

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 21110328-02 Cameron Woods Lot 26- 2721 elev B 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: T26199777 thru T26199817

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

North Carolina COA: C-0844



December 9,2021

# 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.



BOT CHORD

BOT CHORD 2x4 SP No.2 \*Excep 3-7: 2x4 SP No.3 WEBS 2x4 SP No.3

REACTIONS. (size) 8=0-4-7, 4=Mechanical, 5=Mechanical

Max Horz 8=51(LC 8)

Max Uplift 8=-48(LC 17), 5=-19(LC 5)

Max Grav 8=154(LC 3), 4=86(LC 1), 5=142(LC 13)

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); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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 19 lb uplift at joint 5.
- 6) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 7 lb down and 2 lb up at -2-0-1, and 7 lb down and 2 lb up at -2-0-1 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  9) 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: 2-4=-20(F=40) Concentrated Loads (lb) Vert: 1=-11(F=-6, B=-6)

Trapezoidal Loads (plf)

Vert: 1=40(F=70, B=30)-to-2=8(F=54, B=14), 8=-32(F=-6, B=-6)-to-7=-83(F=-32, B=-32), 6=-83(F=-32, B=-32)-to-5=-105(F=-42, B=-42)



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

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BRACING-

TOP CHORD

BOT CHORD

4-6-0 4-5-9 4-5-9 Plate Offsets (X,Y)--[2:0-3-0,Edge] LOADING (psf) SPACING-DEEL PLATES GRIP 2-0-0 CSI. in (loc) l/defl L/d TCLL 20.0 Plate Grip DOL 1.15 тс 0.05 Vert(LL) n/a n/a 999 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.14 Vert(CT) n/a n/a 999 BCLL Rep Stress Incr YES WB 0.00 0.00 3 0.0 Horz(CT) n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-P Weight: 13 lb

LUMBER-

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

REACTIONS. (size) 1=4-5-2, 3=4-5-2 Max Horz 1=17(LC 11) Max Uplift 1=-1(LC 12), 3=-1(LC 12) Max Grav 1=137(LC 1), 3=137(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.



FT = 20%

Structural wood sheathing directly applied or 4-6-0 oc purlins.

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

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6-6-12

Plate Offsets (X,Y)	[2:0-3-0,Edge]	1	1		
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	<b>CSI.</b> TC 0.24 BC 0.32 WB 0.00	<b>DEFL.</b> in (H Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	oc) l/defl L/d - n/a 999 - n/a 999 4 n/a n/a	PLATES         GRIP           MT20         244/190
BCDL 10.0	Code IRC2018/1PI2014	Matrix-R			Weight: 21 lb $FI = 20\%$
LUMBER-			BRACING-		
BOT CHORD 2x4 SI	P No.2 P No.2		TOP CHORD Sti	ructural wood sheathing dire	ectly applied or 6-0-0 oc purlins,

BOT CHORD

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

BOT CHORD2x4 SP No.2WEBS2x4 SP No.3

REACTIONS. (size) 1=6-6-5, 4=6-6-5 Max Horz 1=48(LC 11)

Max Uplift 1=-1(LC 12), 4=-2(LC 12)

Max Grav 1=235(LC 1), 4=235(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 4-3-0, Exterior(2E) 4-3-0 to 6-5-0 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) 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.

7) 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.



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0-0-7

6-11-0 6-10-9

Plate Of	fsets (X,Y)	[2:0-3-0,Edge]										
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	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-P						Weight: 20 lb	FT = 20%
	<b>२</b> -	1		1		BRACING-					1	

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 1=6-10-2, 3=6-10-2 Max Horz 1=29(LC 11) Max Uplift 1=-2(LC 12), 3=-2(LC 12)

Max Grav 1=233(LC 1), 3=233(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.



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

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

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





#### 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 5-5-8, Exterior(2R) 5-5-8 to 8-5-8, Interior(1) 8-5-8 to 10-4-8 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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ENGINEERING BY AMITEK Attiliate 818 Soundside Road Edenton, NC 27932



REACTIONS. All bearings 13-11-12.

(lb) - Max Horz 1=-69(LC 10)

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 1), 8=328(LC 23), 6=311(LC 24)

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

#### NOTES-

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 3-5-8, Interior(1) 3-5-8 to 7-5-8, Exterior(2R) 7-5-8 to 10-5-8, Interior(1) 10-5-8 to 13-11-12 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) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 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.



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<sup>1)</sup> Unbalanced roof live loads have been considered for this design.



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

Max Horz 8=80(LC 12) Max Uplift 8=-29(LC 12), 4=-14(LC 12)

Max Grav 8=244(LC 1), 4=72(LC 1), 5=53(LC 3)

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=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3) -1-4-0 to 2-10-15, Exterior(2R) 2-10-15 to 3-6-8 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
- 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 14 lb uplift at joint 4.
- 6) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 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.



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			4-8-13
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNO	CSI. TC 0.32 BC 0.54 WB 0.00	DEFL.         in         (loc)         l/defl         L/d         PLATES         GRIP           Vert(LL)         -0.05         4-5         >999         240         MT20         244/190           Vert(CT)         -0.09         4-5         >614         180         MT20         244/190           Horz(CT)         0.03         3         n/a         n/a         MT20         244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MR	Weight: 18 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

Structural wood sheathing directly applied or 4-8-13 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-9, 3=Mechanical, 4=Mechanical

Max Horz 5=90(LC 7)

Max Uplift 5=-34(LC 17), 3=-2(LC 17), 4=-33(LC 5)

Max Grav 5=158(LC 3), 3=66(LC 1), 4=204(LC 13)

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); cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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 2 lb uplift at joint 3 and 33 lb uplift at joint 4
- 6) 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
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1 lb down and 3 lb up at -1-10-10, and 1 lb down and 3 lb up at -1-10-10 on top chord. The design/selection of such connection device(s) is the responsibility of others.

9) 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: 2-3=-20(F=40)

Concentrated Loads (lb)

Vert: 1=5(F=2, B=2)

Trapezoidal Loads (plf)

Vert: 1=40(F=70, B=30)-to-2=10(F=55, B=15), 5=-37(F=-8, B=-8)-to-4=-114(F=-47, B=-47)



 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 besign valid to less only with with twe 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 **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



0
%

## LUMBER-

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

TOP CHORD BOT CHORD

BRACING-

Structural wood sheathing directly applied or 3-5-4 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

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

Max Horz 5=88(LC 12)

Max Uplift 5=-24(LC 12), 3=-27(LC 12)

Max Grav 5=238(LC 1), 3=79(LC 17), 4=59(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) -1-4-0 to 1-8-0, Interior(1) 1-8-0 to 3-4-8 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
- 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 27 lb uplift at joint 3.
- 6) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5 and 4. 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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December 9,2021



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 besign valid to less only with with twe 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 **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

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

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 26- 2721 elev B PERMIT-roof truss
					T26199787
21110328-02	H1GRA	HALF HIP GIRDER	1	1	
					Job Reference (optional)
Carter Components (Lexington). Lexington. NC - 27295.				530 s Nov :	29 2021 MiTek Industries, Inc. Wed Dec 8 08:49:48 2021 Page 2

ID:5LW3e3KbnmujEoocu3QUU8yjMRN-flUCas9qkT6\_oBrlECAA8DvN?j?TQxfcGGfPyTyB4Jn

### LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-4=-60, 4-8=-60, 9-15=-20

Concentrated Loads (lb)

Vert: 4=-36(B) 14=-178(B) 19=-18(B) 20=-18(B) 21=-18(B) 22=-18(B) 24=-18(B) 25=-18(B) 26=-18(B) 27=-18(B) 28=-18(B) 29=-18(B) 30=-18(B) 31=-35(B) 32=-11(B) 33=-11(B) 34=-11(B) 35=-11(B) 35=-11(B)

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<b> </b>	5-5-4	13-8-0		21-10-12		27-4-0	
Plate Offsets (X,Y)	[2:0-4-12,Edge], [4:0-4-0,0-1-11], [8:0-4	I-0,0-1-11], [10:0-4-12,Edg	ge], [12:0-4-0,0-3-0]	0-2-12		5-5-4	
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 0.63 BC 0.83 WB 0.70 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) l/defl 0.14 11-12 >999 0.34 12-13 >977 0.09 10 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 132 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP SLIDER Left 2x4	No.2 No.2 No.3 4 SP No.3 1-6-0, Right 2x4 SP No.3 1-6	3-0	BRACING- TOP CHORE BOT CHORE	<ul> <li>Structural wood</li> <li>2-0-0 oc purlins</li> <li>Rigid ceiling dir</li> </ul>	l sheathing direct (3-6-2 max.): 4-6 ectly applied.	ly applied, except 3.	
REACTIONS. (size Max H Max U Max G	<ul> <li>10=Mechanical, 2=0-3-8</li> <li>z 2=63(LC 11)</li> <li>plift 10=-7(LC 12), 2=-42(LC 12)</li> <li>rav 10=1091(LC 1), 2=1175(LC 1)</li> </ul>						
FORCES.         (lb) - Max.           TOP CHORD         2-4=-           BOT CHORD         2-13=           WEBS         4-13=	Comp./Max. Ten All forces 250 (lb) o 1652/22, 4-5=-1338/43, 5-7=-2148/22, 0/1361, 12-13=0/2057, 11-12=-6/2061 0/600, 5-13=-920/37, 5-12=0/253, 7-12	r less except when shown 7-8=-1351/48, 8-10=-1663 , 10-11=0/1373 2=0/251, 7-11=-915/52, 8-1	9/26 11=0/599				
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V II; Exp B; Enclosed; Interior(1) 9-8-3 to 2 end vertical left and DOL=1.60 3) Provide adequate dr 4) This truss has been will fit between the b 6) Refer to girder(s) for 7) Provide mechanical 8) One RT7A MiTek co only and does not cc 9) This truss is designer referenced standard 10) This truss design referenced standard 10) This truss design referenced standard 11) Graphical purlin ref	I loads have been considered for this dult=120mph (3-second gust) Vasd=95r MWFRS (directional) and C-C Exterior 1-10-12, Exterior(2R) 21-10-12 to 26-1 right exposed;C-C for members and for ainage to prevent water ponding. designed for a 10.0 psf bottom chord lin n designed for a live load of 20.0psf on ottom chord and any other members. truss to truss connections. connection (by others) of truss to bearin nectors recommended to connect trus onsider lateral forces. d in accordance with the 2018 Internati ANSI/TPI 1. equires that a minimum of 7/16" structu ad directly to the bottom chord.	esign. nph; TCDL=6.0psf; BCDL= 2E) -1-4-0 to 1-8-0, Interio 11, Interior(1) 26-1-11 to 2 ces & MWFRS for reaction we load nonconcurrent with the bottom chord in all are ng plate capable of withsta is to bearing walls due to to onal Residential Code second ral wood sheathing be appent the orientation of the purifi	=6.0psf; h=25ft; B=4 r(1) 1-8-0 to 5-5-4, r27-4-0 zone; cantiler ns shown; Lumber I n any other live load eas where a rectang unding 7 lb uplift at ju JPLIFT at jt(s) 2. The stions R502.11.1 an ulied directly to the to n along the top and	5ft; L=24ft; eave=4ft; Exterior(2R) 5-5-4 to 5 ver left and right exposi DOL=1.60 plate grip s. le 3-6-0 tall by 2-0-0 v oint 10. is connection is for up d R802.10.2 and op chord and 1/2" gyp	Cat. 3-8-3, sed ; vide blift	NULLOS S 03	EAL 5183



## December 9,2021

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	I	7-5-4	13-8-0	19	-10-12		27-4-0	
Plate Offsets ()	X.Y) I	2:0-4-12.Edae]. [4:0-4-0.0-1-11]. [6:0-4	-0.0-1-11], [8:0-4-12.Edae], [1	10:0-4-0.0-3-01	-2-12		7-5-4	
LOADING (psi TCLL 20.1 TCDL 10.1 BCLL 0.1 BCDL 10.1	f) 0 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 0.63 BC 0.63 WB 0.23 Matrix-AS	DEFL.         in           Vert(LL)         -0.08           Vert(CT)         -0.17           Horz(CT)         0.06	(loc) l/defl 9-10 >999 10-11 >999 8 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 134 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD BOT CHORD WEBS SLIDER	2x4 SP 2x4 SP 2x4 SP Left 2x4	No.2 No.2 No.3 I SP No.3 1-6-0, Right 2x4 SP No.3 1-6	-0	BRACING- TOP CHORD BOT CHORD	Structural wood a 2-0-0 oc purlins ( Rigid ceiling dire	sheathing directly (4-0-12 max.): 4-6 ctly applied.	/ applied, except 6.	
REACTIONS.	Max Ho Max Up Max Gi	)						
FORCES. (Ib TOP CHORD BOT CHORD WEBS	) - Max. ( 2-4=-´ 2-11= 4-11=	Comp./Max. Ten All forces 250 (lb) or 1596/41, 4-5=-1667/64, 5-6=-1667/64, 6 0/1297, 10-11=0/1293, 9-10=0/1300, 8- 0/257, 4-10=-4/560, 5-10=-441/80, 6-10	less except when shown. 6-8=-1603/44 9=0/1304 9=-2/556, 6-9=0/259					
NOTES- 1) Unbalanced 2) Wind: ASCE II; Exp B; En , Interior(1) ' ; end vertica DOL=1.60 3) Provide ade 4) This truss ha 5) * This truss ha 5) * This truss ha 6) Refer to gird 7) Provide mee 8) One RT7A M only and doc 9) This truss of 10) This t	I roof live 57-16; Vi holosed; I 11-8-3 to al left and equate dra as been to bas been thas beer thas	loads have been considered for this de ult=120mph (3-second gust) Vasd=95m WWFRS (directional) and C-C Exterior(2 19-10-12, Exterior(2R) 19-10-12 to 24- right exposed;C-C for members and fo ainage to prevent water ponding. designed for a 10.0 psf bottom chord liv designed for a live load of 20.0psf on to bottom chord and any other members. truss to truss connections. connection (by others) of truss to bearin nectors recommended to connect trus: nsider lateral forces. d in accordance with the 2018 Internatio ANSI/TPI 1. guires that a minimum of 7/16" structur	sign. ph; TCDL=6.0psf; BCDL=6.0 2E) -1-4-0 to 1-8-0, Interior(1) 1-11, Interior(1) 24-1-11 to 27 rces & MWFRS for reactions e load nonconcurrent with an he bottom chord in all areas of g plate capable of withstandi s to bearing walls due to UPL onal Residential Code section al wood sheathing be applied	Ppsf; h=25ft; B=45ft; L 1-8-0 to 7-5-4, Exter 7-4-0 zone; cantilever shown; Lumber DOL y other live loads. where a rectangle 3-6 ng 7 lb uplift at joint 8 IFT at jt(s) 2. This co ns R502.11.1 and R8 I directly to the top ch	=24ft; eave=4ft; C ior(2R) 7-5-4 to 1 left and right exp =1.60 plate grip -0 tall by 2-0-0 wi nnection is for upl 02.10.2 and ord and 1/2" gyps	Cat. 1-8-3 osed ide	S O3	CAR BOOL THEAL 5183
sheetrock I	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.



December 9,2021

818 Soundside Road Edenton, NC 27932

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L	9-5-4		17-10-12			27-4-0	
	9-5-4		8-5-8			9-5-4	'
Fiate Offsets (A, Y)	[∠.∪-4-1∠,⊏age], [5:∪-4-0,0-1-11], [7:0-4	0,0-1-11], [10:0-4-12,Edge]			1		
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	<b>CSI.</b> TC 0.53 BC 0.85 WB 0.26 Matrix-AS	DEFL.         in           Vert(LL)         -0.21           Vert(CT)         -0.34           Horz(CT)         0.06	(loc) l/defl 11-13 >999 11-13 >951 10 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 148 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP WEBS 2x4 SP SLIDER Left 2x	2 No.2 2 No.2 2 No.3 4 SP No.3 1-6-0, Right 2x4 SP No.3 1-6	0	BRACING- TOP CHORD BOT CHORD	Structural wood 2-0-0 oc purlins Rigid ceiling dir	l sheathing direc (4-11-14 max.) ectly applied.	ctly applied, except : 5-7.	
REACTIONS. (size Max H Max U Max G	e) 10=Mechanical, 2=0-3-8 orz 2=102(LC 11) plift 10=-7(LC 12), 2=-42(LC 12) rav 10=1216(LC 18), 2=1290(LC 17)						
FORCES. (lb) - Max. TOP CHORD 2-4=-	Comp./Max. Ten All forces 250 (lb) or 1776/62, 4-5=-1604/49, 5-6=-1336/70, 6	less except when shown. -7=-1339/71, 7-8=-1609/51,					
BOT CHORD 2-13= WEBS 5-13=	=-1760/66 =-9/1545, 11-13=0/1428, 10-11=-16/149 =0/506, 6-13=-257/38, 6-11=-253/37, 7-1	1=0/508					
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V II; Exp B; Enclosed; , Interior(1) 13-8-0 tc ; end vertical left and DOL=1.60 3) Provide adequate dr 4) This truss has been will fit between the b 6) Refer to girder(s) for 7) Provide mechanical 8) One RT7A MiTek coc only and does not cc 9) This truss is designer referenced standard 10) This truss design re- sheetrock be applied 11) Graphical purlin rep	e loads have been considered for this de /ult=120mph (3-second gust) Vasd=95m MWFRS (directional) and C-C Exterior( of 17-10-12, Exterior(2R) 17-10-12 to 22- d right exposed;C-C for members and fo rainage to prevent water ponding. designed for a 10.0 psf bottom chord liv n designed for a 10.0 psf bottom chord liv n designed for a 10.0 psf bottom chord liv not contom chord and any other members, wi truss to truss connections. connection (by others) of truss to bearin onnectors recommended to connect trus onsider lateral forces. ed in accordance with the 2018 Internation (ANSI/TPI 1. equires that a minimum of 7/16" structur ed directly to the bottom chord. presentation does not depict the size or	sign. oh; TCDL=6.0psf; BCDL=6.0 IE) -1-4-0 to 1-8-0, Interior(1) I-11, Interior(1) 22-1-11 to 27 cces & MWFRS for reactions e load nonconcurrent with an ne bottom chord in all areas of th BCDL = 10.0psf. g plate capable of withstandii to bearing walls due to UPL nal Residential Code section al wood sheathing be applied he orientation of the purlin al	psf; h=25ft; B=45ft; L 1-8-0 to 9-5-4, Exter 7-4-0 zone; cantilever shown; Lumber DOL y other live loads. where a rectangle 3-6 ng 7 lb uplift at joint 1 IFT at jt(s) 2. This co as R502.11.1 and R8( directly to the top ch ong the top and/or bo	=24ft; eave=4ft; ior(2R) 9-5-4 to left and right ex =1.60 plate grip 5-0 tall by 2-0-0 v 0. nnection is for up 02.10.2 and ord and 1/2" gyp ottom chord.	Cat. 13-8-0 posed vide sum	S S S S S S S S S S S S S S S S S S S	EAL 5183 NEER. December 9,202
WARNING - Verify	y design parameters and READ NOTES ON THIS AN	D INCLUDED MITEK REFERENCE P	AGE MII-7473 rev. 5/19/20	20 BEFORE USE.		ENGIN	EERING BY

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

## A MiTek Affiliat 818 Soundside Road Edenton, NC 27932



	4-8-15	L	11-5-4	15-10-12		22-7-1		27-4-0	
	4-8-15		6-8-5	4-5-8		6-8-5		4-8-15	1
Plate Offsets (X,Y)	[5:0-4-0,0-1-11], [6:0-4-0,	0-1-11]							
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/TF	2-0-0 1.15 1.15 YES Pl2014	<b>CSI.</b> TC 0.65 BC 0.82 WB 0.44 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (l -0.27 13 -0.38 10 0.07	loc) l/defl -14 >999 -11 >873 9 n/a	L/d 240 180 n/a	<b>PLATES</b> MT20 Weight: 143 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 BOT CHORD 2x4 WEBS 2x4 SLIDER Left REACTIONS. (( Max Max Max	SP No.2 SP No.2 SP No.3 2x4 SP No.3 1-6-0, Right 2x size) 9=Mechanical, 2=0-3 ( Horz 2=122(LC 11) ( Uplift 9=-7(LC 12), 2=-42(L ( Grav 9=1230(LC 18), 2=13	4 SP No.3 1-6 -8 .C 12) 304(LC 17)	-0	BRACING- TOP CHORI BOT CHORI	D St 2-1 D Ri	tructural wood 0-0 oc purlins igid ceiling dire	sheathing direc (5-2-0 max.): 5- ctly applied.	ttly applied, except 6.	
FORCES.(lb) - MaTOP CHORD2BOT CHORD2-WEBS4-	ax. Comp./Max. Ten All for 4=-1858/32, 4-5=-1468/74, 5 14=0/1624, 13-14=0/1624, 1 13=-425/61, 5-13=0/402, 6-1	ces 250 (lb) or -6=-1197/93, 6 1-13=0/1234, 1 1=0/404, 7-11:	less except when shown. 6-7=-1473/75, 7-9=-1871/3 10-11=0/1554, 9-10=0/155 =-440/68	38 54					
NOTES- 1) Unbalanced roof 2) Wind: ASCE 7-16 II: Exp B: Enclose	ive loads have been conside ; Vult=120mph (3-second gu d: MWERS (directional) and	ered for this de ust) Vasd=95m	sign. ph; TCDL=6.0psf; BCDL= 2F) -1-4-0 to 1-8-0 Interio	=6.0psf; h=25ft; B=- r(1) 1-8-0 to 11-5-4	45ft; L=24	4ft; eave=4ft; ( r(2E) 11-5-4 to	Cat.		

If; EXP 5; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-4-0 to 1-8-0, interior(1) 1-8-0 to 11-5-4, Exterior(2E) 11-5-4 to 15-10-12, Exterior(2R) 15-10-12 to 20-1-11, Interior(1) 20-1-11 to 27-4-0 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
 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 7 lb uplift at joint 9.

 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.



December 9,2021



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- II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-4-0 to 1-8-0, Interior(1) 1-8-0 to 13-5-4, Exterior(2E) 13-5-4 to 13-10-12, Exterior(2R) 13-10-12 to 18-1-11, Interior(1) 18-1-11 to 27-4-0 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.
- 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 7 lb uplift at joint 10.
- 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.



December 9,2021

TENGINEERING BY AMITEK Atfiliate 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 MSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



	8-3-7		19-0-10	27-4-0	-
	8-3-7	1	10-9-3	8-3-7	1
Plate Offsets (X,Y)	[2:0-4-12,Edge], [9:0-4-12,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 0.65 BC 0.89 WB 0.32 Matrix-AS	DEFL.         in         (loc)         l/           Vert(LL)         -0.53         10-12         >           Vert(CT)         -0.83         10-12         >           Horz(CT)         0.06         9         9	/defl L/d PLATES .624 240 MT20 .394 180 n/a n/a Weight: 138 lb	<b>GRIP</b> 244/190 FT = 20%

BRACING-TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

## LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 1-6-0, Right 2x4 SP No.3 1-6-0
	8

REACTIONS. (size) 9=Mechanical, 2=0-3-8 Max Horz 2=145(LC 11) Max Uplift 9=-7(LC 12), 2=-42(LC 12) Max Grav 9=1233(LC 18), 2=1307(LC 17)

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

TOP CHORD 2-4=-1822/62, 4-6=-1723/121, 6-7=-1730/126, 7-9=-1829/67

BOT CHORD 2-12=-0/1597, 10-12=0/1041, 9-10=0/1503

WEBS 6-10=-7/813, 7-10=-351/135, 6-12=-6/803, 4-12=-345/135

### 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 13-8-0, Exterior(2R) 13-8-0 to 16-8-0, Interior(1) 16-8-0 to 27-4-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

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

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

 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.

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.

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December 9,2021



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- 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) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 13-8-0, Exterior(2R) 13-8-0 to 16-8-0, Interior(1) 16-8-0 to 27-4-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

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

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 7.
- 7) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. 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.



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	8-3-7 8-3-7	+ <u>19-0-10</u> 10-9-3	8-3-7
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.         DEFL.         i           TC         0.65         Vert(LL)         -0.5:           BC         0.89         Vert(CT)         -0.8:           WB         0.32         Horz(CT)         0.0           Matrix-AS         Kerting         Kerting         Kerting	n (loc) l/defl L/d PLATES GRIP 10-12 >624 240 MT20 244/190 10-12 >394 180 8 n/a n/a Weight: 138 lb FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 1-6-0, Right 2x4 SP No.3 1-6-0

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied. Rigid ceiling directly applied.

REACTIONS. (size) 1=Mechanical, 8=0-3-8 Max Horz 1=-145(LC 10) Max Uplift 1=-7(LC 12), 8=-42(LC 12)

Max Grav 1=1233(LC 17), 8=1307(LC 18)

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

TOP CHORD 1-3=-1829/67, 3-4=-1730/126, 4-6=-1723/121, 6-8=-1822/62

BOT CHORD 1-12=0/1612, 10-12=0/1049, 8-10=0/1493

WEBS 4-10=-6/803, 6-10=-345/135, 4-12=-7/813, 3-12=-351/135

#### 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) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 13-8-0, Exterior(2R) 13-8-0 to 16-8-0, Interior(1) 16-8-0 to 28-8-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

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

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 1.
- 7) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. 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.



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	2-3-8 0-9-5 2-11-10 3-0-6	6-11-11	1-7-8 4-0-0	3-4-11	8-3-5			
Plate Offsets (X,Y)	[2:0-2-0,0-0-2], [4:0-4-0,0-4-4], [5:0-8-0,	0-2-4], [26:0-3-8,0-1-8]						
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. TC 0.84 BC 0.90 WB 0.91 Matrix-MS	DEFL. in Vert(LL) -0.51 Vert(CT) -1.03 Horz(CT) 0.34	(loc) l/defl 24-25 >786 24-25 >390 13 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 424 lb	<b>GRIP</b> 244/190 187/143 FT = 20%	
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI 4-29: : WEBS 2x4 SI 3-28,7 SLIDER Left 2: REACTIONS. (siz Max H Max (	<ul> <li>No.2</li> <li>No.2 *Except*</li> <li>2x4 SP No.1, 24-28: 2x6 SP 2400F 2.0E,</li> <li>No.3 *Except*</li> <li>-24: 2x4 SP No.2</li> <li>t4 SP No.3 1-4-1, Right 2x4 SP No.3 1-6</li> <li>te) 2=0-3-8, 13=0-3-8</li> <li>torz 2=-149(LC 6)</li> <li>Grav 2=2480(LC 2), 13=2089(LC 32)</li> </ul>	8-23: 2x4 SP No.3 -0	BRACING- TOP CHORD BOT CHORD WEBS	Structural wood si except 2-0-0 oc purlins (2 Rigid ceiling direc 6-0-0 oc bracing: 6-0-0 oc bracing: 1 Row at midpt	heathing directly. 2-8-6 max.): 5-7. tly applied or 10-1 23-24,21-23. 17-22 7-24	applied or 3-10-5 0-0 oc bracing, I	oc purlins, Except:	
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         TOP CHORD       2-3=-1449/0, 3-4=-7393/0, 4-5=-7062/0, 5-6=-10239/0, 6-7=-12148/0, 7-8=-4258/0, 8-9=-4159/0, 9-11=-3081/0, 11-13=-3189/0         BOT CHORD       2-29=0/2385, 28-29=0/1755, 4-28=0/6357, 26-27=0/6582, 25-26=0/10239, 24-25=0/12269, 23-24=-305/0, 8-24=-356/120, 21-23=-179/378, 16-21=0/2166, 15-16=0/2166, 13-15=0/2671         WEBS       3-29=-2224/0, 5-27=0/1810, 5-26=0/3947, 6-26=-975/0, 6-25=0/2458, 7-25=-1079/0, 9-24=0/3093, 9-17=0/768, 15-17=-19/663, 11-15=-313/167, 3-28=0/5465, 7-24=-8740/0, 20-21=-883/0, 22-24=0/2314, 21-22=0/2557								
NOTES- 1) 2-ply truss to be co Top chords connect Bottom chords connect Webs connected as 2) All loads are consid- ply connections hav 3) Unbalanced roof liv 4) Wind: ASCE 7-16; ' 11; Exp B; Enclosed plate grip DOL=1.6 5) 350.0lb AC unit load 6) Provide adequate co 7) All plates are MT20 8) All plates are 2x4 M 9) This truss has beer 10) * This truss has be will fit between the 11) This truss is designed referenced standa Continued on page 2	nnected together with 10d (0.131"x3") na ted as follows: 2x4 - 1 row at 0-9-0 oc. hected as follows: 2x4 - 1 row at 0-9-0 oc follows: 2x4 - 1 row at 0-9-0 oc. ered equally applied to all plies, except if e been provided to distribute only loads e loads have been considered for this de /ult=120mph (3-second gust) Vasd=95m MWFRS (directional); cantilever left and 0 d placed on the bottom chord, 19-8-0 from rainage to prevent water ponding. plates unless otherwise indicated. IT20 unless otherw	ils as follows: , 2x6 - 2 rows staggered ; noted as front (F) or bac noted as (F) or (B), unless sign. ph; TCDL=6.0psf; BCDL= right exposed ; end verti n left end, supported at tw e load nonconcurrent with the bottom chord in all an with BCDL = 10.0psf. tional Residential Code se	at 0-9-0 oc. k (B) face in the LOAD C s otherwise indicated. =6.0psf; h=25ft; B=45ft; L cal left and right exposed vo points, 4-0-0 apart. n any other live loads. reas where a rectangle 3 sections R502.11.1 and R	ASE(S) section. Pl .=24ft; eave=4ft; Ca t; Lumber DOL=1.6 t-6-0 tall by 2-0-0 w .802.10.2 and	y to at. SO	S O S S S S S S S S S S S S S S S S S S	EAL 5183 INEER. JS LEE. December 9,2021	

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Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 26- 2721 elev B PERMIT-roof truss		
					T26199796		
21110328-02	T1GR	ROOF SPECIAL GIRDER	1	2			
				<b>–</b>	Job Reference (optional)		
Carter Components (Lexington), Lexington, NC - 27295,		95,	8.530 s Nov 29 2021 MiTek Industries, Inc. Wed Dec 8 08:50:15 2021 Page 2				
		ID:5LW3	ID:5LW3e3KbnmujEoocu3QUU8yjMRN-NxcPF5UmNIW9YLPxJN9WkvWz2bCGF74bUyiKPOyB4JM				

## NOTES-

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

13) Use MiTek THD26 (With 18-16d nails into Girder & 12-10d x 1-1/2 nails into Truss) or equivalent at 5-11-4 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg. to the left, sloping 0.0 deg. down.

14) Fill all nail holes where hanger is in contact with lumber.

15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 111 lb down and 36 lb up at 3-0-13 on top chord, and 138 lb down and 46 lb up at 3-0-13 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

### LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)
  - Vert: 1-5=-60, 5-7=-60, 7-9=-60, 9-14=-60, 29-30=-20, 24-28=-20, 23-34=-20, 17-22=-20 Concentrated Loads (lb)

Vert: 5=-33(B) 27=-138(B) 26=-636(B) 16=-175 21=-175 38=-12(B) 39=-24(B)

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	2-3-8 6-1-7	7-7-9	1-7-8 4-0-0	3-4-10	8-3-7			
Plate Offsets (X Y)	[3:0-1-3 0-1-12] [4:0-3-12 Edge] [6:0-4	-0.0-1-111 [7:0-6-0.0-2-0]	[21:0-3-8 0-2-0]	5-4-10	0-0-1			
		0,0 1 11], [1:0 0 0,0 2 0]	, [21:0 0 0,0 2 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	<b>CSI.</b> TC 0.95 BC 0.95 WB 0.88 Matrix-AS	DEFL.         in           Vert(LL)         -0.34           Vert(CT)         -0.68           Horz(CT)         0.34	(loc) l/defl L/d 24-25 >999 240 24-25 >593 180 13 n/a n/a	H PLATES MT20 MT20HS Weight: 210 lb	<b>GRIP</b> 244/190 187/143 FT = 20%		
LUMBER- TOP CHORD 2x4 Si 10-14. BOT CHORD 2x4 Si 2-27,8 WEBS 2x4 Si 3-26,9 SLIDER Left 2	P No.2 *Except* 2x4 SP No.1 P No.1 *Except* -23,17-22: 2x4 SP No.2 P No.3 *Except* -24,21-24: 2x4 SP No.2 4 SP No.3 1-4-1, Right 2x4 SP No.3 1-6	-0	BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheat 2-0-0 oc purlins (2-8-1 Rigid ceiling directly a 6-0-0 oc bracing: 17-2 1 Row at midpt	hing directly applied, except 0 max.): 6-7. pplied. Except: 2 7-25			
REACTIONS. (size) 2=0-3-8, 13=0-3-8 Max Horz 2=149(LC 11) Max Grav 2=1822(LC 17), 13=1976(LC 18)								
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         TOP CHORD       2-3=-756/0, 3-4=-5048/0, 4-5=-5489/0, 5-6=-3278/0, 6-7=-2779/0, 7-8=-3711/0, 8-9=-3573/0, 9-11=-2884/0, 11-13=-2988/0         BOT CHORD       2-27=0/1793, 26-27=0/1514, 25-26=0/3455, 24-25=0/3816, 23-24=-274/0, 16-21=0/2035, 15-16=0/2035, 13-15=0/2482         WEBS       3-27=-1895/0, 3-26=0/3842, 6-25=0/1321, 7-25=-1248/0, 7-24=-1632/0, 9-24=0/2542, 9-17=0/772, 15-17=-6/659, 11-15=-309/167, 20-21=-697/0, 22-24=0/2210, 21-22=0/2414, 5-25=-644/31, 5-26=0/1860								
NOTES- 1) Unbalanced roof liv 2) Wind: ASCE 7-16; ' II; Exp B; Enclosed 11-4-15, Interior(1) exposed ; end verti grip DOL=1.60 3) 350.0lb AC unit loa 4) Provide adequate of 5) All plates are MT20 6) This truss has beer 7) * This truss has beer will fit between the 8) This truss is design referenced standam 9) This truss design re sheetrock be applie 10) Graphical purlin re	e loads have been considered for this de /ult=120mph (3-second gust) Vasd=95m MWFRS (directional) and C-C Exterior( 11-4-15 to 19-8-0, Exterior(2R) 19-8-0 to cal left and right exposed;C-C for member d placed on the bottom chord, 19-8-0 fror rainage to prevent water ponding. plates unless otherwise indicated. designed for a 10.0 psf bottom chord live en designed for a live load of 20.0psf on to bottom chord and any other members, wi ed in accordance with the 2018 Internation d ANSI/TPI 1. quires that a minimum of 7/16" structural d directly to the bottom chord. presentation does not depict the size or	sign. ph; TCDL=6.0psf; BCDL= 22) -1.4-0 to 1-8-0, Interior 22-8-0, Interior(1) 22-8-0 rrs and forces & MWFRS m left end, supported at tw e load nonconcurrent with the bottom chord in all are ith BCDL = 10.0psf. onal Residential Code second I wood sheathing be appliin the orientation of the purli	=6.0psf; h=25ft; B=45ft; L or(1) 1-8-0 to 8-4-15, Exter to 34-8-0 zone; cantileve for reactions shown; Lun wo points, 4-0-0 apart. In any other live loads. eas where a rectangle 3-6 ctions R502.11.1 and R80 ied directly to the top cho in along the top and/or bo	2=24ft; eave=4ft; Cat. erior(2R) 8-4-15 to er left and right nber DOL=1.60 plate 6-0 tall by 2-0-0 wide 02.10.2 and rd and 1/2" gypsum bottom chord.		CARO SEAL 55183		

December 9,2021

 120 BEFORE USE.
 Component, not

 component, not
 into the overall

 permanent bracing
 An

 ding the
 818 Soundside Road

 Edention, NC 27932

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A MiTek Affili



L	5-11-15	13	-5-4		19-10-12	1		27-4-2	2	33-4-0	
	5-11-15	7-	5-6		6-5-8	1		7-5-5		5-11-15	
Plate Offsets (X,Y)	[2:0-4-12,Edge], [6:0-4-0,	0-1-11], [7:0-4-0	),0 <b>-1-11]</b> , [11	1:0-4-12,Edge]							
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 VI2014	<b>CSI.</b> TC BC WB Matrix-	0.81 0.98 0.21 -AS	<b>DEFL.</b> Vert(LL) Vert(CT) Horz(CT)	in -0.16 -0.33 0.11	(loc) 13-15 16-18 11	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 188 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF 6-15: 2 SLIDER Left 2x	P No.2 P No.2 P No.3 *Except* 2x4 SP No.2 24 SP No.3 1-6-0, Right 2x	4 SP No.3 1-6-0	)		BRACING- TOP CHOR BOT CHOR WEBS	D D	Structu 2-0-0 o Rigid co 1 Row a	ral wood s c purlins ( eiling dire at midpt	sheathing dii (4-6-4 max.): ctly applied. 4	rectly applied, except : 6-7. 4-16, 9-15, 6-15	
REACTIONS. (size) 2=0-3-8, 11=0-3-8 Max Horz 2=145(LC 11) Max Uplift 2=-43(LC 12), 11=-43(LC 12) Max Grav 2=1559(LC 17), 11=1554(LC 18)											
FORCES.         (lb) - Max.           TOP CHORD         2-4=           BOT CHORD         2-18           WEBS         4-16	. Comp./Max. Ten All for -2274/42, 4-6=-1811/88, 6 =0/1991, 16-18=0/1991, 1 =-487/73, 6-16=0/534, 7-1	ces 250 (lb) or le -7=-1489/108, 7 5-16=0/1552, 13 5=0/509, 9-15=-	ess except v 7-9=-1801/88 3-15=0/1875 -489/74	when shown. 8, 9-11=-2266/42 5, 11-13=0/1875	2						
<ul> <li>NOTES-</li> <li>1) Unbalanced roof live loads have been considered for this design.</li> <li>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 13-5-4, Exterior(2R) 13-5-4 to 17-8-3, Interior(1) 17-8-3 to 19-10-12, Exterior(2R) 19-10-12 to 24-1-11, Interior(1) 24-1-11 to 34-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces &amp; MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60</li> <li>3) Provide adequate drainage to prevent water ponding.</li> <li>4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> <li>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</li> </ul>											

- 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 11. 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.



## December 9,2021

TRENCIO A MITEK Affiliate 818 Soundside Road Edenton, NC 27932

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L	4-8-15 11-5-4		21-10-12		33-3-12 33-4-0				
	4-8-15 6-8-5		10-5-8	6-8-5	4-8-10 0-0-5				
Plate Offsets (X,Y)	_[2:0-4-12,Edge], [5:0-4-0,0-1-11], [7:0	4-0,0-1-11], [10:0-4-12,Edg	ej						
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	<b>CSI.</b> TC 0.69 BC 0.92 WB 0.29 Matrix-AS	DEFL.         in           Vert(LL)         -0.46           Vert(CT)         -0.77           Horz(CT)         0.09	(loc) l/defl L/d 12-15 >864 240 12-15 >520 180 10 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 186 lb         FT = 20%				
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S SLIDER Left 2: REACTIONS. (siz Max h Max ( Max (	P No.2 P No.1 P No.3 x4 SP No.3 1-6-0, Right 2x4 SP No.3 1 ze) 10=0-2-15, 2=0-3-8 Horz 2=122(LC 11) Uplift 10=-9(LC 12), 2=-44(LC 12) Croy 10=-1402(I C 12), 2=-1567(I C 17)	6-0	BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathing d 2-0-0 oc purlins (4-4-10 max Rigid ceiling directly applied 1 Row at midpt	L irectly applied, except 				
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         TOP CHORD       2-4=-2266/42, 4-5=-2000/67, 5-6=-1668/87, 6-7=-1671/87, 7-8=-2003/68, 8-10=-2280/48         BOT CHORD       2-16=0/1971, 15-16=0/1971, 12-15=0/1788, 11-12=0/1901, 10-11=0/1901         WEBS       4-15=-278/77, 5-15=0/653, 6-15=-322/48, 6-12=-320/44, 7-12=0/654, 8-12=-291/83									
NOTES- 1) Unbalanced roof liv 2) Wind: ASCE 7-16; II; Exp B; Enclosed 15-8-3, Interior(1) 1 exposed ; end verti grip DOL=1.60 3) Provide adequate of 4) This truss has beer 5) * This truss has beer 6) Provide mechanica 7) One RT7A MiTek of uplift only and does 8) This truss is design referenced standar 9) This truss design re sheetrock be applie 10) Graphical purlin re	ve loads have been considered for this Vult=120mph (3-second gust) Vasd=96 ; MWFRS (directional) and C-C Exterior (5-8-3 to 21-10-12, Exterior(2R) 21-10- ical left and right exposed;C-C for mem drainage to prevent water ponding. In designed for a 10.0 psf bottom chord en designed for a live load of 20.0psf o bottom chord and any other members, al connection (by others) of truss to bea connectors recommended to connect trus a not consider lateral forces. led in accordance with the 2018 Interna d ANSI/TPI 1. equires that a minimum of 7/16" structu ed directly to the bottom chord. epresentation does not depict the size of	lesign. mph; TCDL=6.0psf; BCDL= r(2E) -1-4-0 to 1-8-0, Interior 2 to 26-1-11, Interior(1) 26- bers and forces & MWFRS f ive load nonconcurrent with the bottom chord in all area with BCDL = 10.0psf. ing plate at joint(s) 10. ss to bearing walls due to U tional Residential Code sect al wood sheathing be applie r the orientation of the purlir	6.0psf; h=25ft; B=45ft; L= r(1) 1-8-0 to 11-5-4, Exte 1-11 to 33-4-0 zone; can or reactions shown; Lum any other live loads. as where a rectangle 3-6 IPLIFT at jt(s) 10 and 2. <sup>-7</sup> tions R502.11.1 and R80 ed directly to the top chor n along the top and/or bo	=24ft; eave=4ft; Cat. rior(2R) 11-5-4 to tilever left and right ber DOL=1.60 plate -0 tall by 2-0-0 wide This connection is for 02.10.2 and rd and 1/2" gypsum httom chord.	SEAL 035183 December 9.2021				

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RENCO



L	9-5-4	16-8-0	23-1	10-12		33-4-0		
	9-5-4	7-2-12	7-2	2-12	1	9-5-4		
Plate Offsets (X,Y)	[2:0-4-12,Edge], [5:0-4-0,0-1-11], [7:0-4	-0,0-1-11], [10:0-4-12,Ed	ge]					
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	<b>CSI.</b> TC 0.69 BC 0.73 WB 0.33 Matrix-AS	DEFL.         in           Vert(LL)         -0.17           Vert(CT)         -0.30           Horz(CT)         0.09	(loc) l/defl 13-15 >999 13-15 >999 10 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 180 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF 12-14: WEBS 2x4 SF SLIDER Left 2x	P No.2 P No.1 *Except* 2x4 SP No.2 P No.3 4 SP No.3 1-6-0, Right 2x4 SP No.3 1-6	-0	BRACING- TOP CHORD BOT CHORD	Structural wood a 2-0-0 oc purlins a Rigid ceiling dire	sheathing diri (3-3-12 max.) ctly applied.	ectly applied, except I: 5-7.		
REACTIONS.         (size)         10=Mechanical, 2=0-3-8           Max Horz         2=102(LC 11)           Max Uplift         10=-9(LC 12), 2=-44(LC 12)           Max Grav         10=1498(LC 18), 2=1572(LC 17)								
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         TOP CHORD       2-4=-2250/65, 4-5=-2102/54, 5-6=-2190/86, 6-7=-2190/86, 7-8=-2108/56, 8-10=-2264/71         BOT CHORD       2-15=-11/1937, 13-15=0/1823, 11-13=0/1766, 10-11=-18/1884								
<ul> <li>WEBS 5-15:</li> <li>NOTES-</li> <li>1) Unbalanced roof live</li> <li>2) Wind: ASCE 7-16; V II; Exp B; Enclosed; , Interior(1) 13-8-3 tr ; end vertical left and DOL=1.60</li> <li>3) Provide adequate di</li> <li>4) This truss has been will fit between the b</li> <li>6) Refer to girder(s) foi 7) Provide mechanical</li> <li>8) One RT7A MiTek cc only and does not cc only and does not cc</li> <li>9) This truss is designer referenced standarce</li> <li>10) This truss design r sheetrock be applii</li> <li>11) Graphical purlin re</li> </ul>	e loads have been considered for this de /ult=120mph (3-second gust) Vasd=95m MWFRS (directional) and C-C Exterior( o 23-10-12, Exterior(2R) 23-10-12 to 28- d right exposed;C-C for members and fo rainage to prevent water ponding. designed for a 10.0 psf bottom chord liv n designed for a live load of 20.0psf on to ottom chord and any other members, w r truss to truss connections. connection (by others) of truss to bearin onsider lateral forces. ed in accordance with the 2018 Internatio I ANSI/TPI 1. equires that a minimum of 7/16" structur ed directly to the bottom chord. presentation does not depict the size or	sign. ph; TCDL=6.0psf; BCDL: 2E) -1-4-0 to 1-8-0, Interior 1-11, Interior(1) 28-1-11 t rcces & MWFRS for reacti e load nonconcurrent with he bottom chord in all are th BCDL = 10.0psf. g plate capable of withsta s to bearing walls due to b onal Residential Code sea al wood sheathing be app the orientation of the purl	=6.0psf; h=25ft; B=45ft; L or(1) 1-8-0 to 9-5-4, Exten to 33-4-0 zone; cantilever ons shown; Lumber DOL h any other live loads. eas where a rectangle 3-6 anding 9 lb uplift at joint 1 UPLIFT at jt(s) 2. This co ctions R502.11.1 and R8 blied directly to the top ch in along the top and/or bo	.=24ft; eave=4ft; C rior(2R) 9-5-4 to 1: r left and right exp =1.60 plate grip 6-0 tall by 2-0-0 wi 0. nnection is for upl 02.10.2 and lord and 1/2" gyps ottom chord.	at. 3-8-3 osed de ift um	UN S S	EAL 5183	

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	L	7-5-4		16-8-0			25-10-12		33-4-0	
Plate Offecte (	· · · · · · · · · · · · · · · · · · · ·	/-5-4 [/-0_4_0_0_1_11] [8:0_4_0	0-1-111	9-2-12	•		9-2-12		7-5-4	·
	<u>, , , , ) </u>	[4.0-4-0,0-1-11], [0.0-4-0	,0-1-11]							
LOADING         (ps           TCLL         20.           TCDL         10.           BCLL         0.           BCDL         10.	sf) .0 .0 .0 * .0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TI	2-0-0 1.15 1.15 YES Pl2014	<b>CSI.</b> TC 0.96 BC 0.99 WB 0.94 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.20 1 -0.46 1 0.12	(loc) l/defl 1-13 >999 3-15 >869 10 n/a	L/d 240 180 n/a	<b>PLATES</b> MT20 Weight: 161 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD BOT CHORD WEBS SLIDER	2x4 SP 2x4 SP 2x4 SP 2x4 SP Left 2x4	No.2 No.2 No.3 I SP No.3 1-6-0, Right 23	(4 SP No.3 1-6	0	BRACING- TOP CHOR BOT CHOR	D S 2 D F	Structural wood s 2-0-0 oc purlins ( Rigid ceiling dire	sheathing direc 2-5-10 max.): ctly applied.	ctly applied, except 4-8.	
REACTIONS.         (size)         10=Mechanical, 2=0-3-8           Max Horz         2=82(LC 11)           Max Uplift         10=-9(LC 12), 2=-44(LC 12)           Max Grav         10=1332(LC 1), 2=1415(LC 1)										
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         TOP CHORD       2-4=-2037/36, 4-5=-1650/63, 5-7=-2384/40, 7-8=-1659/67, 8-10=-2045/39         BOT CHORD       2-15=0/1670, 13-15=0/2298, 11-13=0/2301, 10-11=0/1679         WEBS       4-15=0/720, 5-15=-925/36, 5-13=0/262, 7-13=0/261, 7-11=-920/33, 8-11=0/719										
<ul> <li>NOTES-</li> <li>1) Unbalanced roof live loads have been considered for this design.</li> <li>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 7-5-4, Exterior(2R) 7-5-4 to 11-8-3, Interior(1) 11-8-3 to 25-10-12, Exterior(2R) 25-10-12 to 30-1-11, Interior(1) 30-1-11 to 33-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces &amp; MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60</li> <li>3) Provide adequate drainage to prevent water ponding.</li> <li>4) This trues has been designed for a 10.0 psf bottom chord live load porconcurrent with any other live loads.</li> </ul>										
<ol> <li>This truss will fit betwee</li> <li>Refer to gird</li> <li>Provide mee</li> <li>One RT7A I only and do</li> <li>This truss is referenced st</li> </ol>	has been een the bo der(s) for chanical o MiTek con bes not co s designed standard	a designed for a live load ottom chord and any other truss to truss connection connection (by others) of nnectors recommended nsider lateral forces. d in accordance with the ANSI/TPI 1.	of 20.0psf on t er members. Is. truss to bearin to connect truss 2018 Internatio	he bottom chord in all are g plate capable of withsta s to bearing walls due to l onal Residential Code sec	eas where a rectan anding 9 lb uplift at UPLIFT at jt(s) 2. T ctions R502.11.1 a	gle 3-6-0 joint 10. his conn nd R802	0 tall by 2-0-0 wi	de ft	S O3	EAL 5183
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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	5-5-4	12-10	-8	20-5-8		2	27-10-12	33-4-0	)
I	5-5-4	7-5-4	4 '	7-7-0	1		7-5-4	5-5-4	1
Plate Offsets (X,Y)	[2:0-4-12,Edge], [4:0	-4-0,0-1-11], [8:0-4	-0,0-1-11], [10:0-	)-4-12,Edge]					
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0         *	SPACING- Plate Grip DO Lumber DOL Rep Stress In	2-0-0 PL 1.15 1.15 cr YES	CSI. TC 0.8 BC 0.8 WB 0.6	DEFL.81Vert(LL)84Vert(CT)67Horz(CT)	in (loc) -0.20 13-14 -0.44 13-14 0.11 10	l/defl >999 >903 n/a	L/d 240 180 n/a	PLATES MT20	<b>GRIP</b> 244/190
BCDL 10.0	Code IRC201	8/TPI2014	Matrix-AS	S				Weight: 164 lb	FT = 20%
LUMBER- TOP CHORD 2x4 SP No.2 *Except* 4-6.6-8: 2x4 SP 2400F 2.0E BRACING- TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-0-14 max.): 4-8.									

TOP CHORD	2x4 SP No.2 *Except*	TOP CHORD	Structural wood sheat	thing directly applied, except
	4-6,6-8: 2x4 SP 2400F 2.0E		2-0-0 oc purlins (4-0-1	14 max.): 4-8.
BOT CHORD	2x4 SP No.1 *Except*	BOT CHORD	Rigid ceiling directly a	applied.
	12-15: 2x4 SP No.2	WEBS	1 Row at midpt	5-13
WEBS	2x4 SP No.3			
SLIDER	Left 2x4 SP No.3 1-6-0, Right 2x4 SP No.3 1-6-0			

REACTIONS. (size) 10=Mechanical, 2=0-3-8 Max Horz 2=63(LC 11) Max Uplift 10=-9(LC 12), 2=-44(LC 12) Max Grav 10=1332(LC 1), 2=1415(LC 1)

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

TOP CHORD 2-4=-2083/30, 4-5=-3141/62, 5-7=-3144/62, 7-8=-3146/63, 8-10=-2096/35

BOT CHORD 2-16=0/1736, 14-16=0/1734, 13-14=0/3140, 11-13=0/1746, 10-11=0/1749

WEBS 4-14=-12/1609, 5-14=-523/98, 7-13=-507/110, 8-13=-6/1605

## 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 5-5-4, Exterior(2R) 5-5-4 to 9-8-3, Interior(1) 9-8-3 to 27-10-12, Exterior(2R) 27-10-12 to 32-1-11, Interior(1) 32-1-11 to 33-4-0 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 connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 10.
- 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.



December 9,2021

TERENCINEERING BY AMITER Affiliate 818 Soundside Road Edenton, NC 27932

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besign valid to be only with with these contractors. This design is based only door parameters shown, and is for an individual building completint, 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 **ANSUTPTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 26- 2721 elev B PERMIT-roof truss
					T26199807
21110328-02	H1GR	HALF HIP GIRDER	1	1	
					Job Reference (optional)
Carter Components (Lexington), Lexington, NC - 27295,				530 s Nov	29 2021 MiTek Industries, Inc. Wed Dec 8 08:49:45 2021 Page 2

ID:5LW3e3KbnmujEoocu3QUU8yjMRN-FAo3yr7ySYkPxk7AZ3dTXaHrMV1yDbVAalQIM8yB4Jq

## LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-4=-60, 4-10=-60, 11-18=-20

Concentrated Loads (lb)

Vert: 4=-36(F) 15=-11(F) 17=-189(F) 16=-11(F) 5=-18(F) 22=-18(F) 23=-18(F) 24=-18(F) 26=-18(F) 27=-18(F) 28=-18(F) 29=-18(F) 30=-18(F) 32=-18(F) 33=-18(F) 33=-18(F) 33=-18(F) 35=-18(F) 35=-18(F) 35=-18(F) 35=-18(F) 35=-18(F) 35=-11(F) 40=-11(F) 41=-11(F) 42=-11(F) 43=-11(F) 44=-11(F) 45=-11(F) 46=-11(F) 46=-11(F) 48=-11(F) 49=-11(F) 49=-11(F) 40=-11(F) 41=-11(F) 42=-11(F) 43=-11(F) 45=-11(F) 4

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THD28

3x6 =

3-7-4

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 1-11-14 oc purlins,
BOT CHORD	2x8 SP 2400F 2.0E *Except*		except end verticals.
	2-5: 2x4 SP No.3, 2-4: 2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.3		

REACTIONS. (size) 1=0-3-8, 4=Mechanical Max Horz 1=44(LC 8) Max Uplift 4=-22(LC 8)

Max Grav 1=735(LC 2), 4=693(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-7=-269/0, 3-4=-493/24

BOT CHORD 2-5=-22/1316

### 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); cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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 22 lb uplift at joint 4.
- 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) Use MiTek THD28 (With 28-16d nails into Girder & 16-10d x 1-1/2 nails into Truss) or equivalent at 1-8-0 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
- 8) Fill all nail holes where hanger is in contact with lumber.
- 9) 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: 1-2=-60, 2-3=-60, 5-6=-20, 2-4=-20
  - Concentrated Loads (lb) Vert: 9=-1071(B)



December 9,2021



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Plate Offsets (X,Y)	[2:0-0-2,0-0-0]			
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 0.30 BC 0.25 WB 0.00 Matrix-AS	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         0.06         4-7         >918         240           Vert(CT)         -0.05         4-7         >999         180           Horz(CT)         -0.00         2         n/a         n/a	PLATES         GRIP           MT20         244/190           Weight: 20 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, 4=0-1-8 Max Horz 2=70(LC 12) Max Uplift 2=-71(LC 12), 4=-48(LC 12) Max Grav 2=285(LC 1), 4=183(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 4-10-4 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) 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) 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.
- 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.

December 9,2021



Edenton, NC 27932

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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 0.15 BC 0.03 WB 0.04 Matrix-P	DEFL.         in         (loc)         l/defl         L/d         PLATES         GRIP           Vert(LL)         0.00         1         n/r         120         MT20         244/190           Vert(CT)         -0.00         1         n/r         120         MT20         244/190           Horz(CT)         0.00         n/a         n/a         Mage: Ma	20%
LUMBER- TOP CHORD 2x4	SP No.2		BRACING- TOP CHORD Structural wood sheathing directly applied or 3-6-0 oc purlins	,

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

TOP CHORD

except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

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

Max Horz 2=55(LC 12)

Max Uplift 5=-8(LC 12), 2=-40(LC 12) Max Grav 5=43(LC 1), 2=179(LC 1), 6=126(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=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 3-4-4 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) 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.
- 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) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5 and 2. 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.



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6-0-0						
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0         *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.16 Rep Stress Incr YES	CSI.           5         TC         0.45           5         BC         0.35           S         WB         0.00	DEFL. in Vert(LL) 0.13 Vert(CT) -0.11 Horz(CT) -0.00	(loc) l/de 4-7 >55 4-7 >66 2 n/	efl L/d 56 240 56 180 /a n/a	<b>PLATES GRIP</b> MT20 244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS				Weight: 24 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=0-3-0, 4=0-1-8 Max Horz 2=81(LC 12) Max Uplift 2=-77(LC 12), 4=-60(LC 12) Max Grav 2=323(LC 1), 4=225(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 5-10-4 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.
- \* 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 3) 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) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at it(s) 2 and 4. 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.

December 9,2021

818 Soundside Road Edenton, NC 27932

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			6-0-0	
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         0.50           BC         0.56           WB         0.00	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         0.19         4-11         >378         240           Vert(CT)         0.15         4-11         >475         180           Horz(CT)         -0.00         2         n/a         n/a	PLATES         GRIP           MT20         244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	BRACING-	Weight: 27 lb FT = 20%

TOP CHORD

BOT CHORD

## LUMBER-

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

REACTIONS. (size) 2=0-3-0, 4=0-1-8 Max Horz 2=81(LC 12) Max Uplift 2=-77(LC 12), 4=-60(LC 12) Max Grav 2=323(LC 1), 4=225(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 5-10-4 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) 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 studs spaced at 2-0-0 oc.
- 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) 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 8) 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.
- 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.



Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

December 9,2021



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Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 26- 2721 elev B PERMIT-roof truss
					T26199813
21110328-02	T2GR	COMMON GIRDER	1	່	
				<b>–</b>	Job Reference (optional)
Carter Components (Lexingt	on), Lexington, NC - 272	95.	8.	530 s Nov	29 2021 MiTek Industries, Inc. Wed Dec 8 08:50:18 2021 Page 2

ID:5LW3e3KbnmujEoocu3QUU8yjMRN-nWIYt7WeggukPo8W?VjDMY8b4pEGSYe1Aww?0jyB4JJ

### 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, 7-10=-20

Concentrated Loads (lb)

Vert: 13=-1560(B) 14=-1312(B) 15=-1312(B) 16=-1312(B)

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Edenton, NC 27932

<sup>818</sup> Soundside Road

Job	Truss	Truss Type	Qty	Ply	Cameron Woods Lot 26- 2721 elev B PERMIT-roof truss
					T26199814
21110328-02	T3GRA	Hip Girder	1	2	
				<b></b>	Job Reference (optional)
Carter Components (Lexington), Lexington, NC - 27295,			8.530 s Nov 29 2021 MiTek Industries, Inc. Wed Dec 8 08:50:21 2021 Page 2		

8.530 s Nov 29 2021 MiTek Industries, Inc. Wed Dec 8 08:50:21 2021 Page 2 ID:5LW3e3KbnmujEoocu3QUU8yjMRN-B5\_gV8ZXzbHIGGt5gdGw\_AmzJ0KcfvPTsu9fd2yB4JG

#### NOTES-

13) Fill all nail holes where hanger is in contact with lumber.

## LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-5=-60, 5-9=-60, 15-19=-20 Concentrated Loads (lb)

Vert: 11=-1071(B) 23=-1079(B) 24=-1071(B) 25=-1071(B) 26=-1071(B) 27=-1071(B) 28=-1071(B) 29=-1071(B) 30=-1317(B)

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	L					20-2-0						
	ſ					20-2-0						7
Plate Offse	ts (X,Y)	[6:0-2-8,0-2-1], [8:0-2-8,0	)-2-1], [12:0-3·	·12,0-1-8], [20	):0-3-0,0-3-	0], [24:0-3-12,0-1-8]						
LOADING TCLL TCDL	(psf) 20.0 10.0	SPACING- Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15	CSI. TC BC	0.15 0.03	DEFL. Vert(LL) Vert(CT)	in -0.01 -0.01	(loc) 13 13	l/defl n/r n/r	L/d 120 120	PLATES MT20	<b>GRIP</b> 244/190
BCLL BCDL	0.0 * 10.0	Code IRC2018/TI	YES PI2014	WB Matri	0.07 x-R	Horz(CT)	0.00	14	n/a	n/a	Weight: 114 lb	FT = 20%
LUMBER-						BRACING-						

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, and 2-0-0 oc purlins (10-0-0 max.): 6-8.
WEBS	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
OTHERS	2x4 SP No.3		

**REACTIONS.** All bearings 20-2-0.

(lb) - Max Horz 24=-108(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 24, 14, 19, 21, 22, 23, 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=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 8-1-1, Corner(3R) 8-1-1 to 11-1-1, Exterior(2N) 11-1-1 to 12-0-15, Corner(3R) 12-0-15 to 15-0-15, Exterior(2N) 15-0-15 to 21-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 24, 14, 19, 21, 22, 23, 17, 16, and 15. This connection is for uplift only and does not consider lateral forces.
- 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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TOP CHORD 2-3=-515/77, 3-4=-515/77, 2-8=-489/143, 4-6=-489/143

BOT CHORD 7-8=0/363, 6-7=0/363

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 5-10-8, Exterior(2R) 5-10-8 to 8-10-8, Interior(1) 8-10-8 to 13-1-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) 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) 8 and 6. 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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F			11-9-0 11-9-0						
Plate Offsets (X,Y)	[4:0-2-8,0-2-1], [6:0-2-8,0-2-1], [8:0-3-1	2,0-1-8], [16:0-3-12,0-1-8]						T	
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 0.15 BC 0.03 WB 0.03 Matrix-R	<b>DEFL.</b> Vert(LL) Vert(CT) Horz(CT)	in -0.01 -0.01 0.00	(loc) 9 9 10	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 57 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SI	P No.2		BRACING- TOP CHOR	D	Structu	ral wood	sheathing di	rectly applied or 10-0-	0 oc purlins,

TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 10-0-0 oc purlins,
BOT CHORD	2x4 SP No.2		except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 4-6.
WEBS	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
OTHERS	2x4 SP No.3		

**REACTIONS.** All bearings 11-9-0.

(lb) - Max Horz 16=-66(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 13, 15, 11

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

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

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=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 1-10-8, Exterior(2N) 1-10-8 to 3-10-8, Corner(3R) 3-10-8 to 6-10-8, Exterior(2N) 6-10-8 to 7-10-8, Corner(3R) 7-10-8 to 10-10-8, Exterior(2N) 10-10-8 to 13-1-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 11) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16, 10, 13, 15, and 11. This
- connection is for uplift only and does not consider lateral forces. 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.



## December 9,2021



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