

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 21051A 238.2338.A

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components - #2383.

Pages or sheets covered by this seal: I37296241 thru I37296261

My license renewal date for the state of North Carolina is December 31, 2019.

North Carolina COA: C-0844



June 4,2019

# Sevier, Scott

**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.



L	9-2-4	18-2-0	27-1-13	36-4-0
I	9-2-4	8-11-12	8-11-12	9-2-3
Plate Offsets (X,	[4:0-0-0,0-2-12], [4:0-2-12,0-4-8], [	6:0-0-0,0-2-12], [6:0-2-12,0-4-8]		
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2015/TPI2014	CSI.         DE           TC         0.54         Ve           BC         0.99         Ve           WB         0.47         Hc           Matrix-S         Hc         Hc	in         (loc)         l/defl         L/d           rt(LL)         -0.18         2-14         >999         240           rt(CT)         -0.40         2-14         >999         180           rz(CT)         0.13         8         n/a         n/a	PLATES         GRIP           MT20         244/190           Weight: 209 lb         FT = 20%

BRACING-

WEBS

TOP CHORD

BOT CHORD

#### LUMBER-

TOP CHORD 2x6 SP No.2 BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3

- REACTIONS. (lb/size) 2=1492/0-3-8, 8=1492/0-3-8 Max Horz 2=157(LC 12) Max Uplift 2=-187(LC 12), 8=-187(LC 13)
- FORCES. (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown.
- TOP CHORD 2-3=-2561/294, 3-5=-1751/295, 5-7=-1751/295, 7-8=-2561/294
- BOT CHORD 2-14=-305/2204, 12-14=-305/2204, 10-12=-157/2205, 8-10=-157/2205
- WEBS 5-12=-57/970, 7-12=-880/294, 7-10=0/387, 3-12=-880/293, 3-14=0/387

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-4 to 2-11-5, Interior(1) 2-11-5 to 18-2-0, Exterior(2) 18-2-0 to 21-9-10, Interior(1) 21-9-10 to 37-0-4 zone; 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) \* 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) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.



Structural wood sheathing directly applied or 3-9-8 oc purlins.

7-12, 3-12

Rigid ceiling directly applied or 2-2-0 oc bracing.

1 Row at midpt

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	$\vdash$	<u>12-2</u> 12-2	-3 -3			24-1-13 11-11-10			+		36-0-12 11-10-15	———————————————————————————————————————
LOADING         (psf           TCLL         20.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	f) 0 0 0 * 0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2015/TF	2-0-0 1.15 1.15 YES Pl2014	<b>CSI.</b> TC BC WB Matrix	0.62 0.73 0.39 <-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.19 -0.36 0.07	(loc) 9-14 2-14 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 241 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD BOT CHORD WEBS	2x6 SP I 2x6 SP I 10-13: 2 2x4 SP I	No.2 No.2 *Except* x4 SP No.2 No.3				BRACING- TOP CHOR BOT CHOR	:D :D	Structu Rigid ce	ral wood sl eiling direc	heathing dir tly applied o	ectly applied or 3-11-6 or 10-0-0 oc bracing.	oc purlins.

#### REACTIONS. (lb/size) 2=1485/0-3-8, 8=1434/Mechanical Max Horz 2=174(LC 11) Max Uplift 2=-113(LC 12), 8=-86(LC 12)

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

 TOP CHORD
 2-15=-2613/325, 3-15=-2444/352, 3-4=-2216/268, 4-16=-2068/292, 5-16=-2038/318, 5-17=-2029/330, 6-17=-2057/304, 6-7=-2202/280, 7-18=-2399/357, 8-18=-2570/331

 BOT CHORD
 2-14=-234/2346, 13-14=-27/1444, 13-19=-27/1444, 12-19=-27/1444, 11-12=-27/1444, 13-19=-27/1444, 12-19=-27/1444, 11-12=-27/1444, 13-19=-27/1444, 12-19=-27/1444, 11-12=-27/1444, 13-19=-27/1444, 12-19=-27/1444, 11-12=-27/1444, 13-19=-27/1444, 12-19=-27/1444, 13-19<

- 11-20=-27/1444, 10-20=-27/1444, 9-10=-27/1444, 8-9=-226/2227
- WEBS 3-14=-598/259, 5-14=-27/883, 5-9=-31/866, 7-9=-563/253

#### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) -0-8-4 to 2-11-0, Interior(1) 2-11-0 to 18-2-0, Exterior(2) 18-2-0 to 21-9-5, Interior(1) 21-9-5 to 36-0-0 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.

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 113 lb uplift at joint 2 and 86 lb uplift at joint 8.

7) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

LOAD CASE(S) Standard



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- FORCES. (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown.
- TOP CHORD 2-3=-2547/292, 3-5=-1735/294, 5-6=-1732/299, 6-7=-2510/298
- BOT CHORD 2-12=-308/2192, 10-12=-308/2192, 8-10=-158/2147, 7-8=-157/2149
- WEBS 3-12=0/389, 3-10=-881/293, 5-10=-65/964, 6-10=-844/288, 6-8=0/385

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-4 to 2-11-0, Interior(1) 2-11-0 to 18-2-0, Exterior(2) 18-2-0 to 21-9-5, Interior(1) 21-9-5 to 36-0-0 zone; 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) \* 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) 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) 7=167.

7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.



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	18-2-0		1	30-0-12		
	18-2-0			17-10-12		
Plate Offsets (X,Y)	[2:0-3-8,Edge], [2:0-1-3,0-7-0], [2:0-0-9,0	)-1-3], [12:0-3-0,Edge]				
LOADING         (psf)           TCLL         20.0           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 IRC2015/TPI2014	CSI.         DE           TC         0.15         Ve           BC         0.11         Ve           WB         0.14         Ho           Matrix-S         Ho         Ho	EFL. in srt(LL) -0.00 srt(CT) 0.00 orz(CT) 0.01	n (loc) l/defl L/d 1 n/r 120 1 n/r 120 23 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 235 lb         FT = 20%	
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S OTHERS 2x4 S	SP No.2 SP No.2 SP No.3 SP No.3	BR TO BO WE	<b>₹ACING-</b> )P CHORD )T CHORD EBS	Structural wood sheathing di except end verticals. Rigid ceiling directly applied 1 Row at midpt	rectly applied or 6-0-0 oc purlins, or 10-0-0 oc bracing. 11-33, 13-32	

WEDGE Left: 2x4 SP No.3

Max Horz 2=172(LC 12) Max Uplift All uplift 100 lb or less at joint(s) 2, 35, 36, 37, 38, 39, 40, 41, 30, 29, 28, 27, 26, 25 except 24=-110(LC 13) Max Grav All reactions 250 lb or less at joint(s) 23, 2, 33, 35, 36, 37, 38, 39, 40, 41, 32, 30, 29, 28, 27, 26, 25, 24

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

TOP CHORD 10-11=-99/256, 13-14=-99/260

#### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-0-4, Exterior(2) 3-0-4 to 18-2-0, Corner(3) 18-2-0 to 21-9-5, Exterior(2) 21-9-5 to 35-11-0 zone; 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 2-0-0 oc.

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

8) \* 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.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 35, 36, 37, 38, 39, 40, 41, 30, 29, 28, 27, 26, 25 except (jt=lb) 24=110.

MILLIN Contraction of the WWWWWWWW SEAL 044925 S Μ. ///////// June 4,2019



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REACTIONS. All bearings 36-0-12. (lb) - Max Horz 2=172(LC 1



LUMBER	र-					BRACING	-					
BCDL	10.0	Code IRC2015/T	PI2014	Matri	ix-S						Weight: 115 lb	FT = 20%
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.01	14	n/a	n/a		
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	0.00	14	n/r	120		
TCLL	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.00	14	n/r	120	MT20	244/190
EONDIN			200	000				(100)	1/ 0011	L/G	1 2/11 20	0.0

#### LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 OTHERS 2x4 SP No.3

SLIDER Left 2x4 SP No.3 1-6-8, Right 2x4 SP No.3 1-6-8 TOP CHORD BOT CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 19-0-0.

Max Horz 2=-171(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 21, 22, 23, 18, 17 except 24=-114(LC 12), 16=-110(LC 13) All reactions 250 lb or less at joint(s) 2, 21, 22, 23, 24, 19, 18, 17, 16, 14 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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-4-4, Exterior(2) 2-4-4 to 9-6-0, Corner(3) 9-6-0 to 12-7-12, Exterior(2) 12-7-12 to 19-10-8 zone;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.
- All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 21, 22, 23, 18, 17 except (jt=lb) 24=114, 16=110.



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818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.A
					137296246
21051A	BG	COMMON GIRDER	1	2	
				<b>_</b>	Job Reference (optional)
84 Components (Dunn),	Dunn, NC - 28334,		8	.220 s Nov	16 2018 MiTek Industries, Inc. Mon Jun 3 16:25:04 2019 Page 2
		ID:byj??>	6A9z5_vio	m_kAqhrz	C2Gy-wTwsn8eV_JGa55Wj3GR4TNhSG4uGzzsWiHWox_z9xRD

# LOAD CASE(S) Standard

Concentrated Loads (lb) Vert: 8=-1414(B) 13=-1414(B) 14=-1414(B) 15=-1414(B) 16=-1414(B) 17=-1414(B) 18=-1414(B) 19=-1414(B) 20=-1414(B) Vert: 8=-1414(B) 13=-1414(B) 14=-1414(B) 15=-1414(B) 16=-1414(B) 17=-1414(B) 18=-1414(B) 19=-1414(B) 20=-1414(B) 16=-1414(B) 16=-140(B) 16

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# 12-1-0 Plate Offsets (X,Y)- [2:0-0-12,0-1-1], [2:0-1-7,0-5-11], [2:0-3-13,0-0-4], [8:0-0-12,0-1-1], [8:0-1-7,0-5-11], [8:0-3-13,0-0-4]

LOADING         (psf)           TCLL         20.0           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 IRC2015/TPI2014	CSI. TC 0.05 BC 0.02 WB 0.03 Matrix-S	DEFL. Vert(LL) -( Vert(CT) -( Horz(CT) (	in ( 0.00 0.00 0.00	(loc) 8 8 8	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 73 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SP	No.2		BRACING- TOP CHORD	s	structura	al wood	sheathing di	rectly applied or 6-0-0	oc purlins.

BOT CHORD

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

 TOP CHORD
 2x4 SP No.2

 BOT CHORD
 2x6 SP No.2

 OTHERS
 2x4 SP No.3

 WEDGE
 2x4 SP No.3

Left: 2x4 SP No.3, Right: 2x4 SP No.3

(lb) - Max Horz 2=-114(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 13, 14, 11, 10
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-0-8, Exterior(2) 2-0-8 to 6-0-8, Corner(3) 6-0-8 to 9-0-8, Exterior(2) 9-0-8 to 12-11-8 zone; 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 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 13, 14, 11, 10.
   10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



**REACTIONS.** All bearings 12-1-0.



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818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.A
					137296248
21051A	CG	COMMON GIRDER	1	2	
				<b></b>	Job Reference (optional)

8.220 s Mar 22 2019 MiTek Industries, Inc. Tue Jun 4 07:20:50 2019 Page 2 ID:byj??x6A9z5\_viqm\_kAqhrzC2Gy-3qeUwlyhm8K1Lbp0SjR68ahECQJklg\_Sa6roKoz9kJR

LOAD CASE(S) Standard Concentrated Loads (Ib)

Vert: 5=-1424(B) 6=-1414(B) 7=-1414(B) 8=-1414(B) 9=-1414(B) 10=-1414(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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 Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

![](_page_10_Picture_5.jpeg)

![](_page_11_Figure_0.jpeg)

	<b>⊢</b>	4-2-0 4-2-0							
LOADING (psf)	SPACING- 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) I/defl L/d	PLATES         GRIP           MT20         244/190					
TCLL 20.0	Plate Grip DOL 1.15	TC 0.24	Vert(LL) -0.01 2-4 >999 240						
TCDL 10.0	Lumber DOL 1.15	BC 0.18	Vert(CT) -0.03 2-4 >999 180						
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 n/a n/a						
3CDL 10.0	Code IRC2015/TPI2014	Matrix-P		Weight: 16 lb FT = 20%					

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.3 REACTIONS. (lb/size) 2=224/0-3-8, 4=147/0-1-8

Max Horz 2=66(LC 8) Max Uplift 2=-65(LC 8), 4=-35(LC 12)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-0-4 zone; 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) \* 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) Bearing at joint(s) 4 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 at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
- 7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

![](_page_11_Picture_16.jpeg)

Structural wood sheathing directly applied or 4-2-0 oc purlins,

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

except end verticals.

🙏 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE Design valid for use only design parameters and READ NOTES ON TIPS ON TIPS AND INCLODED MITCR REPRETENCE PAGE MIT-1473 TeV. 100322010 SECORE 052. 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-98 and BCSI Building Component** fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Qua** Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

![](_page_11_Picture_18.jpeg)

![](_page_12_Figure_0.jpeg)

			4-2-0				—	
LOADING (psf)	SPACING- 2-0-0	CSL	DEFL. ir	(loc)	l/defl	l /d	PLATES	GRIP
TCLL         20.0           TCDL         10.0	Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.28 BC 0.18	Vert(LL) -0.01 Vert(CT) -0.03	1-3 1-3	>999 >999	240 180	MT20	244/190
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2015/TPI2014	WB 0.00 Matrix-P	Horz(CT) 0.00		n/a	n/a	Weight: 14 lb	FT = 20%
LUMBER-	·		BRACING-					

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 4-2-0 oc purlins,

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

except end verticals.

#### LUMBER-

TOP CHORD 2x4 SP No.2 2x4 SP No.2 BOT CHORD WEBS 2x4 SP No.3

REACTIONS. (lb/size) 1=155/0-3-8, 3=155/0-1-8 Max Horz 1=53(LC 8)

Max Uplift 1=-19(LC 8), 3=-38(LC 8)

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

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-0-4 zone; 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) \* 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) Bearing at joint(s) 3 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 at joint(s) 3.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.

![](_page_12_Picture_15.jpeg)

🙏 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE ARXING - Verify design parameters and READ NOTES ON THIS AND INCLODED MITER REFERENCE PAGE MIT-14's rev. Towards BEFORE OSE. Design valid for use only with MiTeR's 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 quidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component** fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Qua** Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

![](_page_12_Picture_17.jpeg)

![](_page_13_Figure_0.jpeg)

11	IM	RF	P_	

TOP CHORD 2x4 SP No.2 2x4 SP No.2 BOT CHORD WEBS 2x4 SP No.3 BRACING-TOP CHORD

Structural wood sheathing directly applied or 4-2-0 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing

REACTIONS. 5=56/4-2-0, 2=134/4-2-0, 6=185/4-2-0 (lb/size) Max Horz 2=66(LC 8) Max Uplift 5=-15(LC 8), 2=-43(LC 8), 6=-42(LC 12)

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

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-2-0, Exterior(2) 2-2-0 to 4-0-4 zone; 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 2-0-0 oc.

- 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

![](_page_13_Picture_16.jpeg)

🙏 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE Design valid for use only design parameters and READ NOTES ON TIPS ON TIPS AND INCLODED MITCR REPRETENCE PAGE MIT-1473 TeV. 100322010 SECORE 052. 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-98 and BCSI Building Component** fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

![](_page_13_Picture_18.jpeg)

![](_page_14_Figure_0.jpeg)

	0- <u>1-6</u> 0-1-6	4-0-13 3-11-7	4-8-1	7-11-8	
LOADING         (psf)           TCLL         20.0           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 IRC2015/TPI2014	CSI. TC 0.29 BC 0.31 WB 0.05 Matrix-S	<b>DEFL.</b> in Vert(LL) -0.02 Vert(CT) -0.05 Horz(CT) 0.00	n (loc) l/defl L/d 2 2-6 >999 240 5 2-6 >999 180 0 5 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 30 lb         FT = 20%
LUMBER-           TOP CHORD         2x4 SP No.2           BOT CHORD         2x4 SP No.2           WEBS         2x4 SP No.3 *Except*           4-5: 2x6 SP No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dire end verticals. Rigid ceiling directly applied o	ectly applied or 6-0-0 oc purlins, except r 10-0-0 oc bracing.	
REACTIONS. (Ib/siz	e) 2=371/0-5-4, 5=296/0-3-8				

REACTIONS. (lb/size) 2=371/0-5-4, 5=296/0-3-8 Max Horz 2=47(LC 11) Max Uplift 2=-55(LC 12), 5=-16(LC 12)

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

TOP CHORD 2-7=-354/96, 7-8=-306/99, 3-8=-296/111, 3-4=-336/125 BOT CHORD 2-6=-93/269, 5-6=-93/269

## NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-8-1, Exterior(2) 4-8-1 to 7-8-12 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

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) 2, 5.

LOAD CASE(S) Standard

![](_page_14_Picture_13.jpeg)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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 sand truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

![](_page_14_Picture_15.jpeg)

![](_page_15_Figure_0.jpeg)

	0-1-14 0-1-14		9-4-0 9-2-2					I	
LOADING         (psf)           TCLL         20.0           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 IRC2015/TPI2014	CSI. TC 0.08 BC 0.05 WB 0.06 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 6 7 6	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 38 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER-			BRACING-					·	

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 OTHERS 2x4 SP No.3 TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 9-0-2.

(lb) - Max Horz 2=-30(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8 Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

#### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3) -0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 4-8-0, Corner(3) 4-8-0 to 7-8-0, Exterior(2) 7-8-0 to 10-2-8 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) Gable studs spaced at 2-0-0 oc.
- 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.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 10, 8.

8) Non Standard bearing condition. Review required.

LOAD CASE(S) Standard

![](_page_15_Picture_20.jpeg)

🙏 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE Design valid for use only design parameters and READ NOTES ON TIPS ON TIPS AND INCLODED MITCR REPRETENCE PAGE MIT-1473 TeV. 100322010 SECORE 052. 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-98 and BCSI Building Component** fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Qua** Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

![](_page_15_Picture_22.jpeg)

![](_page_16_Figure_0.jpeg)

9-4-12								
LOADING         (psf)           TCLL         20.0           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 IRC2015/TPI2014	CSI. TC 0.25 BC 0.18 WB 0.05 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) n/a - n/a - 0.00 3	l/defl n/a n/a 3 n/a	L/d 999 999 n/a	PLATES MT20 Weight: 33 lb	<b>GRIP</b> 244/190 FT = 20%

LUMBER-

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2OTHERS2x4 SP No.3

OTHERS 2x4 SP No.3

12 4-242/0 4 12

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=166/9-4-12, 3=166/9-4-12, 4=343/9-4-12 Max Horz 1=70(LC 9) Max Uplift 1=-31(LC 12), 3=-40(LC 13), 4=-11(LC 12)

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 4-8-6, Exterior(2) 4-8-6 to 7-8-6, Interior(1) 7-8-6 to 8-11-0 zone; 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) \* 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, 3, 4.

![](_page_16_Picture_17.jpeg)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

![](_page_16_Picture_19.jpeg)

![](_page_17_Figure_0.jpeg)

		0-0-6				6-4-6						
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TP	12014	Matri	k-P						Weight: 21 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

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

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

LUMBER-

TOP CHORD 2x4 SP No.2 2x4 SP No.2 BOT CHORD

2x4 SP No.3 OTHERS

REACTIONS. (lb/size) 1=117/6-4-0, 3=117/6-4-0, 4=200/6-4-0 Max Horz 1=-45(LC 8) Max Uplift 1=-26(LC 12), 3=-32(LC 13)

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;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) \* 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, 3.

![](_page_17_Picture_14.jpeg)

🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. ARXING - Verify design parameters and READ NOTES ON THIS AND INCLODED INTER REPERENCE PAGE MIL-14's rev. 10/03/2013 BEFORE USE. Design valid for use only with MITER® 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/TPIT Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

![](_page_17_Picture_16.jpeg)

![](_page_18_Figure_0.jpeg)

2x4 🥢

2x4 📎

Structural wood sheathing directly applied or 3-4-12 oc purlins.

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

	0-0 <u>1</u> 6 0-0-6	<u>3</u> -4- 3-4	<u>12</u> -6		———————————————————————————————————————
Plate Offsets (X,Y)	[2:0-2-0,Edge]				
LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014	CSI.         D           TC         0.02         V           BC         0.07         V           WB         0.00         H           Matrix-P         H         H	EFL.         in         (loc)         1/d           ert(LL)         n/a         -         -         -           ert(CT)         n/a         -         -         -           orz(CT)         0.00         3         3         -	/defl L/d n/a 999 n/a 999 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 9 lb         FT = 20%

BRACING-TOP CHORD

BOT CHORD

#### LUMBER-

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2

REACTIONS. (lb/size) 1=97/3-4-0, 3=97/3-4-0 Max Horz 1=-20(LC 10) Max Uplift 1=-10(LC 12), 3=-10(LC 13)

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

#### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;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) \* 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, 3.

![](_page_18_Picture_15.jpeg)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

![](_page_18_Picture_17.jpeg)

![](_page_19_Figure_0.jpeg)

![](_page_19_Picture_1.jpeg)

🙏 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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 **ANSUTPIT Quality Criteria**, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

![](_page_19_Picture_3.jpeg)

![](_page_20_Figure_0.jpeg)

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

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 6-7-14, Exterior(2) 6-7-14 to 9-7-14, Interior(1) 9-7-14 to 12-10-0 zone; 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) \* 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) 6=123, 8=123.

![](_page_20_Picture_9.jpeg)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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 **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

![](_page_20_Picture_11.jpeg)

![](_page_21_Figure_0.jpeg)

BRACING-TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.2 2x4 SP No.2 BOT CHORD

2x4 SP No.3 OTHERS

REACTIONS. 1=184/10-3-12, 3=184/10-3-12, 4=380/10-3-12 (lb/size) Max Horz 1=-77(LC 8) Max Uplift 1=-34(LC 12), 3=-44(LC 13), 4=-12(LC 12)

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

#### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 5-1-14, Exterior(2) 5-1-14 to 8-1-14, Interior(1) 8-1-14 to 9-10-0 zone; 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.

\* 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 5) 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, 3, 4.

![](_page_21_Picture_13.jpeg)

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. 10/03/2015 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 **ANSUTPIT Quality Criteria**, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

![](_page_21_Picture_15.jpeg)

![](_page_22_Figure_0.jpeg)

LOADING (psf)         SPACING- Plate Grip DOL         2-0-0         CSI.           TCLL         20.0         Plate Grip DOL         1.15         TC         0.19           TCDL         10.0         Lumber DOL         1.15         BC         0.10           BCLL         0.0 *         Rep Stress Incr         YES         WB         0.03           BCDL         10.0         Code IRC2015/TPI2014         Matrix-P	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         n/a         -         n/a         999           Vert(CT)         n/a         -         n/a         999           Horz(CT)         0.00         3         n/a         n/a	PLATES         GRIP           MT20         244/190           Weight: 25 lb         FT = 20%
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BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.3

REACTIONS. (lb/size) 1=137/7-3-0, 3=137/7-3-0, 4=234/7-3-0 Max Horz 1=52(LC 11) Max Uplift 1=-30(LC 12), 3=-37(LC 13)

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

#### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;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) \* 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, 3.

![](_page_22_Picture_14.jpeg)

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. 10/03/2015 BEFORE USE. ARXING - Verify design parameters and READ NOTES ON THIS AND INCLODED INTER REPERENCE PAGE MIL-14's rev. 10/03/2013 BEFORE USE. Design valid for use only with MITER® 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/TPIT Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

![](_page_22_Picture_16.jpeg)

![](_page_23_Figure_0.jpeg)

2x4 🥢

2x4 📎

Structural wood sheathing directly applied or 4-3-12 oc purlins.

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

0-0-6 0-0-6	4-3-12 4-3-6	
Plate Olisets (X, Y) [2:0-2-0,Edge]		
LOADING         (psf)         SPACING-         2-0-0           TCLL         20.0         Plate Grip DOL         1.15           TCDL         10.0         Lumber DOL         1.15           BCLL         0.0 *         Rep Stress Incr         YES	CSI.         DEFL.         in         (loc)         l/defl           TC         0.05         Vert(LL)         n/a         -         n/a           BC         0.14         Vert(CT)         n/a         -         n/a           WB         0.00         Horz(CT)         0.00         3         n/a	L/d <b>PLATES GRIP</b> 999 MT20 244/190 999 n/a
BCDL 10.0 Code IRC2015/TPI2014	Matrix-P	Weight: 12 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

#### LUMBER-

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2

REACTIONS. (lb/size) 1=134/4-3-0, 3=134/4-3-0 Max Horz 1=-28(LC 10) Max Uplift 1=-14(LC 12), 3=-14(LC 13)

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;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) \* 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, 3.

![](_page_23_Picture_15.jpeg)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

![](_page_23_Picture_17.jpeg)

![](_page_24_Figure_0.jpeg)