

RE: B0419-1976 Topsail B Trenco 818 Soundside Rd Edenton, NC 27932

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 8.1 Wind Speed: 130 mph Floor Load: N/A psf

This package includes 15 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	E12574200	a01	1/4/2019
2	E12574201	a02	1/4/2019
3	E12574202	a03	1/4/2019
4	E12574203	a04	1/4/2019
5	E12574204	a05	1/4/2019
6	E12574205	a06	1/4/2019
7	E12574206	b01	1/4/2019
8	E12574207	b02	1/4/2019
9	E12574208	b03	1/4/2019
10	E12574209	m01	1/4/2019
11	E12574210	m02	1/4/2019
12	E12574211	m03	1/4/2019
13	E12574212	ps-8	1/4/2019
14	E12574213	ps-8g	1/4/2019
15	E12574214	v01	1/4/2019

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, 2019

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 design 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.





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LOADING (psf)	SPACING- 2-0-0		DEFL. in	(loc)	l/defl	L/d	PLATES GRIP
TCLL 20.0	Lumber DOL 1.15	BC 0.60	Vert(LL) -0.17	9-11 9-11	>999 >9999	360 240	MT20 244/190
BCLL 0.0 *	Rep Stress Incr YES	WB 0.58	Horz(CT) 0.03	8	n/a	n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.06	2-11	>999	240	Weight: 179 lb FT = 20%
LUMBER-	1		BRACING-				-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.1 BOT CHORD 2x6 SP No.1 2x4 SP No.2 *Except* WEBS 7-9,3-11: 2x4 SP No.3

WEDGE

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

REACTIONS. (lb/size) 2=1269/0-5-8, 8=1200/0-5-8 Max Horz 2=284(LC 7) Max Uplift 2=-159(LC 10), 8=-140(LC 11) Max Grav 2=1337(LC 17), 8=1272(LC 18)

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

TOP CHORD 2-3=-1834/519, 3-5=-1682/623, 5-7=-1687/632, 7-8=-1836/524

- BOT CHORD 2-11=-273/1587, 9-11=-31/1038, 8-9=-287/1399
- 5-9=-245/866, 7-9=-513/352, 5-11=-232/861, 3-11=-501/332 WEBS

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=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 10-10-3, Exterior(2) 10-10-3 to 15-3-0, Interior(1) 19-7-13 to 25-10-7 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 (it=lb) 2=159, 8=140.



Structural wood sheathing directly applied or 3-7-5 oc purlins.

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

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







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7) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in	(loc)	l/defl L/d	PLATES GRIP MT20 244/190 Weight: 137 lb FT = 20%
TCLL 20.0	Plate Grip DOL 1.15	TC 0.57	Vert(LL) -0.15	8-10	>999 360	
TCDL 10.0	Lumber DOL 1.15	BC 0.39	Vert(CT) -0.20	8-10	>999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.56	Horz(CT) 0.01	8	n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	2-10	>999 240	
LUMBER- TOP CHORD 2x4 SP	No.1	1	BRACING- TOP CHORD	Structur	ral wood sheathing dir	rectly applied or 5-7-7 oc purlins,

BOT CHORD

WEBS

except end verticals.

1 Row at midpt

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

5-8

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

2x4 SP No.3 *Except* WEBS 5-10,5-8: 2x4 SP No.2

WEDGE Left: 2x4 SP No.3

REACTIONS. (lb/size) 8=784/0-5-8, 2=848/0-5-8 Max Horz 2=319(LC 10) Max Uplift 8=-153(LC 10), 2=-82(LC 10) Max Grav 8=976(LC 17), 2=879(LC 17)

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

TOP CHORD 2-3=-1061/207, 3-5=-915/314

BOT CHORD 2-10=-351/902, 8-10=-100/314

3-10=-538/349, 5-10=-238/920, 5-8=-770/247 WEBS

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=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 10-10-3, Exterior(2) 10-10-3 to 15-3-0 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) 2 except (jt=lb) 8=153



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20-0-0

Plate Offsets (X,Y)-	[11:0-2-0,Edge]	1		
OADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
CLL 20.0	Plate Grip DOL 1.15	TC 0.08	Vert(LL) 0.00 1 n/r 120	MT20 244/190
CDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) -0.00 1 n/r 120	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.00 15 n/a n/a	
SCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 177 lb FT = 20%

BOT CHORD

WEBS

except end verticals.

T-Brace:

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

Brace must cover 90% of web length.

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.

TOP CHORD	2x4 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

- REACTIONS. All bearings 20-0-0. (lb) - Max Horz 2=470(LC 10)
 - Max Uplift All uplift 100 lb or less at joint(s) 15, 19, 2 except 20=-124(LC 10),
 - 21=-104(LC 10), 22=-107(LC 10), 23=-107(LC 10), 24=-104(LC 10), 25=-171(LC 10), 16=-130(LC 11)
 - Max Grav All reactions 250 lb or less at joint(s) 15, 20, 21, 22, 23, 24, 25, 17, 16 except 19=283(LC 17), 2=270(LC 10)
- FORCES. (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown.
- TOP CHORD 2-3=-531/360, 3-4=-408/261, 4-5=-325/216

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=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 10-10-3, Corner(3) 10-10-3 to 15-3-0 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, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 19, 2 except (jt=lb) 20=124, 21=104, 22=107, 23=107, 24=104, 25=171, 16=130.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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2x4 SPF No.2 - 10-19, 9-20, 12-17, 13-16

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TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 WEBS 2x4 SP No.3 OTHERS 2x4 SP No.3 WEDGE

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

REACTIONS. (lb/size) 2=847/0-5-8, 4=847/0-5-8 Max Horz 2=-301(LC 8) Max Uplift 2=-230(LC 10), 4=-230(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1435/238, 3-4=-1432/352 BOT CHORD 2-6=-149/1176, 4-6=-141/1164 WEBS 3-6=-47/1116

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=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-14 to 3-7-14, Interior(1) 3-7-14 to 5-8-3, Exterior(2) 5-8-3 to 10-1-0, Interior(1) 14-5-13 to 16-6-2 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 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.

8) Bearing at joint(s) 2, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=230, 4=230.



Structural wood sheathing directly applied or 5-2-10 oc purlins.

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

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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=5.0psf; h=25ft; 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) 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) Bearing at joint(s) 2, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

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



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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=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 5-8-3, Exterior(2) 5-8-3 to 10-1-0, Interior(1) 14-5-13 to 15-6-7 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.

5) Bearing at joint(s) 1, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

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



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	0-4-0		6-9-9					_
	0-4-0		6-5-9					1
Plate Offsets (X,Y)	[2:0-5-3,0-2-0], [2:1-0-4,Edge]							
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2015/TPI2014	CSI. TC 0.71 BC 0.76 WB 0.00 Matrix-P	DEFL. in Vert(LL) -0.06 Vert(CT) -0.14 Horz(CT) 0.00 Wind(LL) 0.28	(loc) 2-5 2-5	l/defl >999 >546 n/a >285	L/d 360 240 n/a 240	PLATES MT20	GRIP 244/190 FT = 20%
		INIGULA I	Wind(LL) 0.20	2.5	~200	240	Weight: 00 lb	11 = 2070
LUMBER-			BRACING-					
TOP CHORD 2x4 SP	' No.1		TOP CHORD	Structu	ral wood	sheathing di	rectly applied or 6-0-0	oc purlins,
BOT CHORD 2x6 SP	' No.1			except	end verti	cals.		
WEBS 2x6 SP	' No.1		BOT CHORD	Riaid ce	eilina dire	ctly applied	or 6-10-1 oc bracing.	

Left 2x4 SP No.3 2-5-2 REACTIONS. (lb/size) 2=605/0-3-0, 5=573/0-1-8 Max Horz 2=95(LC 6) Max Uplift 2=-414(LC 6), 5=-404(LC 6)

2x4 SP No.3

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

NOTES-

OTHERS

SLIDER

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone 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) 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) 5 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) 5.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=414 5=404
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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

LOAD CASE(S) Standard

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

Vert: 1-4=-60, 2-5=-115(F=-95)





🙏 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 MICLODED MITER REPERIENCE PAGE mit-14/3 at 900, 1002/015 BEPORE 052. Design valid for use only with MITeR works connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component** 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.



	<mark></mark>		6-11-0 6-7-0				—
Plate Offsets (X,Y)	[2:0-4-12,Edge]	1				1	
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2015/TPI2014	CSI. TC 0.65 BC 0.59 WB 0.00 Matrix-P	DEFL. Vert(LL) -0.0 Vert(CT) -0.0 Horz(CT) 0.0 Wind(LL) 0.0	in (loc) l/defl 13 2-4 >999 15 2-4 >999 10 4 n/a 16 2-4 >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 29 lb	GRIP 244/190 FT = 20%

LUMBER-

TOP CHORD2x4 SP No.1BOT CHORD2x6 SP No.1WEBS2x4 SP No.3

 BRACING

 TOP CHORD
 Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

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

REACTIONS. (Ib/size) 4=264/0-1-8, 2=297/0-3-0 Max Horz 2=67(LC 6)

Max Uplift 4=-136(LC 6), 2=-144(LC 6)

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

NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (envelope) 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=136, 2=144.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

0.00

2

240

Structural wood sheathing directly applied or 2-5-0 oc purlins.

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

Weight: 8 lb

FT = 20%

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BCDL

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

10.0

REACTIONS. All bearings 2-5-0. (lb) -

Max Horz 2=38(LC 6) Max Uplift All uplift 100 lb or less at joint(s) 3, 2 Max Grav All reactions 250 lb or less at joint(s) 3, 3, 2, 4

Code IRC2015/TPI2014

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=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

Matrix-P

- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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	6-0-0			12-0-0					
Plate Offsets (X,Y)	[2:0-3-0,Edge], [4:0-3-0,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 0.39 BC 0.31 WB 0.11 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.10 -0.07 -0.01	(loc) 4-6 4-6 4	l/defl >999 >999 n/a	L/d 240 240 n/a	PLATES MT20 Weight: 41 lb	GRIP 244/190 FT = 20%
LUMBER- TOP CHORD 2x4 SI BOT CHORD 2x4 SI WEBS 2x4 SI	P No.1 P No.1 P No.3		BRACING- TOP CHOR BOT CHOR	D D	Structu Rigid c	ıral wood eiling dire	sheathing dire	ectly applied or 5-10- r 5-10-11 oc bracing.	12 oc purlins.
REACTIONS. (Ib/siz Max H Max U	e) 2=500/0-3-0, 4=500/0-3-0 lorz 2=-28(LC 15) Jplift 2=-236(LC 6), 4=-236(LC 7)								
FORCES. (Ib) - Max TOP CHORD 2-3= BOT CHORD 2-6-	. Comp./Max. Ten All forces 250 (lb) or -873/1166, 3-4=-873/1166 -1022/771 4-61022/771	less except when shown.							

BOT CHORD 2-6=-1022/771, 4-6=-102 WEBS 3-6=-430/283

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=5.0psf; h=25ft; 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 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=236, 4=236.

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



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0-4-8 0-4-8			12-4-8 12-0-0						12-9-0 0-4-8
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.15 BC 0.09 WB 0.11 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 7 7 6	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 44 lb	GRIP 244/190 FT = 20%
LUMBER-			BRACING-						

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.3

REACTIONS. All bearings 12-0-0. Max Horz 2=-48(LC 15)

(lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=-150(LC 10), 8=-149(LC 11) Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=336(LC 1), 8=336(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 3-10=-237/376, 5-8=-237/376

NOTES-

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 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) 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 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 10=150, 8=149.
- 9) 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.

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



Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-141(LC 10), 12=-125(LC 10), 9=-140(LC 11), 8=-126(LC 11)

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 12, 9, 8

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=5.0psf; h=25ft; Cat. II; Exp C; enclosed;

MWFRS (envelope) 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 except (jt=lb) 11=141, 12=125, 9=140, 8=126.



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