	7/17/2020
26	142065413	D7	7/17/2020	52	142065439	J23	7/17/2020

The truss drawing(s) referenced above have been prepared by

MiTek USA, Inc under my direct supervision based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Liu, Xuegang

My license renewal date for the state of Missouri is December 31, 2020. Missouri COA: 001193

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



Liu, Xuegang



RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

08/05/2020

Subdivision:

State:

RE: 400422 - Lot 77 RR

Site Information:

Project Customer: Project Name: Lot/Block: Address: City, County:

No.	Seal#	Truss Name	Date
53	142000440	JZ4	7/17/2020
54	142065441	J25	7/17/2020
55	142065442	J26	7/17/2020
56	142065443	J27	7/17/2020
57	142065444	J28	7/17/2020
58	142065445	J29	7/17/2020
59	142065446	J30	7/17/2020
60	142065447	LAY2	7/17/2020
61	142065448	LAY3	7/17/2020
62	142065449	LAY4	7/17/2020
63	142065450	LAY5	7/17/2020
64	142065451	LAY6	7/17/2020
65	142065452	LAY7	7/17/2020
66	142065453	V5	7/17/2020
67	142065454	V6	7/17/2020
68	142065455	V7	7/17/2020

MiTek USA, Inc. 16023 Swingley Ridge Rd Chesterfield, MO 63017 314-434-1200



Scale = 1:59.3



⊢	3-3-8	10-1-3	15-10-10	21-8-1		27-5-8	33-3-8			
Plate Offcate ()	<u>3-3-8</u>	6-9-11	5-9-7	5-9-7		5-9-7	5-10-0			
Fiale Olisels (A	^, t <i>)</i>	[17.0-6-8,0-7-4]								
LOADING (psf TCLL 25.0 TCDL 10.0	f) 0 0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Bop Strace lastNO	CSI. TC 0.94 BC 0.71	DEFL. Vert(LL) -(Vert(CT) -(in (loc) 0.30 14-16 0.53 14-16	l/defl L/d >999 360 >750 240	PLATES MT20 MT18HS	GRIP 197/144 197/144		
BCDL 10.0	0	Code IRC2018/TPI2014	Matrix-S	Wind(LL)	0.24 10	>999 240	Weight: 369 lb	FT = 10%		
LUMBER- TOP CHORD BOT CHORD WEBS	JMBER- DP CHORD 2x4 SPF No.2 *Except* 1-4: 2x4 SPF 2100F 1.8E BRACING- TOP CHORD OT CHORD 2x6 SP 2400F 2.0E *Except* 2-17: 2x8 SP DSS, 8-11: 2x4 SPF No.2 BOT CHORD Structural wood sheathing directly applied or 4-7-1 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-4 max.): 4-9. OT CHORD 2x6 SP 2400F 2.0E *Except* 2-17: 2x8 SP DSS, 8-11: 2x4 SPF No.2 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. (EBS 2x4 SPF No.2 *Except* 3-17: 2x6 SPF No.2 ST CHORD EACTIONS.									
REACTIONS. (size) 10=Mechanical, 2=0-3-8 Max Horz 2=150(LC 7) Max Uplift 10=-547(LC 5), 2=-490(LC 8) Max Grav 10=2988(LC 1), 2=2756(LC 1)										
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-11442/2216, 3-4=-7079/1513, 4-5=-7281/1512, 5-6=-7278/1511, 6-8=-4026/785, 8-9=-4009/795, 9-10=-2833/620 XUEGANG										
BOT CHORD 2-17=-2161/10449, 16-17=-1931/9247, 14-16=-1459/6438, 13-14=-1336/6602, 12-17=-2161/10449, 16-17=-1931/9247, 14-16=-1459/6438, 13-14=-1336/6602,										
WEBS	3-17= 6-14=	-1330/6002, 8-12=-655/200 -520/2875, 3-16=-2768/507, 4-16=-358/ -268/789, 6-13=0/516, 6-12=-2986/612,	1582, 4-14=-148/1163, 5 9-12=-919/4682	-14=-774/266,			PAOCE-2	ABER 9713		
NOTES- 1) 2-ply truss to Top chords of Bottom chorn Webs conne 2) All loads are ply connectio 3) Unbalanced 4) Wind: ASCE MWFRS (end) 5) Provide adec 6) All plates are 7) This truss ha 8) * This truss ha 8) * This truss have 9) Refer to gird 10) Bearing at capacity of 11) Provide me 10–547, 2= Continued on par	 NOTES- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc. Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc. 2) 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. 3) 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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 5) Provide adequate drainage to prevent water ponding. 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. 8) * This truss has been designed for a 10.0 psf bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members. 9) Refer to girder(s) for truss to truss connections. 10) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface. 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10-547, 2=490. 2000000000000000000000000000000000000									
WARNIN Design valid a truss syste building des is always reu fabrication, s Safety Infor	IG - Verify d d for use on em. Before sign. Bracin equired for s storage, de rmation a	esign parameters and READ NOTES ON THIS AND I/y with MiTek® connectors. This design is based o use, the building designer must verify the applicab g indicated is to prevent buckling of individual trus stability and to prevent collapse with possible perso livery, erection and bracing of trusses and truss sy vailable from Truss Plate Institute, 2670 Crain High	INCLUDED MITEK REFERENC hly upon parameters shown, anni lity of design parameters and pri s web and/or chord members or nal injury and property damage. stems, see ANSI/TP11 way, Suite 203 Waldorf, MD 200	E PAGE MII-7473 rev. 5/11 operly incorporate this de ly. Additional temporary. For general guidance re Quality Criteria, DSB-85 601	9/2020 BEFORE ing component, r esign into the ove and permanent l garding the 9 and BCSI Buil	USE. not rrall pracing ding Component	Mitek* 16023 Swingley Chesterfield, M	y Ridge Rd O 63017		

			RELEASE FOR			
Job	Truss	Truss Type	CONSTRUCTION	Ply	Lot 77 RR	
400422	B1A	Half Hip Girde	AS NOTED ON PLANS REVI	EW	142065	388
100 122	5		DEVELOPMENT SERVICE	s 2	Job Reference (optional)	
Wheeler Lumber, Wave	erly, KS 66871		LEE'S SUMMIT, MISSOUR	8.410 s N	ay 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:29 2020 Page 2	2
			ID:ell3htibC3u		CZUTUE-04SKIZ0VdOiMK50UOLNW/b2W/bT5USa2D0V/W//LINVXDa8	

NOTES-

NOTES-12) 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.

13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

(a) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 114 lb down and 78 lb up at 10-5-7, 116 lb down and 78 lb up at 12-5-7, 116 lb down and 78 lb up at 14-5-7, 116 lb down and 78 lb up at 12-5-7, 116 lb down and 24 lb up at 12-5-7, 116 lb down and 94 lb up 30-5-7, and 129 lb down and 91 lb up at 32-5-7 on top chord, and 706 lb down and 320 lb up at 10-1-3, 71 lb down and 21 lb up at 10-5-7, 71 lb down and 21 lb up at 12-5-7, 71 lb down and 21 lb up at 14-5-7, 71 lb down and 21 lb up at 16-5-7, 71 lb down and 21 lb up at 18-5-7, 71 lb down and 21 lb up at 20-5-7, 91 lb down at 22-5-7, 142 lb down and 73 lb up at 24-5-7, 142 lb down and 73 lb up at 26-5-7, 71 lb down at 28-5-7, and 71 lb down at 30-5-7, and 77 lb down at 32-5-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-70, 4-9=-70, 2-17=-20, 12-17=-20, 10-11=-20

Concentrated Loads (lb) Vert: 16=-706(F) 18=-93(F) 19=-93(F) 20=-93(F) 21=-93(F) 22=-93(F) 23=-93(F) 24=-100(F) 25=-24(F) 26=-24(F) 27=-114(F) 28=-114(F) 29=-125(F) 30=-71(F) 20=-71(F) 20=-7 31=-71(F) 32=-71(F) 33=-71(F) 34=-71(F) 35=-71(F) 36=-75(F) 37=-142(F) 38=-142(F) 39=-50(F) 40=-50(F) 41=-53(F)

🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. ARXING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MILER KEERENCE PAGE MIL-7475 fev. or 19/2/2/0/ DEFORE 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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601







4.00 12

	3-3-8	9-1-14	13-3-10	20-4-9	27-5-8	33-3-	8		
Plate Offset	<u> </u>	5-10-6	4-1-12	7-0-15	7-0-15	5-10-	0		
LOADING (TCLL 2 TCDL 7 BCLL	(psf) 25.0 10.0 0.0 *	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYES	CSI. TC 0.76 BC 0.77 WB 0.68	DEFL. in Vert(LL) -0.31 Vert(CT) -0.59 Horz(CT) 0.30	(loc) l/defl l 15-16 >999 3 15-16 >673 2 9 n/a r	L/d PLATES 60 MT20 40 MT18HS n/a	GRIP 197/144 197/144		
BCDL 1	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.18	15-16 >999 2	40 Weight: 138	lb FT = 10%		
LUMBER- TOP CHORI BOT CHORI WEBS	D 2x4 SP D 2x4 SP 2-16: 2x 2x3 SP 3-16: 2x	F 2100F 1.8E F No.2 *Except* x8 SP DSS, 14-16: 2x4 SPF 2100F 1.8E F No.2 *Except* x6 SPF No.2	:, 7-10: 2x3 SPF No.2	BRACING- TOP CHORD BOT CHORD WEBS	Structural wood she except end verticals Rigid ceiling directly 1 Row at midpt	athing directly applied or 2-8 s, and 2-0-0 oc purlins (4-4-2 v applied or 10-0-0 oc bracing 8-9, 3-15	9-9 oc purlins, max.): 5-8. J.		
REACTIONS. (size) 9=Mechanical, 2=0-3-8 Max Horz 2=195(LC 7) Max Uplift 9=-70(LC 5), 2=-14(LC 8) Max Grav 9=1486(LC 1), 2=1559(LC 1)									
FORCES. TOP CHOR	(lb) - Max. (D 2-3=-6 7-8=-7	Comp./Max. Ten All forces 250 (lb) or 6322/163, 3-4=-3369/55, 4-5=-2681/77, 1535/98, 8-9=-1429/106	less except when shown. 5-6=-2493/114, 6-7=-2490	//112,		- S X	JEGANG D		
BOT CHOR	D 2-16= 7-11=	-328/5761, 15-16=-301/5027, 13-15=-1 =-1119/141	70/3074, 12-13=-150/2417	, 11-12=-126/1545,		Ξ*	LIU		
WEBS	3-16= 8-11=	-38/1822, 5-13=0/613, 5-12=-39/312, 6- -118/1988, 4-13=-827/83, 4-15=0/403, 3	12=-565/130, 7-12=-40/11 3-15=-1978/132	42,		PAC	IUMBER		
NOTES-							123		
 Unbalance Wind: AS MWFRS Provide a 	ced roof live CE 7-16; V (envelope);	loads have been considered for this de- ult=115mph (3-second gust) Vasd=91m cantilever left and right exposed ; end v ainage to prevent water ponding	sign. ph; TCDL=6.0psf; BCDL=6 ertical left and right expose	6.0psf; h=25ft; Cat. II; E ed; Lumber DOL=1.60 p	xp C; Enclosed; blate grip DOL=1.60	11.851	DNAL ENGIN		
4) All plates5) This truss	are MT20 p s has been o	blates unless otherwise indicated. designed for a 10.0 psf bottom chord live	e load nonconcurrent with a	any other live loads.			GANO		
6) * This true will fit bet	ss has beer tween the bo	n designed for a live load of 20.0psf on the ottom chord and any other members.	he bottom chord in all area	s where a rectangle 3-6	6-0 tall by 2-0-0 wide	Jun to	CENSE		
 Refer to g Bearing a capacity of 	 7) Refer to girder(s) for truss to truss connections. 8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify 								
9) Provide n	nechanical o	connection (by others) of truss to bearin	g plate capable of withstan	iding 100 lb uplift at join	t(s) 9, 2. 802 10 2 and	E	19198 E		

 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.

11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July July

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





4.00 12

	3-3-8	9-1-14	16	-6-0	21-1	1-12	2	27-5-8	33-3-8	
	3-3-8 5-10-5		7-	7-4-2 5-5-12		-12	5-5-12		5-10-0	1
Plate Offset	s (X,Y)	[13:0-2-8,0-1-8], [15:0-2-8,0-1	-8]							
LOADING	(psf)	SPACING- 2-	D-0 CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 2	25.0	Plate Grip DOL 1	.15 TC	0.78	Vert(LL)	-0.35 15-16	>999	360	MT20	197/144
	10.0	Lumber DOL 1	15 PC	0.05	Vort(CT)	0 62 15 16	×620	240	MT10UC	107/144

TCDL 10	0.0	Lumber DOL 1.15	BC 0.95	Vert(CT)	-0.62 15-1	16 >639	240	MT18HS	197/144	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.75	Horz(CT)	0.30	9 n/a	n/a			
BCDL 1	0.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL)	0.18 15-1	16 >999	240	Weight: 147 lb	FT = 10%	
LUMBER-				BRACING-						
TOP CHORD 2x4 SPF 2100F 1.8E *Except*				TOP CHORE	D Stru	ctural wood	d sheathing di	rectly applied or 2-6-6 of	oc purlins,	
	5-8: 2x4 SPF No.2				except end verticals, and 2-0-0 oc purlins (3-11-12 max.): 5-8.					
BOT CHORD	2x4 SP	PF No.2 *Except*		BOT CHORE	D Rigi	Rigid ceiling directly applied or 10-0-0 oc bracing. Except:				
	2-16: 2	x8 SP DSS, 14-16: 2x4 SPF 2100F 1.8E	E, 7-10: 2x3 SPF No.2		2-2-	-0 oc bracin	q: 13-15.			
WEBS	2x3 SP	PF No.2 *Except*			1 R	ow at midpt	-	7-11		
	8-9: 2x	4 SPF No.2, 3-16: 2x6 SPF No.2		WEBS	1 R	ow at midpt	8	3-9, 3-15, 4-13, 5-12		
DEACTIONS	(-!	-) O Mashariaal O O O O								

REACTIONS. (size) 9=Mechanical, 2=0-3-8 Max Horz 2=240(LC 7) Max Uplift 9=-68(LC 5), 2=-30(LC 8) Max Grav 9=1568(LC 2), 2=1608(LC 2)

FORCES. (lb) -	Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-6535/151, 3-4=-3556/56, 4-5=-2374/60, 5-6=-1916/91, 6-7=-1914/89,
	7-8=-1245/86, 8-9=-1469/107
BOT CHORD	2-16=-338/5963, 15-16=-306/5181, 13-15=-168/3266, 12-13=-134/2103, 11-12=-113/1253,
	7-11=-1120/129
WEBS	3-16=-51/1948, 3-15=-1939/139, 4-15=0/534, 4-13=-1262/122, 5-13=0/764,
	5-12=-287/52, 6-12=-424/95, 7-12=-30/992, 8-11=-101/1813

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 3) Provide adequate drainage to prevent water ponding.

- 4) All plates are MT20 plates unless otherwise indicated
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 2.
- 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.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



111111 MI

XUEGANG LIU

NUMBER

0

MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017

🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 designe. 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 **ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





July 17,2020

MITEK 16023 Swingley Ridge Rd Chesterfield, MO 63017

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 designe. 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 **ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Provide adequate drainage to prevent water ponding.

4) All plates are MT20 plates unless otherwise indicated.

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

6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

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

8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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.

11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TPI Quality Criteria**, DSB-89 and BCSI Building Component **Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





16023 Swingley Ridge Rd Chesterfield, MO 63017

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 designe. 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 **ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 designe. 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 **ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 **ANSITTPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601 16023 Swingley Ridge Rd Chesterfield, MO 63017



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSITP11** Quality Criteria, **DSB-89** and **BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601 , , .





16023 Swingley Ridge Rd Chesterfield, MO 63017

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 designe. 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 **ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



	2-3-8	9-1-13	16-6-0		25-5-8	33-3-8			
	2-3-8	6-10-5	7-4-4	I	8-11-8	7-10-0	1		
Plate Offset	s (X,Y)	[3:0-0-3,0-0-0], [3:0-1-9,0-0-3]							
LOADING TCLL 2 TCDL 2 BCLL BCDL 2	(psf) 25.0 10.0 0.0 * 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.79 BC 0.72 WB 0.92 Matrix-S	DEFL. i Vert(LL) -0.3(Vert(CT) -0.6(Horz(CT) 0.3(Wind(LL) 0.2(n (loc) l/defl L/ 6 11-12 >999 36 3 3-14 >632 24 3 9 n/a n/ 3 3-14 >999 24	d PLATES 0 MT20 0 a 0 0 Weight: 173 lb	GRIP 197/144 FT = 10%		
LUMBER- TOP CHORD 2x8 SP DSS *Except* 5-8: 2x4 SPF 2100F 1.8E BOT CHORD 2x4 SPF No.2 *Except* 3-13,11-13: 2x4 SPF 2100F 1.8E, 7-10: 2x3 SPF No.2 WEBS 2x3 SPF No.2 *Except* 8-9,16-18,17-19: 2x4 SPF No.2				BRACING- TOP CHORD BOT CHORD WEBS	Structural wood shea except end verticals, Rigid ceiling directly a 6-0-0 oc bracing: 9-1 1 Row at midpt	thing directly applied or 2-9-3 and 2-0-0 oc purlins (5-2-3 m applied or 10-0-0 oc bracing, 0. 8-9, 4-12	oc purlins, ax.): 5-8. Except:		
REACTION	S. (size Max Ho Max Up Max G	e) 9=0-3-8, 2=0-3-8 orz 2=316(LC 5) plift 9=-255(LC 5), 2=-210(LC 8) rav 9=1557(LC 2), 2=1607(LC 2)				NATE OF	MISSO		
FORCES. TOP CHOR	(lb) - Max. D 2-3=-6 7-8=-7	Comp./Max. Ten All forces 250 (lb) or 899/38, 3-4=-3729/453, 4-5=-2422/318, 1537/293, 8-9=-1429/304	less except when shown. 5-6=-2142/318, 6-7=-1540/	/290,		× XUE			
BOT CHOR WEBS	D 3-14=-556/3537, 12-14=-555/3536, 11-12=-385/1916, 7-11=-505/218 4-14=0/262, 4-12=-1519/385, 5-12=0/616, 6-12=-69/385, 6-11=-641/120, 8-11=-339/1952						MBER		
NOTES-							.2.5		
 Wind: AS MWFRS grip DOL Provide a 	 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate provide adequate drainage to prevent water ponding. 								

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

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=255, 2=210.

6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



omponent 16023 Swingley Ridge Rd Chesterfield, MO 63017

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



2-3-8	6-9-1 13-3-	10	19-5-13	25-5-8		33-3-8					
Plate Offsets (X,Y)	[3:0-1-9,0-0-1], [3:0-7-15,0-0-0], [5:0-6-0	,),0-2-13], [13:0-2-8,0-1-8]		5-11-11		7-10-0					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.88 BC 0.58 WB 0.85 Matrix-S	DEFL. Vert(LL) · Vert(CT) · Horz(CT) Wind(LL)	in (loc) l/defl -0.27 13-15 >999 -0.51 13-15 >776 0.30 9 n/a 0.21 13-15 >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 163 lb	GRIP 197/144 FT = 10%				
LUMBER- TOP CHORD 2x8 S 5-8: 2 BOT CHORD 2x4 S 3-14, WEBS 2x3 S 17-19 OTHERS 2x3 S	LUMBER- TOP CHORD 2x8 SP DSS *Except* 5-8: 2x4 SPF 2100F 1.8E BRACING- TOP CHORD TOP CHORD Structural wood sheathing directly applied or 3-3-5 oc purlins, except end verticals, and 2-0-0 oc purlins (4-4-14 max.): 5-8. BOT CHORD 2x4 SPF No.2 *Except* 3-14,11-14: 2x4 SPF 2100F 1.8E, 7-10: 2x3 SPF No.2 BOT CHORD Rigid ceiling directly applied or 9-9-9 oc bracing. NWEBS Now at midpt 8-9, 4-13 WEBS 2x3 SPF No.2 *Except* 17-19,18-20: 2x4 SPF No.2 WEBS 1 Row at midpt 8-9, 4-13 OTHERS 2x3 SPF No.2 X3 SPF No.2 X4 SPF No.2 X4 SPF No.2										
REACTIONS. (size) 9=0-3-8, 2=0-3-8 Max Horz 2=258(LC 5) Max Uplift 9=-264(LC 5), 2=-184(LC 4) Max Grav 9=1486(LC 1), 2=1561(LC 1)											
FORCES. (lb) - Max TOP CHORD 2-3: 7-8: 7-8: BOT CHORD 3-1! WEBS 4-1:	FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. XUEGANG TOP CHORD 2-3=-768/59, 3-4=-4023/473, 4-5=-2765/405, 5-6=-2508/443, 6-7=-2507/443, 7-8=-1932/381, 8-9=-1406/314 BOT CHORD 3-15=-646/3861, 13-15=-644/3859, 12-13=-459/2478, 11-12=-415/1933, 7-11=-1002/289 WEBS 4-13=-1461/388, 5-13=-26/575, 6-12=-94/738, 8-11=-433/2248										
 NOTES- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 2) Provide adequate drainage to prevent water ponding. 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members. 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=264, 2=184. 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. 											

19198 19198 S/ONAL July 17,2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601









	2-3-8	10-1-3	17-11-2		25-5	-8		33-3-8		
	2-3-8	7-9-11	7-9-14	1	7-6-	-6	1	7-10-0		
Plate Offset	s (X,Y)	[3:0-1-7,0-2-3], [3:0-10-10,0-0-0], [4:0-6-	0,0-2-4]							
LOADING TCLL TCDL BCLL BCDL	(psf) 25.0 10.0 0.0 * 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.76 BC 0.49 WB 0.72 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc 0.28 12-14 0.50 12-14 0.27 9 0.23 12-14) I/defl I >999 I >786 9 n/a I >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 394 lb	GRIP 197/144 FT = 10%	
LUMBER- TOP CHORD 2x4 SPF 2100F 1.8E *Except* 1-4: 2x8 SP DSS BRACING- TOP CHORD Str BOT CHORD 2x6 SP 2400F 2.0E *Except* 7-10,16-17: 2x4 SPF No.2 BOT CHORD Rit WEBS 2x4 SPF No.2 *Except* 3-15: 2x6 SPF No.2 BOT CHORD Rit REACTIONS (size) 9-0-3-8 2-0-3-8						ctural wood sl pt end vertica ceiling direc oc bracing: :	heathing dire als, and 2-0- tly applied o 2-15.	ectly applied or 6-0-0 o 0 oc purlins (5-3-11 ma r 10-0-0 oc bracing, E	nc purlins, ax.): 4-8. Except:	
REACTION	S. (size Max He Max U Max G	e) 9=0-3-8, 2=0-3-8 brz 2=153(LC 5) blift 9=-534(LC 5), 2=-444(LC 8) rav 9=2945(LC 1), 2=2690(LC 1)						NATE OF	MISSO	
FORCES. TOP CHOR BOT CHOR	DRCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. DP CHORD 2-3=-1386/228, 3-4=-6956/1382, 4-5=-7169/1427, 5-7=-7167/1427, 7-8=-5438/1086, 8-9=-2749/631 DT CHORD 3-14=-1384/6491, 12-14=-11393/6541, 11-12=-1113/5483, 10-11=0/298, 7-11=-1744/506 DT CHORD 3-14=-1384/6491, 12-14=-11393/6541, 11-12=-1113/5483, 10-11=0/298, 7-11=-1744/506									
WEB5	8-11=	-46/299, 4-14=-214/1170, 4-12=-122/73 1172/5835	3, 5-12=-823/248, 7-12=-	403/1859,				PD NUM	MBER	
NOTES- 1) 2-ply trus Top chor Bottom c Webs col 2) All loads	to be con ds connecte hords conne nnected as	nected together with 10d (0.131"x3") nai ad as follows: 2x8 - 2 rows staggered at ected as follows: 2x6 - 2 rows staggered follows: 2x6 - 2 rows staggered at 0-9-0 wed equally applied to all plice executif	Is as follows: 0-9-0 oc, 2x4 - 1 row at 0 at 0-9-0 oc, 2x4 - 1 row a oc, 2x4 - 1 row at 0-9-0 c pated ac freet (E) oc bool	-9-0 oc. at 0-9-0 oc. oc.		2) sastian Pl	(to	THE SSION	ALENGINI	
 All loads ply conne Wind: AS MWFRS Provide a This truss * This truss 	 2) 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. 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 4) Provide adequate drainage to prevent water ponding. 5) This trues has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 2) This trues has been designed for a 10.0 psf bottom chord live has the haster a back is plateness. 									
will fit bet 7) Provide r 9=534, 2 8) This truss	tween the b nechanical =444. s is designe	ottom chord and any other members. connection (by others) of truss to bearin d in accordance with the 2018 Internation	g plate capable of withsta	nding 100 lb uplift a	t joint(s) e>	ccept (jt=lb) 2 and		19		
9) Graphica	ed standard I purlin repr	ANSI/TPI 1. esentation does not depict the size or th	e orientation of the purlin	along the top and/o	r bottom ch	nord.			NALENGII	

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



July 17,2020

		RELEASE FOR	
Job Truss	Truss Type	CONSTRUCTION Ply	Lot 77 RR
400422 B14	Half Hip Girde	AS NOTED ON PLANS REVIEW	142065401
	i ian i np en ac	DEVELOPMENT SERVICES	Job Reference (optional)
Wheeler Lumber, Waverly, KS 66871		LEE'S SUMMIT, MISSOURI 8.410 s	May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:26 2020 Page 2
		ID:ell3htjhC3ucpFh1	ifG0EczUTUF-OVmB56I1KVLnTe3JjCqpzPuD4twAdeLnw IrtXyxDeB

NOTES-10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 115 lb down and 81 lb up at 10-5-7, 111 lb down and 63 lb up at 12-5-7, 111 lb down and 63 lb up at 14-5-7, 111 lb down and 63 lb up at 16-5-7, 111 lb down and 63 lb up at 12-5-7, 111 lb down and 63 lb up at 22-5-7, 111 lb down and 63 lb up at 22-5-7, 111 lb down and 63 lb up at 22-5-7, 111 lb down and 63 lb up at 22-5-7, 111 lb down and 63 lb up at 22-5-7, 111 lb down and 63 lb up at 22-5-7, 111 lb down and 63 lb up at 22-5-7, 111 lb down and 63 lb up at 22-5-7, 111 lb down and 94 lb up at 26-5-7, 124 lb down and 94 lb up at 28-5-7, and 124 lb down and 94 lb up at 30-5-7, and 129 lb down and 91 lb up at 32-5-7 on top chord, and 703 lb down and 311 lb up at 10-1-3, 82 lb down at 10-5-7, 80 lb down and 34 lb up at 14-5-7, 80 lb down and 34 lb up at 12-5-7, 80 lb down and 34 lb up at 12-5-7, 80 lb down and 34 lb up at 22-5-7, 80 lb down and 34 lb up at 22-5-7, 80 lb down and 34 lb up at 22-5-7, 80 lb down and 34 lb up at 20-5-7, 80 lb down a 24-5-7, 71 lb down at 26-5-7, 71 lb down at 28-5-7, and 71 lb down at 30-5-7, and 77 lb down at 32-5-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

11) Filler applied to ply: 1(Front)

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-4=-70, 4-8=-70, 2-15=-20, 3-11=-20, 9-10=-20

Concentrated Loads (lb)

Vert: 14=-772(B) 20=-102(B) 21=-81(B) 22=-81(B) 23=-81(B) 24=-81(B) 25=-81(B) 26=-81(B) 27=-81(B) 28=-114(B) 29=-114(B) 30=-114(B) 31=-125(B) 32=-80(B) 32=-33=-80(B) 34=-80(B) 35=-80(B) 36=-80(B) 37=-80(B) 38=-50(B) 39=-50(B) 40=-50(B) 41=-53(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





			22-4-0				
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.09	DEFL. in Vert(LL) -0.00	(loc) l/defl 15 n/r	L/d P 120 N	LATES C MT20 1	3RIP 97/144
TCDL 10.0 BCLL 0.0 * BCDL 10.0	Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	BC 0.07 WB 0.22 Matrix-R	Vert(CT) -0.00 Horz(CT) 0.00	15 n/r 16 n/a	120 n/a V	Veight: 114 lb	FT = 10%
I UMBER-			BRACING-				

TOP CHORD 2x4 SPF No 2 BOT CHORD 2x4 SPF No.2 WEBS 2x4 SPF No.2 OTHERS 2x4 SPF No.2

TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 22-4-0.

Max Horz 29=239(LC 7) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 16, 24, 25, 26, 27, 22, 21, 19, 18 except 29=-151(LC 4), 28=-163(LC 8), 17=-146(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 29, 16, 23, 24, 25, 26, 27, 28, 22, 21, 19, 18, 17

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 24, 25, 26, 27, 22, 21, 19, 18 except (jt=lb) 29=151, 28=163, 17=146.
- 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.



July 17,2020



🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 designe. 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

referenced standard ANSI/TPI 1.





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Mitek 16023 Swingley Ridge Rd Chesterfield, MO 63017



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 ouclapse 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



July 17,2020





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601







		13-10-6	05.0.0	00.4.44					
2-4	4-6 5-7-15 11-6-4 4-6 3-3-9 5-10-5	0-0-1 2-4-1 3-11-6	7-11-4	+ 33-1-11 7-4-11	6-10-5				
Plate Offsets (X,Y)	[3:0-3-8,0-1-14], [5:0-2-0,Edge]	[9:Edge,0-1-12], [20:0-1-4,0-1-0)]						
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0- Plate Grip DOL 1.1 Lumber DOL 1.1 Rep Stress Incr NN Code IRC2018/TPI2014	CSI. 5 TC 0.87 5 BC 0.51 0 WB 0.68 Matrix-S	DEFL. in Vert(LL) -0.07 Vert(CT) -0.14 Horz(CT) 0.02 Wind(LL) 0.03	(loc) l/defl L/d 12-14 >999 360 12-14 >999 240 20 n/a n/a 11-12 >999 240	PLATES GRIP MT20 197/144 Weight: 155 lb FT = 10%				
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x3 SP 2-19: 2 REACTIONS. All be (lb) - Max H Max U Max G	PF No.2 PF No.2 PF No.2 *Except* x6 SPF No.2, 9-20: 2x4 SPF No earings 0-3-8 except (jt=length) : orz 19=320(LC 7) plift All uplift 100 lb or less at j 20=-126(LC 30) rav All reactions 250 lb or less 20=969(LC 1)	.2 20=Mechanical. pint(s) except 19=-152(LC 8), 16 at joint(s) except 19=600(LC 21	BRACING- TOP CHORD BOT CHORD WEBS =-241(LC 4), 14=-260(LC 2), 16=1126(LC 21), 14=120	Structural wood sheathing dir 2-0-0 oc purlins (6-0-0 max.): Rigid ceiling directly applied o 6-0-0 oc bracing: 14-16,12-14 1 Row at midpt 8: 29), 05(LC 1),	ectly applied, except end verticals, and 3-5. or 10-0-0 oc bracing, Except: I. -12				
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. Superior TOP CHORD 2-3=-533/155, 3-4=-556/164, 4-5=-217/530, 6-7=-757/217, 7-8=-747/179, 8-9=-1234/176, 2-19=-470/138, 10-20=-969/126, 9-10=-905/161 BOT CHORD 18-19=-340/500, 17-18=-343/502, 16-17=-328/498, 14-16=-262/184, 11-12=-76/934 WEBS 4-16=-1202/443, 5-16=-515/188, 6-14=-1156/265, 6-12=-6/595, 7-12=-57/290, 8-12=-583/262, 9-11=0/707									
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) grip DOL=1.60 3) Provide adequate dr 4) This truss has been 5) * This truss has been 6) Refer to girder(s) for 7) Provide mechanical joint 16, 260 lb uplift 8) This truss is designe referenced standard 9) Graphical purlin repr 10) Hanger(s) or other 2-4-6, 82 lb down at and 69 lb up at 10- and 24 lb down at 11) In the LOAD CASE	 WEBS 4-16=-1202/443, 5-16=-515/188, 6-14=-1156/265, 6-12=-6/595, 7-12=-57/290, 8-12=-583/262, 9-11=0/707 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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 3) Provide adequate drainage to prevent water ponding. 4) This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members. 6) Refer to girder(s) for truss to truss connection. 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 152 lb uplift at joint 19, 241 lb uplift at joint 14, 260 lb uplift at joint 14 and 126 lb uplift at joint 20. 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/TP1 1. 9) Graphical purtin representation does not depic the size or the orientation of the purtin along the top and/or bottom chord. 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 93 lb down and 84 lb up at 2-4-6, 82 lb down and 69 lb up at 6-0-0, and 82 lb down at 8-0-0, and 24 lb down								

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

NITEK* 16023 Swingley Ridge Rd Chesterfield, MO 63017

			RELEASE	FOR		
Job	Truss	Truss Type	CONSTRUC	CTION	Ply	Lot 77 RR
400422	1	Roof Special (Girder AS NOTED ON PLA	NS REVIE	W 1	142065407
400422		TOOL Special	DEVELOPMENT	SERVICES	· ·	Job Reference (optional)
Wheeler Lumber, Wave	erly, KS 66871		LEE'S SUMMIT, I	MISSOURI	8.410 s N	ay 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:46 2020 Page 2
				ID:ell3htj	hC3ucpFl	11ifG0EczUTUF-pLzIIx?Zdesxsib9uPBVndjcExkUJiqjW58uZMyxDdt
LOAD CASE(S) Standard			08/05/202	20		
LOAD CASE(S) Standard						
 Dead + Roof Live (balan 	ced): Lumber Increase=1.15	, Plate Increa	se=1.15			

Uniform Loads (plf) Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-7=-70, 7-9=-70, 10-19=-20

Concentrated Loads (lb)

Vert: 3=-18(F) 18=-16(F) 4=-32(F) 21=-32(F) 22=-32(F) 23=-32(F) 24=-17(F) 25=-17(F) 26=-17(F) 27=-17(F)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TP11 Quality Criteria**, **DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





	3-10-6 11-6-4	15-4-6 ₁ 17-9-12	25-9-0	33-1-11	40-0-0			
	3-10-6 7-7-14	3-10-2 2-5-6	7-11-4	7-4-11	6-10-5			
Plate Offsets (X,Y)	[3:0-3-8,0-1-14], [5:0-2-8,Edge], [9:Edge	,0-1-12], [19:0-1-4,0-1-0]						
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.77 BC 0.47 WB 0.69 Matrix-S	DEFL. in Vert(LL) -0.08 Vert(CT) -0.17 Horz(CT) 0.01 Wind(LL) 0.02	(loc) l/defl L/d 16-17 >999 360 16-17 >792 240 19 n/a n/a 11-12 >999 240	PLATES GRIP MT20 197/144 Weight: 156 lb FT = 10%			
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x3 SF 2-18: 2	2F No.2 2F No.2 2F No.2 *Except* 1x6 SPF No.2, 9-19: 2x4 SPF No.2	Structural wood sheathing dir except end verticals, and 2-0- Rigid ceiling directly applied c 1 Row at midpt 8	ectly applied or 3-10-14 oc purlins, -0 oc purlins (6-0-0 max.): 3-5. or 6-0-0 oc bracing. -12					
REACTIONS. All be (lb) - Max H Max U Max G	earings 0-3-8 except (jt=length) 19=Mech lorz 18=258(LC 7) plift All uplift 100 lb or less at joint(s) 18 rav All reactions 250 lb or less at joint(19=966(LC 1)	anical. 8, 16, 14, 19 s) except 18=483(LC 19), 1	6=1021(LC 19), 14=11	97(LC 1),	OF MISS			
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-440/41, 3-4=-295/61, 4-5=0/376, 6-7=-752/117, 7-8=-742/96, 8-9=-1229/51, 2-18=-437/54, 10-19=-966/16, 9-10=-902/52 BOT CHORD 17-18=-172/378, 11-12=0/930 WEBS 4-17=0/328, 4-16=-740/109, 5-16=-374/73, 6-14=-1173/104, 6-12=0/605, 7-12=-16/285,								
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; M MWFRS (envelope) 3) Provide adequate di 4) This truss has been will fit between the b 6) Refer to girder(s) for 7) Provide mechanical 8) This truss is designer referenced standarco 9) Graphical purtin rep	a loads have been considered for this der /ult=115mph (3-second gust) Vasd=91m ; cantilever left and right exposed ; end v rainage to prevent water ponding. designed for a 10.0 psf bottom chord live n designed for a live load of 20.0psf on t bottom chord and any other members. r truss to truss connections. connection (by others) of truss to bearin ad in accordance with the 2018 Internatio I ANSI/TPI 1.	sign. oh; TCDL=6.0psf; BCDL=6. ertical left and right exposed e load nonconcurrent with a ne bottom chord in all areas g plate capable of withstand nal Residential Code section	Opsf; h=25ft; Cat. II; Ex d; Lumber DOL=1.60 p ny other live loads. where a rectangle 3-6 ting 100 lb uplift at joint ons R502.11.1 and R80	cp C; Enclosed; late grip DOL=1.60 -0 tall by 2-0-0 wide t(s) 18, 16, 14, 19. 12.10.2 and	NUMBER E-29713			



16023 Swingley Ridge Rd Chesterfield, MO 63017

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



 $3x6 = 2x4 \parallel$

3x10 =

L	5-4-6 11-6-4	<u>16-10-6 17-8-ρ</u>	25-9-0	33-1-11	40-0-0				
	5-4-6 6-1-14	5-4-2 0-9-10	8-1-0	7-4-11	6-10-5				
Plate Offsets (X,Y)	[3:0-3-8,0-1-14], [5:0-4-0,0-2-12], [8:Edg	e,0-1-12], [18:0-1-4,0-1-0]							
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2018/TPI2014	CSI. TC 0.67 BC 0.47 WB 0.73 Matrix-S	DEFL. i Vert(LL) -0.0 Vert(CT) -0.1 Horz(CT) 0.0 Wind(LL) 0.0	n (loc) l/defl L/d 7 11-13 >999 360 5 11-13 >999 240 2 18 n/a n/a 2 10-11 >999 240	PLATES MT20 Weight: 163 lb	GRIP 197/144 FT = 10%			
LUMBER- TOP CHORD 2x4 SPF No.2 *Except* 5-6: 2x6 SPF No.2 BRACING- TOP CHORD TOP CHORD Structural wood sheathing directly applied or 4-4-5 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 3-5. BOT CHORD 2x4 SPF No.2 BOT CHORD BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. WEBS 2x3 SPF No.2 *Except* 2-17: 2x6 SPF No.2, 8-18: 2x4 SPF No.2 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. REACTIONS. All bearings 0-3-8 except (it=length) 18=Mechanical. BMECHANICAL									
REACTIONS. All be (lb) - Max H Max U Max G	earings 0-3-8 except (jt=length) 18=Mech orz 17=257(LC 7) plift All uplift 100 lb or less at joint(s) 17 rav All reactions 250 lb or less at joint(1)	anical. 7, 15, 13, 18 s) except 17=498(LC 19),	15=1086(LC 1), 13=1(067(LC 1), 18=998(LC	INTE OF	MISSO			
FORCES. (lb) - Max. TOP CHORD 2-3= 8-9=-	Comp./Max. Ten All forces 250 (lb) or 417/83, 5-6=-821/122, 6-7=-801/107, 7-6 934/59	less except when shown. 3=-1277/60, 2-17=-447/90,	9-18=-998/23,		S XUE	GANG			
BOT CHORD 16-17 WEBS 3-15= 8-10=	/=-193/371, 15-16=-195/368, 10-11=0/96 529/0, 4-15=-436/123, 5-15=-372/65, 5 =0/739, 5-13=-945/136	59 -11=0/723, 6-11=-14/300,	7-11=-552/133,		PR. NUI	MBER			
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope); 3) Provide adequate dr. 4) This truss has been 5) * This truss has been will fit between the b 6) Refer to girder(s) for 7) Provide mechanical 9) This true is decised	loads have been considered for this det ult=115mph (3-second gust) Vasd=91m cantilever left and right exposed ; end v ainage to prevent water ponding. designed for a 10.0 psf bottom chord live n designed for a live load of 20.0psf on the ottom chord and any other members. truss to truss connections. connection (by others) of truss to bearing the accordance with the 2049 Interaction	sign. oh; TCDL=6.0psf; BCDL=6 ertical left and right expose e load nonconcurrent with a ne bottom chord in all area g plate capable of withstan	5.0psf; h=25ft; Cat. II; ed; Lumber DOL=1.60 any other live loads. s where a rectangle 3 inding 100 lb uplift at jo	Exp C; Enclosed; plate grip DOL=1.60 -6-0 tall by 2-0-0 wide int(s) 17, 15, 13, 18.	TURNING STOR	ANG LIU			

referenced standard ANSI/TPI 1.

2x4 ||

2x4 ||

9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



3x4 =

3x4 =

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Scale = 1:77.2

July ALENGINI

Mitek° 16023 Swingley Ridge Rd Chesterfield, MO 63017



—	<u>6-10-6</u> <u>11-6-8</u>	17-9-8 17-10-8	25-9-0	33-1-11	40-0-0				
Plate Offsets (X,Y)	[2:0-1-5,0-1-12], [3:0-3-8,0-1-14], [9:0	-3-0,0-1-8], [20:0-1-4,0-1-0]	7-10-0	/-4-11	0-10-5				
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.68 BC 0.67 WB 0.47 Matrix-S	DEFL. in Vert(LL) -0.11 Vert(CT) -0.22 Horz(CT) 0.04 Wind(LL) 0.04	(loc) I/defl L/d 12-14 >999 360 12-14 >999 240 20 n/a n/a 17-18 >999 240	PLATES GRIP MT20 197/144 Weight: 171 lb FT = 10%				
LUMBER- TOP CHORD 2x4 SPF No.2 *Except* 6-7: 2x6 SPF No.2 BRACING- TOP CHORD TOP CHORD Structural wood sheathing directly applied or 4-7-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-6. BOT CHORD 2x4 SPF No.2 BOT CHORD BOT CHORD Rigid ceiling directly applied or 4-5-15 oc bracing. WEBS 2x3 SPF No.2 *Except* 2-19: 2x6 SPF No.2, 9-20: 2x4 SPF No.2 BOT CHORD Rigid ceiling directly applied or 4-5-15 oc bracing. REACTIONS. (size) 19=0-3-8, 14=0-2-0 (reg. 0-3-1), 20=Mechanical WEBS 1									
REACTIONS. (size) 19=0-3-8, 14=0-2-0 (req. 0-3-1), 20=Mechanical Max Horz 19=257(LC 7) Max Uplift 19=-47(LC 8), 14=-21(LC 8), 20=-44(LC 9) Max Grav 19=781(LC 19), 14=1961(LC 1), 20=906(LC 1)									
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-786/73, 3-4=-477/131, 4-5=-564/110, 5-6=-87/316, 6-7=-655/161, 7-8=-649/141, 8-9=-1135/94, 2-19=-702/95, 10-20=-906/44, 9-10=-840/80 BOT CHORD 18-19=-100/538, 17-18=-102/536, 4-16=-387/119, 15-16=-326/6, 14-15=-1200/63, 5-15=-1104/106, 11-12=-17/852									
 Scholling in the formation of the formation in the formation of t									

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601







Plate Offsets (X,Y)-- [2:0-1-11,0-2-8], [4:0-3-8,0-1-14], [7:0-2-0,Edge], [10:0-3-0,0-1-8], [21:0-1-4,0-1-0]

LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.69 BC 0.62 WB 0.97 Matrix-S	DEFL. in (loc) l/defl L/d Vert(LL) -0.16 13-15 >999 360 MT20 197/144 Vert(CT) -0.27 13-15 >973 240 MT20 197/144 Horz(CT) -0.03 21 n/a n/a Weight: 174 Wind(LL) 0.03 17 >999 240 Weight: 174 b
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x3 S	PF No.2 PF No.2 PF No.2 *Except*		BRACING- TOP CHORD Structural wood sheathing directly applied or 4-7-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-7. BOT CHORD Bind ceiling directly applied or 4-6-1 oc bracing

	2X4 SFF N0.2	IOP CHORD	Structural wood sheathing	directly applied of 4-7-7 oc putlins,			
OT CHORD	2x4 SPF No.2		except end verticals, and 2-0-0 oc purlins (6-0-0 max				
EBS	2x3 SPF No.2 *Except*	BOT CHORD	Rigid ceiling directly applied	d or 4-6-1 oc bracing.			
	2-20: 2x8 SP DSS, 10-21: 2x4 SPF No.2	WEBS	1 Row at midpt	9-13			

REACTIONS. (size) 20=0-3-8, 15=0-2-0 (req. 0-3-4), 21=Mechanical Max Horz 20=258(LC 7) Max Uplift 20=-47(LC 8), 15=-22(LC 8), 21=-50(LC 9) Max Grav 20=792(LC 21), 15=2087(LC 2), 21=1022(LC 14)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. 2-3=-847/67, 3-4=-730/162, 4-5=-448/122, 5-6=-490/112, 6-7=-83/377, 7-8=-708/176, TOP CHORD 8-9=-713/151, 9-10=-1247/102, 2-20=-688/77, 11-21=-1022/50, 10-11=-911/85 BOT CHORD 19-20=-108/686, 18-19=-84/501, 17-18=-27/315, 5-17=-361/100, 16-17=-319/8, 15-16=-1069/56, 6-16=-951/94, 12-13=-25/910 WEBS 6-17=-45/989, 7-15=-958/9, 7-13=0/642, 8-13=-85/284, 9-13=-650/134, 10-12=0/687, 4-19=-79/427

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

Provide adequate drainage to prevent water ponding.

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

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

6) WARNING: Required bearing size at joint(s) 15 greater than input bearing size.

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

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 15, 21.

9) 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.

10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





🔺 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 Lessign value use only winn will exec connectors. Inis 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 incorporely 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 **ANSUTPTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



5x7 =



	H	5-4-5 9-10-6	11-6-8	17-9-8	17-10-82	1-4-6	25-9-	-0		33-1-11		40-0-0			
D		5-4-5 4-6-0	'1-8-2 '	6-3-0	0-1'-0 3-	5-14	4-4-1	0		7-4-11		6-10-5			
Plate Offsets ()	X,Y)	[2:0-1-11,0-2-8], [4:0-3-8	,0-1-14], [7:0-2·	-8,Edge], [10	:0-3-0,0-1-8],	[18:Edge,	,0-3-8],	[21:0-1	-4,0-1-0)]					
LOADING (psi TCLL 25.1 TCDL 10.1 BCLL 0. BCDL 10.1	f) 0 0 .0 * 0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/T	2-0-0 1.15 1.15 YES Pl2014	CSI. TC BC WB Matrix	0.69 0.99 0.57 -S	DEF Vert Vert Horz Win	FL. t(LL) t(CT) rz(CT) nd(LL)	in -0.20 -0.32 -0.04 0.04	(loc) 13-15 13-15 21 16-17	l/defl >999 >812 n/a >999	L/d 360 240 n/a 240	PLATES MT20 MT18HS Weight:	s 175 lb	GRIP 197/144 197/144 FT = 10	%
LUMBER-						BRA	ACING-								
TOP CHORD	2x4 SP	PF No.2				TOP	P CHOR	D	Structu	ral wood	sheathing di	rectly applied o	r 4-7-1 oc	purlins.	
BOT CHORD 2x4 SPF No.2 *Except*				except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-7.											
5-18,6-15: 2x3 SPF No.2				BOT	CHOR	D	Rigid c	eiling dire	ctly applied	or 10-0-0 oc bra	acing, Ex	cept:			
WEBS 2x3 SPF No.2 *Except*							6-0-0 o	c bracing	: 16-17		0				
	2-20: 2	2x8 SP DSS, 10-21: 2x4 S	SPF No.2						1-11-14	4 oc braci	ng: 15-16.				
									1 Row	at midpt	6	6-16			
						WEE	BS		1 Row	at midpt	7	7-15, 9-13			
REACTIONS.	(size	e) 20=0-3-8, 15=0-2-0	(req. 0-3-6), 21	=Mechanica										1.1.2	
	Max H	lorz 20=258(LC 7)											11111	1111	
	Max U	Iplift 20=-51(LC 8), 15=-1	5(LC 8), 21=-60	D(LC 9)								110	OF	MISS	11.
	Max G	Grav 20=797(LC 14), 15=	2141(LC 2), 21	=1035(LC 14	.)							12			0/1
												SYL.	-		. 0-
FORCES. (ID) - Max.		rces 250 (ID) or	less except	when shown.	7 0 004/	400					20:	XUEG	ANG	12-2
IOF CHORD	2-3=-	-000/13, 3-4=-118/189, 4	·0=-401/132, 0-	0 = -4 10/127	0 - 1 = -91/359	1-0=-084/	190,					2.1	LIU	U	: . =
	0-9=-	-1 30/101, 9-10=-1203/11	5, Z-ZU=-079/80 5, 17, 19- 11/20	0, 11-∠1=-103 05 5 17_ 225	5/117 16 17-	- 922/90						- ×:			× -
BOICHORD	19-20	0=-30//00, 10-13=-04/42 6_ 1126/76 6 16_ 079/1	J, 17-10=-41/38	0, 0-17=-320 195	, i i i , i o-i / =	-213/10,						-			
WEBS	6-17-	44/923 7-15979/0 2	10, 12-10=-37/8 10278/157 /	20 10-108/510	7-13-0/537	8-1310	0/338					= 0:	NUM	BER	<u> </u>
WEDO	9-13=	=-646/134 10-12=0/701	15-210/157,4	10= 30/313	, , 10=0/007	, 0 13=10	5,550,					- 70 -	F-29	713	:14-

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 3) Provide adequate drainage to prevent water ponding.

- All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) WARNING: Required bearing size at joint(s) 15 greater than input bearing size.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 15, 21.
- 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.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



16023 Swingley Ridge Rd Chesterfield, MO 63017

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





⊢ −−	5-4-4	11-6-8	17-9-8	17-10-8	22-10-6	25-9-0	1	33-1-10	40-0-0		
Plate Offsets (X,Y)	[2:0-1-5,0-1-12], [4:	0-7-6,Edge], [9:0-3-0	,0-1-8], [17:I	Edge,0-2-8],	<u>4-11-14</u> [20:0-1-4,0-1-0	2-10-10		7-4-10	6-10-6		
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress II Code IRC20	2-0-0 OL 1.15 - 1.15 ncr YES 118/TPI2014	CSI. TC BC WB Matrix	0.67 0.67 0.79 S	DEFL. Vert(LL) Vert(CT Horz(CT Wind(LL	in -0.21) -0.33) -0.06 .) 0.03	(loc) 12-14 12-14 12-14 14 17-18	l/defl L/d >999 360 >788 240 n/a n/a >999 240	PLATES MT20 M18SHS MT18HS Weight: 178 I	GRIP 197/144 197/144 197/144 b FT = 10%	 ,
LUMBER- TOP CHORD 2x4 \$ 6-7: 2 BOT CHORD 2x4 \$ 4-17, WEBS 2x3 \$		BRACING- TOP CHORD Structu except BOT CHORD Rigid c 6-0-0 c 2-6-14			Structural wood sheathing directly applied or 4-6-6 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 4-6. Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 17-18 3-6-14 oc bracing: 14-15						
2-19:	: 2x6 SPF No.2, 9-20:	2x4 SPF No.2			WEBS		1 Row at	midpt	4-15, 6-14, 8-12		
REACTIONS. (s Max Max Max	ize) 19=0-3-8, 14=0 Horz 19=257(LC 7) Uplift 19=-53(LC 8), 1 Grav 19=832(LC 13)	0-2-0 (req. 0-3-4), 20= 14=-11(LC 8), 20=-54 , 14=2055(LC 2), 20=	=Mechanica I(LC 9) =1063(LC 14	l -)					INATE O	F MISSO	
FORCES. (lb) - Ma TOP CHORD 2-3 10	x. Comp./Max. Ten =-917/81, 3-4=-594/12 -20=-1063/54_9-10=-5	All forces 250 (lb) or 26, 6-7=-715/187, 7-8 949/90	less except 3=-791/158,	when shown 8-9=-1307/1	09, 2-19=-714/	80,			xu	EGANG LIU	P
BOT CHORD 18-	19=-107/784, 4-16=0/	/560, 15-16=-69/476,	14-15=-111	1/86, 5-15=-	470/117,				= ^		<u>^</u>
12- WEBS 16- 8-1	14=0/355, 11-12=-29/ 18=-107/780, 3-16=-3 2=-628/131, 9-11=0/7	/958 357/89, 4-15=-890/43 28	0, 6-12=0/38	80, 7-12=-98/41	2,			PRO	JMBER -29713	REP.	
NOTES- 1) Unbalanced roof li 2) Wind: ASCE 7-16; MWFRS (envelope 3) Provide adequate 4) All plates are MT2 5) This truss has bee	ive loads have been c ; Vult=115mph (3-seco e); cantilever left and r drainage to prevent w :0 plates unless otherv an designed for a 10.0	onsidered for this des ond gust) Vasd=91mp right exposed ; end vo rater ponding. vise indicated. psf bottom chord live	sign. oh; TCDL=6. ertical left ar e load nonco	.0psf; BCDL⊧ nd right expo ncurrent with	=6.0psf; h=25ft; sed; Lumber D n any other live	Cat. II; E OL=1.60 loads.	xp C; Encl plate grip E	osed; DOL=1.60		GANG	

- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) WARNING: Required bearing size at joint(s) 14 greater than input bearing size.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 14, 20.
- 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.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 **ANSITTPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





16023 Swingley Ridge Rd Chesterfield, MO 63017

			RELEASE FO	DR		
Job	Truss	Truss Type	CONSTRUCT	ØN	Ply	Lot 77 RR
400422	٩٩		RDER AS NOTED ON PLANS	REVIE	w _	142065415
100122	50		DEVELOPMENT SEF	RVICES	3	Job Reference (optional)
Wheeler Lumber, Wave	erly, KS 66871	LEE'S SUMMIT, MISSOURI 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:57 2020 Page 2				
			ID:ell3htjhC3ucpFh1ifG0Ecz			G0EczUTUFT8vci7T11FNhPxG1Dt4jygcFNUZOhjL2JJ_SEyxDdi
LOAD CASE(S) Standard			08/05/2020			
ECAD CASE(S) Standard						
 Dead + Roof Live (balan 	ced): Lumber Increase=1.15	, Plate Increas	se=1.15			

Uniform Loads (plf) Vert: 1-2=-70, 2-5=-70, 5-6=-70, 9-11=-20, 7-8=-20

Concentrated Loads (lb)

Vert: 10=-2968(B) 12=-1466(B) 13=-1464(B) 14=-1464(B) 16=-1464(B) 18=-1464(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TP11 Quality Criteria**, **DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601




Scale = 1:37.7



L	5-6-0	10-6-0	1	5-6-0	1	21-0-0			
I	5-6-0	5-0-0		5-0-0	I	5-6-0	1		
Plate Offsets (X,Y)	[3:0-3-8,0-2-3], [5:0-3-8,0-2-3], [8:0-3-4	<u>,0-2-0], [9:0-2-8,0-1-8], [12:0</u>)-2-8,0-1-8], [13:0-3-4,	0-2-0]					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO	CSI. TC 0.55 BC 0.57 WB 0.49	DEFL. ir Vert(LL) -0.09 Vert(CT) -0.17 Horz(CT) 0.04	(loc) 11 9-11 8	l/defl L/d >999 360 >999 240 n/a n/a	PLATES MT20	GRIP 197/144		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.08	11	>999 240	Weight: 78 lb	FT = 10%		
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x3 SF 2-13,6	PF No.2 PF No.2 PF No.2 *Except* -8: 2x6 SPF No.2		BRACING- TOP CHORD BOT CHORD	Structura except e Rigid ce	al wood sheathing d and verticals, and 2- iling directly applied	irectly applied or 3-7-6 0-0 oc purlins (3-4-8 m or 9-6-11 oc bracing.	i oc purlins, ax.): 3-5.		
REACTIONS. (siz Max H Max U Max C	e) 13=0-3-8, 8=0-3-8 lorz 13=-65(LC 27) Jplift 13=-297(LC 8), 8=-297(LC 9) Grav 13=1406(LC 1), 8=1406(LC 1)						MISSI		
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2099/442, 3-4=-2363/520, 4-5=-2363/520, 5-6=-2099/442, 2-13=-1350/322, 6-8=-1350/322									
BOT CHORD 12-1 WEBS 3-11	6-8=-1350/322 BOT CHORD 12-13=-168/396, 11-12=-380/1793, 9-11=-338/1793, 8-9=-137/396 WEBS 3-11=-177/748, 4-11=-574/252, 5-11=-177/748, 2-12=-333/1429, 6-9=-336/1429 ★ LIU								
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; M MWFRS (envelope) grip DOL=1.60 3) Provide adequate d 4) This truss has been 5) * This truss has been	e loads have been considered for this de /ult=115mph (3-second gust) Vasd=91n gable end zone; cantilever left and righ rainage to prevent water ponding. designed for a 10.0 psf bottom chord liv in designed for a live load of 20.0psf on	usign. hph; TCDL=6.0psf; BCDL=6. exposed ; end vertical left a re load nonconcurrent with a the bottom chord in all areas	.0psf; h=25ft; Cat. II; E and right exposed; Lur any other live loads. s where a rectangle 3-	xp C; Enc nber DOL 6-0 tall by	closed; =1.60 plate 2-0-0 wide	PROFILE SO	MBER 29713 NALEN		
will fit between the t 6) Provide mechanical 13=297, 8=297.	connection (by others) of truss to bearing	ng plate capable of withstand	ding 100 lb uplift at joir	nt(s) excep	ot (jt=lb)	IN VE	GANG LIU		
 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 100 lb down and 63 lb up at 6-6-0, 100 lb down and 63 lb up at 12-6-0, and 100 lb down and 63 lb up at 14-6-0 on top chord, and 234 lb down and 134 lb up at 5-6-0, 32 lb down at 8-6-0, 32 lb down at 8-6-0, 32 lb 									
down at 10-6-0, 32 design/selection of s 10) In the LOAD CASE	Ib down at 12-6-0, and 32 lb down at 1 such connection device(s) is the respon- E(S) section, loads applied to the face of	4-6-0, and 234 lb down and sibility of others. the truss are noted as front	134 lb up at 15-6-0 o (F) or back (B).	n bottom (chord. The	Yam	ANSAS LAX		
LOAD CASE(S) Stan	dard					111081	DNALEN		

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



July 17,2020

			RELEASE	FOR		
Job T	russ	Truss Type	CONSTRUC	CTION	Ply	Lot 77 RR
400422 F	1	Hip Girder	AS NOTED ON PLA	NS REVIE	₩ ₁	142065416
	. 1		DEVELOPMENT	SERVICES		Job Reference (optional)
Wheeler Lumber, Waverl	ly, KS 66871		LEE'S SUMMIT, N	MISSOURI	8.410 s M	ay 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:59 2020 Page 2
				ID:ell3htjhC3	BucpFh1if	G0EczUTUF-wrGg0O9jZeV5wi5f9evYoNlv0BAfsd1eWdo4X6yxDdg
LOAD CASE(S) Standard			08/05/202	20		
 Dead + Roof Live (balance) 	ed): Lumber Increase=1 15	Plate Increase=	1 15			

 Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 6-7=-70, 8-13=-20

Concentrated Loads (lb)

Vert: 12=-234(B) 11=-22(B) 4=-46(B) 9=-234(B) 14=-46(B) 15=-46(B) 16=-46(B) 17=-46(B) 18=-22(B) 19=-22(B) 20=-22(B) 21=-22(B) 21=-22(B)





	8-2-0		12-10-0	2	1-0-0	
Plate Offsets (X,Y)	<u>8-2-0</u> [9:0-4-1,0-8-2], [13:0-2-7,0-4-14]		4-8-0		5-2-0	
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.75 BC 0.49 WB 0.12 Matrix-S	DEFL. in Vert(LL) -0.11 Vert(CT) -0.21 Horz(CT) 0.03 Wind(LL) 0.06	(loc) l/defi L/d 11-12 >999 360 9-11 >999 240 9 n/a n/a 11-12 >999 240	PLATES MT20 Weight: 76 lb	GRIP 197/144 FT = 10%
LUMBER- TOP CHORD 2x4 SP 4-5: 2x4 BOT CHORD 2x4 SP WEBS 2x3 SP 2-13,7-1	F 2100F 1.8E *Except* 4 SPF No.2 F No.2 F No.2 *Except* 9: 2x8 SP DSS		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing di except end verticals, and 2-0 Rigid ceiling directly applied	rectly applied or 4-10-1 I-0 oc purlins (5-7-8 ma or 10-0-0 oc bracing.	1 oc purlins, ax.): 4-5.
FORCES. (lb) Max. H Max Hi Max Uj Max Gi TOP CHORD 2-3=- 2-13= BOT CHORD 12-13	, 15-05-05, 35-05-05 point 13=-83(LC 6) point 13=-123(LC 8), 9=-123(LC 9) rav 13=1000(LC 1), 9=1000(LC 1) Comp./Max. Ten All forces 250 (lb) or 1274/179, 3-4=-1157/109, 4-5=-997/135 -909/165, 7-9=-909/165 =-158/1011, 11-12=-2/997, 9-11=-103/1	less except when shown , 5-6=-1157/109, 6-7=-12 011	74/180,		XUE	MISSOL GANG
 NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) grip DOL=1.60 3) Provide adequate dr. 4) This truss has been will fit between the bit of) Provide mechanical of 13=123, 9=123. 7) This truss is designe referenced standard 8) Graphical purlin reproduction 	loads have been considered for this des ult=115mph (3-second gust) Vasd=91mg gable end zone; cantilever left and right ainage to prevent water ponding. designed for a 10.0 psf bottom chord live n designed for a live load of 20.0psf on th ottom chord and any other members. connection (by others) of truss to bearing d in accordance with the 2018 Internatio ANSI/TPI 1. esentation does not depict the size or the	sign. sh; TCDL=6.0psf; BCDL= exposed ; end vertical lef load nonconcurrent with the bottom chord in all are g plate capable of withsta nal Residential Code sec e orientation of the purlin	=6.0psf; h=25ft; Cat. II; E ft and right exposed; Lun n any other live loads. as where a rectangle 3-4 anding 100 lb uplift at joir ctions R502.11.1 and R8 along the top and/or bot	xp C; Enclosed; hber DOL=1.60 plate 6-0 tall by 2-0-0 wide ht(s) except (jt=lb) 02.10.2 and tom chord.	PROTOSOOO	MBER 29713 VALENGIN SANG LIU ENSED



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

16023 Swingley Ridge Rd Chesterfield, MO 63017



4) * This truss has been designed for a live load of 20.0pst on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=140, 8=140.

6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







ŀ	8-0-4		12-11-12			21-0-0	
Plate Offsets (X,Y)	[2:0-9-0.0-0-3], [6:0-9-0.0-0-3], [9:0-4-0.0)-6-0]. [10:0-4-0.0-6-0]. [1	<u>4-11-8</u> 3:0-1-15.0-1-0]. [14:0)-1-15.0-1	-01	8-0-4	
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.37 BC 0.48 WB 0.33 Matrix-S	DEFL. Vert(LL) -0 Vert(CT) -0 Horz(CT) 0 Wind(LL) 0	in (loc) .09 6-9 .16 6-9 .03 6 .06 6-9	I/defl L/d >999 360 >999 240 n/a n/a >999 240	PLATES MT20 Weight: 447 II	GRIP 197/144 D FT = 10%
LUMBER- TOP CHORD 2x6 SF BOT CHORD 2x8 SF WEBS 2x4 SF REACTIONS. (siz Max H Max U	PF No.2 P DSS PF No.2 e) 2=0-3-8, 6=0-3-8 orz 2=65(LC 7) plift 2=-371(LC 8), 6=-634(LC 9) prove 0.550(10.4)		BRACING- TOP CHORD BOT CHORD	Struc Rigid	tural wood sheathir ceiling directly app	ng directly applied or 6-0-(lied or 10-0-0 oc bracing.) oc purlins.
Max G FORCES. (Ib) - Max. TOP CHORD 2-3= BOT CHORD 2-10: WEBS 4-9=: NOTES- 1) 3-ply truss to be cor Top chords connect Bottom chords connect Bottom chords connect as 2) All loads are conside ply connections hav 3) Unbalanced roof live 4) Wind: ASCE 7-16; \ MWFRS (envelope)	rav 2=5598(LC 1), 6=6623(LC 1) Comp./Max. Ten All forces 250 (lb) or .7994/531, 3-4=-7828/526, 4-5=-8125/61 =-471/6942, 9-10=-320/5548, 6-9=-500/7 .363/4009, 5-9=-243/251, 4-10=-175/339 Intected together with 10d (0.131"x3") nai ed as follows: 2x6 - 2 rows staggered at 1 ected as follows: 2x8 - 2 rows staggered at 1 follows: 2x4 - 1 row at 0-9-0 oc. ered equally applied to all plies, except if e been provided to distribute only loads r bloads have been considered for this des 'ult=115mph (3-second gust) Vasd=91mp ; cantilever left and right exposed ; end v	less except when shown. 4, 5-6=-8314/623 235 2, 3-10=-251/271 Is as follows:)-9-0 oc. at 0-4-0 oc. noted as front (F) or back ioted as (F) or (B), unless sign. oh; TCDL=6.0psf; BCDL= ertical left and right expos	(B) face in the LOA otherwise indicated 6.0psf; h=25ft; Cat. I sed; Lumber DOL=1.	D CASE(S) section. Ply to Enclosed; ip DOL=1.60	PROFILESS/O	EGANG LIU JMBER 29713
 b) All plates are 2x4 M c) All plates are 2x4 M c) This truss has been c) * This truss is designed c) This trust is designed c) The trust is designed <lic) designed<="" is="" td="" the="" trust=""><td>Calliever feit and right exposed, end v T20 unless otherwise indicated. designed for a 10.0 psf bottom chord live n designed for a live load of 20.0psf on the ottom chord and any other members. connection (by others) of truss to bearing ed in accordance with the 2018 Internatio I ANSI/TPI 1. connection device(s) shall be provided s and 74 lb up at 3-5-7, 909 lb down and 978 lb down and 43 lb up at 11-5-7, 946 50 lb up at 17-5-7, and 977 lb down and e design/selection of such connection devider</td><td>e load nonconcurrent with the bottom chord in all are g plate capable of withsta nal Residential Code sec ufficient to support conce 80 lb up at 5-5-7, 903 lb lb down and 36 lb up at 154 lb up at 19-5-7, and ice(s) is the responsibility</td><td>any other live loads. as where a rectangle nding 100 lb uplift at tions R502.11.1 and ntrated load(s) 929 ll down and 69 lb up a 13-5-7, 949 lb down 971 lb down and 15: of others.</td><td>3-6-0 tall joint(s) ex R802.10.2 o down an t 7-5-7, 8t and 146 lb 5 lb up at</td><td>by 2-0-0 wide cept (jt=lb) 2 and d 81 lb up at 32 lb down and up at 15-5-7, 19-9-4 on</td><td></td><td>GANG LIU DENSEO 9198 MAAS LA</td></lic)>	Calliever feit and right exposed, end v T20 unless otherwise indicated. designed for a 10.0 psf bottom chord live n designed for a live load of 20.0psf on the ottom chord and any other members. connection (by others) of truss to bearing ed in accordance with the 2018 Internatio I ANSI/TPI 1. connection device(s) shall be provided s and 74 lb up at 3-5-7, 909 lb down and 978 lb down and 43 lb up at 11-5-7, 946 50 lb up at 17-5-7, and 977 lb down and e design/selection of such connection devider	e load nonconcurrent with the bottom chord in all are g plate capable of withsta nal Residential Code sec ufficient to support conce 80 lb up at 5-5-7, 903 lb lb down and 36 lb up at 154 lb up at 19-5-7, and ice(s) is the responsibility	any other live loads. as where a rectangle nding 100 lb uplift at tions R502.11.1 and ntrated load(s) 929 ll down and 69 lb up a 13-5-7, 949 lb down 971 lb down and 15: of others.	3-6-0 tall joint(s) ex R802.10.2 o down an t 7-5-7, 8t and 146 lb 5 lb up at	by 2-0-0 wide cept (jt=lb) 2 and d 81 lb up at 32 lb down and up at 15-5-7, 19-9-4 on		GANG LIU DENSEO 9198 MAAS LA

July 17,2020

MiTek[®] 16023 Swingley Ridge Rd Chesterfield, MO 63017

LOAD CASE(S) Standard

Continued on page 2

		RELEASE FOR		
Job Truss	Truss Type	CONSTRUCTION	Ply	Lot 77 RR
400422 F4	COMMON GI	GIRDER AS NOTED ON PLANS REVIE	w	142065419
		DEVELOPMENT SERVICES	3	Job Reference (optional)
Wheeler Lumber, Waverly, KS 66871		LEE'S SUMMIT, MISSOURI	8.410 s M	ay 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:03 2020 Page 2
		ID:ell3htjhC3ucp	oFh1ifG0E	czUTUF-pdVBsICEdt?XPKOQOU_UzDwesoY3oTZDRFmIgtyxDdc
		08/05/2020		
LOAD CASE(S) Standard				
1) Dead + Roof Live (balanced): Lumber Increase=1.15	Plate Increa	ase-1 15		

Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf) Vert: 1-4=-70, 4-7=-70, 2-6=-20

Concentrated Loads (lb)

Vert: 17=-885(F) 18=-901(F) 19=-876(F) 20=-872(F) 21=-882(F) 22=-978(F) 23=-946(F) 24=-949(F) 25=-977(F) 26=-977(F) 27=-971(F)





			3-7-0				1			
LOADING (psf) SPAC TCLL 25.0 Plate TCDL 10.0 Lumbu BCLL 0.0 * Rep S BCDL 10.0 Code	NG- 2-0-0 Grip DOL 1.15 r DOL 1.15 ress Incr YES IRC2018/TPI2014 1	CSI. TC 0.15 BC 0.10 WB 0.00 Matrix-R	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.01 -0.01 0.01 0.01	(loc) 4-5 4-5 3 4-5	l/defl >999 >999 n/a >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 10 lb	GRIP 197/144 FT = 10%	

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

REACTIONS. 5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=65(LC 8) Max Uplift 5=-34(LC 8), 3=-54(LC 8) Max Grav 5=234(LC 1), 3=103(LC 1), 4=63(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



11111 MI

0

🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 3-7-0 oc purlins, except end verticals.

Rigid ceiling directly applied or 10-0-0 oc bracing.



Plate Offse	ets (X,Y)	[2:0-2-13,0-2-8]		3-7-0				7-5-0				
	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.13	5-6	>961	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.26	5-6	>500	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.87	Horz(CT)	0.06	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matrix	-S	Wind(LL)	0.15	5-6	>888	240	Weight: 45 lb	FT = 10%
LUMBER-	2v4 S	PE No 2				BRACING-	20	Structu	ural wood	sheathing di	rectly applied or 3-9-3	

LOWIDER		BIULONICO		
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing	directly applied or 3-9-3 oc purlins,
BOT CHORD	2x4 SPF No.2 *Except*		except end verticals.	
	5-6: 2x6 SPF 1650F 1.4E	BOT CHORD	Rigid ceiling directly applied	d or 6-0-0 oc bracing.
WEBS	2x3 SPF No.2 *Except*	WEBS	1 Row at midpt	3-5
	2-7: 2x4 SPF No.2			

REACTIONS. (size) 7=0-4-3, 5=Mechanical Max Horz 7=196(LC 5) Max Uplift 7=-247(LC 4), 5=-282(LC 8)

Max Grav 7=734(LC 1), 5=744(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

TOP CHORD 2-7=-685/259, 2-3=-1907/712, 4-5=-255/145

BOT CHORD 5-6=-777/1750

WEBS 2-6=-687/1800, 3-6=-75/378, 3-5=-1702/751

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

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

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=247, 5=282.

7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 20 lb up at 2-0-9, 105 lb down and 70 lb up at 3-6-14, 80 lb down and 58 lb up at 4-4-14, and 105 lb down and 87 lb up at 6-9-3, and 120 lb down and 94 lb up at 9-1-8 on top chord, and 13 lb down and 16 lb up at 2-0-9, 14 lb down at 3-7-4, 15 lb down and 16 lb up at 4-4-14, 28 lb down at 6-9-3, and 251 lb down and 109 lb up at 7-4-3, and 53 lb down and 43 lb up at 9-1-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





ONALE

mini

		RELEASE FOR		
Job Truss T	Truss Type	CONSTRUCTION	N Ply	Lot 77 RR
400422	Diagonal Hip	Girder AS NOTED ON PLANS RE	EVIEW	142065421
		DEVELOPMENT SERVI		Job Reference (optional)
Wheeler Lumber, Waverly, KS 66871		LEE'S SUMMIT, MISSO	URI 8.410 s M	ay 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:21 2020 Page 2
		ID:ell3h	htjhC3ucpFh1if	G0EczUTUF-H4b_evQXNPG_Z5nuRGJih0faY2fJ0UZta27FIryxDdK
		08/05/2020		
LOAD CASE(S) Standard				
1) Dead + Roof Live (balanced): Lumber Increase=1.15, !	Plate Increa	se=1.15		

Uniform Loads (plf) Vert: 1-2=-70, 2-4=-70, 6-7=-20, 5-6=-20 Concentrated Loads (lb)

Vert: 6=-4(B) 10=-23(F) 11=-44(F) 12=2(F) 13=-0(F) 14=-13(F) 15=-251(B) 16=-51(F)





			<u>3-3-8</u> 3-3-8		<u>3-7-0</u> 0-3-8		
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.17 BC 0.10 WB 0.00 Matrix-R	DEFL. Vert(LL) -0 Vert(CT) -0 Horz(CT) -0 Wind(LL) 0	in (loc) 0.01 5-6 0.02 5-6 0.01 3 0.01 5-6	l/defl L/d >999 360 >999 240 n/a n/a >999 240	PLATES MT20 Weight: 10 lb	GRIP 197/144 FT = 10%

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 WEBS

2x3 SPF No.2

REACTIONS. 6=0-3-8, 3=Mechanical, 4=Mechanical (size)

Max Horz 6=65(LC 8) Max Uplift 6=-32(LC 8), 3=-58(LC 8)

Max Grav 6=232(LC 1), 3=106(LC 1), 4=65(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections. 5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



11111 MI

0

🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Structural wood sheathing directly applied or 3-7-0 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

BRACING-TOP CHORD







BOT CHORD

except end verticals.

Rigid ceiling directly applied or 6-0-0 oc bracing.

TOP CHORD2x4 SPF No.2BOT CHORD2x4 SPF No.2WEPS2x2 SPE No.2

WEBS 2x3 SPF No.2

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical Max Horz 5=44(LC 5) Max Uplift 5=-4(LC 8), 3=-23(LC 8), 4=-11(LC 8) Max Grav 5=146(LC 1), 3=15(LC 6), 4=21(LC 6)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.5) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify
- capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



FMI

0

16023 Swingley Ridge Rd Chesterfield, MO 63017



			2-0-1	0-3-8		
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.09	DEFL. Vert(LL) -0.	in (loc) .00 5	l/defl L/d >999 360	PLATES GRIP MT20 197/144
TCDL 10.0 BCLL 0.0 * BCDL 10.0	Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	BC 0.05 WB 0.00 Matrix-R	Vert(CT) -0. Horz(CT) -0. Wind(LL) 0.	.00 5-6 .01 3 .00 5-6	>999 240 n/a n/a >999 240	Weight: 8 lb FT = 10%

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 WEBS 2x3 SPF No.2

REACTIONS. 6=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 6=69(LC 8) Max Uplift 3=-55(LC 8), 4=-3(LC 8) Max Grav 6=180(LC 1), 3=69(LC 15), 4=41(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections. 5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify
- capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



11111 MI

0

Structural wood sheathing directly applied or 2-3-9 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.





н	IIMBER-	

BCDL

2x4 SPF No.2 TOP CHORD 2x4 SPF No.2 BOT CHORD WEBS 2x3 SPF No.2

10.0

BRACING-TOP CHORD

BOT CHORD

0.01

5-6

>999

240

Wind(LL)

Structural wood sheathing directly applied or 3-6-9 oc purlins, except end verticals. Rigid ceiling directly applied or 6-0-0 oc bracing.

Weight: 11 lb

FT = 10%

REACTIONS. 6=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 6=103(LC 8) Max Uplift 3=-82(LC 8)

Max Grav 6=231(LC 1), 3=115(LC 15), 4=65(LC 3)

Code IRC2018/TPI2014

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-R

- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections. 5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify
- capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



11111 MI

XUEGANG

0





LOADING (psf) SPACING- 2-0-0 CSI. TCLL 25.0 Plate Grip DOL 1.15 TC 0.23 TCDL 10.0 Lumber DOL 1.15 BC 0.27 BCLL 0.0 * Rep Stress Incr YES WB 0.02 BCDL 10.0 Code IRC2018/TPI2014 Matrix-P	DEFL. in (loc) l/defl L/d Vert(LL) -0.03 6 >999 360 Vert(CT) -0.06 5-6 >894 240 Horz(CT) -0.05 4 n/a n/a Wind(LL) 0.06 6 >919 240	PLATES GRIP MT20 197/144 Weight: 15 lb FT = 10%
--	---	---

TOP CHORD2x4 SPF No.2BOT CHORD2x4 SPF No.2WEBS2x3 SPF No.2

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 4-9-9 oc purlins, except end verticals. Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical

Max Horz 7=137(LC 8) Max Uplift 4=-83(LC 8), 5=-19(LC 8)

Max Grav 7=284(LC 1), 4=137(LC 15), 5=81(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.



11111

0

MI





2-0-1	5-11-4	
2-0-1	3-11-3	

Plate Off	sets (X,Y)	[2:0-2-0,0-1-4]										
	G (psf)	SPACING- 2-	-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.08	5-6	>857	360	MT20	197/144
TCDL	10.0	Lumber DOL 1	1.15	BC	0.44	Vert(CT)	-0.15	5-6	>462	240		
BCLL	0.0 *	Rep Stress Incr	/ES	WB	0.02	Horz(CT)	0.08	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20	14	Matrix	-P	Wind(LL)	0.09	5-6	>739	240	Weight: 18 lb	FT = 10%
											-	

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 WEBS 2x3 SPF No.2

BRACING-TOP CHORD

Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical

Max Horz 7=118(LC 8) Max Uplift 4=-64(LC 8), 5=-1(LC 8)

Max Grav 7=334(LC 1), 4=170(LC 13), 5=103(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;

MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide

will fit between the bottom chord and any other members. 4) Refer to girder(s) for truss to truss connections.

5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.

7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



11111

0

MI







Plate Off	sets (X,Y)	[2:0-3-0,0-1-4], [6:0-3-0,0-0)-8]	_								
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	тс	0.47	Vert(LL)	-0.06	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.14	5-6	>506	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.05	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI	2014	Matrix	(-R	Wind(LL)	0.06	5-6	>999	240	Weight: 20 lb	FT = 10%

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	6-7: 2x3 SPF No.2
WEBS	2x3 SPF No.2

BRACING-TOP CHORD

 TOP CHORD
 Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.

 BOT CHORD
 Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical Max Horz 8=119(LC 8) Max Uplift 4=-66(LC 8) Max Gray 8=266(LC 1), 4=174(LC 12), 5=1214(LC 12)

Max Grav 8=366(LC 1), 4=174(LC 13), 5=131(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD $$2-8{=}{-}343/0$$

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.

6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



FMI

0





Plate Off	sets (X,Y)	[2:0-2-0,0-1-4]									1	
	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.03	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.06	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.03	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-R	Wind(LL)	0.03	6	>999	240	Weight: 20 lb	FT = 10%

LL	JME	ER-	

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	3-7: 2x3 SPF No.2
WEBS	2x3 SPF No.2

BRACING-TOP CHORD

Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical Max Horz 8=119(LC 8) Max Uplift 4=-10(LC 8), 5=-53(LC 8)

Max Grav 8=334(LC 1), 4=92(LC 13), 5=172(LC 13)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-8=-290/11

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.

6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

With PRUM XUEGANG LIU NUMBER E-29713 C JNAL JUEGANG LICEN LIU CENSED 19198 E ONAL mm July 17,2020

11111 MI

0





			5-11-4	
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.56	DEFL. in (loc) I/defl L/d PLATES Vert(LL) -0.05 4-5 >999 360 MT20	GRIP 197/144
TCDL 10.0 BCLL 0.0 * BCDL 10.0	Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	BC 0.33 WB 0.00 Matrix-R	Vert(CT) -0.12 4-5 >569 240 Horz(CT) 0.06 3 n/a n/a Wind(LL) 0.05 4-5 >999 240 Weight: 17	lb FT = 10%

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2

WEBS 2x3 SPF No.2

REACTIONS. 5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=119(LC 8) Max Uplift 3=-80(LC 8)

Max Grav 5=334(LC 1), 3=191(LC 13), 4=111(LC 3)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-5=-288/25

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;

MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

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

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.

6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

XUEGANG LIU NUMBER T E-29713 C JNA JUEGANC LICE, NEGANG 40 CENSED 19198 ONAL E 111111 July 17,2020

MI

0

Structural wood sheathing directly applied or 5-11-4 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals.

MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017



			<u>3-9-11</u> 3-9-3	
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.19 BC 0.13 WB 0.00 Matrix-R	DEFL. in (loc) l/defl L/d Vert(LL) -0.01 4-5 >999 360 Vert(CT) -0.02 4-5 >999 240 Horz(CT) -0.01 3 n/a n/a Wind(LL) 0.01 4-5 >999 240	PLATES GRIP MT20 197/144 Weight: 11 lb FT = 10%

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No 2 BOT CHORD 2x4 SPF No.2 WEBS

2x3 SPF No.2

REACTIONS. 5=0-4-13, 3=Mechanical, 4=Mechanical (size) Max Horz 5=71(LC 8) Max Uplift 5=-64(LC 4), 3=-73(LC 8) Max Grav 5=298(LC 1), 3=105(LC 1), 4=73(LC 3)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-5=-260/95

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPL1
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 73 lb down and 57 lb up at 3-2-0 on top chord, and 15 lb down at 3-2-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)
 - Vert: 1-2=-70, 2-3=-70, 4-5=-20
 - Concentrated Loads (lb)
 - Vert: 6=-1(F) 7=-5(F)



Structural wood sheathing directly applied or 3-9-11 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

July 17,2020

MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017



LOADING (psf) SPACING- 2-0-0 CSI. DEFL. in (line) TCLL 25.0 Plate Grip DOL 1.15 TC 0.09 Vert(LL) -0.00 TCDL 10.0 Lumber DOL 1.15 BC 0.06 Vert(CT) -0.01	(loc) l/defl	L/d 360	PLATES	GRIP	
LOADING (psf) SPACING- Plate Grip DOL 2-0-0 CSI. DEFL. in (I) TCLL 25.0 Plate Grip DOL 1.15 TC 0.09 Vert(LL) -0.00 Vert(LL) -0.00 Vert(LL) -0.01 Vert(LL)	(loc) l/defl	L/d 360	PLATES	GRIP	
BCLL 0.0 * Rep Stress Incr YES WB 0.00 Horc(CT) -0.00 BCDL 10.0 * Code IRC2018/TPI2014 Matrix-R	4-5 >999 3 n/a	240 n/a 240	Weight: 8 lb	FT - 10%	

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2

WEBS 2x3 SPF No.2

REACTIONS. 5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=63(LC 8) Max Uplift 5=-22(LC 8), 3=-50(LC 8)

Max Grav 5=200(LC 1), 3=79(LC 1), 4=50(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



11111 MI

0

Structural wood sheathing directly applied or 2-9-12 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.





				3-3-13
LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.15	Vert(LL) -0.01 4-5 >999 360 MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.10	Vert(CT) -0.01 4-5 >999 240
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.01 3 n/a n/a
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.01 4-5 >999 240 Weight: 10 lb FT = 10%

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 WEBS 2x3 SPF No.2

REACTIONS. 5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=77(LC 8) Max Uplift 5=-24(LC 8), 3=-62(LC 8)

Max Grav 5=228(LC 1), 3=102(LC 1), 4=63(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

118 * PRUI XUEGANG LIU NUMBER E-29713 0 JNAL JUEGANG LICEN LIU CENSED 9198 ONALES minin July 17,2020

11111 MI

0

🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



BOT CHORD

BRACING-

TOP CHORD

Structural wood sheathing directly applied or 3-5-13 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.



OADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in	(loc)	l/defl L/d	PLATES	GRIP
CLL 25.0	Plate Grip DOL 1.15	TC 0.58	Vert(LL) -0.06	4-5 :	>999 360	MT20	197/144
CDL 10.0	Lumber DOL 1.15	BC 0.36	Vert(CT) -0.12	4-5 :	>591 240		
CLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) -0.00	4	n/a n/a		
CDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.03	4-5 :	>999 240	Weight: 20 lb	FT = 10%

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 WEBS 2x3 SPF No.2

REACTIONS. (size) 5=0-4-13, 4=Mechanical

Max Horz 5=149(LC 5) Max Uplift 5=-98(LC 4), 4=-100(LC 5)

Max Grav 5=399(LC 1), 4=268(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-348/134

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 4 = 100

6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 73 lb down and 36 lb up at 2-6-15, and 87 lb down and 57 lb up at 3-0-12, and 93 lb down and 73 lb up at 5-0-15 on top chord, and 9 lb down and 14 lb up at 2-6-15, and 8 lb down at 3-0-12, and 21 lb down at 5-0-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-2=-70, 2-3=-70, 4-5=-20 Concentrated Loads (lb) Vert: 8=-3(F) 9=1(F) 10=-2(B) 11=-7(F)



111111

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017



	000							
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP				
TCLL	25.0	Plate Grip DOL 1.15	TC 0.13	Vert(LL) -0.00 4-5 >999 360 MT20 197/144				
TCDL	10.0	Lumber DOL 1.15	BC 0.07	Vert(CT) -0.01 4-5 >999 240				
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.01 3 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.01 4-5 >999 240 Weight: 9 lb FT = 10%				

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 WEBS

2x3 SPF No.2

REACTIONS. 5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=89(LC 8) Max Uplift 5=-2(LC 8), 3=-68(LC 8)

Max Grav 5=208(LC 1), 3=94(LC 15), 4=54(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



11111 MI

0

🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals.

Rigid ceiling directly applied or 10-0-0 oc bracing.



LOADING	(psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d PLATES GRIP	
TCLL	25.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL) -0.01 4-5 >999 360 MT20 197/144	
TCDL	10.0	Lumber DOL 1.15	BC 0.13	Vert(CT) -0.02 4-5 >999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.02 3 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.01 4-5 >999 240 Weight: 12 lb FT = 10%	

TOP CHORD2x4 SPF No.2BOT CHORD2x4 SPF No.2WEBS2x3 SPF No.2

2

BRACING-

BOT CHORD

Structural wood sheathing directly applied or 3-10-8 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical Max Horz 5=80(LC 8)

Max Uplift 3=-54(LC 8)

Max Grav 5=244(LC 1), 3=122(LC 13), 4=71(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

F MIS

0





LOADING TCLL	(psf) 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.07	DEFL. Vert(LL) -(in (loc)).00 5	l/defl L/d >999 240	PLATES GRIP MT20 197/144	
BCLL BCDL	10.0 0.0 * 10.0	Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.00 Matrix-R	Horz(CT) -(0.00 5 0.00 3	>999 180 n/a n/a	Weight: 6 lb FT = 10%	

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No 2 BOT CHORD 2x4 SPF No.2

WEBS 2x3 SPF No.2

REACTIONS. 5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=50(LC 8) Max Uplift 5=-5(LC 8), 3=-35(LC 8), 4=-6(LC 8) Max Grav 5=155(LC 1), 3=36(LC 15), 4=26(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.



11111 MI

0

Structural wood sheathing directly applied or 1-6-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.





			2-8-12				
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.08 BC 0.06 WB 0.00 Matrix-R	DEFL. in Vert(LL) -0.00 Vert(CT) -0.00 Horz(CT) -0.00 Wind(LL) 0.00	(loc) l/de 4-5 >99 4-5 >99 3 n 4-5 >99	fl L/d 9 360 9 240 ⁄a n/a 9 240	PLATES MT20 Weight: 8 lb	GRIP 197/144 FT = 10%

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 WEBS

2x3 SPF No.2

REACTIONS. 5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=61(LC 8)

Max Uplift 5=-22(LC 8), 3=-48(LC 8) Max Grav 5=197(LC 1), 3=76(LC 1), 4=49(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

118 * PRUIN XUEGANG LIU NUMBER E-29713 0 NAL VUEGANG LICEN UEGANG LIL CENSED 19198 ONALE min July 17,2020

11111 MI

0

Structural wood sheathing directly applied or 2-8-12 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017



		3-6-8 3-6-8		5-11-4 2-4-12	4 2				
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.33 BC 0.41 WB 0.00 Matrix-R	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.07 -0.12 0.03 0.07	(loc) 6 6 5 6	l/defl >999 >578 n/a >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 19 lb	GRIP 197/144 FT = 10%

TOP CHORD

BOT CHORD

LUMBER-

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2 *Except*

 3-7: 2x3 SPF No.2

 WEBS
 2x4 SPF No.2

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical

Max Horz 8=118(LC 8)

Max Uplift 4=-49(LC 8), 5=-14(LC 8)

Max Grav 8=336(LC 1), 4=156(LC 13), 5=106(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-8=-304/7

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

VUEGANG LIU NUMBER E-29713 SS/ONAL ENGINE UEGANG UCENSES 19198

FMI

0

Structural wood sheathing directly applied or 5-11-4 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals.

16023 Swingley Ridge Rd Chesterfield, MO 63017



2-3-8 3-7-12	2-3-8	5-11-4	
	2-3-8	3-7-12	

Plate Off	sets (X,Y)	[2:0-3-0,0-1-4], [6:0-3-0,0-0)-8]									
	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.06	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.13	5-6	>519	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.06	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2	2014	Matri	x-R	Wind(LL)	0.07	5-6	>999	240	Weight: 19 lb	FT = 10%
											_	

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	6-7: 2x3 SPF No.2
WEBS	2x3 SPF No.2

BRACING-TOP CHORD

 TOP CHORD
 Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.

 BOT CHORD
 Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical Max Horz 8=119(LC 8) Max Uplift 4=-67(LC 8)

Max Grav 8=360(LC 1), 4=176(LC 13), 5=122(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD $$2-8{=}{-}342/0$$

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



FMI

0





July 17,2020

MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017

Vert: 1-2=-70, 2-4=-70, 7-8=-20, 5-6=-20

Continued on page 2

		RELEASE FOR		
Job Truss	Truss Type		Ply	Lot 77 RR
400422	Diagonal Hin	Girder AS NOTED ON PLANS REVIE	N 1	142065442
	Blagonarnip	DEVELOPMENT SERVICES		Job Reference (optional)
Wheeler Lumber, Waverly, KS 66871		LEE'S SUMMIT, MISSOURI 8	3.410 s N	lay 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:17 2020 Page 2
		ID:eII3htjhC3ucpFh1	ifG0Eczl	JTUF-OJLToYN0KAmY4TT6CQEmXAVtRRHQ4fmHfQ9193yxDdO
		08/05/2020		
LOAD CASE(S) Standard				

Concentrated Loads (lb) Vert: 7=-6(F) 9=-4(B) 10=-9(B) 11=-48(B) 12=-31(B) 13=-251(F) 14=-44(B)





3-7: 2x3 SPF No.2

WEBS 2x4 SPF No.2

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical

Max Horz 8=138(LC 8) Max Uplift 8=-1(LC 8), 4=-81(LC 8), 5=-19(LC 8)

Max Grav 8=286(LC 1), 4=140(LC 15), 5=76(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-8=-262/38

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 4, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



11111 MIS

0





LUMBER-	
---------	--

BCDL

TOP CHORD 2x4 SPF No.2 2x4 SPF No.2 *Except* BOT CHORD 3-7: 2x3 SPF No.2

WEBS 2x4 SPF No.2

10.0

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical

Max Horz 8=104(LC 8) Max Uplift 8=-2(LC 8), 4=-48(LC 8), 5=-30(LC 8)

Code IRC2018/TPI2014

Max Grav 8=233(LC 1), 4=90(LC 15), 5=64(LC 15)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-R

- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 4, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



11111 MI

0

👠 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid to use only design parameters and READ NOTES ON THIS AND INCLUDED WITH REPORT PAGE MIT 475 164 (2010) and 164 (20
 Satisfies
 Ansi/TPH Qu

 Safety Information
 available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



BRACING-TOP CHORD BOT CHORD

0.01

6 >999

Wind(LL)

Structural wood sheathing directly applied or 3-6-9 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing

Weight: 12 lb

FT = 10%

240



	2-3-9							
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP				
TCLL	25.0	Plate Grip DOL 1.15	TC 0.16	Vert(LL) -0.05 6 >552 360 MT20 197/144				
TCDL	10.0	Lumber DOL 1.15	BC 0.17	Vert(CT) -0.09 6 >278 240				
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.02 5 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.03 6 >933 240 Weight: 10 lb FT = 10%				

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No 2 BOT CHORD 2x4 SPF No.2 WEBS

2x4 SPF No.2

REACTIONS. 7=0-3-8, 4=Mechanical, 5=Mechanical (size) Max Horz 7=70(LC 8) Max Uplift 4=-39(LC 8), 5=-3(LC 8) Max Grav 7=197(LC 1), 4=71(LC 15), 5=60(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



11111 MI

0

Structural wood sheathing directly applied or 2-3-9 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.





		2-3-8	6-9-6	
		2-3-8	4-5-14	
Plate Offsets (X,Y)	[3:0-3-8,Edge], [5:Edge,0-2-8]			
LOADING (psf)	SPACING- 2-0	-0 CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.1	5 TC 0.54	Vert(LL) -0.11 5-6 >686 360	MT20 197/144

TCDL BCLL BCDL	10.0 0.0 * 10.0	Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	BC 0.57 WB 0.00 Matrix-R	Vert(CT) -0.21 Horz(CT) 0.10 Wind(LL) 0.12	5-6 >380 5 n/a 5-6 >670	240 n/a 240	Weight: 20 lb	FT = 10%
LUMBER TOP CHO	- DRD 2x4 SP	PF No.2		BRACING- TOP CHORD	Structural wood	sheathing di	rectly applied or 6-0-0 c	oc purlins,
BOLCHO	3-7: 2x	3 SPF No.2		BOT CHORD	Rigid ceiling dir	cals. ectly applied (or 10-0-0 oc bracing.	
WEBS	2x4 SF	PF No.2 *Except*						

REACTIONS. (size) 8=0-3-8, 5=Mechanical Max Horz 8=131(LC 5)

4-5: 2x3 SPF No.2

Max Uplift 8=-62(LC 8), 5=-71(LC 8) Max Grav 8=371(LC 1), 5=288(LC 1)

Lumber DOL

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-8=-359/86, 2-3=-284/36

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

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

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide 3) will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



MI

0





BRACING-TOP CHORD

BOT CHORD

	N/	D	-	D
LU	IVI	D	с	R -

TOP CHORD 2x4 SPF No.2 2x4 SPF No.2 BOT CHORD OTHERS 2x4 SPF No.2

REACTIONS.

All bearings 9-8-15. Max Horz 1=106(LC 5) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-138(LC 8), 6=-137(LC 9)

All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=268(LC 15), 6=268(LC 16) Max Grav

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=138.6=137.

7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing




WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type CONSTRUCTION Ply Lot 77 RR H2065449 400422 LAY4 GABLE GABLE DevelopMent SERVICES Lot 77 RR Lot 70 R				RELE	ASE FOR				
400422 LAY4 GABLE AS NOTED ON PLANS, REVIEW DEVELOPMENT SERVICES Jub Reference (optional) Wheeler Lumber, Waverly, KS 66871 Devision/CSuppFhildSecuTUF-e2OthdUCxvGis/Fepul03Neh3WThmspikq0_2yxDdF Devision/CSuppFhildSecuTUF-e2OthdUCxvGis/Fepul03Neh3WThmspikq0_2yxDdF Devision/CSuppFhildSecuTUF-e2OthdUCxvGis/Fepul03Neh3WThmspikq0_2yxDdF Scale = 1.72.1 10.82 12 2x4 11 3.66 + 3 VPE 3.66 + 3 3 3 VPE 10.82 12 10 3 VE 2x4 11 1 1 VE 3.66 + 5 5 2x4 11 6x6 = 2x4 11 1	Job	Truss	Truss Type	CONST	RUCTION	Ply	Lot 77 RR		140005440
Wheeler Lumber, Waverly, KS 66871 Wheeler Lumber, Waverly, KS 66871 $LEE'S SUMMIT, MISSOURI 8.41 os May 22 2020 Mick Industries, Inc. Fri Jul 17 07:59:26 2020 Page 1 Deil3htlpC3ucpFh1if30EczUTUF-e20thdUfCxvGfsfrEput03Nch3WThm3cjKq0_2xytDdF 0.82 \frac{12}{12} \frac{2}{24} \frac{11}{4}10.82 \frac{12}{12} \frac{2}{24} \frac{11}{4}10.82 \frac{12}{12} \frac{2}{24} \frac{11}{4}8 7 6 52x4 6x6 = 2x4 $	400422	LAY4	GABLE	AS NOTED ON	I PLANS REVIE	W 1			142065449
Wheeler Lumber, Waverly, KS 66871 LEE S SUMMIR, MISSOugPFhillSDEczUTUF-e2OthdUfCxvGfstFEputOSNch3WThm9cjKq0_2yxDdF DellShihtC3ucpFhillSDEczUTUF-e2OthdUfCxvGfstFEputOSNch3WThm9cjKq0_2yxDdF 0.8/d33020 10.82 12^{244} II $3x6 \neq 3^{3}$ 2x4 II 10.82 12^{244} II 10^{244} II				DEVELOPM	ENT SERVICES		Job Reference (optiona	al)	
$\begin{array}{c} 0.07433020 \\ \hline \\ 10.82 \boxed{12} \\ 2x4 \boxed{11} \\ \hline \\ 2x4 \boxed{11} \\ \hline \\ 2x4 \boxed{11} \\ \hline \\ \\ 2x4 \boxed{11} \\ \hline \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $	Wheeler Lumber, V	Vaverly, KS 66871		LEE'S SUM	ID:ell3htihC	8.410 s N 3ucoEh1if	lay 22 2020 MiTek Indus G0EczUTUE-e2OthdUfC	stries, Inc. Fri Jul 17 0 2xvGfsfrEput03Nch3W	7:59:26 2020 Page 1 Thm9ciKg0 2vxDdF
Scale = 1.72.1 $10.82 \overline{12}$ 2x4 1 2x4 1 2x4 1 2x4 1 2x4 1 8 7 6 5 2x4 6x6 = 2x4 1				⊢ <u>08/(</u>	15/2020	odoprinn			1111001100_278201
Scale = 1.72.1					1-9-9				
$10.82 12$ $2x4 $ $3x6 \neq 3$ $2x4 $ $2x4 $ $2x4 $ $8 7 6 5$ $2x4 $ $8 7 6 5$ $2x4 $ $6x6 = 2x4 $					2x4		1		Scale = 1:72.1
$\begin{array}{c} 2 \times 1 \\ 3 \times 6 \\ 2 \times 4 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\$				10.82 12					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				274					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				3x6 🥢					
$\begin{array}{c c} & & & & \\ \hline & & & & \\ \hline & & & & \\ \hline & & & &$				2x4 ²					
$\begin{array}{c c} & & & \\ \hline \\ \hline$				Ţ					
$\begin{array}{c} 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ $									
$\begin{array}{c} 7\\ \hline \\ 8\\ 7\\ 6\\ 5\\ 2x^4 \parallel 6x^6 = 2x^4 \parallel \end{array}$				4 //					
$ \begin{array}{c} $				3.71					
$ \begin{array}{c} $				9					
$ \begin{array}{c} $				0-4-					
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				σ					
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$					\\				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$									
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					Щ Ц				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					****				
$2x_{1}^{4} 6x_{6} = 2x_{4} $				8 7	6 5				
				2:4	eve — 2×4 II				
					0x0 = 2x4				
		SPACING. 2.0			DEEL		l/defl L/d		GPIP
LOADING (psi) SPACING- 2-0-0 CSI. $2k4$ DEPL. Iff (loc) //defi L/d PLATES GRIP TCLL 25.0 Plate Grip DOL 1.15 TC 0.13 Vert(LL) n/a - n/a 999 MT20 197/144	TCLL 25.0	Plate Grip DOL 1.1	5	TC 0.13 2x4	Vert(LL) n/a	i (ioc)	n/a 999	MT20	197/144
TCDL 10.0 Lumber DOL 1.15 BC 0.03 Vert(CT) n/a - n/a 999	TCDL 10.0	Lumber DOL 1.1	5	BC 0.03	Vert(CT) n/a	ı -	n/a 999		
BCLL 0.0 * Rep Stress Incr YES WB 0.72 Horz(CT) -0.00 5 n/a n/a BCDI 10.0 Code IRC2018/TPI2014 Matrix-P Weight: 70 lb FT = 10%	BCLL 0.0 * BCDI 10.0	Rep Stress Incr YE Code IRC2018/TPI2014	S 1	WB 0.72 Matrix-P	Horz(CT) -0.00	5	n/a n/a	Weight [,] 70 lb	FT = 10%
LUMBER- TOP CHORD 2v4 SPE No 2 TOP CHORD Structural wood sheathing directly applied or 4-9-9 oc purlies	LUMBER-	E No 2			BRACING-	Structur	al wood sheathing dire	actly applied or 4-9-9	oc purlins
BOT CHORD 2x4 SPF No.2 except end verticals.	BOT CHORD 2x4 SP	F No.2				except	end verticals.	ouy applied of 4-9-9	oo puillio,
WEBS 2x4 SPF No.2 *Except* BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. 2 0: 0:2 SPE No.2 WEBS 4 Down at middle	WEBS 2x4 SP	F No.2 *Except*			BOT CHORD	Rigid ce	eiling directly applied of	6-0-0 oc bracing.	
2-6: 2x3 SPF NO.2 WEBS 1 Kow at midpt 1-8, 4-5, 2-7, 3-6 OTHERS 2x4 SPF No.2	2-6: 2X OTHERS 2x4 SP	5 5 FF 10.2 F No.2			WEB2	I KOW 8	at midpt 1-	o, 4-o, 2-1, 3-d	

REACTIONS. All bearings 4-9-9.

(lb) - Max Horz 8=166(LC 8) Max Uplift All uplift 100 lb or less at joint(s) 8, 5 except 7=-150(LC 6), 6=-821(LC 8) Max Grav All reactions 250 lb or less at joint(s) 8, 5 except 7=633(LC 8), 6=408(LC 15)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

WEBS 2-7=-613/183, 2-6=-289/808

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;

MWFRS (envelope) gable end zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60

2) Gable requires continuous bottom chord bearing.

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

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 5 except (jt=lb) 7=150, 6=821.

6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



FMIS

0

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



July 17,2020

			RELE	ASE FOR					
Job	Truss	Truss Type	CONS	TRUCTION	Ply	Lot 7	77 RR		142065450
400422	LAY5	GABLE	AS NOTED O DEVELOP	N PLANS REV	/IEW ES	1 Job	Reference (optiona	al)	142065450
Wheeler Lumber, W	averly, KS 66871		LEE'S SUN	MIT, MISSOU	RI 8.41	10 s May 22	2 2020 MiTek Indus	stries, Inc. Fri Jul 17 0	7:59:26 2020 Page 1
			01 <mark>7-508 0-7-5</mark>	1D:eli3ntji 4-2-3	nC3ucp	ofn1iiGUEC	zUTUF-e2OthdUfC	xvGfsffEputO3Nep3V	v i nnkcjkq0_zyxDaF
			10.82 12	2x4 4					Scale = 1:72.1
			2x4 5x12 = 2x4 1 2 6 0 0 0 0 6 0 0 0 0 6 0 0 0 0 6 0 0 0 0		9-10-9				
			8 7	6 5					
			2x4	<u>4-6</u> x6 <u>6</u> = 2x4 4-9-9					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	5	CSI. 2x4 TC 0.06 BC 0.03 WB 0.64 Matrix-P	II DEFL. Vert(LL) r Vert(CT) r Horz(CT) -0.	in (lo n/a n/a .00	oc) l/def - n/a - n/a 5 n/a	fl L/d a 999 a 999 a n/a	PLATES MT20 Weight: 70 lb	GRIP 197/144 FT = 10%
LUMBER- TOP CHORD 2x4 SPF BOT CHORD 2x4 SPF WEBS 2x4 SPF 2-6: 2x3 OTHERS 2x4 SPF	No.2 No.2 No.2 *Except* SPF No.2 No.2			BRACING- TOP CHORD BOT CHORD WEBS	Str exc Rig 1 F	ructural wo cept end vo gid ceiling o Row at mid	ood sheathing dire rerticals, and 2-0-0 directly applied or dpt 1-8	actly applied or 4-9-9) oc purlins: 1-2. • 6-0-0 oc bracing. 8, 4-5, 2-7, 3-6	oc purlins,
REACTIONS. All bea (lb) - Max Ho Max Up Max Gra	rrings 4-9-9. rz 8=146(LC 8) lift All uplift 100 lb or less at jc av All reactions 250 lb or less	oint(s) 8, 5 exc at joint(s) 8, 5	ept 7=-232(LC 6), 6=-8 5 except 7=791(LC 8), 6	814(LC 8) 5=413(LC 15)					11111

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 2-7=-772/264, 2-6=-259/719

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;

MWFRS (envelope) gable end zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60

2) Provide adequate drainage to prevent water ponding.

3) Gable requires continuous bottom chord bearing.

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

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide

- will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 5 except (jt=lb) 7=232.6=814.

7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



MIS

XUEGANG

0



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 ocllapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSIVTP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601 NiTek* 16023 Swingley Ridge Rd Chesterfield, MO 63017





16023 Swingley Ridge Rd Chesterfield, MO 63017



2x4 💋

2x4 ||

except end verticals.

Rigid ceiling directly applied or 10-0-0 oc bracing.

			1	
OADING (psf) TCLL 25.0 TCDI 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOI 1.15	CSI. TC 0.04 BC 0.02	DEFL. in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999	PLATES GRIP MT20 197/144
3CLL 0.0 * 3CDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.00 Matrix-P	Horz(CT) -0.00 3 n/a n/a	Weight: 5 lb FT = 10%
TOP CHORD 2x4 SPF No.2			BRACING- TOP CHORD Structural wood sheathing dire	ectly applied or 2-4-13 oc purlins,

BOT CHORD

TOP CHORD2x4 SPF No.2BOT CHORD2x4 SPF No.2WEBS2x3 SPF No.2

REACTIONS. (size) 1=2-4-5, 3=2-4-5 Max Horz 1=35(LC 5) Max Uplift 1=-10(LC 8), 3=-18(LC 8)

Max Uplift 1=-10(LC 8), 3=-18(LC 8) Max Grav 1=75(LC 1), 3=75(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

2) Gable requires continuous bottom chord bearing.

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



F MIS

0

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





July 17,2020

16023 Swingley Ridge Rd Chesterfield, MO 63017

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



