



# ROOF & FLOOR TRUSSES & BEAMS

Reilly Road Industrial Park  
 Fayetteville, N.C. 28309  
 Phone: (910) 864-8787  
 Fax: (910) 864-4444

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables ( derived from the prescriptive Code requirements ) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

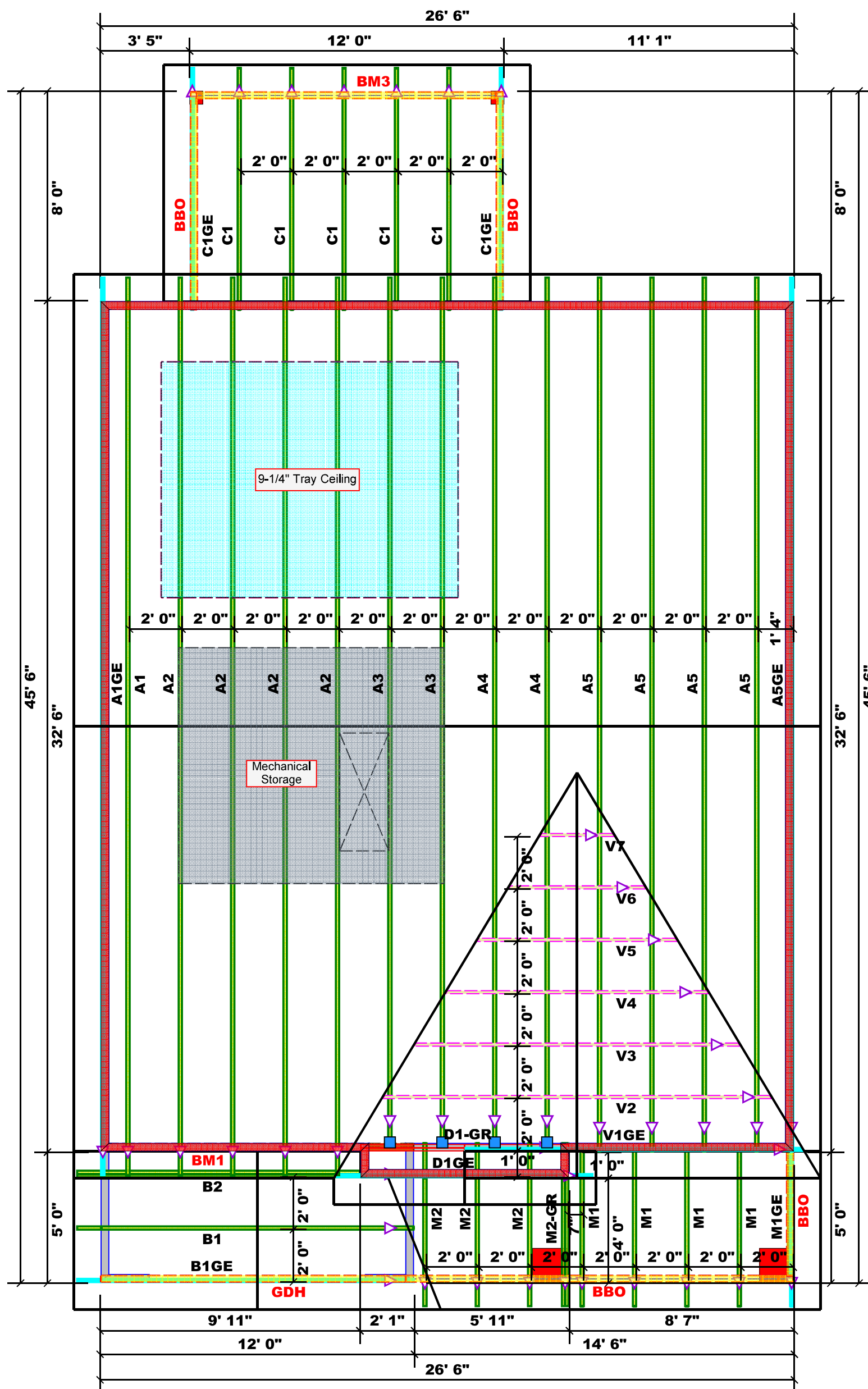
Signature David Landry

David Landry

### LOAD CHART FOR JACK STUDS

(BASED ON TABLES R522.5(1) & (2))  
 NUMBER OF JACK STUDS REQUIRED @ EACH END OF HEADERS/BEAM

FIN. REACTION (LIFT TO) REQ. STUDS FOR (2) END HEADERS	FIN. REACTION (LIFT TO) REQ. STUDS FOR (2) END BEAMS	FIN. REACTION (LIFT TO) REQ. STUDS FOR (2) END BEAMS
1700 1	2550 1	3400 1
3400 2	5100 2	6800 2
5100 3	7650 3	10200 3
6800 4	10200 4	13600 4
8500 5	12750 5	17000 5
10200 6	15300 6	
11900 7		
13600 8		
15300 9		



**Dimension Notes**  
 1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise  
 2. All interior wall dimensions are to face of frame wall unless noted otherwise  
 3. All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

All Walls Shown Are Considered Load Bearing

Roof Area = 1468.1 sq.ft.  
 Ridge Line = 52.07 ft.  
 Hip Line = 0 ft.  
 Horiz. OH = 98.57 ft.  
 Raked OH = 159.04 ft.  
 Decking = 50 sheets

**Hatch Legend**

[Grey Hatch]	Padded HVAC
[Red Hatch]	2nd Floor Walls
[Light Blue Hatch]	Tray Ceiling
[Yellow Hatch]	Drop Beam

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
[Blue Box]	HUS26	USP	4	NA	16d/3-1/2"	16d/3-1/2"

Products					
PlotID	Length	Product	Plies	Net Qty	
BM1	12' 0"	1-3/4"x 16" LVL Kerto-S	2	2	
BM2	15' 0"	1-3/4"x 16" LVL Kerto-S	2	2	
BM3	12' 0"	2x10 SPF No.2	2	2	
GDH	12' 0"	2x12 SPF No.2	2	2	

1 Truss Placement Plan  
 Scale: 1/4"=1'

BUILDER	CITY / CO.	Sanford / Harnett
WEAVER DEVELOPMENT CO. INC.	ADDRESS	4912 BARBECUE CHURCH RD.
JOB NAME	MODEL	Roof
PLAN	DATE REV.	05/12/21
SEAL DATE	DRAWN BY	David Landry
QUOTE #	SALES REP.	Lenny Norris
JOB #		J0521-2894

**△ = Indicates Left End of Truss**  
**(Reference Engineered Truss Drawing)**  
**Do NOT Erect Truss Backwards**

**THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.**  
 These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCS-B1 and BCS-B3 provided with the truss delivery package or online @ sbcindustry.com



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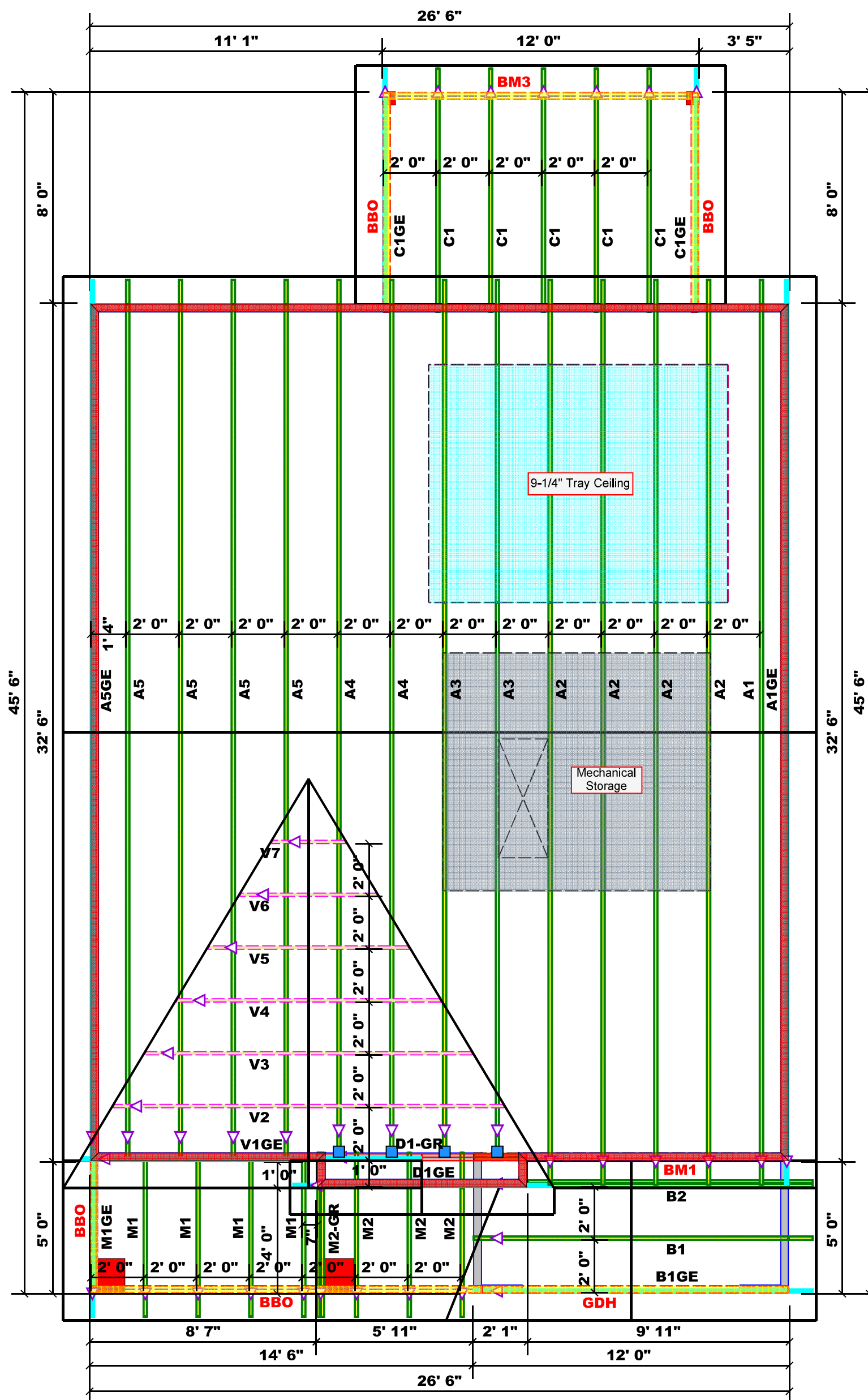
Signature David Landry

David Landry

**LOAD CHART FOR JACK STUDS**

(BASED ON TABLES R522.5(1) & (2))  
 NUMBER OF JACK STUDS REQUIRED @ EACH END OF HEADERS/BEAMER

FIN. REACTION (L.P.F.T.)	REQ. STUDS FOR (L.P.F.T.)	FIN. REACTION (L.P.F.T.)	REQ. STUDS FOR (L.P.F.T.)	FIN. REACTION (L.P.F.T.)	REQ. STUDS FOR (L.P.F.T.)
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				



**Dimension Notes**  
 1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise  
 2. All interior wall dimensions are to face of frame wall unless noted otherwise  
 3. All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

**All Walls Shown Are Considered Load Bearing**

Roof Area = 1468.1 sq.ft.  
 Ridge Line = 52.07 ft.  
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 Horiz. OH = 98.57 ft.  
 Raked OH = 159.04 ft.  
 Decking = 50 sheets

**Hatch Legend**

[Grey Hatch]	Padded HVAC
[Red Hatch]	2nd Floor Walls
[Blue Hatch]	Tray Ceiling
[Yellow Hatch]	Drop Beam

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
[Blue Box]	HUS26	USP	4	NA	16d/3-1/2"	16d/3-1/2"

Products					
PlotID	Length	Product	Plies	Net Qty	
BM1	12' 0"	1-3/4"x 16" LVL Kerto-S	2	2	
BM2	15' 0"	1-3/4"x 16" LVL Kerto-S	2	2	
BM3	12' 0"	2x10 SPF No.2	2	2	
GDH	12' 0"	2x12 SPF No.2	2	2	

1 Truss Placement Plan  
 Scale: 1/4"=1'

BUILDER	CITY / CO.	Sanford / Harnett
WEAVER DEVELOPMENT CO. INC.	ADDRESS	4912 BARBECUE CHURCH RD.
PLAN	MODEL	Roof
SEAL DATE	DATE REV.	05/12/21
QUOTE #	DRAWN BY	David Landry
JOB #	SALES REP.	Lenny Norris

**THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.**  
 These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCS-B1 and BCS-B3 provided with the truss delivery package or online at sbcindustry.com

**△ = Indicates Left End of Truss**  
**( Reference Engineered Truss Drawing )**  
**Do NOT Erect Truss Backwards**



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Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J0521-2894  
Lot 5 Barbecue Church Rd.

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: E15721922 thru E15721946

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

North Carolina COA: C-0844



May 12, 2021

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Gilbert, Eric

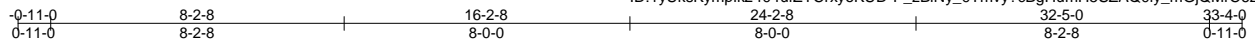
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), 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.

Job J0521-2894	Truss A1	Truss Type COMMON	Qty 1	Ply 1	Lot 5 Barbecue Church Rd. Job Reference (optional)	E15721922
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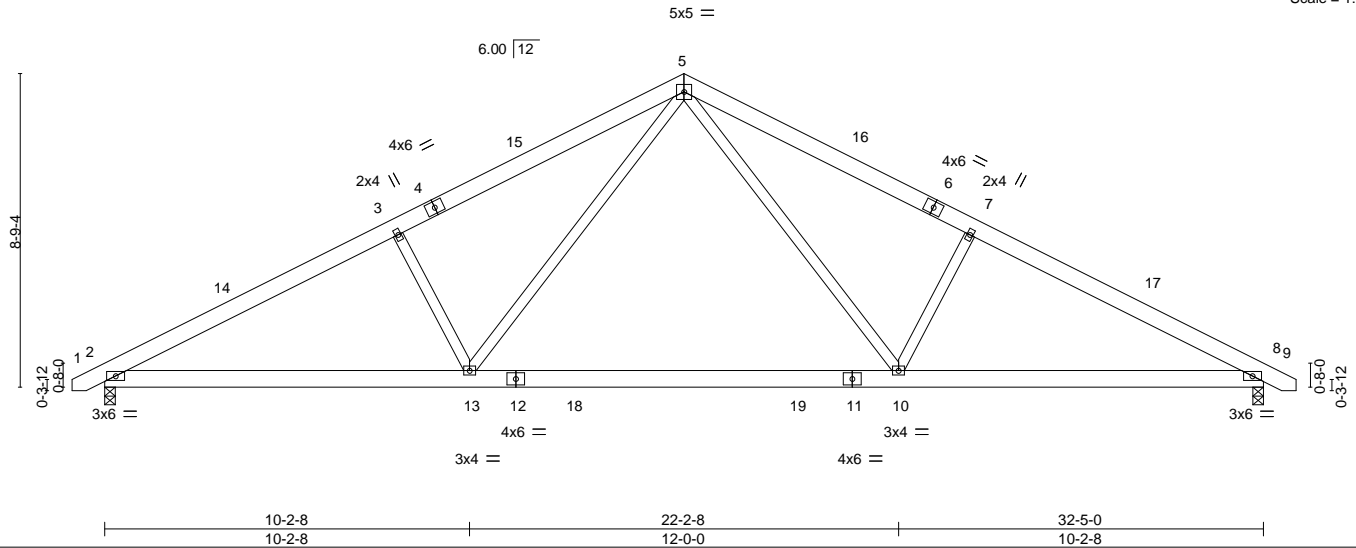
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:16 2021 Page 1

ID:1yUksKypmlk2404ufZYCrxyoKUD-P\_zBiNy\_0Tmvy?cBgHumH5SZAQ0iy\_mGjQMrC6zHF3n



Scale = 1:60.7



<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 0.28	Vert(LL)	-0.34 10-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.64	Vert(CT)	-0.47 10-13	>824	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.27	Horz(CT)	0.05 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.05 2-13	>999	240	Weight: 208 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-11-7 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=-110(LC 10)  
Max Uplift 2=-89(LC 12), 8=-89(LC 13)  
Max Grav 2=1337(LC 1), 8=1337(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2307/486, 3-5=-2125/534, 5-7=-2125/534, 7-8=-2307/486  
BOT CHORD 2-13=-316/2007, 10-13=-106/1303, 8-10=-320/1964  
WEBS 5-10=-147/921, 7-10=-454/288, 5-13=-147/921, 3-13=-454/288

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 16-2-8, Exterior(2) 16-2-8 to 20-7-5, Interior(1) 20-7-5 to 33-1-10 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.
- 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



May 12, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **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 J0521-2894	Truss A1GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 5 Barbecue Church Rd. Job Reference (optional)	E15721923
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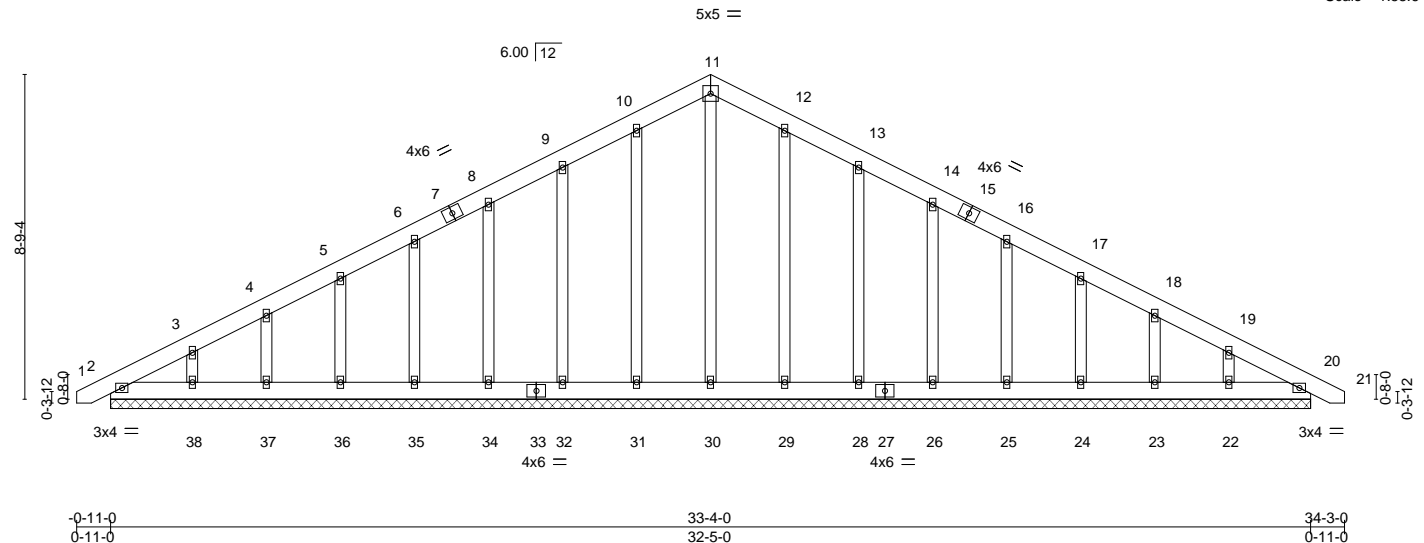
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:19 2021 Page 1

ID:1yUksKymplk2404ufZYCrxyoKUD-qYeJLO\_sJO9UpSLmLPRVj48CdCC9NBjPObVoQzHF3k

-0-11-0 17-1-8 33-4-0 34-3-0  
0-11-0 16-2-8 16-2-8 0-11-0

Scale = 1:58.6



<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 0.04	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(LL) 0.00 20 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.16	Vert(CT) 0.00 20 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 20 n/a n/a		
	Code IRC2015/TPI2014			Weight: 258 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 32-5-0.  
(lb) - Max Horz 2=-171(LC 17)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, 22  
Max Grav All reactions 250 lb or less at joint(s) 2, 30, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, 22, 20

**FORCES.**

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

TOP CHORD 10-11=-114/284, 11-12=-114/284

**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 Exterior(2) 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, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, 22.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



May 12, 2021

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



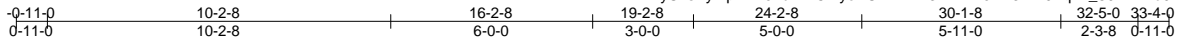
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 Barbecue Church Rd.	E15721924
J0521-2894	A2	ROOF SPECIAL	4	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314.

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ID:1yUksKymplk2404ufZYCrxyoKUD-mxm3m47r0PB3mV9TqTx\_89lfRkYd9F0si4ctJzHF3i



Scale: 3/16"=1'

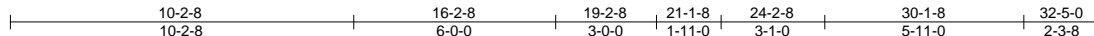
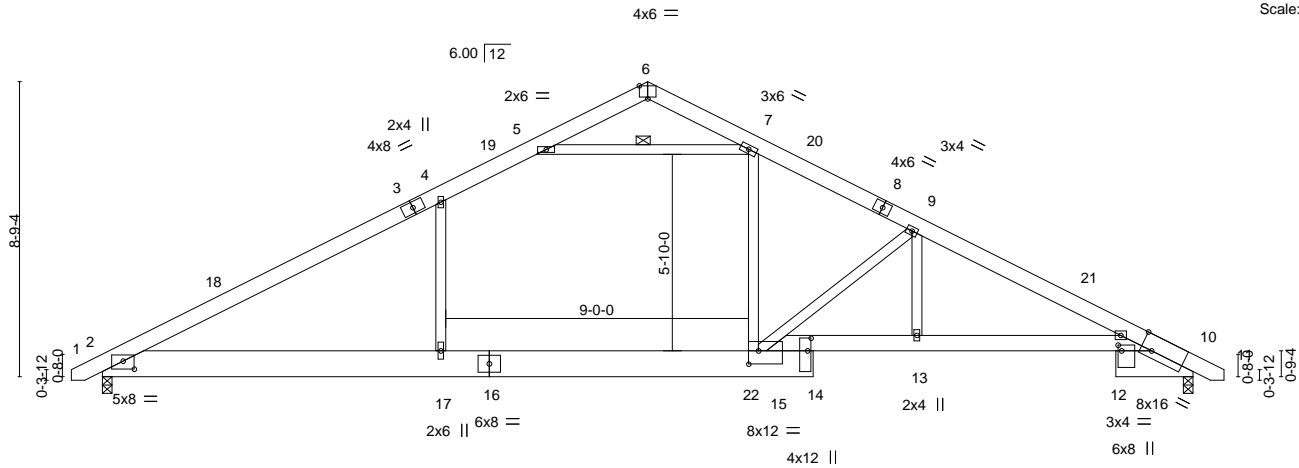


Plate Offsets (X,Y)-- [2:0-4-0,0-2-14], [6:0-3-0,Edge], [10:0-4-0,Edge], [12:0-2-0,0-1-4], [14:0-4-8,0-1-4], [15:0-3-8,0-4-12]

<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 0.75	Vert(LL)	-0.21	17	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.67	Vert(CT)	-0.38	17	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.70	Horz(CT)	0.09	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.17	2-17	>999	Weight: 247 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x10 SP No.1 \*Except\*  
 10-15: 2x6 SP 2400F 2.0E  
 WEBS 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-0-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-7

**REACTIONS.**

(size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=110(LC 10)  
 Max Uplift 2=90(LC 12), 10=90(LC 13)  
 Max Grav 2=1393(LC 2), 10=1353(LC 2)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2217/403, 4-5=-1870/483, 7-9=-2258/519, 9-10=-2889/551  
 BOT CHORD 2-17=-193/1848, 15-17=-195/1860, 13-15=-371/2525, 10-13=-380/2525  
 WEBS 4-17=-29/402, 7-15=-114/967, 9-15=-1075/232, 9-13=0/616, 5-7=-1955/459

**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) 0-8-10 to 3-8-3, Interior(1) 3-8-3 to 16-2-8, Exterior(2) 16-2-8 to 20-7-5, Interior(1) 20-7-5 to 33-1-10 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) 2, 10.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



May 12, 2021

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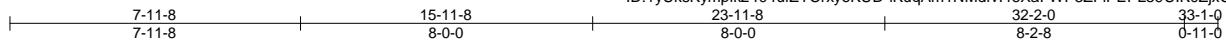
818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 5 Barbecue Church Rd.	E15721926
J0521-2894	A4	COMMON	2	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314.

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:23 2021 Page 1  
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Scale = 1:59.4

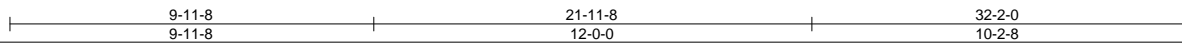
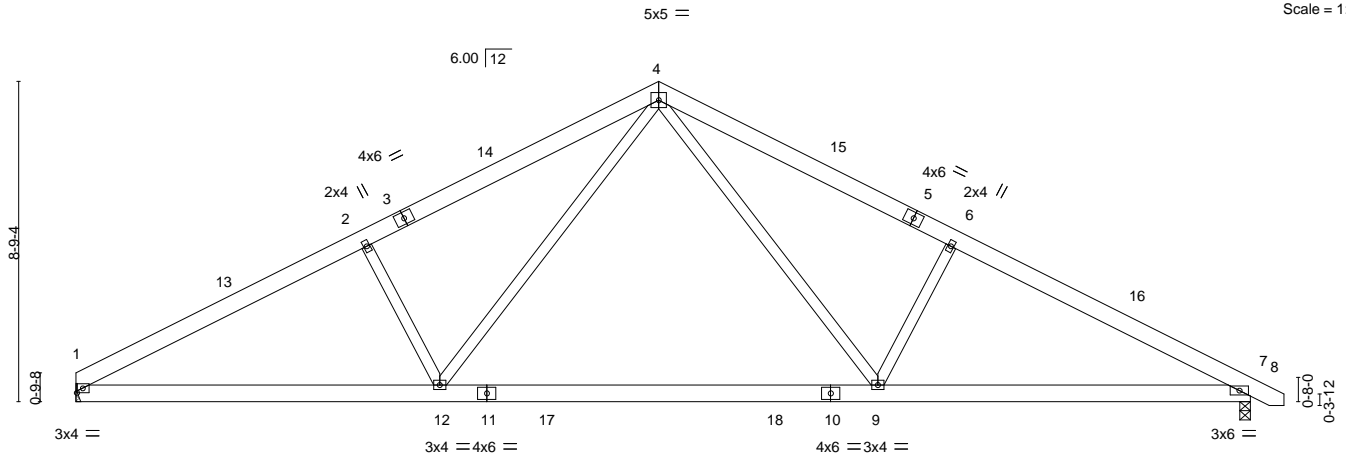


Plate Offsets (X,Y)-- [1:0-1-14,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
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 0.64	Vert(LL) -0.34 9-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.27	Vert(CT) -0.47 9-12 >822 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.05 7 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.05 12 >999 240	Weight: 204 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-11-9 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=Mechanical, 7=0-3-8  
 Max Horz 1=-111(LC 8)  
 Max Uplift 1=-76(LC 12), 7=-89(LC 13)  
 Max Grav 1=1278(LC 1), 7=1331(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-2276/496, 2-4=-2096/546, 4-6=-2113/532, 6-7=-2294/484  
 BOT CHORD 1-12=-319/1973, 9-12=-109/1291, 7-9=-324/1953  
 WEBS 4-9=-147/922, 6-9=-454/288, 4-12=-144/897, 2-12=-437/286

**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) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 15-11-8, Exterior(2) 15-11-8 to 20-4-5, Interior(1) 20-4-5 to 32-10-10 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.
- 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) 1, 7.



May 12, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



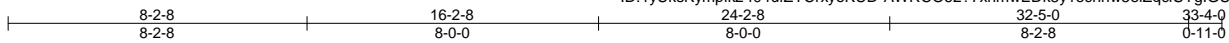
818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 5 Barbecue Church Rd.	E15721927
J0521-2894	A5	COMMON	4	1	Job Reference (optional)	

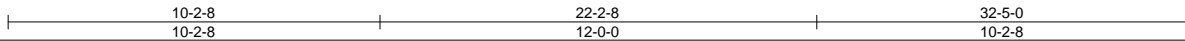
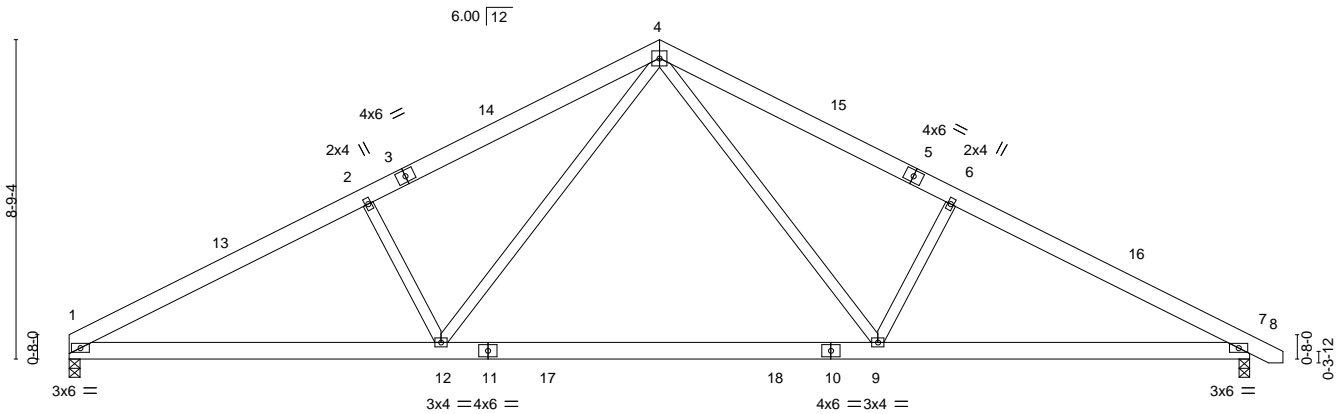
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:24 2021 Page 1



5x5 =

Scale = 1:59.6



<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 0.29	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.65	Vert(LL) -0.34 9-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.27	Vert(CT) -0.47 9-12 >822 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.05 7 n/a n/a		
	Code IRC2015/TP12014		Wind(LL) 0.05 12 >999 240	Weight: 206 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-10-13 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=0-3-8, 7=0-3-8  
 Max Horz 1=111(LC 10)  
 Max Uplift 1=77(LC 12), 7=89(LC 13)  
 Max Grav 1=1284(LC 1), 7=1337(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-2310/503, 2-4=-2129/551, 4-6=-2126/535, 6-7=-2308/487  
 BOT CHORD 1-12=-327/2012, 9-12=-111/1304, 7-9=-326/1966  
 WEBS 4-9=-147/921, 6-9=-454/288, 4-12=-149/924, 2-12=-458/292

**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; BC DL=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 16-2-8, Exterior(2) 16-2-8 to 20-7-5, Interior(1) 20-7-5 to 33-1-10 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 BC DL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.



May 12, 2021

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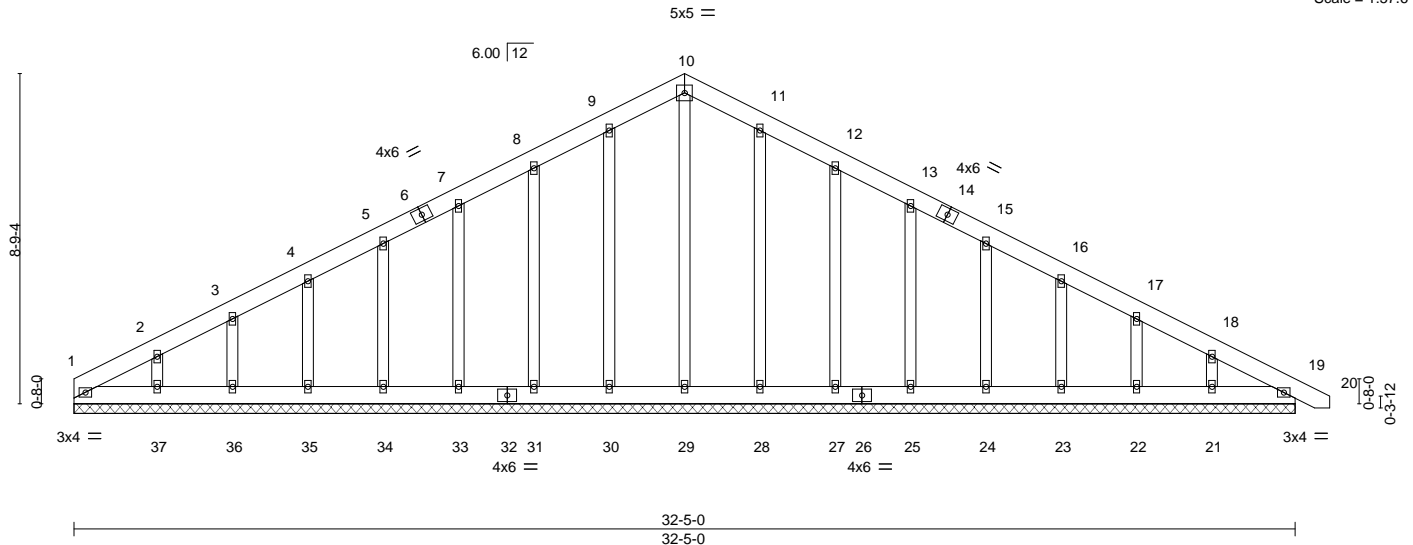
818 Soundside Road  
 Edenton, NC 27932

Job J0521-2894	Truss A5GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 5 Barbecue Church Rd. Job Reference (optional)	E15721928
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Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:26 2021 Page 1  
 ID:1yUksKymplk2404ufZYCrxyoKUD-7vZypn3FFy1U9XN6GN36hBtkRSbrlYwI0\_nNYWzHF3d  
 32-5-0 33-4-0  
 16-2-8 16-2-8 0-11-0

Scale = 1:57.6



<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 0.04	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(LL) 0.00 19 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.16	Vert(CT) 0.00 19 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 19 n/a n/a		
	Code IRC2015/TPI2014			Weight: 256 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 32-5-0.  
 (lb) - Max Horz 1=-175(LC 17)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 30, 31, 33, 34, 35, 36, 28, 27, 25, 24, 23, 22, 21 except 37=-101(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 29, 30, 31, 33, 34, 35, 36, 37, 28, 27, 25, 24, 23, 22, 21, 19

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 9-10=-114/284, 10-11=-114/284

**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 Exterior(2) 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) 1, 30, 31, 33, 34, 35, 36, 28, 27, 25, 24, 23, 22, 21 except (jt=lb) 37=101.



May 12, 2021

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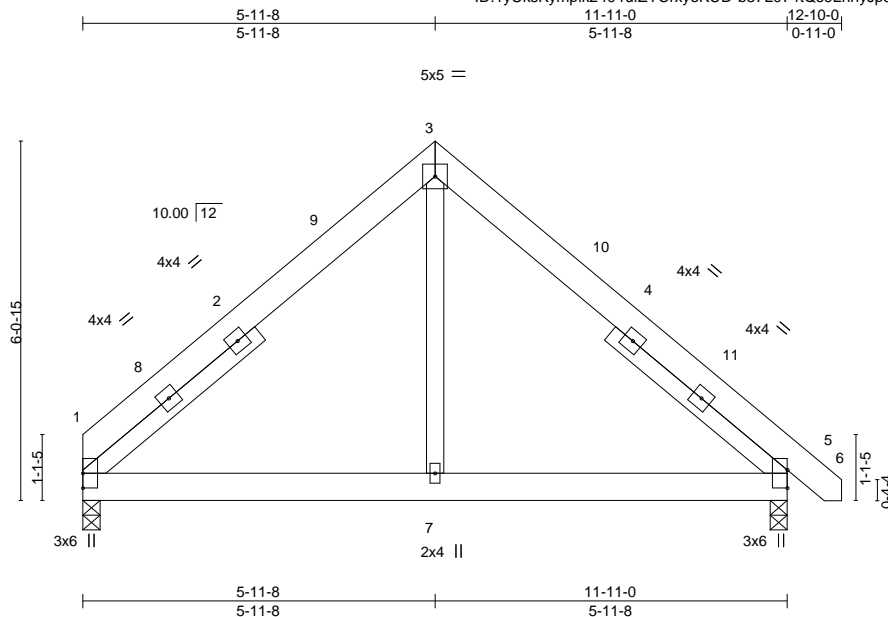


818 Soundside Road  
 Edenton, NC 27932

Job J0521-2894	Truss B1	Truss Type COMMON	Qty 1	Ply 1	Lot 5 Barbecue Church Rd. Job Reference (optional)	E15721929
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Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:27 2021 Page 1  
ID:1yUksKymplk2404ufZYCrxyoKUD-b57L074tQs9LnhYJp5aLEPPThrwR11guFeXw5zzHF3c



Scale = 1:36.7

<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 0.14	Vert(LL) -0.01 1-7 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.12	Vert(CT) -0.02 1-7 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.01 5-7 >999 240	Weight: 87 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 - 3-9-13, Right 2x4 SP No.2 -x 3-9-13

**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) 1=0-3-8, 5=0-3-8  
 Max Horz 1=-134(LC 10)  
 Max Uplift 1=-18(LC 12), 5=-29(LC 13)  
 Max Grav 1=475(LC 1), 5=524(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-491/156, 3-5=-517/155  
 BOT CHORD 1-7=0/307, 5-7=0/307  
 WEBS 3-7=0/277

**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) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 5-11-8, Exterior(2) 5-11-8 to 10-4-5, Interior(1) 10-4-5 to 12-8-4 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.



May 12,2021

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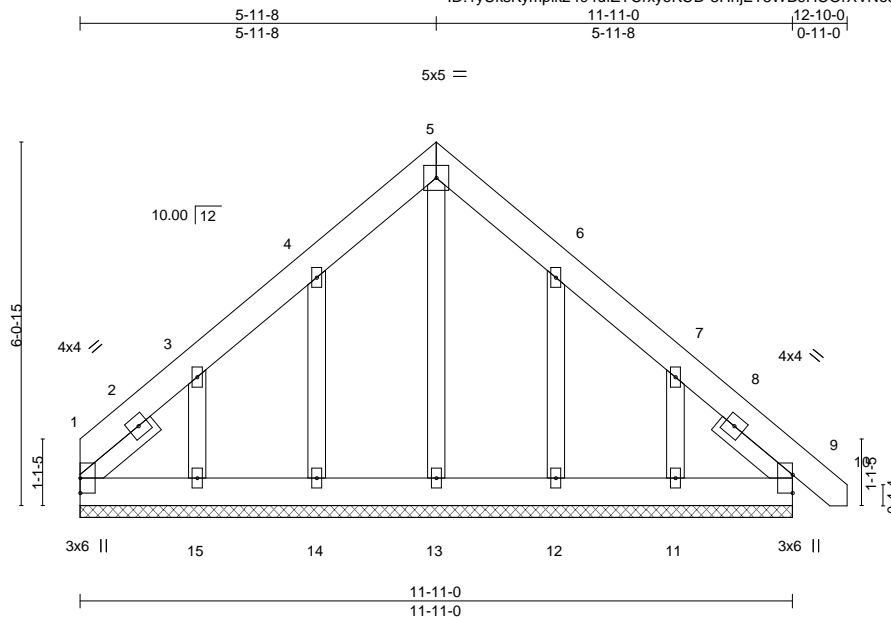


818 Soundside Road  
 Edenton, NC 27932

Job J0521-2894	Truss B1GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 5 Barbecue Church Rd. Job Reference (optional)	E15721930
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Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:28 2021 Page 1  
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Scale = 1:36.3

<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 0.03	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(LL) -0.00 9 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Vert(CT) 0.00 9 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 9 n/a n/a		
	Code IRC2015/TPI2014			Weight: 96 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -x 1-6-11, Right 2x4 SP No.2 -x 1-6-11

**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 11-11-0.  
 (lb) - Max Horz 1=167(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 14, 12 except 15=181(LC 12), 11=169(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 12, 11

**FORCES.**

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

**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 Exterior(2) 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) 1, 9, 14, 12 except (jt=lb) 15=181, 11=169.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9.



May 12, 2021

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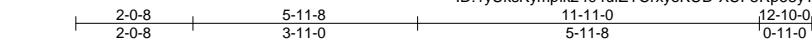


818 Soundside Road  
 Edenton, NC 27932

Job J0521-2894	Truss B2	Truss Type ROOF SPECIAL	Qty 1	Ply 2	Lot 5 Barbecue Church Rd. Job Reference (optional)	E15721931
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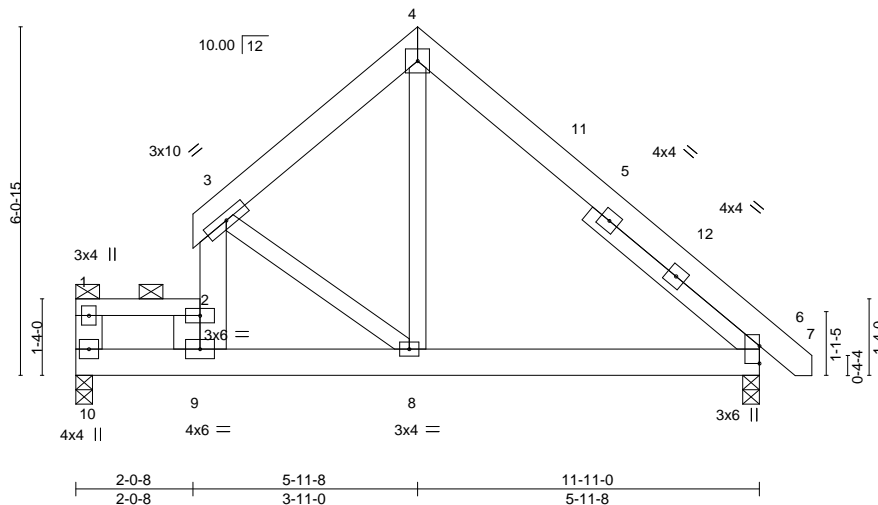
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:29 2021 Page 1  
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5x5 =

Scale = 1:37.8



<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 0.17	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.23	Vert(LL) -0.01 8-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.18	Vert(CT) -0.04 8-9 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.00 6 n/a n/a		
	Code IRC2015/TP12014		Wind(LL) 0.01 8-9 >999 240	Weight: 184 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1 \*Except\*  
 1-2: 2x4 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 4-8,3-8; 2x4 SP No.2  
 SLIDER Right 2x4 SP No.2 -x 3-9-13

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-2.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 10=0-3-8, 6=0-3-8  
 Max Horz 10=-131(LC 8)  
 Max Grav 10=859(LC 1), 6=555(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-10=-363/0, 1-2=-630/0, 3-4=-478/103, 4-6=-578/69  
 BOT CHORD 9-10=0/631, 8-9=0/325, 6-8=0/334  
 WEBS 4-8=0/359, 2-9=-497/2, 2-3=-404/132

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 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) 0-2-12 to 2-4-12, Interior(1) 2-4-12 to 5-11-8, Exterior(2) 5-11-8 to 10-4-5, Interior(1) 10-4-5 to 12-8-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 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.
- Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 has/have been modified.  
 Building designer must review loads to verify that they are correct for the intended use of this truss.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-260, 3-4=-60, 4-7=-60, 6-10=-20



May 12, 2021

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 Barbecue Church Rd.	E15721931
J0521-2894	B2	ROOF SPECIAL	1	2	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:29 2021 Page 2  
 ID:1yUksKypmlk2404ufZYCrxyoKUD-XUF5Rp68yTP30?6hxWdpJqUppgZAVuHBiy019rzHF3a

**LOAD CASE(S)** Standard

- 2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-250, 3-4=-50, 4-7=-50, 6-10=-20
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-2=-220, 3-4=-20, 4-7=-20, 6-10=-40
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-156, 3-4=27, 4-12=35, 6-12=27, 6-7=20, 6-10=-12  
 Horz: 3-4=-39, 4-12=47, 6-12=39, 6-7=32
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-170, 3-4=35, 4-11=27, 6-11=35, 6-7=58, 6-10=-12  
 Horz: 3-4=-47, 4-11=39, 6-11=47, 6-7=70
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-235, 3-4=-58, 4-6=-58, 6-7=-51, 6-10=-20  
 Horz: 3-4=38, 4-6=-38, 6-7=-31
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-235, 3-4=-58, 4-6=-58, 6-7=11, 6-10=-20  
 Horz: 3-4=38, 4-6=-38, 6-7=31
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-179, 3-4=-13, 4-6=11, 6-7=4, 6-10=-12  
 Horz: 3-4=1, 4-6=23, 6-7=16
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-191, 3-4=11, 4-6=-13, 6-7=2, 6-10=-12  
 Horz: 3-4=-23, 4-6=-1, 6-7=14
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-201, 3-4=-35, 4-6=-11, 6-7=-4, 6-10=-20  
 Horz: 3-4=15, 4-6=9, 6-7=16
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-213, 3-4=-11, 4-6=-35, 6-7=-28, 6-10=-20  
 Horz: 3-4=-9, 4-6=-15, 6-7=-8
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-179, 3-4=21, 4-6=9, 6-7=2, 6-10=-12  
 Horz: 3-4=-33, 4-6=21, 6-7=14
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-191, 3-4=9, 4-6=21, 6-7=14, 6-10=-12  
 Horz: 3-4=-21, 4-6=33, 6-7=26
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-179, 3-4=21, 4-6=9, 6-7=2, 6-10=-12  
 Horz: 3-4=-33, 4-6=21, 6-7=14
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-191, 3-4=9, 4-6=21, 6-7=14, 6-10=-12  
 Horz: 3-4=-21, 4-6=33, 6-7=26
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-201, 3-4=-1, 4-6=-13, 6-7=-6, 6-10=-20  
 Horz: 3-4=-19, 4-6=7, 6-7=14
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-213, 3-4=-13, 4-6=-1, 6-7=6, 6-10=-20  
 Horz: 3-4=-7, 4-6=19, 6-7=26
- 18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90  
 Uniform Loads (plf)  
 Vert: 1-2=-220, 3-4=-20, 4-7=-20, 6-10=-20
- 19) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-236, 3-4=-61, 4-6=-43, 6-7=-38, 6-10=-20  
 Horz: 3-4=11, 4-6=7, 6-7=12
- 20) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-245, 3-4=-43, 4-6=-61, 6-7=-56, 6-10=-20  
 Horz: 3-4=-7, 4-6=-11, 6-7=-6
- 21) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 Barbecue Church Rd.	E15721931
J0521-2894	B2	ROOF SPECIAL	1	<b>2</b>	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:29 2021 Page 3  
ID:1yUksKympIk2404ufZYCrxyoKUD-XUF5Rp68yTP30?6hxWdpJqUppfZAVuHBiy019zHF3a

**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-2=-236, 3-4=-36, 4-6=-45, 6-7=-40, 6-10=-20

Horz: 3-4=-14, 4-6=5, 6-7=10

22) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-245, 3-4=-45, 4-6=-36, 6-7=-31, 6-10=-20

Horz: 3-4=-5, 4-6=14, 6-7=19

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-260, 3-4=-60, 4-7=-20, 6-10=-20

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-220, 3-4=-20, 4-7=-60, 6-10=-20

25) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-250, 3-4=-50, 4-7=-20, 6-10=-20

26) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-220, 3-4=-20, 4-7=-50, 6-10=-20

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818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	Lot 5 Barbecue Church Rd.	E15721932
J0521-2894	C1	Monopitch	5	1	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:29 2021 Page 1

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-0-11-0  
0-11-0

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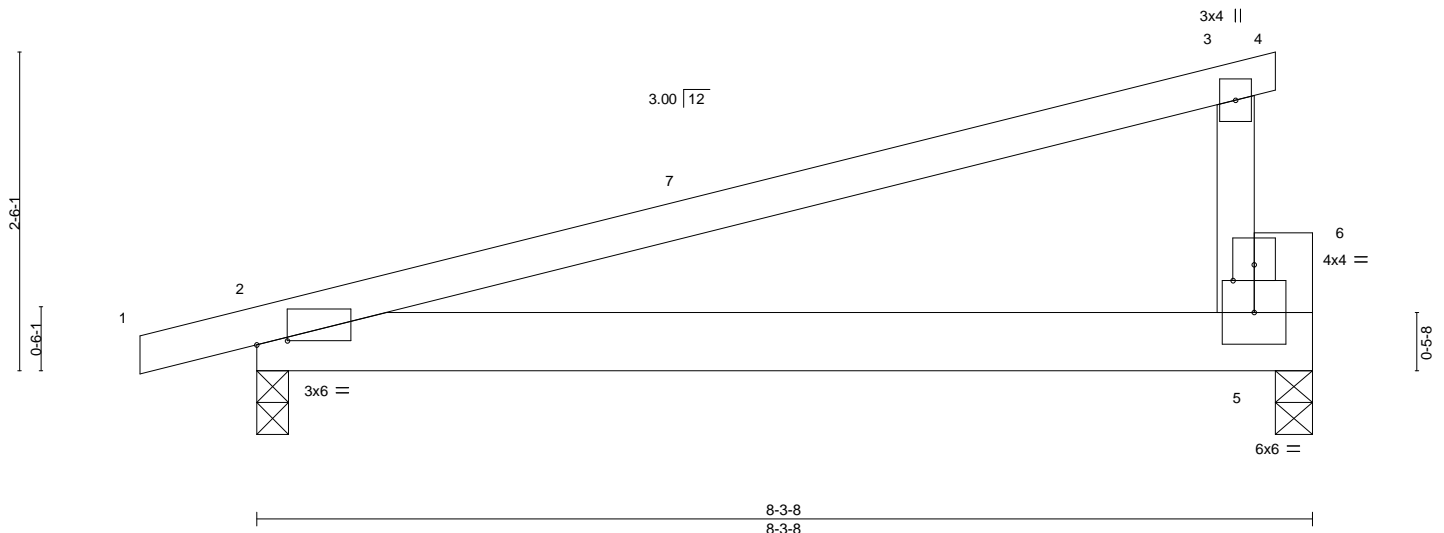


Plate Offsets (X,Y)-- [2:0-2-14,0-0-6], [6:0-2-0,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.84	Vert(LL) -0.05	2-5	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.24	Vert(CT) -0.10	2-5	>969	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT) 0.00	5	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Wind(LL) 0.10	2-5	>886	240	Weight: 37 lb	FT = 20%
	Code IRC2015/TPI2014							

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-3-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-0, 5=0-3-8  
Max Horz 2=74(LC 8)  
Max Uplift 2=150(LC 8), 5=127(LC 8)  
Max Grav 2=375(LC 1), 5=314(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) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 8-0-0 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=150, 5=127.



May 12,2021

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818 Soundside Road  
Edenton, NC 27932



Job J0521-2894	Truss C1GE	Truss Type GABLE	Qty 2	Ply 1	Lot 5 Barbecue Church Rd. Job Reference (optional)	E15721933
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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:30 2021 Page 1

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8-0-0

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0-11-0

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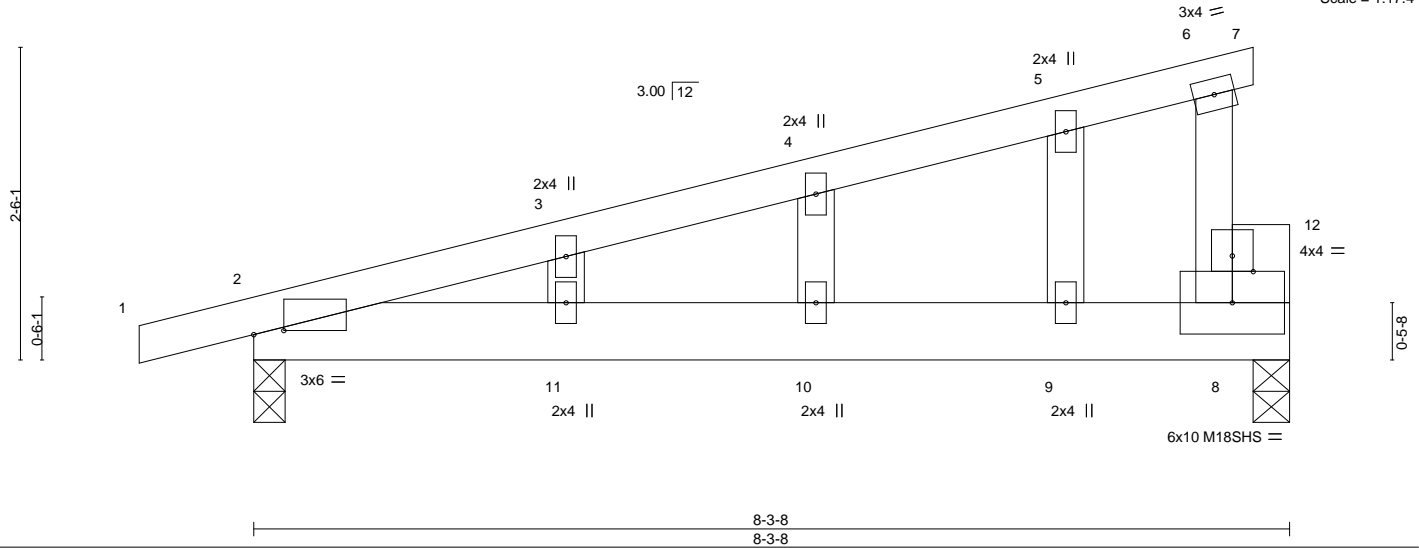


Plate Offsets (X,Y)-- [2:0-2-14,0-0-6], [12:0-2-0,0-1-8]

<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 0.35	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.26	Vert(LL) 0.09 10-11 >999 240	M18SHS	244/190
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Vert(CT) -0.08 10-11 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) -0.00 8 n/a n/a		
	Code IRC2015/TPI2014			Weight: 41 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2  
OTHERS 2x4 SP No.2 \*Except\*  
8-12: 2x6 SP No.1

**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.**

(size) 2=0-3-0, 8=0-3-8  
Max Horz 2=105(LC 8)  
Max Uplift 2=-216(LC 8), 8=-188(LC 8)  
Max Grav 2=375(LC 1), 8=314(LC 1)

**FORCES.**

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

BOT CHORD 2-11=-284/207, 10-11=-284/207, 9-10=-284/207, 8-9=-284/207

**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 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) All plates are MT20 plates unless otherwise indicated.
- 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) except (jt=lb) 2=216, 8=188.



May 12, 2021

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818 Soundside Road  
Edenton, NC 27932



Job J0521-2894	Truss D1-GR	Truss Type Common Girder	Qty 1	Ply <b>2</b>	Lot 5 Barbecue Church Rd. E15721934 Job Reference (optional)
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Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:33 2021 Page 2  
ID:1yUksKymplk2404ufZYCrxyoKUD-PFUcHB9e0iwUVcPSALhITgfSLGswRe6ndZ\_EldzHF3W

**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 5--1261(B) 6--1258(B) 7--1258(B) 8--1258(B)

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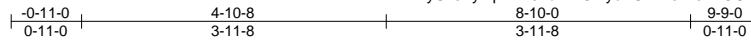


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Job J0521-2894	Truss D1GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 5 Barbecue Church Rd. Job Reference (optional)	E15721935
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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:31 2021 Page 1  
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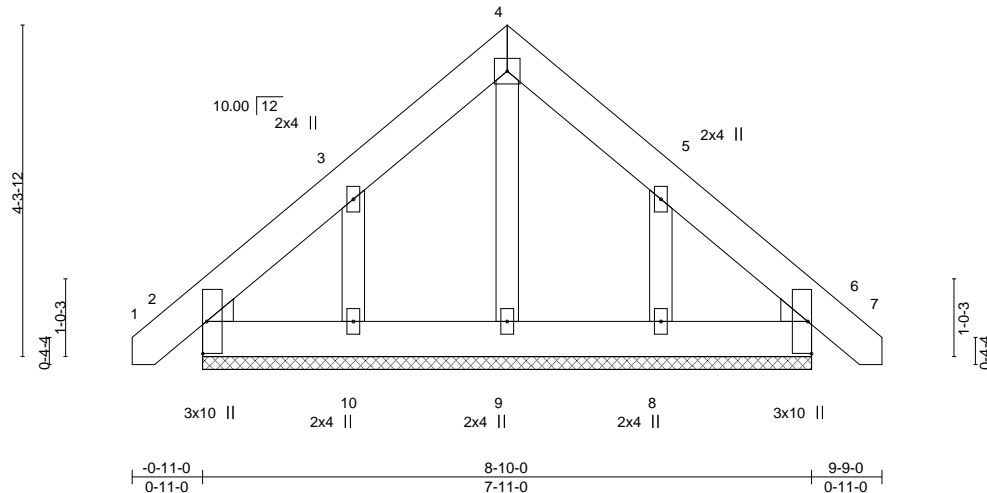


Plate Offsets (X,Y)-- [2:0-0-4,0-0-5], [2:0-0-8,0-3-6], [6:0-0-4,0-0-5], [6:0-0-8,0-3-6]

<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 0.02	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.01	Vert(LL) 0.00 6 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Vert(CT) 0.00 6 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 6 n/a n/a		
	Code IRC2015/TPI2014			Weight: 60 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.** All bearings 7-11-0.  
(lb) - Max Horz 2=-118(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=-152(LC 12), 8=-148(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

- 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 Exterior(2) 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.
  - 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, 6 except (jt=lb) 10=152, 8=148.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



May 12,2021

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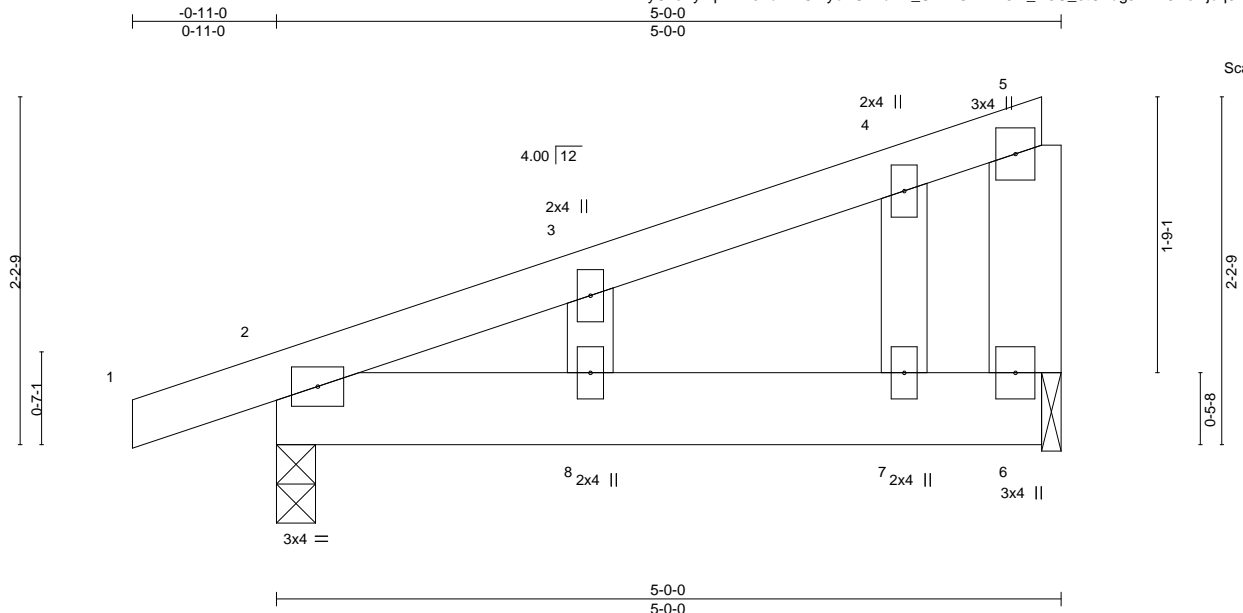


Job J0521-2894	Truss M1GE	Truss Type GABLE	Qty 1	Ply 1	Lot 5 Barbecue Church Rd. Job Reference (optional)	E15721937
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Comtech, Inc. Fayetteville, NC - 28314,

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ID:1yUksKypmlk2404ufZYCrxyoKUD-uR2\_UWAGn?2L6m\_fk3C\_0tChdJgXAB8wsDjoq3zHF3V



<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)	0.01	8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	-0.01	8	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	-0.00	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 27 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x6 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) 2=0-3-0, 6=0-1-8  
 Max Horz 2=90(LC 8)  
 Max Uplift 2=147(LC 8), 6=115(LC 8)  
 Max Grav 2=255(LC 1), 6=179(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) 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 6 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) 6.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=147, 6=115.



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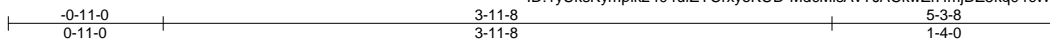


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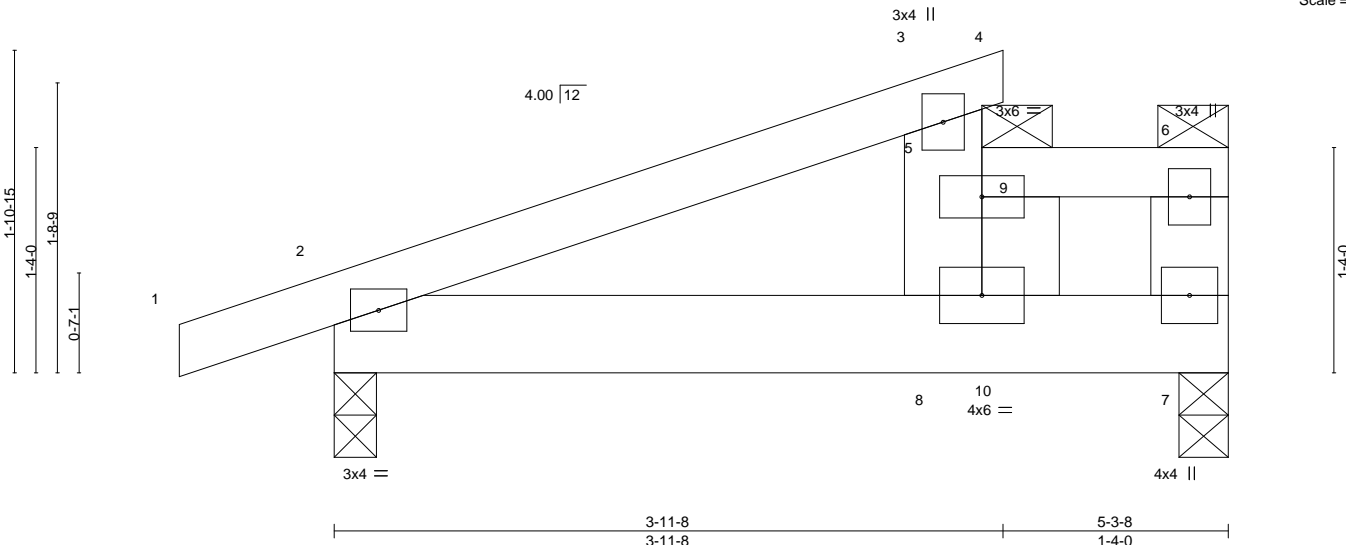
Job	Truss	Truss Type	Qty	Ply	Lot 5 Barbecue Church Rd.	E15721938
J0521-2894	M2	Half Hip	3	1	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:35 2021 Page 1  
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Scale = 1:12.8



<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 0.24	Vert(LL) -0.00 8 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.01 8 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-R	Horz(CT) -0.00 7 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.02 8 >999 240	Weight: 28 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-3-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-8, 5-6. Except: 10-0-0 oc bracing: 3-5  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 7=0-3-8, 2=0-3-0  
 Max Horz 2=69(LC 12)  
 Max Uplift 7=173(LC 8), 2=138(LC 8)  
 Max Grav 7=561(LC 19), 2=349(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-425/505, 5-8=-279/265, 5-6=-233/338, 6-7=-292/309  
 BOT CHORD 2-8=-546/359, 7-8=-338/233

**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) -0-11-0 to 3-7-4, Interior(1) 3-7-4 to 5-0-12 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 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) 7=173, 2=138.
- Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s). The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-4=-60, 5-9=-40, 6-9=-80, 2-7=-20  
 Concentrated Loads (lb)  
 Vert: 9=400
- Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-50, 3-4=-50, 5-9=-100, 6-9=-130, 2-7=-20



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Continued on page 2

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818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	Lot 5 Barbecue Church Rd.	E15721938
J0521-2894	M2	Half Hip	3	1	Job Reference (optional)	

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**LOAD CASE(S)** Standard

- Concentrated Loads (lb)  
Vert: 9=350
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=-20, 3-4=-20, 5-6=-40, 2-7=-40  
Concentrated Loads (lb)  
Vert: 9=300
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=70, 2-3=58, 3-4=153, 5-6=12, 2-8=52, 8-10=115, 7-10=52  
Horz: 1-2=-82, 2-3=-70, 3-4=-165, 3-5=-55  
Concentrated Loads (lb)  
Vert: 9=548
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=51, 2-3=58, 3-4=51, 5-6=42, 2-8=52, 8-10=115, 7-10=52  
Horz: 1-2=-63, 2-3=-70, 3-4=-63, 3-5=-55  
Concentrated Loads (lb)  
Vert: 9=566
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-1, 2-3=-45, 3-4=17, 5-6=-58, 2-8=-9, 8-10=2, 7-10=-9  
Horz: 1-2=-19, 2-3=25, 3-4=-37, 3-5=51  
Concentrated Loads (lb)  
Vert: 9=420
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-39, 2-3=-45, 3-4=-39, 5-6=-58, 2-8=-9, 8-10=2, 7-10=-9  
Horz: 1-2=19, 2-3=25, 3-4=19, 3-5=51  
Concentrated Loads (lb)  
Vert: 9=420
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=36, 2-3=21, 3-4=14, 5-6=-11, 2-8=10, 8-10=33, 7-10=10  
Horz: 1-2=-48, 2-3=-33, 3-4=-26, 3-5=7  
Concentrated Loads (lb)  
Vert: 9=154
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=6, 2-3=12, 3-4=28, 5-6=1, 2-7=-12  
Horz: 1-2=-18, 2-3=-24, 3-4=-40, 3-5=-27  
Concentrated Loads (lb)  
Vert: 9=43
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=6, 2-3=-1, 3-4=6, 5-6=-33, 2-8=2, 8-10=25, 7-10=2  
Horz: 1-2=-26, 2-3=-19, 3-4=-26, 3-5=34  
Concentrated Loads (lb)  
Vert: 9=-339
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-2, 2-3=-9, 3-4=-2, 5-6=-21, 2-7=-20  
Horz: 1-2=-18, 2-3=-11, 3-4=-18, 3-5=0  
Concentrated Loads (lb)  
Vert: 9=-234
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=14, 2-3=21, 3-4=14, 5-6=-11, 2-7=-12  
Horz: 1-2=-26, 2-3=-33, 3-4=-26, 3-5=-39  
Concentrated Loads (lb)  
Vert: 9=43
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=2, 2-3=9, 3-4=2, 5-6=1, 2-7=-12  
Horz: 1-2=-14, 2-3=-21, 3-4=-14, 3-5=-27  
Concentrated Loads (lb)  
Vert: 9=43
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=14, 2-3=21, 3-4=14, 5-6=-11, 2-7=-12  
Horz: 1-2=-26, 2-3=-33, 3-4=-26, 3-5=-39  
Concentrated Loads (lb)  
Vert: 9=43
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

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818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 5 Barbecue Church Rd.	E15721938
J0521-2894	M2	Half Hip	3	1	Job Reference (optional)	

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**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-2=2, 2-3=9, 3-4=2, 5-6=1, 2-7=-12  
Horz: 1-2=-14, 2-3=-21, 3-4=-14, 3-5=-27

Concentrated Loads (lb)

Vert: 9=43

16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=6, 2-3=-1, 3-4=6, 5-6=-33, 2-7=-20  
Horz: 1-2=-26, 2-3=-19, 3-4=-26, 3-5=-12

Concentrated Loads (lb)

Vert: 9=-234

17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-6, 2-3=-13, 3-4=-6, 5-6=-21, 2-7=-20  
Horz: 1-2=-14, 2-3=-7, 3-4=-14, 3-5=0

Concentrated Loads (lb)

Vert: 9=-234

18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90

Uniform Loads (plf)

Vert: 1-3=-20, 3-4=-20, 5-6=-120, 2-7=-20

Concentrated Loads (lb)

Vert: 9=-200

19) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-31, 2-3=-36, 3-4=-31, 5-9=-95, 6-9=-125, 2-8=-3, 8-10=13, 7-10=-3  
Horz: 1-2=-19, 2-3=-14, 3-4=-19, 3-5=26

Concentrated Loads (lb)

Vert: 9=-454

20) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-37, 2-3=-42, 3-4=-37, 5-9=-86, 6-9=-116, 2-7=-20  
Horz: 1-2=-13, 2-3=-8, 3-4=-13, 3-5=0

Concentrated Loads (lb)

Vert: 9=-375

21) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-31, 2-3=-36, 3-4=-31, 5-9=-95, 6-9=-125, 2-7=-20  
Horz: 1-2=-19, 2-3=-14, 3-4=-19, 3-5=-9

Concentrated Loads (lb)

Vert: 9=-375

22) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-40, 2-3=-45, 3-4=-40, 5-9=-86, 6-9=-116, 2-7=-20  
Horz: 1-2=-10, 2-3=-5, 3-4=-10, 3-5=0

Concentrated Loads (lb)

Vert: 9=-375

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-60, 3-4=-60, 5-6=-40, 2-7=-20

Concentrated Loads (lb)

Vert: 9=-400

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-20, 3-4=-20, 5-9=-40, 6-9=-80, 2-7=-20

Concentrated Loads (lb)

Vert: 9=-400

25) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-50, 3-4=-50, 5-6=-100, 2-7=-20

Concentrated Loads (lb)

Vert: 9=-350

26) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-20, 3-4=-20, 5-9=-100, 6-9=-130, 2-7=-20

Concentrated Loads (lb)

Vert: 9=-350

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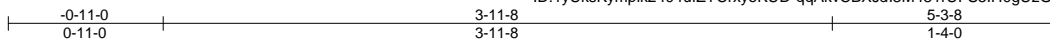
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 Barbecue Church Rd.	E15721939
J0521-2894	M2-GR	HALF HIP	1	2	Job Reference (optional)	

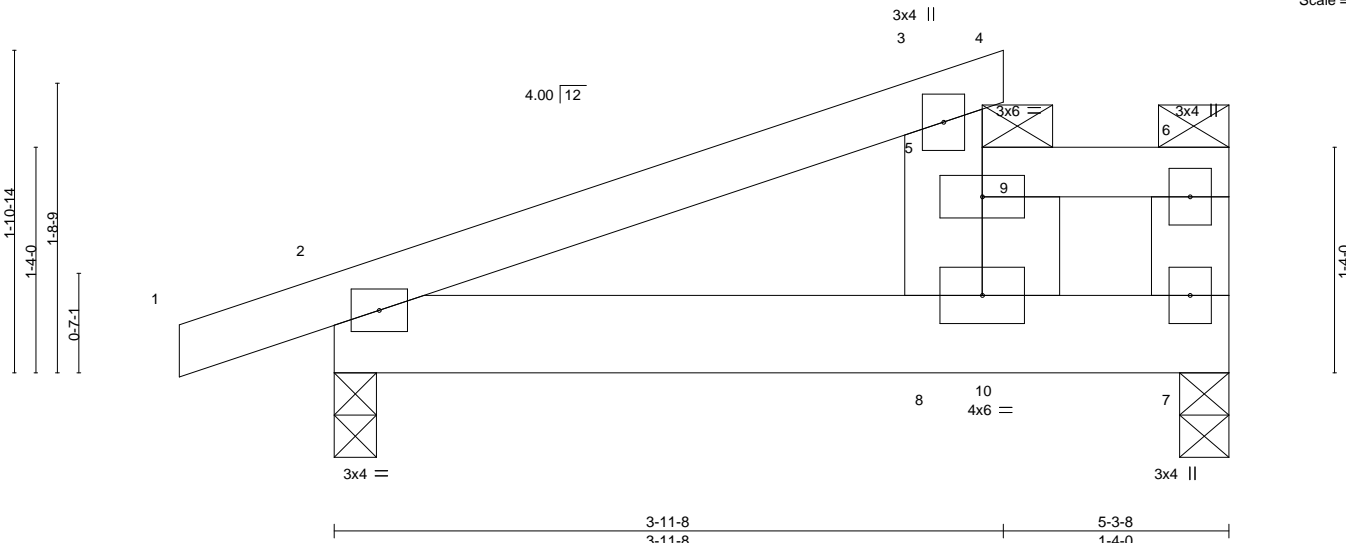
Comtech, Inc. Fayetteville, NC - 28314,

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Scale = 1:12.8



<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 0.12	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.14	Vert(LL) -0.00 8 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.01 8 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-R	Horz(CT) -0.00 7 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.01 8 >999 240	Weight: 55 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-3-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-8, 5-6. Except: 10-0-0 oc bracing: 3-5  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 7=0-3-8, 2=0-3-0  
 Max Horz 2=69(LC 12)  
 Max Uplift 7=-24(LC 8), 2=-112(LC 8)  
 Max Grav 7=710(LC 19), 2=375(LC 1)

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

TOP CHORD 2-3=-484/446, 5-8=-334/210, 5-6=-280/291, 6-7=-390/210  
 BOT CHORD 2-8=-491/415, 7-8=-291/280

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 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; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-0 to 3-7-4, Interior(1) 3-7-4 to 5-0-12 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 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 except (jt=lb) 2=112.
- Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s). The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-4=-60, 5-9=-160, 6-9=-200, 2-7=-20



May 12, 2021

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 Barbecue Church Rd.	E15721939
J0521-2894	M2-GR	HALF HIP	1	2	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:36 2021 Page 2  
ID:1yUksKymplk2404ufZYCrxyoKUD-qqAkvCBXJdl3M481rUFS5IH0gUzGe5sDJXcvvxZHF3T

**LOAD CASE(S)** Standard

- Concentrated Loads (lb)  
Vert: 9=400
- 2) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-50, 3-4=-50, 5-9=-220, 6-9=-250, 2-7=-20  
Concentrated Loads (lb)  
Vert: 9=350
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=-20, 3-4=-20, 5-6=-160, 2-7=-40  
Concentrated Loads (lb)  
Vert: 9=300
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=70, 2-3=58, 3-4=153, 5-6=-108, 2-8=52, 8-10=115, 7-10=52  
Horz: 1-2=-82, 2-3=-70, 3-4=-165, 3-5=-55  
Concentrated Loads (lb)  
Vert: 9=548
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=51, 2-3=58, 3-4=51, 5-6=-78, 2-8=52, 8-10=115, 7-10=52  
Horz: 1-2=-63, 2-3=-70, 3-4=-63, 3-5=-55  
Concentrated Loads (lb)  
Vert: 9=566
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-1, 2-3=-45, 3-4=17, 5-6=-178, 2-8=-9, 8-10=2, 7-10=-9  
Horz: 1-2=-19, 2-3=25, 3-4=-37, 3-5=51  
Concentrated Loads (lb)  
Vert: 9=420
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-39, 2-3=-45, 3-4=-39, 5-6=-178, 2-8=-9, 8-10=2, 7-10=-9  
Horz: 1-2=19, 2-3=25, 3-4=19, 3-5=51  
Concentrated Loads (lb)  
Vert: 9=420
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=36, 2-3=21, 3-4=14, 5-6=-131, 2-8=10, 8-10=33, 7-10=10  
Horz: 1-2=-48, 2-3=-33, 3-4=-26, 3-5=7  
Concentrated Loads (lb)  
Vert: 9=154
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=6, 2-3=12, 3-4=28, 5-6=-119, 2-7=-12  
Horz: 1-2=-18, 2-3=-24, 3-4=-40, 3-5=-27  
Concentrated Loads (lb)  
Vert: 9=43
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=6, 2-3=-1, 3-4=6, 5-6=-153, 2-8=2, 8-10=25, 7-10=2  
Horz: 1-2=-26, 2-3=-19, 3-4=-26, 3-5=34  
Concentrated Loads (lb)  
Vert: 9=-339
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-2, 2-3=-9, 3-4=-2, 5-6=-141, 2-7=-20  
Horz: 1-2=-18, 2-3=-11, 3-4=-18, 3-5=-0  
Concentrated Loads (lb)  
Vert: 9=-234
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=14, 2-3=21, 3-4=14, 5-6=-131, 2-7=-12  
Horz: 1-2=-26, 2-3=-33, 3-4=-26, 3-5=-39  
Concentrated Loads (lb)  
Vert: 9=43
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=2, 2-3=9, 3-4=2, 5-6=-119, 2-7=-12  
Horz: 1-2=-14, 2-3=-21, 3-4=-14, 3-5=-27  
Concentrated Loads (lb)  
Vert: 9=43
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 Barbecue Church Rd.	E15721939
J0521-2894	M2-GR	HALF HIP	1	2	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:36 2021 Page 3  
ID:1yUksKymplk2404ufZYCrxyoKUD-qqAkxCBxJdI3M481rUFS5IH0gUzGe5sDJXCvwxzHF3T

**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-2=14, 2-3=21, 3-4=14, 5-6=-131, 2-7=-12

Horz: 1-2=-26, 2-3=-33, 3-4=-26, 3-5=-39

Concentrated Loads (lb)

Vert: 9=43

15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=2, 2-3=9, 3-4=2, 5-6=-119, 2-7=-12

Horz: 1-2=-14, 2-3=-21, 3-4=-14, 3-5=-27

Concentrated Loads (lb)

Vert: 9=43

16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=6, 2-3=-1, 3-4=6, 5-6=-153, 2-7=-20

Horz: 1-2=-26, 2-3=-19, 3-4=-26, 3-5=-12

Concentrated Loads (lb)

Vert: 9=-234

17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-6, 2-3=-13, 3-4=-6, 5-6=-141, 2-7=-20

Horz: 1-2=-14, 2-3=-7, 3-4=-14, 3-5=0

Concentrated Loads (lb)

Vert: 9=-234

18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90

Uniform Loads (plf)

Vert: 1-3=-20, 3-4=-20, 5-6=-240, 2-7=-20

Concentrated Loads (lb)

Vert: 9=-200

19) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-31, 2-3=-36, 3-4=-31, 5-9=-215, 6-9=-245, 2-8=-3, 8-10=13, 7-10=-3

Horz: 1-2=-19, 2-3=-14, 3-4=-19, 3-5=26

Concentrated Loads (lb)

Vert: 9=-454

20) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-37, 2-3=-42, 3-4=-37, 5-9=-206, 6-9=-236, 2-7=-20

Horz: 1-2=-13, 2-3=-8, 3-4=-13, 3-5=0

Concentrated Loads (lb)

Vert: 9=-375

21) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-31, 2-3=-36, 3-4=-31, 5-9=-215, 6-9=-245, 2-7=-20

Horz: 1-2=-19, 2-3=-14, 3-4=-19, 3-5=-9

Concentrated Loads (lb)

Vert: 9=-375

22) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-40, 2-3=-45, 3-4=-40, 5-9=-206, 6-9=-236, 2-7=-20

Horz: 1-2=-10, 2-3=-5, 3-4=-10, 3-5=0

Concentrated Loads (lb)

Vert: 9=-375

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-60, 3-4=-60, 5-6=-160, 2-7=-20

Concentrated Loads (lb)

Vert: 9=-400

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-20, 3-4=-20, 5-9=-160, 6-9=-200, 2-7=-20

Concentrated Loads (lb)

Vert: 9=-400

25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-50, 3-4=-50, 5-6=-220, 2-7=-20

Concentrated Loads (lb)

Vert: 9=-350

26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-20, 3-4=-20, 5-9=-220, 6-9=-250, 2-7=-20

Concentrated Loads (lb)

Vert: 9=-350

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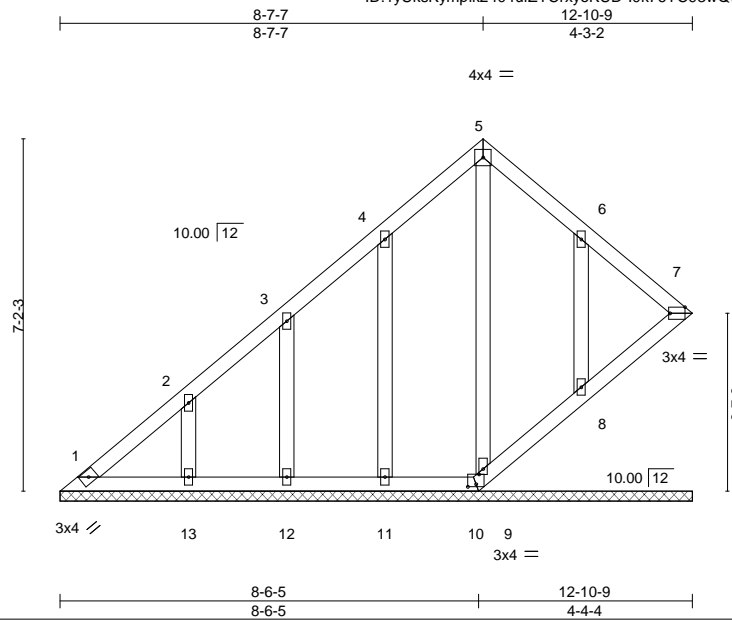


818 Soundside Road  
Edenton, NC 27932

Job J0521-2894	Truss V1GE	Truss Type ROOF SPECIAL STRUCTU	Qty 1	Ply 1	Lot 5 Barbecue Church Rd. Job Reference (optional)	E15721940
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Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:37 2021 Page 1  
ID:1yUksKypmk2404ufZYCrxyoKUD-I0k76YC93wQwzDjEPBmheWqCKtLBNXuMYBySROzHF3S



Scale = 1:44.2

Plate Offsets (X,Y)-- [7:0-3-11,Edge], [9:0-1-6,0-1-0], [10:0-2-0,0-0-10]

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 0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 75 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 10-0-0 oc bracing.

**REACTIONS.** All bearings 12-10-9.  
(lb) - Max Horz 1=231(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 10 except 11=-112(LC 12), 12=-107(LC 12), 13=-133(LC 12),  
8=-126(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 9, 11, 12, 13, 8

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-295/189

**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 Exterior(2) 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.
- Bearing at joint(s) 7, 9, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 10 except (jt=lb) 11=112, 12=107, 13=133, 8=126.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 7, 9, 8.



May 12,2021

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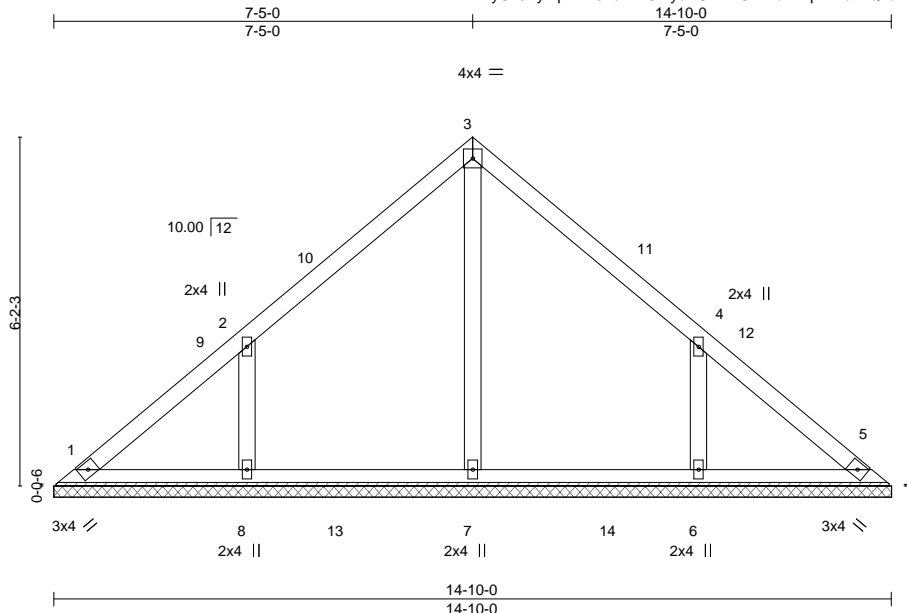


818 Soundside Road  
Edenton, NC 27932

Job J0521-2894	Truss V2	Truss Type VALLEY	Qty 1	Ply 1	Lot 5 Barbecue Church Rd. Job Reference (optional)	E15721941
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Comtech, Inc. Fayetteville, NC - 28314.

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:38 2021 Page 1  
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Scale = 1:38.4

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

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.14	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.15	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.09	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
	Code IRC2015/TPI2014			Weight: 64 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 10-0-0 oc bracing.

**REACTIONS.** All bearings 14-10-0.  
(lb) - Max Horz 1=140(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=135(LC 12), 6=135(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=400(LC 19), 8=393(LC 19), 6=393(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-8=338/247, 4-6=338/247

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 7-5-0, Exterior(2) 7-5-0 to 11-9-13, Interior(1) 11-9-13 to 14-5-3 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=135, 6=135.



May 12,2021

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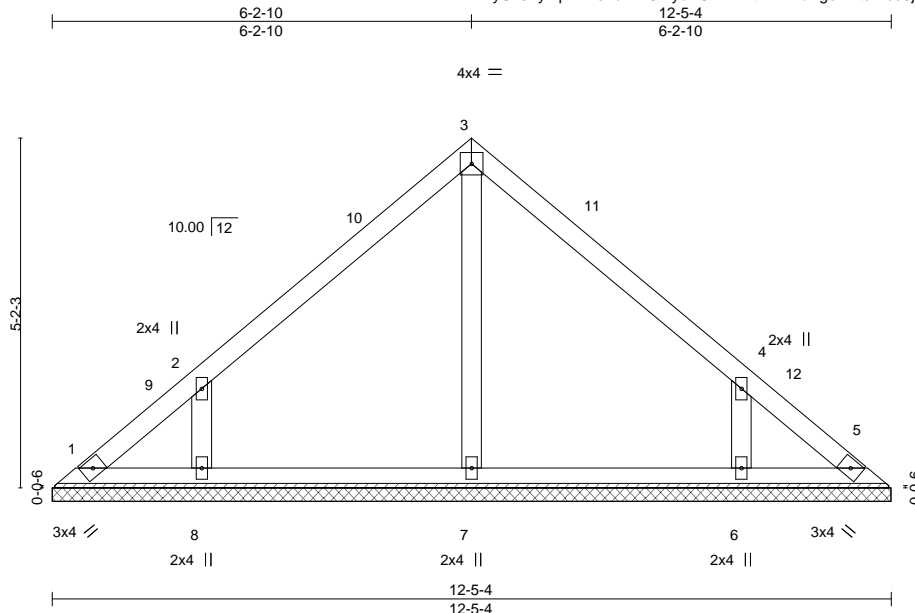
818 Soundside Road  
Edenton, NC 27932

Job J0521-2894	Truss V3	Truss Type VALLEY	Qty 1	Ply 1	Lot 5 Barbecue Church Rd. Job Reference (optional)	E15721942
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Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:39 2021 Page 1

ID:1yUksKymplk2404ufZYCrxyoKUD-EPrtXEDPbYgeDXtcWco9jxvWmh0lrRcf?VRZWGzHF3Q



Scale: 3/8"=1'

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

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.13	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
	Code IRC2015/TPI2014			Weight: 52 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 10-0-0 oc bracing.

**REACTIONS.** All bearings 12-5-4.  
 (lb) - Max Horz 1=116(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-123(LC 12), 6=-123(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=326(LC 19), 6=326(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-312/241, 4-6=-312/241

- 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) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 6-2-10, Exterior(2) 6-2-10 to 10-7-7, Interior(1) 10-7-7 to 12-0-7 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - 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) 1, 5 except (jt=lb) 8=123, 6=123.



May 12, 2021

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 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



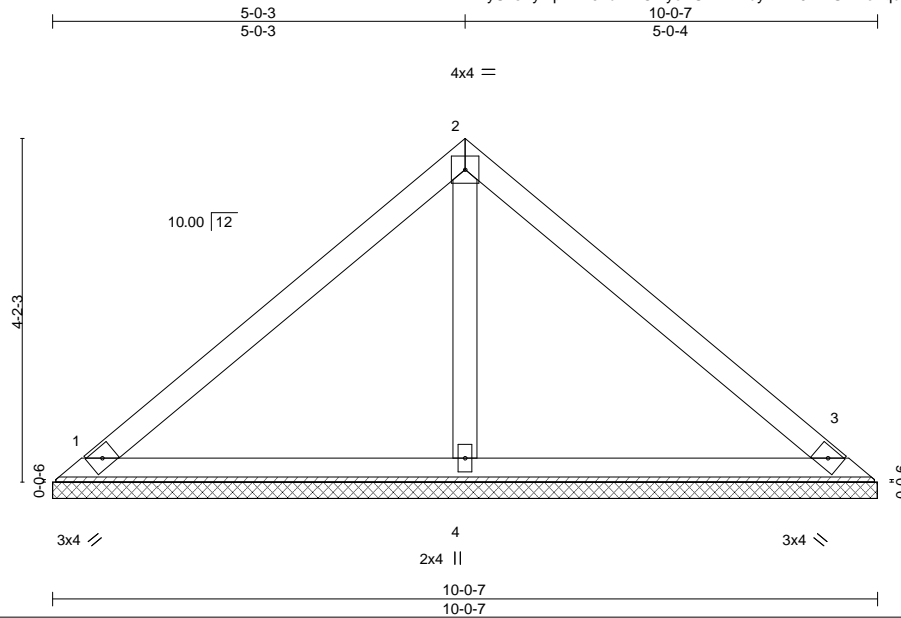
818 Soundside Road  
 Edenton, NC 27932

Job J0521-2894	Truss V4	Truss Type VALLEY	Qty 1	Ply 1	Lot 5 Barbecue Church Rd. Job Reference (optional)	E15721943
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Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:41 2021 Page 1

ID:1yUksKymplk2404ufZYCrxyoKUD-AnzdywF79wMSr17e1qdoM\_rnVhAJMGyTpwga9zHF3O



Scale = 1:26.4

<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 0.22	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.16	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 38 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 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=10-0-7, 3=10-0-7, 4=10-0-7  
Max Horz 1=92(LC 8)  
Max Uplift 1=22(LC 13), 3=30(LC 13)  
Max Grav 1=197(LC 1), 3=197(LC 1), 4=344(LC 1)

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

**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) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- 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) 1, 3.



May 12, 2021

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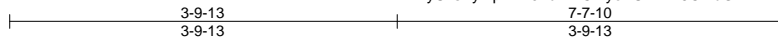


Job J0521-2894	Truss V5	Truss Type VALLEY	Qty 1	Ply 1	Lot 5 Barbecue Church Rd. Job Reference (optional)	E15721944
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Comtech, Inc. Fayetteville, NC - 28314,

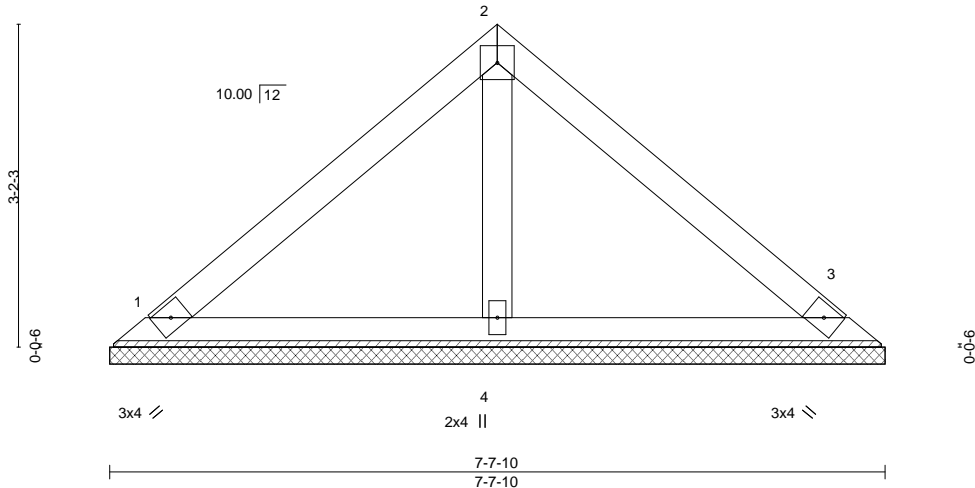
8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:43 2021 Page 1

ID:1yUksKymplk2404ufZYCrxyoKUD-7A5ONbGwfmA4h8ANIS5tn4C7INknGDFw7Pmf1zHF3M



4x4 =

Scale = 1:21.4



<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 0.17	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 28 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 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=7-7-10, 3=7-7-10, 4=7-7-10  
Max Horz 1=68(LC 9)  
Max Uplift 1=24(LC 13), 3=30(LC 13)  
Max Grav 1=158(LC 1), 3=158(LC 1), 4=230(LC 1)

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

**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) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- 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) 1, 3.



May 12, 2021

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



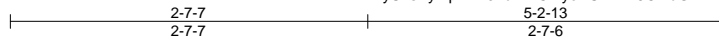
818 Soundside Road  
Edenton, NC 27932

Job J0521-2894	Truss V6	Truss Type VALLEY	Qty 1	Ply 1	Lot 5 Barbecue Church Rd. Job Reference (optional)	E15721945
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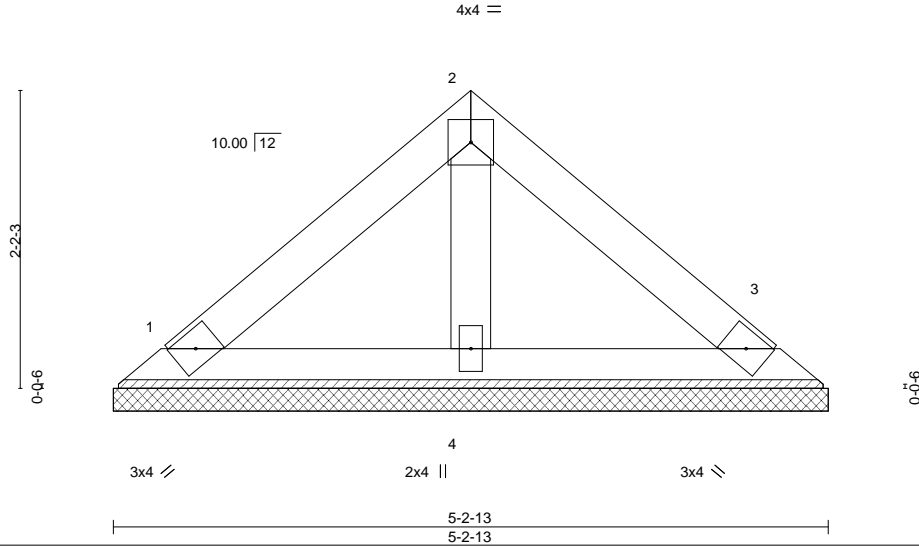
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:43 2021 Page 1

ID:1yUksKymplk2404ufZYCrxyoKUD-7A5ONbGwfmA4h8ANIS5tn4DjIOWnGQFw7Pmf1zHF3M



Scale: 3/4"=1'



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.07	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 19 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 5-2-13 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=5-2-13, 3=5-2-13, 4=5-2-13  
Max Horz 1=44(LC 8)  
Max Uplift 1=15(LC 13), 3=19(LC 13)  
Max Grav 1=102(LC 1), 3=102(LC 1), 4=149(LC 1)

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

**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) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- 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) 1, 3.



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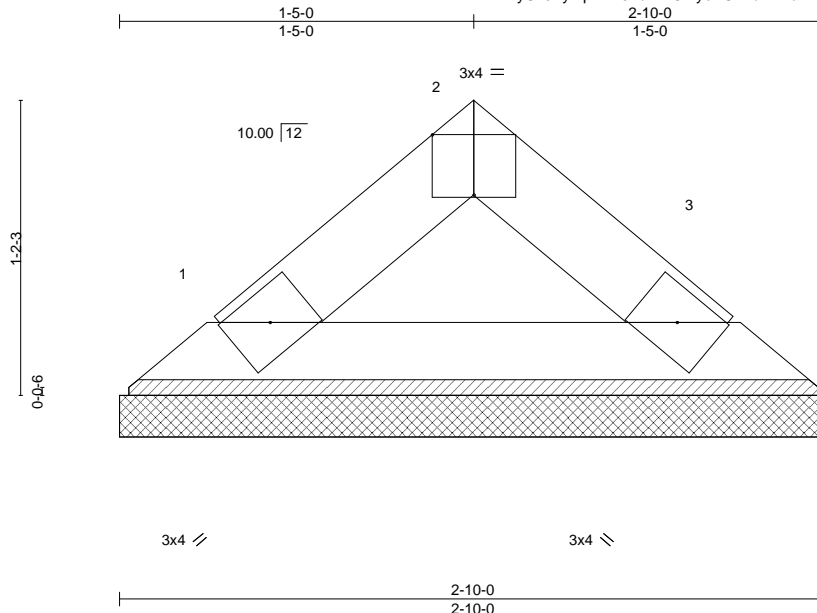


818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 Barbecue Church Rd.	E15721946
J0521-2894	V7	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed May 12 12:21:44 2021 Page 1  
 ID:1yUksKymplk2404ufZYCrxyoKUD-bMfmaxHYQ4lxJllaJ9OKQ\_cPlikoWjrO9n8KBuZHF3L



Scale = 1:8.7

Plate Offsets (X,Y)-- [2:0-2-0,Edge]		CSI.		DEFL.				PLATES		GRIP	
LOADING (psf)	SPACING-	2-0-0	TC	in	(loc)	l/defl	L/d	MT20	244/190		
TCLL 20.0	Plate Grip DOL	1.15	0.01	Vert(LL)	n/a	-	n/a				
TCDL 10.0	Lumber DOL	1.15	0.03	Vert(CT)	n/a	-	n/a				
BCLL 0.0 *	Rep Stress Incr	YES	WB	Horz(CT)	0.00	3	n/a				
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P								
								Weight: 8 lb		FT = 20%	

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-10-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=2-10-0, 3=2-10-0  
 Max Horz 1=20(LC 8)  
 Max Uplift 1=4(LC 12), 3=4(LC 13)  
 Max Grav 1=81(LC 1), 3=81(LC 1)

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

**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) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- 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) 1, 3.



May 12, 2021

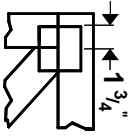
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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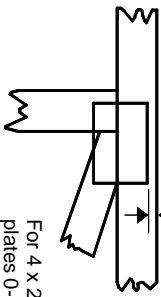
818 Soundside Road  
 Edenton, NC 27932

# 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

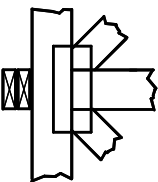
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



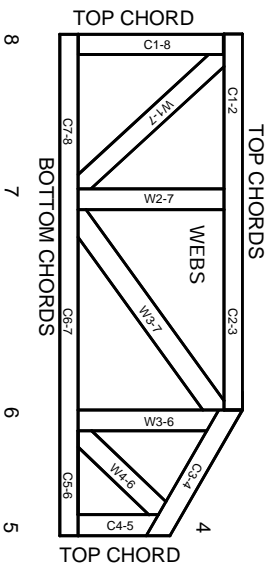
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: 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 NUMBER/LETTERS.

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR 1988  
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/TP1 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/TP1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1.
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 lead 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/TP1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.



# ROOF & FLOOR TRUSSES & BEAMS

Reilly Road Industrial Park  
Fayetteville, N.C. 28309  
Phone: (910) 864-8787  
Fax: (910) 864-4444

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables ( derived from the prescriptive Code requirements ) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

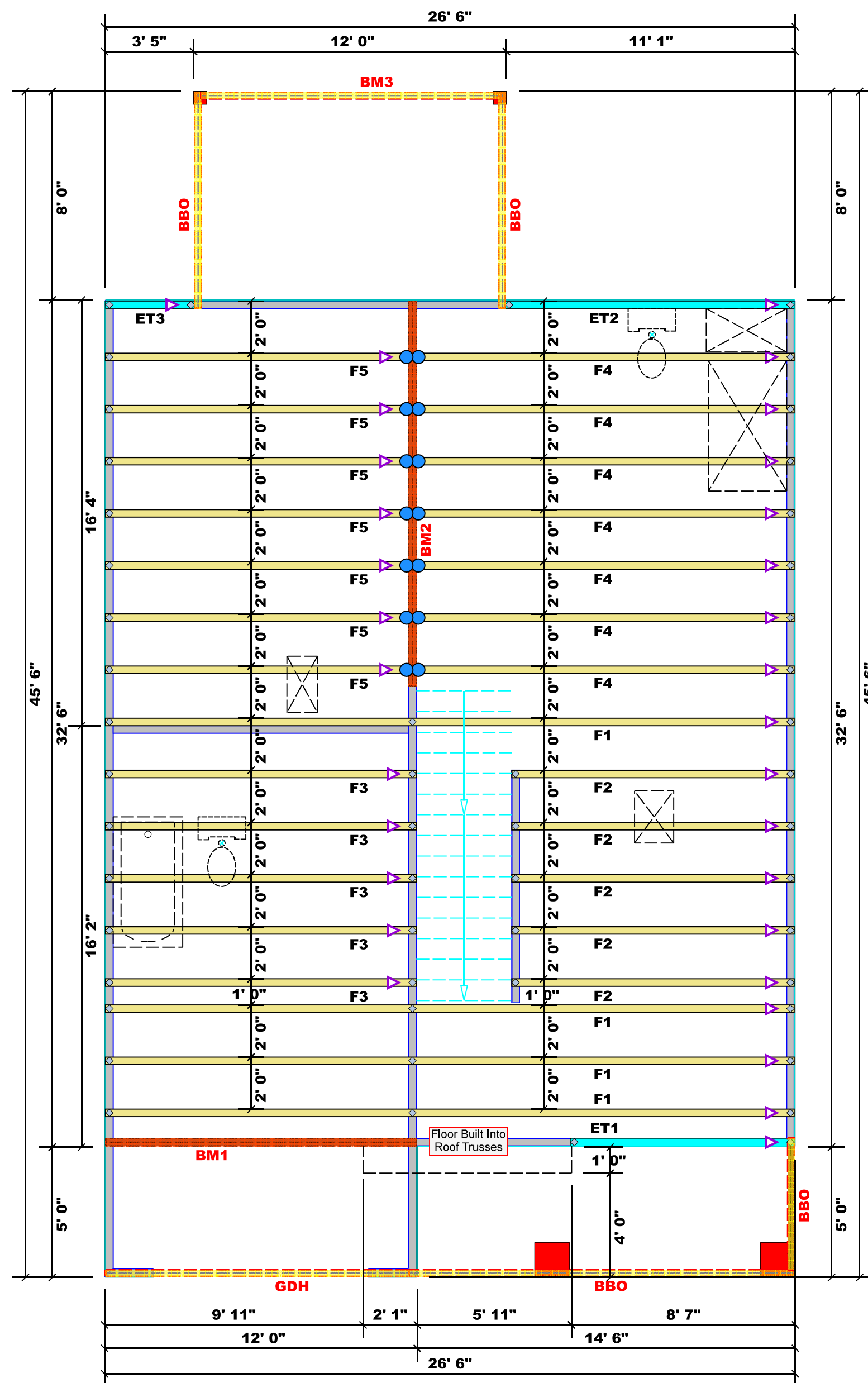
Signature Sales Area

Sales Area

### LOAD CHART FOR JACK STUDS

(BASED ON TABLES R532.5(1) & (2) - NUMBERS OF JACK STUDS REQUIRED @ EACH END OF HEADERS/BEAMS)

FIN. REACTION (LPT)	REQ. STUDS FOR EACH END	FIN. REACTION (LPT)	REQ. STUDS FOR EACH END	FIN. REACTION (LPT)	REQ. STUDS FOR EACH END
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				



**Dimension Notes**

- All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
- All interior wall dimensions are to face of frame wall unless noted otherwise
- All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

**All Walls Shown Are Considered Load Bearing**

**Plumbing Drop Notes**

- Plumbing drop locations shown are NOT exact.
- Contractor to verify ALL plumbing drop locations prior to setting Floor Trusses.
- Adjust spacing as needed not to exceed 24"oc.

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
●	HUS410	USP	14	NA	16d/3-1/2"	16d/3-1/2"

Products					
PlotID	Length	Product	Plies	Net Qty	
BM1	12' 0"	1-3/4"x 16" LVL Kerto-S	2	2	
BM2	15' 0"	1-3/4"x 16" LVL Kerto-S	2	2	
BM3	12' 0"	2x10 SPF No.2	2	2	
GDH	12' 0"	2x12 SPF No.2	2	2	

1 Truss Placement Plan  
Scale: 1/4"=1'

BUILDER	CITY / CO.	Sanford / Harnett
WEAVER DEVELOPMENT CO. INC.	ADDRESS	4912 Barbecue Church Road
JOB NAME	MODEL	Floor
PLAN	DATE REV.	05/13/21
SEAL DATE	DRAWN BY	David Landry
QUOTE #	SALES REP.	Lenny Norris
JOB #		J0521-2895

△ = Indicates Left End of Truss  
(Reference Engineered Truss Drawing)  
Do NOT Erect Truss Backwards

**THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.**  
These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCS-B1 and BCS-B3 provided with the truss delivery package or online @ sbcindustry.com



# ROOF & FLOOR TRUSSES & BEAMS

Reilly Road Industrial Park  
Fayetteville, N.C. 28309  
Phone: (910) 864-8787  
Fax: (910) 864-4444

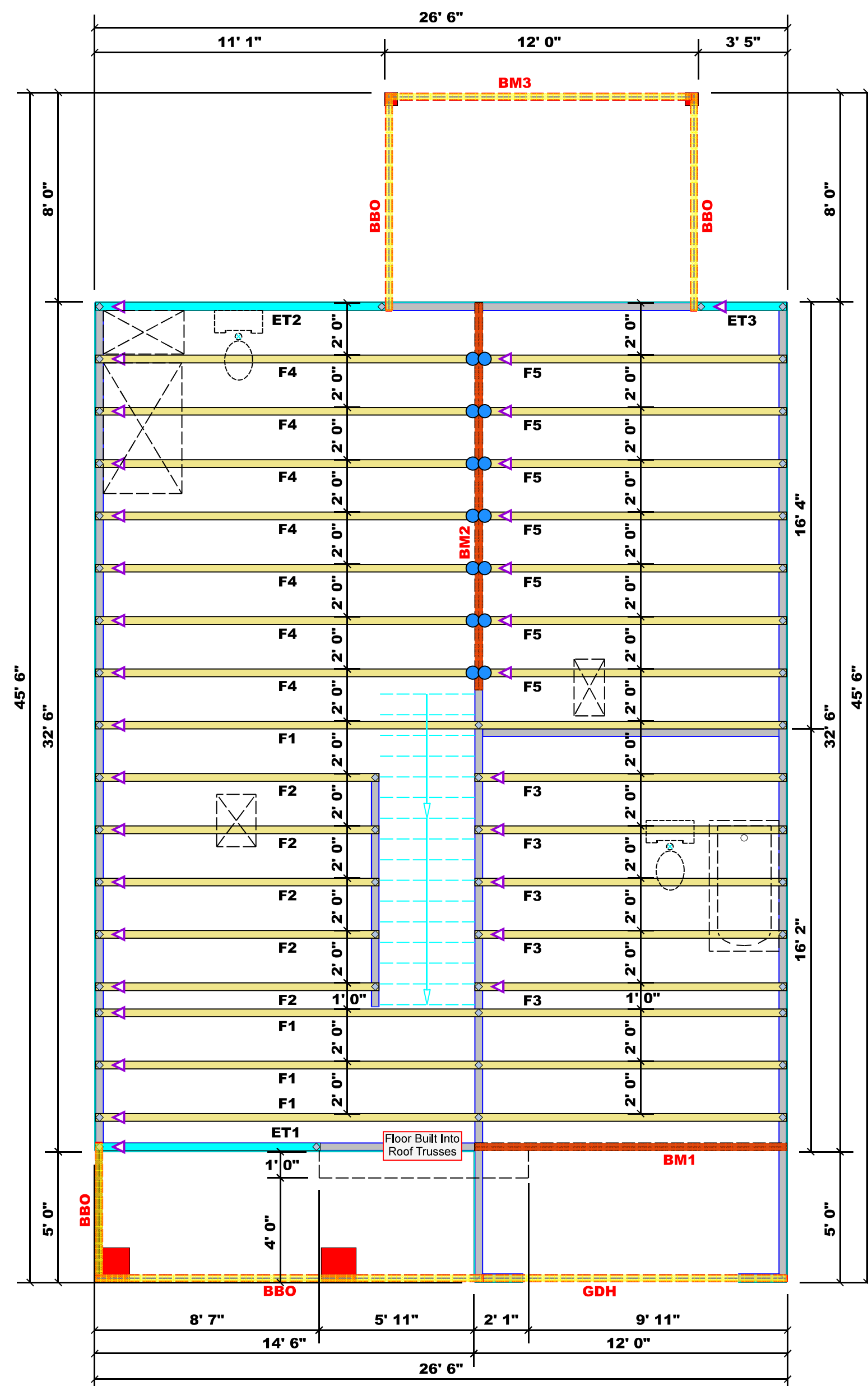
Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables ( derived from the prescriptive Code requirements ) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature Sales Area  
Sales Area

### LOAD CHART FOR JACK STUDS

(BASED ON TABLES R532.5(1) & (2))  
NUMBER OF JACK STUDS REQUIRED @ EACH END OF HEADERS/STIFFENER

FIN. REACTION (L.F.T.)	REQ. STUDS FOR (2) END HEADERS	FIN. REACTION (L.F.T.)	REQ. STUDS FOR (2) END HEADERS	FIN. REACTION (L.F.T.)	REQ. STUDS FOR (2) END HEADERS
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				



**Dimension Notes**

- All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
- All interior wall dimensions are to face of frame wall unless noted otherwise
- All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

**All Walls Shown Are Considered Load Bearing**

**Plumbing Drop Notes**

- Plumbing drop locations shown are NOT exact.
- Contractor to verify ALL plumbing drop locations prior to setting Floor Trusses.
- Adjust spacing as needed not to exceed 24"oc.

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
●	HUS410	USP	14	NA	16d/3-1/2"	16d/3-1/2"

Products				
PlotID	Length	Product	Plies	Net Qty
BM1	12' 0"	1-3/4"x 16" LVL Kerto-S	2	2
BM2	15' 0"	1-3/4"x 16" LVL Kerto-S	2	2
BM3	12' 0"	2x10 SPF No.2	2	2
GDH	12' 0"	2x12 SPF No.2	2	2

1 Truss Placement Plan  
Scale: 1/4"=1'

BUILDER	CITY / CO.	Sanford / Harnett
WEAVER DEVELOPMENT CO. INC.	ADDRESS	4912 BARBECUE CHURCH ROAD
JOB NAME	MODEL	FLOOR
PLAN	DATE REV.	05/13/21
SEAL DATE	DRAWN BY	DAVID LANDRY
QUOTE #	SALES REP.	LENNY NORRIS
JOB #		J0521-2895

**THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.**  
These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCS-B1 and BCS-B3 provided with the truss delivery package or online @ sbcindustry.com

▲ = Indicates Left End of Truss  
(Reference Engineered Truss Drawing)  
Do NOT Erect Truss Backwards



Client: Weaver Development

Date: 5/14/2021

Page 1 of 8

Project:

Input by: David Landry

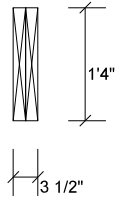
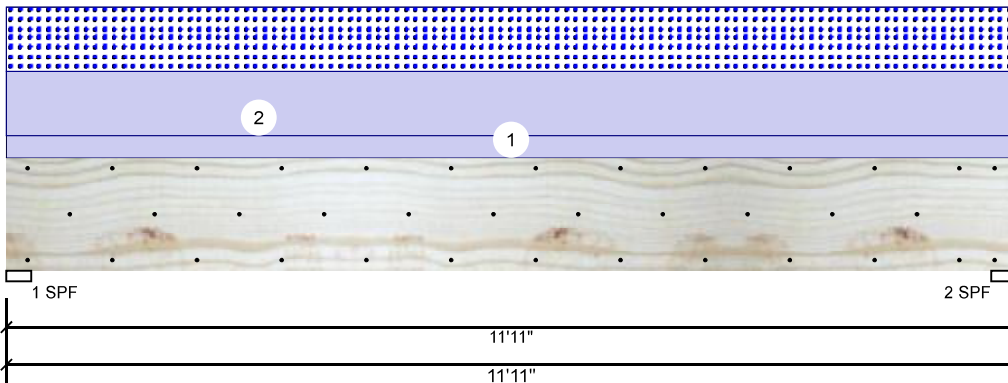
Address:

Job Name: Lot 5 Barbecue Church Road

Project #: J0521-2895

**BM1 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	360
Importance:	Normal - II
Temperature:	Temp <= 100°F

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	No
Deck:	Not Checked
Ceiling:	Gypsum 1/2"

**Reactions UNPATTERNED lb (Uplift)**

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	2869	2079	0	0
2	Vertical	0	2869	2079	0	0

**Bearings**

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	95%	2869 / 2079	4948	L	D+S
2 - SPF	3.500"	Vert	95%	2869 / 2079	4948	L	D+S

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	13679 ft-lb	5'11 1/2"	39750 ft-lb	0.344 (34%)	D+S	L
Unbraced	13679 ft-lb	5'11 1/2"	13699 ft-lb	0.999 (100%)	D+S	L
Shear	3615 lb	1'7 1/2"	13739 lb	0.263 (26%)	D+S	L
LL Defl inch	0.069 (L/2000)	5'11 1/2"	0.287 (L/480)	0.240 (24%)	S	L
TL Defl inch	0.164 (L/840)	5'11 1/2"	0.383 (L/360)	0.428 (43%)	D+S	L

**Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at a maximum of 8'8 3/8" o.c.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Uniform			Top	349 PLF	0 PLF	349 PLF	0 PLF	0 PLF	A2
	Self Weight				12 PLF					

**Notes**

Calculated Structural Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive

**Handling & Installation**

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/7/2024

**Manufacturer Info**

Metsä Wood  
301 Merritt 7 Building, 2nd Floor  
Norwalk, CT 06851  
(800) 622-5850  
www.metsawood.com/us  
ICC-ES: ESR-3633

Comtech, Inc.  
1001 S. Reilly Road, Suite #639  
Fayetteville, NC  
USA  
28314  
910-864-TRUS





Client: Weaver Development

Project:

Address:

Date: 5/14/2021

Input by: David Landry

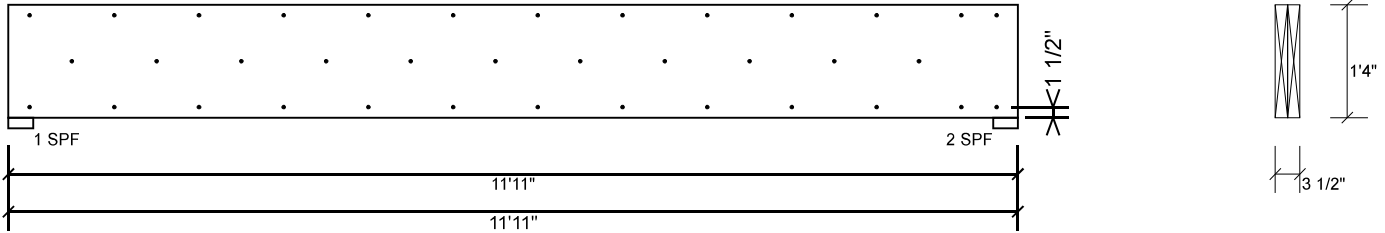
Job Name: Lot 5 Barbecue Church Road

Project #: J0521-2895

Page 2 of 8

# BM1 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



## Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	245.6 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

### Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

### Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive

### chemicals

### Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/7/2024

### Manufacturer Info

Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
[www.metsawood.com/us](http://www.metsawood.com/us)  
 ICC-ES: ESR-3633

Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
 Fayetteville, NC  
 USA  
 28314  
 910-864-TRUS







Client: Weaver Development

Date: 5/14/2021

Page 3 of 8

Project:

Input by: David Landry

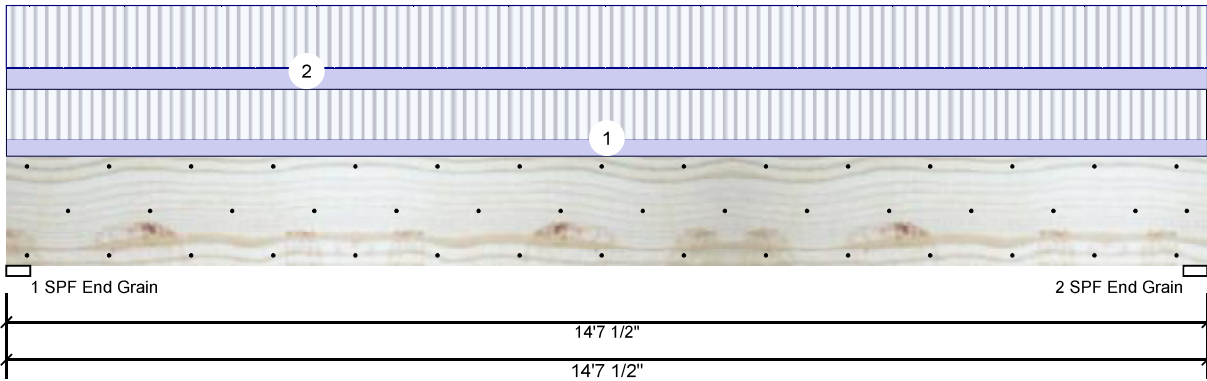
Address:

Job Name: Lot 5 Barbecue Church Road

Project #: J0521-2895

**BM2 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	360
Importance:	Normal - II
Temperature:	Temp <= 100°F

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	No
Deck:	Not Checked
Ceiling:	Gypsum 1/2"

**Reactions UNPATTERNED lb (Uplift)**

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	3868	1385	0	0	0
2	Vertical	3868	1385	0	0	0

**Bearings**

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	49%	1385 / 3868	5254	L	D+L
2 - SPF End Grain	3.500"	Vert	49%	1385 / 3868	5254	L	D+L

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	18077 ft-lb	7'3 3/4"	34565 ft-lb	0.523 (52%)	D+L	L
Unbraced	18077 ft-lb	7'3 3/4"	18085 ft-lb	1.000 (100%)	D+L	L
Shear	5044 lb	1'7 1/2"	11947 lb	0.422 (42%)	D+L	L
LL Defl inch	0.229 (L/743)	7'3 13/16"	0.355 (L/480)	0.646 (65%)	L	L
TL Defl inch	0.311 (L/547)	7'3 13/16"	0.473 (L/360)	0.658 (66%)	D+L	L

**Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top must be laterally braced at a maximum of 6'5 1/8" o.c.
- 6 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Near Face	79 PLF	235 PLF	0 PLF	0 PLF	0 PLF	F5
2	Uniform			Far Face	98 PLF	294 PLF	0 PLF	0 PLF	0 PLF	F4
	Self Weight				12 PLF					

**Notes**

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

**Handling & Installation**

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/7/2024

**Manufacturer Info**

Metsä Wood  
301 Merritt 7 Building, 2nd Floor  
Norwalk, CT 06851  
(800) 622-5850  
www.metsawood.com/us  
ICC-ES: ESR-3633

Comtech, Inc.  
1001 S. Reilly Road, Suite #639  
Fayetteville, NC  
USA  
28314  
910-864-TRUS





Client: Weaver Development

Project:

Address:

Date: 5/14/2021

Input by: David Landry

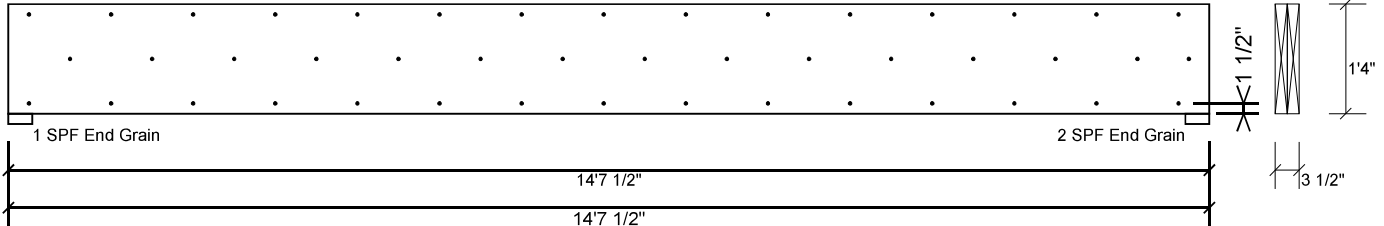
Job Name: Lot 5 Barbecue Church Road

Project #: J0521-2895

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# BM2 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



## Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	79.8 %
Load	196.0 PLF
Yield Limit per Foot	245.6 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+L
Duration Factor	1.00

### Notes

Calculated Structural Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

### Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive

### chemicals

### Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/7/2024

### Manufacturer Info

Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
[www.metsawood.com/us](http://www.metsawood.com/us)  
 ICC-ES: ESR-3633

Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
 Fayetteville, NC  
 USA  
 28314  
 910-864-TRUS



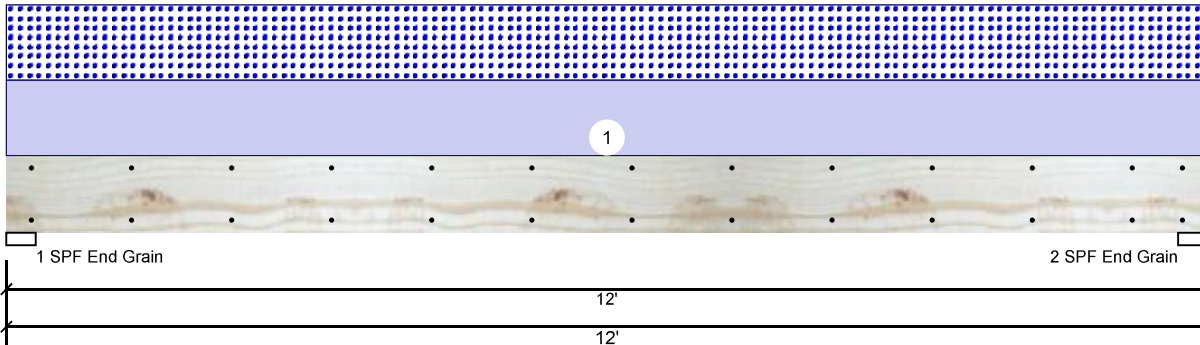


Client: Weaver Development  
 Project:  
 Address:

Date: 5/14/2021  
 Input by: David Landry  
 Job Name: Lot 5 Barbecue Church Road  
 Project #: J0521-2895

**BM3 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	360
Importance:	Normal - II
Temperature:	Temp <= 100°F

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	No
Deck:	Not Checked
Ceiling:	Gypsum 1/2"

**Reactions UNPATTERNED lb (Uplift)**

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	564	564	0	0
2	Vertical	0	564	564	0	0

**Bearings**

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	25%	564 / 564	1128	L	D+S
2 - SPF End Grain	3.500"	Vert	25%	564 / 564	1128	L	D+S

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3130 ft-lb	6'	3946 ft-lb	0.793 (79%)	D+S	L
Unbraced	3130 ft-lb	6'	3131 ft-lb	1.000 (100%)	D+S	L
Shear	928 lb	10'11 1/4"	2872 lb	0.323 (32%)	D+S	L
LL Defl inch	0.135 (L/1022)	6'	0.289 (L/480)	0.470 (47%)	S	L
TL Defl inch	0.271 (L/511)	6'	0.385 (L/360)	0.704 (70%)	D+S	L

**Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at a maximum of 8'8 11/16" o.c.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	94 PLF	0 PLF	94 PLF	0 PLF	0 PLF	C1

**Manufacturer Info**

Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
 Fayetteville, NC  
 USA  
 28314  
 910-864-TRUS



This design is valid until 4/7/2024



Client: Weaver Development

Project:

Address:

Date: 5/14/2021

Input by: David Landry

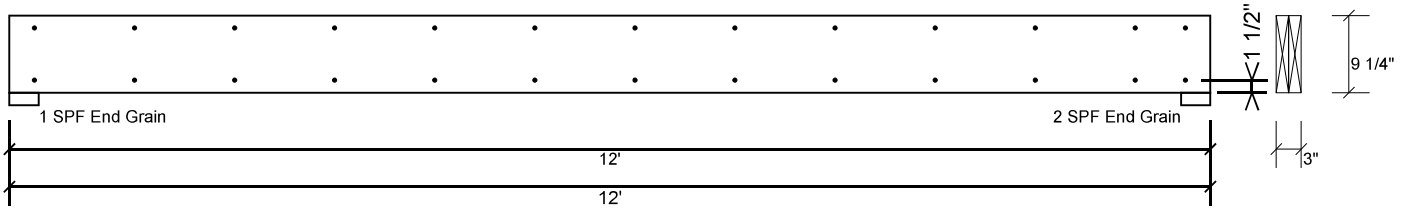
Job Name: Lot 5 Barbecue Church Road

Project #: J0521-2895

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**BM3 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED**

Level: Level



### Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	157.4 PLF
Yield Limit per Fastener	78.7 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

<b>Manufacturer Info</b>	Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS

This design is valid until 4/7/2024



Client: Weaver Development

Project:

Address:

Date: 5/14/2021

Input by: David Landry

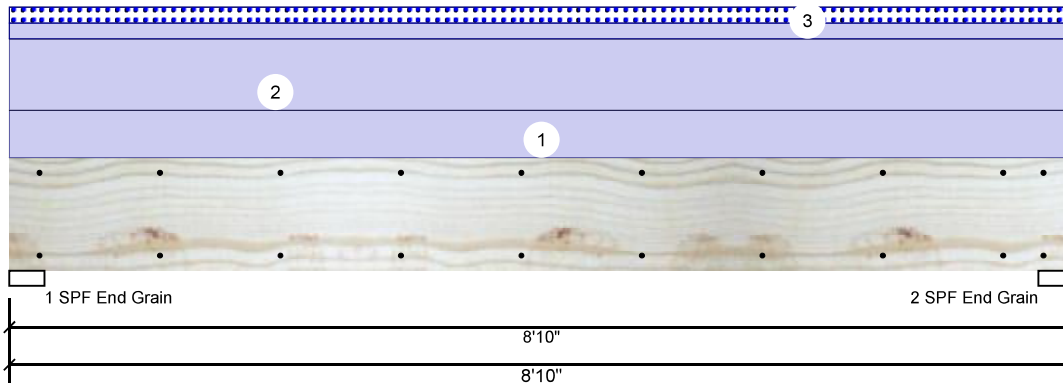
Job Name: Lot 5 Barbecue Church Road

Project #: J0521-2895

Page 7 of 8

**GDH S-P-F #2 2.000" X 12.000" 2-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	360
Importance:	Normal - II
Temperature:	Temp <= 100°F

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	No
Deck:	Not Checked
Ceiling:	Gypsum 1/2"

**Reactions UNPATTERNED lb (Uplift)**

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	751	88	0	0
2	Vertical	0	751	88	0	0

**Bearings**

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	19%	751 / 88	839	L	D+S
2 - SPF End Grain	3.500"	Vert	19%	751 / 88	839	L	D+S

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment Unbraced	1490 ft-lb	4'5"	4153 ft-lb	0.359 (36%)	D	Uniform
Shear	542 lb	1'2 3/4"	2734 lb	0.198 (20%)	D	Uniform
LL Defl inch (L/22622)	0.004	4'5 1/16"	0.209 (L/480)	0.021 (2%)	S	L
TL Defl inch (L/2381)	0.042	4'5 1/16"	0.279 (L/360)	0.151 (15%)	D+S	L

**Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at end bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Uniform			Top	90 PLF	0 PLF	0 PLF	0 PLF	0 PLF	B1GE
3	Tie-In	0-0-0 to 8-10-0	1-0-0	Top	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	Roof Load

**Manufacturer Info**

Comtech, Inc.  
1001 S. Reilly Road, Suite #639  
Fayetteville, NC  
USA  
28314  
910-864-TRUS



This design is valid until 4/7/2024



Client: Weaver Development

Project:

Address:

Date: 5/14/2021

Input by: David Landry

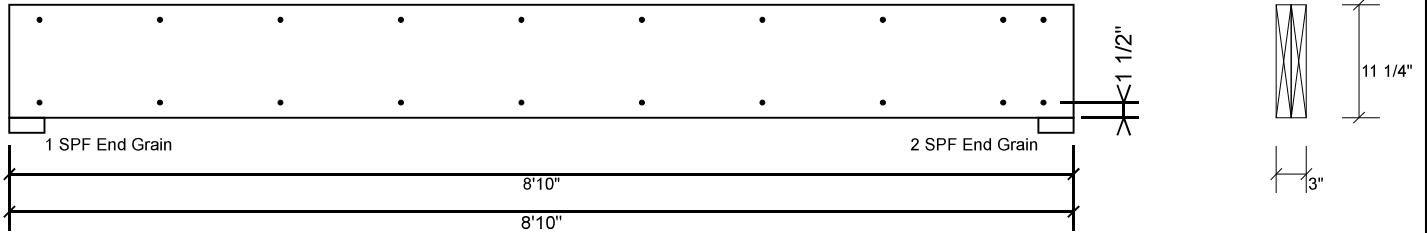
Job Name: Lot 5 Barbecue Church Road

Project #: J0521-2895

Page 8 of 8

**GDH S-P-F #2 2.000" X 12.000" 2-Ply - PASSED**

Level: Level



**Multi-Ply Analysis**

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	157.4 PLF
Yield Limit per Fastener	78.7 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

<b>Manufacturer Info</b>	Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS

This design is valid until 4/7/2024



---

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J0521-2895  
Lot 5 Barbecue Church Rd.

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: E15727346 thru E15727353

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

North Carolina COA: C-0844



May 13, 2021

---

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.

Job J0521-2895	Truss ET1	Truss Type Floor Supported Gable	Qty 1	Ply 1	Lot 5 Barbecue Church Rd. Job Reference (optional)	E15727346
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Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu May 13 15:12:24 2021 Page 1  
ID:1yUksKypmk2404ufZYCrxyoKUD-1g8w9plaXK2dtz1AOWRkJP9UotqYRyNyU31444zGtTL

0'-1'-8"

0'-1'-8"

Scale: 3/4"=1'

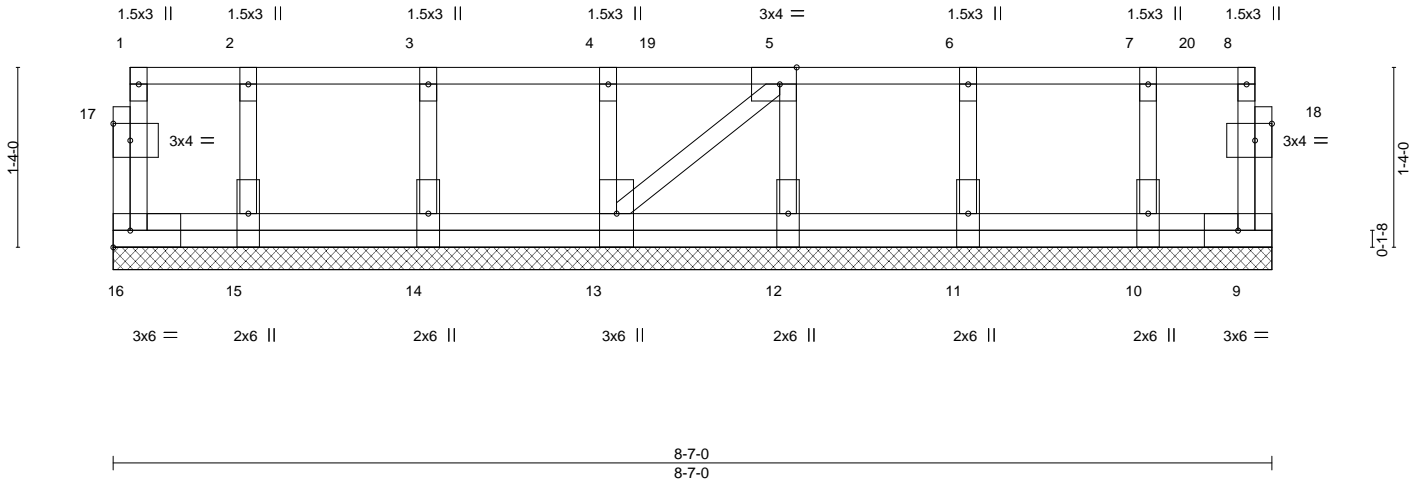


Plate Offsets (X,Y)--	[5:0-1-8,Edge], [17:0-1-8,0-1-8], [18:0-1-8,0-1-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.08	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.00	Vert(CT) n/a - n/a 999		
BCLL 0.0	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.00 9 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-P		Weight: 54 lb	FT = 20%F, 11%E

**LUMBER-**

TOP CHORD 2x4 SP No.1 (flat)  
BOT CHORD 2x4 SP No.1 (flat)  
WEBS 2x4 SP No.3 (flat)  
OTHERS 2x4 SP No.3 (flat)

**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.**

All bearings 8-7-0.  
(b) - Max Grav All reactions 250 lb or less at joint(s) 16, 9, 15, 14, 13, 12, 11, 10

**FORCES.**

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

**NOTES-**

- Plates checked for a plus or minus 1 degree rotation about its center.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.  
Strongbacks to be attached to walls at their outer ends or restrained by other means.

**LOAD CASE(S)** Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 9-16=-10, 1-8=-100  
Concentrated Loads (lb)  
Vert: 3=-71 6=-71 19=-71 20=-77



May 13, 2021

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818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 5 Barbecue Church Rd.	E15727347
J0521-2895	ET2	Floor Supported Gable	1	1	Job Reference (optional)	

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0<sub>1</sub>1<sub>8</sub>

Scale = 1:18.2

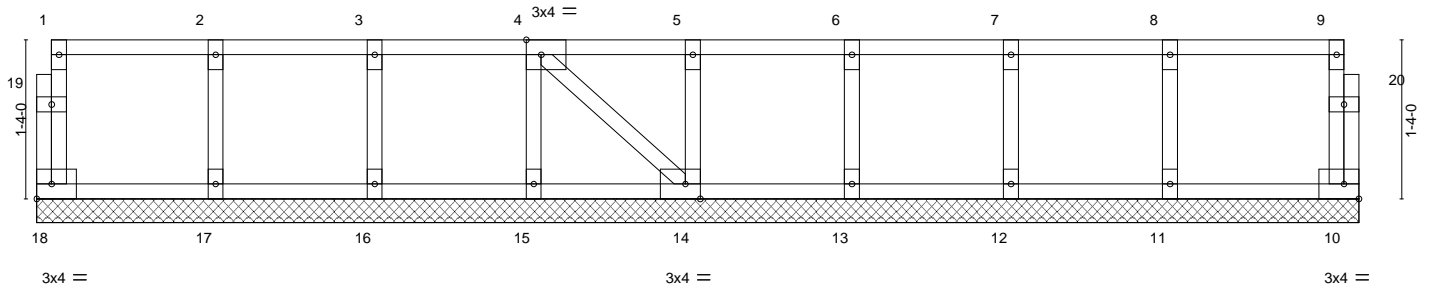


Plate Offsets (X,Y)--	[4:0-1-8,Edge], [14:0-1-8,Edge]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0 Plate Grip DOL 1.00	TC 0.07	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr YES	WB 0.04	Horz(CT)	0.00	10	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 52 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	
OTHERS 2x4 SP No.3(flat)	

**REACTIONS.** All bearings 11-1-0.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 18, 10, 17, 16, 15, 14, 13, 12, 11

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

- NOTES-**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 5) Gable studs spaced at 1-4-0 oc.
  - 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



May 13,2021

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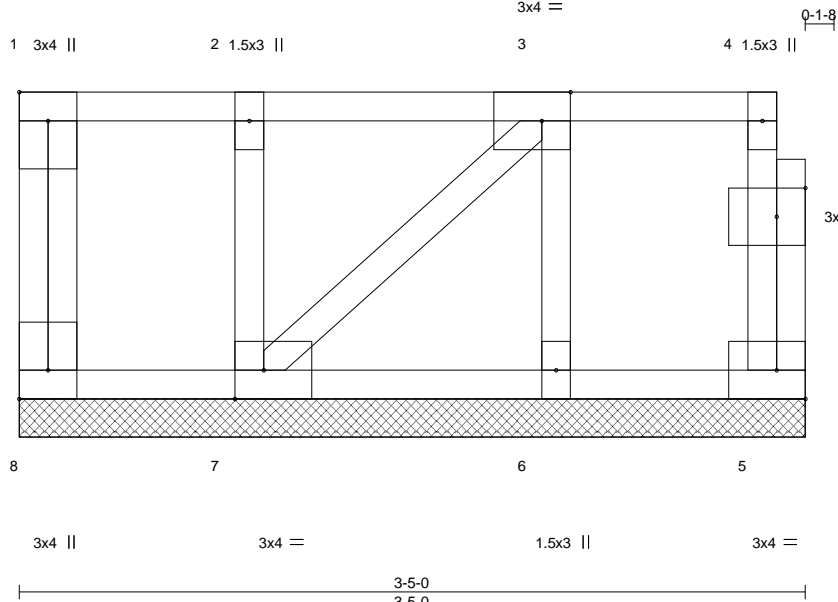


Job J0521-2895	Truss ET3	Truss Type Floor Supported Gable	Qty 1	Ply 1	Lot 5 Barbecue Church Rd. Job Reference (optional)	E15727348
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8.330 s Oct 7 2020 MiTek Industries, Inc. Thu May 13 15:12:26 2021 Page 1

ID:1yUksKymplk2404ufZYCrxyoKUD-\_3GgaUJq3xlL6HBYVxTCOqErqhWzvs8FyNWB9zzGtTJ



Scale = 1:9.4

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [3:0-1-8,Edge], [7:0-1-8,Edge], [8:Edge,0-1-8], [9:0-1-8,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0 Plate Grip DOL 1.00	TC 0.05	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT)	0.00	5	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-P					Weight: 22 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.1 (flat)  
BOT CHORD 2x4 SP No.1 (flat)  
WEBS 2x4 SP No.3 (flat)  
OTHERS 2x4 SP No.3 (flat)

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-5-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 3-5-0.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 8, 5, 7, 6

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

- NOTES-**
- 1) Plates checked for a plus or minus 1 degree rotation about its center.
  - 2) Gable requires continuous bottom chord bearing.
  - 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 4) Gable studs spaced at 1-4-0 oc.
  - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 6) CAUTION, Do not erect truss backwards.



May 13, 2021

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 Barbecue Church Rd.	E15727349
J0521-2895	F1	Floor	4	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu May 13 15:12:27 2021 Page 1  
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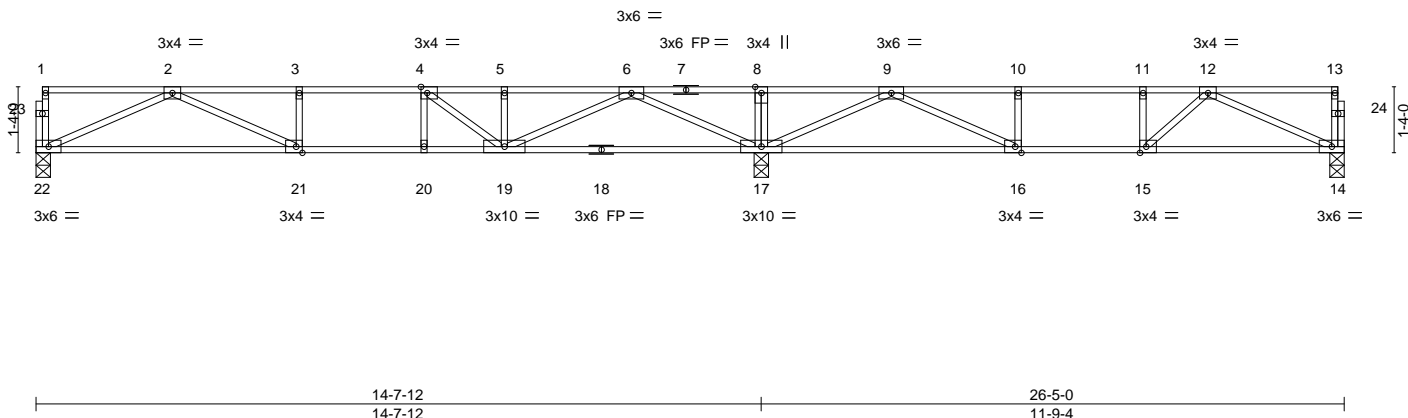


Plate Offsets (X,Y)-- [4:0-1-8,Edge], [15:0-1-8,Edge], [16:0-1-8,Edge], [21:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.55	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.59	Vert(LL) -0.17 21-22 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.53	Vert(CT) -0.25 21-22 >697 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 14 n/a n/a		
	Code IRC2015/TPI2014			Weight: 129 lb	FT = 20%F, 11%E

**LUMBER-**  
 TOP CHORD 2x4 SP No.1 (flat)  
 BOT CHORD 2x4 SP No.1 (flat)  
 WEBS 2x4 SP No.3 (flat)

**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. Except: 6-0-0 oc bracing: 17-19,16-17.

**REACTIONS.** (size) 22=0-3-8, 17=0-3-8, 14=0-3-8  
 Max Grav 22=728(LC 10), 17=1669(LC 1), 14=562(LC 7)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1987/0, 3-4=-1987/0, 4-5=-1740/0, 5-6=-1740/0, 6-8=0/1282, 8-9=0/1282, 9-10=-1183/0, 10-11=-1183/0, 11-12=-1183/0  
 BOT CHORD 21-22=0/1314, 20-21=0/1987, 19-20=0/1987, 17-19=-191/818, 16-17=-366/574, 15-16=0/1183, 14-15=0/954  
 WEBS 8-17=-284/0, 2-22=-1440/0, 2-21=0/745, 3-21=-260/0, 6-17=-1781/0, 6-19=0/1122, 4-19=-646/0, 9-17=-1465/0, 9-16=0/917, 10-16=-329/0, 12-14=-1044/0, 12-15=-86/311

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - All plates are 1.5x3 MT20 unless otherwise indicated.
  - Plates checked for a plus or minus 1 degree rotation about its center.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - CAUTION, Do not erect truss backwards.



May 13, 2021

Job	Truss	Truss Type	Qty	Ply	Lot 5 Barbecue Church Rd.	E15727350
J0521-2895	F2	Floor	5	1	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Thu May 13 15:12:27 2021 Page 1  
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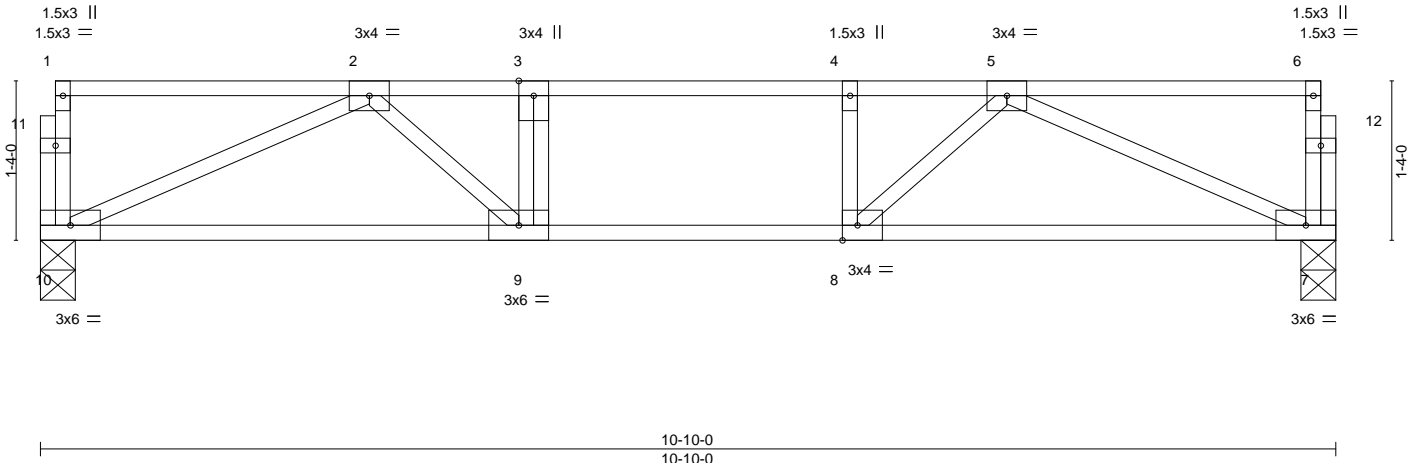
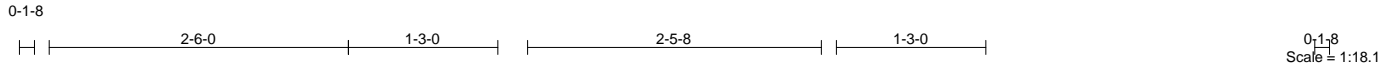


Plate Offsets (X,Y)-- [8:0-1-8,Edge]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	2-0-0	TC 0.42	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.35	Vert(LL) -0.08 9-10 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.30	Vert(CT) -0.11 9-10 >999 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 7 n/a n/a		
	Code IRC2015/TPI2014			Weight: 56 lb	FT = 20%F, 11%E

**LUMBER-**

TOP CHORD 2x4 SP No.1 (flat)  
BOT CHORD 2x4 SP No.1 (flat)  
WEBS 2x4 SP No.3 (flat)

**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.**

(size) 10=0-3-8, 7=0-3-8  
Max Grav 10=576(LC 1), 7=576(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1234/0, 3-4=-1234/0, 4-5=-1234/0  
BOT CHORD 9-10=0/981, 8-9=0/1234, 7-8=0/982  
WEBS 2-10=-1073/0, 5-7=-1075/0, 5-8=0/485, 2-9=0/478, 3-9=-255/0, 4-8=-266/0

**NOTES-**

- Unbalanced floor live loads have been considered for this design.
- Plates checked for a plus or minus 1 degree rotation about its center.
- Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



May 13, 2021

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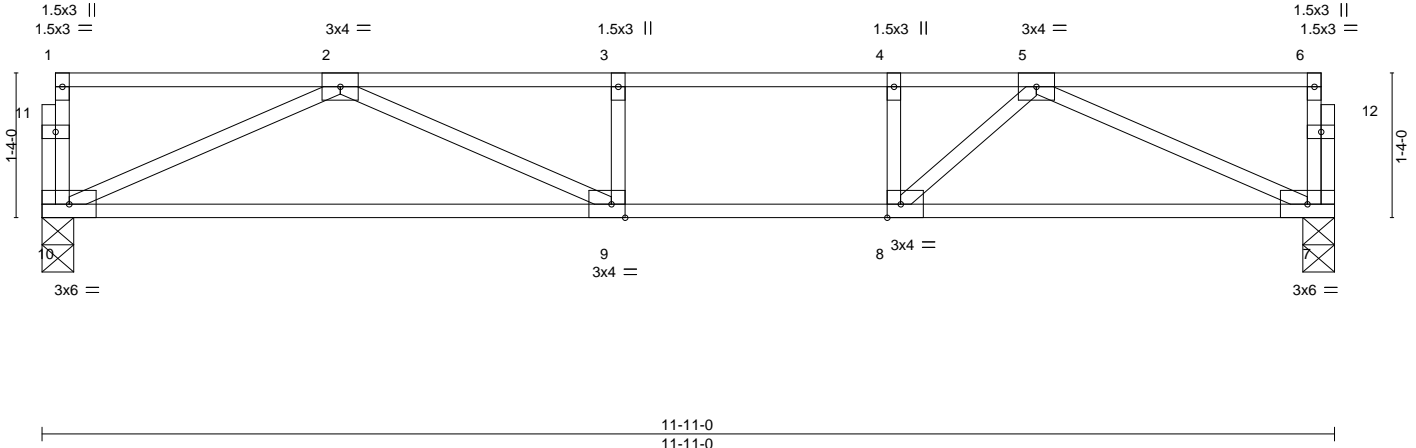
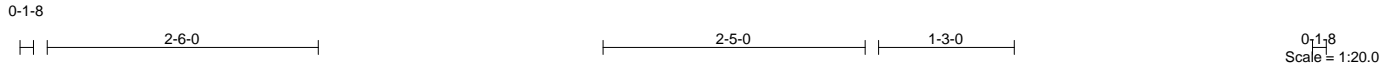


Job	Truss	Truss Type	Qty	Ply	Lot 5 Barbecue Church Rd.	E15727351
J0521-2895	F3	Floor	5	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

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ID:1yUksKympIk2404ufZYCrxyoKUD-wROR?AL5bZY2MaKxdMWgUfJ0RU3pNhmYPg?IDrzGtH



LOADING (psf)		SPACING-		CSI.	DEFL.				PLATES	GRIP	
TCLL	40.0	2-0-0	Plate Grip DOL	1.00	TC	0.68	in (loc)	l/defl	L/d	MT20	244/190
TCDL	10.0	1.00	Lumber DOL	1.00	BC	0.56	Vert(LL)	-0.19 9-10	>740	480	
BCLL	0.0	YES	Rep Stress Incr	YES	WB	0.34	Vert(CT)	-0.29 9-10	>490	360	
BCDL	5.0	Code IRC2015/TPI2014	Matrix-S		Horz(CT)	0.02 7	n/a	n/a			
										Weight: 59 lb	FT = 20%F, 11%E

- LUMBER-**  
TOP CHORD 2x4 SP No.1 (flat)  
BOT CHORD 2x4 SP No.1 (flat)  
WEBS 2x4 SP No.3 (flat)
- 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.** (size) 10=0-3-8, 7=0-3-8  
Max Grav 10=635(LC 1), 7=635(LC 1)
- FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1508/0, 3-4=-1508/0, 4-5=-1508/0  
BOT CHORD 9-10=0/1112, 8-9=0/1508, 7-8=0/1121  
WEBS 2-10=-1219/0, 2-9=0/558, 5-7=-1228/0, 5-8=0/655, 4-8=-353/0

- NOTES-**  
1) Unbalanced floor live loads have been considered for this design.  
2) Plates checked for a plus or minus 1 degree rotation about its center.  
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.  
Strongbacks to be attached to walls at their outer ends or restrained by other means.



May 13, 2021

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Job	Truss	Truss Type	Qty	Ply	Lot 5 Barbecue Church Rd.	E15727352
J0521-2895	F4	Floor	7	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu May 13 15:12:29 2021 Page 1  
ID:1yUksKymplk2404ufZYCrxyoKUD-OeypCWMjMsgvzkv7A31v0TsCGuKe66CheKkrmzlGtTG



Scale = 1:24.2

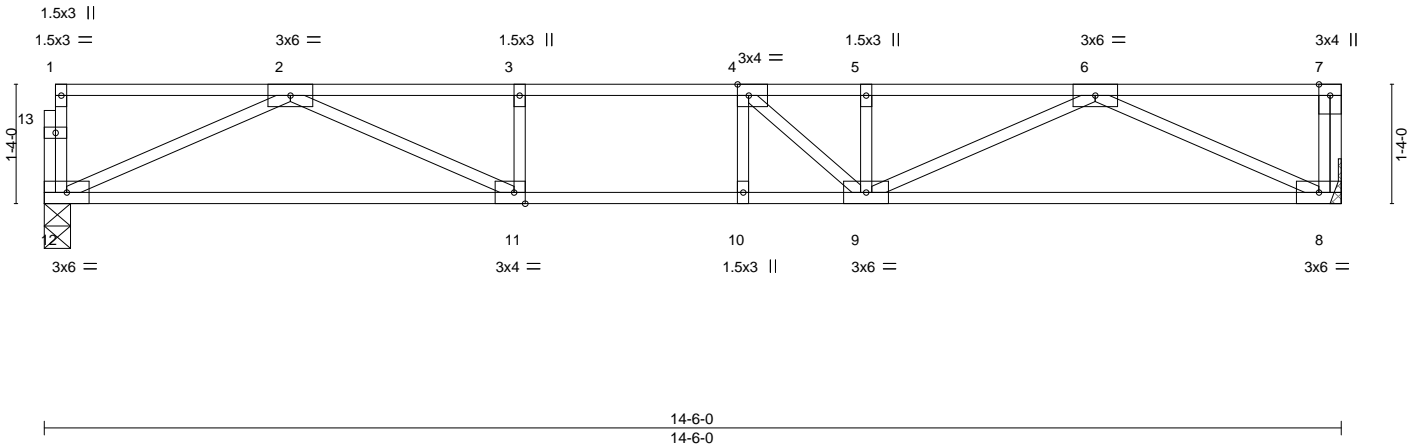


Plate Offsets (X,Y)-- [4:0-1-8,Edge], [11:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0 Plate Grip DOL 1.00	TC 0.61	Vert(LL)	-0.20	9-10	>838	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.84	Vert(CT)	-0.25	9-10	>684		
BCLL 0.0	Rep Stress Incr YES	WB 0.46	Horz(CT)	0.03	8	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 73 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.1 (flat)  
BOT CHORD 2x4 SP No.1 (flat)  
WEBS 2x4 SP No.3 (flat)

**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.** (size) 12=0-3-8, 8=Mechanical  
Max Grav 12=778(LC 1), 8=784(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2243/0, 3-4=-2243/0, 4-5=-2186/0, 5-6=-2186/0  
BOT CHORD 11-12=0/1424, 10-11=0/2243, 9-10=0/2243, 8-9=0/1429  
WEBS 2-12=-1561/0, 2-11=0/958, 3-11=-303/0, 6-8=-1573/0, 6-9=0/836, 5-9=-271/41, 4-9=-428/186

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - Plates checked for a plus or minus 1 degree rotation about its center.
  - Refer to girder(s) for truss to truss connections.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - CAUTION, Do not erect truss backwards.



May 13, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **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



Job	Truss	Truss Type	Qty	Ply	Lot 5 Barbecue Church Rd.	E15727353
J0521-2895	F5	Floor	7	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu May 13 15:12:29 2021 Page 1  
 ID:1yUksKymplk2404ufZYCrxyoKUD-OeypCWMjMsgvzkv7A31v0TsCTuQo68BheKkrmIzGtTG



Scale = 1:19.4

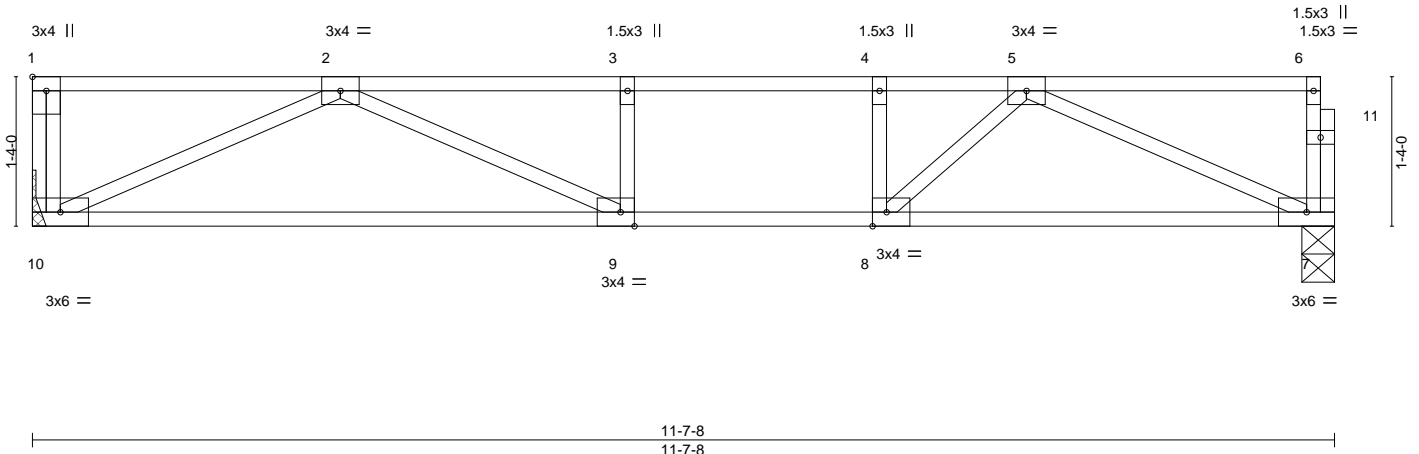


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [8:0-1-8,Edge], [9:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.60	Vert(LL)	-0.16	9-10	>846	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.51	Vert(CT)	-0.25	9-10	>540		
BCLL 0.0	Lumber DOL 1.00	WB 0.33	Horz(CT)	0.02	7	n/a		
BCDL 5.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014						Weight: 58 lb	FT = 20%F, 11%E

**LUMBER-**  
 TOP CHORD 2x4 SP No.1 (flat)  
 BOT CHORD 2x4 SP No.1 (flat)  
 WEBS 2x4 SP No.3 (flat)

**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.** (size) 10=Mechanical, 7=0-3-8  
 Max Grav 10=626(LC 1), 7=619(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1441/0, 3-4=-1441/0, 4-5=-1441/0  
 BOT CHORD 9-10=0/1081, 8-9=0/1441, 7-8=0/1087  
 WEBS 2-10=-1190/0, 2-9=0/515, 5-7=-1190/0, 5-8=0/606, 4-8=-323/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Refer to girder(s) for truss to truss connections.
  - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 5) CAUTION, Do not erect truss backwards.



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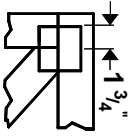
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **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



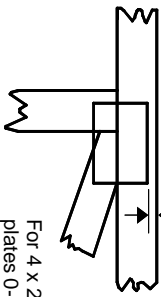
818 Soundside Road  
 Edenton, NC 27932

# 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

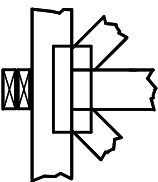
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



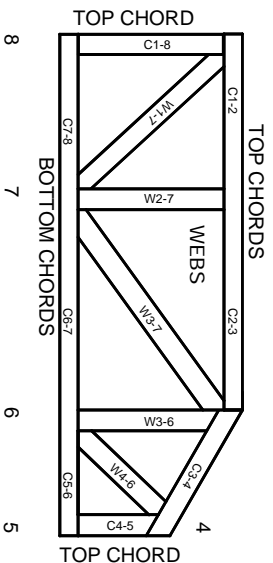
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: 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 NUMBER/LETTERS.

## PRODUCT CODE APPROVALS

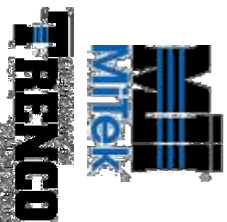
ICC-ES Reports:

ESR-1311, ESR-1352, ESR 1988  
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/TP1 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

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
- 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.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and lead vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TP1 Quality Criteria.
- The design does not take into account any dynamic or other loads other than those expressly stated.