

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 26815 Whttenton Bldrs/Register

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by C & R Truss.

Pages or sheets covered by this seal: I53381649 thru I53381694

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844



August 1,2022

## Gilbert, Eric

**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.



BRACING-

TOP CHORD

BOT CHORD

11	11	M	R	F	R.

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.1 WEBS 2x4 SP No.3

SLIDER Left 2x4 SP No.3 1-6-0 REACTIONS.

(size) 9=Mechanical, 2=0-4-9 Max Horz 2=267(LC 7) Max Uplift 9=-349(LC 5), 2=-212(LC 8) Max Grav 9=1246(LC 1), 2=892(LC 1)

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

TOP CHORD 2-3=-1254/268, 3-5=-1028/287

BOT CHORD

2-11=-333/1074, 10-11=-333/1074, 9-10=-284/845

WEBS 3-10=-266/57, 5-10=-289/978, 5-9=-1206/382

## NOTES-

1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

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 with a clearance greater than 6-0-0 3) between the bottom chord and any other members.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 349 lb uplift at joint 9 and 212 lb uplift at joint 2.

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

7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 57 lb down and 35 lb up at 2-8-7, 57 lb down and 35 lb up at 2-8-7, and 88 lb down and 81 lb up at 5-6-6, and 88 lb down and 81 lb up at 5-6-6 on top chord, and 5 lb down and 4 lb up at 2-8-7, 5 lb down and 4 lb up at 2-8-7, 24 lb down at 5-6-6, 24 lb down at 5-6-6, 190 lb down and 93 lb up at 8-4-5, 190 lb down and 93 lb up at 8-4-5, and 273 lb down and 114 lb up at 11-2-4, and 273 lb down and 114 lb up at 11-2-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

8) 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, 6-7=-20, 8-13=-20

## Continued on page 2

ᄊ 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



Structural wood sheathing directly applied or 5-2-4 oc purlins,

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

except end verticals.



Job	Truss	Truss Type	Qty	Ply	Whttenton Bldrs/Register	
						153381649
26815	CJ1	Diagonal Hip Girder	1	1		
					Job Reference (optional)	
C&R Truss, Autryville,	NC - 28318,			8.430 s Ai	ug 16 2021 MiTek Industries, Inc. Fri Jul 29 09:43:00 2022	Page 2

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 29 09:43:00 2022 Page 2 ID:m3JJ6pNkJbuT4FqrgLho0yzifBs-FSXiWqVlxg29m4nsKvJPTdsEcLabdJs8Qgg7XNytF\_9

LOAD CASE(S) Standard Concentrated Loads (Ib)

Vert: 18=-14(F=-7, B=-7) 19=7(F=4, B=4) 20=-20(F=-10, B=-10) 21=-380(F=-190, B=-190) 22=-545(F=-273, B=-273)





- BOT CHORD
- 1-9=-359/1120. 8-9=-359/1120. 7-8=-293/862
- WEBS 2-8=-301/79, 3-8=-305/1006, 3-7=-1238/397

#### NOTES

- 1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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 with a clearance greater than 6-0-0 3) between the bottom chord and any other members.
- Refer to airder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 164 lb uplift at joint 1 and 361 lb uplift at ioint 7.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 59 lb down and 51 lb up at 2-8-7, 57 lb down and 35 lb up at 2-8-7, and 92 lb down and 87 lb up at 5-6-6, and 88 lb down and 81 lb up at 5-6-6 on top chord, and 6 lb down and 11 lb up at 2-8-7, 5 lb down and 4 lb up at 2-8-7, 27 lb down at 5-6-6, 24 lb down at 5-6-6, 200 lb down and 98 Ib up at 8-4-5, 190 lb down and 93 lb up at 8-4-5, and 280 lb down and 117 lb up at 11-2-4, and 273 lb down and 114 lb up at 11-2-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others
- 8) 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: 1-4=-60, 4-5=-20, 6-11=-20

#### Continued on page 2





Job	Truss	Truss Type	Qty	Ply	Whttenton Bldrs/Register	
					1533	81650
26815	CJ2	Diagonal Hip Girder	1	1		
					Job Reference (optional)	
C&R Truss, Autryville,	NC - 28318,			8.430 s A	ug 16 2021 MiTek Industries, Inc. Fri Jul 29 09:43:02 2022 Page	e 2
		ID:m	3JJ6pNkJ	buT4Fqrgl	ho0yzifBs-BqfSwWX?THIt?OxERKLtY2xa69Fw5DzRt_9EbFytF	-7

LOAD CASE(S) Standard Concentrated Loads (Ib)

Vert: 16=-23(F=-7, B=-16) 17=1(F=4, B=-3) 18=-27(F=-10, B=-17) 19=-390(F=-190, B=-200) 20=-553(F=-273, B=-280)





Max Horz 16=-128(LC 6) (lb) -

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 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

- 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 with a clearance greater than 6-0-0 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
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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



Edenton, NC 27932

036322



LUADING (psi)	SPACING- 2-0-0	631.	DEFL. IN	(100)	i/deli L/C	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.13	Vert(LL) -0.01	15	n/r 120	) MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.05	Vert(CT) -0.01	15	n/r 120	)
BCLL 0.0 *	Rep Stress Incr YES	WB 0.20	Horz(CT) 0.00	16	n/a n/a	a
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R				Weight: 147 lb FT = 20%
LUMBER- TOP CHORD 2x4 SF	P No.2		BRACING- TOP CHORD	Structu	ral wood sheat	thing directly applied or 6-0-0 oc purlins,

 BOT CHORD
 2x4 SP No.2

 WEBS
 2x4 SP No.3

 OTHERS
 2x4 SP No.3

REACTIONS. All bearings 22-6-0.

(lb) - Max Horz 28=-207(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 28, 16, 23, 24, 25, 26, 27, 21, 20, 19, 18, 17 Max Grav All reactions 250 lb or less at joint(s) 28, 16, 22, 23, 24, 25, 26, 27, 21, 20, 19, 18, 17

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 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 gualified 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) 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 28, 16, 23, 24, 25, 26, 27, 21, 20, 19, 18, 17.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







			4-8-0		4-8	-0			
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC 0.23 BC 0.08 WB 0.07	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.01 6-7 -0.01 6-7 0.00 6	l/defl >999 >999 >999 on/a	L/d 360 240 n/a	PLATES MT20	<b>GRIP</b> 244/190
BCDL 10.0	Code IRC2018/TP	12014	Matrix-AS	Wind(LL)	0.00	>999	240	Weight: 62 lb	FI = 20%

LUMBER-

 TOP CHORD
 2x4 SP No.2

 BOT CHORD
 2x4 SP 2400F 2.0E

 WEBS
 2x4 SP No.3

 OTHERS
 2x4 SP No.3

REACTIONS. (size) 8=0-3-8, 6=0-3-8 Max Horz 8=126(LC 7) Max Uplift 8=-74(LC 8), 6=-74(LC 8) Max Grav 8=443(LC 1), 6=443(LC 1)

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

TOP CHORD 2-3=-351/50, 3-4=-351/50, 2-8=-399/99, 4-6=-399/99

NOTES-

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

2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

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

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

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

6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
 This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

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

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



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BRACING-TOP CHORD BOT CHORD

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



818 Soundside Road

Edenton, NC 27932

## Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Whttenton Bldrs/Register	
						153381656
26815	GR1	Common Girder	1	2		
				~	Job Reference (optional)	
C&R Truss, Autryville,	NC - 28318,			8.430 s A	ug 16 2021 MiTek Industries, Inc. Fri Jul 29 09:43:09 2022	Page 2

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 29 09:43:09 2022 Page 2 ID:m3JJ6pNkJbuT4FqrgLho0yzifBs-UAa6OvcOpRBtLTzaMIzWKXjo5\_twERJTUaL6LLytF\_0

## LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-4=-60, 4-6=-60, 10-13=-20

Concentrated Loads (lb)

Vert: 8=-993(F) 13=-1144(F) 15=-1000(F) 16=-993(F) 17=-993(F) 18=-993(F) 19=-993(F)



Job	Truss	Truss Type	Qty	Ply	Whttenton Bldrs/Regi	ster	201057
26815	GR2	COMMON GIRDER	1	2		-1)	100100
C&R Truss, Autryvill	e, NC - 28318,			8.430 s A	Job Reference (option ug 16 2021 MiTek Indu	al) stries, Inc. Fri Jul 29 09:43:11 2022 Pag	je 1
	2-8-6 5-1-4	7-6-2 9-11-0 11-4-0	ID:m3JJ6pNkJ 0 <u>  12-9-0   15-1-14</u>	buT4Fqrg 17-6-1	Lho0yzifBs-QZispbeeL 12 19-11-10	2Rbam7zTj?_Qyp7onK6iGYmytqDQEytF _22-8-023-10-8	
	2-8-6 2-4-14	2-4-14 2-4-14 1-5-0	1-5-0 2-4-14	2-4-1	4 2-4-14	2-8-6 1-2-8	
		Ę	5x6 =			Scale	= 1:52.7
8.4.7	8.00 3x6 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	6x8 = 12 4x8 = 3 4 4 5 5 6 7 6 7 6 7 6 7 6 7 6 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7	6 6 7 22 3x6    16 31	4x8 × 8	3x6 ≈ 9 12 14 33 13		
	6x10 ≁ 2x4	7x10 MT18HS = 8x8 =	8x8 =	8x8 =	8x8 = 2x4	6x10 ≫	
		8x8 = 8x8 =		47.0			
Plate Offsets (X,Y) [1	<u>2-8-6</u> 5-1-4 <u>2-8-6</u> 2-4-14 1:0-1-4,0-1-13], [5:0-1-2,0-2-0], [19:0-3-14,0-0-0], [20:0-3-8,0-4	<u>7-6-2</u> <u>9-11-0</u> 12 <u>2-4-14</u> <u>2-4-14</u> <u>2-</u> [7:0-1-2,0-2-0], [11:0-1-4,0-1-13], [14 -12]	2-9-0 <u>15-1-14</u> -10-0 <u>2-4-14</u> 4:0-3-8,0-4-12], [15:0-	<u>17-6-1</u> 2-4-1 ·3-8,0-4-1	12 19-11-10 4 2-4-14 2], [16:0-3-8,Edge], [	22-8-0 2-8-6 17:0-3-8,Edge], [18:0-3-8,0-4-12]	
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING- 1-4-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NC Code IRC2018/TPI2014	CSI.           TC 0.34           BC 0.51           WB 0.99           Matrix-MS	DEFL.         in           Vert(LL)         -0.10           Vert(CT)         -0.20           Horz(CT)         0.06           Wind(LL)         0.08	(loc) 18 18 11 18	l/defl L/d >999 360 >999 240 n/a n/a >999 240	PLATES         GRIP           MT20         244/190           MT18HS         244/190           Weight: 429 lb         FT = 20%	
LUMBER- TOP CHORD 2x6 SP 2 BOT CHORD 2x6 SP 2 WEBS 2x4 SP 1 WEDGE Left: 2x6 SP No.2 , Right	2400F 2.0E 2400F 2.0E No.3 :: 2x6 SP No.2		BRACING- TOP CHORD BOT CHORD	Structura Rigid ce	al wood sheathing dir iling directly applied c	ectly applied or 6-0-0 oc purlins. r 10-0-0 oc bracing.	
REACTIONS. (size) Max Hor Max Upl Max Gra	1=0-3-12, 11=0-3-8 rz 1=-120(LC 6) lift 1=-1144(LC 8), 11=-806(LC av 1=9120(LC 1), 11=5545(LC	8) 1)					
FORCES. (lb) - Max. C TOP CHORD 1-2=-1 6-7=-1 BOT CHORD 1-21=- 16-17= 11-13= WEBS 7-16=- 10-14= 3-18=- 7-22=-	Comp./Max. Ten All forces 25 1750/1560, 2-3=-11689/1634, 3 633/261, 7-8=8537/1462, 8-9 1207/9412, 20-21=-1207/9412 1115/7452, 15-16=-1052/717 885/6435 791/4107, 8-16=-288/460, 8-15 229/1204, 10-13=-652/153, 5 2122/221, 3-20=-144/2089, 2-2 6254/1056, 6-22=-275/1630	0 (lb) or less except when shown. 3-4=-10502/1569, 4-5=-8691/1441, 5 -8780/1417, 9-10=-8695/1308, 10-1 18-20=-1301/9828, 17-18=-1181/86 7, 14-15=-1027/7331, 13-14=-885/64 =0/289, 9-15=-283/0, 9-14=-286/221 17=-690/4795, 4-17=-3453/224, 4-1 0=-173/572, 2-21=0/324, 5-22=-625	5-6=-1428/292, 1=-8077/1164 674, 435, 1, 8=-313/4203, i4/1056,				
<ul> <li>NOTES-</li> <li>1) 2-ply truss to be conn Top chords connected Bottom chords connected Webs connected as fc</li> <li>2) All loads are considern ply connections have</li> <li>3) Unbalanced roof live I</li> <li>4) Wind: ASCE 7-16; Vu II; Exp B; Enclosed; M plate grip DOL=1.60</li> <li>5) All plates are MT20 pl</li> <li>6) This truss has been did</li> <li>7) * This truss has been did</li> <li>7) * This truss has been did</li> <li>7) * This truss has been did</li> <li>8) Provide mechanical conditional content and the solution of 1=1144, 11=806.</li> <li>Continued on page 2</li> </ul>	ected together with 10d (0.131 d as follows: 2x6 - 2 rows stagg cted as follows: 2x6 - 2 rows st blows: 2x4 - 1 row at 0-9-0 oc. ed equally applied to all plies, been provided to distribute only oads have been considered foi lt=140mph (3-second gust) Va: IWFRS (directional); cantilever ates unless otherwise indicated esigned for a 10.0 psf bottom of designed for a live load of 20.0 hord and any other members, vo onnection (by others) of truss to	<ul> <li>'x3") nails as follows: ered at 0-9-0 oc.</li> <li>aggered at 0-2-0 oc.</li> <li>except if noted as front (F) or back (B</li> <li>/ loads noted as (F) or (B), unless ot this design.</li> <li>sd=111mph; TCDL=6.0psf; BCDL=6.</li> <li>left and right exposed ; end vertical id.</li> <li>hord live load nonconcurrent with an psf on the bottom chord in all areas with BCDL = 10.0psf.</li> <li>bebaring plate capable of withstandi</li> </ul>	<ol> <li>face in the LOAD C therwise indicated.</li> <li>.0psf; h=20ft; B=45ft; left and right exposed ny other live loads.</li> <li>with a clearance greating 100 lb uplift at join</li> </ol>	ASE(S) s L=24ft; ea ; Lumber ter than 6 t(s) excep	ection. Ply to ave=4ft; Cat. DOL=1.60 6-0-0 bt (jt=lb)	SEAL 036322	and an an an an an
WARNING - Verify de	sign parameters and READ NOTES ON	THIS AND INCLUDED MITEK REFERENCE PA	AGE MII-7473 rev. 5/19/2020	BEFORE U	ISE.	ENGINEERING BY	
Design valid for use only a truss system. Before u building design. Bracing is always required for et	y with MiTek® connectors. This design use, the building designer must verify the g indicated is to prevent buckling of indi ability and to prevent collapse with pose	s based only upon parameters shown, and is f e applicability of design parameters and prope vidual truss web and/or chord members only.	for an individual building co orly incorporate this design in Additional temporary and p	mponent, no nto the over ermanent br	ot all acing	<b>TRENCO</b>	

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 sate furses systems, see Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Whttenton Bldrs/Register	
26815	GR2		1			153381657
20010	0112		·	2	Job Reference (optional)	
C&R Truss, Autryville,	NC - 28318,			8.430 s A	ug 16 2021 MiTek Industries, Inc. Fri Jul 29 09:43:11 2022	Page 2

## NOTES-

ID:m3JJ6pNkJbuT4FqrgLho0yzifBs-QZispbeeL2Rbam7zTj?\_Qyp7onK6iGYmytqDQEytF\_\_

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

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1248 lb down and 107 lb up at 0-6-12, 1245 lb down and 110 lb up at 2-6-12, 1245 lb down and 110 lb up at 4-6-12, 1311 lb down and 147 lb up at 6-6-12, 1246 lb down and 110 lb up at 6-10-4, 1246 lb down and 110 lb up at 8-10-4, 1382 lb down and 333 lb up at 9-10-4, 3818 lb down and 1033 lb up at 12-9-8, 283 lb down at 14-8-0, 203 lb down at 16-8-0, and 132 lb down at 18-8-0, and 54 lb down at 20-8-0 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=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-6=-40, 6-12=-40, 23-26=-13

Concentrated Loads (lb)

Vert: 19=-2557(B) 16=-3818(B) 17=-1382(B) 21=-1245(B) 25=-1248(B) 29=-1245(B) 30=-1246(B) 31=-283(B) 32=-203(B) 33=-132(B) 34=-54(B) 34=-54(B) 32=-203(B) 32=-132(B) 34=-54(B) 32=-1245(B) 32=-1245(B)





Edenton, NC 27932

besign valid to less only with with twe commendations. This besign is based only upon parameters and properly incorporate this design into the overall a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job	Truss	Truss Type	Qty	Ply	Whttenton Bldrs/Register	
26815	Н1	Half Hip Girder	1			53381658
20010			•	2	Job Reference (optional)	
C&R Truss Autryville	NC - 28318			8 430 s A	ug 16 2021 MiTek Industries Inc. Eri Jul 29 09:43:13 2022	Page 2

ID:m3JJ6pNkJbuT4FqrgLho0yzifBs-NypcEGfutfhJq4HMb82SVNuKrbzvAAS3PBJJT7ytEzy

NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1572 lb down and 484 lb up at 9-9-0, 646 lb down and 468 lb up at 11-9-12, 355 lb down and 106 lb up at 11-9-12, 355 lb down and 106 lb up at 15-9-0, 355 lb down and 106 lb up at 15-9-0, 355 lb down and 106 lb up at 15-9-0, 355 lb down and 106 lb up at 15-8-4, and 355 lb down and 106 lb up at 19-8-4, and 1598 lb down and 495 lb up at 21-8-4 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=1.15, Plate Increase=1.15

Uniform Loads (plf) Vert: 1-4=-60, 4-9=-60, 10-18=-20

Concentrated Loads (lb)

Vert: 16=-1572(B) 24=-585(F=-231, B=-354) 25=-354(B) 27=-354(B) 28=-354(B) 29=-354(B) 30=-1598(B)



	-			5		
Job	Truss	Truss Type	Qty	Ply	Whttenton Bldrs/Reg	lister I53381659
26815	H2	Half Hip Girder	1	1	Job Reference (optio	nal)
C&R Truss, Autry	/ille, NC - 28318,		ID:m3JJ6pNkJb	8.430 s A uT4Fqrgl	lug 16 2021 MiTek Indu Lho0yzifBs-NypcEGfutt	ustries, Inc. Fri Jul 29 09:43:13 2022 Page 1 fhJq4HMb82SVNuLUb3EAGZ3PBJJT7ytEzy
		<u>⊢ 1-9</u>   1-9	<u>-0 2-9-0</u> -0 1-0-0			
		8 00 12				Scale - 1:47 2
			2 3 x4 = 4 x4			
		8 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2				
		6	5 4			
		3x6	4x4    8x8 —			
		1-9 1-9	<u>9-0 2-9-0</u> 9-0 1-0-0			
Plate Offsets (X,Y)	[3:Edge,0-3-8], [4:Edge,0-3-8]					
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING- 2-0- Plate Grip DOL 1.1 Lumber DOL 1.1 Rep Stress Incr N0 Code IBC2018/TPI2014	0 <b>CSI.</b> 5 TC 0.84 5 BC 0.28 0 WB 0.64 Matrix-MS	DEFL.inVert(LL)0.01Vert(CT)-0.01Horz(CT)-0.00	(loc) 5 5 4	l/defl L/d >999 240 >999 180 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 56 lb         ET = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x6 SF WEBS 2x4 SF REACTIONS. (siz: Max H Max U Max G	P No.2 P No.1 P No.3 e) 4=Mechanical, 6=Mechanic lorz 6=295(LC 5) plift 4=-582(LC 5), 6=-423(LC 4 rav 4=740(LC 31), 6=658(LC 2	ial ) 6)	BRACING- TOP CHORD BOT CHORD WEBS	Structur except o Rigid ce 1 Row a	ral wood sheathing di end verticals, and 2-0 eiling directly applied at midpt	rectly applied or 2-9-0 oc purlins, I-0 oc purlins: 2-3. or 10-0-0 oc bracing. 3-4, 2-5
FORCES.         (lb) - Max.           TOP CHORD         1-6=-           BOT CHORD         5-6=-           WEBS         1-5=-	Comp./Max. Ten All forces 25 704/535 :265/202 :617/690	0 (Ib) or less except when shown.				
<ul> <li>NOTES- <ol> <li>Unbalanced roof live</li> <li>Wind: ASCE 7-16; V <li>Exp B; Enclosed; </li> <li>plate grip DOL=1.6C</li> <li>Provide adequate di</li> <li>This truss has been</li> <li>* This truss has been</li> <li>truss is between the bottom</li> <li>Refer to girder(s) for</li> <li>Provide mechanical 4=582, 6=423.</li> <li>This truss is designer referenced standard</li> <li>Graphical purlin rep</li> <li>Hanger(s) or other 1-9-12 on bottom ci</li> <li>In the LOAD CASE</li> </li></ol> LOAD CASE(S) Stan <ol> <li>Dead + Roof Live (b)</li> <li>Uniform Loads (plf)</li> <li>Vert: 1-2=-6</li> <li>Concentrated Loads</li> <li>Vert: 5=-43</li> </ol> </li> </ul>	e loads have been considered fo (ult=140mph (3-second gust) Va MWFRS (directional); cantileve ) ananage to prevent water pondin, designed for a 10.0 psf bottom n designed for a live load of 20.1 chord and any other members, r truss to truss connections. connection (by others) of truss i ed in accordance with the 2018 I (ANSI/TPI 1. resentation does not depict the si connection device(s) shall be p chord. The design/selection of si E(S) section, loads applied to the dard dard calanced): Lumber Increase=1.1. 50, 2-3=-60, 4-6=-20 s (Ib) 8(F)	r this design. sd=111mph; TCDL=6.0psf; BCDL=6 left and right exposed ; end vertical g. chord live load nonconcurrent with an Opsf on the bottom chord in all areas with BCDL = 10.0psf. o bearing plate capable of withstand nternational Residential Code sectio size or the orientation of the purlin all rovided sufficient to support concent uch connection device(s) is the resp face of the truss are noted as front 5, Plate Increase=1.15	5.0psf; h=20ft; B=45ft; left and right exposed ny other live loads. with a clearance grea ling 100 lb uplift at join ons R502.11.1 and R80 ong the top and/or bott rated load(s) 438 lb do onsibility of others. (F) or back (B).	L=24ft; e ; Lumber ter than ( t(s) exce 02.10.2 a tom chor wn and 2	eave=4ft; Cat. r DOL=1.60 6-0-0 ept (jt=lb) und d. 119 lb up at	SEAL 036322 August 1,2022
WARNING - Verify	design parameters and READ NOTES ON	THIS AND INCLUDED MITEK REFERENCE P	PAGE MII-7473 rev. 5/19/2020	BEFORE I	USE.	ENGINEERING BY

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

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

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



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Edenton, NC 27932



Continued on page 2

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818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Whttenton Bldrs/Register	
					15	3381661
26815	HP2	Hip Girder	1	1		
					Job Reference (optional)	
C&R Truss, Autryville,	NC - 28318,			8.430 s A	ug 16 2021 MiTek Industries, Inc. Fri Jul 29 09:43:16 2022 P	age 2

ID:m3JJ6pNkJbuT4FqrgLho0yzifBs-nXVIsIhnAa3uhY?wGGb97?W0Vo?ZNZ1V59Y\_4SytEzv

## LOAD CASE(S) Standard

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

Vert: 1-6=-60, 6-8=-60, 8-11=-60, 22-25=-20

Concentrated Loads (lb)

Vert: 28=-364(B)





REACTIONS. (size) 8=0-3-8, 7=Mechanical Max Horz 8=276(LC 5) Max Uplift 8=-64(LC 8), 7=-86(LC 5)

- Max Grav 8=463(LC 1), 7=409(LC 13)
- FORCES. (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown. TOP CHORD 2-8=-356/92, 2-3=-429/17
- BOT CHORD
- 7-8=-131/270 WFBS 3-8=-31/286, 3-7=-290/120

#### NOTES-

1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); 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.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 3) between the bottom chord and any other members.
- 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) 8, 7.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.







				1-10-3					
LOADING TCLL	G (psf) 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.13	<b>DEFL.</b> in Vert(LL) -0.00	(loc) 5	l/defl >999	L/d 360	PLATES         GRIP           MT20         244/190	
TCDL BCLL	10.0 0.0 *	Lumber DOL 1.15 Rep Stress Incr YES	BC 0.03 WB 0.00	Vert(CT) -0.00 Horz(CT) -0.00	5 3	>999 n/a	240 n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-MR	Wind(LL) 0.00	5	>999	240	Weight: 9 lb 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 1-10-3 oc purlins, except end verticals.

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

## REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical

Max Horz 5=90(LC 8)

Max Uplift 5=-41(LC 8), 3=-18(LC 8) Max Grav 5=181(LC 1), 3=33(LC 13), 4=29(LC 3)

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

## NOTES-

- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber 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 with a clearance greater than 6-0-0 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) 5, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and









LOADING	(psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.18	Vert(LL) -0.01 4-5 >999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.14	Vert(CT) -0.02 4-5 >999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.01 3 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-MR	Wind(LL) 0.01 4-5 >999 240	Weight: 16 lb 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 3-10-3 oc purlins, except end verticals.

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical

Max Horz 5=129(LC 8)

Max Uplift 5=-27(LC 8), 3=-51(LC 8) Max Grav 5=242(LC 1), 3=100(LC 13), 4=68(LC 3)

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

NOTES-

- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber 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 with a clearance greater than 6-0-0 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) 5, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- SEAL 036322 August 1,2022





			5-10-3				
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	<b>CSI.</b> TC 0.41 BC 0.32 WB 0.06	DEFL. in Vert(LL) -0.04 Vert(CT) -0.09 Horz(CT) 0.00	(loc) l/defl 6-7 >999 6-7 >742 n/a	L/d 360 240 n/a	PLATES MT20	<b>GRIP</b> 244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Wind(LL) 0.03	6-7 >999	240	Weight: 28 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

```
LUMBER-
```

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

- 2x4 SP No.3
- REACTIONS. 7=0-3-8, 6=Mechanical (size) Max Horz 7=170(LC 8) Max Uplift 7=-15(LC 8), 6=-65(LC 8) Max Grav 7=308(LC 1), 6=233(LC 13)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-7=-259/62

## NOTES-

- 1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); 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 with a clearance greater than 6-0-0 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) 7, 6.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.





LOADING	í (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL)	-0.01	7-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.15	Vert(CT)	-0.01	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.12	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-AS	Wind(LL)	0.00	8-9	>999	240	Weight: 47 lb	FT = 20%

```
LUMBER-
```

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

2x4 SP No.3

REACTIONS. 9=0-3-8, 7=Mechanical (size) Max Horz 9=210(LC 8) Max Uplift 9=-7(LC 8), 7=-85(LC 8) Max Grav 9=385(LC 1), 7=318(LC 13)

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

TOP CHORD 2-9=-335/37, 2-3=-299/0 WEBS 3-7=-275/91

NOTES-

1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); 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.

\* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 3) 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) 9, 7.

6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

referenced standard ANSI/TPI 1.

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



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 Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



BRACING-TOP CHORD

BOT CHORD

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

Job	Truss	Truss Type		Qtv	Plv	Whttenton Bldrs/Register
					,	150004667
						153561067
26815	J6	Jack-Open		1	1	
						Job Reference (ontional)
C&R Truss, Autryville, I	NC - 28318,				8.430 s Au	ug 16 2021 MiTek Industries, Inc. Fri Jul 29 09:43:21 2022 Page 1
-				ID:m3JJ6r	NkJbuT4F	FaraLho0vzifBs-8Ulew?lw?6iAnJuu3pBKa3Dvlps?21XEFRFllfvtEza
						1.3
		1	-10-3			

Scale = 1:13.2



3x8 || <sup>4</sup>

3

		ŀ	1-10-3 1-10-3	-1			
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 IRC2018/TPI2014	CSI. TC 0.05 BC 0.03 WB 0.00 Matrix-MR	<b>DEFL.</b> Vert(LL) -0.0 Vert(CT) -0.0 Horz(CT) -0.0 Wind(LL) 0.0	n (loc) ) 4 ) 4 ) 2 ) 2	l/defl >999 >999 n/a >999	L/d 360 240 n/a 240	PLATES         GRIP           MT20         244/190           Weight: 7 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 1-10-3 oc purlins, except end verticals.

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

### REACTIONS. (size) 4=Mechanical, 2=Mechanical, 3=Mechanical

Max Horz 4=49(LC 8)

Max Uplift 2=-30(LC 8), 3=-1(LC 8) Max Grav 4=68(LC 1), 2=52(LC 13), 3=33(LC 3)

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

#### NOTES-

- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber 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 with a clearance greater than 6-0-0 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, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- SEAL 036322 August 1,2022





LOADING TCLL TCDL	<b>G</b> (psf) 20.0 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Page Strass Large VES	CSI. TC 0.21 BC 0.15	DEFL. i Vert(LL) -0.0 Vert(CT) -0.0	n (loc) 1 3-4 2 3-4	l/defl >999 >999	L/d 360 240	PLATES MT20	<b>GRIP</b> 244/190
BCDL	10.0	Code IRC2018/TPI2014	Matrix-MR	Wind(LL) 0.0	1 3-4	>999	240	Weight: 13 lb	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 3-10-3 oc purlins, except end verticals.

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

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

Max Horz 4=88(LC 8)

Max Uplift 2=-55(LC 8) Max Grav 4=146(LC 1), 2=107(LC 13), 3=70(LC 3)

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

NOTES-

- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber 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 with a clearance greater than 6-0-0 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.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







Wind(LL)

BRACING-TOP CHORD

BOT CHORD

0.04

5-6

>999

Rigid ceiling directly applied.

240

Weight: 26 lb

Structural wood sheathing directly applied, except end verticals.

FT = 20%

LUMBER-
TOPOLO

BCDL

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

10.0

WEBS 2x4 SP No.3 REACTIONS. (size) 6=Mechanical, 5=Mechanical

Max Horz 6=128(LC 8) Max Uplift 5=-70(LC 8) Max Grav 6=216(LC 1), 5=242(LC 13)

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

Code IRC2018/TPI2014

#### NOTES-

 Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60

Matrix-AS

- 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 with a clearance greater than 6-0-0 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) 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
  - referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.







LUMBER-TOP CHORD BOT CHORD

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

2x4 SP No.2

REACTIONS. (size) 8=Mechanical, 6=Mechanical Max Horz 8=168(LC 8) Max Uplift 6=-89(LC 8) Max Grav 8=296(LC 1), 6=325(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-306/0

TOP CHORD 1-2=-306/0 WEBS 2-6=-290/99

NOTES-

 Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber 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 with a clearance greater than 6-0-0 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) 6.

6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

referenced standard ANSI/TPI 1.

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



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BRACING-TOP CHORD BOT CHORD

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

Job	Truss	Truss Type	Qty	Ply	Whttenton Bldrs/Register	152291671
26815	J10	Jack-Closed	1	1		155561071
C&R Truss, Autryvil	le, NC - 28318,			8.430 s A	Job Reference (optional) Aug 16 2021 MiTek Industries	s, Inc. Fri Jul 29 09:43:18 2022 Page 1
		-1-2-8 5-10-8	ID:m3JJ6pN	lkJbuT4F 11-9-0	qrgLho0yzifBs-jvdVH_j1iBJb	wr9JNhddCQbHncn4raEoZT149KytEzt
		1-2-8 5-10-8		5-10-8		
					4 5	Scale: 1/4"=1'
	Ī				4 5 4x4	
		8.00	12			
			3x6 🕬			
	5		3			
	-7-8				×	
				$\langle \rangle$		
		3x8 /				
	12	2				
	-0-0					
		9	8		7 <sub>6</sub>	
		2x4	4x4 =		3x6 =	
		5-10-8		11-9-0		
		3-10-8		<u> </u>		
TCLL 20.0	Plate Grip DOL 1.1	5 TC 0.54	Vert(LL) -0.04	(loc) 7-8	l/defl L/d >999 240	PLATES GRIP MT20 244/190
TCDL 10.0 BCLL 0.0 *	Lumber DOL 1.1 Rep Stress Incr YE	5 BC 0.30 S WB 0.42	Vert(CT) -0.06 Horz(CT) 0.01	7-8 7	>999 180 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS				Weight: 78 lb FT = 20%
LUMBER-			BRACING-			
TOP CHORD 2x4 SP BOT CHORD 2x4 SP	No.2 No.2		TOP CHORD BOT CHORD	Structur Rigid ce	ral wood sheathing directly eiling directly applied.	applied, except end verticals.
WEBS 2x4 SP	No.3 *Except*		WEBS	1 Row a	at midpt 4-7	
2-9. 2.0						
Max Ho	) 9=0-3-8, 7=Mechanical hrz 9=326(LC 5)					
Max Up Max Gr	lift 9=-67(LC 8), 7=-101(LC 5) av 9=542(LC 1) 7=495(LC 13)					
	Comp (Max. Top. All foreca 25	(lh) or loss avaant when shown				
TOP CHORD 2-9=-4	89/104, 2-3=-518/40					
BOT CHORD 8-9=-2 WEBS 3-7=-4	289/303, 7-8=-118/380 39/112					
NOTES.						
1) Wind: ASCE 7-16; Vu	ult=140mph (3-second gust) Va	sd=111mph; TCDL=6.0psf; BCDL	_=6.0psf; h=20ft; B=45ft;	L=24ft; e	eave=4ft; Cat.	
II; Exp B; Enclosed; M plate grip DOL=1.60	AWERS (directional); cantileve	left and right exposed ; end vertion	cal left and right exposed	i; Lumbe	r DOL=1.60	
<ul><li>2) This truss has been of</li><li>3) * This truss has been</li></ul>	lesigned for a 10.0 psf bottom designed for a live load of 20.0	chord live load nonconcurrent with opsf on the bottom chord in all are	n any other live loads. as with a clearance grea	ter than	6-0-0	
between the bottom (	chord and any other members.				*	
5) Provide mechanical d	connection (by others) of truss t	o bearing plate capable of withsta	anding 100 lb uplift at join	it(s) 9 ex	cept (jt=lb)	SAMULTING ST

7=101.6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

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

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



818 Soundside Road Edenton, NC 27932





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EACTIONS. (size) 10=0-3-8, 8=0-3-8 Max Horz 10=-220(LC 6) Max Uplift 10=-109(LC 8), 8=-109(LC 8)

Max Grav 10=861(LC 1), 8=861(LC 1)

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

- TOP CHORD 2-3=-396/55, 3-4=-708/134, 4-5=-708/134, 5-6=-396/55, 2-10=-412/114, 6-8=-412/114
- BOT CHORD 9-10=0/689, 8-9=0/634
- WEBS 4-9=-54/499, 3-10=-537/72, 5-8=-537/72

#### NOTES-

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

- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 10 and 109 lb uplift at joint 8.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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> 818 Soundside Road Edenton, NC 27932



joint 7. 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

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

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



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REACTIONS. (size) 9=0-3-8, 7=0-3-8 Max Horz 9=124(LC 7) Max Uplift 9=-87(LC 8), 7=-33(LC 8) Max Grav 9=553(LC 1), 7=456(LC 1)

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

TOP CHORD 3-4=-421/74, 4-5=-422/74

BOT CHORD 8-9=-13/389, 7-8=-10/385

WEBS 4-8=-19/271, 3-9=-397/64, 5-7=-344/40

## NOTES-

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

 Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60

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 with a clearance greater than 6-0-0 between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint 9 and 33 lb uplift at joint 7.

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

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



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A MILLER ATT 818 Soundside Road Edenton, NC 27932









August 1,2022





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

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







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Edenton, NC 27932





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

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



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August 1,2022





sheetrock be applied directly to the bottom chord.



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sheetrock be applied directly to the bottom chord.



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



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RENCO

August 1,2022

818 Soundside Road Edenton, NC 27932



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 IRC2018/TPI2014	CSI. TC 0.23 BC 0.37 WB 0.42 Matrix-AS	DEFL. Vert(LL) -C Vert(CT) -C Horz(CT) C Wind(LL) C	in ( 0.11 9 0.21 9 0.01 0.01	(loc) I. 9-10 > 9-10 > 8 9 >	l/defl L/d >999 360 >999 240 n/a n/a >999 240	PLATES         GRIP           MT20         244/190           Weight: 122 lb         FT = 20%
LUMBER- TOP CHORD 2x4 SF	BRACING- TOP CHORD	St	tructural	l wood sheat	hing directly applied, except end verticals.		

BOT CHORD

Rigid ceiling directly applied.

 TOP CHORD
 2x4 SP No.2

 BOT CHORD
 2x4 SP 2400F 2.0E

 WEBS
 2x4 SP No.3 \*Except\*

2-10,6-8: 2x6 SP No.1 (size) 10=0-3-8, 8=0-3-8 Max Horz 10=-220(LC 6) Max Uplift 10=-109(LC 8), 8=-109(LC 8)

Max Grav 10=861(LC 1), 8=861(LC 1)

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

- TOP CHORD 2-3=-396/55, 3-4=-708/134, 4-5=-708/134, 5-6=-396/55, 2-10=-412/114, 6-8=-412/114
- BOT CHORD 9-10=0/689, 8-9=0/634
- WEBS 4-9=-54/499, 3-10=-537/72, 5-8=-537/72

## NOTES-

REACTIONS.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 10 and 109 lb uplift at joint 8.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.







		4-8-0		9-4-0								
4.				4-8-0		1		4-8-0		1		
LOADING	i (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.01	6-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matrix	-AS	Wind(LL)	0.00	7	>999	240	Weight: 56 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

 TOP CHORD
 2x4 SP No.2

 BOT CHORD
 2x4 SP 2400F 2.0E

 WEBS
 2x4 SP No.3

REACTIONS. (size) 8=0-3-8, 6=0-3-8 Max Horz 8=126(LC 7) Max Uplift 8=-74(LC 8), 6=-74(LC 8) Max Grav 8=443(LC 1), 6=443(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-351/50, 3-4=-351/50, 2-8=-399/99, 4-6=-399/99

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 8 and 74 lb uplift at joint 6.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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



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



5/19/2020 BEFORE USE. uilding component, not is design into the overall rary and permanent bracing are regarding the B-89 and BCSI Building Component 818 Soundside Road

Edenton, NC 27932



#### LUMBER-

 TOP CHORD
 2x4 SP No.2

 BOT CHORD
 2x4 SP 2400F 2.0E

 WEBS
 2x4 SP No.3

 SLIDER
 Left 2x6 SP No.1 1-6-0, Right 2x6 SP No.1 1-6-0

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied. Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 6=0-3-8 Max Horz 2=186(LC 7) Max Uplift 2=-111(LC 8), 6=-111(LC 8) Max Grav 2=993(LC 13), 6=993(LC 14)

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

- TOP CHORD 2-3=-1245/131, 3-4=-1146/193, 4-5=-1146/193, 5-6=-1245/131
- BOT CHORD 2-11=-134/1084, 9-11=0/744, 6-9=-103/969
- WEBS 4-9=-54/553, 5-9=-282/149, 4-11=-54/553, 3-11=-282/149

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 with a clearance greater than 6-0-0 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 111 lb uplift at joint 2 and 111 lb uplift at joint 6.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.







Max Uplift 6=-68(LC 8), 2=-112(LC 8) Max Grav 6=923(LC 14), 2=992(LC 13)

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

TOP CHORD 2-3=-1244/132, 3-4=-1146/195, 4-5=-1144/197, 5-6=-1243/134

BOT CHORD 2-10=-154/1074, 8-10=0/733, 6-8=-161/957

WEBS 3-10=-282/149, 4-10=-54/553, 4-8=-58/553, 5-8=-284/151

## NOTES-

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

2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 with a clearance greater than 6-0-0 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 68 lb uplift at joint 6 and 112 lb uplift at joint 2.

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

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







#### LUMBER-

 TOP CHORD
 2x4 SP No.2

 BOT CHORD
 2x4 SP 2400F 2.0E

 WEBS
 2x4 SP No.3

 SLIDER
 Left 2x6 SP No.1 1-6-0, Right 2x6 SP No.1 1-6-0

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied. Rigid ceiling directly applied.

REACTIONS. (size) 1=0-3-8, 5=0-3-8 Max Horz 1=-167(LC 6) Max Uplift 1=-69(LC 8), 5=-69(LC 8) Max Grav 1=922(LC 13), 5=922(LC 14)

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

- TOP CHORD 1-2=-1243/135, 2-3=-1144/199, 3-4=-1144/199, 4-5=-1243/135
- BOT CHORD 1-9=-161/1072, 7-9=0/733, 5-7=-161/957
- WEBS 3-7=-58/554, 4-7=-284/151, 3-9=-58/554, 2-9=-284/151

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 with a clearance greater than 6-0-0 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 69 lb uplift at joint 1 and 69 lb uplift at joint 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.





