

RE: J0221-1193 Weaver / 10 West Park / Harnett Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J0221-1193 Lot/Block: Address: City:

Model: Subdivision: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2015/TPI2014 Wind Code: ASCE 7-10 Roof Load: 40.0 psf Design Program: MiTek 20/20 8.3 Wind Speed: 130 mph Floor Load: N/A psf

This package includes 27 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E15535151	A1	3/24/2021	21	E15535171	VA8	3/24/2021
2	E15535152	A1GE	3/24/2021	22	E15535172	VM1	3/24/2021
3	E15535153	A1SE	3/24/2021	23	E15535173	VM2	3/24/2021
4	E15535154	A2	3/24/2021	24	E15535174	VM3	3/24/2021
5	E15535155	B1	3/24/2021	25	E15535175	VM4	3/24/2021
6	E15535156	B1GE	3/24/2021	26	E15535176	VM5	3/24/2021
7	E15535157	C1	3/24/2021	27	E15535177	VM6	3/24/2021
8	E15535158	C1GE	3/24/2021				
9	E15535159	M1	3/24/2021				
10	E15535160	M1GE	3/24/2021				
11	E15535161	PM1	3/24/2021				
12	E15535162	PM1GE	3/24/2021				
13	E15535163	PM2	3/24/2021				
14	E15535164	VA1	3/24/2021				
15	E15535165	VA2	3/24/2021				
16	E15535166	VA3	3/24/2021				
17	E15535167	VA4	3/24/2021				
18	E15535168	VA5	3/24/2021				
19	E15535169	VA6	3/24/2021				
20	E15535170	VA7	3/24/2021				

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision

based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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.



Gilbert, Eric



	12-2-2			11-7-12			12-2-2				
	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 2	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.27 10-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.37 10-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.07 8	n/a	n/a		
BCDL	10.0	Code IRC2015/T	PI2014	Matri	x-S	Wind(LL)	0.06 2-13	>999	240	Weight: 230 lb	FT = 20%
LUMBER-						BRACING-					

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 2x4 SP No.2 WEBS

REACTIONS. (size) 2=0-3-8, 8=0-3-8 Max Horz 2=-122(LC 10) Max Uplift 2=-97(LC 12), 8=-97(LC 13) Max Grav 2=1537(LC 2), 8=1537(LC 2)

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

2-3=-2641/541, 3-5=-2415/562, 5-7=-2415/562, 7-8=-2641/541 TOP CHORD

BOT CHORD 2-13=-353/2319. 10-13=-110/1546. 8-10=-355/2273

WEBS 3-13=-516/315, 5-13=-143/1020, 5-10=-143/1020, 7-10=-516/315

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-6 to 3-8-7, Interior(1) 3-8-7 to 18-0-0, Exterior(2) 18-0-0 to 22-4-13, Interior(1) 22-4-13 to 36-8-6 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 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 97 lb uplift at joint 2 and 97 lb uplift at joint 8.

6) 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 4-5-0 oc purlins.

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

March 24,2021

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 MSIVTP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





A. GILb



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12-2-2					23-9-14 36-0-0 11-7-12 12-2-2						
Plate Offsets (X,Y)	[12:0-4-0,0-4-8], [15:0-2-8	3,0-2-0]									
LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.15	2-13	>999	360	MT20	244/190
CDL 10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.32	2-13	>999	240		
CLL 0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.06	8	n/a	n/a		
3CDL 10.0	Code IRC2015/TP	12014	Matrix	-S	Wind(LL)	0.09	2-13	>999	240	Weight: 324 lb	FT = 20%
LUMBER-					BRACING-						
TOP CHORD 2x6 SF	P No.1				TOP CHOR	2D	Structu	ral wood	sheathing di	rectly applied or 4-6-6 of	oc purlins.

BOT CHORD

TOP CHORD 2x6 SP No 1 BOT CHORD

2x6 SP No.1 2x4 SP No.2 WFBS OTHERS 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 8=0-3-8 Max Horz 2=-189(LC 13) Max Uplift 2=-317(LC 12), 8=-317(LC 13) Max Grav 2=1479(LC 1), 8=1479(LC 1)

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

TOP CHORD 2-3=-2443/541. 3-5=-2171/562. 5-7=-2171/562. 7-8=-2443/541

BOT CHORD 2-13=-513/2087. 10-13=-159/1394. 8-10=-355/2087

WEBS 3-13=-516/415, 5-13=-248/825, 5-10=-248/825, 7-10=-516/415

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-6 to 3-8-7, Interior(1) 3-8-7 to 18-0-0, Exterior(2) 18-0-0 to 22-4-13, Interior(1) 22-4-13 to 36-8-6 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 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 30.0psf 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.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=317.8=317.

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

TH CAN RT 0 Vermannen SEAL 036322 G mmm

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

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

March 24,2021



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F	12-2-2		23-9-14	25-2-8	33-10-0	36-0-0	
Plate Offsets (X,Y)	[2:0-0-3,0-0-7], [2:0-2-6,0-0-0], [8:0-4-8,	0-4-5], [10:0-2-12,0-1-12]	, [11:0-3-4,0-1-12], [12	:0-10-1,0-3-14]			
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 IRC2015/TPI2014	CSI. TC 0.62 BC 0.71 WB 0.33 Matrix-S	DEFL. Vert(LL) -0. Vert(CT) -0. Horz(CT) 0. Wind(LL) 0.	in (loc) l/defl 26 8-12 >999 58 8-12 >743 18 8 n/a 18 8-12 >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 258 lb	GRIP 244/190 FT = 20%
BRACING- TOP CHORD 2x6 SP No.1 BOT CHORD 2x10 SP No.1 *Except* 2-14: 2x6 SP No.1, 8-13: 2x6 SP 2400F 2.0E WEBS 2x4 SP No.2							
REACTIONS. (size) 2=0-3-8, 8=0-3-8 Max Horz 2=-123(LC 10) Max Uplift 2=-97(LC 12), 8=-97(LC 13) Max Grav 2=1511(LC 2), 8=1479(LC 1)							
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2546/540, 3-5=-2320/562, 5-7=-2655/598, 7-8=-2914/597 BOT CHORD 2-15=-347/2240, 12-15=-121/1600, 8-12=-414/2552 WEBS 5-15=-125/848, 5-12=-182/1315, 7-12=-576/322, 3-15=-521/315							
NOTES- 1) Unbalanced roof live	e loads have been considered for this de	sign.					

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-6 to 3-8-7, Interior(1) 3-8-7 to 18-0-0, Exterior(2) 18-0-0 to 22-4-13, Interior(1) 22-4-13 to 36-8-6 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 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.

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



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

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

VULLANDAN SEAL 036322 G (111111)

March 24,2021

ENGINEERING BY EREENCO A MITEK Affiliate 818 Soundside Road Edenton, NC 27932

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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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) * This truss has been designed for a live load of 30.0psf 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) 4, 2.



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818 Soundside Road Edenton, NC 27932



- MWFRS (envelope) 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
- 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) 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 30.0psf 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) 6, 2, 9, 7.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



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

 TOP CHORD
 2-9=-282/60

 BOT CHORD
 8-9=-396/340

WEBS 2-8=-324/395

NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-6 to 3-8-7, Interior(1) 3-8-7 to 10-8-0 zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

3) * This truss has been designed for a live load of 30.0psf 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.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=114.



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- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 9, 10, 11, 12 except (jt=lb) 13=250.



March 24,2021



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LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.30	Vert(LL)	-0.02	2-4	>999	360	MT20	244/190
FCDL 10.0	Lumber DOL 1.15	BC 0.20	Vert(CT)	-0.05	2-4	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL)	0.05	2-4	>999	240	Weight: 18 lb	FT = 20%
LUMBER-			BRACING-						
TOP CHORD 2x4 SI	TOP CHOR	D :	Structur	ral wood	sheathing dir	ectly applied or 5-0-0	oc purlins,		
						and a second	1 -		

 BOT CHORD
 2x4 SP No.1

 BOT CHORD
 2x4 SP No.1

 WEBS
 2x6 SP No.1

 BOT CHORD
 BOT CHORD

 Rigid ceiling directly applied or 10-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 4=0-1-8 Max Horz 2=50(LC 8) Max Uplift 2=-84(LC 8), 4=-78(LC 8) Max Grav 2=217(LC 1), 4=184(LC 1)

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-4-8 to 4-0-5, Interior(1) 4-0-5 to 4-9-4 zone; porch 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 30.0psf 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.



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- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-4-8 to 4-0-5, Exterior(2) 4-0-5 to 4-9-4 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 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 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.



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			5-3-8				
Plate Offsets (X,Y)	[1:0-2-13,Edge]						
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.34	Vert(LL) -	0.03 1-5	>999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.44	Vert(CT) -	0.07 1-5	>909 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT)	0.00	n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL)	0.04 1-5	>999 240	Weight: 22 lb	FT = 20%
LUMBER- TOP CHORD 2x4 SF	2 No.1	BRACING- TOP CHORD	Structu	ral wood sheathing c	lirectly applied or 5-0-0	oc purlins,	

5-3-8

 IOP CHORD
 2x4 SP No.1
 IOP CHORD
 Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.

 BOT CHORD
 2x6 SP No.1
 BOT CHORD
 except end verticals.

 WEBS
 2x4 SP No.2
 BOT CHORD
 Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-0, 4=0-3-8 Max Horz 1=45(LC 4) Max Uplift 1=-112(LC 4), 4=-137(LC 4) Max Grav 1=409(LC 1), 4=476(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) 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=15ft; Cat. II; Exp C; Enclosed;

- MWFRS (envelope); porch 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 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=112, 4=137.
- 5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 251 lb down and 80 lb up at 2-0-12, and 251 lb down and 80 lb up at 4-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 6) 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=-20, 1-4=-20

Concentrated Loads (lb) Vert: 6=-251(B) 7=-251(B)



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818 Soundside Road Edenton, NC 27932



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 0.16 BC 0.18 WB 0.12 Matrix-S	DEFL. ir Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	n (loc) l/defl L/d - n/a 999 - n/a 999 5 n/a n/a	PLATES GRIP MT20 244/190 Weight: 73 lb FT = 20%	
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI	P No.1 P No.1		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dir Rigid ceiling directly applied o	rectly applied or 6-0-0 oc purlins. or 10-0-0 oc bracing.	

REACTIONS. All bearings 15-2-4.

(lb) - Max Horz 1=174(LC 9)

2x4 SP No.2

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-182(LC 12), 6=-182(LC 13) Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=414(LC 22), 8=457(LC 19), 6=456(LC 20)

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

WEBS 2-8=-395/305, 4-6=-395/305

NOTES-

OTHERS

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 7-7-8, Exterior(2) 7-7-8 to 12-0-5, Interior(1) 12-0-5 to 14-10-12 zone; 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 30.0psf 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=182, 6=182.



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



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 0.14 BC 0.15 WB 0.09 Matrix-S	DEFL. ii Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	n (loc) l/defl L/d a - n/a 999 a - n/a 999 0 5 n/a n/a	PLATES GRIP MT20 244/190 Weight: 61 lb FT = 20%
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI	P No.1 P No.1		BRACING- TOP CHORD BOT CHORD	Structural wood sheathing d Rigid ceiling directly applied	irectly applied or 6-0-0 oc purlins. or 10-0-0 oc bracing.

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

REACTIONS. All bearings 13-2-4.

(lb) -Max Horz 1=-150(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-164(LC 12), 6=-164(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=389(LC 19), 8=380(LC 19), 6=380(LC 20)

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

2-8=-360/290, 4-6=-360/291 WEBS

NOTES-

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 6-7-8, Exterior(2) 6-7-8 to 11-0-5, Interior(1) 11-0-5 to 12-10-12 zone;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 30.0psf 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=164, 6=164.



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



TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. All bearings 11-2-4.

(lb) -Max Horz 1=-126(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-164(LC 12), 6=-164(LC 13) Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=344(LC 19), 6=344(LC 20)

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

WEBS 2-8=-369/312, 4-6=-369/312

NOTES-

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 5-7-8, Exterior(2) 5-7-8 to 10-0-5, Interior(1) 10-0-5 to 10-10-12 zone;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 30.0psf 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, 5 except (jt=lb) 8=164, 6=164.

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

WITH CAN ORTH SEAL 036322 G THILL



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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) 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 30.0psf 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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Max Grav 1=159(LC 1), 3=159(LC 1), 4=205(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) 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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) 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 30.0psf 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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¹⁾ Unbalanced roof live loads have been considered for this design.



Max Grav 1=111(LC 1), 3=111(LC 1), 4=142(LC 1)

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) 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 30.0psf 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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BRACING-

TOP CHORD

BOT CHORD

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

(size) 1=3-2-4, 3=3-2-4 Max Horz 1=-31(LC 10) Max Uplift 1=-3(LC 12), 3=-3(LC 12) Max Grav 1=102(LC 1), 3=102(LC 1)

Code IRC2015/TPI2014

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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

Matrix-P

3) Gable requires continuous bottom chord bearing.

BCDL

LUMBER-

TOP CHORD

BOT CHORD

REACTIONS.

10.0

2x4 SP No.1

2x4 SP No.1

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 30.0psf 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.



Weight: 10 lb

Structural wood sheathing directly applied or 3-3-0 oc purlins.

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

FT = 20%

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BOT CHORD

except end verticals.

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

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 WEPS 2x4 SP No.2

BOT CHORD2x4 SP No.1WEBS2x4 SP No.2OTHERS2x4 SP No.2

REACTIONS. All bearings 12-1-8.

(lb) - Max Horz 1=180(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 11 except 12=-138(LC 12), 13=-162(LC 12), 10=-133(LC 13), 9=-192(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 8, 11, 12, 13, 10, 9

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 6-5-4, Exterior(2) 6-5-4 to 10-10-1, Interior(1) 10-10-1 to 11-10-4 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 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 11 except (jt=lb) 12=138, 13=162, 10=133, 9=192.



March 24,2021

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BRACING-

TOP CHORD

BOT CHORD

LUMBER-	

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

REACTIONS. All bearings 10-9-12.

(lb) -Max Horz 1=122(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 5 except 1=-106(LC 10), 8=-170(LC 12), 6=-170(LC 13) Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=354(LC 19), 6=354(LC 20)

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

WEBS 2-8=-383/327, 4-6=-384/328

NOTES-

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 5-5-4, Exterior(2) 5-5-4 to 9-10-1, Interior(1) 9-10-1 to 10-6-4 zone;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 30.0psf 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=106, 8=170, 6=170.



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

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

March 24,2021

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 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 the contractors. This besign is based only upon parameters and properly incorporate this design into the overall a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANS/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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



Max Grav 1=199(LC 1), 3=199(LC 1), 4=256(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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) 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 30.0psf 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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2x4 SP No.2 OTHERS

REACTIONS. (size) 1=6-9-12, 3=6-9-12, 4=6-9-12 Max Horz 1=-74(LC 8)

Max Uplift 1=-27(LC 13), 3=-27(LC 13) Max Grav 1=150(LC 1), 3=150(LC 1), 4=193(LC 1)

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) 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 30.0psf 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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BRACING-

TOP CHORD

BOT CHORD

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L	, 181	БΕ	n-

TOP CHORD2x4 SP No.1BOT CHORD2x4 SP No.1OTHERS2x4 SP No.2

REACTIONS. (size) 1=4-9-12, 3=4-9-12, 4=4-9-12 Max Horz 1=-50(LC 8)

Max Uplift $1=-18(LC \ 13)$, $3=-18(LC \ 13)$

Max Grav 1=102(LC 1), 3=102(LC 1), 4=130(LC 1)

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) 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 30.0psf 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.



Structural wood sheathing directly applied or 4-10-8 oc purlins.

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

March 24,2021

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LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2015/TPI2014	CSI. TC 0.02 BC 0.04 WB 0.00 Matrix-P	DEFL. in Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	(loc) l/defl L/d - n/a 999 - n/a 999 3 n/a n/a	PLATES GRIP MT20 244/190 Weight: 9 lb FT = 20%	
LUMBER- TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1			BRACING- TOP CHORD BOT CHORD	BRACING- TOP CHORD Structural wood sheathing directly applied or 2-10-8 oc purlins. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.		

REACTIONS. (size) 1=2-9-12, 3=2-9-12

Max Horz 1=-26(LC 8) Max Uplift 1=-3(LC 12), 3=-3(LC 12)

Max Grav 1=87(LC 1), 3=87(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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) 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 30.0psf 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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