

Trenco 818 Soundside Rd Edenton, NC 27932

Re: PC89 MATTAMYHOMES/SHENANDOAH; LOT 89 PROVIDENCE CREEK

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Builders FirstSource-Apex,NC.

Pages or sheets covered by this seal: I49772197 thru I49772221

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

North Carolina COA: C-0844



Johnson, Andrew

January 20,2022

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.



	37-9-0								
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 NO Code IRC2015/TPI2014	CSI. TC 0.13 BC 0.06 WB 0.15 Matrix-R	DEFL. in Vert(LL) -0.00 Vert(CT) -0.00 Horz(CT) 0.00	n (loc) l/defl L/d) 1 n/r 120) 1 n/r 120) 25 n/a n/a	PLATES GRIP MT20 244/190 Weight: 245 lb FT = 20	%			
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF OTHERS 2x4 SF	P No.2 P No.2 P No.3 P No.3		BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathing di except end verticals. Rigid ceiling directly applied 1 Row at midpt	rectly applied or 6-0-0 oc purlins, or 6-0-0 oc bracing. 13-36				

REACTIONS. All bearings 37-9-0.

(lb) - Max Horz 47=98(LC 12)

ax Grav All reactions 250 lb or less at joint(s) 47, 25, 36, 37, 38, 40, 41, 42, 43, 44, 45, 46, 35, 34, 32, 31, 30, 29, 28, 27, 26

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

TOP CHORD 12-13=-92/266, 13-14=-92/258

NOTES-

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

2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-0 to 3-9-10, Exterior(2) 3-9-10 to 19-0-0, Corner(3) 19-0-0 to 23-9-10, Exterior(2) 23-9-10 to 37-7-4 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) 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.

6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

7) Gable studs spaced at 2-0-0 oc.

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

- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 47, 25, 37, 38,
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 47, 25, 37, 38, 40, 41, 42, 43, 44, 45, 35, 34, 32, 31, 30, 29, 28, 27 except (jt=lb) 46=117, 26=124.



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	13-0-10		24-11-6		37-9-0	
I	13-0-10	I	11-10-12	1	12-9-10	I
Plate Offsets (X,Y)	[11:0-5-0,0-4-8], [12:0-5-0,0-4-8]					
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 0.79 BC 0.85 WB 0.34 Matrix-MS	DEFL. in (loc) Vert(LL) -0.38 11-12 Vert(CT) -0.59 11-12 Horz(CT) 0.10 10 Wind(LL) 0.09 11-12	l/defl L/d >999 360 >770 240 n/a n/a >999 240	PLATES GRIP MT20 244/19 Weight: 238 lb FT =	20%

LUMBER-

 TOP CHORD
 2x6 SP No.2

 BOT CHORD
 2x6 SP No.2

 WEBS
 2x4 SP No.3

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 2-7-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

 SLIDER
 Left 2x4 SP No.3 1-11-12, Right 2x4 SP No.3 1-11-12

REACTIONS. (size) 2=0-3-8, 10=Mechanical Max Horz 2=110(LC 12)

Max Grav 2=1559(LC 1), 10=1509(LC 1)

- FORCES. (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown.
- TOP CHORD 2-4=-2754/169, 4-6=-2436/168, 6-8=-2401/175, 8-10=-2703/172

BOT CHORD 2-12=-97/2454, 11-12=0/1701, 10-11=-84/2402

WEBS 4-12=-537/181, 6-12=-2/832, 6-11=-7/786, 8-11=-508/185

NOTES-

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

2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-9-10 to 3-11-15, Interior(1) 3-11-15 to 19-0-0, Exterior(2) 19-0-0 to 25-9-7, Interior(1) 25-9-7 to 37-9-0 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) 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.









WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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Plate Olisets (X, Y)	[11:0-5-0,0-4-8], [12:0-5-0,0-2-0], [14:0-	5-0,0-4-8], [18:0-5-0,0-2-0	J				
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCode IRC2015/TPI2014	CSI. TC 0.79 BC 0.96 WB 0.68 Matrix-MS	DEFL. in Vert(LL) -0.40 Vert(CT) -0.57 Horz(CT) 0.09 Wind(LL) 0.08	(loc) l/defl 12-13 >999 12-13 >792 10 n/a 12-13 >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 256 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD 2x6 SP 7-10: 2 BOT CHORD 2x6 SP 10-11: WEBS 2x4 SP SLIDER Left 2x REACTIONS. (sizt Max H	P No.2 *Except* x6 SP DSS P DSS *Except* 2x6 SP No.2 P No.3 4 SP No.3 1-11-12, Right 2x4 SP No.3 e) 2=0-3-8, 10=Mechanical lorz 2=110(1 C 12)	I-11-12	BRACING- TOP CHORD BOT CHORD WEBS	Structural wood : Rigid ceiling dire 1 Row at midpt	sheathing direct tty applied or 1 15-1	lly applied or 3-1-9 c 0-0-0 oc bracing. 6	oc purlins.
Max G FORCES. (Ib) - Max. TOP CHORD 2-4=- BOT CHORD 2-14= WEBS 6-16= 4-14=	irav 2=1559(LC 1), 10=1509(LC 1) Comp./Max. Ten All forces 250 (lb) of -2810/170, 4-6=-2549/168, 6-8=-2511/13 99/2513, 13-14=0/1923, 12-13=0/1923 7/958, 11-16=-14/778, 8-11=-515/187, 541/180	eless except when shown 76, 8-10=-2757/174 8, 11-12=0/1923, 10-11=- 14-15=-10/837, 6-15=-2/	38/2456 1016,				
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-10; V gable end zone and 37-9-0 zone; cantile' reactions shown; Lu 3) This truss has been 4) * This truss has been will fit between the b 5) Refer to girder(s) for 6) N/A 7) In the LOAD CASE(LOAD CASE(S) Stand 1) Dead + Roof Live (b	e loads have been considered for this de /ult=115mph Vasd=91mph; TCDL=6.0ps C-C Exterior(2) -0-9-10 to 3-11-15, Inte ver left and right exposed ; end vertical I mber DOL=1.60 plate grip DOL=1.60 designed for a 10.0 psf bottom chord liv n designed for a live load of 20.0psf on to vottom chord and any other members. r truss to truss connections. S) section, loads applied to the face of t dard alanced): Lumber Increase=1.15, Plate	isign. sf; BCDL=6.0psf; h=32ft; (rior(1) 3-11-15 to 19-0-0, eft and right exposed;C-C e load nonconcurrent with the bottom chord in all are he truss are noted as from Increase=1.15	Cat. II; Exp B; Enclosed; N Exterior(2) 19-0-0 to 25-9 ; for members and forces n any other live loads. eas where a rectangle 3-6 t (F) or back (B).	//WFRS (envelop -7, Interior(1) 25- & MWFRS for -0 tall by 2-0-0 wi	e) I-7 to	SE/	AROLINE Right AL 44
Uniform Loads (plf) Vert: 1-6=-6 2) Dead + 0.75 Roof Li Uniform Loads (plf) Vert: 1-6=-5	50, 6-10=-60, 19-23=-20 ive (balanced) + 0.75 Uninhab. Attic Sto 50, 6-10=-50, 19-23=-20, 15-16=-30(F)	rage: Lumber Increase=1	.15, Plate Increase=1.15			THOREW Januar	NEFER ON INTERNET

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



January 20,2022

Job	Truss	Truss Type	Qty	Ply	MATTAMYHOMES/SHENANDOAH; LOT 89 PROVIDENCE CREEK
					149772200
PC89	A03	COMMON	2	1	
					Job Reference (optional)
Builders FirstSource (Apex,	NC), Apex, NC - 27523,		8.	430 s Aug	16 2021 MiTek Industries, Inc. Tue Jan 18 17:46:59 2022 Page 2

Builders FirstSource (Apex, NC), Apex, NC - 27523

ID:3TtRaskrdZOKr4jVkPWDepyhbii-WdyTvcAilzPsxYi8fYuseu8E2RVMLwpUoZa9XSzu2UA

LOAD CASE(S) Standard

- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
- Uniform Loads (plf) Vert: 1-6=-20, 6-10=-20, 19-23=-40, 15-16=-40(F)

18) Dead + Uninhabitable Attic Storage: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90

Uniform Loads (plf) Vert: 1-6=-20, 6-10=-20, 19-23=-20, 15-16=-40(F)

19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

- Vert: 1-2=-37, 2-6=-40, 6-10=-41, 19-23=-20, 15-16=-30(F) Horz: 1-2=-13, 2-6=-10, 6-10=9
- 20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

- Vert: 1-2=-38, 2-6=-41, 6-10=-40, 19-23=-20, 15-16=-30(F) Horz: 1-2=-12, 2-6=-9, 6-10=10
- 21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-30, 2-4=-34, 4-6=-41, 6-10=-46, 19-23=-20, 15-16=-30(F)

- Horz: 1-2=-20, 2-4=-16, 4-6=-9, 6-10=4
- 22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-43, 2-6=-46, 6-30=-41, 10-30=-34, 19-23=-20, 15-16=-30(F)

- Horz: 1-2=-7, 2-6=-4, 6-30=9, 10-30=16
- 25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-6=-50, 6-10=-20, 19-23=-20, 15-16=-30(F)

26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-6=-20, 6-10=-50, 19-23=-20, 15-16=-30(F)





WEBS

LUMBER-

LOWIDER	
TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP DSS
WEBS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 1-11-12, Right 2x4 SP No.3 1-11-12

BRACING-TOP CHORD Structural wood sheathing directly applied or 3-1-4 oc purlins. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. 16-17 1 Row at midpt

REACTIONS. (size) 2=0-3-8, 10=0-3-8 Max Horz 2=-105(LC 17)

Max Grav 2=1568(LC 1), 10=1568(LC 1)

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

TOP CHORD 2-4=-2830/168, 4-6=-2570/169, 6-8=-2570/169, 8-10=-2830/168

- BOT CHORD 2-15=-79/2532, 14-15=0/1949, 13-14=0/1949, 12-13=0/1949, 10-12=-79/2532
 - 6-17=-2/1009, 12-17=-10/829, 8-12=-542/180, 15-16=-10/829, 6-16=-2/1009, 4-15=-542/180

NOTES-

WFBS

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

2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-9-10 to 3-11-15, Interior(1) 3-11-15 to 19-0-0, Exterior(2) 19-0-0 to 25-9-7, Interior(1) 25-9-7 to 38-9-10 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.

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

LOAD CASE(S) Standard

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

- Uniform Loads (plf)
- Vert: 1-6=-60, 6-11=-60, 20-24=-20
- 2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-6=-50, 6-11=-50, 20-24=-20, 16-17=-30(F)

3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf)

Vert: 1-6=-20, 6-11=-20, 20-24=-40, 16-17=-40(F)

Continued on page 2





⁵⁾ N/A

	Job	Truss	Truss Type	Qty	Ply	MATTAMYHOMES/SHENANDOAH; LOT 89 PROVIDENCE CREEK
						149772201
	PC89	A04	COMMON	5	1	
ļ		10) 1 10 07500			100 1	Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jan 18 17:47:00 2022 Page 2 ID:3TtRaskrdZOKr4jVkPWDepyhbii-_pWr6yAKWHXjZiHLDFP5A6gPjry_4NMd1DJi3vzu2U9

LOAD CASE(S) Standard

- 18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
 - Uniform Loads (plf) Vert: 1-6=-20, 6-11=-20, 20-24=-20, 16-17=-40(F)

19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-37, 2-6=-40, 6-10=-41, 10-11=-38, 20-24=-20, 16-17=-30(F)

Horz: 1-2=-13, 2-6=-10, 6-10=9, 10-11=12

20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-38, 2-6=-41, 6-10=-40, 10-11=-37, 20-24=-20, 16-17=-30(F)

Horz: 1-2=-12, 2-6=-9, 6-10=10, 10-11=13

21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-30, 2-4=-34, 4-6=-41, 6-10=-46, 10-11=-43, 20-24=-20, 16-17=-30(F)

Horz: 1-2=-20, 2-4=-16, 4-6=-9, 6-10=4, 10-11=7

22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-43, 2-6=-46, 6-8=-41, 8-10=-34, 10-11=-30, 20-24=-20, 16-17=-30(F)

Horz: 1-2=-7, 2-6=-4, 6-8=9, 8-10=16, 10-11=20 25) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-6=-50, 6-11=-20, 20-24=-20, 16-17=-30(F)

26) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-6=-20, 6-11=-50, 20-24=-20, 16-17=-30(F)





Job	Truss	Truss Type	Qty	Ply	MATTAMYHOMES/SHENANDOAH; LOT 89 PROVIDENCE CREEK			
					149772202			
PC89	A04T	COMMON	1	1				
					Job Reference (optional)			
Builders FirstSource (Apex, I	NC), Apex, NC - 27523,		8.	430 s Aug	16 2021 MiTek Industries, Inc. Tue Jan 18 17:47:01 2022 Page 2			
	ID:3TtRaskrdZOKr4iVkPWDepvhbii-S04EKHBvHafaArsXnzxKiJDXLFBwppvnGt3FbLzu2U8							

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-60, 2-7=-60, 7-12=-60, 22-23=-20, 18-28=-20, 19-21=-20

- Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)
- Vert: 1-2=-50, 2-7=-50, 7-12=-50, 22-23=-20, 18-28=-20, 19-21=-20, 24-25=-30(F)
- Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf)
- Vert: 1-2=-20, 2-7=-20, 7-12=-20, 22-23=-40, 18-28=-40, 19-21=-40, 24-25=-40(F)
- 18) Dead + Uninhabitable Attic Storage: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
- Uniform Loads (plf) Vert: 1-2=-20, 2-7=-20, 7-12=-20, 22-23=-20, 18-28=-20, 19-21=-20, 24-25=-40(F)
- 19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (olf)
 - Vert: 1-2=-37, 2-7=-40, 7-11=-41, 11-12=-38, 22-23=-20, 18-28=-20, 19-21=-20, 24-25=-30(F)
 - Horz: 2-23=16, 1-2=-13, 2-7=-10, 7-11=9, 11-12=12
- 20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-38, 2-7=-41, 7-11=-40, 11-12=-37, 22-23=-20, 18-28=-20, 19-21=-20, 24-25=-30(F)

Horz: 2-23=-6, 1-2=-12, 2-7=-9, 7-11=10, 11-12=13

21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-30, 2-33=-34, 7-33=-41, 7-11=-46, 11-12=-43, 22-23=-20, 18-28=-20, 19-21=-20, 24-25=-30(F)

Horz: 2-23=15, 1-2=-20, 2-33=-16, 7-33=-9, 7-11=4, 11-12=7

22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-43, 2-7=-46, 7-36=-41, 11-36=-34, 11-12=-30, 22-23=-20, 18-28=-20, 19-21=-20, 24-25=-30(F) Horz: 2-23=-2, 1-2=-7, 2-7=-4, 7-36=9, 11-36=16, 11-12=20

- 25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)
 - Vert: 1-2=-50, 2-7=-50, 7-12=-20, 22-23=-20, 18-28=-20, 19-21=-20, 24-25=-30(F)
- 26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-20, 2-7=-20, 7-12=-50, 22-23=-20, 18-28=-20, 19-21=-20, 24-25=-30(F)





Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11

Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-0 to 3-9-10, Exterior(2) 3-9-10 to 6-4-0, Corner(3) 6-4-0 to 11-1-10, Exterior(2) 11-1-10 to 13-8-0 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 2x4 MT20 unless otherwise indicated.

5) Gable requires continuous bottom chord bearing.

6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

7) Gable studs spaced at 2-0-0 oc.

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

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

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.



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gable end zone and C-C Exterior(2) -10-0 to 3-9-10, Interior(1) 3-9-10 to 6-4-0, Exterior(2) 6-4-0 to 13-1-7, Interior(1) 13-1-7 to 13-8-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

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



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Vert: 1-2=-60, 2-3=-60, 4-7=-775(F=-755)







REACTIONS. All bearings 12-0-0.

(lb) - Max Horz 16=-19(LC 13)

Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11

Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-0 to 4-0-0, Exterior(2) 4-0-0 to 6-0-0, Corner(3) 6-0-0 to 10-9-10, Exterior(2) 10-9-10 to 13-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) All plates are 2x4 MT20 unless otherwise indicated.

5) Gable requires continuous bottom chord bearing.

6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

7) Gable studs spaced at 2-0-0 oc.

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

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

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses sand truss system. See **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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Horz(CT)

Wind(LL)

BRACING-TOP CHORD

BOT CHORD

0.00

0.01

2

4-11

n/a

>999

except end verticals.

n/a

240

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

Structural wood sheathing directly applied or 4-9-0 oc purlins,

Weight: 20 lb

FT = 20%

BCDL	10.0

LUMBER-

BCLL

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

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

Max Horz 2=71(LC 11) Max Uplift 2=-28(LC 12), 4=-18(LC 12)

Max Grav 2=273(LC 1), 4=155(LC 1)

Rep Stress Incr

Code IRC2015/TPI2014

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

NOTES-

1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 3-9-10, Interior(1) 3-9-10 to 4-7-4 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

0.00

Matrix-MP

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 studs spaced at 2-0-0 oc.

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

YES

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

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





Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

0.00

0.01

2

4-9

n/a

>999

except end verticals.

n/a

240

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

Structural wood sheathing directly applied or 4-9-0 oc purlins,

Weight: 19 lb

FT = 20%

NOTES-

BCLL

BCDL

LUMBER-

WEBS

TOP CHORD

BOT CHORD

REACTIONS.

0.0

2x4 SP No.2

2x4 SP No.2

2x4 SP No.3

(size)

Max Horz 2=71(LC 11)

10.0

Rep Stress Incr

2=0-3-0, 4=Mechanical

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

Max Uplift 2=-28(LC 12), 4=-18(LC 12) Max Grav 2=273(LC 1), 4=155(LC 1)

Code IRC2015/TPI2014

 Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 3-9-10, Interior(1) 3-9-10 to 4-7-4 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

WB

Matrix-MP

0.00

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

YES

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

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

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







	0-4-8		4-4-8		
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCode IRC2015/TPI2014	CSI. TC 0.34 BC 0.60 WB 0.00 Matrix-MP	DEFL. in (lt Vert(LL) -0.04 4 Vert(CT) -0.08 4 Horz(CT) 0.00 4 Wind(LL) 0.03 4	loc) I/defl L/d 4-9 >999 360 4-9 >674 240 2 n/a n/a 4-9 >999 240	PLATES GRIP MT20 244/190 Weight: 19 lb FT = 20%

LUMBER-

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3

BRACING-TOP CHORD

Structural wood sheathing directly applied or 4-9-0 oc purlins, except end verticals.
 Rigid ceiling directly applied or 10-0-0 oc bracing.

BOT CHORD Rigid ceiling directly applied or 10-0-0

REACTIONS. (size) 2=0-3-0, 4=Mechanical Max Horz 2=95(LC 7) Max Uplift 2=-64(LC 8), 4=-33(LC 8)

Max Grav 2=459(LC 3), 4=35(LC 3)Max Grav 2=459(LC 1), 4=311(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 6) Girder carries hip end with 0-0-0 right side setback, 0-0-0 left side setback, and 6-0-0 end setback.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 4-5=-124(F=-104), 1-2=-60, 2-3=-30(F=30)







			0-4-8	1-7-8	
LOADING	i (psf) 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.09	DEFL. in (loc) I/defl L/d PLATES GRIP Vert(LL) -0.00 5 >999 360 MT20 244/190	
TCDL BCLL	10.0 0.0 *	Lumber DOL 1.15 Rep Stress Incr NO	BC 0.06 WB 0.00	Vert(CT) -0.00 5 >999 240 Horz(CT) -0.00 3 n/a n/a Widd(L) 0.00 5 >999 240	
BCDL	10.0	Code IRC2013/1712014	IVIALITX-IVIF		

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

Max Horz 2=39(LC 12)

Max Uplift 3=-13(LC 12), 2=-27(LC 8)

Max Grav 3=27(LC 1), 4=24(LC 3), 2=196(LC 1)

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

NOTES-

- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 6) Girder carries hip end with 0-0-0 right side setback, 0-0-0 left side setback, and 2-6-0 end setback.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-2=-60, 2-3=-63(F=-3), 4-5=-21(F=-1)



Structural wood sheathing directly applied or 2-0-0 oc purlins.

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





LOADING TCLL	(psf) 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.08	DEFL. Vert(LL) -(in 0.00	(loc) 5	l/defl >999	L/d 360	PLATES MT20	GRIP 244/190
TCDL BCLL	10.0 0.0 *	Lumber DOL 1.15 Rep Stress Incr YES	BC 0.05 WB 0.00	Vert(CT) -(Horz(CT) -(0.00	5 3	>999 n/a	240 n/a	Waisht Olk	FT 20%
BCDL	10.0	Code IRC2015/1PI2014	Matrix-MP	vvind(LL) (0.00	5	>999	240	vveight: 8 ib	FI = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

Max Horz 2=36(LC 12)

Max Uplift 3=-11(LC 12), 2=-26(LC 8)

Max Grav 3=25(LC 1), 4=23(LC 3), 2=191(LC 1)

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

NOTES-

1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; 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

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

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

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

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



Structural wood sheathing directly applied or 2-0-0 oc purlins.

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





	0-4-8		2-0-0					5-8-8			
Plate Offsets (X,Y)	[3:0-3-0,0-2-4]		1-7-0					5-0-0			
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	0.45	Vert(LL)	-0.01	5-10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.02	5-10	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI	2014	Matrix	-MR	Wind(LL)	-0.00	5-10	>999	240	Weight: 20 lb	FT = 20%
LUMBER-					BRACING-						

TOP CHORD

BOT CHORD

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

REACTIONS. (size) 5=Mechanical, 2=0-3-0

Max Horz 2=37(LC 5) Max Uplift 5=-18(LC 5), 2=-34(LC 8)

Max Grav 5=207(LC 1), 2=321(LC 1)

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

NOTES-

1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope)

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

2) Provide adequate drainage to prevent water ponding.

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

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

5) 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) 5, 2.

7) Girder carries hip end with 0-0-0 right side setback, 0-0-0 left side setback, and 2-6-0 end setback.

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

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

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-60, 2-3=-63(F=-3), 3-4=-63(F=-3), 5-6=-21(F=-1)



Structural wood sheathing directly applied or 5-8-8 oc purlins,

except end verticals, and 2-0-0 oc purlins: 3-4.

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

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		' 0-4	-8 '		3-7-8		1	1-8-8	1	
Plate Offs	sets (X,Y)	[3:0-3-0,0-2-4]								_
									_	_
LOADING	G (psf)	SPACING- 2-	0-0 CSI		DEFL.	in (loc)	l/defl L/	d PLAT	'ES GRIP	
TCLL	20.0	Plate Grip DOL 1	.15 TC	0.41	Vert(LL)	-0.01 5-10	>999 36	0 MT20	244/190	
TCDL	10.0	Lumber DOL 1	.15 BC	0.20	Vert(CT)	-0.03 5-10	>999 24	0		
BCLL	0.0 *	Rep Stress Incr Y	'ES WB	0.00	Horz(CT)	0.00 5	n/a n/	a		
BCDL	10.0	Code IRC2015/TPI20	14 Mat	rix-MR	Wind(LL)	0.01 5-10	>999 24	0 Weigh	nt: 21 lb FT = 20%	

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3

REACTIONS. (size) 5=Mechanical, 2=0-3-0

Max Horz 2=63(LC 11)

Max Uplift 5=-13(LC 9), 2=-32(LC 12)

Max Grav 5=196(LC 1), 2=309(LC 1)

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=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; 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) Provide adequate drainage to prevent water ponding.

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

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

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

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

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



Structural wood sheathing directly applied or 5-8-8 oc purlins,

except end verticals, and 2-0-0 oc purlins: 3-4.

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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and 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 Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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	<u> 0-4-8</u> 0-4-8	33+	5-5-0 5-0-8				
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 0.34 BC 0.25 WB 0.00 Matrix-MP	DEFL. in Vert(LL) -0.02 Vert(CT) -0.05 Horz(CT) 0.00 Wind(LL) 0.02	(loc) 4-9 4-9 2 4-9	l/defl L/d >999 360 >999 240 n/a n/a >999 240	PLATES MT20 Weight: 22 lb	GRIP 244/190 FT = 20%

LUMBER-

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3

BRACING-TOP CHORD

 TOP CHORD
 Structural wood sheathing directly applied or 5-5-0 oc purlins, except end verticals.

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

REACTIONS. (size) 2=0-3-0, 4=Mechanical Max Horz 2=80(LC 11) Max Uplift 2=-29(LC 12), 4=-22(LC 12) Max Grav 2=298(LC 1), 4=184(LC 1)

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

NOTES-

- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 5-3-4 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
- 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 studs spaced at 2-0-0 oc.
- 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) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.







						12-0-0						
						12-0-0						1
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	тс	0.17	Vert(LL)	0.00	7	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	0.01	7	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TF	PI2014	Matri	x-S						Weight: 48 lb	FT = 20%
LUMBER-						BRACING-						

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.3

REACTIONS. All bearings 12-0-0. (lb) -

Max Horz 2=-39(LC 13) 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 except 10=321(LC 1), 8=321(LC 1)

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=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-0-0, Exterior(2) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 13-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) 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 requires continuous bottom chord bearing.

5) Gable studs spaced at 2-0-0 oc.

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

7) * 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.

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



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

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





	6-0-0				
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 0.44 BC 0.46 WB 0.11 Matrix-MS	DEFL. in Vert(LL) -0.05 Vert(CT) -0.09 Horz(CT) 0.01 Wind(LL) 0.04	(loc) l/defi L/d 6-12 >999 360 6-12 >999 240 4 n/a n/a 6-9 >999 240	PLATES GRIP MT20 244/190 Weight: 44 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 4=0-3-8 Max Horz 2=-39(LC 13) Max Uplift 2=-32(LC 12), 4=-32(LC 13) Max Grav 2=540(LC 1), 4=540(LC 1)

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

TOP CHORD 2-3=-763/75, 3-4=-763/76

BOT CHORD 2-6=0/652, 4-6=0/652 WEBS 3-6=0/280

NOTES-

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

2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-0-0, Exterior(2) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 13-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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, 4.



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

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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and 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 MSIVTP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

818 Soundside Road Edenton, NC 27932



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

2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; 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.







2x4 ⋍

2x4 🗢

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

			<u>4-0-0</u> 4-0-0	
Plate Offsets (X,Y)	[2:0-3-0,Edge]			
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. TC 0.04 BC 0.13 WB 0.00 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: 10 lb FT = 20%
LUMBER- TOP CHORD 2x4 SP	No.3		BRACING- TOP CHORD Structural wood sheathing d	irectly applied or 4-0-0 oc purlins.

BOT CHORD

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

REACTIONS. 1=4-0-0, 3=4-0-0 (size) Max Horz 1=-7(LC 13) Max Uplift 1=-4(LC 12), 3=-4(LC 13) Max Grav 1=102(LC 1), 3=102(LC 1)

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=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; 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.

* 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.







Max Uplift 1=-14(LC 12), 3=-17(LC 13) Max Grav 1=129(LC 23), 3=129(LC 24), 4=324(LC 1)

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=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; 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.







2x4 /

 $2x4 \ge$

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

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

H			<u>4-8-0</u> 4-8-0				
Plate Offsets (X,Y)	[2:0-3-0,Edge]						
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0 Plate Grip DOL 1. Lumber DOL 1. Rep Stress Incr YI Code IRC2015/TPI201	0-0 CSI. .15 TC .15 BC TES WB 14 Matrix	0.07 DEFL. 0.21 Vert(LL) 0.00 Horz(CT) x-P	in (loc) n/a - n/a - 0.00 3	l/defl n/a S n/a S n/a	L/d PLATES 999 MT20 999 n/a Weight: 1	GRIP 244/190 2 lb FT = 20%
LUMBER-		·	BRACING	j-			

TOP CHORD

BOT CHORD

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

REACTIONS. 1=4-8-0, 3=4-8-0 (size) Max Horz 1=-9(LC 13) Max Uplift 1=-5(LC 12), 3=-5(LC 13) Max Grav 1=128(LC 1), 3=128(LC 1)

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=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; 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.

* 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.





