



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

Re: 3017089 SUMMIT/COBEY CREEK #15/MO

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource (Valley Center).

Pages or sheets covered by this seal: I49290346 thru I49290387

My license renewal date for the state of Missouri is December 31, 2021.

Missouri COA: Engineering 001193



Johnson, Andrew

December 16,2021

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

,Engineer



December 16,2021





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



	7-9-3	15-6-0	23-1-1	23-7-0	31-8-12	———————————————————————————————————————
Plate Offsets (X,Y)	[2:0-3-8,Edge], [7:0-3-12,0-2	4]	7-7-1	0-5-15	0-1-12	
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2 Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TPI20	0-0 CSI. .15 TC 0.62 .15 BC 0.73 YES WB 0.78 14 Matrix-AS	DEFL. in (loc) Vert(LL) -0.15 10-12 Vert(CT) -0.31 12-14 Horz(CT) 0.11 9	l/defl L/d >999 240 >999 180 n/a n/a	PLATES MT20 Weight: 127 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4	SPF No.2	· · ·	BRACING- TOP CHORD Structo	ural wood sheathing dir	ectly applied, except en	nd verticals, and

BOT CHORD

WEBS

2-0-0 oc purlins (6-0-0 max.): 7-8.

3-12, 6-12

Rigid ceiling directly applied.

1 Row at midpt

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2

 WEBS
 2x4 SPF No.2

 WEDGE
 Left: 2x4 SPF No.2

REACTIONS. (size) 9=Mechanical, 2=0-3-8 Max Horz 2=155(LC 11)

Max Holz 2=155(LC 11) Max Uplift 9=-239(LC 13), 2=-253(LC 12) Max Grav 9=1420(LC 1), 2=1486(LC 1)

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

TOP CHORD 2-3=-2434/391, 3-5=-1732/360, 5-6=-1731/355, 6-7=-2482/397

- BOT CHORD 2-14=-389/2077, 12-14=-389/2077, 10-12=-339/2180, 9-10=-458/2548
- WEBS 3-14=0/293, 3-12=-773/293, 5-12=-112/909, 7-10=-391/140, 7-9=-2726/503, 6-12=-864/284, 6-10=0/391

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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-3-1, Interior(1) 2-3-1 to 15-6-0, Exterior(2R) 15-6-0 to 18-8-1, Interior(1) 18-8-1 to 31-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=239, 2=253.
- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.







	1	7-9-3	15-6-0	1	25-4-13	31-8-12	1
		7-9-3	7-8-13	1	9-10-13	6-3-15	
Plate Offsets ()	X,Y)	[2:0-3-8,Edge], [7:0-6-0,0-1-14]	, [8:Edge,0-1-8]				
LOADING (psi TCLL 25. TCDL 10. BCLL 0. BCDL 10.	f) 0 0 0 0	SPACING- 2-0 Plate Grip DOL 1.1 Lumber DOL 1.1 Rep Stress Incr YE Code IRC2018/TPI2014	0 CSI. 5 TC 0.62 5 BC 0.76 S WB 0.64 Matrix-AS	DEFL. in Vert(LL) -0.22 Vert(CT) -0.51 Horz(CT) 0.11	n (loc) l/defi L/d 2 10-12 >999 240 1 10-12 >745 180 I 9 n/a n/a	PLATES MT20 Weight: 131 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD BOT CHORD WEBS WEDGE	2x4 SF 2x4 SF 2x4 SF	PF No.2 PF No.2 PF No.2	I	BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathing dii 2-0-0 oc purlins (6-0-0 max.): Rigid ceiling directly applied. 1 Row at midpt 3	rectly applied, except er : 7-8. 3-12, 7-9	nd verticals, and

Left: 2x4 SPF No.2

REACTIONS. (size) 9=Mechanical, 2=0-3-8

Max Horz 2=192(LC 11) Max Uplift 9=-245(LC 13), 2=-253(LC 12) Max Grav 9=1420(LC 1), 2=1486(LC 1)

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

TOP CHORD 2-3=-2433/394, 3-5=-1735/355, 5-6=-1677/353, 6-7=-2764/479

- BOT CHORD 2-14=-411/2078, 12-14=-411/2078, 10-12=-335/1840, 9-10=-396/2409
- WEBS 3-14=-/17/2073, 3-12=-764/299, 5-12=-151/997, 6-12=-635/242, 6-10=-147/836, 7-10=-473/191, 7-9=-2601/395

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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-3-1, Interior(1) 2-3-1 to 15-6-0, Exterior(2R) 15-6-0 to 18-8-1, Interior(1) 18-8-1 to 31-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Refer to girder(s) for truss to truss connections.

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=245, 2=253.
- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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







1	7-9-3	8 ₆ 3-3	15-6-0	22-8-	13	1	31-8-12	1
ſ	7-9-3	0 <mark>-6-</mark> 0	7-2-13	7-2-1	13	1	8-11-15	1
Plate Offsets (X,Y)	[2:0-3-8,Edge], [6:0-6-0,	0-1-14]						
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/T	2-0-0 1.15 1.15 YES PI2014	CSI. TC 0.71 BC 0.68 WB 0.35 Matrix-AS	DEFL. ir Vert(LL) -0.16 Vert(CT) -0.34 Horz(CT) 0.05	n (loc) l/defl 5 9-10 >999 9-10 >999 9 9 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 132 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 3 BOT CHORD 2x4 3 WEBS 2x4 3	SPF No.2 SPF No.2 SPF No.2			BRACING- TOP CHORD BOT CHORD	Structural woo 2-0-0 oc purlin Rigid ceiling di	d sheathing di s (3-9-11 max. rectly applied.	rectly applied, except e): 6-8.	end verticals, and

WEBS

1 Row at midpt

WEDGE Left: 2x4 SPF No.2

REACTIONS. (size) 9=Mechanical, 2=0-3-8

Max Horz 2=230(LC 11) Max Uplift 9=-253(LC 13), 2=-252(LC 12) Max Grav 9=1420(LC 1), 2=1486(LC 1)

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

TOP CHORD 2-3=-2413/389, 3-5=-1723/363, 5-6=-1719/342, 6-7=-2116/375

BOT CHORD 2-14=-455/2054, 12-14=-455/2054, 10-12=-390/2137, 9-10=-262/1244

WEBS 5-12=-121/936, 6-12=-830/206, 6-10=-692/196, 7-10=-171/1223, 7-9=-1701/329, 3-14=0/300, 3-12=-766/288

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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-3-1, Interior(1) 2-3-1 to 15-6-0, Exterior(2R) 15-6-0 to 18-8-1, Interior(1) 18-8-1 to 31-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=253, 2=252.
- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



6-12, 7-9, 3-12





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



MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017



BOT CHORD

WEBS

2-0-0 oc purlins (6-0-0 max.): 7-8.

7-11, 4-14, 6-14

Rigid ceiling directly applied.

1 Row at midpt

 TOP CHORD
 2x4 SPF No.2 *Except*

 1-4: 2x6 SPF 2100F 1.8E

 BOT CHORD
 2x4 SPF No.2 *Except*

 3-13: 2x4 SPF 1650F 1.5E

 WEBS
 2x4 SPF No.2

 OTHERS
 2x6 SPF 2100F 1.8E

 LBR SCAB
 1-4 2x6 SPF 2100F 1.8E one side

 WEDGE
 1-4 2x6 SPF 2100F 1.8E

Left: 2x4 SPF No.2

REACTIONS. (size) 9=Mechanical, 2=0-3-8 Max Horz 2=193(LC 11) Max Uplift 9=-241(LC 13), 2=-253(LC 12) Max Grav 9=1429(LC 1), 2=1486(LC 1)

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

 TOP CHORD
 3-21=-823/166, 3-4=-2981/504, 4-5=-1973/369, 5-6=-1957/377, 6-7=-3932/601, 9-11=-1352/232

 BOT CHORD
 3-16=-77/367, 3-15=-555/2791, 14-15=-551/2790, 12-14=-491/2735, 11-12=-572/3547

WEBS 7-12=-927/194, 7-11=-3572/528, 5-14=-135/1142, 4-14=-1237/407, 6-14=-1193/357, 6-12=-138/1308

NOTES-

 Attached 9-11-0 scab 1 to 4, front face(s) 2x6 SPF 2100F 1.8E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 0-0-5 from end at joint 1, nail 2 row(s) at 4" o.c. for 4-4-13; starting at 7-8-12 from end at joint 1, nail 2 row(s) at 7" o.c. for 2-0-0.
 Unbalanced roof live loads have been considered for this design.

3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-12, Interior(1) 2-1-12 to 15-6-0, Exterior(2R) 15-6-0 to 18-8-1, Interior(1) 18-8-1 to 31-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

4) Provide adequate drainage to prevent water ponding.

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

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

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=241, 2=253.

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

9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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







Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #15/MO	
						149290353
3017089	A8	COMMON GIRDER	1	2		
				_	Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8.4	30 s Aug 1	16 2021 MiTek Industries, Inc. Wed Dec 15 15:02:05 2021	Page 2
		ID:4rXH	hD3 rtBCo	QSIY2qd	JuzGwv6-LvT2tOHI7uiGiFo52wB6Q WbgSymBQbhCvYEt9	v8hCm

NOTES-

9) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 23-11-4 from the left end to 29-11-4 to connect truss(es) to back face of bottom chord.

10) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf) Vert: 1-6=-70, 6-11=-70, 19-22=-20

Concentrated Loads (lb)

Vert: 13=-3416(B) 12=-565(B) 24=-566(B) 26=-565(B) 27=-565(B)





	7-9-3 7-9-3	<u>15-6-0</u> 7-8-13	23-2-13 7-8-13	<u>31-0-0</u> 7-9-3
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 YES Code IRC2018/TPI2014	CSI. TC 0.56 BC 0.62 WB 0.28 Matrix-AS	DEFL. in (loc) I/defl Vert(LL) -0.13 10-12 >999 Vert(CT) -0.27 10-12 >999 Horz(CT) 0.10 8 n/a	L/d PLATES GRIP 240 MT20 197/144 180 n/a Weight: 118 lb FT = 20%
LUMBER-		· · · ·	BRACING-	

TOP CHORD

BOT CHORD

WEBS

Structural wood sheathing directly applied.

7-12, 3-12

Rigid ceiling directly applied.

1 Row at midpt

LUMBER-

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

Left: 2x6 SPF No.2 , Right: 2x6 SPF No.2

REACTIONS. (size) 2=0-3-8, 8=0-3-8 Max Horz 2=145(LC 12) Max Uplift 2=-251(LC 12), 8=-251(LC 13) Max Grav 2=1459(LC 1), 8=1459(LC 1)

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

2-3=-2378/386, 3-5=-1675/349, 5-7=-1675/349, 7-8=-2378/386 TOP CHORD

BOT CHORD 2-14=-378/2028, 12-14=-378/2028, 10-12=-242/2028, 8-10=-242/2028

WEBS 5-12=-108/862, 7-12=-773/295, 7-10=0/291, 3-12=-773/294, 3-14=0/291

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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-2-3, Interior(1) 2-2-3 to 15-6-0, Exterior(2R) 15-6-0 to 18-7-3, Interior(1) 18-7-3 to 31-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=251, 8=251.

5) 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.

6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



MiTek

16023 Swingley Ridge Rd Chesterfield, MO 63017







Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #15/MO	
						149290357
3017089	A12	Roof Special	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8.4	30 s Aug 1	16 2021 MiTek Industries, Inc. Wed Dec 15 15:01:54 2021	Page 2
		ID:4rX	HhD3_rtB	CgQSIY2g	dJuzGwv6-9nluZd8rjWKquZSzv6VXUfZla0C86OF4ghO9?	Hy8hCx

NOTES-

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





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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Max Uplift All uplift 100 lb or less at joint(s) 2, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27

Max Grav All reactions 250 lb or less at joint(s) 2, 37, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26

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

TOP CHORD 13-14=-95/264, 14-15=-95/264

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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 2-2-0, Exterior(2N) 2-2-0 to 15-6-0, Corner(3R) 15-6-0 to 18-7-3, Exterior(2N) 18-7-3 to 31-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 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) Gable studs spaced at 1-4-0 oc.

- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 26.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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December 16,2021





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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 6-6-0, Exterior(2R) 6-6-0 to 9-6-0, Interior(1) 9-6-0 to 13-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=109, 8=109.

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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.







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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 2-11-4, Interior(1) 2-11-4 to 6-6-0, Exterior(2R) 6-6-0 to 9-6-0, Interior(1) 9-6-0 to 13-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

5) Bearing at joint(s) 1 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) 1, 7.
 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



NiTek° 16023 Swingley Ridge Rd Chesterfield, MO 63017



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

KITEK 16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #15/MO	
						149290363
3017089	B5	Flat Girder	1	2		
				-	Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,	8.4	30 s Aug 1	16 2021 MiTek Industries, Inc. Wed Dec 15 15:02:09 2021	Page 2

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Dec 15 15:02)21 Pag ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-DgiZilKFB7DiBt6sHmG2aqhTL3Sz7FHH7WWS0wy8hCi

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-4=-70, 5-8=-20

Concentrated Loads (lb)

Vert: 1=-2 9=-884 10=-884 11=-884 12=-884 13=-884 14=-889





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.



PROFILESSIONAL

OHNSO

NUMBER PE-2017018993

December 16,2021

E



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 system. See MSI/TP11 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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #15/MO	
						149290365
3017089	B7	COMMON GIRDER	1	2		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, k	S - 67147,	8.4	30 s Aug 1	16 2021 MiTek Industries, Inc. Wed Dec 15 15:02:12 2021	Page 2
		ID:4rXH	hD3 rtBC	aQSIY2ad	lJuzGwv6-dF0iLnM8U2bH2KqRyuplCSJwKGU2KVDjpUl6	dFy8hCf

LOAD CASE(S) Standard

Uniform Loads (plf) Vert: 1-3=-70, 3-5=-70, 10-13=-20 Concentrated Loads (lb) Vert: 8=-1409(B) 7=-1400(B) 16=-1409(B) 17=-1409(B) 18=-1400(B) 19=-1400(B) 20=-1400(B) 21=-1400(B) 22=-1400(B)





LUMBER-

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 WEBS 2x4 SPF No.2 SLIDER Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied. Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 8=0-3-8 Max Horz 2=-190(LC 10) Max Uplift 2=-159(LC 12), 8=-159(LC 13) Max Grav 2=964(LC 1), 8=964(LC 1)

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

2-4=-1008/216, 4-5=-897/205, 5-6=-897/205, 6-8=-1008/216 TOP CHORD

BOT CHORD 2-10=-194/909, 8-10=-87/892

WEBS 5-10=-91/545, 6-10=-321/211, 4-10=-321/210

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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 20-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=159.8=159

5) 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.

6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



December 16,2021





BRACING-

TOP CHORD

BOT CHORD

LUMBER-

WEBS

OTHERS

TOP CHORD

BOT CHORD

REACTIONS.

2x4 SPF No.2

2x4 SPF No.2

2x4 SPF No.2

2x4 SPF No.2

Max Horz 2=75(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 3-6=-264/392

Max Uplift 5=-44(LC 1), 2=-39(LC 8), 6=-95(LC 12) Max Grav 5=17(LC 12), 2=163(LC 1), 6=341(LC 1)

(size) 5=4-11-8, 2=4-11-8, 6=4-11-8

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-5-0 to 2-7-0, Exterior(2N) 2-7-0 to 4-9-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

3) Gable requires continuous bottom chord bearing.

4) Gable studs spaced at 1-4-0 oc.

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.

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 4-11-8 oc purlins,

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

except end verticals.





			4-11-8		
	1		4-11-8		
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 0.30 BC 0.26 WB 0.00 Matrix-AS	DEFL. in (Vert(LL) 0.04 Vert(CT) -0.06 Horz(CT) 0.00 -0.00 -0.00	(loc) l/defi L/d 4-7 >999 240 4-7 >937 180 2 n/a n/a	PLATES GRIP MT20 197/144 Weight: 14 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SPF No.2

REACTIONS. 2=0-3-8, 4=Mechanical (size) Max Horz 2=75(LC 11) Max Uplift 2=-62(LC 8), 4=-54(LC 12) Max Grav 2=247(LC 1), 4=215(LC 1)

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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-5-0 to 2-7-0, Interior(1) 2-7-0 to 4-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
- grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 5) 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.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.





Plate Offsets (X,Y)	[2:0-1-2,Edge]			
LOADING (psf) TCLL 25.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	CSI. TC 0.84 BC 0.64	DEFL. in (loc) I/defl L/d Vert(LL) 0.21 4-7 >456 240 Vert(CT) -0.39 4-7 >241 180	PLATES GRIP MT20 197/144
BCLL 0.0 BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.00 Matrix-AS	Horz(CT) 0.01 2 n/a n/a	Weight: 22 lb FT = 20%
LUMBER-			BRACING-	

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

Structural wood sheathing directly applied, except end verticals. Rigid ceiling directly applied.

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

Max Horz 2=120(LC 11) Max Uplift 4=-89(LC 12), 2=-89(LC 8)

Max Grav 4=351(LC 1), 2=382(LC 1)

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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed;

MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-5-0 to 2-7-0, Interior(1) 2-7-0 to 7-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 5) 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.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.







LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. ir	n (loc) l/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.11	Vert(LL) -0.00) 1 n/r 120	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.06	Vert(CT) 0.00) 1 n/r 120	
BCLL 0.0	Rep Stress Incr YES	WB 0.04	Horz(CT) 0.00) 9 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	. ,		Weight: 39 lb FT = 20%
LUMBER-		1	BRACING-		· ·
TOP CHORD 2x4 S	PF No.2		TOP CHORD	Structural wood sheathing of	lirectly applied or 6-0-0 oc purlins,
BOT CHORD 2x4 S	PF No.2			except end verticals.	· · ·
WEBS 2x4 S	PF No.2		BOT CHORD	Rigid ceiling directly applied	l or 10-0-0 oc bracing.

REACTIONS. All bearings 9-11-8.

(lb) - Max Horz 2=156(LC 9)

2x4 SPF No.2

Max Uplift All uplift 100 lb or less at joint(s) 9, 2, 10, 11, 12, 13, 14

Max Grav All reactions 250 lb or less at joint(s) 9, 2, 10, 11, 12, 13 except 14=287(LC 1)

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

TOP CHORD 2-3=-291/142

NOTES-

OTHERS

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 9-9-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.

4) Gable requires continuous bottom chord bearing.

5) Gable studs spaced at 1-4-0 oc.

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

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 2, 10, 11, 12, 13, 14.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







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 0.42 BC 0.60 WB 0.30 Matrix-AS	DEFL. i Vert(LL) -0.2 Vert(CT) -0.4 Horz(CT) 0.0	n (loc) l/defl L/d 1 5-8 >572 240 1 5-8 >285 180 1 2 n/a n/a	PLATES GRIP MT20 197/144 Weight: 34 lb FT = 20%
LUMBER- TOP CHORD 2x BOT CHORD 2x WEBS 2x	4 SPF No.2 4 SPF No.2 4 SPF No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing di Rigid ceiling directly applied.	rectly applied, except end verticals.
REACTIONS. Mi Mi Mi	(size) 2=0-3-8, 5=Mechanical ax Horz 2=158(LC 11) ax Uplift 2=-129(LC 8), 5=-112(LC 12) ax Grav 2=509(LC 1), 5=439(LC 1)				
FORCES.(lb) - MTOP CHORD2BOT CHORD2WEBS3	Max. Comp./Max. Ten All forces 250 (lb) or 2-3=-694/313 2-5=-417/636 3-5=-622/394	less except when shown.			
NOTES.					

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 9-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=129, 5=112.

5) 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.

6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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BOT CHORD

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

2x4 SPF No.2 BOT CHORD

REACTIONS. 3=Mechanical, 2=0-4-9, 4=Mechanical (size)

Max Horz 2=104(LC 4)

Max Uplift 3=-71(LC 8), 2=-103(LC 4)

Max Grav 3=163(LC 1), 2=353(LC 1), 4=100(LC 3)

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=4.2psf; 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) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 2=103.
- 5) 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.
- 6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 7) 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: 1-3=-70, 4-5=-20 Concentrated Loads (lb)
- Vert: 9=-10(F=-5, B=-5)





TOP CHORD 2x4 SPF No.2



						22-4-0						
		1				22-4-0						
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	0.22	Vert(LL)	0.01	15	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	0.02	15	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	912014	Matri	x-S						Weight: 85 lb	FT = 20%
LUMBER-						BRACING-						

TOP CHORD

BOT CHORD

UMBER-

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

REACTIONS. All bearings 22-4-0.

Max Horz 2=-71(LC 13) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 22, 23, 24, 26, 20, 19, 18, 17, 14 except 27=-125(LC 12), 16=-124(LC 13)

All reactions 250 lb or less at joint(s) 2, 21, 22, 23, 24, 26, 20, 19, 18, 17, 14 except 27=438(LC Max Grav 25), 16=438(LC 26)

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

WEBS 3-27=-317/180, 13-16=-317/180

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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 11-2-0, Corner(3R) 11-2-0 to 14-2-0, Exterior(2N) 14-2-0 to 23-3-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 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.
- Gable requires continuous bottom chord bearing.

6) Gable studs spaced at 1-4-0 oc.

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

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 22, 23, 24, 26, 20, 19, 18, 17, 14 except (jt=lb) 27=125, 16=124.

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.



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

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







BOT CHORD

3x6 =

3x4 =

Rigid ceiling directly applied.

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

4x6 =

REACTIONS. (size) 2=0-3-8, 6=0-3-8 Max Horz 2=-71(LC 17) Max Uplift 2=-227(LC 8), 6=-227(LC 9) Max Grav 2=1069(LC 1), 6=1069(LC 1)

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

TOP CHORD 2-3=-2253/540, 3-4=-1981/486, 4-5=-1981/486, 5-6=-2253/540

BOT CHORD 2-10=-449/2076, 8-10=-267/1444, 6-8=-453/2076

WEBS 4-8=-111/593, 5-8=-403/196, 4-10=-110/593, 3-10=-403/196

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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 11-2-0, Exterior(2R) 11-2-0 to 14-2-0, Interior(1) 14-2-0 to 23-3-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3x4 =

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

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=227, 6=227.

5) 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.

6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



4x6 =





F	4-0-0 4-0-0	7-0-0 3-0-0	10-0-0 3-0-0	14-0-0 4-0-0	
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCodeIRC2018/TPI2014	CSI. TC 0.24 BC 0.72 WB 0.11 Matrix-MS	DEFL. in (loc) l/def Vert(LL) -0.07 8-9 >999 Vert(CT) -0.16 8-9 >999 Horz(CT) 0.04 6 n/a	1 L/d PLATES 240 MT20 3 180 a n/a Weight: 47 lb	GRIP 197/144 FT = 20%

LUMBER-

TOP CHORD2x4 SPF No.2BOT CHORD2x4 SPF No.2WEBS2x4 SPF No.2

BRACING-TOP CHORD

Structural wood sheathing directly applied or 4-2-6 oc purlins, except 2-0-0 oc purlins (4-6-11 max.): 3-5. Rigid ceiling directly applied or 9-1-14 oc bracing.

- REACTIONS. (size) 2=0-3-8, 6=0-3-8 Max Horz 2=42(LC 12) Max Uplift 2=-227(LC 8), 6=-227(LC 9) Max Grav 2=1007(LC 1), 6=1007(LC 1)
- FORCES. (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown.
- TOP CHORD 2-3=-1819/372, 3-4=-1557/362, 4-5=-1557/362, 5-6=-1819/372
- BOT CHORD 2-9=-308/1587, 8-9=-411/1834, 6-8=-287/1587
- WEBS 3-9=0/438, 5-8=0/438, 4-9=-367/167, 4-8=-367/167

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=4.2psf; 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
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=227, 6=227.
- 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.
- 8) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 170 lb down and 151 lb up at 4-0-0, and 170 lb down and 151 lb up at 10-0-0 on top chord, and 82 lb down at 4-0-0, and 82 lb down at 9-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) 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: 1-3=-70, 3-5=-70, 5-7=-70, 10-13=-20

Concentrated Loads (lb)

Vert: 3=-111(F) 5=-111(F) 9=-82(F) 8=-82(F) 4=-47(F) 16=-47(F) 17=-47(F) 18=-33(F) 19=-33(F) 20=-33(F)







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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=126, 4=126

5) 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.

6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.







	6-0-0		8-0-0	14-0-0				
I	6-0-0	I	2-0-0	6-0-0		1		
Plate Offsets (X,Y)	[2:0-1-0,Edge], [5:0-1-0,Edge]							
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 0.43 BC 0.43 WB 0.04 Matrix-AS	DEFL. in Vert(LL) -0.09 Vert(CT) -0.14 Horz(CT) 0.01	(loc) l/defl L/d 8-11 >999 240 8-11 >999 180 5 n/a n/a	PLATES MT20 Weight: 42 lb	GRIP 197/144 FT = 20%		
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF REACTIONS. (siz Max H Max L Max C	PF No.2 PF No.2 PF No.2 e) 2=0-3-8, 5=0-3-8 forz 2=-60(LC 17) Jplift 2=-128(LC 12), 5=-128(LC 13) Grav 2=694(LC 1), 5=694(LC 1)		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dir 2-0-0 oc purlins (6-0-0 max.): Rigid ceiling directly applied.	rectly applied, except : 3-4.			
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-954/274, 3-4=-782/283, 4-5=-954/274 BOT CHORD 2-8=-134/788, 7-8=-134/782, 5-7=-132/788								
NOTES- 1) Unbalanced roof live	e loads have been considered for this de	sign.						

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 6-0-0, Exterior(2E) 6-0-0 to 8-0-0, Exterior(2R) 8-0-0 to 12-2-15, Interior(1) 12-2-15 to 14-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=128, 5=128.
- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





LOADING TCLL TCDL BCLL	G (psf) 25.0 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr. YES	CSI. TC 0.06 BC 0.03 WB 0.00	DEFL. in (loc) l/defl L/d PLATES GRIP Vert(LL) -0.00 7 >999 240 MT20 197/144 Vert(CT) -0.00 7 >999 180 Horz/(CT) 197/144	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-MP	Weight: 6 lb FT = 20%	

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

Max Horz 2=55(LC 12)

Max Uplift 3=-24(LC 12), 2=-37(LC 12) Max Grav 3=48(LC 1), 2=165(LC 1), 4=32(LC 3)

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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2. 5) 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 1-11-0 oc purlins.

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





13-2-15

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-HZ6EsuWffk5aUAlkfQ1Zh_pxV6cX779UaMfl2Yy8hCT

Scale = 1:54.4

13-2-15 4x6 || 2 3 5 7 \boxtimes 3x4 14 X \square 13 10.82 12 12 11

8 4x6 ||

1 Row at midpt

7-8, 6-9

3x4 ≫ 10 9

	ł		<u>10-6-14</u> 10-6-14	 13-2-1 2-8-1	5	
(X,Y)	[1:0-1-14,0-1-8], [7:Edge,0-3-8], [8	3:Edge,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 0.51 BC 0.24 WB 0.16 Matrix-S	DEFL. ir Vert(LL) n/z Vert(CT) n/z Horz(CT) -0.01	(loc) l/defl L/c - n/a 999 - n/a 999 8 n/a n/a	PLATES GRIP MT20 197/144 Weight: 77 lb FT = 20%
LUMBER- TOP CHORD 2x4 BOT CHORD 2x4 WEBS 2x4	SPF No.2 SPF No.2 SPF No.2		BRACING- TOP CHORD BOT CHORD	2-0-0 oc purlins (6-0-0 Rigid ceiling directly a 6-0-0 oc bracing: 1-14) max.): 1-7, except end verticals. pplied or 10-0-0 oc bracing, Except: .12-13.

WEBS

REACTIONS. All bearings 13-2-15.

Max Horz 1=261(LC 11) (lb) -

2x4 SPF No.2

Max Uplift All uplift 100 lb or less at joint(s) 8, 10, 9, 11, 12, 13, 14 except 1=-108(LC 11) Max Grav All reactions 250 lb or less at joint(s) 1, 8, 10, 9, 11, 12, 13 except 14=270(LC 1)

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

NOTES-

OTHERS

Plate Offsets

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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 10, 9, 11, 12, 13, 14 except (jt=lb) 1=108.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 11, 12, 13, 14.
- 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.







Max Grav 1=142(LC 1), 3=142(LC 1), 4=171(LC 1)

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

NOTES-

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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) 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/TPL1.





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



	4-0-0								
LOADING (psf) SPACING- 2-0 TCLL 25.0 Plate Grip DOL 1. TCDL 10.0 Lumber DOL 1. BCLL 0.0 Rep Stress Incr YI BCDL 10.0 Code IRC2018/TPI201 10.0	0-0 15 15 ES 4	CSI. TC 0.19 BC 0.15 WB 0.00 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.02 -0.03 -0.00	(loc) 4-7 4-7 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 11 lb	GRIP 197/144 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

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

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

Max Horz 2=96(LC 12)

Max Uplift 3=-60(LC 12), 2=-44(LC 12) Max Grav 3=117(LC 1), 2=249(LC 1), 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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 3-11-4 zone; cantilever left and right
- exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 5) 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.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



December 16,2021





LOADING TCLL TCDL BCLL BCDL	(psf) 25.0 10.0 0.0 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TF	2-0-0 1.15 1.15 YES Pl2014	CSI. TC BC WB Matrix	0.15 0.04 0.04 <-P	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 7	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 33 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHOI BOT CHOI	RD 2x4 SP RD 2x4 SP	PF No.2 PF No.2				BRACING- TOP CHOR	D	Structu except	ral wood end verti	sheathing d cals.	lirectly applied or 6-0-0	oc purlins,

BOT CHORD

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

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

REACTIONS. All bearings 8-4-13.

(lb) - Max Horz 1=159(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 7, 8, 9, 10, 11

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 8, 9, 10, 11

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-345/177

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-7-7 to 3-7-7, Exterior(2N) 3-7-7 to 8-3-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.

4) Gable requires continuous bottom chord bearing.

5) Gable studs spaced at 1-4-0 oc.

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

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 8, 9, 10, 11.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

referenced standard ANSI/TPI 1.







LOADING TCLL TCDL BCLL	i (psf) 25.0 10.0 0.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC BC WB	0.49 0.27 0.00	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 197/144
BCDL	10.0	Code IRC2018/TP	2014	Matri	x-P						Weight: 16 lb	FT = 20%

LUMBER-

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

 TOP CHORD
 Structural wood sheathing directly applied or 5-9-13 oc purlins, except end verticals.

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

REACTIONS. (size) 1=5-9-5, 3=5-9-5 Max Horz 1=105(LC 9) Max Uplift 1=-38(LC 12), 3=-65(LC 12)

Max Grav 1=227(LC 1), 3=227(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-8-1 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate

grip DOL=1.60 2) Gable requires continuous bottom chord bearing.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) 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.







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 0.10 BC 0.05 WB 0.00 Matrix-P	DEFL. in (loc) Vert(LL) n/a - Vert(CT) n/a - Horz(CT) 0.00 3	l/defi L/d n/a 999 n/a 999 n/a n/a	PLATES GRIP MT20 197/144 Weight: 8 lb FT = 20%
LUMBER-			BRACING-		

TOP CHORD

BOT CHORD

TOP CHORD 2x4 SPF No.2

BOT CHORD2x4 SPF No.2WEBS2x4 SPF No.2

REACTIONS. (size) 1=3-1-5, 3=3-1-5 Max Horz 1=50(LC 9) Max Uplift 1=-18(LC 12), 3=-30(LC 12) Max Grav 1=107(LC 1), 3=107(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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.

ANDREW THOMAS JOHNSON NUMBER PE-2017018993 SIONAL ENGINE December 16,2021

Structural wood sheathing directly applied or 3-1-13 oc purlins,

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

except end verticals.





BCLL 0.0 BCDL 10.0	.0 .0	Rep Stress Incr Code IRC2018/TF	YES PI2014	WB Matrix	0.05 <-P	Horz(CT)	-0.00	4	n/a	n/a	Weight: 21 lb	FT = 20%
LOADING (psf) TCLL 25.0 TCDL 10.0	sf) .0 .0	SPACING- Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15	CSI. TC BC	0.19 0.10	DEFL. Vert(LL) Vert(CT)	in n/a n/a	(loc) - -	l/defl n/a n/a	L/d 999 999	PLATES MT20	GRIP 197/144

BOT CHORD

except end verticals.

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

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2

 WEBS
 2x4 SPF No.2

OTHERS 2x4 SPF No.2

REACTIONS. (size) 1=7-1-5, 4=7-1-5, 5=7-1-5

Max Horz 1=133(LC 9) Max Uplift 4=-30(LC 9), 5=-123(LC 12)

Max Grav 1=78(LC 20), 4=140(LC 1), 5=371(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 2-5=-289/264

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 7-0-1 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) 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.

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=123.

5) 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.







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 0.25 BC 0.14 WB 0.00 Matrix-P	DEFL. in Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 12 lb	GRIP 197/144 FT = 20%
LUMBER-			BRACING-					

TOP CHORD 2x4 SPF No 2

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

REACTIONS. 1=4-5-5, 3=4-5-5 (size) Max Horz 1=77(LC 9)

Max Uplift 1=-28(LC 12), 3=-48(LC 12) Max Grav 1=167(LC 1), 3=167(LC 1)

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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-Č Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-4-1 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate

grip DOL=1.60 2) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) 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 preven tbuckling 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 sand 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



RACING

TOP CHORD Structural wood sheathing directly applied or 4-5-13 oc purlins, except end verticals.

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

