

Trenco 818 Soundside Rd Edenton, NC 27932

Re: J1221-6758 Lot 202 Anderson Creek

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

Pages or sheets covered by this seal: E16508526 thru E16508560

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844



January 6,2022

# Gilbert, Eric

**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



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- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-4 to 8-9-11, Interior(1) 8-9-11 to 26-3-12 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 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 10=115.



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- 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 40.0psf 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 29, 28, 26, 25, 24, 23, 22, 20, 19, 18, 17 except (jt=lb) 16=124.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

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		3-10-11	7-9-4	14-2-12	18-1-5	22-0-0	1
		3-10-11	3-10-9	6-5-8	3-10-9	3-10-11	٦
Plate Offsets (X,Y)	[2:0-1-12.0-1-12], [6:0-3-9.Edge], [1	10:0-0-0.0-1-1	1. [13:0-4-0.0-4	-12]			

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	0.44	Vert(LL)	-0.05	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1	.15	BC	0.23	Vert(CT)	-0.08	10-12	>999	240		
BCLL	0.0 *	Rep Stress Incr Y	ΈS	WB	0.10	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI20	14	Matrix	k-S	Wind(LL)	0.06	2-14	>999	240	Weight: 227 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

 TOP CHORD
 2x6 SP No.1

 BOT CHORD
 2x10 SP No.1

 WEBS
 2x6 SP No.1

 WEDGE
 2x6 SP No.1

Left: 2x6 SP No.2 , Right: 2x6 SP No.2

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

- TOP CHORD 2-4=-1781/86, 4-5=-898/195, 7-8=-897/195, 8-10=-1780/86
- BOT CHORD 2-14=0/1139. 12-14=0/1139. 10-12=0/1139
- WEBS 5-7=-1311/438, 4-14=-63/769, 8-12=-63/768

## NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph 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) -0-8-7 to 3-8-6, Exterior(2) 3-8-6 to 11-0-0, Corner(3) 11-0-0 to 15-4-13, Exterior(2) 15-4-13 to 22-8-7 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) \* This truss has been designed for a live load of 40.0psf 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) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-14, 8-12

6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14

7) Attic room checked for L/360 deflection.



Structural wood sheathing directly applied or 5-11-3 oc purlins.

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

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REACTIONS. (size) 2=0-3-8, 10=0-3-8 Max Horz 2=-346(LC 10) Max Grav 2=1467(LC 20), 10=1467(LC 21)





6x6 =

		3-10-11	7-9-4	14-2-12	18-1-5	22-0-0	
		3-10-11	3-10-9	6-5-8	3-10-9	3-10-11	
Plate Offsets (X,Y)	[2:0-0-0,0-0-1], [6:0-3-9,Edge], [	12:0-4-0,0-4-12]					

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No 1 BOT CHORD 2x10 SP No.1 WFBS 2x6 SP No.1 WEDGE

Left: 2x6 SP No.2 , Right: 2x4 SP No.3

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

TOP CHORD  $2\text{-}4\text{=-}1769/38,\,4\text{-}5\text{=-}898/151,\,7\text{-}8\text{=-}902/167,\,8\text{-}10\text{=-}1763/20$ 

BOT CHORD 2-13=0/1113, 11-13=0/1113, 10-11=0/1113

WEBS 5-7=-1335/366, 4-13=-32/751, 8-11=-30/745

### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-7 to 3-8-6, Interior(1) 3-8-6 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 21-10-4 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 40.0psf 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) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s). 4-13, 8-11

6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13

7) Attic room checked for L/360 deflection.



Structural wood sheathing directly applied or 5-11-4 oc purlins.

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

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REACTIONS. (size) 2=0-3-8, 10=0-3-8 Max Horz 2=275(LC 9) Max Grav 2=1473(LC 20), 10=1432(LC 20)



BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD2x6 SP No.1BOT CHORD2x10 SP No.1WEBS2x6 SP No.1 \*

WEBS 2x6 SP No.1 \*Except\* 10-13: 2x4 SP No.2 WEDGE

Left: 2x6 SP No.2

REACTIONS.	(size)	2=0-3-8, 11=0-3-8
	Max Horz	2=273(LC 9)
	Max Grav	2=1410(LC 20), 11=1231(LC 20)

- FORCES. (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown.
- TOP CHORD 2-4=-1656/29, 4-5=-825/147, 5-6=-107/256, 7-8=-867/163, 8-10=-1529/10
- BOT CHORD 2-15=0/1033, 13-15=0/1033
- WEBS 5-7=-1299/355, 4-15=-19/694, 8-13=-45/527, 10-12=-1327/55, 10-13=0/1046

#### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-7 to 3-8-6, Interior(1) 3-8-6 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 21-4-4 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 40.0psf 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) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-15, 8-13
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15

7) Attic room checked for L/360 deflection.



Structural wood sheathing directly applied or 5-11-1 oc purlins.

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

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2) Wind: ASCE 7-10; Vult=130mph 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) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 8-1-12, Exterior(2) 8-1-12 to 12-6-9, Interior(1) 12-6-9 to 17-0-4 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 40.0psf 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) 13, 11 except (jt=lb) 2=168, 12=391.



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#### Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	Lot 202 Anderson Creek	
					E16508	8535
J1221-6758	C2	Common Girder	1	2		
				<b>–</b>	Job Reference (optional)	
Comtech, Inc, Faye	teville, NC - 28314,			3.430 s Au	g 16 2021 MiTek Industries, Inc. Thu Jan 6 10:44:53 2022 Page 2	2

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LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-3=-60, 3-5=-60, 1-5=-20

Concentrated Loads (lb)

Vert: 7=-1022(F) 5=-1030(F) 9=-1022(F) 10=-1022(F) 11=-1022(F) 13=-1022(F) 15=-1022(F) 16=-1022(F)

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Job	Truss	Truss Type	Qty	Ply	Lot 202 Anderson Creek	
					E165	508537
J1221-6758	H1	FLAT GIRDER	1	2		
				<b></b>	Job Reference (optional)	
Comtech, Inc. F	avetteville, NC - 28314.			8.430 s Au	g 16 2021 MiTek Industries, Inc. Thu Jan 6 10:44:56 2022 Pag	ie 2

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## LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-5=-60, 6-10=-20 Concentrated Loads (lb)

Vert: 8=-1027(B) 9=-1027(B) 2=-700(F) 11=-700(F) 12=-700(F) 13=-700(F) 14=-700(F) 15=-700(F) 16=-700(F) 17=-700(F) 18=-1027(B) 20=-1027(B) 21=-1027(B) 23=-1027(B) 24=-1027(B) 25=-1027(B) 25=-1027(B)

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-0<sub>г</sub>10<sub>г</sub>8 20-3-0 0-10-8 19-4-8 Plate Offsets (X,Y)--[2:0-1-7,0-2-3], [3:0-5-4,0-2-12] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) l/defl L/d PLATES GRIP TCLL 20.0 Plate Grip DOL 1.15 тс 0.08 Vert(LL) -0.00 13 n/r 120 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.02 Vert(CT) 0.00 13 120 n/r WB BCLL 0.0 Rep Stress Incr YES 0.10 Horz(CT) -0.00 15 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 170 lb FT = 20% LUMBER-BRACING-TOP CHORD 2x6 SP No 1 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. BOT CHORD 2x6 SP No.1 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2x4 SP No 2 OTHERS 6-0-0 oc bracing: 23-24,19-21,15-16. SLIDER Left 2x4 SP No.2 1-7-9 REACTIONS. All bearings 19-3-0. (lb) -Max Horz 2=782(LC 12) Max Uplift All uplift 100 lb or less at joint(s) 15 except 2=-310(LC 10), 16=-101(LC 12), 17=-115(LC 12), 18=-110(LC 12), 19=-111(LC 12), 21=-111(LC 12), 22=-111(LC 12), 23=-105(LC 12), 24=-130(LC 12), 25=-497(LC 12) Max Grav All reactions 250 lb or less at joint(s) 15, 16, 17, 18, 19, 21, 22, 23, 24 except 2=987(LC 12), 25=256(LC 10) FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1240/975, 3-4=-879/697, 4-5=-762/603, 5-6=-665/528, 6-8=-563/447, 8-9=-461/368, 9-10=-360/288, 10-11=-258/209 WEBS 3-25=-429/475NOTES-1) Wind: ASCE 7-10; Vult=130mph 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) -0-8-12 to 3-4-8, Interior(1) 3-4-8 to 19-4-8 zone;C-C for members and forces & MWFRS for numunu 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 ORTH 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. Vinneeren 1111111111 7) \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide SEAL will fit between the bottom chord and any other members. 8) Bearing at joint(s) 15, 16, 17, 18, 19 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer 036322 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) 15 except (jt=lb) 2=310, 16=101, 17=115, 18=110, 19=111, 21=111, 22=111, 23=105, 24=130, 25=497. 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer. G mmm January 6,2022

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Scale = 1:88.1

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				9-7	-12	19	-0-0	19	-4-8				
				9-7	-12	9-	4-4	0	4-8				
Plate Offs	ets (X,Y)	[2:0-2-1,0-2-3], [8:0-3-1,0	)-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	0.20	Vert(LL)	-0.07	8-10	>999	360	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.14	8-10	>999	240			
BCU	00 *	Rep Stress Incr	VES	\//B	0.74		0.02	8	n/a	n/a			

Wind(LL)

BRACING-TOP CHORD

BOT CHORD

0.04

10 >999 240

Rigid ceiling directly applied or 8-5-3 oc bracing.

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

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

10.0

OTHERS 2x4 SP No.2 SLIDER Left 2x4 SP No.2 4-2-8

REACTIONS. (size) 2=0-3-8, 8=Mechanical Max Horz 2=541(LC 12) Max Uplift 8=-315(LC 12) Max Grav 2=818(LC 1), 8=847(LC 19)

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

Code IRC2015/TPI2014

TOP CHORD 2-4=-1682/341. 4-6=-1345/230

BOT CHORD 2-10=-861/1850, 8-10=-523/1073

WEBS 4-10=-369/292, 6-10=-133/736, 6-8=-956/451

## NOTES-

BCDL

1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 19-2-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-S

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 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

5) Bearing at joint(s) 2 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) except (jt=lb) 8=315.

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



Weight: 154 lb

FT = 20%

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LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins,
BOT CHORD	2x6 SP No.1		except end verticals.
WEBS	2x4 SP No.2 *Except*	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
	6-7: 2x6 SP No.1	WEBS	2 Rows at 1/3 pts 6-7

WEDGE Left: 2x4 SP No.2

REACTIONS.	(size)	2=0-3-8, 7=0-3-8
	Max Horz	2=374(LC 12)
	Max Uplift	7=-218(LC 12)
	Max Grav	2=699(LC 19), 7=924(LC 19)

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

TOP CHORD 2-4=-541/128, 5-6=-257/497, 7-10=-432/224, 6-10=-429/223

BOT CHORD 2-8=-91/259, 7-8=-91/259

WEBS 4-8=-169/326, 5-10=-568/198

#### NOTES-

1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 13-0-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) All plates are MT20 plates unless otherwise indicated.

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 40.0psf 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) except (jt=lb)

7=218

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



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Plate Offsets (	(X,Y)	[2:0-1-0,0-3-0], [9:0-3-14,	0-1-3], [11:0-3	-14,0-1-6], [12:0-3-0,0-1-4]				-			
LOADING (ps TCLL 20 TCDL 10 BCLL 0 BCDL 10	sf) 1.0 1.0 1.0 1.0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2015/TF	2-0-0 1.15 1.15 YES Pl2014	CSI. TC 0.87 BC 0.47 WB 0.17 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in -0.26 -0.45 0.11 0.28	(loc) 10 10 8 10	l/defl >585 >345 n/a >560	L/d 360 240 n/a 240	PLATES MT20 Weight: 128 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER-           TOP CHORD         2x6 SP No.1           BOT CHORD         2x8 SP No.1 *Except*           2-8: 2x6 SP No.1           WEBS         2x4 SP No.2 *Except*           6-8: 2x6 SP No.1						D D	Structu except Rigid c 1 Brace	ral wood end verti eiling dire e at Jt(s):	sheathing dir icals. ectly applied o 13	rectly applied or 6-0-0 c or 10-0-0 oc bracing.	oc purlins,
REACTIONS.											
FORCES. (III: TOP CHORD	b) - Max. 2-4=-	Comp./Max. Ten All for 548/97, 5-6=-293/456, 8-	ces 250 (lb) or 13=-453/280, 6	less except when shown. 6-13=-450/279							

BOT CHORD 2-10=-100/253, 8-10=-100/253

WEBS 5-13=-517/201

#### NOTES-

1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 13-7-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

3) \* This truss has been designed for a live load of 40.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=233.

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



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- (lb) Max Horz 2=546(LC 12)
  - Max Uplift All uplift 100 lb or less at joint(s) 11, 12 except 2=-165(LC 10), 13=-104(LC 12), 14=-117(LC 12),
    - ах орнт. Ан орнт. 100 го от less at joint(s) 11, 12 except 2=-165(LC 10), 13=-104(LC 12), 14=-117(LC 12), 15=-110(LC 12), 16=-108(LC 12), 17=-122(LC 12), 18=-279(LC 12)
  - Max Grav All reactions 250 lb or less at joint(s) 11, 12, 13, 14, 15, 16, 17, 18 except 2=572(LC 12)
- FORCES. (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown.
- TOP CHORD 2-3=-779/637, 3-4=-573/468, 4-5=-462/377, 5-7=-363/298, 7-8=-262/217
- WEBS 3-18=-275/273

### NOTES-

- Wind: ASCE 7-10; Vult=130mph 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) -0-8-12 to 3-8-1, Exterior(2) 3-8-1 to 13-3-8 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) 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 40.0psf 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) Bearing at joint(s) 11 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) 11, 12 except (jt=lb) 2=165, 13=104, 14=117, 15=110, 16=108, 17=122, 18=279.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



TRENCO

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Plate Offse	ets (X,Y)	[4:Edge,0-2-0]										
	(psf)	SPACING-	2-0-0	CSI.	0.64	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Lumber DOL Rep Stress Ipcr	1.15 1.15 VES	BC	0.64 0.43	Vert(LL) Vert(CT)	-0.11	2-4 2-4	>757 >379	360 240	MT20	244/190
BCDL	10.0	Code IRC2015/TI	PI2014	Matri	v-P	Wind(LL)	0.00	2-4	>344	240	Weight: 26 lb	FT = 20%
LUMBER-	RD 2x4 SI	P No.1				BRACING- TOP CHOF	RD	Structu	ral wood	sheathing c	lirectly applied or 6-0-0	oc purlins,

BOT CHORD 2x4 SP No.1 except end verticals. BOT CHORD 2x4 SP No.2 Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=0-1-8 Max Horz 2=85(LC 8) Max Uplift 2=-128(LC 8), 4=-115(LC 8) Max Grav 2=334(LC 1), 4=262(LC 1)

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

### NOTES-

WEBS

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; 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 6-9-15 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 40.0psf 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) except (jt=lb) 2=128, 4=115.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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Plate Offsets (X,Y)	[4:Edge,0-2-0]	I	I						
LOADING (psf)	SPACING- 2-	-0-0 <b>CSI</b> .	DEFI	L. in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1	1.15 TC	0.45 Vert(	LL) -0.06	2-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1	1.15 BC	0.31 Vert(	CT) -0.11	2-4	>615	240		
BCLL 0.0 *	Rep Stress Incr Y	YES WB	0.00 Horz	(CT) 0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI20	014 Matrix	x-P Wind	(LL) 0.12	2-4	>554	240	Weight: 22 lb	FT = 20%
LUMBER- TOP CHORD 2x4 SI	P No.1	·	BRA( TOP	CING- CHORD	Structu	ral wood s	heathing directl	y applied or 6-0-0	oc purlins,

 BOT CHORD
 2x4 SP No.1
 except end verticals.

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

REACTIONS. (size) 2=0-3-8, 4=0-1-8 Max Horz 2=74(LC 8) Max Uplift 2=-115(LC 8), 4=-98(LC 8) Max Grav 2=295(LC 1), 4=221(LC 1)

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

### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; 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 5-9-15 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 40.0psf 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=115.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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			6-3-8 6-3-8	<u> </u>					
LOADING (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL.	in (lo	oc) l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL 1.15	TC 0.43	Vert(LL) -	-0.02 2	2-6 >999	360	MT20	244/190	
TCDL 10.0	Lumber DOL 1.15	BC 0.17	Vert(CT) -	-0.04 2	2-6 >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	2-6 >999	240	Weight: 28 lb	FT = 20%	
LUMBER-		I I	BRACING-				1		

TOP CHORD

BOT CHORD

# LUMBER-

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

REACTIONS. (size) 2=0-3-8, 5=0-3-8

Max Horz 2=77(LC 8) Max Uplift 2=-121(LC 8), 5=-270(LC 8)

Max Grav 2=306(LC 1), 5=770(LC 1)

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

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; 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 6-0-0 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 40.0psf 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) 2=121, 5=270.
- 5) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 344 lb down and 73 lb up at 6-1-12, and 211 lb down and 110 lb up at 6-1-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) 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: 1-3=-60, 3-4=-20, 2-5=-20 Concentrated Loads (lb)

Vert: 5=-554(F=-344)



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

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

except end verticals.

818 Soundside Road

Edenton, NC 27932

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+-0-10-8 0-10-8			15-10-8 15-0-0					16-9-0
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 0.09 BC 0.06 WB 0.04 Matrix-S	DEFL. Vert(LL) 0.0 Vert(CT) 0.0 Horz(CT) 0.0	n (loc) 0 9 1 9 0 8	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES GRIP MT20 244/190 Weight: 61 lb FT =	0 = 20%
LUMBER-	2 No 1		BRACING-	Structu	ral wood	sheathing di	rectly applied or 6-0-0 oc purlir	15

BOT CHORD

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

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

**REACTIONS.** All bearings 15-0-0.

(lb) - Max Horz 2=56(LC 16)

Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10

Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 11 except 14=271(LC 1), 10=271(LC 1)

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

#### NOTES-

10

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

2) Wind: ASCE 7-10; Vult=130mph 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) -0-10-8 to 3-6-0, Exterior(2) 3-6-0 to 7-6-0, Corner(3) 7-6-0 to 11-10-13, Exterior(2) 11-10-13 to 15-10-8 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

 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 40.0psf 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.

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

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



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L	7-6-0		15-0-0							
	7-6-0		7-6-0							
Plate Offsets (X,Y)	[2:0-3-0,Edge], [4:0-3-0,Edge]									
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0         *           BCDL         10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2015/TPI2014	<b>CSI.</b> TC 0.29 BC 0.43 WB 0.08 Matrix-S	DEFL.         in         (loc)         //defl         L/d           Vert(LL)         0.14         4-6         >999         240           Vert(CT)         -0.13         4-6         >999         240           Horz(CT)         0.02         4         n/a         n/a           Weight:         67 lb         FT = 20%							
LUMBER- TOP CHORD 2x6 SF BOT CHORD 2x4 SF WEBS 2x4 SF	P No.1 P No.1 P No.2		BRACING-TOP CHORDStructural wood sheathing directly applied or 6-0-0 oc purlins.BOT CHORDRigid ceiling directly applied or 6-1-4 oc bracing.							
REACTIONS. (siz Max H Max L Max C	ze) 2=0-3-8, 4=0-3-8 Horz 2=33(LC 16) Jplift 2=-241(LC 8), 4=-241(LC 9) Grav 2=638(LC 1), 4=638(LC 1)									
FORCES.         (lb) - Max.           TOP CHORD         2-3=           BOT CHORD         2-6=           WEBS         3-6=	. Comp./Max. Ten All forces 250 (lb) or le 1047/1081, 3-4=-1047/1081 939/938, 4-6=-939/938 413/338	ss except when shown.								
NOTES- 1) Unbalanced roof live	e loads have been considered for this desid	ŋn.								

2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-3 to 3-8-10, Interior(1) 3-8-10 to 7-6-0, Exterior(2) 7-6-0 to 11-10-13, Interior(1) 11-10-13 to 15-8-3 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) 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 40.0psf 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) except (jt=lb) 2=241, 4=241.

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



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(lb) - Max Horz 1=177(LC 9)

Max Upit All upit 100 b or less at joint(s) 1, 5 except 8=-185(LC 12), 6=-185(LC 13) Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=482(LC 22), 8=488(LC 19), 6=488(LC 20)

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

WEBS 2-8=-400/307, 4-6=-400/307

## NOTES-

2) Wind: ASCE 7-10; Vult=130mph 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 7-8-12, Exterior(2) 7-8-12 to 12-1-9, Interior(1) 12-1-9 to 15-1-4 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 40.0psf 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=185, 6=185.



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



**REACTIONS.** All bearings 13-5-8.

(lb) - Max Horz 1=-153(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-165(LC 12), 6=-165(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=451(LC 19), 8=398(LC 19), 6=397(LC 20)

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

WEBS 2-8=-362/291, 4-6=-362/291

## NOTES-

2) Wind: ASCE 7-10; Vult=130mph 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 6-8-12, Exterior(2) 6-8-12 to 11-1-9, Interior(1) 11-1-9 to 13-1-4 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 40.0psf 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=165, 6=165.



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



Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-162(LC 12), 6=-162(LC 13) Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=341(LC 19), 6=340(LC 20)

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

WEBS 2-8=-363/306, 4-6=-363/306

## NOTES-

2) Wind: ASCE 7-10; Vult=130mph 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 5-8-12, Exterior(2) 5-8-12 to 10-1-9, Interior(1) 10-1-9 to 11-1-4 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 40.0psf 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=162, 6=162.



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



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 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 40.0psf 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=165(LC 1), 3=164(LC 1), 4=211(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 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 40.0psf 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 Horz 1=-57(LC 8) Max Uplift 1=-21(LC 13), 3=-21(LC 13)

Max Grav 1=116(LC 1), 3=116(LC 1), 4=149(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 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 40.0psf 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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**REACTIONS.** (size) 1=3-5-8, 3=3-5-8, 4=3-5-8

Max Horz 1=-33(LC 8)

Max Uplift 1=-12(LC 13), 3=-12(LC 13)

Max Grav 1=67(LC 1), 3=67(LC 1), 4=86(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 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 40.0psf 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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REACTIONS. (size) 1=11-8-9, 3=11-8-9, 4=11-8-9 Max Horz 1=-20(LC 13) Max Uplift 1=-24(LC 8), 3=-26(LC 13), 4=-14(LC 8)

Max Grav 1=175(LC 23), 3=175(LC 24), 4=453(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 2-4=-309/208

## NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-10-13 to 5-3-9, Interior(1) 5-3-9 to 5-10-5, Exterior(2) 5-10-5 to 10-3-1, Interior(1) 10-3-1 to 10-9-12 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 40.0psf 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, 4.



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3x4 ||

	<u>8-4-5</u> 8-4-5										
Plate Offsets (X,Y) [2:0-3-5,Edge]											
LOADING (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL. ii	n (loc) l/defl L/d	PLATES	GRIP					
CLL 20.0	Plate Grip DOL 1.15	TC 0.49	Vert(LL) -0.06	6 2-6 >999 360	MT20	244/190					
CDL 10.0	Lumber DOL 1.15	BC 0.32	Vert(CT) -0.12	2 2-6 >789 240							
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) 0.07	7 2-6 >999 240	Weight: 45 lb	FT = 20%					
UMBER-			BRACING-								
OP CHORD 2x6 SP	9 No.1		TOP CHORD	Structural wood sheathing of	directly applied or 6-0-0	oc purlins,					
OT CHORD 2Y6 SP	9 No.1		except end verticals.	, ,,	,						

REACTIONS. (size) 6=Mechanical, 2=0-4-9 Max Horz 2=74(LC 4) Max Uplift 6=-157(LC 4), 2=-173(LC 4) Max Grav 6=358(LC 1), 2=409(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 3-6=-262/115

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=157, 2=173.
- 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 17 lb down and 21 lb up at 2-9-8, 17 lb down and 21 lb up at 2-9-8, and 41 lb down and 56 lb up at 5-7-7, and 41 lb down and 56 lb up at 5-7-7 on top chord, and 2 lb down and 21 lb up at 2-9-8, 2 lb down and 21 lb up at 2-9-8, and 20 lb down and 41 lb up at 5-7-7, and 20 lb down and 41 lb up at 5-7-7 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: 1-3=-60, 3-4=-20, 2-5=-20 Concentrated Loads (lb) Vert: 8=-36(F=-18, B=-18) 10=-17(F=-9, B=-9)





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	3-10-15										
LOADING (psf) TCLL 20.0 Plate Grip D TCDL 10.0 Lumber DOL BCLL 0.0 * Rep Stress 1 PCDL 10.0 Code JRC20	2-0-0 OL 1.15 - 1.15 ncr YES	CSI. TC 0.16 BC 0.12 WB 0.00 Motiv D	DEFL. Vert(LL) Vert(CT) Horz(CT)	in ( -0.01 -0.02 -0.00	(loc) 2-4 2-4 3	l/defl >999 >999 n/a	L/d 360 240 n/a	PLATES MT20	<b>GRIP</b> 244/190		

BRACING-

TOP CHORD

BOT CHORD

# LUMBER-

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=53(LC 8)

Max Uplift 3=-46(LC 12), 2=-89(LC 8), 4=-19(LC 8)

Max Grav 3=103(LC 1), 2=218(LC 1), 4=74(LC 3)

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

# NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; 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 3-10-3 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- 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 3-10-15 oc purlins.

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

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		1-10-15									
LOADING	i (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP							
TCLL	20.0	Plate Grip DOL 1.15	TC 0.04	Vert(LL) -0.00 2 >999 360 MT20 244/190							
TCDL	10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00 2-4 >999 240							
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00 3 n/a n/a							
BCDL	10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.00 2-4 >999 240 Weight: 7 lb FT = 20%							

# LUMBER-

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=31(LC 8)

Max Uplift 3=-22(LC 12), 2=-63(LC 8), 4=-10(LC 8)

Max Grav 3=43(LC 1), 2=142(LC 1), 4=37(LC 3)

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

## NOTES-

- Wind: ASCE 7-10; Vult=130mph 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 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 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 1-10-15 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.



			6-0-0				1	
Plate Offsets (X,Y)	[4:Edge,0-2-0]						-	
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	n (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.45	Vert(LL) -0.0	6 2-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.31	Vert(CT) -0.1	1 2-4	>615	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.0	0 4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.1	2 2-4	>554	240	Weight: 22 lb	FT = 20%
LUMBER-	2 No 1		BRACING-	Structu	ural wood	sheathing di	irectly applied or 6-0-0	

 TOP CHORD
 2x4 SP No.1
 TOP CHORD
 Structural wood sheathing directly applied or 6-0-0 oc purl except end verticals.

 BOT CHORD
 2x4 SP No.1
 BOT CHORD
 BOT CHORD
 Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=0-1-8 Max Horz 2=74(LC 8) Max Uplift 2=-115(LC 8), 4=-98(LC 8) Max Grav 2=295(LC 1), 4=221(LC 1)

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

### NOTES-

- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; 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 5-9-15 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 40.0psf 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) 4 except (jt=lb) 2=115.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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Plate Offset	ts (X,Y)	[4:Edge,0-2-0]									-	
	(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	0.57	Vert(LL)	-0.06	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.11	2-4	>615	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TI	PI2014	Matrix	(-P	Wind(LL)	0.18	2-4	>371	240	Weight: 25 lb	FT = 20%
LUMBER-						BRACING-					·	
TOP CHORD 2x4 SP No.1					TOP CHOR	D	Structural wood sheathing directly applied or 6-0-0 oc purlins,					

BOT CHORD

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

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

REACTIONS. (size) 2=0-3-8, 4=0-1-8 Max Horz 2=106(LC 8) Max Uplift 2=-166(LC 8), 4=-142(LC 8)

Max Grav 2=295(LC 1), 4=221(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 3-4=-164/287

## NOTES-

- Wind: ASCE 7-10; Vult=130mph 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) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 5-9-15 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 40.0psf 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) except (jt=lb) 2=166, 4=142.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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