

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 28170-28170A Huntington A 1546

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: I47525137 thru I47525169

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

North Carolina COA: C-0844



August 19,2021

## Fox, Steve

**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.



August 19,2021





August 19,2021





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



2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psr; BCDL=6.0psr; 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

Provide adequate drainage to prevent water ponding.

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

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

6) 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) 1, 7.

 This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



August 19,2021





Max Horz 1=329(LC 11) Max Uplift 1=-21(LC 12), 8=-16(LC 12) Max Grav 1=708(LC 2), 8=935(LC 20)

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

TOP CHORD 1-3=-832/128, 3-4=-748/211, 4-5=-352/202

BOT CHORD 1-14=-322/704. 9-14=-171/438. 8-9=-171/438

```
WEBS 3-14=-411/278, 13-14=-119/627, 4-13=-83/788, 5-10=-884/306, 8-10=-1042/267
```

## NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph Vasd=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) Provide adequate drainage to prevent water ponding.

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

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

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

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8.
 This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



August 19,2021

ENGINEERING BY ERENCO AMITEK Affiliate 818 Soundside Road Edenton, NC 27932



Plate Offsets (X,Y)	[6:0-5-8,0-3-0], [8:0-2-5,Edge]					
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0         *           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.78 BC 0.99 WB 0.44 Matrix-MS	<b>DEFL.</b> ir Vert(LL) -0.38 Vert(CT) -0.60 Horz(CT) 0.01	n (loc) I/defl L/d 13 >517 240 13-15 >324 180 10 n/a n/a	<b>PLATES</b> MT20 Weight: 142 lb	<b>GRIP</b> 197/144 FT = 20%
LUMBER- TOP CHORD 2x6 SI BOT CHORD 2x4 SI	P No.2 P No.2 or 2x4 SPF No.2		BRACING- TOP CHORD	Structural wood sheathing dir except end verticals, and 2-0-	ectly applied or 6-0-0 oc 0 oc purlins (6-0-0 max.	purlins, ): 6-8.

 TOP CHORD
 2x6 SP No.2
 TOP CHORD
 Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-8.

 WEBS
 2x4 SP No.3 cor 2x4 SP No.3 co

Max Horz 2=351(LC 11) Max Uplift 2=-54(LC 12), 10=-14(LC 12) Max Grav 2=792(LC 20), 10=923(LC 20)

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

TOP CHORD 2-4=-821/120, 4-6=-728/201, 6-7=-352/199

BOT CHORD 2-16=-316/683, 11-16=-170/434, 10-11=-170/434

WEBS 4-16=-385/270, 15-16=-112/598, 6-15=-76/759, 7-12=-850/295, 10-12=-1006/256

### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph Vasd=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) Provide adequate drainage to prevent water ponding.

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

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

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

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

B) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



August 19,2021





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) 14, 15, 16, 17, 18, 19, 20 except (jt=lb) 2=142, 21=136.

10) Non Standard bearing condition. Review required.

11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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



August 19,2021





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **MSIVTP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601 August 19,2021





6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 19,2021

A MiTek Affilia 818 Soundside Road Edenton, NC 27932



### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 24, 26, 27, 28, 29, 22, 21, 20, 19, 18.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 19,2021





Plate Offsets (X,Y)	[8:0-4-8,0-1-8], [9:0-4-0,0-4-8], [11:0-4-8	3,0-1-8]			
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING-2-0-0Plate Grip DOL1.25Lumber DOL1.25Rep Stress IncrNOCodeIRC2015/TPI2014	<b>CSI.</b> TC 0.48 BC 0.55 WB 0.80 Matrix-MS	DEFL.         in           Vert(LL)         -0.11           Vert(CT)         -0.22           Horz(CT)         0.06	(loc) I/defl L/d 9-11 >999 240 9-11 >999 180 7 n/a n/a	PLATES         GRIP           MT20         197/144           MT18HS         244/190           Weight: 370 lb         FT = 20%
LUMBER- TOP CHORD 2x6 SP BOT CHORD 2x6 SP WEBS 2x4 SP 4-9: 2x	No.2 DSS No.3 *Except* 4 SP No.2 or 2x4 SPF No.2		BRACING- TOP CHORD BOT CHORD	Structural wood sheathin Rigid ceiling directly appl	g directly applied or 4-9-15 oc purlins. ied or 10-0-0 oc bracing.
REACTIONS. (size Max H Max U Max G	e) 1=0-3-8, 7=0-3-8 orz 1=-237(LC 25) plift 1=-526(LC 8), 7=-389(LC 9) rav 1=6423(LC 1), 7=6019(LC 1)				
FORCES.         (lb) - Max.           TOP CHORD         1-2=-           BOT CHORD         1-11=           WEBS         4-9=-	Comp./Max. Ten All forces 250 (lb) or 8501/688, 2-4=-5612/511, 4-6=-5608/51 -604/6790, 9-11=-604/6790, 8-9=-348/6 463/6285, 6-9=-2348/321, 6-8=-51/2420	less except when shown 10, 6-7=-7813/539 5221, 7-8=-348/6221 0, 2-9=-3076/478, 2-11=-2	1. 233/3226		
<ul> <li>NOTES-</li> <li>1) 2-ply truss to be con Top chords connected Bottom chords connected as</li> <li>2) All loads are conside ply connections have</li> <li>3) Unbalanced roof live</li> <li>4) Wind: ASCE 7-10; V gable end zone; can</li> <li>5) All plates are MT20</li> <li>6) This truss has been</li> <li>7) * This truss has been</li> <li>7) * This truss has been</li> <li>8) Provide mechanical 1=526, 7=389.</li> <li>9) This truss is designer referenced standard</li> </ul>	nected together with 10d (0.120"x3") na ed as follows: 2x6 - 2 rows staggered at ected as follows: 2x6 - 2 rows staggered follows: 2x4 - 1 row at 0-9-0 oc. ered equally applied to all plies, except if a been provided to distribute only loads to loads have been considered for this de ult=130mph Vasd=103mph; TCDL=6.0p tillever left and right exposed; end vertic plates unless otherwise indicated. designed for a 10.0 psf bottom chord liv n designed for a live load of 20.0psf on t ottom chord and any other members. connection (by others) of truss to bearin ed in accordance with the 2015 Internatio ANSI/TPI 1.	ils as follows: 0-9-0 oc. 1 at 0-7-0 oc. i noted as front (F) or bac noted as (F) or (B), unles sign. osf; BCDL=6.0psf; h=30ft; al left and right exposed; e load nonconcurrent with he bottom chord in all are ug plate capable of withsta	k (B) face in the LOAD C s otherwise indicated. ; Cat. II; Exp B; Enclosed Lumber DOL=1.60 plate h any other live loads. eas where a rectangle 3-6 anding 100 lb uplift at joir ctions R502.11.1 and R86	ASE(S) section. Ply to ; MWFRS (envelope) grip DOL=1.60 6-0 tall by 2-0-0 wide it(s) except (jt=lb) 02.10.2 and	SEAL 18603

## 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

August 19,2021



Job	Truss	Truss Type	Qty	Ply	Huntington A 1546	
						I47525147
28170-28170A	BGR	Common Girder	1	2		
				<b>Z</b>	Job Reference (optional)	
84 Components (Dunn),	Dunn, NC - 28334,		8	.510 s Jun	18 2021 MiTek Industries, Inc. Thu Aug 19 07:05:18 2021	Page 2
		ID:HQzvBvHI	D22FQ9e	QE7soz6z	cfgh-maVYR7N5TMHmgp7twtg35JwHMgJOel DHQ2gyQ	/mMK?

## NOTES-

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 941 lb down and 95 lb up at 1-6-12, 941 lb down and 95 lb up at 3-6-12, 941 lb down and 95 lb up at 5-6-12, 941 lb down and 95 lb up at 9-6-12, 873 lb down and 47 lb up at 11-6-12, 873 lb down and 47 lb up at 11-6-12, 873 lb down and 47 lb up at 11-6-12, 873 lb down and 47 lb up at 13-6-12, 688 lb down and 41 lb up at 14-9-12, 688 lb down and 41 lb up at 16-9-12, 688 lb down and 41 lb up at 20-9-12, and 688 lb down and 41 lb up at 22-9-12, and 691 lb down and 38 lb up at 24-9-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

## LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 12-15=-20

Concentrated Loads (lb)

Vert: 10=-938(F) 8=-675(F) 17=-678(F) 18=-938(F) 19=-938(F) 20=-938(F) 21=-938(F) 22=-830(F) 23=-830(F) 24=-675(F) 25=-675(F) 26=-675(F) 27=-675(F) 26=-675(F) 26=-67





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601 August 19,2021







August 19,2021

ENE



August 19,2021



Job	Truss	Truss Type	Qty	Ply	Huntington A 1546
00470 004704		MONODITOLI			14752515
28170-28170A	CM	MONOPTICH	2	1	Job Reference (optional)
84 Components (Dunn),	Dunn, NC - 28334,			8.510 s Jun	18 2021 MiTek Industries, Inc. Thu Aug 19 07:05:23 2021 Page 1
			ID:HQzvBvHPD22	2FQ9eQE7	soz6zcfgh-6YIRUrREIvv2wa?qjRQEnNd8Gr0EJhJyQimbceymMJw
		+-1-6-0	7-2-12		
		1-8-0	7-2-12		
					Scale = 1:50
			:	2x4    3	
		Ţ		1	
				/ 8	
			/		
		11 75			
		11.75	0 12		
		~			
		-0-6		Ø	
		0.			
		4.6.4			
		4x0 //			
		2 //			
		44 L			
		5		×	
		2x4		4x4 =	=
			- 0.40		
			7-2-12		l
Plate Offsets (X,Y) [2	:0-2-15,0-2-0]				
	0040000		555		
LUADING (pst)	SPACING- 2-0	-U CSI.	DEFL.	IN (IOC)	I/defi         L/d         PLATES         GRIP           >500         240         MT20         107/444
TCDI 10.0	Lumber DOL 1.	20 IC 0.47	Vert(LL) -0.1	4 4-5 8 4-5	>399 240 WIZU 197/144
BCLL 0.0 *	Rep Stress Incr YE	S WB 0.28	Horz(CT) -0.0	0 4	n/a n/a
BCDL 10.0	Code IRC2015/TPI201	4 Matrix-MP			Weight: 64 lb $FT = 20\%$

BRACING-TOP CHORD

BOT CHORD

WEBS

## LUMBER-

TOP CHORD	2x6 SP No.2
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2
WEBS	2x4 SP No.3

REACTIONS. (size) 4=0-3-8, 5=0-3-8 Max Horz 5=290(LC 12) Max Uplift 4=-241(LC 12) Max Grav 4=326(LC 19), 5=379(LC 1)

FORCES.	(lb) - Max	. Comp./Max	Ten	All forces	250 (lb)	or less	except v	when	shown.
	D 21-	207/220 24	- 210/	0					

TOP CHORD 3-4=-297/228, 2-5=-310/0 BOT CHORD 4-5=-364/291

WEBS 2-4=-298/373

NOTES-

1) Wind: ASCE 7-10; Vult=130mph Vasd=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 exposed ; end vertical left 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=241.

5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

3-4

Rigid ceiling directly applied or 9-3-11 oc bracing.

except end verticals.

1 Row at midpt

August 19,2021





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) 2 except (jt=lb) 12=135.8=129.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 19,2021







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) 2, 8 except (jt=lb) 11=142.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 19,2021











Job	Truss	Truss Type	Qty	Ply	Huntington A 1546	
						147525155
28170-28170A	DGR	Monopitch Girder	1	2		
				<b>_</b>	Job Reference (optional)	
84 Components (Dunn),	Dunn, NC - 28334,		8	.510 s Jun	18 2021 MiTek Industries, Inc. Thu Aug 19 07:05:28 2021	Page 2
		ID:HQzvBv	HPD22FQ	9eQE7soz	6zcfqh-TV6KYYVN6RYL1MuoW ?PUQL1mslx pZia TMHr	ymMJr

## LOAD CASE(S) Standard

Concentrated Loads (lb) Vert: 10=-852(B) 11=-852(B) 12=-852(B) 13=-852(B) 14=-852(B) 15=-854(B)





BRACING-

TOP CHORD

BOT CHORD

LUMBER-

 TOP CHORD
 2x6 SP No.2

 BOT CHORD
 2x4 SP No.2 or 2x4 SPF No.2

 WEBS
 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 4=0-3-8 Max Horz 2=-146(LC 10) Max Uplift 2=-82(LC 12), 4=-82(LC 13) Max Grav 2=602(LC 1), 4=-602(LC 1)

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

TOP CHORD 2-3=-545/115, 3-4=-545/115

BOT CHORD 2-6=0/391, 4-6=0/391 WEBS 3-6=0/272

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph Vasd=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) 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.

6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

August 19,2021



ENGINEERING BY A MITEK Atfillate B18 Soundside Road Edenton, NC 27932



10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 19,2021





BRACING-

TOP CHORD

BOT CHORD

### LUMBER-

 TOP CHORD
 2x4 SP No.2 or 2x4 SPF No.2

 BOT CHORD
 2x4 SP No.2 or 2x4 SPF No.2

 OTHERS
 2x4 SP No.3

**REACTIONS.** (size) 2=3-11-11, 4=3-11-11, 6=3-11-11

Max Horz 2=-57(LC 10) Max Uplift 2=-27(LC 13), 4=-33(LC 13)

Max Grav 2=119(LC 1), 4=119(LC 1), 6=124(LC 3)

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 Vasd=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) 2, 4.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

 See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



Structural wood sheathing directly applied or 5-1-4 oc purlins.

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

August 19,2021



A MiTek Affiliate B18 Soundside Road Edenton, NC 27932



BRACING-

TOP CHORD

BOT CHORD

LUMBER-

BCDL

10.0

 TOP CHORD
 2x4 SP No.2 or 2x4 SPF No.2

 BOT CHORD
 2x4 SP No.2 or 2x4 SPF No.2

 OTHERS
 2x4 SP No.3

REACTIONS. (size) 2=2-9-13, 4=2-9-13, 6=2-9-13

Max Horz 2=40(LC 11) Max Uplift 2=-23(LC 12), 4=-27(LC 13)

Max Grav 2=91(LC 1), 4=91(LC 1), 6=88(LC 3)

Code IRC2015/TPI2014

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 Vasd=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

Matrix-P

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) 2, 4.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

 See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



FT = 20%

Weight: 14 lb

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

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

August 19,2021





August 19,2021





August 19,2021





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss system. See MSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Edenton, NC 27932



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

REACTIONS. (size) 1=5-9-3, 3=5-9-3, 4=5-9-3 Max Horz 1=46(LC 9) Max Uplift 1=-24(LC 12), 3=-30(LC 13) Max Grav 1=109(LC 1), 3=109(LC 1), 4=177(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=130mph Vasd=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.

\* 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.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and

referenced standard ANSI/TPI 1.



August 19,2021





			7-11-11			0-0-4		
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.44 BC 0.23 WB 0.04 Matrix-P	<b>DEFL.</b> Vert(LL) Vert(CT) Horz(CT)	in (lo n/a n/a 0.00	loc) l/ - - 3	/defl L/d n/a 999 n/a 999 n/a n/a	PLATES MT20 Weight: 32 lb	<b>GRIP</b> 244/190 FT = 20%

LUMBER-

TOP CHORD2x4 SP No.3BOT CHORD2x4 SP No.3OTHERS2x4 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. (size) 1=7-11-6, 3=7-11-6, 4=7-11-6 Max Horz 1=-88(LC 8) Max Uplift 1=-42(LC 13), 3=-43(LC 13) Max Grav 1=173(LC 1), 3=173(LC 1), 4=236(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=130mph Vasd=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.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and

referenced standard ANSI/TPI 1.



August 19,2021





Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.00

3

n/a

n/a

Structural wood sheathing directly applied or 4-3-0 oc purlins.

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

Weight: 16 lb

FT = 20%

# NOTES-

BCLL

BCDL

LUMBER-TOP CHORD

OTHERS

BOT CHORD

REACTIONS.

0.0

2x4 SP No.3

2x4 SP No.3

2x4 SP No.3

(size)

10.0

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

Max Horz 1=-43(LC 8)

Rep Stress Incr

1=4-2-7, 3=4-2-7, 4=4-2-7

Max Uplift 1=-20(LC 13), 3=-21(LC 13) Max Grav 1=84(LC 1), 3=84(LC 1), 4=115(LC 1) FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

Code IRC2015/TPI2014

2) Wind: ASCE 7-10; Vult=130mph Vasd=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

WB

Matrix-P

0.01

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.

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

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and

referenced standard ANSI/TPI 1.



August 19,2021











August 19,2021







August 19,2021





REACTIONS. (size) 1=5-6-5, 3=5-6-5, 4=5-6-5 Max Horz 1=44(LC 9) Max Uplift 1=-22(LC 12), 3=-28(LC 13) Max Grav 1=104(LC 1), 3=104(LC 1), 4=169(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=130mph Vasd=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.

7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and

referenced standard ANSI/TPI 1.



August 19,2021

ENGINEERING BY EREPTION A MITER Affiliate 818 Soundside Road Edenton, NC 27932

