

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 148_1869_A_REV 148.1869.A REV

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: I36862003 thru I36862032

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

North Carolina COA: C-0844



April 24,2019

Liu, Xuegang

IMPORTANT NOTE: Truss Engineer's responsibility is solely for design of individual trusses based upon design parameters shown on referenced truss drawings. Parameters have not been verified as appropriate for any use. Any location identification specified is for file reference only and has not been used in preparing design. Suitability of truss designs for any particular building is the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.



					20-8-0 20-8-0						
Plate Offsets (X,Y)	[2:0-3-8,Edge], [2:0-1-9,0-	·5-13], [2:0-0·	-12,0-1-3], [7:	0-2-8,Edge],	, [12:0-0-12,0-1-3],	[12:0-1-	9,0-5-1	3], [12:0-	3-8,Edge]		
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	0.12	Vert(LL)	0.00	13	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	0.01	13	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(TL)	0.01	12	n/a	n/a		
BCDL 10.0	Code IRC2012/TP	12007	Matri	x-S						Weight: 123 lb	FT = 20%
LUMBER-					BRACING-						
TOP CHORD 2x4 SF	TOP CHORD 2x4 SP No.2						Structu	ral wood	sheathing dir	ectly applied or 6-0-0 o	oc purlins.
BOT CHORD 2x4 SF	No.2				BOT CHOR	D	Rigid c	eiling dire	ectly applied of	or 10-0-0 oc bracing.	

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

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

REACTIONS. All bearings 20-8-0.

(lb) - Max Horz 2=185(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 20, 21, 16, 15 except 22=-115(LC 12), 14=-114(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 2, 18, 20, 21, 17, 16, 15, 12 except 22=281(LC 19), 14=279(LC 20)

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) V(IRC2012)=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 10-4-0, Corner(3) 10-4-0 to 13-4-0, Exterior(2) 13-4-0 to 21-6-8 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) All plates are 1.5x4 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, 18, 20, 21, 16, 15 except (jt=lb) 22=115, 14=114.







Continued on page 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 ouckling of individual truss web and/or chord members only. Additional temporary and permanent bracing fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSUTPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	148.1869.A REV	
					1368	362004
148_1869_A_REV	AG	COMMON GIRDER	1	3		
				•	Job Reference (optional)	
84 Components (Dunn),	Dunn, NC - 28334,		8.2	20 s Nov	16 2018 MiTek Industries, Inc. Wed Apr 24 13:07:59 2019 Page	e 2
		ID:0ckUA53	Thu5GUjf	QqCaouP	ZBFs-n2X69BiG UhOBUUubt0p5qxj?OxRZFLhwWm?CmzNVA	A

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-3=-60, 3-5=-60, 1-5=-20

Concentrated Loads (lb)

Vert: 7=-1396(B) 14=-466(B) 15=-466(B) 16=-466(B) 17=-1396(B) 18=-1396(B) 19=-1396(B) 20=-1396(B) 21=-1396(B) 22=-1403(B) 22=-





15-8-0 Plate Offsets (X,Y)-- [2:0-3-8,Edge], [2:0-1-9,0-5-13], [2:0-0-12,0-1-3], [6:0-2-8,Edge], [10:0-0-12,0-1-3], [10:0-1-9,0-5-13], [10:0-3-8,Edge]

LUMBER-		Mainx-S	BRACING-					FT = 20%
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05 Matrix S	Horz(TL) 0.	00 10	n/a	n/a	Woight: 95 lb	ET - 20%
TCDL 10.0	Lumber DOL 1.15	BC 0.06	Vert(TL) 0.	00 11	n/r	120		
TCLL 20.0	Plate Grip DOL 1.15	TC 0.08	Vert(LL) 0.	00 10	n/r	120	MT20	244/190
	SPACING. 2-0-0	190	DEEL	in (loc)	l/dofl	L/d		CRIP

BOT CHORD

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

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

- REACTIONS. All bearings 15-8-0.
 - Max Horz 2=144(LC 11) (lb) -Max Uplift All uplift 100 lb or less at joint(s) 15, 16, 17, 14, 13, 12 Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 14, 13, 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) V(IRC2012)=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 7-10-0, Corner(3) 7-10-0 to 10-10-0, Exterior(2) 10-10-0 to 16-6-8 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) All plates are 1.5x4 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) 15, 16, 17, 14, 13, 12
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



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

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

April 24,2019



🔺 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MILER KETEKERICE FAGE MILETATION, INVERTIGATION AND INVERTI AND INVERTIGATION AND INVERTIGATION AND INVERTICALIA AND 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.



April 24,2019





		7-2-2		<u>14-1-14</u> 6-11-13				21-4-0		
Plate Offsets (X,Y)-	[2:0-0-12,0-1-3], [2:0-1-4	9,0-5-13], [2:0-3	3-8,Edge], [6:0-0	0-12,0-1-3], [6:0-1-9,0-5	-13], [6:0-3-	3,Edge]				
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).38 Vert(L	L) -0.11	8-1Ó	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0).52 Vert(1	L) -0.19	6-8	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0).19 Horz(Ľ) 0.03	6	n/a	n/a		
BCDL 10.0	Code IRC2012/1	PI2007	Matrix-S	S S					Weight: 110 lb	FT = 20%
LUMBER-	SP No 2	1 12007	Iviau ix-c	BRAC	ING-	Struct	ural wood	sheathing dir	ectly applied or 4-11-1	4 oc purlins

BOT CHORD

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

 TOP CHORD
 2x4 SP No.2

 BOT CHORD
 2x4 SP No.2

 WEBS
 2x4 SP No.3

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

REACTIONS. (lb/size) 2=903/0-3-8, 6=903/0-3-8 Max Horz 2=-190(LC 10)

Max Uplift 2=-111(LC 12), 6=-111(LC 13)

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

TOP CHORD 2-3=-1194/148, 3-4=-1052/208, 4-5=-1053/208, 5-6=-1194/148

BOT CHORD 2-10=-147/1012, 8-10=0/661, 6-8=-38/906

WEBS 4-8=-124/522, 5-8=-294/218, 4-10=-124/522, 3-10=-294/218

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) V(IRC2012)=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 10-8-0, Exterior(2) 10-8-0 to 13-8-0, Interior(1) 13-8-0 to 22-2-8 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=111.

6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6. This connection is for uplift only and does not consider lateral forces.

SEAL 28228

April 24,2019





21-4-0 Plate Offsets (X,Y)-- [2:0-0-12,0-1-3], [2:0-3-8,Edge], [12:0-0-12,0-1-3], [12:0-1-9,0-5-13], [12:0-3-8,Edge] LOADING (psf) SPACING- 2-0-0 CSI. DEFL. in (loc) I/defl L/d PLATES GRIP

TCLL 20.0 TCDL 10.0 BCDL 0.0 * BCDL	Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2012/TPI2007	CSI. TC 0.07 BC 0.05 WB 0.14 Matrix-S	Vert(LL) 0.00 Vert(TL) 0.00 Horz(TL) 0.01	12 n/r 13 n/r 12 n/a	120 120 n/a	Weight: 130 lb	244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SF	2 No.2		BRACING- TOP CHORD	Structural wood	l sheathing dir	ectly applied or 6-0-0	oc purlins.

BOT CHORD

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

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

- **REACTIONS.** All bearings 21-4-0.
 - (lb) Max Horz 2=-190(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 21, 22, 23, 17, 16, 15, 14
 Max Grav All reactions 250 lb or less at joint(s) 2, 18, 20, 21, 22, 23, 17, 16, 15, 14, 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) V(IRC2012)=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 10-8-0, Corner(3) 10-8-0 to 13-8-0, Exterior(2) 13-8-0 to 22-2-8 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) All plates are 1.5x4 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, 20, 21, 22, 23, 17, 16, 15, 14.



rev. 10/03/2015 BEFORE USE. puilding component, not is design into the overall rary and permanent bracing pe regarding the IB-89 and BCSI Building Component 818 Soundside Road Edenton, NC 27932

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



Vert: 1-3=-60, 3-5=-60, 1-5=-20

Continued on page 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 **ANS/TPH 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.

818 Soundside Road Edenton, NC 27932

GANG munn April 24,2019

Job	Truss	Truss Type	Qty	Ply	148.1869.A REV
					13686200
148_1869_A_REV	CG	COMMON GIRDER	1	2	
				J	Job Reference (optional)
84 Components (Dunn),	Dunn, NC - 28334,		8.2	20 s Nov	16 2018 MiTek Industries, Inc. Wed Apr 24 13:08:07 2019 Page 2
		ID:0ckl	JA53Thu5	GUjfQqCa	ouPyZBFs-Yb08rwpH5xhF8i5R3Z9hQMG2_ck6RuetmliQUIzNV9s

LOAD CASE(S) Standard

Concentrated Loads (lb) Vert: 8=-1708(F) 6=-1708(F) 14=-1459(F) 15=-1459(F) 16=-1459(F) 17=-1708(F) 18=-1708(F) 19=-1708(F) 20=-1708(F) 21=-1708(F)





		9-6-2 9-6-2	16-8-8 7-2-6	· ·	18-5-12 1-9-4	25-6-4 7-0-8			34-5-14 8-11-10		43-8-0 9-2-2	
LOADING TCLL TCDL BCLL BCDL	(psf) 20.0 10.0 0.0 * 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2012/TI	2-0-0 1.15 1.15 YES Pl2007	CSI. TC BC WB Matrix	0.74 0.46 0.79 x-S	DEFL. Vert(LL) Vert(TL) Horz(TL)	in -0.09 -0.21 0.02	(loc) 14-16 2-16 13	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 271 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHOP BOT CHOP WEBS REACTION	RD 2x4 SP RD 2x6 SP 2x4 SP NS. (Ib/size Max H Max U Max G	8	BRACING- TOP CHOF BOT CHOF WEBS	RD RD	Structu Rigid c 1 Row 2 Rows	ral wood eiling dire at midpt s at 1/3 pt	sheathing dii ctly applied (7 s 6	rectly applied or 4-2-11 or 6-0-0 oc bracing. 7-13, 5-14 5-13	oc purlins.			
FORCES. TOP CHOP BOT CHOP WEBS	(lb) - Max. RD 2-3=- RD 2-16= 3-16= 7-11=	Comp./Max. Ten All fo 1339/203, 3-5=-1138/24 275/1111, 14-16=-90/54 405/240, 5-16=-132/736 131/714, 9-11=-408/246	rces 250 (lb) or l 2, 5-6=-310/165, 43, 13-14=-215/2 6, 6-14=-191/929 6, 5-14=-750/310	ess except 6-7=0/801, 285, 11-13= 9, 6-13=-15)	when shown , 7-9=-398/17 342/160, 10 38/233, 7-13	ı. 72, 9-10=-595/131)-11=-38/449 =-740/308,						
NOTES- 1) Unbalar 2) Wind: A Enclose 25-0-0, forces & 3) This trus 4) * This task	nced roof live SCE 7-10; V d; MWFRS (Interior(1) 25 MWFRS for ss has been	loads have been consid ult=130mph (3-second g envelope) gable end zon -0-0 to 43-7-4 zone; can r reactions shown; Lumb designed for a 10.0 psf b	ered for this des ust) V(IRC2012) e and C-C Exter tilever left and ri- er DOL=1.60 pla ottom chord live	ign. =103mph; ⁻ rior(2) -0-10 ght exposed te grip DOL load nonce	TCDL=6.0ps -8 to 2-1-8, I d ; end vertic _=1.60 oncurrent with	f; BCDL=6.0psf; h= nterior(1) 2-1-8 to al left and right exp h any other live loa	=30ft; C 22-0-0, posed;C ads.	Cat. II; E: Exterio C-C for r	xp B; r(2) 22-0- nembers	0 to and		

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 100 lb uplift at joint(s) 10 except (jt=lb) 2=140.

7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13. This connection is for uplift only and does not consider lateral forces.









38

37

TOP CHORD

BOT CHORD

WEBS

36

34

1 Row at midpt

35

3x6 =

33

32

31

30

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

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

29

28

14-38, 13-39, 12-40, 15-37, 16-36

LUMBER-

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

3x5 =

48

47

46

45

44

43

42

41

6x6 =

40

39

OTHERS 2x4 SP No.3

REACTIONS. All bearings 43-8-0. Max Horz 2=197(LC 12)

(lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 37, 36, 34, 33, 32, 31, 30, 29, 28, 27 All reactions 250 lb or less at joint(s) 2, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 37, 36, 34, Max Grav

33, 32, 31, 30, 29, 28, 27, 26

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

TOP CHORD 2-3=-256/83, 11-12=-93/261, 12-13=-111/312, 13-14=-126/352, 14-15=-126/355, 15-16=-111/315, 16-17=-93/264

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) V(IRC2012)=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-0-0, Exterior(2) 2-0-0 to 22-0-0, Corner(3) 22-0-0 to 25-0-0, Exterior(2) 25-0-0 to 43-8-0 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 1.5x4 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, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 37, 36, 34, 33, 32, 31, 30, 29, 28, 27.



3x5 =

27

📣 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 besign valid for dise only with with every connectors. This design is based only upon 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 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.





	L	9-6-2	17-	-0-0 17	7-2-5	25-6-4	27-	1-12	34-5	5-14		43-8-0	
	1	9-6-2	7-5	5-14 0)-2-5	8-3-15	ነ-	7-8 '	7-4	1-2	1	9-2-2	
Plate Offsets (X	(,Y)	[4:0-4-0,Edge], [5:0-4-0,0-4	-4], [7:0-4-0,0	0-4-4], [10:0 ')-1-8,Edge]	, [11:0-4	-0,0-4-8], [14	:0-0-0,	0-2-12]				
LOADING (psf TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	f) C C C * C	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2012/TPl2	2-0-0 1.15 1.15 YES 2007	CSI. TC BC WB Matri	0.98 0.78 0.62 x-S		DEFL. Vert(LL) Vert(TL) Horz(TL)	in -0.38 -0.81 0.10	(loc) 15-17 15-17 10	l/defl >811 >375 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 318 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD BOT CHORD WEBS	2x6 SP 1-4: 2x4 2x6 SP 11-14: 2 2x4 SP	No.2 *Except* 4 SP No.2 No.2 *Except* 2x6 SP DSS No.3					BRACING- TOP CHOR BOT CHOR WEBS JOINTS	D D	Structura Rigid ce 1 Row a 1 Brace	al wood s iling direc at midpt at Jt(s): 1	heathing dire tly applied o 5- 18	ectly applied. r 9-3-15 oc bracing. -18, 7-18	
REACTIONS.	EACTIONS. (Ib/size) 2=1571/0-3-8, 10=1416/Mechanical, 13=550/0-3-8 Max Horz 2=197(LC 12) Max Uplift 2=-308(LC 12), 10=-182(LC 12), 13=-261(LC 13) Max Grav 2=1600(LC 25), 10=1425(LC 2), 13=868(LC 24)												
FORCES. (Ib) TOP CHORD) - Max. (2-3=-3 9-10=	Comp./Max. Ten All force 3018/585, 3-5=-2850/631, 4 -2701/455	es 250 (lb) or 5-6=-442/138	less except 3, 6-7=-483/ ⁻	when show 145, 7-9=-2	vn. 495/483	,						
BOT CHORD	2-17= 10-11	-616/2684, 15-17=-359/19 1=-357/2371	56, 13-15=-3	55/1963, 12	-13=-331/1	954, 11-	12=-348/194	9,					
WEBS	3-17= 5-18=	-450/267, 5-17=-210/922, -1633/461, 7-18=-1633/46	7-11=-215/71 1, 7-12=-526/	2, 9-11=-47 ⁄554	1/301, 5-15	5=-107/2	78,						
NOTES- 1) Unbalanced 2) Wind: ASCE Enclosed; M' 25-0-0, Interi forces & MW	roof live 7-10; V WFRS (ior(1) 25 /FRS for	loads have been consider ult=130mph (3-second gus envelope) gable end zone ; -0-0 to 43-7-4 zone; cantile reactions shown: Lumber	ed for this dee t) V(IRC2012 and C-C Exte ver left and r DOL=1.60 pla	sign. !)=103mph; erior(2) -0-10 ight expose ate grip DOI	TCDL=6.0p)-8 to 2-1-8 d ; end vert L=1.60	osf; BCD , Interior ical left :	L=6.0psf; h= (1) 2-1-8 to 2 and right exp	:30ft; C 22-0-0, oosed;C	at. II; Ex Exterior(C-C for m	p B; (2) 22-0-0 embers a) to Ind	tunnin All All	CARO

- 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 100 lb uplift at joint(s) except (jt=lb) 2=308, 10=182.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13. This connection is for uplift only and does not consider lateral forces.



April 24,2019





L			43-4-0				
			43-4-0				Ι
Plate Olisets (X, Y)	[34:0-2-4,0-1-8], [40:0-2-4,0-1-8]					1	
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2012/TPI2007	CSI. TC 0.09 BC 0.04 WB 0.15 Matrix-S	DEFL. in Vert(LL) n/a Vert(TL) n/a Horz(TL) 0.01	(loc) l/defl - n/a - n/a 25 n/a	L/d 999 999 n/a	PLATES MT20 Weight: 311 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF OTHERS 2x4 SF	 No.2 No.2 No.2 No.3 		BRACING- TOP CHORD BOT CHORD WEBS	Structural wood s Rigid ceiling dire 1 Row at midpt	sheathing dir ctly applied c 1	ectly applied or 6-0-0 c or 10-0-0 oc bracing. 3-37, 12-38, 11-39, 14	oc purlins. -36, 15-35
REACTIONS. All be (lb) - Max H Max U Max G	earings 43-4-0. łorz 1=-184(LC 13) Jplift All uplift 100 lb or less at joint(s) 1 30, 29, 28, 27, 26 Grav All reactions 250 lb or less at joint 32, 31, 30, 29, 28, 27, 26, 25	, 38, 39, 41, 42, 43, 44, 45, (s) 1, 37, 38, 39, 41, 42, 43	, 46, 47, 48, 36, 35, 33, 3 8, 44, 45, 46, 47, 48, 36,	32, 31, 35, 33,			
FORCES. (Ib) - Max. TOP CHORD 1-2=- 14-1	Comp./Max. Ten All forces 250 (lb) o -270/87, 10-11=-93/261, 11-12=-110/31 5=-110/314, 15-16=-93/263	r less except when shown. 2, 12-13=-126/352, 13-14≕	-126/354,				
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-10; V Enclosed; MWFRS 24-8-0, Exterior(2) 2 forces & MWFRS fo 3) Truss designed for V	e loads have been considered for this d /ult=130mph (3-second gust) V(IRC201 (envelope) gable end zone and C-C Co 24-8-0 to 43-4-0 zone; cantilever left and or reactions shown; Lumber DOL=1.60 p wind loads in the plane of the truss only	sign. 2)=103mph; TCDL=6.0psf; rner(3) 0-0-0 to 3-0-0, Exter I right exposed; end vertica late grip DOL=1.60 For studs exposed to wing	BCDL=6.0psf; h=30ft; C rior(2) 3-0-0 to 21-8-0, C al left and right exposed; d (normal to the face), sc	at. II; Exp B; orner(3) 21-8-0 to C-C for members see Standard Indus	and		

- Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 1.5x4 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) 1, 38, 39, 41, 42, 43, 44, 45, 46, 47, 48, 36, 35, 33, 32, 31, 30, 29, 28, 27, 26.



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	9-6-2 9-6-2	1 8	8-5-2 3-11-0	25-6-4 7-1-2	<u> </u>	<u>38-0-0 43-8-12 44-0</u> -0 0-1-12 5-8-12 0-3-4
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2012/TF	2-0-0 1.15 1.15 YES 12007	CSI. TC 0.82 BC 0.69 WB 0.92 Matrix-S	DEFL. Vert(LL) -0.1 Vert(TL) -0.4 Horz(TL) 0.0	in (loc) l/defl L/d 9 12-14 >999 240 3 12-14 >999 180 8 12 n/a n/a	PLATES GRIP MT20 244/190 Weight: 275 lb FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x6 SF WEBS 2x4 SF	P No.2 P No.2 P No.3			BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathing di Rigid ceiling directly applied 6-0-0 oc bracing: 10-12. 1 Row at midpt	rectly applied or 2-2-0 oc purlins. or 10-0-0 oc bracing, Except: 5-15, 7-14
REACTIONS. (Ib/size Max H Max U	e) 2=1548/0-3-8, 12=19 lorz 2=191(LC 12) lplift 2=-212(LC 12), 12=-2	04/0-3-8, 10=1 233(LC 13), 10	167/0-3-8 ⊨27(LC 13)			-12

Max Grav 2=1548(LC 1), 12=1962(LC 2), 10=205(LC 24)

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

TOP CHORD 2-3=-2805/360, 3-5=-2637/399, 5-6=-1859/330, 6-7=-1665/298

BOT CHORD 2-17=-407/2450, 15-17=-226/1892, 14-15=-27/1324, 12-14=-38/1367

3-17=-398/240, 5-17=-127/717, 5-15=-745/308, 6-15=-207/907, 6-14=-101/412, WFBS 7-14=-131/255, 7-12=-1907/183, 9-12=-468/280

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) V(IRC2012)=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 22-0-0, Exterior(2) 22-0-0 to 25-0-0, Interior(1) 25-0-0 to 44-10-8 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=212

6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12 and 10. This connection is for uplift only and does not consider lateral forces.







		<u>9-2-2</u> 9-2-2	<u>18-1-</u> 8-11-	2+	<u>25-2-4</u> 7-1-2	<u>34-6-8</u> 9-4-4	37-6-4	<u>43-4-12</u> <u>43-8</u> -0 <u>5-10-8</u> 0-3-4
LOADING TCLL TCDL BCLL BCDL	(psf) 20.0 10.0 0.0 * 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2012/T	2-0-0 1.15 1.15 YES PI2007	CSI. TC 0.82 BC 0.69 WB 0.90 Matrix-S	DEFL. Vert(LL) Vert(TL) Horz(TL)	in (loc) l/defl L/d -0.19 11-13 >999 240 -0.42 11-13 >999 180 0.08 11 n/a n/a	PLATES MT20 Weight: 27	GRIP 244/190 2 lb FT = 20%
LUMBER- TOP CHOF BOT CHOF WEBS	RD 2x4 SP 1-3: 2x4 RD 2x6 SP 2x4 SP	No.2 *Except* 4 SP No.1 No.2 No.3			BRACING- TOP CHORI BOT CHORI WEBS	D Structural wood sheathi D Rigid ceiling directly app 6-0-0 oc bracing: 9-11. 1 Row at midpt 2 Rows at 1/3 pts	ng directly applied. Jlied or 10-0-0 oc bracir 4-14, 6-13 6-11	ng, Except:
DEACTION	IS (lb/sizo) 1-1/70/Mechanical	11-1875/0-3-8	195/0 2 9		•		

al, 11=1875/0-3-8, 9=185/0-3-8 Max Horz 1=-199(LC 17) Max Uplift 1=-188(LC 12), 11=-232(LC 13), 9=-27(LC 13)

Max Grav 1=1479(LC 1), 11=1929(LC 2), 9=216(LC 24)

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

TOP CHORD 1-2=-2738/354, 2-4=-2574/395, 4-5=-1837/333, 5-6=-1656/298

BOT CHORD 1-16=-404/2381, 14-16=-223/1863, 13-14=-27/1312, 11-13=-39/1365

2-16=-371/242, 4-16=-123/674, 4-14=-723/305, 5-14=-205/882, 5-13=-101/422, WFBS 6-13=-138/255, 6-11=-1858/180, 8-11=-468/280

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) V(IRC2012)=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-12 to 3-0-12, Interior(1) 3-0-12 to 21-8-0, Exterior(2) 21-8-0 to 24-8-0, Interior(1) 24-8-0 to 44-6-8 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) 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 100 lb uplift at joint(s) except (jt=lb) 1=188.

7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11 and 9. This connection is for uplift only and does not consider lateral forces.



🔺 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.

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L	9-2-2	18-1-2	25-2-4	34-1-14	43-4-0	J
	9-2-2	8-11-0	7-1-2	8-11-10	9-2-2	í.
Plate Offsets (X,Y)	[1:0-0-0,0-0-2], [9:0-0-0,0	-0-2]				
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IBC2006/TF	2-0-0 CSI. 1.15 TC 1.15 BC YES WB Pl2002 Matrix	0.90 Vert(LL) 0.77 Vert(TL) 0.44 Horz(TL) x-S	in (loc) l/defl L/d -0.28 10-12 >999 240 -0.57 10-12 >908 180 0.16 9 n/a n/a	PLATES GRIP MT20 244/190 Weight: 268 lb FT = 20%	
LUMBER- TOP CHORD 2x4 SF 1-3,7-5 BOT CHORD 2x6 SF WEBS 2x4 SF	P No.2 *Except* 9: 2x4 SP No.1 P No.2 P No.3		BRACING TOP CHO BOT CHO WEBS	Structural wood sheathing dir RD Rigid ceiling directly applied (1 Row at midpt 6	rectly applied. or 10-0-0 oc bracing. 5-12, 4-13	
REACTIONS. (Ib/siz Max H	e) 1=1973/Mechanical, lorz 1=170(LC 8)	9=1973/Mechanical				

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

TOP CHORD 1-2=-3811/130, 2-4=-3614/170, 4-5=-2789/198, 5-6=-2784/196, 6-8=-3614/169, 8-9=-3812/130

BOT CHORD 1-15=-40/3301, 13-15=0/2723, 12-13=0/2075, 10-12=0/2733, 9-10=-38/3301

WEBS 5-12=-28/1059, 6-12=-752/133, 6-10=-12/725, 8-10=-348/139, 5-13=-31/1064,

4-13=-750/134, 4-15=-14/732, 2-15=-354/141

NOTES-

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

2) Wind: ASCE 7-05; 90mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=43ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (all heights) and C-C Exterior(2) 0-0-12 to 4-4-12, Interior(1) 4-4-12 to 21-8-0, Exterior(2) 21-8-0 to 26-0-0, Interior(1) 26-0-0 to 43-3-4 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

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.

















FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 2-4=-286/87

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) V(IRC2012)=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 6-0-4, Exterior(2) 6-0-4 to 9-0-4, Interior(1) 9-0-4 to 11-6-12 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) 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.







BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

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

REACTIONS. 1=163/9-2-12, 3=163/9-2-12, 4=336/9-2-12 (lb/size) Max Horz 1=-68(LC 8) Max Uplift 1=-30(LC 12), 3=-39(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) V(IRC2012)=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 4-7-6, Exterior(2) 4-7-6 to 7-7-6, Interior(1) 7-7-6 to 8-9-0 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) 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.







2.5x4 1

2.5x4

6-2₁12 0-0-6

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

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

GRIP

244/190

FT = 20%

SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES
Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20
Lumber DOL	1.15	BC	0.36	Vert(TL)	n/a	-	n/a	999	
Rep Stress Incr	YES	WB	0.00	Horz(TL)	0.00	3	n/a	n/a	
Code IRC2012/TPI2007		Matri	x-P						Weight: 19 lb

BRACING-

TOP CHORD

BOT CHORD

6-2-6

6-2-6

LUMBER-

TCLL

TCDL

BCLL

BCDL

Plate Offsets (X,Y)--

20.0

10.0

10.0

0.0

LOADING (psf)

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

REACTIONS. (lb/size) 1=211/6-2-0, 3=211/6-2-0 Max Horz 1=-43(LC 10) Max Uplift 1=-23(LC 12), 3=-23(LC 13)

[2:0-2-8,Edge]

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) V(IRC2012)=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) * 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.







2.5x4 🥢

2.5x4 🚿

Structural wood sheathing directly applied or 3-5-0 oc purlins.

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

3-4-10 3-5-0 0-0-6 3-4-10 Plate Offsets (X,Y)--[2:0-2-8,Edge] SPACING-DEFL. PLATES GRIP LOADING (psf) 2-0-0 CSI. in (loc) l/defl L/d TCLL 20.0 Plate Grip DOL 1.15 тс 0.02 Vert(LL) n/a 999 MT20 244/190 n/a TCDL 10.0 Lumber DOL 1.15 BC 0.07 Vert(TL) n/a n/a 999 BCLL 0.0 Rep Stress Incr YES WB 0.00 0.00 3 Horz(TL) n/a n/a Code IRC2012/TPI2007 FT = 20% BCDL 10.0 Matrix-P Weight: 9 lb BRACING-LUMBER-TOP CHORD

BOT CHORD

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

REACTIONS. (lb/size) 1=98/3-4-4, 3=98/3-4-4 Max Horz 1=-20(LC 8) Max Uplift 1=-11(LC 12), 3=-11(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) V(IRC2012)=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) * 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.







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, 5 except (jt=lb) 8=127, 6=127.







Max Uplift 1=-33(LC 12), 3=-43(LC 13), 4=-12(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) V(IRC2012)=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 5-0-4, Exterior(2) 5-0-4 to 8-0-4, Interior(1) 8-0-4 to 9-6-12 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) 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.







LOADING TCLL TCDL BCLL	(psf) 20.0 10.0 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.17 BC 0.09 WB 0.03	DEFL. Vert(LL) Vert(TL) Horz(TL)	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 244/190
BCDL	10.0	Code IRC2012/TPI2007	Matrix-P						Weight: 24 lb	FT = 20%

LUMBER-

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

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=131/6-11-12, 3=131/6-11-12, 4=224/6-11-12 Max Horz 1=50(LC 9) Max Uplift 1=-29(LC 12), 3=-36(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) V(IRC2012)=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; 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) * 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.







2 5x4 /

2.5x4 📎

Structural wood sheathing directly applied or 4-0-8 oc purlins.

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

4-0-2 4-0-8 0-0-6 4-0-2 Plate Offsets (X,Y)--[2:0-2-8,Edge] SPACING-DEFL. PLATES GRIP LOADING (psf) 2-0-0 CSI. in l/defl L/d (loc) 244/190 TCLL 20.0 Plate Grip DOL 1.15 тс 0.04 Vert(LL) n/a 999 MT20 n/a TCDL 10.0 Lumber DOL 1.15 BC 0.11 Vert(TL) n/a n/a 999 BCLL 0.0 Rep Stress Incr YES WB 0.00 0.00 3 Horz(TL) n/a n/a Code IRC2012/TPI2007 FT = 20% BCDL 10.0 Matrix-P Weight: 11 lb BRACING-LUMBER-TOP CHORD

BOT CHORD

TOP CHORD 2x4 SP No.2

2x4 SP No.2 BOT CHORD

REACTIONS. (lb/size) 1=123/3-11-12, 3=123/3-11-12 Max Horz 1=-25(LC 8) Max Uplift 1=-13(LC 12), 3=-13(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) V(IRC2012)=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) * 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.







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 ocllapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **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.



April 24,2019



April 24,2019

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 buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

TRENCO A MiTek Affiliate 818 Soundside Road

Edenton, NC 27932



FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 2-4=-305/90

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) V(IRC2012)=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 6-4-10, Exterior(2) 6-4-10 to 9-4-10, Interior(1) 9-4-10 to 12-3-8 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) 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.







REACTIONS. 1=173/9-9-4, 3=173/9-9-4, 4=358/9-9-4 (lb/size) Max Horz 1=-73(LC 8) Max Uplift 1=-32(LC 12), 3=-42(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) V(IRC2012)-103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 4-10-10, Exterior(2) 4-10-10 to 7-10-10, Interior(1) 7-10-10 to 9-3-8 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) 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.







DEFL.	in (loc) l	l/defl l/d		
DEFL.	in (loc) l	l/defl l/d		
			LATES	GRIP
0.15 Vert(LL)	n/a -	n/a 999	MT20	244/190
).44 Vert(TL)	n/a -	n/a 999		
).00 Horz(TL)	0.00 3	n/a n/a		
› ``			Weight: 20 lb	FT = 20%
).4).4).(⊃	15 Vert(LL) 44 Vert(TL) 20 Horz(TL)	15 Vert(LL) n/a - 44 Vert(TL) n/a - 30 Horz(TL) 0.00 3	15 Vert(LL) n/a - n/a 999 44 Vert(TL) n/a - n/a 999 30 Horz(TL) 0.00 3 n/a n/a	15 Vert(LL) n/a - n/a 999 MT20 44 Vert(TL) n/a - n/a 999 30 Horz(TL) 0.00 3 n/a n/a Weight: 20 lb

TOP CHORD

BOT CHORD

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

REACTIONS. (lb/size) 1=232/6-8-8, 3=232/6-8-8 Max Horz 1=-48(LC 8) Max Uplift 1=-25(LC 12), 3=-25(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) V(IRC2012)=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) * 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.



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

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





2.5x4 🥢

2.5x4 📎

Structural wood sheathing directly applied or 3-9-4 oc purlins.

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

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Plate Offse	ets (X,Y)	[2:0-2-8,Edge]										
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	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2012/T	PI2007	Matri	x-P						Weight: 11 lb	FT = 20%
						BRACING						

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (lb/size) 1=112/3-8-8, 3=112/3-8-8 Max Horz 1=-23(LC 8) Max Uplift 1=-12(LC 12), 3=-12(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) V(IRC2012)=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) * 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.





