

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 22-3988-A MAG-LOT #123 ROOF

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

Pages or sheets covered by this seal: I52888150 thru I52888179

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

North Carolina COA: C-0844



July 4,2022

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.



- 10) Use Simpson Strong-Tie TJC37 (4 nail, 30-90) or equivalent spaced at 2-9-15 oc max. starting at 1-10-3 from the left end to 4-8-2 to connect truss(es) to front face of bottom chord.
- Use Simpson Strong-Tie TJC37 (4 nail 90-150) or equivalent at 1-10-3 from the left end to connect truss(es) to back face of bottom 11) chord, skewed 45.0 deg.to the right, sloping 0.0 deg. down.
- 12) Use Simpson Strong-Tie TJC37 (4 nail 90-150) or equivalent at 4-8-2 from the left end to connect truss(es) to back face of bottom chord, skewed 45.0 deg.to the right, sloping 0.0 deg. down.
- 13) Fill all nail holes where hanger is in contact with lumber.
- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 59 lb down and 12 lb up at 1-10-3, 59 lb down and 12 lb up at 1-10-3, and 72 lb down and 53 lb up at 4-8-2, and 72 lb down and 53 lb up at 4-8-2 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

CARE CARE AND 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





Job	Truss	Truss Type	Qty	Ply	MAG-LOT #123 ROOF	-			
						152888150			
22-3988-A	CJ01	Diagonal Hip Girder	1	1					
					Job Reference (optional)				
Riverside Roof Truss, LLC,	Danville, Va - 24541,			8.530 s l	Dec 6 2021 MiTek Industries, Inc. Fri Jul 1 14:47:33 2022	Page 2			
		ID:Bxl2MwYau NHkbraGCmHloyOvst-MtVkW2?Vd7AI khqYJXFafDwX5qAt0Li6JV8eFz0P8e							

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-2=-43, 2-4=-43, 4-5=-43, 6-8=-20

Concentrated Loads (lb) Vert: 11=-75(F=-37, B=-37) 13=-11(F=-5, B=-5)

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Job	Truss	Truss Type	Qty	Ply	MAG-LOT #123 ROOF	
						152888151
22-3988-A	HG01	Roof Special Girder	1	2		
				_	Job Reference (optional)	
Riverside Roof Truss, LLC,	Danville, Va - 24541,			8.530 s	Dec 6 2021 MiTek Industries, Inc. Fri Jul 1 14:47:35 2022	Page 2
		ID:B:	xl2MwYau	_NHkbraG	CmHloyOvst-IGcVxk1m9kQ0D2rDfkajf4J8XuF_L8P_Zd_Fj	7z0P8c

NOTES-

- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 268 lb uplift at joint 21 and 508 lb uplift at joint 12.
- 12) 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.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) Use Simpson Strong-Tie LUS26-2 (4-16d Girder, 3-16d Truss) or equivalent at 22-10-0 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg. to the left, sloping 0.0 deg. down.
- 15) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 24-1-4 from the left end to 32-1-4 to connect truss(es) to front face of bottom chord.
- 16) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Right Hand Hip) or equivalent at 34-1-10 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
- 17) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)
 - Vert: 1-2=-43, 2-4=-43, 4-5=-43, 5-9=-53, 9-10=-43, 10-11=-43, 12-21=-20

Concentrated Loads (lb)

Vert: 16=-829(F) 13=-491(F) 27=-198(F) 28=-198(F) 29=-198(F) 30=-198(F) 31=-198(F)

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			3-4-7						
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0 PCUL 0.0 t	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.17 BC 0.11 WB 0.04	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.01 -0.01 -0.00	(loc) 5-6 5-6 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP						Weight: 18 lb	FT = 20%
LUMBER-		BF	ACING-						

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 3-4-7 oc purlins,

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

except end verticals

LUMBER-

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

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 5=Mechanical

Max Horz 6=100(LC 16) Max Uplift 6=-16(LC 16), 3=-33(LC 16), 5=-3(LC 16) Max Grav 6=207(LC 2), 3=97(LC 21), 5=67(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 3-3-11 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 6, 33 lb uplift at joint 3 and 3 lb uplift at joint 5.
- 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.

July 4,2022

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3-4-7 3-4-7

BRACING-

TOP CHORD

BOT CHORD

DEFL

Vert(LL)

Vert(CT)

Horz(CT)

in (loc)

5-6

5-6

except end verticals

3

-0.01

-0.01

-0.00

l/defl

>999

>999

n/a

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

I/d

240

180

n/a

Structural wood sheathing directly applied or 3-4-7 oc purlins,

PLATES

Weight: 18 lb

MT20

GRIP

244/190

FT = 20%

LUMBER-

LOADING (psf)

TCLL (roof)

TCDL

BCLL

BCDL

Snow (Pf/Pg)

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

20.0

10.0

10.0

0.0

11.6/15.0

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 5=Mechanical

Max Horz 6=100(LC 16) Max Uplift 6=-16(LC 16), 3=-33(LC 16), 5=-3(LC 16)

Max Grav 6=207(LC 2), 3=97(LC 21), 5=67(LC 7)

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

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

NOTES-

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 3-3-11 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

2-0-0

1.15

1.15

YES

CSI.

тс

вс

WB

Matrix-MP

0.17

0.11

0.04

- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 6, 33 lb uplift at joint 3 and 3 lb uplift at joint 5.
- 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.



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LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.09 BC 0.02 WB 0.03 Matrix-MP	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.00 -0.00 -0.00	(loc) 6 6 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 9 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3		BF TC BC	ACING-	Structural except end Rigid ceilir	wood : d vertic na dire	sheathin cals.	g directly ap	oplied or 1-4-7 oc purl 0 oc bracing.	ins,

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical Max Horz 6=67(LC 16) Max Uplift 6=-21(LC 16), 3=-11(LC 20), 4=-30(LC 16)

Max Grav 6=153(LC 21), 3=10(LC 12), 4=25(LC 14)

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

NOTES-

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 6, 11 lb uplift at joint 3 and 30 lb uplift at joint 4.
- 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.

July 4,2022

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2







1 1ato 01100to (7t, 1) [0.Edgo	,0 1 0]							
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 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 0.09 BC 0.02 WB 0.03 Matrix-MP	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loo -0.00 -0.00 -0.00	c) l/defl 6 >999 6 >999 3 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 9 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3		BRA TOP BOT	CING- CHORD CHORD	Structural wo except end v Rigid ceiling	od sheathin erticals. directly appl	ig directly a lied or 10-0-	pplied or 1-4-7 oc purl •0 oc bracing.	lins,

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical Max Horz 6=67(LC 16) Max Uplift 6=-21(LC 16), 3=-11(LC 20), 4=-30(LC 16)

Plate Offsets (X Y)-- [5:Edge 0-1-8]

Max Grav 6=153(LC 21), 3=10(LC 12), 4=25(LC 14)

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

NOTES-

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

-9-9

0-0-1

- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 6, 11 lb uplift at joint 3 and 30 lb uplift at joint 4.
- 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.

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818 Soundside Road Edenton, NC 27932

			5-4-0					
			5-4-0					
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.53 BC 0.32 WB 0.09	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (lo -0.04 4 -0.08 4 -0.00	c) l/defl -5 >999 -5 >781 4 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCDL 10.0	Code IRC2016/1FI2014	Maultx-IVIP					weight. 52 lb	FI = 20%
LUMBER-		В	RACING-					

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 4=Mechanical, 5=0-3-8 Max Horz 5=138(LC 13)

Max Uplift 4=-39(LC 13), 5=-42(LC 16)

Max Grav 4=218(LC 21), 5=278(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. BOT CHORD 4-5=-306/223 WEBS 2-4=-175/265

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 5-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

3) Unbalanced snow loads have been considered for this design.

- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 4 and 42 lb uplift at ioint 5.
- 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.

Structural wood sheathing directly applied or 5-4-0 oc purlins,

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

except end verticals

Scale = 1:26.5

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Scale = 1:26.5

<u>5-4-0</u> 5-4-0

Plate Offsets (X,Y) [4:Edge,0	-6-4]					
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCode IRC2018/TPI2014	CSI. TC 0.32 BC 0.98 WB 0.01 Matrix-MP	DEFL. in (I /ert(LL) -0.07 /ert(CT) -0.12 /orz(CT) -0.00 -0.00 //ert(CT)	loc) I/defl L/d 3-4 >919 240 3-4 >488 180 3 n/a n/a	PLATES MT20 Weight: 69 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2 WEBS 2x4 SP No.3		BRACING TOP CHC BOT CHC	i- IRD Structural v except end DRD Rigid ceilin	wood sheathing directly a l verticals. g directly applied or 10-0-	oplied or 5-4-0 oc purlir 0 oc bracing.	15,

REACTIONS. (size) 3=Mechanical, 4=0-3-8 Max Horz 4=125(LC 9)

Max Uplift 3=-95(LC 9), 4=-78(LC 12) Max Grav 3=1031(LC 3), 4=1237(LC 3)

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

NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
- Top chords connected as follows: 2x4 1 row at 0-9-0 oc.
- Bottom chords connected as follows: 2x6 2 rows staggered at 0-9-0 oc.
- Webs connected as follows: 2x4 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 95 lb uplift at joint 3 and 78 lb uplift at joint 4.
- 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.
- Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-4-12 from the left end to 3-4-12 to connect truss(es) to back face of bottom chord.
- 12) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

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

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	MAG-LOT #123 ROOF	
						152888158
22-3988-A	M02G	Monopitch Girder	1	2		
				_	Job Reference (optional)	
Riverside Roof Truss, LLC,	Danville, Va - 24541,			8.530 s	Dec 6 2021 MiTek Industries, Inc. Fri Jul 1 14:47:41 2022	Page 2
		ID:BxI2M	/lwYau_NH	kbraGCmF	HoyOvst-7QzmCn6WkaBAxzIM0?h7vLYGnJF3l0gtyYRZwn	z0P8W

LOAD CASE(S) Standard Uniform Loads (plf) Vert: 1-2=-43, 3-4=-20 Concentrated Loads (lb) Vert: 6=-702(B) 7=-702(B)

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- DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.

5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.

- 6) Gable requires continuous bottom chord bearing.
- 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 35 lb uplift at joint 2 and 35 lb uplift at joint 4.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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2x4 =

6-0-0

2x4 =

	6-0-0										
Plate Offsets (X,Y) [3:0-2-0,	late Offsets (X,Y) [3:0-2-0,Edge], [5:0-2-0,Edge]										
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 16.5/15.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2018/TPI2014	CSI. TC 0.05 BC 0.05 WB 0.02 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 6 6 6	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 17 lb	GRIP 244/190 FT = 20%		
LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3		B B	RACING- OP CHORD OT CHORD	Structural 2-0-0 oc p Rigid ceili	l wood ourlins: ing dire	sheathin 3-5. ctly appli	g directly ap ied or 10-0-0	plied or 6-0-0 oc purlir) oc bracing.	ıs, except		

REACTIONS. (size) 2=4-3-11, 6=4-3-11, 8=4-3-11 Max Horz 2=-25(LC 14) Max Uplift 2=-31(LC 16), 6=-31(LC 16)

Max Grav 2=147(LC 39), 6=147(LC 39), 8=167(LC 2)

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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; B=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain
- surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) Gable requires continuous bottom chord bearing.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 2 and 31 lb uplift at joint 6.
- 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.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or 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 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

Job	Truss	Truss Type	Qty	Ply	MAG-LOT #123 ROOF	
						152888162
22-3988-A	SD02	Hip	1	1		
					Job Reference (optional)	
Riverside Roof Truss, LLC,	Danville, Va - 24541,			8.530 s l	Dec 6 2021 MiTek Industries, Inc. Fri Jul 1 14:47:47 2022	2 Page 2
		ID:BxI2Mv	vYau NHk	braGCmH	lovOvst-vaL1SqAHKQxJfumWMGoX9coArkK49XUlKUut8	Rz0P8Q

NOTES-

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.

11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or 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 **ANS/ITPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

	6-1-12		2-0-0 -10-4	+	5-4-8	+ 4	22-9-0 5-4-8		30-11	-12 12			39-6-0 8-6-4	
Plate Offsets (X	(,Y) [11:0-2-8	3,0-1-12], [23:0-2-8	,0-1-12]		0.0		0.0							
LOADING (psf) TCLL (roof) Snow (Pf/Pg) 1 TCDL BCLL) 20.0 16.5/15.0 10.0 0.0 *	SPACING- Plate Grip I Lumber DO Rep Stress Code JRC2	2-0 DOL 1. L 1. Incr YE	-0 15 15 55	CSI. TC BC WB Matri	0.84 0.96 0.87		DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.57 -0.97 0.11	(loc) 19 19 13	l/defl >829 >484 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS	GRIP 244/190 187/143
BCDL	10.0		010/111201	+	Iviati								Weight. 200 lb	FT = 2076
LUMBER- TOP CHORD BOT CHORD WEBS REACTIONS.	2x4 SP No.2 *E 4-5,8-9: 2x4 SP 2x4 SP No.2 *E 15-22: 2x4 SP I 2x4 SP No.3 *E 2-24: 2x6 SP No (size) 24=(Max Horz 24=-	xcept* DSS xcept* DSS, 18-20: 2x4 SF xcept* 5.2 D-3-8, 13=0-3-8 -192(I C 14)	9 No.1				BR/ TOF BOT	ACING- P CHORD T CHORD BS	Structura 2-0-0 oc Rigid cei 2-2-0 oc 6-0-0 oc 1 Row at	al wood purlins ling dire bracing bracing midpt	sheathin (3-6-15 r ectly appl : 13-14. : 18-20	ng directly app max.): 5-8. lied or 10-0-0 6-21, 6-16	blied, except end vertic oc bracing, Except: 5, 7,16,110-13	als, and
FORCES. (Ib) TOP CHORD BOT CHORD WEBS	Max Horz 24=- Max Uplift 24=- Max Grav 24=2 - Max. Comp./N 2-3=-2901/75, 8-10=-2850/11 23-24=-71/460 13-14=0/2382 3-21=-326/136 8-14=-71/561.	-192(LC 14) -69(LC 16), 13=-80 2073(LC 28), 13=20 Max. Ten All force , 3-5=-2762/86, 5-6 67, 10-11=-672/127 0, 21-23=0/2555, 1 -6 6, 5-21=0/1063, 20 10-14=-279/169, 2	(LC 16) 036(LC 29) es 250 (lb) or =-2164/121; 7, 2-24=-195 7-21=0/255; -21=-781/11 2-23=0/2115	less exc 6-7=-240 0/105, 11 2, 16-17= , 6-20=-6 , 10-13=-	ept when sh 65/114, 7-8= 1-13=-555/1 0/2552, 14- 07/61, 7-16 2337/0	nown. =-2466/11 41 16=0/2169 =-345/89,	15, 5, , 8-16:	=0/971,				Charles Charles	SEAL 036322	
NOTES- 1) Unbalanced 2) Wind: ASCE II; Exp B; End 18-11-1, Inte exposed ; en grip DOL=1.6 3) TCLL: ASCE DOL=1.15; 1 surcharge ap 4) Unbalanced 5) This truss ha non-concurre 6) Provide adec 7) All plates are 8) This truss ha 9) * This truss ha	 VEBS 3:21=326/136, 5-21=0/1063, 20-21=-781/11, 6-20=-607/61, 7-16=-345/89, 8-16=0/971, 8-14=-71/561, 10-14=-279/169, 2-23=0/2115, 10-13=-2337/0 VOTES- Unbalanced roof live loads have been considered for this design. Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=40ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-11-6, Interior(1) 2-11-6 to 13-4-0, Exterior(2R) 13-4-0 to 13-4-1, Interior(1) 18-11-1 to 26-2-0, Exterior(2R) 26-2-0 to 31-9-1, Interior(1) 31-9-1 to 40-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15) Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4. Uhbalanced snow loads have been considered for this design. This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads. Provide adequate drainage to prevent water ponding. All plates are MT20 plates unless otherwise indicated. 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 will fib between the bottom chord and any other members, with BCDL = 10.0psf. 													
10) Provide me ioint 13.	chanical connec	tion (by others) of t	russ to bear	ing plate	capable of v	withstandi	ling 69	lb uplift at join	t 24 and 8	30 lb up	lift at		July 4,20	22
Continued on pa	ige 2											1		
WARNING - Design valid fo a truss system building design is always requi fabrication, sto Safety Information	• Verify design parame r use only with MiTel . Before use, the buil . Bracing indicated i ired for stability and tr rage, delivery, erectit ation available from	eters and READ NOTES k® connectors. This des ding designer must veril is to prevent buckling of o prevent collapse with on and bracing of trusse I Truss Plate Institute, 26	ON THIS AND ign is based on y the applicabil individual truss possible persor s and truss sys 570 Crain High	NCLUDED ly upon para ity of design web and/or ial injury and tems, see vay, Suite 2	MITEK REFERI ameters shown parameters ar chord member d property dam ANSI/1 03 Waldorf, ME	And is for a nd properly i rs only. Add age. For ge FP11 Quality 2 20601	E MII-74 an indiv incorpor ditional t eneral g y Criter	73 rev. 5/19/2020 B ridual building comp rate this design into temporary and perr juidance regarding ria, DSB-89 and BC	EFORE USE ponent, not the overall nanent brac the CSI Building	ing J Compo	nent	1	ENGINEERING BY A MITEK A 818 Soundside Road Edenton, NC 27932	G

Job	Truss	Truss Type	Qty	Ply	MAG-LOT #123 ROOF	
						152888163
22-3988-A	SD03	Hip	1	1		
					Job Reference (optional)	
Riverside Roof Truss, LLC,	Danville, Va - 24541,			8.530 s l	Dec 6 2021 MiTek Industries, Inc. Fri Jul 1 14:47:49 2022	Page 2
		ID:BxI2M	wYau NH	braGCmH	llovOvst-uvSntWCYs1B1vBwvUga?E1uViX BdRJ2noN C	Jz0P8O

NOTES-

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.

12) 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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5-9	12 11-4-0	19-9-0	28-2-0	33-8-4	39-6-0	-
Plate Offsets (X,Y) [2:0-2	-4,0-1-12], [10:0-2-4,0-1-12], [12:Edge,	0-1-8]	0-0-0	3-0-4	5-5-12	
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 16.5/15.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code. IRC2018/TPI2014	CSI. TC 0.64 BC 0.93 WB 0.76 Matrix-MS	DEFL. in (loc) Vert(LL) -0.25 16-18 Vert(CT) -0.44 16-18 Horz(CT) 0.10 12	l/defl L/d >999 240 >999 180 n/a n/a	PLATES MT20 Weight: 244 lb	GRIP 244/190 FT = 20%
BCDL 10.0					Weight. 244 10	11 = 2070
LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 15-17: 2x4 SP WEBS 2x4 SP No.3 REACTIONS. (size) 2 Max Horz 2 Max Uplift 2	*Except* P No.1 D=0-3-8, 12=0-3-8 D=168(LC 15) D=-131(LC 16), 12=-131(LC 16)	E V	BRACING- OP CHORD Structural wood except end ver SOT CHORD Rigid ceiling dir VEBS 1 Row at midpt	d sheathing directly app ticals, and 2-0-0 oc pur rectly applied or 2-2-0 o 5-18, 7-14	blied or 3-4-11 oc purlin lins (3-5-10 max.): 4-8. oc bracing. 4	IS,
FORCES. (lb) - Max. Comp TOP CHORD 2-3=-2568/ 8-9=-2385/ BOT CHORD 19-20=-74/ 12-13=-12/ WEBS 3-18=-323/ 8-14=-11/8)=1843(LC 28), 12=1843(LC 29) ./Max. Ten All forces 250 (lb) or less 170, 3-4=-2386/205, 4-5=-2003/205, 5- 205, 9-10=-2569/170, 2-20=-1737/162, 431, 18-19=-39/2251, 16-18=-8/2474, 1 311 35, 4-18=-11/889, 5-18=-810/56, 5-16= 89, 9-14=-323/85, 2-19=-30/1856, 10-1	except when shown. 7=-2484/217, 7-8=-2003/20 10-12=-1737/162 4-16=-8/2448, 13-14=-39/2 0/263, 7-16=0/263, 7-14=-8 3=-30/1850	5, 125, 10/56,			
 NOTES- 1) Unbalanced roof live loads 2) Wind: ASCE 7-16; Vult=13 II; Exp B; Enclosed; MWFI 16-11-5, Interior(1) 16-11- exposed ; end vertical left grip DOL=1.60 3) TCLL: ASCE 7-16; Pr=20. DOL=1.15); Is=1.0; Rough surcharge applied to all ex 4) Unbalanced snow loads h 5) This truss has been desig non-concurrent with other 6) Provide adequate drainag 7) This truss has been desig 8) * This truss has been desig 8) * This truss has been desig 9) Provide mechanical conne at joint 12. 10) This truss is designed in referenced standard ANS 11) Graphical purlin represer 	have been considered for this design. Omph (3-second gust) Vasd=103mph; XS (directional) and C-C Exterior(2E) -1 5 to 28-2-0, Exterior(2R) 28-2-0 to 33-8 and right exposed; C-C for members an D psf (roof LL: Lum DOL=1.15 Plate DC Cat B; Partially Exp.; Ce=1.0; Cs=1.00 posed surfaces with slopes less than 0 ave been considered for this design. ted for greater of min roof live load of 1 live loads. a to prevent water ponding. ted for a 10.0 psf bottom chord live loar gned for a 11.0 psf bottom chord live loar gned for a live load of 20.0psf on the bc chord and any other members, with BC cition (by others) of truss to bearing pla accordance with the 2018 International B/TPI 1. tation does not depict the size or the o	TCDL=6.0psf; BCDL=6.0ps -0-0 to 2-11-6, Interior(1) 2- -4, Interior(1) 33-8-4 to 40-6 d forces & MWFRS for reac DL=1.15); Pg=15.0 psf; Pf=1 ; Ct=1.10, Lu=50-0-0; Min. .500/12 in accordance with 2.0 psf or 1.00 times flat roc d nonconcurrent with any ot tottom chord in all areas whe DL = 10.0psf. te capable of withstanding 1 Residential Code sections rientation of the purlin along	f; h=25ft; B=45ft; L=40ft; eave=5f -11-6 to 11-4-0, Exterior(2R) 11-4 S-0 zone; cantilever left and right titons shown; Lumber DOL=1.60 p 6.5 psf (Lum DOL=1.15 Plate flat roof snow load governs. Rain IBC 1608.3.4. of load of 11.6 psf on overhangs her live loads. re a rectangle 3-6-0 tall by 2-0-0 v I31 lb uplift at joint 20 and 131 lb o R502.11.1 and R802.10.2 and the top and/or bottom chord.	t; Cat. -0 to plate wide uplift	SEAL 036322	Human Human
WARNING - Verify design par Design valid for use only with M a truss system. Before use, the building design. Bracing indicat	ameters and READ NOTES ON THIS AND INCLUE (Tek® connectors. This design is based only upor building designer must verify the applicability of de de is to prevent buckling of individual truss web a	DED MITEK REFERENCE PAGE MI parameters shown, and is for an ir ssign parameters and properly inco d/or chord members only. Addition	I-7473 rev. 5/19/2020 BEFORE USE. ndividual building component, not rporate this design into the overall nal temporary and permanent bracing		TRENC	0

billing design. Dialong indicates is 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

Scale = 1:71.9

6-1	1-12 13-8-0	21-11-0	30-2-0	39-6-0	
Blota Offecto (X X) [2:0.2.0	0.1.12 6-8-4	8-3-0	8-3-0	9-4-0	·
Plate Olisets (A, f) [2.0-2-0]	0-1-12]				
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 16.5/15.0 TCDL 10.0 PCLL 0.0 *	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYES	CSI. TC 0.70 BC 0.85 WB 0.65	DEFL. in (loc) I/defl Vert(LL) -0.28 16-18 >999 Vert(CT) -0.52 16-18 >901 Horz(CT) 0.13 13 n/a	L/d PLATES 240 MT20 180 n/a	GRIP 244/190
BCDL 0.0	Code IRC2018/TPI2014	Matrix-MS		Weight: 244 lb	FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.1 WEBS 2x4 SP No.3 *E 4-18: 2x4 SP N REACTIONS. (size) 20=	xcept* o.2 0-3-8, 13=0-3-8	BR TO BO WE	ACING- P CHORD Structural wood sheathin except end verticals, and T CHORD Rigid ceiling directly appl BS 1 Row at midpt	g directly applied or 2-11-15 oc purli l 2-0-0 oc purlins (3-0-13 max.): 5-9. lied or 10-0-0 oc bracing. 5-18, 6-18, 8-14, 3-20, 10-13	ns,
Max Horz 20= Max Uplift 20= Max Grav 20=	171(LC 15) -131(LC 16), 13=-131(LC 16) 1848(LC 28), 13=1839(LC 29)				
FORCES. (lb) - Max. Comp.// TOP CHORD 2-3=-521/119 8-9=-2103/21 8-9=-2103/21 BOT CHORD 19-20=-121/2 WEBS 4-19=-70/384 8-14=-1058/9 8	Max. Ten All forces 250 (lb) or less exc , 3-4=-2567/290, 4-5=-3046/324, 5-6=-2 9, 9-10=-2489/225, 10-11=-493/60, 2-20 249, 18-19=-42/2023, 16-18=-126/2965 , 4-18=-166/2487, 5-18=-1693/212, 6-18 7, 9-14=-14/956, 10-14=-123/253, 3-20=	ept when shown. 639/262, 6-8=-2904/267,)=-458/129, 11-13=-460/95 14-16=-114/2773, 13-14= 8=-587/62, 8-16=0/445, 2181/102, 10-13=-2106/1	-121/2023 89		
 NOTES- 1) Unbalanced roof live loads h 2) Wind: ASCE 7-16; Vult=130r II; Exp B; Enclosed; MWFRS 13-8-0, Interior(1) 13-8-0 to 3 end vertical left and right exp DOL=1.60 3) TCLL: ASCE 7-16; Pr=20.0 g DOL=1.15); Is=1.0; Rough C surcharge applied to all export 4) Unbalanced snow loads have 5) This truss has been designe non-concurrent with other liv 6) Provide adequate drainage t 7) This truss has been designe will fit between the bottom ct 9) Provide mechanical connect at joint 13. 10) This truss is designed in ac referenced standard ANSI/ 11) Graphical purlin representa 	ave been considered for this design. nph (3-second gust) Vasd=103mph; TC (directional) and C-C Exterior(2E) -1-0- 00-2-0, Exterior(2R) 30-2-0 to 34-1-6, Int osed;C-C for members and forces & MV osef (roof LL: Lum DOL=1.15 Plate DOL= at B; Partially Exp.; Ce=1.0; Cs=1.00; C sed surfaces with slopes less than 0.50 a been considered for this design. d for greater of min roof live load of 12.0 e loads. o prevent water ponding. d for a 10.0 psf bottom chord live load no ed for a live load of 20.0psf on the botto ior and any other members, with BCDL on (by others) of truss to bearing plate of cordance with the 2018 International Re TPI 1. tion does not depict the size or the orier	DL=6.0psf; BCDL=6.0psf; 1 0 to 2-11-6, Interior(1) 2-11 erior(1) 34-1-6 to 40-6-0 zc VFRS for reactions shown; 1.15); Pg=15.0 psf; Pf=16.1 t=1.10, Lu=50-0-0; Min. fla 0/12 in accordance with IB/ psf or 1.00 times flat roof I onconcurrent with any othe m chord in all areas where .= 10.0psf. apable of withstanding 131 sidential Code sections R5 tation of the purlin along th	n=25ft; B=45ft; L=40ft; eave=5ft; Cat. -6 to 11-6-0, Exterior(2E) 11-6-0 to one; cantilever left and right exposed ; Lumber DOL=1.60 plate grip 5 psf (Lum DOL=1.15 Plate t roof snow load governs. Rain C 1608.3.4. oad of 11.6 psf on overhangs r live loads. a rectangle 3-6-0 tall by 2-0-0 wide I lb uplift at joint 20 and 131 lb uplift i02.11.1 and R802.10.2 and he top and/or bottom chord.	SEAL 036322 July 4,20	A AND AND AND AND AND AND AND AND AND AN
WARNING - Verify design param Design valid for use only with MiTe a truss system. Before use, the bui building design. Bracing indicated is always required for stability and fabrication, storage, delivery, erect Safety Information available from	eters and READ NOTES ON THIS AND INCLUDED k® connectors. This design is based only upon par iding designer must verify the applicability of design is to prevent buckling of individual truss web and/o to prevent collapse with possible personal injury an on and bracing of trusses and truss systems, see h Truss Plate Institute, 2670 Crain Highway, Suite 2	MITEK REFERENCE PAGE MII-74 ameters shown, and is for an indix parameters and properly incorpc rohord members only. Additional d property damage. For general g ANSI/TPH Quality Criter 203 Waldorf, MD 20601	73 rev. 5/19/2020 BEFORE USE. ridual building component, not rate this design into the overall temporary and permanent bracing juidance regarding the ria, DSB-89 and BCSI Building Component	ENGINEERING BY AMITEK AT 818 Soundside Road Edenton, NC 27932	D fillate

6x6 =

7	-11-12 15-8-0	23-11-0	32-2-0	39-6-0
Plate Offsets (X,Y) [2:0-2-0,	0-1-12], [5:0-6-0,0-2-0], [10:0-3-8,Edge]	, [12:Edge,0-1-8]	0-5-0	1-4-0
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 16.5/15.0 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.DEFL.TC0.93Vert(LL)BC0.90Vert(CT)WB0.73Horz(CT)Matrix-MSVert(CT)	in (loc) l/defl L/d -0.31 15-16 >999 240) -0.61 15-16 >770 180) 0.13 12 n/a n/a	PLATES GRIP MT20 244/190 MT20HS 187/143 Weight: 230 lb FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.1 *E 17-19: 2x4 SP No.3 *E WEBS 2x4 SP No.3 *E 4-16,2-19,10-12	xcept* No.2 xcept* 2: 2x4 SP No.2	BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathing directly 2-0-0 oc purlins (2-6-4 max.): 5-9. Rigid ceiling directly applied or 10- 1 Row at midpt 5-16, 8	applied, except end verticals, and -0-0 oc bracing. 8-13, 3-19
REACTIONS. (size) 19= Max Horz 19= Max Uplift 19= Max Grav 19=	0-3-8, 12=0-3-8 171(LC 15) -131(LC 16), 12=-131(LC 16) 1808(LC 28), 12=1788(LC 29)			
FORCES. (lb) - Max. Comp./l TOP CHORD 2-3=-523/110 8-9=-2113/21 8-9=-2113/21 BOT CHORD 18-19=-125/2 WEBS 4-18=-31/437 8-15=0/621, 8	Max. Ten All forces 250 (lb) or less exc , 3-4=-2469/264, 4-5=-3855/385, 5-6=-3 2, 9-10=-2526/203, 2-19=-459/125, 10-1 185, 16-18=-43/1950, 15-16=-185/3486, , 4-16=-219/2946, 5-16=-2143/261, 6-16 i-13=-1355/113, 9-13=0/975, 3-19=-210	ept when shown. 339/293, 6-8=-3333/280, 2=-1674/196 13-15=-159/3081, 12-13=-127/555 =-447/64, 6-15=-289/85, 3/116, 10-13=0/1821		
 NOTES- Unbalanced roof live loads h Wind: ASCE 7-16; Vult=130r II; Exp B; Enclosed; MWFRS 15-8-0, Interior(1) 15-8-0 to 3 end vertical left and right exp DOL=1.60 TCLL: ASCE 7-16; Pr=20.0 g DOL=1.15); Is=1.0; Rough C surcharge applied to all export 4) Unbalanced snow loads haw This truss has been designer non-concurrent with other liv Provide adequate drainage to 7) All plates are MT20 plates ur 8) This truss has been designer will fit between the bottom ch Provide mechanical connect at joint 12. This truss is designed in act referenced standard ANSI/ 	ave been considered for this design. nph (3-second gust) Vasd=103mph; TC (directional) and C-C Exterior(2E) -1-0- 32-2-0, Exterior(2R) 32-2-0 to 36-1-6, Int osed; C-C for members and forces & MV bisf (roof LL: Lum DOL=1.15 Plate DOL= at B; Partially Exp.; Ce=1.0; Cs=1.00; C sed surfaces with slopes less than 0.50 a been considered for this design. d for greater of min roof live load of 12.0 e loads. b prevent water ponding. Ness otherwise indicated. d for a 10.0 psf bottom chord live load nu ed for a live load of 20.0psf on the botto ord and any other members, with BCDL tion (by others) of truss to bearing plate cordance with the 2018 International Re FPI 1.	DL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; 0 to 2-11-6, Interior(1) 2-11-6 to 11-6-0, E erior(1) 36-1-6 to 40-6-0 zone; cantilever VFRS for reactions shown; Lumber DOL= 1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DC t=1.10, Lu=50-0-0; Min. flat roof snow loa 0/12 in accordance with IBC 1608.3.4. psf or 1.00 times flat roof load of 11.6 ps pnconcurrent with any other live loads. m chord in all areas where a rectangle 3- = 10.0psf. capable of withstanding 131 lb uplift at jc sidential Code sections R502.11.1 and R	L=40ft; eave=5ft; Cat. Exterior(2E) 11-6-0 to left and right exposed ; =1.60 plate grip DL=1.15 Plate ad governs. Rain f on overhangs 6-0 tall by 2-0-0 wide bint 19 and 131 lb uplift 8802.10.2 and	SEAL 036322 July 4,2022

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

Plate Offsets (X,Y) [3:0-2-8	.0-2-1]							
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 16.5/15.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code, IPC2018/TPI2014	CSI. TC 0.73 BC 0.64 WB 0.23 Matrix-MP	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.14 5-6 -0.28 5-6 0.00 5	l/defl >599 >300 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCDL 10.0	Code IRC2010/1FI2014	IVIAUIX-IVIP					weight. 50 b	FI = 20%
LUMBER- TOP CHORD 2x4 SP No.2		BR TO	ACING- P CHORD S'	tructural wood	sheathin	g directly ap	plied or 6-0-0 oc purlin	ıs,

BOT CHORD

WEBS 2x4 SP No.3 **REACTIONS.** (size) 6=0-3-0, 5=0-1-8 Max Horz 6=172(LC 13) Max Uplift 6=-42(LC 16), 5=-67(LC 13)

2x4 SP No 2

Max Grav 6=430(LC 36), 5=279(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-6=-314/196

NOTES-

BOT CHORD

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 5-7-13, Exterior(2E) 5-7-13 to 7-1-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 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) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 6 and 67 lb uplift at joint 5.
- 12) 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.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

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

ENGINEERING BY **TREENCO** A MITek Affiliate 818 Soundside Road Edenton, NC 27932

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

- non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 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) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 8 and 42 lb uplift at joint 6.
- 12) 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.
- 13) 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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3) TCLL: ASCE 7-16; Pf=20.0 pst (root LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 pst; Pf=11.6 pst (Lum DOL=1.15 F DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

4) Unbalanced snow loads have been considered for this design.

- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 2 and 61 lb uplift at joint 4.
- 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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			12-0-0						
	1		12-0-0						
LOADING (ps TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	f) 20.0 11.6/15.0 10.0 0.0 * 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2018/TPI2014	CSI. TC 0.18 BC 0.12 WB 0.07 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) 0.00 7 0.01 7 0.00 6	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 46 lb	GRIP 244/190 FT = 20%
LUMBER-			BRA	CING-					
TOP CHORD	2X4 SP N0.2		IOP	CHORD S	structural woo	a sneathin	q directly app	blied of 6-0-0 oc puriir	1S.

BOT CHORD

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

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

REACTIONS. All bearings 12-0-0.

Max Horz 2=24(LC 15) (lb) -

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

Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=336(LC 21), 8=336(LC 22)

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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 to 2-0-0, Exterior(2N) 2-0-0 to 6-0-0, Corner(3R) 6-0-0 to 9-0-0, Exterior(2N) 9-0-0 to 13-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs
- non-concurrent with other live loads.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * 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.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 10, 8. 12) 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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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.

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G mum July 4,2022

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818 Soundside Road Edenton, NC 27932

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Edenton, NC 27932

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818 Soundside Road Edenton, NC 27932

	8-6-4 16-	-0 22	2-9-0	30-11-12		39-6-0	
	8-6-4 8-2	2 6	-0-0	8-2-12	1	8-6-4	
Plate Offsets (X,Y) [2:0-2-0	,0-1-12], [6:0-2-8,0-2-1], [7:0-6-0,0-2-4	<u>, [11:0-2-0,0-1-12]</u>	-				
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 16.5/15.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Pop Strage Larger VES	CSI. TC 0.86 BC 0.87	DEFL. Vert(LL) Vert(CT)	in (loc) I/de -0.25 14-16 >99 -0.42 14-16 >99	efi L/d 19 240 19 180	PLATES MT20	GRIP 244/190
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS		0.12 13 11	a II/a	Weight: 260 lb	FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.1 *E 15-18: 2x4 SP WEBS 2x4 SP No.3	Except* No.2	B T B W	RACING- OP CHORD OT CHORD VEBS	Structural wood shea except end verticals, Rigid ceiling directly a 1 Row at midpt	thing directly ap and 2-0-0 oc pu applied or 10-0- 5-17, 7-1	oplied or 3-4-0 oc purlins Irlins (2-10-13 max.): 6-1 0 oc bracing. 17, 8-16, 3-20, 10-13	;, 7.
REACTIONS. (size) 20= Max Horz 20= Max Uplift 20= Max Grav 20=	0-3-8, 13=0-3-8 -233(LC 14) -131(LC 16), 13=-131(LC 16) 1869(LC 28), 13=1872(LC 29)						
FORCES. (lb) Max. Comp./l TOP CHORD 2-3=-543/108 8-10=-2613/2 BOT CHORD 19-20=-52/23 WEBS 5-19=0/426, 5 3-20=-2239/8 3-20=-2239/8 3-20=-2239/8	Max. Ten All forces 250 (lb) or less 6 , 3-5=-2608/211, 5-6=-2040/239, 6-7= 11, 10-11=-543/108, 2-20=-471/127, 30, 17-19=-9/2170, 16-17=0/1737, 14 5-17=-661/128, 6-17=-22/760, 7-16=-2 1, 10-13=-2245/81	xcept when shown. .1693/235, 7-8=-2045/239, 1-13=-471/127 16=0/2036, 13-14=-52/216 2/821, 8-16=-661/128, 8-14	60 4=0/426,				
 NOTES- 1) Unbalanced roof live loads h 2) Wind: ASCE 7-16; Vult=1300 II; Exp B; Enclosed; MWFRS 22-4-1, Interior(1) 22-4-1 to 2 exposed ; end vertical left ar grip DOL=1.60 3) TCLL: ASCE 7-16; Pr=20.0 DOL=1.15); Is=1.0; Rough C surcharge applied to all expo 4) Unbalanced snow loads hav 5) This truss has been designe non-concurrent with other liv 6) Provide adequate drainage t 7) This truss has been designe will fit between the bottom cl 9) Provide mechanical connect 20=131, 13=131. 10) This truss is designed in ad referenced standard ANSI/ 11) Graphical purlin representation 	ave been considered for this design. mph (3-second gust) Vasd=103mph; 5 (directional) and C-C Exterior(2E) -1 22-9-0, Exterior(2R) 22-9-0 to 28-2-13 ad right exposed;C-C for members and cosf (roof LL: Lum DOL=1.15 Plate DO cat B; Partially Exp.; Ce=1.0; Cs=1.00 used surfaces with slopes less than 0. e been considered for this design. d for greater of min roof live load of 12 e loads. o prevent water ponding. d for a 10.0 psf bottom chord live load ed for a 10.0 psf bottom chord live load ed for a live load of 20.0psf on the bo nord and any other members, with BC ion (by others) of truss to bearing plat cordance with the 2018 International TPI 1.	CDL=6.0psf; BCDL=6.0psf D-0 to 2-11-6, Interior(1) 2- Interior(1) 28-2-13 to 40-6 forces & MWFRS for react (1) 28-2-13 to 40-6 forces & MWFRS for react (2) 21-10, Lu=50-0-0; Min. f 00/12 in accordance with I 00/12 in accordance with I 0 psf or 1.00 times flat roo nonconcurrent with any oth com chord in all areas wher DL = 10.0psf. (2) capable of withstanding 10 Residential Code sections F entation of the purlin along	f; h=25ft; B=45ft; L 11-6 to 16-9-0, Ex -0 zone; cantilever tions shown; Lumt 6.5 psf (Lum DOL: flat roof snow load BC 1608.3.4. of load of 11.6 psf of her live loads. re a rectangle 3-6- 00 lb uplift at joint R502.11.1 and R80 the top and/or bot	=40ft; eave=5ft; Cat. terior(2R) 16-9-0 to r left and right per DOL=1.60 plate =1.15 Plate governs. Rain on overhangs -0 tall by 2-0-0 wide (s) except (jt=lb) 02.10.2 and tom chord.	the community of the second se	SEAL 036322	A A A A A A A A A A A A A A A A A A A

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	L		39-6-0	0					
	I		39-6-0	0				I	
Plate Offsets (X,Y) [6:0-2-3,E	dge], [12:0-2-8,0-2-1], [15:0-2-8,0-2-1]], [21:0-2-3,Edge]						
LOADING (ps TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	sf) 20.0 16.5/15.0 10.0 0.0 * 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.18 BC 0.09 WB 0.20 Matrix-R	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (l -0.00 -0.00 0.01	loc) l/defl 26 n/r 26 n/r 27 n/a	L/d 120 120 n/a	PLATES MT20 Weight: 310 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD BOT CHORD WEBS OTHERS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3		BF TC BC WI	RACING- OP CHORD OT CHORD EBS	Structural v except end Rigid ceilin 1 Row at m	wood sheathi I verticals, an Ig directly app nidpt	ng directly a d 2-0-0 oc p lied or 6-0-(15-37, 2	applied or 6-0-0 oc purlins purlins (6-0-0 max.): 12-1 0 oc bracing. 14-38, 13-39, 12-40, 11-4	5. 5. 1, 16-36
REACTIONS.	All bearings 39	-6-0.							

(lb) - Max Horz 50=-233(LC 14)

Max Uplift All uplift 100 lb or less at joint(s) 27, 38, 39, 41, 43, 44, 45, 46, 47, 48, 36, 34, 33, 32, 31, 30, 29 except 50=-210(LC 14), 49=-154(LC 15), 28=-106(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 27, 37, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, 36, 34, 33, 32, 31, 30, 29, 28 except 50=279(LC 29), 49=255(LC 14)

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

TOP CHORD 10-11=-153/254, 11-12=-181/299, 12-13=-158/274, 13-14=-158/274, 14-15=-158/274, 15-16=-181/299, 16-17=-153/254

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=40ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 to 2-9-0, Exterior(2N) 2-9-0 to 16-9-0, Corner(3R) 16-9-0 to 20-9-0, Exterior(2N) 20-9-0 to 22-9-0, Corner(3R) 22-9-0 to 26-9-0, Exterior(2N) 26-9-0 to 40-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) Gable requires continuous bottom chord bearing.
- 10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 11) Gable studs spaced at 2-0-0 oc.
- 12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 13) * 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.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27, 38, 39, 41, ContiNue#orf5a46 #7, 48, 36, 34, 33, 32, 31, 30, 29 except (jt=lb) 50=210, 49=154, 28=106.

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Job	Truss	Truss Type	Qty	Ply	MAG-LOT #123 ROOF	
00 0000 4	TOOLE	Dissurts als Dana Quesants d Oakla				152888175
22-3988-A	103GE	Piggyback Base Supported Gable	1	1	Job Reference (optional)	
Riverside Roof Truss, LLC,	Danville, Va - 24541,			8.530 s I	Dec 6 2021 MiTek Industries, Inc. Fri Jul 1 14:48:08 2022	Page 2
		ID:Bxl2	/wYau N⊦	IkbraGCm	HlovOvst-ac6zs0RSNtaLh6tZ5AaTV2AwDChGaBSr9FTUNi	iz0P85

NOTES-

15) 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.
16) 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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Snow (Pf/Pg) TCDL BCLL BCDL	11.6/15.0 10.0 0.0 * 10.0	Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	BC 0.03 WB 0.04 Matrix-S	Vert(CT) Horz(CT)	-0.00 0.00	9 10	n/r n/a	120 n/a	Weight: 66 lb	FT = 20%
LUMBER-			BF	ACING-						
TOP CHORD	2x4 SP No.2		тс	P CHORD	Structural	wood s	heathin	g directly ap	plied or 6-0-0 oc purlins,	
BOT CHORD	2x4 SP No.2				except en	d vertic	als.			
WEBS	2x4 SP No.3		BC	OT CHORD	Rigid ceili	ng direa	ctly appl	ied or 6-0-0	oc bracing.	

IOF CHORD	2X4 3P NU.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No 3

REACTIONS. All bearings 11-8-0.

(lb) -Max Horz 16=-105(LC 14)

Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11 Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

NOTES-

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; B=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 to 1-10-0, Exterior(2N) 1-10-0 to 5-10-0, Corner(3R) 5-10-0 to 8-10-0, Exterior(2N) 8-10-0 to 12-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) * 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.
- 13) 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.
- 14) 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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		<u>4-6-0</u> 4-6-0	7-2-1	2				
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.32 BC 0.15 WB 0.07 Matrix-MP	DEFL. ir Vert(LL) -0.01 Vert(CT) -0.03 Horz(CT) -0.00	(loc) 6-7 6-7 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 47 lb	GRIP 244/190 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 7=0-3-0, 5=0-1-8

Max Horz 7=125(LC 15) Max Uplift 7=-49(LC 16), 5=-21(LC 16)

Max Grav 7=352(LC 2), 5=272(LC 2)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-7=-316/183, 4-5=-259/135

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 4-6-0, Exterior(2E) 4-6-0 to 7-1-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.
 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.

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

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

except end verticals

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818 Soundside Road Edenton, NC 27932

	4-6	5-0	4-6-0)				
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0 PCUL 0.0 t	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.40 BC 0.18 WB 0.08	DEFL. ir Vert(LL) -0.01 Vert(CT) -0.02 Horz(CT) -0.00	(loc) 6-7 6-7 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCDL 0.0	Code IRC2018/TPI2014	Matrix-MS					Weight: 64 lb	FT = 20%
LUMBER-		BR	ACING-					

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 8=0-3-0, 6=0-3-0 Max Horz 8=-113(LC 14) Max Uplift 8=-57(LC 16), 6=-57(LC 16)

Max Grav 8=417(LC 2), 6=417(LC 2)

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

TOP CHORD 2-3=-288/97, 3-4=-288/97, 2-8=-384/179, 4-6=-384/179

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 4-6-0, Exterior(2R) 4-6-0 to 7-6-0, Interior(1) 7-6-0 to 10-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate
- DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.

6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.

- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * 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.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
- 12) 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.

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

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

except end verticals.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 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

