

RE: J0521-2890  
Weaver / 4 Barbecue Church Rd / Harnett

Trenco  
818 Soundside Rd  
Edenton, NC 27932

**Site Information:**

Customer: Project Name: J0521-2890  
Lot/Block: Model:  
Address: Subdivision:  
City: State:

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

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

This package includes 9 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	E15350574	A1	5/14/2021
2	E15350575	A1GE	5/14/2021
3	E15350576	A2	5/14/2021
4	E15350577	B1	5/14/2021
5	E15350578	B1GE	5/14/2021
6	E15350579	M1	5/14/2021
7	E15350580	M1GE	5/14/2021
8	E15350581	P1	5/14/2021
9	E15350582	P1GE	5/14/2021

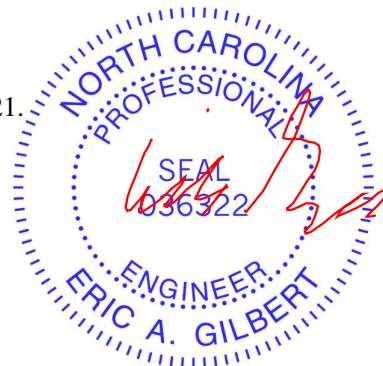
The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

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.



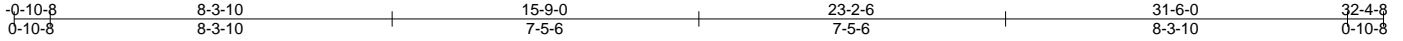
May 14, 2021

Job	Truss	Truss Type	Qty	Ply	Weaver / 4 Barbecue Church Rd / Harnett	E15350574
J0521-2890	A1	FINK	9	1	Job Reference (optional)	

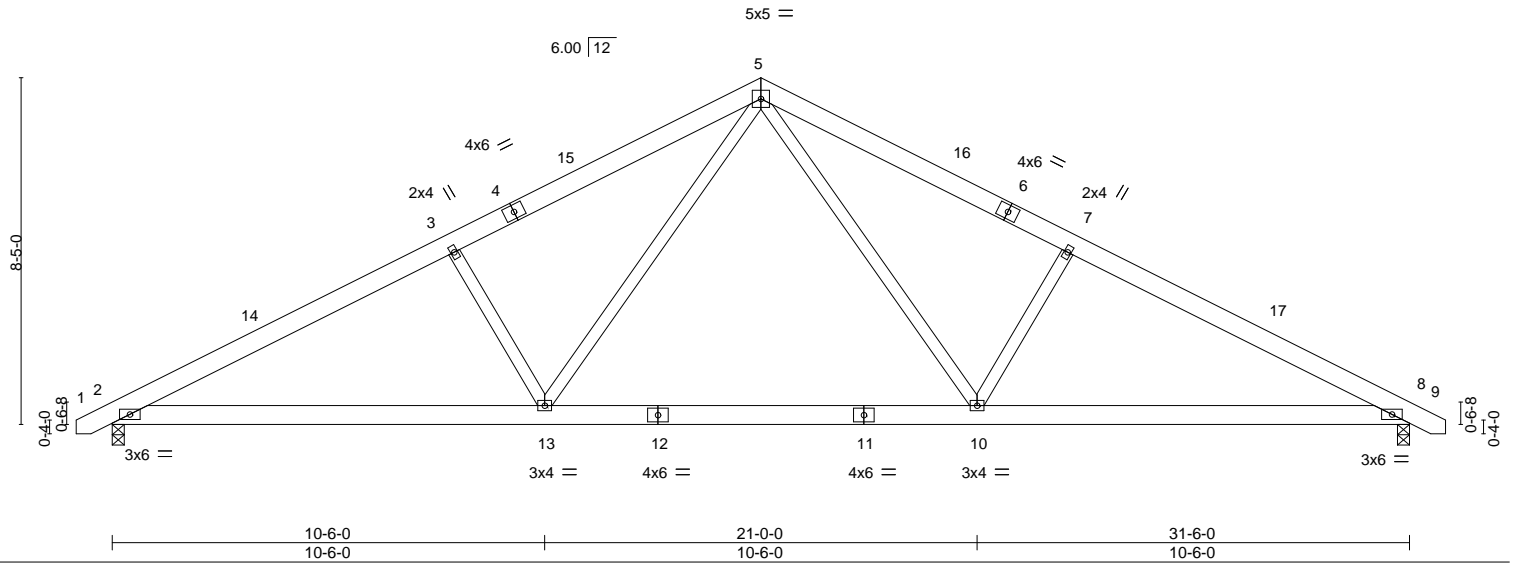
Comtech, Inc, Fayetteville, NC - 28314,

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ID:lwPOH6hK8Jep6t6SXqQOJcyzm6C-2LkM9pSPTIF\_\_AtvZeZmV6Ld6s0WKJYdZcJhRdzrR2B



Scale = 1:55.9



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.28	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.48	Vert(LL) -0.20 10-13 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.23	Vert(CT) -0.29 10-13 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.05 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.05 2-13 >999 240	Weight: 201 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-11-8 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
Max Horz 2=107(LC 11)  
Max Uplift 2=-87(LC 12), 8=-87(LC 13)  
Max Grav 2=1299(LC 1), 8=1299(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2188/486, 3-5=-1990/517, 5-7=-1990/517, 7-8=-2188/486  
BOT CHORD 2-13=-311/1914, 10-13=-102/1258, 8-10=-320/1873  
WEBS 3-13=-466/285, 5-13=-144/843, 5-10=-144/843, 7-10=-466/285

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=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 15-9-0, Exterior(2) 15-9-0 to 20-1-13, Interior(1) 20-1-13 to 32-2-6 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.



Job	Truss	Truss Type	Qty	Ply	Weaver / 4 Barbecue Church Rd / Harnett	E15350575
J0521-2890	A1GE	GABLE	2	1	Job Reference (optional)	

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ID:lwPOH6hK8Jeptt6SXqQJcyzm6C-?kr6aVUf?MViDT0Hh3bEaXR1CfpBoEKw0wooVWzrR29

-0-10-8 15-9-0 31-6-0 32-4-8  
 0-10-8 15-9-0 15-9-0 0-10-8

5x5 =

Scale = 1:55.6

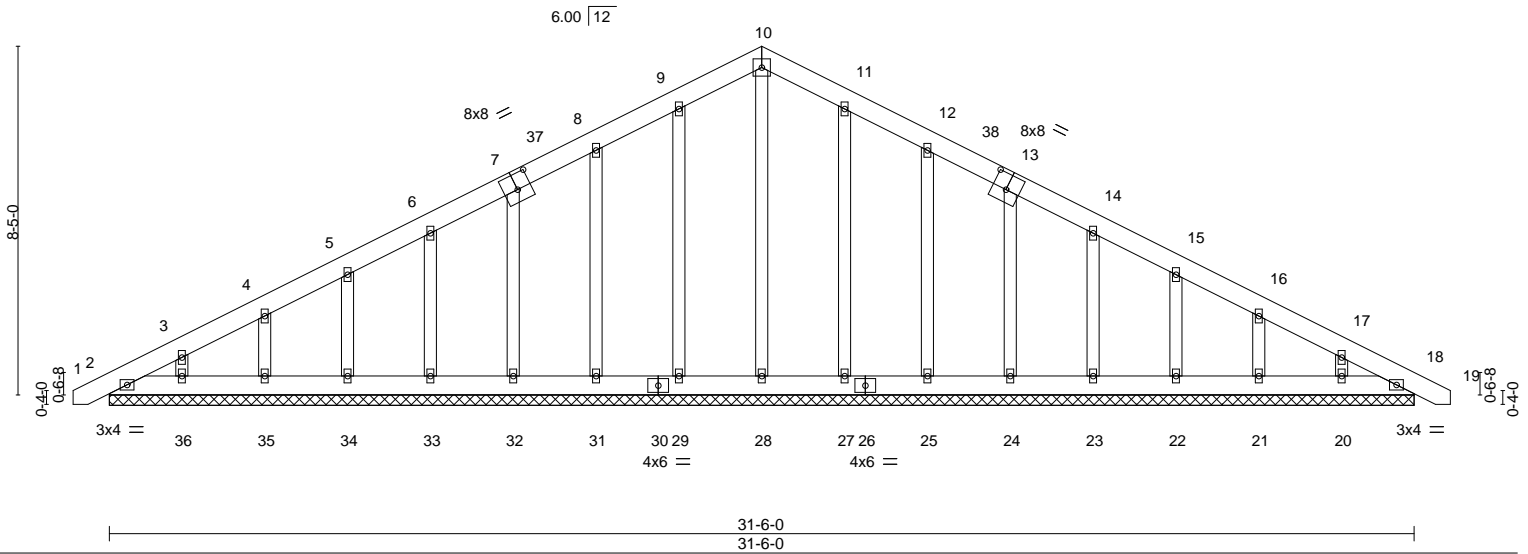


Plate Offsets (X,Y)-- [7:0-4-0,0-4-8], [13:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.05	Vert(LL) 0.00	18	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) 0.00	18	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.00	18	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 246 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 31-6-0.  
 (lb) - Max Horz 2=166(LC 16)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 29, 31, 32, 33, 34, 35, 36, 27, 25, 24, 23, 22, 21, 20  
 Max Grav All reactions 250 lb or less at joint(s) 2, 18, 28, 29, 31, 32, 33, 34, 35, 36, 27, 25, 24, 23, 22, 21, 20

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 8-9=-94/277, 9-10=-110/321, 10-11=-110/323, 11-12=-94/280

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-8-6 to 3-9-0, Exterior(2) 3-9-0 to 15-9-0, Corner(3) 15-9-0 to 20-1-13, Exterior(2) 20-1-13 to 32-2-6 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 18, 29, 31, 32, 33, 34, 35, 36, 27, 25, 24, 23, 22, 21, 20.



January 27, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



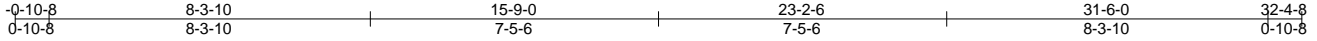
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver / 4 Barbecue Church Rd / Harnett	E15350576
J0521-2890	A2	ROOF SPECIAL	4	1	Job Reference (optional)	

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ID:lwPOH6hK8JepT6SXqQOJcym6C-TwPVorUHGdZrdbUEEn6T7kz9x300Xfv4FaYM2xR28



Scale = 1:59.5

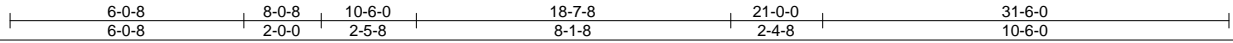
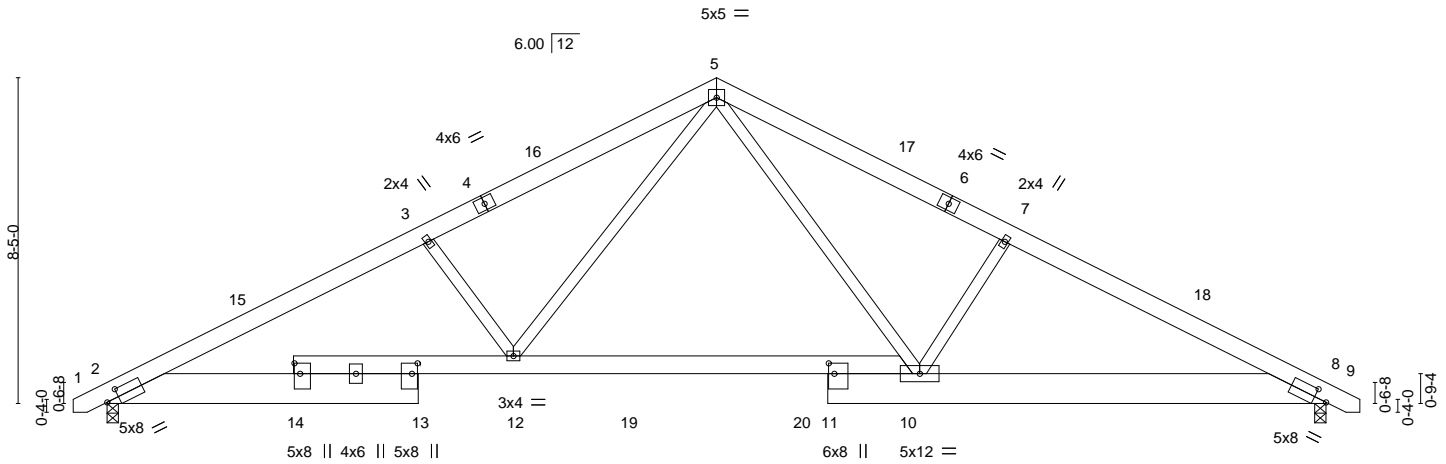


Plate Offsets (X,Y)-- [2:0-3-15,0-2-10], [8:0-3-15,0-2-10], [11:0-3-4,0-1-12], [13:0-3-4,0-1-12], [14:0-3-4,0-1-12]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.24	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.62	Vert(LL) -0.17 10-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.25	Vert(CT) -0.28 10-12 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.06 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.06 10-12 >999 240	Weight: 244 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x10 SP No.1 \*Except\*  
10-14: 2x6 SP No.1  
WEBS 2x4 SP No.2

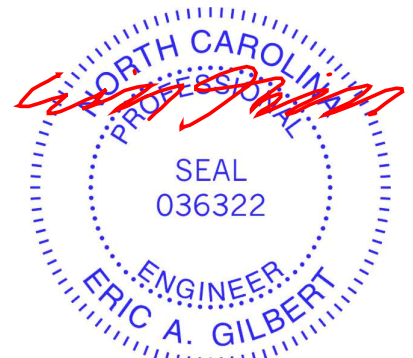
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-8-15 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
Max Horz 2=107(LC 11)  
Max Uplift 2=-88(LC 12), 8=-88(LC 13)  
Max Grav 2=1299(LC 1), 8=1299(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2535/552, 3-5=-2263/555, 5-7=-2167/507, 7-8=-2403/507  
BOT CHORD 2-12=-363/2197, 10-12=-123/1378, 8-10=-344/2077  
WEBS 5-12=-183/1008, 5-10=-120/928, 7-10=-468/286, 3-12=-460/283

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=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 15-9-0, Exterior(2) 15-9-0 to 20-1-13, Interior(1) 20-1-13 to 32-2-6 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.



January 27, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

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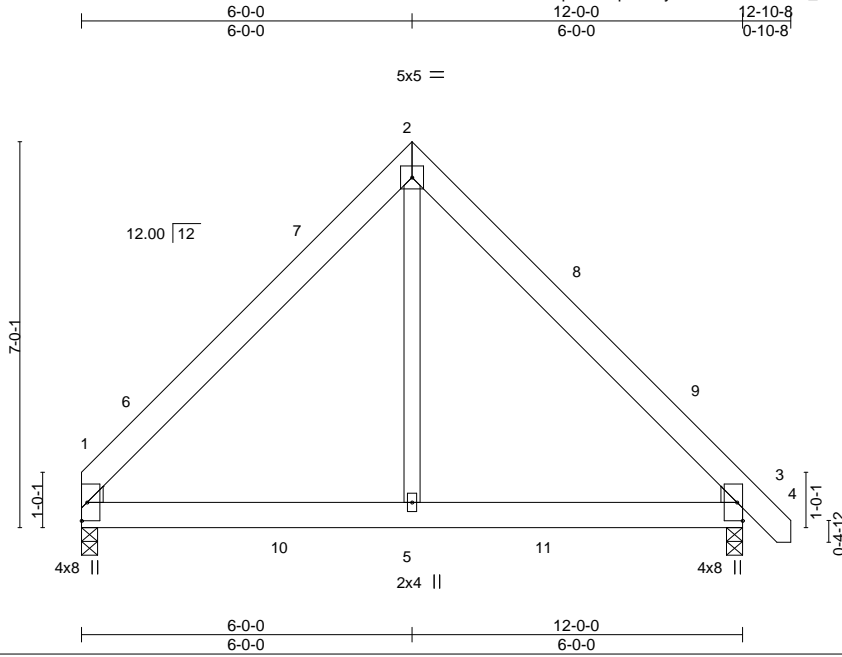
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver / 4 Barbecue Church Rd / Harnett	E15350577
J0521-2890	B1	COMMON	3	1	Job Reference (optional)	

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ID:lwPOH6hK8Jep6SXqQOJcyzm6C-x6zt?BVVW\_IQTnAgoUeifyWLbTTTg8dDUEHvaOzrR27



Scale = 1:41.8

Plate Offsets (X,Y)-- [1:0-1-3,0-3-9], [1:0-0-10,0-0-10], [3:0-0-10,0-0-10], [3:0-1-3,0-3-9]

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 0.18	Vert(LL)	-0.01	3-5	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	-0.02	3-5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.01	3-5	>999	Weight: 82 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 WEDGE  
 Left: 2x4 SP No.2 , Right: 2x4 SP No.2

**BRACING-**

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

**REACTIONS.**

(size) 3=0-3-8, 1=0-3-8  
 Max Horz 1=-159(LC 10)  
 Max Uplift 3=-24(LC 13), 1=-18(LC 13)  
 Max Grav 3=576(LC 20), 1=533(LC 20)

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

TOP CHORD 1-2=-582/149, 2-3=-605/153  
 BOT CHORD 1-5=-1/368, 3-5=-1/368  
 WEBS 2-5=0/407

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 6-0-0, Exterior(2) 6-0-0 to 10-4-13, Interior(1) 10-4-13 to 12-9-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 1.



January 27, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



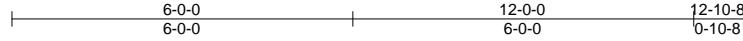
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver / 4 Barbecue Church Rd / Harnett	E15350578
J0521-2890	B1GE	GABLE	1	1	Job Reference (optional)	

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ID:lwPOH6hK8Jeptt6SXqQJcyzm6C-x6zt?BVvW\_IQTnAgoUeifyWMATTdG7sDUEHvaOzrR27



5x5 =

Scale = 1:40.6

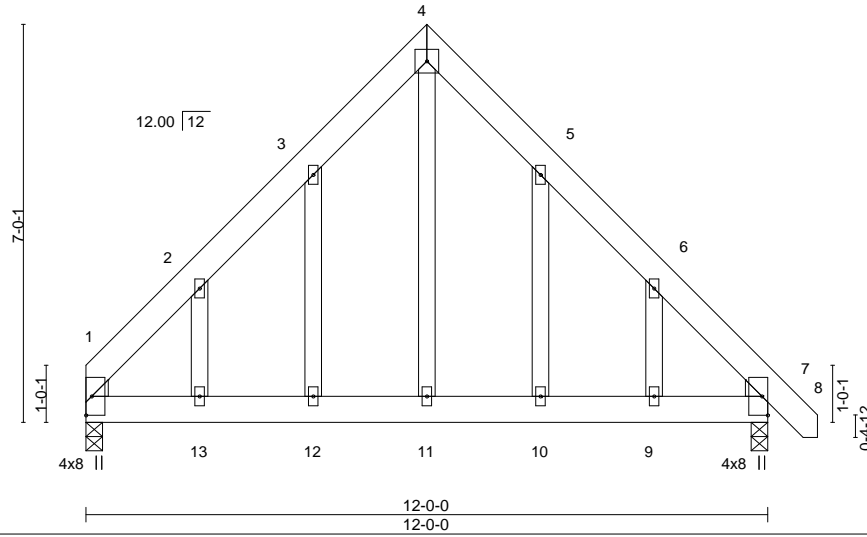


Plate Offsets (X,Y)-- [1:0-1-3,0-3-9], [1:0-0-10,0-0-10], [7:0-0-10,0-0-10], [7:0-1-3,0-3-9]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.08	Vert(LL) 0.03	12-13	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.15	Vert(CT) -0.03	12-13	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 100 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.2  
 WEDGE  
 Left: 2x4 SP No.2 , Right: 2x4 SP No.2

**BRACING-**

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

**REACTIONS.**

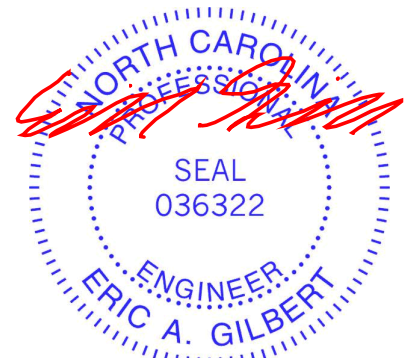
(size) 7=0-3-8, 1=0-3-8  
 Max Horz 1=199(LC 10)  
 Max Uplift 7=94(LC 13), 1=80(LC 13)  
 Max Grav 7=524(LC 1), 1=466(LC 1)

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

TOP CHORD 1-2=-485/84, 2-3=-402/158, 3-4=-445/253, 4-5=-444/254, 5-6=-402/158, 6-7=-487/88  
 BOT CHORD 1-13=-26/296, 12-13=-25/296, 11-12=-25/295, 10-11=-25/295, 9-10=-25/295,  
 7-9=-25/295  
 WEBS 4-11=-212/388

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-1-12 to 4-6-9, Exterior(2) 4-6-9 to 6-0-0, Corner(3) 6-0-0 to 10-4-13, Exterior(2) 10-4-13 to 12-9-0 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 1.



January 27, 2021

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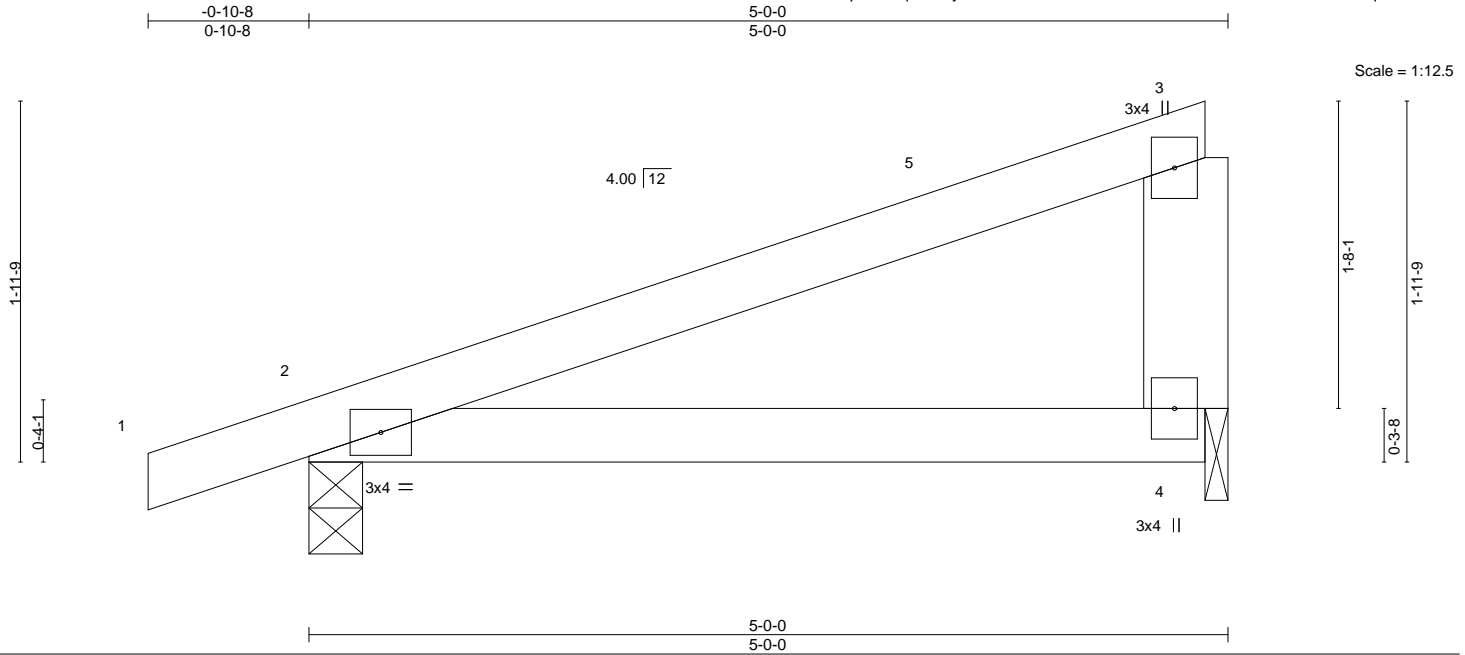
818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Weaver / 4 Barbecue Church Rd / Harnett	E15350579
J0521-2890	M1	MONOPITCH	7	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Jan 26 16:17:27 2021 Page 1  
 ID:lwPOH6hK8Jeptt6SXqQJcym6C-PJXFCXWYHHtH4xIsMB9xC93Uvtn5?cMiu1S7qzrR26



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.27	Vert(LL)	-0.02	2-4	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.19	Vert(CT)	-0.05	2-4	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Wind(LL)	0.05	2-4	>999		
	Code IRC2015/TPI2014						Weight: 20 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.  
 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=65(LC 8)  
 Max Uplift 2=103(LC 8), 4=-76(LC 8)  
 Max Grav 2=253(LC 1), 4=178(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 (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) -0-10-8 to 3-6-5, Interior(1) 3-6-5 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) 4 except (jt=lb) 2=103.



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Job	Truss	Truss Type	Qty	Ply	Weaver / 4 Barbecue Church Rd / Harnett	E15350580
J0521-2890	M1GE	GABLE	1	1	Job Reference (optional)	

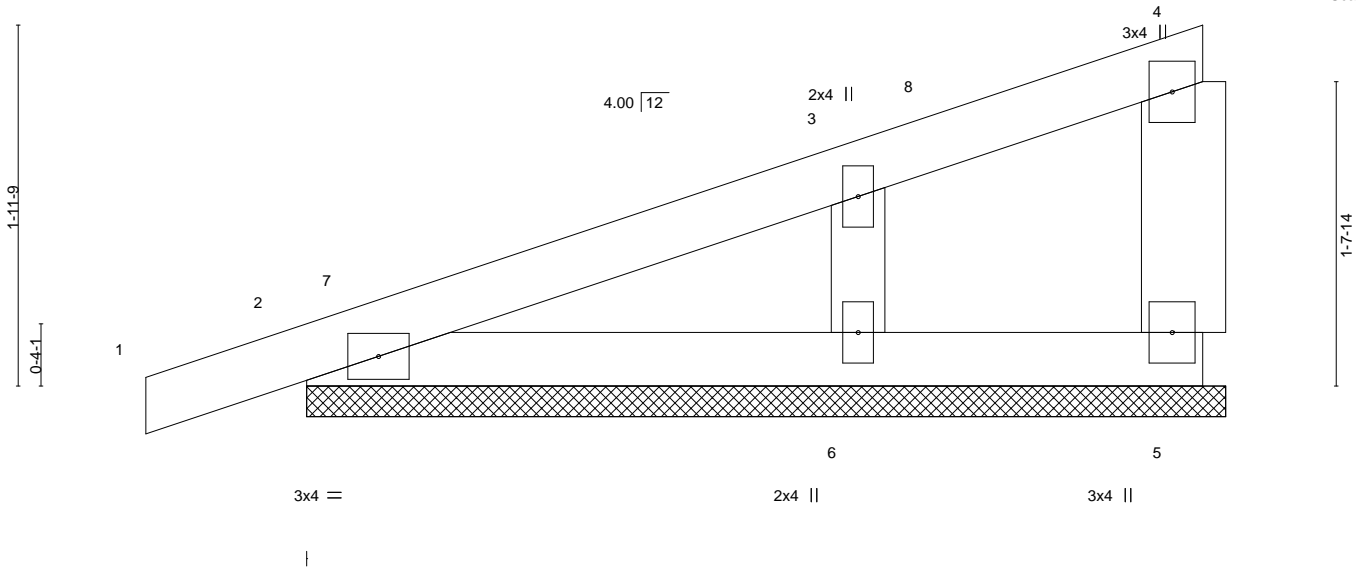
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8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Jan 26 16:17:27 2021 Page 1

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Scale = 1:12.5



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 21 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 5=5-0-0, 2=5-0-0, 6=5-0-0  
 Max Horz 2=92(LC 8)  
 Max Uplift 5=-15(LC 8), 2=-62(LC 8), 6=-82(LC 12)  
 Max Grav 5=37(LC 1), 2=160(LC 1), 6=237(LC 1)

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

WEBS 3-6=-174/313

**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) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 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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**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Weaver / 4 Barbecue Church Rd / Harnett	E15350581
J0521-2890	P1	COMMON	5	1	Job Reference (optional)	

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ID:lwPOH6hK8Jep6t6SXqQOJcyzm6C-tV5dQsXA2b08i5K3wvqAKNbg9H7Gk3kWxYm0fGzrR25



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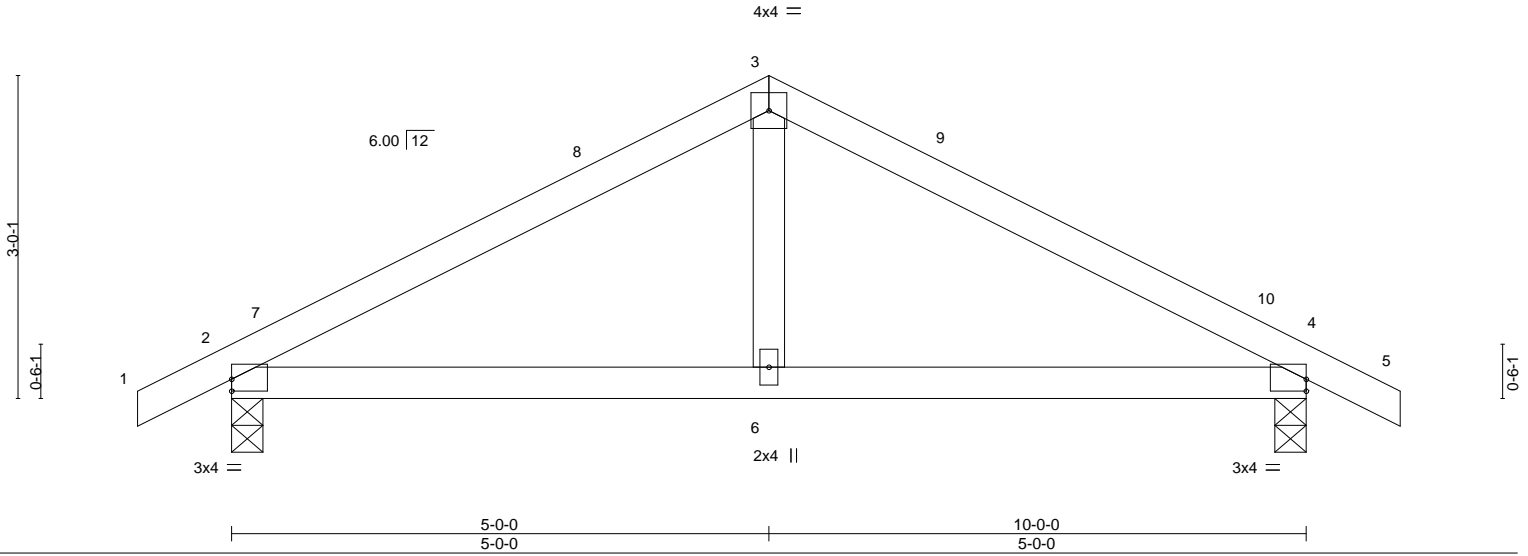


Plate Offsets (X,Y)-- [2:0-0-0,0-1-5], [4:0-0-0,0-1-5]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.24	Vert(LL) 0.04	2-6	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.20	Vert(CT) -0.03	4-6	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 38 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 9-8-3 oc bracing.

**REACTIONS.**

(size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=38(LC 11)  
 Max Uplift 2=-89(LC 9), 4=-89(LC 8)  
 Max Grav 2=450(LC 1), 4=450(LC 1)

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

TOP CHORD 2-3=-518/572, 3-4=-518/572  
 BOT CHORD 2-6=-392/392, 4-6=-392/392  
 WEBS 3-6=-311/234

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=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 5-0-0, Exterior(2) 5-0-0 to 9-4-13, Interior(1) 9-4-13 to 10-10-8 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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.
- 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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818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	Weaver / 4 Barbecue Church Rd / Harnett	E15350582
J0521-2890	P1GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

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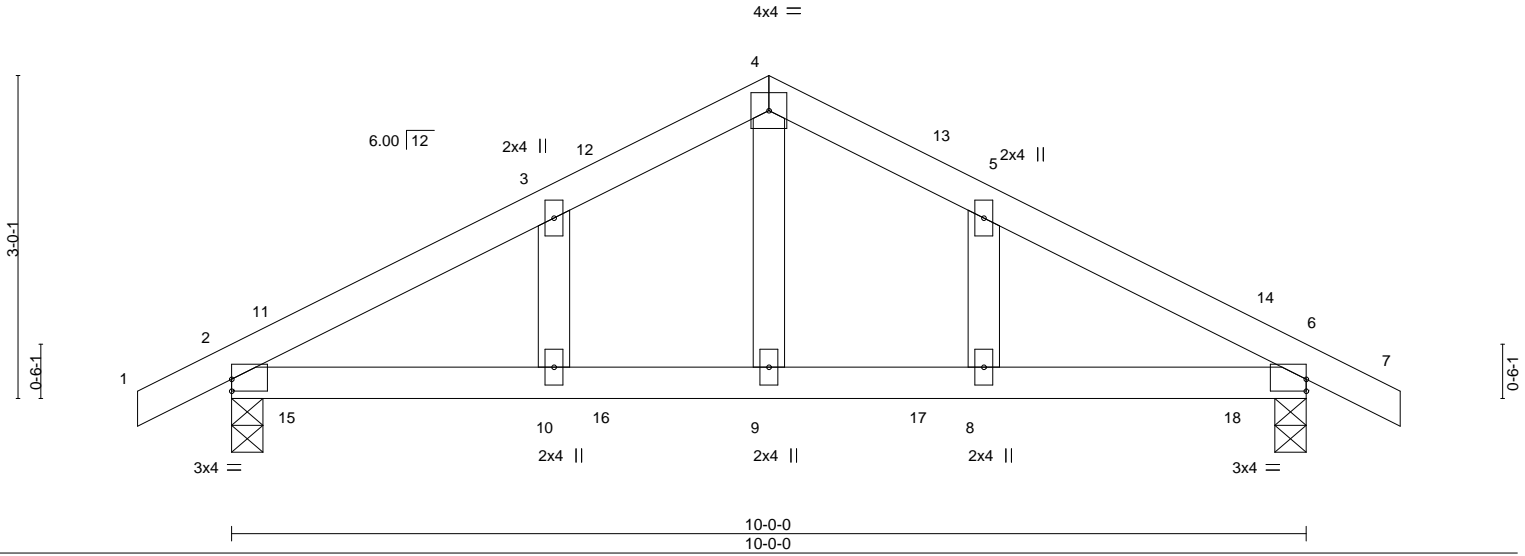


Plate Offsets (X,Y)-- [2:0-0-0,0-1-5], [6:0-0-0,0-1-5]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.24	Vert(LL) -0.02	10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.27	Vert(CT) -0.03	2-10	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) -0.01	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	2-10	>999	240	Weight: 43 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 8-1-12 oc bracing.

**REACTIONS.**

(size) 2=0-3-8, 6=0-3-8  
 Max Horz 2=59(LC 12)  
 Max Uplift 2=-117(LC 9), 6=-117(LC 8)  
 Max Grav 2=450(LC 1), 6=450(LC 1)

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

TOP CHORD 2-3=-514/746, 3-4=-448/794, 4-5=-448/794, 5-6=-514/746  
 BOT CHORD 2-10=-515/397, 9-10=-515/397, 8-9=-515/397, 6-8=-515/397  
 WEBS 4-9=-435/200

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=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 5-0-0, Corner(3) 5-0-0 to 9-4-13, Exterior(2) 9-4-13 to 10-10-8 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.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=117, 6=117.



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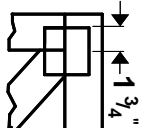
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



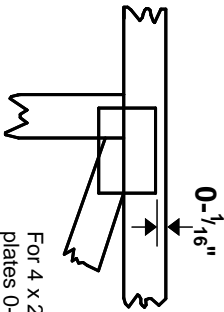
818 Soundside Road  
 Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

\* Plate location details available in **MITek 20/20 software or upon request.**

## PLATE SIZE

**4 X 4**

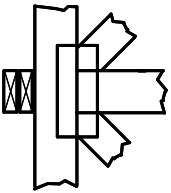
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

## BEARING



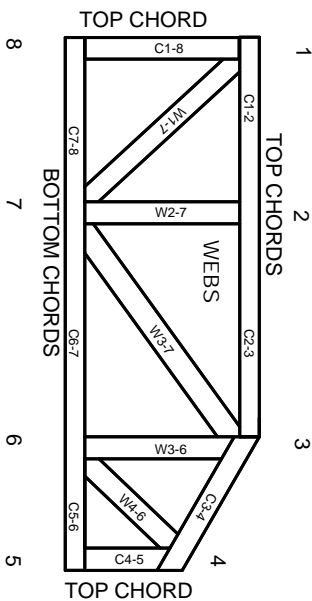
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

ANSI/TFP 1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

6-4-8  
dimensions shown in ft-in-sixteenths  
(Drawings not to scale)



**JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.**

**CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.**

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988  
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TFP 1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: Mill-7473 rev. 5/19/2020



# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TFP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TFP 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TFP 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.