

Trenco 818 Soundside Rd Edenton, NC 27932

Re: B0318-0842 Prelude A

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: E11514094 thru E11514112

My license renewal date for the state of North Carolina is December 31, 2018.

North Carolina COA: C-0844



March 5,2018

Lassiter, Frank

IMPORTANT NOTE: Truss Engineer's responsibility is solely for design of individual trusses based upon design parameters shown on referenced truss drawings. Parameters have not been verified as appropriate for any use. Any location identification specified is for file reference only and has not been used in preparing design. Suitability of truss designs for any particular building is the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.



🔔 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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 value to be only with with these contractions. This besign is based only upon parameters shown, and is to rain individual outdarg component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

Edenton, NC 27932



	 	<u>12-4-9</u> 12-4-9		24-7-7		-	<u> </u>		
Plate Of	fsets (X,Y)	[2:0-3-4,0-2-0]							
LOADIN TCLL TCDL	IG (psf) 20.0 10.0	SPACING- 2-0- Plate Grip DOL 1.11 Lumber DOL 1.13	0 CSI . 5 TC 0.46 5 BC 0.73	DEFL. Vert(LL) Vert(TL)	in (loc) -0.45 9-12 -0.63 9-12	l/defl L/d >993 360 >703 240	PLATES GRIP MT20 244/1	90	
BCLL BCDL	0.0 * 10.0	Rep Stress Incr YES Code IRC2009/TPI2007	S WB 0.71 Matrix-S	Horz(TL) Wind(LL)	0.10 8 0.09 8-9	n/a n/a >999 240	Weight: 235 lb FT	= 20%	

BRACING

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD2x6 SP No.1BOT CHORD2x6 SP No.1WEBS2x4 SP No.3

REACTIONS. (lb/size) 2=1781/0-3-8, 8=1724/0-3-8 Max Horz 2=152(LC 6) Max Uplift 2=-272(LC 6), 8=-231(LC 7)

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

TOP CHORD 2-3=-3234/982, 3-5=-2917/976, 5-7=-2958/997, 7-8=-3265/1011

BOT CHORD 2-12=-727/2783, 9-12=-338/1846, 8-9=-764/2853

WEBS 5-9=-303/1243, 7-9=-597/459, 5-12=-273/1184, 3-12=-540/423

NOTES-

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

2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 14-1-3, Exterior(2) 14-1-3 to 18-6-0, Interior(1) 22-10-13 to 32-9-7 zone; 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=272, 8=231.

Structural wood sheathing directly applied or 3-9-2 oc purlins.

Rigid ceiling directly applied or 8-11-7 oc bracing.

March 5,2018

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SEAL 030652



- REACTIONS. (lb/size) 2=1900/0-3-8, 8=1842/0-5-8 Max Horz 2=152(LC 6) Max Uplift 2=-271(LC 6), 8=-230(LC 7)
- FORCES. (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown.
- TOP CHORD 2-3=-3519/980, 3-5=-3203/974, 5-7=-3236/992, 7-8=-3563/1004

BOT CHORD 2-12=-725/3034, 9-12=-336/2018, 8-9=-757/3092

WEBS 5-9=-299/1386, 7-9=-578/454, 5-12=-273/1339, 3-12=-530/423

NOTES-

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

2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 14-1-3, Exterior(2) 14-1-3 to 18-6-0, Interior(1) 22-10-13 to 32-8-7 zone; 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 30.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=271.8=230.



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LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-1-8Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCode IRC2009/TPI2007	CSI. TC 0.61 BC 0.60 WB 0.76 Matrix-S	DEFL. in Vert(LL) -0.56 Vert(TL) -0.73 Horz(TL) 0.09 Wind(LL) 0.09	(loc) 9-12 9-12 8 8-9	l/defl >796 >605 n/a >999	L/d 360 240 n/a 240	PLATES GRIP MT20 244/190 Weight: 253 lb FT = 20%
LUMBER-			BRACING-				L

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No.1 2x6 SP 2400F 2.0E BOT CHORD WFBS 2x4 SP No.3 *Except*

13-14: 2x6 SP No.1

REACTIONS. (lb/size) 2=2023/0-3-8, 8=1960/0-3-8 Max Horz 2=161(LC 6) Max Uplift 2=-289(LC 6), 8=-245(LC 7)

- FORCES. (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown.
- TOP CHORD 2-3=-3748/1043, 3-5=-3413/1037, 5-7=-3458/1059, 7-8=-3809/1073

BOT CHORD 2-12=-772/3231, 9-12=-359/2152, 8-9=-811/3311

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WEBS
                5-9=-322/1488, 7-9=-628/487, 5-12=-290/1422, 3-12=-561/447
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NOTES-

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

2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 14-1-3, Exterior(2) 14-1-3 to 18-6-0, Interior(1) 22-10-13 to 32-9-7 zone; 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 30.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=289, 8=245.



Structural wood sheathing directly applied or 3-4-15 oc purlins.

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

March 5,2018

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- FORCES. (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown.
- TOP CHORD 2-3=-3492/973, 3-5=-3176/967, 5-7=-3178/977, 7-8=-3495/985

BOT CHORD 2-12=-717/3010, 9-12=-329/1993, 8-9=-736/3014

WEBS 5-9=-287/1343, 7-9=-537/441, 5-12=-272/1340, 3-12=-530/423

NOTES-

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

2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 14-1-3, Exterior(2) 14-1-3 to 18-6-0, Interior(1) 22-10-13 to 32-5-7 zone; 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 30.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=271, 8=227.



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	[2.0-3-4,0-2-0], [0.0-3-4,0-2-0]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP MT20 244/190
TCLL 20.0	Plate Grip DOL 1.15	TC 0.38	Vert(LL) -0.44 10-13 >999 360	
TCDL 10.0	Lumber DOL 1.15	BC 0.72	Vert(TL) -0.62 10-13 >706 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.64	Horz(TL) 0.10 8 n/a n/a	Weight: 236 lb FT = 20%
BCDL 10.0	Code IRC2009/TPI2007	Matrix-S	Wind(LL) 0.08 2-13 >999 240	
LUMBER-			BRACING-	

BOT CHORD

LUMBER-

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

REACTIONS. (lb/size) 2=1765/0-3-8, 8=1765/0-3-8 Max Horz 2=-147(LC 7) Max Uplift 2=-270(LC 6), 8=-270(LC 7)

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

TOP CHORD 2-3=-3199/966, 3-5=-2882/960, 5-7=-2882/960, 7-8=-3199/966

BOT CHORD 2-13=-690/2751, 10-13=-302/1815, 8-10=-690/2751

WEBS 5-10=-271/1185, 7-10=-540/422, 5-13=-271/1185, 3-13=-540/422

NOTES-

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

2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 14-1-3, Exterior(2) 14-1-3 to 18-6-0, Interior(1) 22-10-13 to 33-3-13 zone; 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 with a clearance greater than 6-0-0

between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=270, 8=270.



Structural wood sheathing directly applied or 3-11-12 oc purlins.

Rigid ceiling directly applied or 9-4-12 oc bracing.

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LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 WEBS 2x4 SP No.3 *Except* 14-15: 2x6 SP No.1 BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 3-9-12 oc purlins. Rigid ceiling directly applied or 2-2-0 oc bracing.

- REACTIONS. (lb/size) 2=1887/0-3-8, 8=1887/0-3-8 Max Horz 2=-147(LC 7) Max Uplift 2=-270(LC 6), 8=-270(LC 7)
- FORCES. (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown.

TOP CHORD 2-3=-3491/966, 3-5=-3175/960, 5-7=-3175/960, 7-8=-3491/966

BOT CHORD 2-13=-690/3008, 10-13=-302/1992, 8-10=-690/3008

WEBS 5-10=-271/1339, 7-10=-530/422, 5-13=-271/1339, 3-13=-530/422

NOTES-

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

2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 14-1-3, Exterior(2) 14-1-3 to 18-6-0, Interior(1) 22-10-13 to 33-3-13 zone; 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 30.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=270, 8=270.



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- BOT CHORD 2-12=-720/2760, 9-12=-331/1823, 8-9=-743/2781
- WEBS 5-9=-291/1202, 7-9=-558/445, 5-12=-272/1185, 3-12=-540/423

NOTES-

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

- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 14-1-3, Exterior(2) 14-1-3 to 18-6-0, Interior(1) 22-10-13 to 32-6-7 zone; 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

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

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=271, 8=228.



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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=128, 4=128.



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- <mark>0-10-8</mark>					20-10-8						21-9-0	I
Plate Offsets (X,Y)	[17:0-2-8,0-3-0]											
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2009/TF	2-0-0 1.15 1.15 YES 212007	CSI. TC BC WB Matrix	0.06 0.02 0.06 <-S	DEFL. Vert(LL) Vert(TL) Horz(TL)	in -0.00 -0.00 0.00	(loc) 12 12 12	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 88 lb	GRIP 244/190 FT = 20%	
LUMBER-					BRACING-					<u>.</u>		

BOT CHORD

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 OTHERS 2x4 SP No 3

REACTIONS. All bearings 20-0-0

(lb) - Max Horz 2=-67(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) 12, 19, 20, 21, 22, 17, 16, 15, 14, 2

Max Grav All reactions 250 lb or less at joint(s) 12, 18, 19, 20, 21, 22, 17, 16, 15, 14, 2

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 5-7-3, Corner(3) 5-7-3 to 10-0-0, Exterior(2) 14-4-13 to 16-5-11 zone;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) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 19, 20, 21, 22, 17, 16, 15, 14, 2.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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

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

818 Soundside Road Edenton, NC 27932

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 	<u> </u>						20-0-0			
Plate Offsets (X,Y)-	- [2:0-0-15,Edge], [4:0-0-15,Edge]									
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 IRC2009/TPI2007	CSI. TC 0.59 BC 0.78 WB 0.17 Matrix-S	DEFL. Vert(LL) Vert(TL) Horz(TL) Wind(LL)	in -0.17 -0.48 0.05 0.07	(loc) 2-7 2-7 4 2-7	l/defl >999 >491 n/a >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 88 lb	GRIP 244/190 FT = 20%	
LUMBER-TOP CHORD2x6 SP No.1BOT CHORD2x4 SP No.1WEBS2x4 SP No.3				BRACING- TOP CHORD Structural wood sheathing directly applied or 5-0-13 oc purlins. BOT CHORD Rigid ceiling directly applied or 9-1-5 oc bracing.						
REACTIONS. (Ib/ Ma Ma	size) 4=838/0-3-8, 2=838/0-3-8 x Horz 2=-54(LC 7) x Uplift 4=-180(LC 5), 2=-180(LC 4)									
FORCES.(lb) - MTOP CHORD2-BOT CHORD2-WEBS3-										
NOTES- 1) Unbalanced roof	live loads have been considered for this de	esign.								

2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-3 to 3-8-10, Interior(1) 3-8-10 to 5-7-3, Exterior(2) 5-7-3 to 10-0-0, Interior(1) 14-4-13 to 16-3-6 zone; 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 with a clearance greater than 6-0-0

between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=180, 2=180.

6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 5,2018

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 a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall
 building designer. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing
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FL. in (loc) I/defl L/d PLATES GRIP
rt(LL) -0.02 2-4 >999 360 MT20 244/190
rt(TL) -0.05 2-4 >999 240
rz(TL) -0.00 4 n/a n/a
nd(LL) 0.00 2 **** 240 Weight: 19 lb FT = 20%
ACING-

 TOP CHORD
 2x4 SP No.1

 BOT CHORD
 2x4 SP No.1

 WEBS
 2x4 SP No.3

 OTHERS
 2x4 SP No.3

 TOP CHORD
 Structural wood sheathing directly applied or 4-8-0 oc purlins, except end verticals.

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

REACTIONS. (lb/size) 2=243/0-3-8, 4=166/0-1-8 Max Horz 2=102(LC 4) Max Uplift 2=-131(LC 4), 4=-84(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 3-4=-123/266

NOTES-

1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) zone;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 with a clearance greater than 6-0-0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=131.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 5,2018

ERGINEERING BY A MiTek Affiliate 818 Soundside Road Edenton, NC 27932

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 building designer. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing
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			4-8-0									
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	0.24	Vert(LL)	-0.02	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(TL)	-0.05	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI	2007	Matrix	(-P	Wind(LL)	0.00	2	****	240	Weight: 18 lb	FT = 20%

LUMBER-

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

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

NOTES-

1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2)

- zone;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 with a clearance greater than 6-0-0

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4

7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer

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BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 4-8-0 oc purlins, except end verticals.

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

⁽lb/size) 2=243/0-3-8, 4=166/0-1-8 REACTIONS. Max Horz 2=71(LC 4) Max Uplift 2=-80(LC 4), 4=-43(LC 4)



Plate Offsets (X,Y)	[2:1-0-11,0-1-2]						Т	
LOADING (psf) TCLL 20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	CSI. TC 0.52 BC 0.24	DEFL. Vert(LL) -0.0 Vert(TL) -0.1	n (loc) 5 2-4 2 2-4	l/defl >999 >775	L/d 360 240	PLATES MT20	GRIP 244/190
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2009/TPI2007	WB 0.00 Matrix-P	Horz(TL) -0.0 Wind(LL) 0.0) 4) 2	n/a ****	n/a 240	Weight: 47 lb	FT = 20%
LUMBER- TOP CHORD 2x6 SI	BRACING- TOP CHORD	Struct	ural wood	sheathing d	irectly applied or 6-0-0) oc purlins,		

I OP CHORD2x6 SP No.1TOP CHORDStructural wood sheathing directly applied or 6-0-0 oc purlins,
except end verticals.BOT CHORD2x6 SP No.1BOT CHORDStructural wood sheathing directly applied or 6-0-0 oc purlins,
except end verticals.WEBS2x4 SP No.3BOT CHORDRigid ceiling directly applied or 10-0-0 oc bracing.OTHERS2x4 SP No.3BOT CHORDRigid ceiling directly applied or 10-0-0 oc bracing.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 3-4=-226/440

NOTES-

1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) zone;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 with a clearance greater than 6-0-0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=161, 4=151.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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 fabrication, storage, delivery, erection and bracing of trusses and truss systems, see
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 Safety Information
 available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

REACTIONS. (lb/size) 2=359/0-3-8, 4=303/0-1-8 Max Horz 2=161(LC 4) Max Uplift 2=-161(LC 4), 4=-151(LC 4)



Plate Offsets (X,Y)	[2:0-2-7,Edge]							1	
LOADING (psf) TCLL 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.37	DEFL. Vert(LL)	in -0.05	(loc) 2-4	l/defl >999	L/d 360	PLATES MT20	GRIP 244/190
TCDL 10.0 BCLL 0.0 *	Lumber DOL 1.15 Rep Stress Incr YES	BC 0.31 WB 0.00	Vert(TL) - Horz(TL)	-0.12 0.00	2-4 4	>775 n/a	240 n/a		
BCDL 10.0	Code IRC2009/TPI2007	Matrix-P	Wind(LL)	0.12	2-4	>743	240	Weight: 43 lb	FT = 20%

BOT CHORD

LUMBER-	
---------	--

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

REACTIONS. (lb/size) 2=359/0-3-8, 4=303/0-1-8 Max Horz 2=113(LC 4) Max Uplift 2=-206(LC 4), 4=-196(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 3-4=-226/277

NOTES-

1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; 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 with a clearance greater than 6-0-0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=206, 4=196.

7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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

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

except end verticals.

March 5,2018

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(lb) - Max Horz 1=-49(LC 4)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 12, 8 except 11=-103(LC 6), 9=-102(LC 7) Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 12, 9, 8

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

NOTES-

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

2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) Gable requires continuous bottom chord bearing.

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

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

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 12, 8 except (jt=lb) 11=103, 9=102.



March 5,2018





