

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 1800888-1800888A CL 2862 CP

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components - #2383.

Pages or sheets covered by this seal: I35955142 thru I35955165

My license renewal date for the state of North Carolina is December 31, 2019.

North Carolina COA: C-0844



January 25,2019

Johnson, Andrew

**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.



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 we band/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/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CL 2862 CP
					135955142
1800888-1800888A	GR3	Common Girder	1	2	
				<b>J</b>	Job Reference (optional)
84 Components, Dunn, NC 28334					8.220 s Jan 5 2019 MiTek Industries, Inc. Fri Jan 25 07:36:03 2019 Page 2

8.220 s Jan 5 2019 Mi lek Industries, Inc. Fri Jan 25 07:36:03 2019 Page 2 ID:tctjP4rr1WQdHicMVD41aUzppip-Yy78hILU1mJF1BEGSA5L4UxANkKcRhtJJeG38zzrtmw

# LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-3=-60, 3-5=-60, 9-12=-20

Concentrated Loads (lb)

Vert: 7=-1318(B) 6=-1318(B) 8=-1318(B) 9=-1326(B) 15=-1318(B) 16=-1318(B) 18=-1318(B) 20=-1318(B) 21=-1318(B)





TOP CHORD 2-3=-661/182

BOT CHORD 2-6=-300/561, 5-6=-300/561

WEBS 3-5=-604/267

NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) 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) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.

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







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 IRC2015/TPI2014	<b>CSI.</b> TC 0.23 BC 0.07 WB 0.04 Matrix-S	DEFL.         in           Vert(LL)         0.00           Vert(CT)         0.00           Horz(CT)         -0.00	(loc) 1 1 9	l/defl n/r n/r n/a	L/d 120 90 n/a	PLATES MT20 Weight: 63 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI	BRACING- TOP CHORD	Structu	ral wood end verti	sheathing dir cals.	ectly applied or 6-0-0	oc purlins,		

BOT CHORD

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

BOT CHORD 2x4 SP No.2 WEBS

2x4 SP No.3 OTHERS 2x4 SP No.3

REACTIONS. All bearings 11-0-0.

(lb) -Max Horz 2=177(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 9, 2, 10, 11, 12, 13, 14

Max Grav All reactions 250 lb or less at joint(s) 9, 2, 10, 11, 12, 13, 14

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FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.
TOP CHORD
               2-3=-280/156
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NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

4) Gable requires continuous bottom chord bearing.

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

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

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

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 2, 10, 11, 12, 13, 14.



MILLIN 0 Manual Internet SEAL EW 10 minim January 25,2019



	L		7-0-0					
	I		7-0-0					
Plate Offsets (X,Y)	[2:0-3-7,Edge]							
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0 Plate Grip DOL 1.1 Lumber DOL 1.1 Rep Stress Incr YE	0 <b>CSI.</b> 5 TC 0.87 5 BC 0.59 S WB 0.00	DEFL. ir Vert(LL) -0.12 Vert(CT) -0.24 Horz(CT) 0.00	(loc) 2-4 2-4 4	l/defl >663 >331 n/a	L/d 240 180 n/a	PLATES MT20	<b>GRIP</b> 244/190
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P					Weight: 25 lb	FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF	BRACING- TOP CHORD	Structu except	ral wood s end vertica	heathing dire	ectly applied or 2-2-0	oc purlins,		

BOT CHORD

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

BOT CHORD2x4 SP No.2WEBS2x4 SP No.3

REACTIONS. (lb/size) 2=343/0-3-8, 4=262/0-1-8 Max Horz 2=64(LC 9)

Max Uplift 2=-72(LC 12), 4=-28(LC 12)

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

NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

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







PLATES GRIP
MT20 244/190
Weight: 18 lb FT = 20%

LUMBER-

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

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. (lb/size) 2=254/0-3-0, 4=181/0-1-8 Max Horz 2=65(LC 11) Max Uplift 2=-58(LC 12), 4=-19(LC 12)

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

### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) 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) 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.







4-10-0

Plate Offsets (X,Y)	[1:0-0-8,0-0-7], [3:0-3-7,0-1-7]		
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. NO	CSI. TC 0.70 BC 0.80 WB 0.00	DEFL.         in         (loc)         I/defl         L/d         PLATES         GRIP           Vert(LL)         -0.08         3-6         >718         240         MT20         244/190           Vert(CT)         -0.15         3-6         >364         180         MT20         244/190
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MP	Weight: 17 lb FT = 20%
LUMBER-			BRACING-

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

BOT CHORD

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

REACTIONS. (lb/size) 1=507/0-3-0, 3=668/0-1-8 Max Horz 1=59(LC 11) Max Uplift 1=-69(LC 12), 3=-93(LC 12)

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

#### NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) 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) Bearing at joint(s) 3 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) 3.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3

7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 273 lb down and 51 lb up at 0-10-12, and 258 lb down and 50 lb up at 2-10-12, and 269 lb down and 40 lb up at 4-8-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

8) 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, 3-4=-20 Concentrated Loads (Ib) Vert: 3=-269(B) 7=-273(B) 8=-258(B)





🙏 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 design parameters and READ NOTES ON TIPS ON TIPS AND INCLODED MITCR REPRETENCE PAGE MIT-1473 TeV. 100322010 SECORE 052. Design valid for use only with MITEK @ connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-98 and BCSI Building Component** fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Qua** Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



D

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2OTHERS2x4 SP No.3

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. (Ib/size) 2=129/4-6-2, 4=129/4-6-2, 6=161/4-6-2 Max Horz 2=41(LC 11) Max Uplift 2=-45(LC 12), 4=-45(LC 12)

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) 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) 2, 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



818 Soundside Road Edenton, NC 27932



Plate Offsets (	(X,Y)	[6:0-3-12,0-2-0], [8:0-3-12	2,0-2-0], [15:0-4-8	8,0-3-0], [16	6:0-4-8,0-3-0]							
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 IRC2015/TP	2-0-0 1.15 1.15 YES I2014	<b>CSI.</b> TC BC WB Matrix-	0.96 0.80 0.46 ·MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.36 -0.61 0.08	(loc) 15-16 15-16 12	l/defl >999 >673 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 212 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER-           TOP CHORD         2x4 SP No.2 *Except*           5-6,8-9: 2x4 SP No.1           BOT CHORD         2x4 SP No.1           WEBS         2x4 SP No.3           SLIDER         Left 2x4 SP No.3 1-6-0, Right 2x4 SP No.3 1-6-0			BRACING- TOP CHOR BOT CHOR WEBS	D D	Structu 2-0-0 o Rigid co 1 Row	ral wood s c purlins ( eiling dire at midpt	sheathing dire (5-0-15 max.) ctly applied o 7-	ectly applied, except : 6-8. r 10-0-0 oc bracing. 16, 7-15				
REACTIONS.	(Ib/size Max Ho Max Up	) 2=1420/0-3-8, 12=14 orz 2=224(LC 11) olift 2=-184(LC 12), 12=-1	20/0-3-8 84(LC 12)									

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

TOP CHORD 2-4=-1946/365, 4-6=-1635/382, 6-7=-1180/380, 7-8=-1180/380, 8-10=-1635/382,

10-12=-1946/364

- BOT CHORD 2-17=-194/1664, 16-17=-194/1664, 15-16=-19/1229, 14-15=-196/1552, 12-14=-196/1552
- WEBS 4-16=-452/217, 6-16=-31/548, 8-15=-31/547, 10-15=-452/217

#### NOTES-

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

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

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

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=184, 12=184.

7) 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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- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=131, 12=131.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 8) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.







34-0-0

Plate Offsets (X,Y) [2:Edge,0-0-0], [11:0-2-0,0-2-3], [15:0-2-0,0-2-3], [24:Edge,0-0-0]									
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0         *           BCDL         10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2015/TPI2014	CSI. TC 0.13 BC 0.06 WB 0.17 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.01	(loc) 24 25 24	l/defl n/r n/r n/a	L/d 120 90 n/a	PLATES MT20 Weight: 260 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI OTHERS 2x4 SI SLIDER Left 2:	BRACING- TOP CHORD BOT CHORD WEBS	S 2 F 1	Structur 2-0-0 oc Rigid ce I Row a	ral wood c purlins eiling dire at midpt	sheathing dir (6-0-0 max.): ctly applied c	ectly applied or 6-0-0 c 11-15. r 10-0-0 oc bracing. 3-34, 12-35, 10-36, 14-	oc purlins, except -33, 16-32		

#### REACTIONS. All bearings 34-0-0.

(lb) - Max Horz 2=-224(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 34, 38, 39, 40, 41, 42, 30, 29, 28, 27, 26 Max Grav All reactions 250 lb or less at joint(s) 2, 24, 34, 35, 36, 38, 39, 40, 41, 33, 32, 30, 29, 28, 27, 26 except 42=253(LC 17)

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

### NOTES-

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) 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.
- Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 34, 38, 39, 40, 41, 42, 30, 29, 28, 27, 26.

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





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



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

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

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

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=183, 12=146.

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



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9) 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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EW

104 "minimum January 25,2019

818 Soundside Road Edenton, NC 27932



LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins,
BOT CHORD	2x4 SP No.2		except end verticals.
WEBS	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SP No.3	WEBS	1 Row at midpt 7-23, 9-21

**REACTIONS.** All bearings 18-3-8.

(lb) - Max Horz 28=-288(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 25, 26, 19, 18 except 28=-198(LC 10), 16=-169(LC 11), 24=-124(LC 12), 17=-235(LC 12), 27=-235(LC 12), 20=-124(LC 12), 17=-235(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 23, 21, 24, 25, 26, 20, 19, 18, 17 except 28=283(LC 18), 16=264(LC 8), 27=253(LC 10)

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

TOP CHORD 2-3=-283/237, 13-14=-282/246

### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) 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.

All plates are 2x4 MT20 unless otherwise indicated.

5) Gable requires continuous bottom chord bearing.

6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

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

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

9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 26, 19, 18

10) Provide mechanical connection (by others) or truss to bearing plate capable of withstanding 100 ib uplift at joint(s) 25, 26, 19, 18 except (jt=lb) 28=198, 16=169, 24=124, 27=235, 20=124, 17=235.







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

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







### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) 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) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.







		<u>3-7-12</u> 3-7-12	7-3-8 3-7-12	
Plate Offsets (X,Y)	[2:0-0-0,0-1-4], [2:0-1-7,0-4-4], [4:0-0	0,0-1-4], [4:0-1-7,0-4-4]		
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 IRC2015/TPI2014	CSI. TC 0.13 BC 0.14 WB 0.06 Matrix-MP	DEFL.         in         (loc)         l/defl         L/d           Vert(LL)         -0.01         6-12         >999         240           Vert(CT)         -0.01         6-12         >999         180           Horz(CT)         0.00         2         n/a         n/a	PLATES         GRIP           MT20         244/190           Weight: 31 lb         FT = 20%
LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF WEDGE Left: 2x4 SP No.3. Rig	<sup>2</sup> No.2 <sup>2</sup> No.2 <sup>2</sup> No.3 ht: 2x4 SP No.3		BRACING-         TOP CHORD       Structural wood sheathing di         BOT CHORD       Rigid ceiling directly applied	rectly applied or 6-0-0 oc purlins. or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=352/0-3-0, 4=352/0-3-0 Max Horz 2=46(LC 11) Max Uplift 2=-68(LC 12), 4=-68(LC 12)

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

2-3=-334/133, 3-4=-334/133 TOP CHORD

BOT CHORD 2-6=-25/258, 4-6=-25/258

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.







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EW

101 munn January 25,2019



2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) 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, with BCDL = 10.0psf.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=162, 6=162.







 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) 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) 5 except (jt=lb) 1=118, 6=166, 8=166.







BOT CHORD

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

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

2x4 SP No.3 OTHERS

REACTIONS. 1=177/8-1-0, 3=177/8-1-0, 4=239/8-1-0 (lb/size) Max Horz 1=-94(LC 10) Max Uplift 1=-45(LC 12), 3=-45(LC 12)

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) 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.



818 Soundside Road Edenton, NC 27932



TOP CHORD2x4 SP No.3BOT CHORD2x4 SP No.3OTHERS2x4 SP No.3

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 5-5-8 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (Ib/size) 1=114/5-5-0, 3=114/5-5-0, 4=153/5-5-0 Max Horz 1=-60(LC 10) Max Uplift 1=-29(LC 12), 3=-29(LC 12)

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) 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.



818 Soundside Road Edenton, NC 27932



BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 2-9-8 oc purlins.

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

#### LUMBER-

TOP CHORD2x4 SP No.3BOT CHORD2x4 SP No.3

REACTIONS. (Ib/size) 1=84/2-9-0, 3=84/2-9-0 Max Horz 1=27(LC 11) Max Uplift 1=-9(LC 12), 3=-9(LC 12)

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) 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.



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