

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 22020380-01 Cameron Woods Lot 16-3119 Elev 'A' Permit-Roof Truss

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Carter Components (Lexington, NC).

Pages or sheets covered by this seal: T27232067 thru T27232105

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

North Carolina COA: C-0844



March 25,2022

Lee, Julius

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.



	<u>6-0-0</u> 6-0-0	<u> </u>	<u>16-0-0</u> 6-0-0	
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0CSPlate Grip DOL1.15TCLumber DOL1.15BCRep Stress IncrYESWICode IRC2018/TPI2014Mat	DEFL. in 0.46 Vert(LL) 0.16 0.54 Vert(CT) -0.19 B 0.08 Horz(CT) 0.03	(loc) l/defl L/d PLATES GRIP 8-11 >999 240 MT20 244/190 8-11 >999 180 5 n/a n/a Weight: 58 lb FT = 20%	
LUMBER-		BRACING-		

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied, except

2-0-0 oc purlins (5-2-3 max.): 3-4.

Rigid ceiling directly applied.

LUMBER-TOP CHORD

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

REACTIONS. (size) 2=0-3-0, 5=0-3-0 Max Horz 2=-20(LC 10) Max Uplift 2=-143(LC 12), 5=-143(LC 12) Max Grav 2=720(LC 1), 5=720(LC 1)

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

TOP CHORD 2-3=-1322/1083, 3-4=-1230/1074, 4-5=-1322/1093

BOT CHORD 2-8=-976/1221, 7-8=-990/1230, 5-7=-975/1221

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; 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) -1-4-0 to 1-8-0, Interior(1) 1-8-0 to 6-0-0, Exterior(2E) 6-0-0 to 10-0-0, Exterior(2R) 10-0-0 to 14-2-15, Interior(1) 14-2-15 to 17-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

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

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

6) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.

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

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

9) 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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		2-0-0 2-0-0			4- 2-	-0-0 -0-0	
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0- Plate Grip DOL 1.1 Lumber DOL 1.1 Rep Stress Incr Nr Code IRC2018/TPI2014	0 CSI. 5 TC 0.13 5 BC 0.31 0 WB 0.03 Matrix-MP	DEFL. i Vert(LL) 0.0 Vert(CT) -0.0 Horz(CT) 0.0	in (loc) 02 6 03 6 01 4	l/defl L/c >999 240 >999 180 n/a n/a	d PLATES D MT20 a Weight: 15 lb	GRIP 244/190 FT = 20%
	·						

LUMBER-

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

BRACING-TOP CHORD

 TOP CHORD
 Structural wood sheathing directly applied or 4-0-0 oc purlins, except 2-0-0 oc purlins: 3-4.

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

REACTIONS. (size) 4=Mechanical, 2=0-3-0, 5=Mechanical Max Horz 2=30(LC 8) Max Uplift 4=-17(LC 4), 2=-62(LC 8), 5=-19(LC 5)

Max Grav 4=58(LC 1), 2=252(LC 0), 5=15(LC 0)Max Grav 4=58(LC 1), 2=252(LC 1), 5=97(LC 3)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; 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 exposed; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) "NAILED" indicates 3-10d Nails (0.148" x 3") toe-nails per NDS guidelines.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-3=-60, 3-4=-60, 5-7=-20 Concentrated Loads (lb) Vert: 6=-1(F)



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4-0-0	
4-0-0	

Plate Offse	Plate Offsets (X,Y) [2:0-0-6,Edge]											
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	0.03	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.02	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	k-AS						Weight: 14 lb	FT = 20%

LUMBER-

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

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied. Rigid ceiling directly applied.

REACTIONS. (size) 3=Mechanical, 2=0-3-0, 4=Mechanical Max Horz 2=45(LC 12) Max Uplift 3=-19(LC 12), 2=-58(LC 12), 4=-8(LC 12)

Max Grav 3=96(LC 1), 2=251(LC 1), 4=68(LC 3)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; 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) -1-4-0 to 1-8-0, Interior(1) 1-8-0 to 3-11-4 zone; cantilever left and right exposed; end vertical left exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
- 6) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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A Mi Tek Affiliate 818 Soundside Road Edenton, NC 27932



Scale = 1:30.4



L	4-0-0	12-0-0	16-0-0
	4-0-0	8-0-0	4-0-0
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. DEFL. i TC 0.43 Vert(LL) 0.1' BC 0.75 Vert(CT) -0.3: WB 0.20 Horz(CT) 0.0: Matrix-MS Total Total Total	n (loc) I/defl L/d PLATES GRIP 7 8-9 >999 240 MT20 244/190 2 8-9 >598 180 5 6 n/a n/a Weight: 67 lb FT = 20%
LUMBER- TOP CHORD 2x4 S	SP No.2	BRACING- TOP CHORD	Structural wood sheathing directly applied or 3-10-4 oc purlins,

BOT CHORD

except

2-0-0 oc purlins (3-8-11 max.): 3-5.

Rigid ceiling directly applied or 8-9-0 oc bracing.

BOT CHORD 2x4 SP No.1

WEBS 2x4 SP No.3 REACTIONS. 2=0-3-0, 6=0-3-0 (size) Max Horz 2=-15(LC 6)

Max Uplift 2=-198(LC 4), 6=-198(LC 5) Max Grav 2=946(LC 1), 6=947(LC 1)

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

2-3=-2161/437, 3-4=-2065/429, 4-5=-2069/429, 5-6=-2165/437 TOP CHORD

BOT CHORD 2-9=-394/2021, 8-9=-513/2547, 6-8=-389/2025

WEBS 3-9=-87/454, 4-9=-543/123, 4-8=-539/122, 5-8=-87/455

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; 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; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

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

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

6) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.

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

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

9) "NAILED" indicates 3-10d Nails (0.148" x 3") toe-nails per NDS guidelines.

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

LOAD CASE(S) Standard

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

Vert: 1-3=-60, 3-5=-60, 5-7=-60, 10-13=-20

Concentrated Loads (lb)

Vert: 3=-36(F) 5=-36(F) 9=-28(F) 4=-36(F) 8=-28(F) 18=-36(F) 19=-36(F) 22=-67(F) 23=-28(F) 24=-28(F) 25=-28(F) 26=-67(F)



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WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MILEK REFERENCE PAGE MILEARD INFORMATION OF STADE OF THE STADE WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE besign valid to less only with with the contractors. This besign is based only upon parameters and properly incorporate this design into the overall a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANS/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



				2-0-0 2-0-0				
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.12 BC 0.03 WB 0.00 Matrix-MP	DEFL. Vert(LL) -0.0 Vert(CT) -0.0 Horz(CT) -0.0	in (loc) 10 7 10 7 10 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 8 lb	GRIP 244/190 FT = 20%

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LUMBER-
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TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 BRACING-TOP CHORD BOT CHORD

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

REACTIONS. (size) 3=Mechanical, 2=0-3-0, 4=Mechanical Max Horz 2=30(LC 12) Max Uplift 3=-5(LC 12), 2=-52(LC 12), 4=-4(LC 9) Max Grav 3=36(LC 1), 2=186(LC 1), 4=30(LC 3)

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

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; 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) -1-4-0 to 1-8-0, Interior(1) 1-8-0 to 1-11-14 zone; cantilever left and right exposed; end vertical left exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

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

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
- 6) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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		<u> </u>						
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.72 BC 0.69 WB 0.14 Matrix-AS	DEFL. Vert(LL) 0 Vert(CT) -0 Horz(CT) 0	in (loc) .19 6-12 .24 6-12 .02 4	l/defl >999 >809 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 57 lb	GRIP 244/190 FT = 20%
I UMBER-			BRACING-					

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

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

REACTIONS. 2=0-3-0, 4=0-3-0 (size) Max Horz 2=-26(LC 10) Max Uplift 2=-143(LC 12), 4=-143(LC 12) Max Grav 2=720(LC 1), 4=720(LC 1)

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

2-3=-1205/875, 3-4=-1205/875 TOP CHORD

BOT CHORD 2-6=-759/1101, 4-6=-759/1101 3-6=-339/359

WEBS NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; 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) -1-4-0 to 1-8-0, Interior(1) 1-8-0 to 8-0-0, Exterior(2R) 8-0-0 to 11-0-0 , Interior(1) 11-0-0 to 17-4-0 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

5) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.

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

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



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LOADING (psf) SPACING- TCL 2-0-0 CSI. DEFL. in (loc) I/defl L/d PLATES GRIP TCLL 20.0 Plate Grip DOL 1.15 TC 0.12 Vert(LL) 0.00 7 >999 240 MT20 244/1 TCDL 10.0 Lumber DOL 1.15 BC 0.03 Vert(CT) -0.00 7 >999 180 PCI 0.0 * Pos Strose lage VES WB 0.00 Herry(CT) 0.00 7 p/g p/g				1	1-8-4			1			
Decli 0.0 replates into 125 Wb 0.00 Trol2(01) 0.00 3 ina ina	LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-1 Plate Grip DOL 1.11 Lumber DOL 1.11 Rep Stress Incr YES	CSI. TC 0.12 BC 0.03 WB 0.00 Motiv MB	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.00 -0.00 0.00	(loc) 7 7 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190	

LUMBER-

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=53(LC 12)

Max Uplift 3=-7(LC 12), 2=-39(LC 12)

Max Grav 3=31(LC 17), 2=179(LC 1), 4=26(LC 3)

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

NOTES-

 Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

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

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

6) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4 and 2. This connection is for uplift only and does not consider lateral forces.

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



March 25,2022





BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 1-8-4 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.



		<u>1-8-4</u> 1-8-4				2	3-8-4 2-0-0		
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCodeIRC2018/TPI2014	CSI. TC 0.14 BC 0.64 WB 0.05 Matrix-MP	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.03 -0.06 0.04	(loc) 6 6 4	l/defl >999 >718 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 16 lb	GRIP 244/190 FT = 20%

LUMBER-

 TOP CHORD
 2x4 SP No.2

 BOT CHORD
 2x4 SP No.2

 WEBS
 2x4 SP No.3

 WEDGE
 Left: 2x4 SP No.3

BRACING-TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 3-8-4 oc purlins, except 2-0-0 oc purlins: 3-4.

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

"Special" indicates special hanger(s) or other connection device(s) required at location(s)shown. The design/selection of such special connection device(s) is the responsibility of others. This applies to all applicable truss designs in this job.

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical Max Horz 2=54(LC 27) Max Uplift 4=-20(LC 4), 2=-38(LC 8), 5=-2(LC 5)

Max Grav 4=58(LC 1), 2=337(LC 1), 5=160(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 3-6=-256/42

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 145 lb down and 15 lb up at 1-8-4, and 33 lb down and 19 lb up at 1-8-4 on top chord, and 45 lb down and 5 lb up at 1-8-4, and 8 lb down and 4 lb up at 1-9-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-3=-60, 3-4=-60, 5-7=-20

Continued on page 2

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



March 25,2022



Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 16-3119 Elev 'A' Permit-Roof Truss	
						T27232074
22020380-01	J1A	Jack-Open Girder	3	1		
					Job Reference (optional)	
Carter Components (Lexingte	on), Lexington, NC - 2729	95,	8	.530 s Dec	c 6 2021 MiTek Industries, Inc. Thu Mar 24 08:46:24 2022	Page 2

ID:R1dAcVhN40z53bONtvnm1LzItw3-H4ZldjowAcgNv2YyX1ugelB9OKCu2dgUkvXbu5zXmvD

LOAD CASE(S) Standard

Concentrated Loads (lb) Vert: 3=-145(F) 6=-41(F=-45, B=4)

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			10-0-0							
Plate Offsets (X,Y) [2:0-1-4,Edge]										
LOADING (psf) TCLL 20.0 TCDL 10.0 PCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Bob Stress Iper VES	CSI. TC 0.84 BC 0.69	DEFL. in (loc) l/defl L/d PLATES GRIP Vert(LL) -0.19 5-8 >624 240 MT20 244/190 Vert(CT) -0.42 5-8 >281 180 MT20 244/190							
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Weight: 40 lb FT = 20%							
LUMBER-			BRACING-							

TOP CHORD

BOT CHORD

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

REACTIONS. (size) 2=0-3-8, 5=Mechanical

Max Horz 2=80(LC 8) Max Uplift 2=-46(LC 8), 5=-21(LC 8)

Max Grav 2=480(LC 1), 5=389(LC 1)

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

- TOP CHORD 2-3=-542/129
- BOT CHORD 2-5=-179/506 WFBS 3-5=-558/242

NOTES-

1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) -1-4-0 to 1-8-0, Interior(1) 1-8-0 to 9-10-4 zone; cantilever left and right exposed ; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

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

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

6) Two SBP4 MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces

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

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



Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

March 25,2022



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LOADING (F TCLL 20 TCDL 10 BCLL 10 BCDL 10	(psf) 20.0 10.0 0.0 * 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TPI	2-0-0 CS 1.15 TC 1.15 BC YES WB 12014 Ma	0.15 0.11 0.05 rix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.01 0.00	(loc) 1 1 7	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 41 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD BOT CHORD WEBS	D 2x4 SP D 2x4 SP 2x4 SP 2x4 SP	No.2 No.2 No.3			BRACING- TOP CHOR BOT CHOR	D	Structur except e Rigid ce	al wood end vertie	sheathing dir cals. ectly applied c	ectly applied or 6-0-0 or 10-0-0 oc bracing.	oc purlins,

REACTIONS. All bearings 10-0-0.

2x4 SP No.3

(lb) - Max Horz 2=79(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 7, 2, 8, 9, 10

Max Grav All reactions 250 lb or less at joint(s) 7, 2, 8, 9 except 10=299(LC 1)

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

NOTES-

OTHERS

 Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) -1-4-0 to 1-8-0, Exterior(2N) 1-8-0 to 9-10-4 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

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

4) Gable requires continuous bottom chord bearing.

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

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

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

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

9) N/A

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.



March 25,2022



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Plate Offse	ts (X,Y)	[2:0-2-12,Edge]										
LOADING TCLL TCDL BCLL	(psf) 20.0 10.0 0.0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC BC WB	0.77 0.64 0.00	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.36 -0.29 -0.00	(loc) 4-7 4-7 2	l/defl >252 >311 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCDL	10.0		12014	Matrix	(-AS						vveight: 28 ib	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 2=0-3-0, 4=0-1-8

Max Horz 2=64(LC 8) Max Uplift 2=-109(LC 8), 4=-78(LC 8) Max Grav 2=388(LC 1), 4=294(LC 1)

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

NOTES-

- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) -1-4-0 to 1-8-0, Interior(1) 1-8-0 to 7-6-4 zone; cantilever left and right exposed; end vertical left exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=109.
- One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4. This connection is for uplift only and does not consider lateral forces.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

March 25,2022



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		5-9-12 5-9-12	2					
Plate Offsets (X,Y)	[2:0-2-12,Edge]							
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.32 BC 0.25 WB 0.09	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (0.07 -0.05 -0.00	(loc) 6-9 6-9 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES GRIP MT20 244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						Weight: 29 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 2=0-3-0, 6=0-3-8, 5=0-1-8

Max Horz 2=64(LC 8) Max Uplift 2=-81(LC 8), 6=-108(LC 8), 5=-72(LC 1) Max Grav 2=280(LC 1), 6=473(LC 1), 5=31(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 3-6=-317/288

NOTES-

- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) -1-4-0 to 1-8-0, Interior(1) 1-8-0 to 7-6-4 zone; cantilever left and right exposed; end vertical left exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
- 7) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 5. This connection is for uplift only and does not consider lateral forces.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

March 25,2022

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818 Soundside Road Edenton, NC 27932



		L				7-6-4						4
		1				7-6-4						1
Plate Offsets (X	,Y) [2:0-	3-4,Edge]										
LOADING (psf))	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0		Plate Grip DOL	1.15	TC	0.73	Vert(LL)	0.12	5-8	>745	240	MT20	244/190
TCDL 10.0)	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.27	5-8	>329	180		
BCLL 0.0) *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL 10.0)	Code IRC2018/TF	912014	Matrix	k-AS						Weight: 27 lb	FT = 20%
LUMBER-						BRACING-						

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 2=0-3-8, 5=0-1-8

Max Horz 2=65(LC 8) Max Uplift 2=-44(LC 8), 5=-17(LC 8) Max Grav 2=382(LC 1), 5=294(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) -1-4-0 to 1-8-0, Interior(1) 1-8-0 to 7-8-0 zone; cantilever left and right exposed ; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- 6) Two SBP4 MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 7) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

March 25,2022

818 Soundside Road Edenton, NC 27932

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Plate Offsets (X,Y)	[2:0-3-4,Edge]			
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.77 BC 0.61 WB 0.00 Matrix-AS	DEFL. in (loc) I/defl L/d Vert(LL) 0.13 4-7 >704 240 Vert(CT) -0.29 4-7 >311 180 Horz(CT) 0.00 2 n/a n/a	6

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 2=0-3-8, 4=0-1-8

Max Horz 2=64(LC 8) Max Uplift 2=-45(LC 8), 4=-14(LC 8) Max Grav 2=388(LC 1), 4=294(LC 1)

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

NOTES-

- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) -1-4-0 to 1-8-0, Interior(1) 1-8-0 to 7-6-4 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Two SBP4 MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4. This connection is for uplift only and does not consider lateral forces.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

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LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.12 BC 0.11 WB 0.06 Matrix-P	DEFL. in Vert(LL) 0.00 Vert(CT) 0.00 Horz(CT) 0.00	(loc) l/defl 1 n/r 1 n/r 6 n/a	L/d 120 120 n/a	PLATES MT20 Weight: 30 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 BOT CHORD 2x4 WEBS 2x4	 SP No.2 SP No.2 SP No.3		BRACING- TOP CHORD BOT CHORD	Structural wood except end vertio Rigid ceiling dire	sheathing di cals. ctly applied (rectly applied or 6-0-0 or 10-0-0 oc bracing.	oc purlins,

2X4 SP N0.2
2x4 SP No.2
2x4 SP No.3
2x4 SP No.3

REACTIONS. All bearings 7-8-0.

Max Horz 2=62(LC 9) (lb) -Max Uplift All uplift 100 lb or less at joint(s) 2, 7, 8

Max Grav All reactions 250 lb or less at joint(s) 6, 2, 7 except 8=266(LC 1)

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

NOTES-

1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) -1-4-0 to 1-8-0, Exterior(2N) 1-8-0 to 7-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.

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

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

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2. 8) N/A

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



LUMBER-

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

Structural wood sheathing directly applied or 3-8-4 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=81(LC 12) Max Uplift 3=-28(LC 12), 2=-23(LC 12)

Max Grav 3=91(LC 1), 2=240(LC 1), 4=66(LC 3)

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

NOTES-

 Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) -1-4-0 to 1-8-0, Interior(1) 1-8-0 to 3-7-8 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

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

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

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

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

6) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4 and 2. This connection is for uplift only and does not consider lateral forces.

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



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	0-0-7			6-0-0		
	0-0-7			5-11-9		l
Plate Offsets (X,Y)	[2:0-3-0,Edge]					
LOADING (psf) TCLL 20.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI. TC 0.11	DEFL. Vert(LL)	in (loc) l/defl L/d n/a - n/a 999	PLATES GRIP MT20 244/190

BCDL	10.0	Code IRC2018/T	PI2014	Matri	ix-P	BRACING-					Weight: 17 lb	FT = 20%	
BCLL	0.0 *	Rep Stress Incr	YES PI2014	WB Matri	0.00	Horz(CT)	0.00	3	n/a	n/a	Weight: 17 lb	FT = 20%	
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	n/a	-	n/a	999			
TCLL	20.0	Plate Grip DOL	1.15	тс	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
LOADING	i (pst)	SPACING-	2-0-0	CSI.		DEFL.	ın	(loc)	l/defl	L/d	PLATES	GRIP	

BOT CHORD

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

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

REACTIONS. (size) 1=5-11-2, 3=5-11-2 Max Horz 1=-24(LC 10) Max Uplift 1=-1(LC 12), 3=-1(LC 12) Max Grav 1=197(LC 1), 3=197(LC 1)

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

NOTES-

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

2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) Gable requires continuous bottom chord bearing.

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

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

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

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



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LUMBER-

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

TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. 1=9-11-2, 3=9-11-2, 4=9-11-2 (size) Max Horz 1=-44(LC 10) Max Uplift 1=-11(LC 12), 3=-11(LC 12) Max Grav 1=169(LC 1), 3=169(LC 1), 4=376(LC 1)

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

NOTES-

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

2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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 5-0-0, Exterior(2R) 5-0-0 to 8-0-0, Interior(1) 8-0-0 to 9-5-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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

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

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

7) This truss is designed in accordance with the 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=120mph (3-second gust) Vasd=95mph; 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 7-0-0, Exterior(2R) 7-0-0 to 10-0-0, Interior(1) 10-0-0 to 13-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

6) N/A

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



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- will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1. 7) N/A
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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4) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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

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.

 One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.

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

9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1681 lb down at 1-9-0, 1681 lb down at 3-9-0, 1386 lb down and 28 lb up at 5-9-0, 1342 lb down and 28 lb up at 7-9-0, 1334 lb down and 28 lb up at 9-9-0, 1232 lb down and 28 lb up at 11-9-0, 1232 lb down and 28 lb up at 13-9-0, and 1232 lb down and 28 lb up at 15-9-0, and 1610 lb down and 92 lb up at 17-9-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

Continued on page 2

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March 25,2022



Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 16-3119 Elev 'A' Permit-Roof Truss	
						T27232087
22020380-01	T2GR	COMMON GIRDER	1	2		
				<u>່</u> ວ	Job Reference (optional)	
Carter Components (Lexingt	on), Lexington, NC - 272	95,	8	.530 s Deo	c 6 2021 MiTek Industries, Inc. Thu Mar 24 08:46:41 2022	Page 2

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LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-3=-60, 3-6=-60, 11-14=-20

Concentrated Loads (lb)

Vert: 9=-1232(F) 17=-1500(F) 18=-1500(F) 19=-1232(F) 20=-1232(F) 21=-1232(F) 22=-1232(F) 23=-1232(F) 24=-1610(F)

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

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

5) Gable requires continuous bottom chord bearing.

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

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

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

9) N/A

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.



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Continued on page 2

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ENGINEERING BY RENCO

818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 16-3119 Elev 'A' Permit-Roof Truss	
						T27232090
22020380-01	H1GRA	HALF HIP GIRDER	1	1		
					Job Reference (optional)	
Carter Components (Lexingt	on) Lexington NC - 2729	95	8	530 s Dec	6 2021 MiTek Industries Inc. Thu Mar 24 08:46:14 2022	Page 2

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NOTES-

- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 39 lb down and 40 lb up at 1-9-0, 64 lb down and 52 lb up at 3-8-4, 68 lb down and 49 lb up at 5-7-12, 68 lb down and 49 lb up at 7-7-12, 68 lb down and 49 lb up at 9-7-12, 64 lb down and 49 lb up at 13-7-12, 64 lb down and 49 lb up at 15-7-12, 64 lb down and 49 lb up at 13-7-12, 64 lb down and 49 lb up at 15-7-12, 68 lb down and 49 lb up at 12-7-12, 68 lb down and 49 lb up at 23-7-12, 68 lb down and 49 lb up at 25-7-12, and 68 lb down and 49 lb up at 23-7-12, 68 lb down and 49 lb up at 25-7-12, and 68 lb down and 49 lb up at 23-7-12, 68 lb down and 49 lb up at 25-7-12, and 68 lb down and 49 lb up at 23-7-12, 68 lb down and 49 lb up at 25-7-12, and 68 lb down and 49 lb up at 21-7-12, 26 lb down and 49 lb up at 11-7-12, 26 lb down at 15-7-12, 26 lb down at 15-7-12, 26 lb down at 13-7-12, 26 lb down at 25-7-12, and 26 lb down at 27-7-12, and 26 lb down at 29-7-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-3=-60, 3-9=-60, 10-17=-20

Concentrated Loads (lb)

Vert: 3=-31(F) 3=-20(F) 16=-20(F) 11=-20(F) 8=-31(F) 21=-31(F) 23=-31(F) 24=-31(F) 26=-31(F) 27=-31(F) 28=-31(F) 30=-31(F) 32=-31(F) 32=-31(F) 33=-31(F) 34=-31(F) 35=-140(F) 36=-20(F) 37=-20(F) 38=-20(F) 39=-20(F) 40=-20(F) 41=-20(F) 42=-20(F) 43=-20(F) 44=-20(F) 46=-20(F) 46

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⊢	5-8-4 5-8-4	<u>15-8-0</u> 9-11-12		<u>25-7-12</u> 9-11-12	31-4-0					
Plate Offsets (X,Y)	[2:0-0-0,0-0-13], [3:0-4-0,0-1-11], [7:	0-4-0,0-1-11], [8:0-0-0,0-0-1	3], [10:0-4-0,0-3-4]							
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.81 BC 0.84 WB 0.40 Matrix-AS	DEFL. Vert(LL) -0.2 Vert(CT) -0.5 Horz(CT) 0.1	in (loc) I/defl L/d 3 9-10 >999 240 4 10-11 >697 180 1 8 n/a n/a	PLATES GRIP MT20 244/190 Weight: 145 lb FT = 20%					
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF WEDGE Left: 2x4 SP No.3 , Rig	P No.2 P No.1 P No.3 ht: 2x4 SP No.3		BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathing 2-0-0 oc purlins (2-2-0 ma Rigid ceiling directly applie 1 Row at midpt	g directly applied, except ix.): 3-7. ed. 4-11, 6-9					
REACTIONS. (size) 8=Mechanical, 2=0-3-8 Max Horz 2=65(LC 11) Max Uplift 8=8(LC 12), 2=-43(LC 12) Max Grav 8=1252(LC 1), 2=1335(LC 1)										
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2073/14, 3-4=-1686/39, 4-6=-2855/13, 6-7=-1698/45, 7-8=-2085/20 BOT CHORD 2-11=0/1714, 10-11=-7/2730, 9-10=-9/2734, 8-9=0/1726 WEBS 3-11=0/721, 4-11=-1246/54, 4-10=0/328, 6-10=0/327, 6-9=-1241/49, 7-9=0/720										
 NOTES 1) Unbalanced roof live loads have been considered for this design. 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) 1-1-4 to 1-8-0, Interior(1) 1-8-0 to 5-8-4, Exterior(2R) 5-8-4 to 9-11-3, Interior(1) 9-11-3 to 25-7-12, Exterior(2R) 25-7-12 to 29-10-11 to 11-4-0, 1-4-0, and to 2000; Commended to 2000 psf bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members. 6) Refer to girder(s) for truss to truss connection. 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8. 8) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces. 9) This truss is designed directly to the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1 1. 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord. 11) 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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H	7-8-4	<u>15-8-0</u> 7-11-12		<u>23-7-12</u> 7-11-12		<u> </u>					
Plate Offsets (X,Y)	[2:0-0-15,0-1-8], [3:0-4-0,0-1-11], [5:0	-4-0,0-1-11], [6:0-0-15,0-1-8	8], [8:0-4-0,0-3-0]								
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.73 BC 0.68 WB 0.34 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.12 8-9 -0.28 8-9 0.08 6	l/defl L/d >999 240 >999 180 n/a n/a	PLATES MT20 Weight: 147 lb	GRIP 244/190 FT = 20%				
LUMBER- TOP CHORD 2x4 SP 3-5: 2x BOT CHORD 2x4 SP WEBS 2x4 SP WEDGE Left: 2x4 SP No.3 , Rig REACTIONS. (sizt Max H Max U	LUMBER- BRACING- FOP CHORD 2x4 SP No.2 *Except* TOP CHORD Structural wood sheathing directly applied, except 3-5: 2x4 SP No.1 20-0 oc purlins (3-1-4 max.): 3-5. BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 WEDGE BOT CHORD Left: 2x4 SP No.3, Right: 2x4 SP No.3 REACTIONS. (size) 6=Mechanical, 2=0-3-8 Max Horz 2=85(LC 11) Max Grav 6=1252(LC 1), 2=1335(LC 1)										
Max Grav 6=1252(LC 1), 2=1335(LC 1) FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1989/37, 3-4=-2231/68, 4-5=-2231/68, 5-6=-1996/41 BOT CHORD 2-9=0/1621, 8-9=0/1616, 7-8=0/1624, 6-7=0/1629 WEBS 3-9=0/310, 3-8=-2/811, 4-8=-559/102, 5-8=0/807, 5-7=0/312											
 NOTES- 1) Unbalanced roof live loads have been considered for this design. 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) :1-4-0 to 1-8-0, Interior(1) 17-0 to 7-8-4, Exterior(2R) 7-8-4 to 11-11-11-13 to 23-7-12, Exterior(2R) 23-7-12 to 27-10-11, Interior(1) 17-10-11 to 31-4-0 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) Provide adequate drainage to prevent water ponding. 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members. 6) Refer to girder(s) for truss to truss connections. 7) Provide mechanical connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces. 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/TP1 1. 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord. 11) 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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L	9-8-4	15-8-0	21-7-1	2	31-4-0					
	9-8-4	5-11-12	5-11-1	2 1	9-8-4					
Plate Offsets (X,Y)	[2:Edge,0-1-1], [4:0-4-0,0-1-11], [6:0-4-0),0-1-11], [8:0-0-0,0-1-1],	[10:0-4-0,0-3-0]							
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.49 BC 0.82 WB 0.28 Matrix-AS	DEFL. in Vert(LL) -0.16 Vert(CT) -0.34 Horz(CT) 0.07	(loc) l/defl L/d 9-14 >999 240 9-14 >999 180 8 n/a n/a	PLATES MT20 Weight: 165 lb	GRIP 244/190 FT = 20%				
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF WEDGE Left: 2x4 SP No.3 , Rig	P No.2 No.2 P No.3 ht: 2x4 SP No.3		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing di 2-0-0 oc purlins (4-0-3 max.) Rigid ceiling directly applied.	rectly applied, except : 4-6.					
REACTIONS. (siz Max H Max U Max G	e) 8=Mechanical, 2=0-3-8 lorz 2=105(LC 11) plift 8=-8(LC 12), 2=-43(LC 12) irav 8=1252(LC 1), 2=1335(LC 1)									
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1980/60, 3-4=-1751/60, 4-5=-1742/86, 5-6=-1742/86, 6-7=-1757/64, 7-8=-1990/65 BOT CHORD 2-11=0/1627, 10-11=0/1468, 9-10=0/1472, 8-9=0/1638 WEBS 4-11=0/390, 4-10=-22/465, 5-10=-426/83, 6-10=-19/462, 6-9=0/393										
 WEBS 4:11=0/390, 4:10=-22/465, 5-10=-42/683, 6:10=-19/462, 6:9=0/393 NOTES Unbalanced roof live loads have been considered for this design. Wind: ASCE 7:16; Vull=120mph (3:second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; B=25ft; B=45ft; L=24ft; eave=4ft; Cat. II: Exp B; Enclosed; WMFRS (directional) and C-C Exterior(2E): 1-4-0 to 1-8-0. Interior(1) 1-8-0 to 9:8-4. Exterior(2R) 9:8-4 to 13:11-3. Interior(1) 13:11-3 to 21:7-12, Exterior(2R) 21:7-12 to 25:7-6. Interior(1) 25:7-6 to 31:4-0 zone; cantilever left and right exposed; end vertical left and right exposed; C:C for members and forces & MWFRS for reactions shown; Lumber DDL=1.60 plate grip DDL=1.60 Provide adequate drainage to prevent water ponding. This truss has been designed for a 10.0 psf bottom chord ine load nonconcurrent with any other live loads. This truss has been designed for a 10.0 psf bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fibetween the bottom chord and any other members. 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) 8. One RT7A MITek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplit. SEAL 03518.3 This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1 1. This truss design requires that a minimum of 7/16° structural wood sheathing be applied directly to the top chord and 1/2° gypsum sheetoxe be applied directly to the bottom chord. This truss design requires that a minimum of 7/16° structural wood sheathing be applied directly to the top chord and 1/2° gypsum sheetoxe be applied directly to the bottom chord. (a) Graphical purin representation does not depict the size or the orientation of the purin										



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WEDGE

Left: 2x4 SP No.3 , Right: 2x4 SP No.3

REACTIONS. (size) 7=Mechanical, 2=0-3-8 Max Horz 2=125(LC 11) Max Uplift 7=-8(LC 12), 2=-43(LC 12) Max Grav 7=1395(LC 18), 2=1477(LC 17)

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

- TOP CHORD 2-3=-2183/43, 3-4=-1811/81, 4-5=-1511/93, 5-6=-1797/83, 6-7=-2179/48
- BOT CHORD 2-12=0/1879, 11-12=0/1879, 9-11=0/1564, 8-9=0/1791, 7-8=0/1791
- WEBS 3-11=-399/58, 4-11=0/564, 5-9=0/515, 6-9=-414/65

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) -1-4-0 to 1-8-0, Interior(1) 1-8-0 to 11-8-4, Exterior(2R) 11-8-4 to 15-11-3, Interior(1) 15-11-3 to 19-7-12, Exterior(2R) 19-7-12 to 23-10-11, Interior(1) 23-10-11 to 31-4-0 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
- 8) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 11) 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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March 25,2022





1	6-8-7	13-8-4	17-7-12	24-7-9	31-4-0	I					
Г	6-8-7	6-11-13	3-11-8	6-11-13	6-8-7	1					
Plate Offsets (X,Y)-	late Offsets (X,Y) [2:0-0-0,0-0-13], [3:0-2-12,0-3-0], [4:0-4-0,0-1-11], [5:0-4-0,0-1-11], [6:0-2-12,0-3-0], [7:0-0-0,0-0-13]										

LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.55 BC 0.78 WB 0.76 Matrix-AS	DEFL. in (loc) l/defl L/d Vert(LL) -0.29 11-12 >999 240 Vert(CT) -0.41 11-12 >923 180 Horz(CT) 0.09 7 n/a n/a	PLATES GRIP MT20 244/190 Weight: 162 lb FT = 20%
LUMBER- TOP CHORD 2x4 SF	9 No.2		BRACING- TOP CHORD Structural wood sheathing directly ap	pplied, except

BOT CHORD

2-0-0 oc purlins (4-10-15 max.): 4-5.

Rigid ceiling directly applied.

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

Left: 2x4 SP No.3 , Right: 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 7=Mechanical

Max Horz 2=144(LC 11) Max Uplift 2=-43(LC 12), 7=-8(LC 12) Max Grav 2=1475(LC 17), 7=1402(LC 18)

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

- 2-3=-2217/40, 3-4=-1651/93, 4-5=-1344/107, 5-6=-1651/93, 6-7=-2227/45
- BOT CHORD 2-12=0/1926, 11-12=0/1914, 9-11=0/1388, 8-9=0/1823, 7-8=0/1836
- WEBS 3-12=0/268, 3-11=-615/72, 4-11=0/518, 5-9=0/521, 6-9=-626/78, 6-8=0/270

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) -1-4-0 to 1-8-0, Interior(1) 1-8-0 to 13-8-4, Exterior(2E) 13-8-4 to 17-7-12, Exterior(2R) 17-7-12 to 21-10-11, Interior(1) 21-10-11 to 31-4-0 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

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

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

8) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces

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

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

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



March 25,2022



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ENGINEERING BY REENCED A MITEK Atfiliate 818 Soundside Road Edenton, NC 27932

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- Refer to girder(s) for truss to truss connections.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPL1
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

Conservation of the March 25,2022

818 Soundside Road

Edenton, NC 27932

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A MITek Aff 818 Soundside Road

Edenton, NC 27932





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 **MSIVTPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



	1	6-8-7	1	13-8-4	17-7-12	24-7-9	31-4-0	1		
	Γ	6-8-7	1	6-11-13	3-11-8	6-11-13	6-8-7	<u> ٦</u>		
Plate Offsets (X,Y) [2:0-0-0,0-0-13], [3:0-2-12,0-3-0], [4:0-4-0,0-1-11], [5:0-4-0,0-1-11], [6:0-2-12,0-3-0], [7:0-0-0,0-0-13]										
LOADIN	G (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) l/defl L/d	PLATES GRIP			
TCLL	20.0	Plate Grip DOL	1.15	TC 0.55	Vert(LL)	-0.29 12-13 >999 240	MT20 244/190)		
TCDL	10.0	Lumber DOL	1.15	BC 0.77	Vert(CT)	-0.41 12-13 >922 180				
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.74	Horz(CT)	0.09 7 n/a n/a	l			

BRACING-

TOP CHORD

BOT CHORD

	11/1		D
ᄂ	, 1811	ᇚ	n-

BCDL

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

10.0

Left: 2x4 SP No.3 , Right: 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 7=0-3-8 Max Horz 2=148(LC 11)

Max Uplift 2=-42(LC 12), 7=-42(LC 12) Max Grav 2=1474(LC 17), 7=1474(LC 18)

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

TOP CHORD 2-3=-2215/39, 3-4=-1648/91, 4-5=-1342/106, 5-6=-1648/91, 6-7=-2215/39

Code IRC2018/TPI2014

- BOT CHORD 2-13=0/1932, 12-13=0/1920, 10-12=0/1393, 9-10=0/1809, 7-9=0/1821
- WEBS 3-13=0/268, 3-12=-616/72, 4-12=0/517, 5-10=0/517, 6-10=-616/72, 6-9=0/268

NOTES-

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

2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) -1-4-0 to 1-8-0, Interior(1) 1-8-0 to 13-8-4, Exterior(2E) 13-8-4 to 17-7-12, Exterior(2R) 17-7-12 to 21-10-11, Interior(1) 21-10-11 to 32-8-0 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

Matrix-AS

- Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 7. This connection is for uplift only and does not consider lateral forces.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



FT = 20%

Weight: 164 lb

Structural wood sheathing directly applied, except

2-0-0 oc purlins (4-11-0 max.): 4-5.

Rigid ceiling directly applied.

March 25,2022



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L	6-8-7	11-8-	4	I	19-7-12			24-7-9	9	31-4-0	
	6-8-7	4-11-	13	1	7-11-8		1	4-11-1	3	6-8-7	
Plate Offsets (X,Y)	[2:0-0-0,0-0-13], [4:0-4-0,0	0-1-11], [5:0-4-	0,0-1-11], []	7:0-0-0,0-0-13]							
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TP	2-0-0 1.15 1.15 YES I2014	CSI. TC BC WB Matri	0.80 0.79 0.31 x-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.20 -0.38 0.08	(loc) 10-12 10-12 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 170 lb	GRIP 244/190 FT = 20%
LUMBER- BRACING- TOP CHORD 2x4 SP No.2 *Except* 4-5: 2x4 SP No.1 TOP CHORD BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 *Except* 4-10: 2x4 SP No.2 BOT CHORD WEDGE Left: 2x4 SP No.3 , Right: 2x4 SP No.3											
REACTIONS. (siz Max H Max U Max G	e) 2=0-3-8, 7=0-3-8 lorz 2=-128(LC 10) lplift 2=-42(LC 12), 7=-42(Grav 2=1476(LC 17), 7=14	LC 12) 68(LC 18)									
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2181/41, 3-4=-1809/80, 4-5=-1507/91, 5-6=-1791/80, 6-7=-2167/41 BOT CHORD 2-13=0/1884, 12-13=0/1884, 10-12=0/1570, 9-10=0/1776, 7-9=0/1776 WEBS 3-12=-399/59, 4-12=0/564, 5-10=-403/59											
 NOTES- 1) Unbalanced roof live loads have been considered for this design. 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) -1-4-0 to 1-8-0. Interior(1) 1-8-0 to 11-8-4, Exterior(2R) 11-8-4 to 15-11-3, Interior(1) 15-11-3 to 19-7-12, Exterior(2R) 19-7-12 to 23-10-11, Interior(1) 23-10-11 to 32-8-0 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) Provide adequate drainage to prevent water ponding. 											

- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
- will fit between the bottom chord and any other members, with BCDL = 10.0psf. 6) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 7. This connection is for
- uplift only and does not consider lateral forces. 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) 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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A MITEK ATTILIATE B18 Soundside Road Edenton, NC 27932



	9-8-4	15-8-0		21-7-12			31-4-0				
I	9-8-4	5-11-12	1	5-11-12			9-8-4				
Plate Offsets (X,Y)	[2:0-0-0,0-1-1], [4:0-4-0,0-1-11], [6:0-4-0	<u>,0-1-11], [8:0-0-0,0-1-1],</u>	[11:0-4-0,0-3-0]								
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.49 BC 0.82 WB 0.28 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.16 12-15 -0.34 12-15 0.08 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 167 lb	GRIP 244/190 FT = 20%			
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF WEDGE Left: 2x4 SP No.3 , Rig	BRACING TOP CHO BOT CHO	- RD Struct 2-0-0 RD Rigid	ural wood s oc purlins (ceiling dire	sheathing dir (4-0-4 max.): ctly applied.	ectly applied, except 4-6.						
REACTIONS. (siz Max H Max U Max G	REACTIONS. (size) 2=0-3-8, 8=0-3-8 Max Horz 2=-108(LC 10) Max Uplift 2=-42(LC 12), 8=-42(LC 12) Max Grav 2=1333(LC 1), 8=1333(LC 1)										
FORCES. (lb) - Max. TOP CHORD 2-3= BOT CHORD 2-12: WEBS 4-12:	Comp./Max. Ten All forces 250 (lb) or .1977/59, 3-4=-1748/59, 4-5=-1738/84, 5 =0/1624, 11-12=0/1465, 10-11=0/1465, 1 =0/390, 4-11=-20/463, 5-11=-426/83, 6-7	less except when shown 5-6=-1738/84, 6-7=-1748/ 8-10=0/1624 11=-20/463, 6-10=0/390	59, 7-8=-1977/59								
 WEBS 4-12=0/390, 4-11=-20/463, 5-11=-426/83, 6-11=-20/463, 6-10=0/390 NOTES- Unbalanced roof live loads have been considered for this design. Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25f; B=45f; L=24f; eave=4f; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -14-40 to 1-8-0. Interior(1) 125-7-6 to 32-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 Provide adequate drainage to prevent water ponding. 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 10.0 psf 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. One RT7A MITek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces. This truss is designed requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord. 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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 	7-8-4 7-8-4		<u>15-8-0</u> 7-11-12		23	8-7-12 11-12			<u>31-4-0</u> 7-8-4	
Plate Offsets (X,Y)	[2:0-0-15,0-1-8], [3:0-4-0,0)-1-11], [5:0-4-	-0,0-1-11], [6:0-0-15,0-1-8	8], [9:0-4-0,0-3-0]	-					
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TPI	2-0-0 1.15 1.15 YES 2014	CSI. TC 0.73 BC 0.68 WB 0.33 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.12 -0.28 0.08	(loc) 9-10 9-10 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 149 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SP 3-5: 2x BOT CHORD 2x4 SP WEBS 2x4 SP WEDGE Left: 2x4 SP No.3 , Rig	No.2 *Except* 4 SP No.1 No.2 No.3 ht: 2x4 SP No.3			BRACING- TOP CHOR BOT CHOR	D S	Structur 2-0-0 oc Rigid ce	al wood a purlins (ailing dire	sheathing dir (3-1-7 max.): ctly applied.	ectly applied, except 3-5.	
REACTIONS. (size Max H Max U Max G	e) 2=0-3-8, 6=0-3-8 orz 2=-88(LC 10) plift 2=-42(LC 12), 6=-42(L rav 2=1333(LC 1), 6=133	LC 12) 3(LC 1)								
FORCES. (lb) - Max. TOP CHORD 2-3=- BOT CHORD 2-10= WEBS 3-10=	Comp./Max. Ten All forc 1985/36, 3-4=-2226/66, 4- =0/1618, 9-10=0/1613, 8-9 =0/310, 3-9=-0/809, 4-9=-5	es 250 (lb) or 5=-2226/66, 5 =0/1613, 6-8= 59/103, 5-9=-	less except when shown i-6=-1985/36 0/1618 0/809, 5-8=0/310							
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V II; Exp B; Enclosed; 11-11-3, Interior(1) 1 exposed; end vertic grip DOL=1.60 3) Provide adequate dr 4) This truss has been 5) * This truss has been 6) One RT7A MITek co uplift only and does 7) This truss is designer referenced standard 8) This truss design reor sheetrock be applied 9) Graphical purlin repr	e loads have been consider fult=120mph (3-second gus MWFRS (directional) and 11-11-3 to 23-7-12, Exterio al left and right exposed;C ainage to prevent water po designed for a 10.0 psf bo n designed for a 10.0 psf bo not consider lateral forces. d in accordance with the 2 ANSI/TPI 1. quires that a minimum of 7, d directly to the bottom cho resentation does not depict	red for this de st) Vasd=95m C-C Exterior(2 r(2R) 23-7-12 -C for membe onding. ttom chord livit of 20.0psf on t members. connect truss 2018 Internatio /16" structural rd. t the size or th	sign. ph; TCDL=6.0psf; BCDL= 2E) -1-4-0 to 1-8-0, Interior to 27-10-11, Interior(1) 2 rs and forces & MWFRS e load nonconcurrent with he bottom chord in all are s to bearing walls due to 1 onal Residential Code sec wood sheathing be appli te orientation of the purlin	=6.0psf; h=25ft; B= or(1) 1-8-0 to 7-8-4 (7-10-11 to 32-8-0) for reactions show h any other live loa eas where a rectan UPLIFT at jt(s) 2 and ctions R502.11.1 a ied directly to the to h along the top and	45ft; L= , Exteric zone; ca n; Lumb ds. gle 3-6-1 nd 6. Th nd 8802 op chorc /or botto	24ft; ea or(2R) 7 antilever oer DOL 0 tall by is conn 2.10.2 a d and 1/ om chor	ve=4ft; C -8-4 to left and =1.60 pla 2-0-0 wi ection is nd 2" gypsu d.	eat. right ate de for m	SE 035	AR SAR SAL NEER SLEER







DEFL

Vert(LL)

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

WEBS

25-7-12

9-11-12

8

1 Row at midpt

l/def

>999

>697

n/a

L/d

240

180

n/a

2-0-0 oc purlins (2-2-0 max.): 3-7.

Rigid ceiling directly applied.

Structural wood sheathing directly applied, except

4-12, 6-10

in (loc)

0.11

-0.23 10-11

-0.54 10-11

8)	This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum
	sheetrock be applied directly to the bottom chord.
9)	Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) -1-4-0 to 1-8-0, Interior(1) 1-8-0 to 5-8-4, Exterior(2R) 5-8-4 to 9-11-3, Interior(1) 9-11-3 to 25-7-12, Exterior(2R) 25-7-12 to 29-10-11, Interior(1) 29-10-11 to 32-8-0 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

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

6) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for

15-8-0

9-11-12

CSI.

тс

BC

WB

Matrix-AS

0.80

0.84

0.40

[2:0-0-0,0-0-13], [3:0-4-0,0-1-11], [7:0-4-0,0-1-11], [8:0-0-0,0-0-13], [11:0-4-0,0-3-4]

2-0-0

1.15

1.15

YES

2-3=-2070/12, 3-4=-1683/37, 4-6=-2848/10, 6-7=-1683/37, 7-8=-2070/0

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

3-12=0/719, 4-12=-1243/52, 4-11=0/328, 6-11=0/328, 6-10=-1243/52, 7-10=0/719

5-8-4

(size) 2=0-3-8, 8=0-3-8 Max Horz 2=-68(LC 10)

Max Uplift 2=-42(LC 12), 8=-42(LC 12) Max Grav 2=1333(LC 1), 8=1333(LC 1)

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

3) Provide adequate drainage to prevent water ponding.

uplift only and does not consider lateral forces.

referenced standard ANSI/TPI 1.

will fit between the bottom chord and any other members.

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

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

2-12=0/1711, 11-12=0/2724, 10-11=0/2724, 8-10=0/1711

Lumber DOL

Plate Offsets (X,Y)--

20.0

10.0

10.0

TOP CHORD 2x4 SP No.2

2x4 SP No.1

2x4 SP No.3

Left: 2x4 SP No.3 , Right: 2x4 SP No.3

0.0

LOADING (psf)

TCLL

TCDL

BCLL

BCDL

WEBS

WEDGE

LUMBER-

BOT CHORD

REACTIONS.

TOP CHORD

BOT CHORD

DOL=1.60

WEBS

SEAL 035183

31-4-0

5-8-4

GRIP

244/190

FT = 20%

PLATES

Weight: 147 lb

MT20

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Continued on page 2

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Job Truss	Truss Type	Qty	Ply	Cameron Woods Lot 16-3119 Elev 'A' Permit-Roof Truss	
				-	Г27232105
22020380-01 H1GR	Hip Girder	1	1		
				Job Reference (optional)	
Carter Components (Lexington) Lexington NC - 27	295		3530 s Dec	6 2021 MiTek Industries Inc. Thu Mar 24 08:46:12 2022	Page 2

ID:R1dAcVhN40z53bONtvnm1Lzltw3-emrC6dfO?w94SCdeqVgs8DhzWUAeF2Ujz1dzTozXmvP

NOTES-

9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 39 lb down and 40 lb up at 1-9-0, 64 lb down and 52 lb up at 3-8-4, 68 lb down and 49 lb up at 5-7-0, 68 lb down and 49 lb up at 5-7-0, 68 lb down and 49 lb up at 7-7-0, 68 lb down and 49 lb up at 9-7-0, 64 lb down and 49 lb up at 11-7-0, 64 lb down and 49 lb up at 13-7-0, 64 lb down and 49 lb up at 15-7-0, 68 lb down and 49 lb up at 15-7-0, 68 lb down and 49 lb up at 12-7-0, 68 lb down and 49 lb up at 21-7-0, 68 lb down and 49 lb up at 23-7-0, and 68 lb down and 49 lb up at 25-7-0, and 64 lb down and 52 lb up at 27-7-12 on top chord, and 140 lb down and 22 lb up at 1-9-0, 26 lb down at 3-9-0, 26 lb down at 11-7-0, 26 lb down at 23-7-0, 26 lb down at 23-7

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

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-3=-60, 3-8=-60, 8-10=-60, 16-19=-20

Concentrated Loads (lb)

Vert: 3=-31(B) 5=-31(B) 4=-20(B) 4=-20(B) 4=-31(B) 13=-20(B) 6=-31(B) 7=-31(B) 12=-20(B) 11=-20(B) 23=-31(B) 24=-31(B) 26=-31(B) 27=-31(B) 28=-31(B) 30=-31(B) 31=-31(B) 32=-140(B) 33=-20(B) 34=-20(B) 35=-20(B) 35=-20

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



