

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 24-3350-A RVF-LOT #8 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: I66043307 thru I66043348

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844



June 6,2024

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.





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and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #8 ROOF	
					16	6043308
24-3350-A	HG01	HIP GIRDER	1	2		
				~	Job Reference (optional)	
Riverside Roof Truss, LLC,	Danville, Va - 24541,		8	.730 s Apr	25 2024 MiTek Industries, Inc. Wed Jun 5 10:52:42 2024 Pa	age 2
			ID:tdHS5I\	NyLng?jaF	9E1eBtgyly9 -TuPiot3rlJ0zW7oPJafwL2byP3BUs1ftLp6Di6z	9M6p

NOTES-

14) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Left Hand Hip) or equivalent at 4-0-6 from the left end to connect truss(es) to front face of bottom chord.

15) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Right Hand Hip) or equivalent at 7-11-10 from the left end to connect truss(es) to front face of bottom chord. 16) Fill all nail holes where hanger is in contact with lumber.

17) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 134 lb down and 46 lb up at 6-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-2=-43, 2-3=-43, 3-4=-53, 4-5=-43, 5-6=-43, 7-10=-20

Concentrated Loads (lb)

Vert: 9=-338(F) 8=-338(F) 13=-134(F)

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TCLL (roof) 20.0	SPACING- 2-0-0 Plate Grip DOI 1 15	CSI.	DEFL. in	(loc)	l/defl	L/d	PLATES	GRIP
Snow (Pf/Pg) 11.6/15.0 TCDL 10.0	Lumber DOL 1.15 Rep Stress Incr YES	BC 0.03 WB 0.03	Vert(CT) -0.00 Horz(CT) -0.00	4-5 3	>999 >999 n/a	180 n/a	WI 20	244/190
BCDL 0.0 *	Code IRC2018/TPI2014	Matrix-MP		_			Weight: 11 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 1-11-11 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=67(LC 16) Max Uplift 5=-20(LC 16), 3=-10(LC 13), 4=-14(LC 16)

Max Grav 5=158(LC 21), 3=37(LC 21), 4=35(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) 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 20 lb uplift at joint 5, 10 lb uplift at joint 3 and 14 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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ENGINEERING BY RENCO A MiTek Affiliate



June 6,2024

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A MiTek . 818 Soundside Road Edenton, NC 27932



			4-0-0			
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 0.26 BC 0.16 WB 0.06 Matrix-MP	DEFL. in (loc) Vert(LL) -0.01 4-5 Vert(CT) -0.02 4-5 Horz(CT) -0.00 4	l/defl L/d >999 240 >999 180 n/a n/a	PLATES GRIP MT20 244/190 Weight: 24 lb FT = 20	۵%

LUMBER-

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

BRACING-

 TOP CHORD
 Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.

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

REACTIONS. (size) 5=0-3-8, 4=Mechanical Max Horz 5=97(LC 13) Max Uplift 5=-39(LC 16), 4=-26(LC 13)

Max Grav 5=221(LC 2), 4=155(LC 21)

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) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 3-10-4 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 5 and 26 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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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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Job	Truss	Truss Type	Qty	Ply	RVF-LOT #8 R0	OOF		166042216
24-3350-A	T01G	COMMON GIRDER	1	ົ່				166043316
Riverside Roof Truss LLC	Danville Va - 24541		8	730 s Apr	Job Reference (optional) odustries Inc. We	d lun 5 10:52:47 20	24 Page 1
Riverside Roor Huss, ELC,	Darivine, va - 24341,		ID:tdHS5IWyL	ng?jaR9E	1eBtqyly9psDbi	rb7zareFcuhM67E	525JkW4rkXExcV5c	LNJz9M6k
	3-3-12	6-4-0	9-4-4	1 1		<u>12-8-0</u> 3-3-12		
	0012		00			0012		
			4x4 =					Scale = 1:29.4
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			$\widehat{\Box}$					
	7.0	00 12						
		3x5 =			3x5 🔊			
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		9 14	8 15		73x6 =	16		
	10 LUS26	3x6 = LUS26	3x8 = LUS26	L	LUS26	LUS26	6	
	4x4	LUS26				4x4	11	
	3-3-12	6-4-0	9-4-4	1		12-8-0		
Plate Offsets (X Y) [6:F	dge 0-3-81	3-0-4	3-0-4	1	1	3-3-12	I	
TCLL (roof) 20.0	SPACING- Plate Grip DOI	2-0-0 CSI.	DEFL.	in -0.02	(loc) l/defl	L/d 240	PLATES MT20	GRIP 244/190
Snow (Pf/Pg) 11.6/15.0	Lumber DOL	1.15 BC 0.37	Vert(CT)	-0.04	8-9 >999	180	11120	244/130
BCLL 0.0 *	Rep Stress Incr	NO WB 0.44	Horz(CT)	0.01	6 n/a	n/a	Weight: 171 lb	FT - 20%
BCDL 10.0								FT = 2078
LUMBER-	2		BRACING-	Structure	al wood shoathir	a directly applied		
BOT CHORD 2x6 SP No.	.2			except e	and verticals.	ig directly applied		,
WEBS 2x4 SP No.	.3		BOT CHORD	Rigid ce	iling directly app	lied or 10-0-0 oc	bracing.	
REACTIONS. (size)	10=0-3-8, 6=0-3-8							
Max Horz	10=-97(LC 10)							
Max Uplift Max Grav	6=-127(LC 12) 10=2634(LC 3), 6=2350(LC 3	3)						
TOP CHORD 1-2=-2873	np./Max. Ten All forces 250 3/0, 2-3=-2147/95, 3-4=-2148	3/94, 4-5=-2694/143, 1-10=-2025/0,						
5-6=-190	6/104							
WEBS 3-8=-44/1	/399, 8-9=0/2439, 7-8=-73/22 961, 4-8=-615/129, 4-7=-95/	284, 6-7=-19/317 560, 2-8=-815/0, 2-9=0/786, 1-9=0/214	1,					
5-7=-56/2	2024		,					
NOTES-								
1) 2-ply truss to be connect	ted together with 10d (0.131"	x3") nails as follows:						
Top chords connected a Bottom chords connecte	s follows: 2x4 - 1 row at 0-9-(d as follows: 2x6 - 2 rows sta) oc. Jagered at 0-9-0 oc						
Webs connected as follo	ows: 2x4 - 1 row at 0-9-0 oc.							
 All loads are considered ply connections have be 	equally applied to all plies, e en provided to distribute only	xcept if noted as front (F) or back (B) fa loads noted as (F) or (B) unless other	ace in the LOAD C wise indicated	ASE(S) s	ection. Ply to			
3) Unbalanced roof live loa	ds have been considered for	this design.					H CARO	111
4) Wind: ASCE 7-16; Vult=	130mph (3-second gust) Vas	d=103mph; TCDL=6.0psf; BCDL=6.0p left and right exposed : end vertical left	sf; h=25ft; B=45ft;	L=24ft; ea	ave=4ft; Cat.	I'''P		Ling
plate grip DOL=1.60			and right expected	, Lumbor	202-1.00	la za	OF STA	
5) TCLL: ASCE 7-16; Pr=2	0.0 psf (roof LL: Lum DOL=1	.15 Plate DOL=1.15); Pg=15.0 psf; Pf=	11.6 psf (Lum DOI	_=1.15 Pl	ate	-ung		R
6) Unbalanced snow loads	have been considered for thi	s design.				- E - É -	SEAL	- E -
 7) This truss has been desi 8) * This truss has been do 	igned for a 10.0 psf bottom cl	nord live load nonconcurrent with any o	other live loads.	toll by	2.0.0 wido	- E - E -	036322	÷ =
will fit between the botto	m chord and any other memb	pers.	ere a rectarigie 5-0	5-0 tall by	2-0-0 wide	- E - A -	000022	- E -
 Provide mechanical coni 6–127 	nection (by others) of truss to	bearing plate capable of withstanding	100 lb uplift at join	t(s) excep	ot (jt=lb)	E 1.	A. a	11 3
10) This truss is designed i	n accordance with the 2018 I	nternational Residential Code sections	R502.11.1 and R	302.10.2	and	in the	GINEE	RI
referenced standard Al	NSI/TPI 1.	d Truce, Single Div Cirder) or emission	nt chocod at 0.00	00	starting at	111	A GILB	L'III
1-2-12 from the left end	to 11-2-12 to connect truss	es) to back face of bottom chord.	m spaced at 2-0-0	oc max. :	รเสเนเบg สเ		"IIIIIIIII	1975 - C.
12) Fill all nail holes where	hanger is in contact with lum	ber.					June 6,2	2024
Continued on page 2 LOAD CASE(S) Standard						l		
WARNING - Verify design	n parameters and READ NOTES ON T	THIS AND INCLUDED MITEK REFERENCE PAGE	MII-7473 rev. 1/2/2023	BEFORE US	SE.		ENGINEERING BY	
a truss system. Before use	e, the building designer must verify th	e applicability of design parameters and properly	incorporate this design	into the ove	rall		I REN	
is always required for stab	ility and to prevent collapse with poss	sible personal injury and property damage. For ge	eneral guidance regard	ng the	naoling	•	A MiTek	Affiliate

billioning design. Stacking indicated is to prevent oblasing of individual russ web and/or of members of the second members of the s

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #8 ROOF	
						166043316
24-3350-A	T01G	COMMON GIRDER	1	2		
				_	Job Reference (optional)	
Riverside Roof Truss, LLC,	Danville, Va - 24541,			.730 s Apr	25 2024 MiTek Industries, Inc. Wed Jun 5 10:52:47 2024	Page 2

8.730 s Apr 25 2024 MiTek Industries, Inc. Wed Jun 5 10:52:47 2024 Page 2 ID:tdHS5IWyLng?jaR9E1eBtqyly9_-psDbrb7zareFcuhM67E525JkW4rkXExcV5q_NJz9M6k

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-3=-43, 3-5=-43, 6-10=-20

Concentrated Loads (lb)

Vert: 7=-474(B) 9=-595(B) 13=-595(B) 14=-474(B) 15=-474(B) 16=-474(B)

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- 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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Job	Truss	Truss Type	Qty	Ply	RVF-LOT #8 ROOF
					166043319
24-3350-A	T02G	COMMON GIRDER	1	3	
				J	Job Reference (optional)
Riverside Roof Truss, LLC,	Danville, Va - 24541,		8	.730 s Apr	25 2024 MiTek Industries, Inc. Wed Jun 5 10:52:50 2024 Page 2
		ID:to	dHS5IWyL	ng?jaR9E	leBtgyly9 -ERujUc9stm0gTMPxnFoogkxDulr8kaU2B32e ez9M6h

NOTES-

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) 581 lb down and 59 lb up at 4-0-12, and 581 lb down and 59 lb up at 6-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-43, 3-5=-43, 5-6=-43, 7-12=-20

Concentrated Loads (lb)

Vert: 9=-469(B) 15=-474(B) 16=-469(B) 17=-469(B) 18=-469(B) 19=-469(B) 20=-469(B) 21=-469(B) 22=-469(B) 23=-480(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCEL Building Component Schut Information, purplication for the trust structure Bucking Component Advancement and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)





т	ш	M	R	F	R-

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins,
BOT CHORD	2x4 SP No.2		except end verticals.
WEBS	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
OTHERS	2x4 SP No.3		6-0-0 oc bracing: 23-24,14-15.

REACTIONS. All bearings 20-8-0.

Max Horz 24=-158(LC 14) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 24, 20, 21, 22, 23, 18, 17, 16, 15 All reactions 250 lb or less at joint(s) 24, 14, 19, 20, 21, 22, 23, 18, 17, 16, 15 Max Grav

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) -0-11-0 to 2-4-0, Exterior(2N) 2-4-0 to 10-4-0, Corner(3R) 10-4-0 to 13-4-0, Exterior(2N) 13-4-0 to 21-7-0 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.

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 4) DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

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.
- * 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 12) 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) 24, 20, 21, 22, 23, 18, 17, 16, 15.
- 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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 bilding 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

818 Soundside Road



9-9-8	19-3-8	27-10-0	36-4-8	36 ₁ 6-4	46-0-10	55-9-0	
9-9-8	9-6-0	8-6-8	8-6-8	0-1 ^{!!} 12	9-6-6	9-8-6	
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. TC 0.70 BC 0.69 WB 0.85 Matrix-MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.12 18-20 -0.23 18-20 0.05 15	l/defl L/d >999 240 >999 180 n/a n/a	PLATES MT20 Weight: 406 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD 2x6 SP No.2 BOT CHORD 2x6 SP No.2 WEBS 2x4 SP No.3 WEDGE Right: 2x4 SP No.3 SLIDER Left 2x4 SP No.3	3 2-6-0	BC TC BC	RACING- DP CHORD DT CHORD EBS	Structural wood except 2-0-0 oc purlins Rigid ceiling din 6-0-0 oc bracing 1 Row at midpt 2 Rows at 1/3 p	(6-0-0 max.): 6-9. ectly applied or 10- g: 15-16. 4-18, 6 ts 9-15	applied or 4-4-13 oc purlin 0-0 oc bracing, Except: 3-16, 7-16, 11-15	S,

REACTIONS. (size) 2=0-3-8, 15=0-3-8, 12=Mechanical Max Horz 2=205(LC 15) Max Uplift 2=-121(LC 16), 15=-124(LC 16), 12=-54(LC 16)

Max Grav 2=1664(LC 28), 15=2954(LC 29), 12=688(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-4=-2541/258, 4-6=-1637/263, 6-7=-858/260, 7-9=-858/260, 9-11=0/718,

11-12=-726/143

 BOT CHORD
 2-20=-144/2330, 18-20=-144/2330, 16-18=0/1436, 15-16=-511/137, 13-15=-25/578, 12-13=-25/578

 WEBS
 4-20=0/448, 4-18=-1055/175, 6-18=0/920, 6-16=-984/46, 7-16=-741/173, 9-16=-137/1927, 9-15=-2081/217, 11-15=-1209/187, 11-13=0/493

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=56ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-7-14, Interior(1) 4-7-14 to 19-3-8, Exterior(2R) 19-3-8 to 27-2-2, Interior(1) 27-2-2 to 36-4-8, Exterior(2R) 36-4-8 to 44-3-2, Interior(1) 44-3-2 to 55-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) 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, with BCDL = 10.0psf.

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

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 2=121, 15=124.

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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)





Job	Truss	Truss Type	Qty	Ply	RVF-LOT #8 ROOF			
					1660433	321		
24-3350-A	103	PIGGYBACK BASE	6	1				
					Job Reference (optional)			
Riverside Roof Truss, LLC,	Danville, Va - 24541,		8	.730 s Apr	25 2024 MiTek Industries, Inc. Wed Jun 5 10:52:51 2024 Page 2			
		ID:tdHS5IWyLng?jaR9E1eBtqyIy9idS5hyAUe48h5W_7LzJ1CxTNui8hTxYCQjoBW5z9M6g						

NOTES-

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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Plate Offsets (X,Y) [9:0-4-0,0-4	-8], [23:0-3-0,0-4-0]								
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 0.07 BC 0.03 WB 0.19 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.00 0.00 0.01	(loc) 1 1 34	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 542 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD BOT CHORD OTHERS	2x6 SP No.2 2x6 SP No.2 2x4 SP No.3		BI T(B(RACING- DP CHORD DT CHORD	Structura 2-0-0 oc Rigid cei	al wood purlins ling dire	sheathin (6-0-0 m ectly appl	g directly ap ax.): 13-23. ied or 10-0-0	plied or 6-0-0 oc purlins) oc bracing.	, except
WEDGE Right: 2x4 SP SLIDER	No.3 Left 2x4 SP No.3 1	I-6-4	W	EBS	1 Row at	midpt		23-45, 22 16-52, 15	2-46, 21-47, 20-48, 18-4 5-53, 14-54, 12-55, 11-5	9, 17-50, 6, 24-44

REACTIONS. All bearings 55-9-0. (lb) - Max Horz 2=-208(LC 14)

Max Uplift All uplift 100 lb or less at joint(s) 2, 46, 47, 48, 49, 50, 52, 53, 56, 58, 59, 60, 61, 62, 63, 64, 44, 42, 41, 40, 39, 38, 37, 36, 35, 34 Max Grav All reactions 250 lb or less at joint(s) 2, 45, 46, 47, 48, 49, 50, 52, 53, 54, 55, 56, 58, 59, 60, 61, 62, 63, 64, 44, 42, 41, 40, 39, 38, 37, 36, 35, 34

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

TOP CHORD 11-12=-113/285, 12-13=-115/286, 13-14=-111/287, 14-15=-111/287, 15-16=-111/287, 16-17=-111/287, 17-18=-111/287, 18-20=-111/287, 20-21=-111/287, 21-22=-111/287, 22-23=-111/287, 23-24=-118/299, 24-25=-102/259

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=56ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 4-4-8, Exterior(2N) 4-4-8 to 19-3-8, Corner(3R) 19-3-8 to 24-10-6, Exterior(2N) 24-10-6 to 36-4-8, Corner(3R) 36-4-8 to 41-11-6, Exterior(2N) 41-11-6 to 55-7-4 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 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) 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. Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	RVF-LOT #8 ROOF			
					166	043322		
24-3350-A	T03GE	PIGGYBACK BASE SUPPO	2	1				
					Job Reference (optional)			
Riverside Roof Truss, LLC,	Danville, Va - 24541,		8	.730 s Apr	25 2024 MiTek Industries, Inc. Wed Jun 5 10:52:54 2024 Pag	ge 2		
		ID:tdHS5IWyLng?jaR9E1eBtgyly9_6C8EJ_DMw?XGyzji05skga512vJggSee6h0r7Pz9M6d						

NOTES-

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) 2, 46, 47, 48, 49, 50, 52, 53, 56, 58, 59, 60, 61, 62, 63, 64, 44, 42, 41, 40, 39, 38, 37, 36, 35, 34.

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.

15) 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. 1/2/2023 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 **ANSUTP11 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcaccomponents.com)





Plate Offsets (X,Y) [20:0-2-4	.0-4-8]				0			
	····							
TCLL (reaf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
Spow (Pf/Pg) 16 5/15 0	Plate Grip DOL 1.15	TC 0.69	Vert(LL)	-0.33 17	>694	240	MT20	244/190
TCDI 10.0/15.0	Lumber DOL 1.15	BC 0.97	Vert(CT)	-0.54 16-17	>425	180		
BCU 0.0 *	Rep Stress Incr YES	WB 0.93	Horz(CT)	0.04 13	n/a	n/a		
BCDI 10.0	Code IRC2018/TPI2014	Matrix-MS					Weight: 431 lb	FT = 20%
10.0								
LUMBER-		BH	RACING-	o				
TOP CHORD 2x6 SP No.2		IC	JP CHORD	Structural wood	sheathing o	directly appl	lied or 4-7-3 oc purlins	, except
BUT CHURD 2X6 SP N0.2 "E		D		2-0-0 oc puriins	(6-0-0 max	.): 6-9.	a haasiaa Eveenti	
WERS 2x4 SP No 2	10.2	DU		6 0 0 oc bracin	ectly applied	1012-2-000	c bracing. Except.	
WEDGE 2X4 SF N0.5		W/	FRS	1 Row at midnt	y. 10-19	4-23 6-21	7-21 10-19	
Right: 2x4 SP No 3		•••	LDO	2 Rows at 1/3 n	its	9-20	, 7 21, 10 13	
SLIDER Left 2x4 SP No.	3 2-6-0			2110110 01 1/0 p		0 20		
	0200							
REACTIONS. (size) 2=0-	3-8, 13=Mechanical, 20=0-3-8							
Max Horz 2=20	06(LC 15)							
Max Uplift 2=-1	36(LC 16), 13=-39(LC 16), 20=-2(LC 16)						
Max Grav 2=15	591(LC 28), 13=637(LC 29), 20=3493(LC	C 29)						
FORCES. (lb) - Max. Comp./M	lax. Ten All forces 250 (lb) or less exc	ept when shown.						
TOP CHORD 2-4=-2386/277	7, 4-6=-1473/284, 6-7=-670/287, 7-9=-6	70/287, 9-10=0/945,						
10-12=-852/18	37, 12-13=-848/68		205					
BOT CHORD 2-25=-161/219	13, 23-25=-161/2193, 21-23=-11/1289, 2 22 1066/174 6 22 0/028 6 21 107(20-21=-770/95, 13-14=0/6	600					
9-21134/201	-23=-1000/174, 0-23=0/920, 0-21=-1070	//31, 7-21=-744/101, /_10=_075/1/8_10_16=_6	8/1357					
14-16=-50/121	13, 3-20=-2224/102, 13-20=-1117/104, 1 13, 12-14=-390/195	0-13-373/140, 10-10-0	b/1337,					
11 10- 00/12	10, 12 11 000,100							
NOTES-								
1) Unbalanced roof live loads ha	ave been considered for this design.						MILLING	
2) Wind: ASCE 7-16; Vult=130m	nph (3-second gust) Vasd=103mph; TCI	DL=6.0psf; BCDL=6.0psf;	h=25ft; B=45ft; L	=56ft; eave=7ft	; Cat.		LA CAD	11,
II; Exp B; Enclosed; MWFRS	(directional) and C-C Exterior(2E) -1-0-) to 4-6-14, Interior(1) 4-6	6-14 to 19-3-8, Ex	terior(2R) 19-3-	8 to	11	211 0110	1 de la
27-2-2, Interior(1) 27-2-2 to 3	6-4-8, Exterior(2R) 36-4-8 to 44-3-2, Inte	erior(1) 44-3-2 to 55-9-0 z	zone; cantilever le	eft and right exp	osed ;	A.C	FS	Nie -
end vertical left and right expe	osed;C-C for members and forces & MV	/FRS for reactions shown	n; Lumber DOL=1	.60 plate grip	6	(A)	10 11	22
DOL=1.60								C
3) TCLL: ASCE 7-16; Pr=20.0 p	sf (roof LL: Lum DOL=1.15 Plate DOL=	1.15); Pg=15.0 psf; Pf=16	6.5 psf (Lum DOL	=1.15 Plate		2 :		: =
DOL=1.15); IS=1.0; Rough Ca	at B; Partially Exp.; Ce=1.0; Cs=1.00; C	=1.10, Lu=50-0-0; Min. fla	at root snow load	governs. Rain		F (1	SEAL	: =
4) Unbelanced anow loads have	been considered for this design	/12 in accordance with le	50 1608.3.4.			8	036322	- E - E -
5) This trues has been designed	for greater of min roof live load of 12.0	nef or 1 00 times flat roof	load of 11 6 pet	on overbangs		8 1	000022	1 E
non-concurrent with other live	loads			on overhangs		5 3		1. 2
6) Provide adequate drainage to	prevent water ponding.					3.0	· En R.	ik S
7) This truss has been designed	I for a 10.0 psf bottom chord live load no	nconcurrent with any othe	er live loads.			11/1	GINE	A.S.
8) * This truss has been designed	ed for a live load of 20.0psf on the botton	n chord in all areas where	e a rectangle 3-6-	0 tall by 2-0-0 v	vide	11	CANB	E IN
will fit between the bottom ch	ord and any other members, with BCDL	= 10.0psf.		-			1, A. GILL	11,
9) Refer to girder(s) for truss to	truss connections.						minim	
10) Bearing at joint(s) 20 consid	ers parallel to grain value using ANSI/T	PI 1 angle to grain formula	 Building desig 	ner should verif	у		June 6,2	024
Continuencity plageazing surface.								

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #8 ROOF		
						166043323	
24-3350-A	T03S	Piggyback Base	3	1			
					Job Reference (optional)		
Riverside Roof Truss, LLC,	Danville, Va - 24541,		8	.730 s Apr	25 2024 MiTek Industries, Inc. Wed Jun 5 10:52:55 2024 I	Page 2	
		ID:tdHS5IWyLng?jaR9E1eBtqyIy9aOicXKD?hIf7a7IvaoOzNne30JQIPjNnLLmPfsz9M6c					

NOTES-

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 20 except (jt=lb) 2=136.

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.
 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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and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type	Qty	Ply	RVF-LOT #8 ROOF	
24-3350-4	T04	Piggyback Base	5	1		166043324
24-3330-A	104	r iggydach Dase	5	· ·	Job Reference (optional)	
Riverside Roof Truss LLC	Danville, Va - 24541			730 s Apr	25 2024 MiTek Industries Inc. Wed Jun 5 10:52:56 2024	Page 2

NOTES-

ID:tdHS5IWyLng?jaR9E1eBtqyIy9_-2aF_kgEdScn_BHt58WvCv?BFgjma8AWxZ?VyClz9M6b

10) Bearing at joint(s) 2, 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 22 except (jt=lb) 2=124.
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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	9-9-8	19-3-8	27-10-0	36-4-8	36 ₁ 6-4	48-10-4	55-5-8	<u>55</u> 18-0	
	9-9-8	9-6-0	8-6-8	8-6-8	0-1 [‼] 12	12-4-0	6-7-4	0-2-8	
LOADING TCLL (roof) Snow (Pf/Pg TCDL BCLL BCDI	(psf) 20.0 g) 16.5/15.0 10.0 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.71 BC 0.70 WB 1.00 Matrix-MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.19 16-18 -0.29 16-18 0.05 18	l/defl L/d >784 240 >505 180 n/a n/a	PLATES MT20 Weight: 420 II	GRIP 244/190 FT = 20%	
BCDL	10.0								
LUMBER- TOP CHOR BOT CHOR WEBS SLIDER	D 2x6 SP No.2 D 2x6 SP No.2 2x4 SP No.3 Left 2x4 SP No.	3 2-6-0, Right 2x4 SP No.3 2-6-0	B T(B(W	RACING- OP CHORD OT CHORD /EBS	Structural wood 2-0-0 oc purlins Rigid ceiling dire 1 Row at midpt	sheathing directly app (6-0-0 max.): 6-9. ectly applied or 6-0-0 o 4-21, 6-19	lied or 4-5-1 oc purli c bracing. , 7-19, 9-19, 9-18, 1(ns, except 0-18, 10-16	
REACTION (I	REACTIONS. All bearings 0-3-8 except (jt=length) 14=0-3-0. (lb) - Max Horz 2=207(LC 15) Max Uplift All uplift 100 lb or less at joint(s) 16, 14 except 2=-126(LC 16), 18=-105(LC 16) Max Grav All reactions 250 lb or less at joint(s) except 2=1664(LC 28), 18=2747(LC 28), 16=684(LC 29), 14=341(LC 55)								
FORCES. TOP CHOR BOT CHOR WEBS	FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-4=-2542/261, 4-6=-1639/269, 6-7=-842/268, 7-9=-842/268, 9-10=0/623 BOT CHORD 2-23=-124/2336, 21-23=-124/2336, 19-21=0/1443, 18-19=-435/149, 16-18=-254/73 WEBS 4-23=0/445, 4-21=-1052/175, 6-21=0/928, 6-19=-975/41, 7-19=-743/180, 9-19=-148/1895, 9-18=-1992/191, 10-18=-506/187, 10-16=-53/263, 12-16=-385/167								
 NOTES- 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; B=25ft; B=45ft; L=56ft; eave=7ft; Cat. II; Exp B; Enclosest; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-7-13, Interior(1) 4-7-13 to 19-3-8, Exterior(2R) 19-3-8 to 27-2-0, Interior(1) 27-2-0 to 36-4-8, Exterior(2R) 36-4-8 to 44-3-0, Interior(1) 44-3-0 to 56-7-0 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=1.0; Ise-1.0; Cs=1.01; 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. Unbalanced snow loads have been considered for this design. This truss has been designed for a 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. 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 flt between the bottom chord and any other members, with BCDL = 1.0.0psf. Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 14 except (jt=b) 2=126, 18=105. Provide adeguate in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1 1. 									

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 oullapse 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCB Building Component Scietu Information available from the Structural Building Component Section Component Scietul Information available from the Structural Building Component Scietul Information** and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

June 6,2024





9-9-8	19-3-8	27-10-0	36-4-8	36 ₁ 6-4	48-10-4	<u>55-5-8 55</u> 8-0
9-9-8	9-6-0	8-6-8	8-6-8	0-1"12	12-4-0	6-7-4 0-2-8
LOADING (psf)	SBACINIC 2.0.0	661	DEEL	in (loo)	l/doft l/d	
TCLL (roof) 20.0	Plate Grip DOI 115	TC 0.71	Vort(LL)	-0.19.15-17	√den L/d	MT20 244/190
Snow (Pf/Pg) 16.5/15.0	Lumber DOI 115	BC 0.69	Vert(CT)	-0.29 15-17	>704 240 \\505 180	101120 244/190
TCDL 10.0	Rep Stress Incr VES	WB 1.00	Horz(CT)	0.05 17	>303 100 n/a n/a	
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-MS	11012(01)	0.00 17	11/4 11/4	Weight: 418 lb FT = 209
BCDL 10.0		indani ind				
LUMBER-		В	RACING-			
TOP CHORD 2x6 SP No.2		Т	OP CHORD	Structural wood	I sheathing directly ap	plied or 4-5-2 oc purlins, except
BOT CHORD 2x6 SP No.2				2-0-0 oc purlins	(6-0-0 max.): 5-8.	
WEBS 2x4 SP No.3		B	OT CHORD	Rigid ceiling dir	ectly applied or 6-0-0	oc bracing.
SLIDER Left 2x4 SP No	0.3 2-6-0, Right 2x4 SP No.3 2-6-0	W	/EBS	1 Row at midpt	3-20, 5-1	8, 6-18, 8-18, 8-17, 9-17, 9-15
REACTIONS. All bearings ((lb) - Max Horz 1=- Max Uplift Al Max Grav Al 13=	0-3-8 except (jt=length) 13=0-3-0. 205(LC 14) I uplift 100 lb or less at joint(s) 1, 15, 13 (I reactions 250 lb or less at joint(s) excep :341(LC 55)	except 17=-104(LC 16) ot 1=1615(LC 28), 17=274	14(LC 28), 15=68	6(LC 29),		
FORCES. (lb) - Max. Comp./ TOP CHORD 1-3=-2547/26 BOT CHORD 1-22=-124/23 WEBS 3-22=0/446, 8-18=-148/18	Max. Ten All forces 250 (lb) or less exc 66, 3-5=-1643/273, 5-6=-843/271, 6-8=-8 441, 20-22=-124/2341, 18-20=0/1445, 17 3-20=-1054/176, 5-20=0/929, 5-18=-975 95, 8-17=-1990/191, 9-17=-505/186, 9-	xept when shown. 43/271, 8-9=0/620 *-18=-433/149, 15-17=-25 /41, 6-18=-744/181, /5=-53/261, 11-15=-385/1	:1/73 67			
 NOTES- 1) Unbalanced roof live loads f 2) Wind: ASCE 7-16; Vult=130 II; Exp B; Enclosed; MWFR3 27-2-0, Interior(1) 27-2-0 to end vertical left and right exp DOL=1.60 3) TCLL: ASCE 7-16; Pr=20.0 DOL=1.15); Is=1.0; Rough G surcharge applied to all exp 4) Unbalanced snow loads hav 5) This truss has been designed non-concurrent with other lin 6) Provide adequate drainage 7) This truss has been designed 8) * This truss has been designed 8) * This truss has been designed 9) Provide mechanical connect (jt=lb) 17=104. 10) This truss is designed in an referenced standard ANSI/ 11) Graphical purlin representation 	have been considered for this design. mph (3-second gust) Vasd=103mph; TC S (directional) and C-C Exterior(2E) 0-0-0 36-4-8, Exterior(2R) 36-4-8 to 44-3-0, Ini- bosed;C-C for members and forces & MM psf (roof LL: Lum DOL=1.15 Plate DOL= Cat B; Partially Exp.; Ce=1.0; Cs=1.00; C bosed surfaces with slopes less than 0.50 the been considered for this design. d for greater of min roof live load of 12.0 te loads. to prevent water ponding. d for a 10.0 psf bottom chord live load n thed for a live load of 20.0psf on the botton hord and any other members, with BCDL ion (by others) of truss to bearing plate of excordance with the 2018 International Ref TPI 1. tion does not depict the size or the orier	DL=6.0psf; BCDL=6.0psf 0 to 5-6-13, Interior(1) 5-6 terior(1) 44-3-0 to 56-7-0. WFRS for reactions show (1.15); Pg=15.0 psf; Pf=16 t=1.10, Lu=50-0-0; Min. fi 0/12 in accordance with I psf or 1.00 times flat root onconcurrent with any oth m chord in all areas wher = 10.0psf. capable of withstanding 10 esidential Code sections F tation of the purlin along	; h=25ft; B=45ft; 1 -13 to 19-3-8, Ex zone; cantilever l n; Lumber DOL= 6.5 psf (Lum DOL lat roof snow load BC 1608.3.4. f load of 11.6 psf her live loads. e a rectangle 3-6 00 lb uplift at join R502.11.1 and R8 the top and/or bo	L=56ft; eave=7ft terior(2R) 19-3-4 eft and right exp 1.60 plate grip =1.15 Plate I governs. Rain on overhangs -0 tall by 2-0-0 v c(s) 1, 15, 13 exc 02.10.2 and ttom chord.	; Cat. 3 to osed ; vide	SEAL 036322

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TRENCO A Mitek Attiliate



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818 Soundside Road





6) 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 7) will fit between the bottom chord and any other members.

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

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

June 6,2024



REACTIONS. All bearings 20-1-0.

(lb) - Max Horz 24=115(LC 15)

Max Uplift All uplift 100 lb or less at joint(s) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15 Max Grav All reactions 250 lb or less at joint(s) 24, 14, 19, 20, 21, 22, 23, 18, 17, 16, 15

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) -0-11-0 to 2-0-8, Exterior(2N) 2-0-8 to 10-0-8, Corner(3R) 10-0-8 to 13-0-8, Exterior(2N) 13-0-8 to 21-0-0 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 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) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15.
- 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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A MiTek Afr 818 Soundside Road







GILU.... June 6,2024



REACTIONS. All bearings 14-9-8. (lb) - Max Horz 1=-80(LC

Max Horz 1=-80(LC 14)
 Max Uplift All uplift 100 lb or less at joint(s) 8, 6

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=270(LC 2), 8=327(LC 33), 6=327(LC 34)

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=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-5-3, Interior(1) 3-5-3 to 7-5-3, Exterior(2R) 7-5-3 to 10-5-3, Interior(1) 10-5-3 to 14-3-14 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=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) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
- 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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcaccomponents.com)



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- 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) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 4-0-1, Exterior(2R) 4-0-1 to 7-0-1, Interior(1) 7-0-1 to 7-5-9 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=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) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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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		400					001	
Plate Offsets (X,Y) [2:0-2-0,	,Edge]							
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0 PCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.05 BC 0.15 WB 0.00	DEFL. Vert(LL) r Vert(CT) r Horz(CT) 0.	in (loc) n/a - n/a - 00 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P					Weight: 13 lb	FT = 20%
		BP						

TOP CHORD

BOT CHORD

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

REACTIONS. 1=4-6-1, 3=4-6-1 (size) Max Horz 1=-20(LC 14) Max Uplift 1=-8(LC 16), 3=-8(LC 16) Max Grav 1=140(LC 2), 3=140(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; 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

- 3) 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) Gable requires continuous bottom chord bearing.

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

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

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

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 4-6-15 oc purlins.

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

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Max Grav 1=170(LC 2), 3=170(LC 2), 4=379(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; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 5-0-7, Exterior(2R) 5-0-7 to 8-0-7, Interior(1) 8-0-7 to 9-6-7 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=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) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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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Max Grav 1=117(LC 20), 3=117(LC 21), 4=213(LC 2)

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=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

- 3) 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) Gable requires continuous bottom chord bearing.

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

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

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

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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2x4 💋

2x4 📚

3-2-10 0-0-7 0-0-7 3-2-3 Plate Offsets (X,Y)-- [2:0-2-0,Edge] LOADING (psf) SPACING-2-0-0 CSI. DEFL in (loc) l/defl L/d PLATES GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 тс 0.02 Vert(LL) 999 MT20 244/190 n/a n/a Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 BC 0.05 Vert(CT) n/a n/a 999 TCDL 10.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 3 n/a n/a BCLL 0.0 * Code IRC2018/TPI2014 FT = 20% Matrix-P Weight: 8 lb BCDL 10.0 LUMBER-BRACING-

TOP CHORD

BOT CHORD

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

REACTIONS. (size) 1=3-1-13, 3=3-1-13 Max Horz 1=-12(LC 14) Max Uplift 1=-5(LC 16), 3=-5(LC 16) Max Grav 1=86(LC 2), 3=86(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; 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

- 3) 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) Gable requires continuous bottom chord bearing.

6) 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 7) will fit between the bottom chord and any other members.

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

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 3-2-10 oc purlins.

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

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- & 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=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) 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8, 11, 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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- 3) 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) 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8, 11, 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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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) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 5-6-0, Exterior(2R) 5-6-0 to 8-6-0, Interior(1) 8-6-0 to 11-11-0 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=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) 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8, 11, 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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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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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=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 4-6-14, Exterior(2R) 4-6-14 to 7-6-14, Interior(1) 7-6-14 to 8-7-3 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=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) Gable requires continuous bottom chord bearing.

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

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

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

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.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcaccomponents.com)

Max Horz 1=27(LC 15) Max Uplift 1=-16(LC 16), 3=-16(LC 16)

Max Grav 1=97(LC 2), 3=97(LC 2), 4=177(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; 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

- 3) 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) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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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4x6 🥢

2x4 📎

Matrix-P

2-3-7 0<u>101</u>7 0-0-7 2-3-0 Plate Offsets (X,Y)-- [1:0-2-1,Edge] LOADING (psf) SPACING-2-0-0 CSI. DEFL in (loc) l/defl L/d PLATES GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 тс 0.01 Vert(LL) 999 MT20 244/190 n/a n/a Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 BC 0.02 Vert(CT) n/a n/a 999 TCDL 10.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 3 n/a n/a BCLL 0.0 *

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

BCDL

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

REACTIONS. (size) 1=2-2-9, 3=2-2-9 Max Horz 1=-7(LC 14) Max Uplift 1=-3(LC 16), 3=-3(LC 16) Max Grav 1=48(LC 2), 3=48(LC 2)

10.0

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

Code IRC2018/TPI2014

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) 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=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) Gable requires continuous bottom chord bearing.

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

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

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

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.

FT = 20%

Weight: 5 lb

Structural wood sheathing directly applied or 2-3-7 oc purlins.

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

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- 3) 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) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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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0₁0₁8 0-0-8 4-3-0 4-2-8 Plate Offsets (X,Y)--[2:0-2-0,Edge] LOADING (psf) SPACING-2-0-0 CSI. DEFL in (loc) l/defl L/d PLATES GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 тс 0.05 Vert(LL) 999 MT20 244/190 n/a n/a Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 BC 0.11 Vert(CT) n/a n/a 999 TCDL 10.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 3 n/a n/a BCLL 0.0 * Code IRC2018/TPI2014 FT = 20% Matrix-P Weight: 11 lb BCDL 10.0 LUMBER-BRACING-

TOP CHORD

BOT CHORD

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

REACTIONS. 1=4-2-0, 3=4-2-0 (size) Max Horz 1=12(LC 15) Max Uplift 1=-7(LC 16), 3=-7(LC 16) Max Grav 1=120(LC 2), 3=120(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; 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

- 3) 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) Gable requires continuous bottom chord bearing.

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

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

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

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 4-3-0 oc purlins.

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

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