

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0225-0815
Mt Pisgah Church Addition

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: I71378828 thru I71378847

My license renewal date for the state of North Carolina is December 31, 2025.

North Carolina COA: C-0844



February 12, 2025

Gilbert, Eric

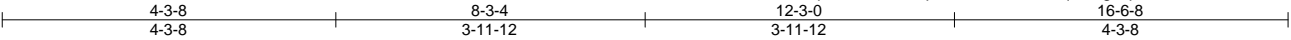
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition	I71378828
J0225-0815	A-GRD	FLAT GIRDER	1	3	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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ID:wQfAwI6J8Z4LdqOnbXV_OszRpX7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:29.6

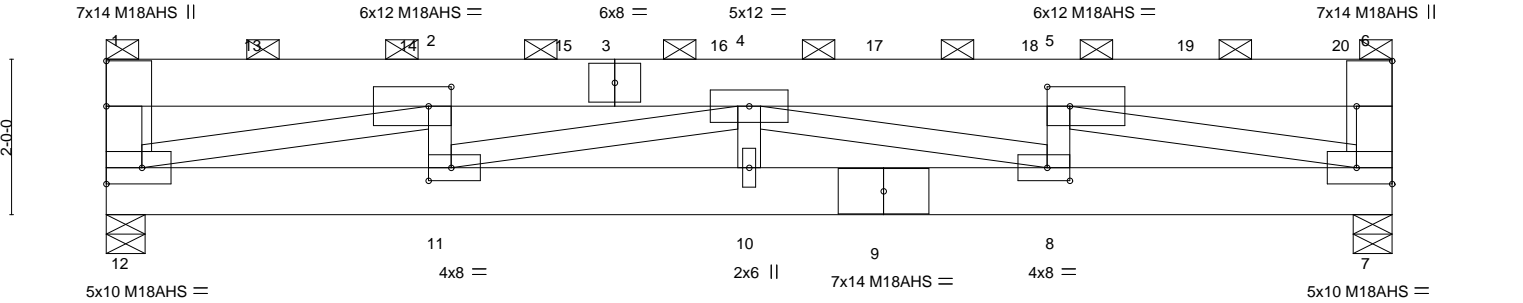


Plate Offsets (X,Y)--		[2:0-3-8,0-3-0], [5:0-3-8,0-3-0], [6:Edge,0-5-8], [7:Edge,0-2-8], [8:0-3-8,0-2-0], [11:0-3-8,0-2-0], [12:Edge,0-2-8]
LOADING (psf)	SPACING-	2-0-0
TCLL 20.0	Plate Grip DOL	1.15
TCDL 10.0	Lumber DOL	1.15
BCLL 0.0 *	Rep Stress Incr	NO
BCDL 10.0	Code IBC2021/TPI2014	
CSI.	DEFL.	in (loc) l/defl L/d
TC 0.69	Vert(LL) -0.20	10 >945 360
BC 0.66	Vert(CT) -0.41	10 >474 240
WB 0.80	Horz(CT) 0.07	7 n/a n/a
Matrix-MS	Wind(LL) 0.16	10 >999 240
PLATES	GRIP	
MT20	244/190	
M18AHS	186/179	
Weight: 394 lb	FT = 20%	

LUMBER-

TOP CHORD 2x8 SP No.1
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except*
1-12,6-7: 2x6 SP No.1

BRACING-

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

REACTIONS.

(size) 12=0-6-0, 7=0-6-0
Max Horz 12=49(LC 24)
Max Uplift 12=920(LC 4), 7=1011(LC 5)
Max Grav 12=9620(LC 1), 7=11082(LC 1)

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

TOP CHORD 1-12=-2391/286, 1-2=-2707/259, 2-4=-20486/1866, 4-5=-20515/1870, 5-6=-2747/263,
6-7=-3853/377
BOT CHORD 11-12=-1886/20486, 10-11=-2551/27872, 8-10=-2551/27872, 7-8=-1877/20515
WEBS 2-12=-18799/1712, 2-11=-75/1486, 4-11=-7827/719, 4-10=0/310, 4-8=-7796/714,
5-8=-73/1472, 5-7=-18788/1710

NOTES-

- 3-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, 2x8 - 3 rows staggered at 0-4-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 2-11 2x4 - 1 row at 0-6-0 oc, member 4-10 2x4 - 1 row at 0-6-0 oc, member 5-8 2x4 - 1 row at 0-6-0 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.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- 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) 12=920, 7=1011.
- 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) 152 lb down and 67 lb up at 0-2-12, 2406 lb down and 237 lb up at 1-11-4, 2406 lb down and 237 lb up at 3-11-4, 2406 lb down and 237 lb up at 5-11-4, 2406 lb down and 237 lb up at 7-11-4, 2406 lb down and 237 lb up at 9-11-4, 2406 lb down and 237 lb up at 11-11-4, and 2406 lb down and 237 lb up at 13-11-4, and 2424 lb down and 237 lb up at 15-11-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.



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Continued on page 2

LOAD CASE(S) - Standard

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition
J0225-0815	A-GRD	FLAT GIRDER	1	3	I71378828
					Job Reference (optional)

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-6=-60, 7-12=-20
- Concentrated Loads (lb)
- Vert: 1=-152(F) 13=-2406(F) 14=-2406(F) 15=-2406(F) 16=-2406(F) 17=-2406(F) 18=-2406(F) 19=-2406(F) 20=-2424(F)

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818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition	171378829
J0225-0815	A1-GE	GABLE	2	1	Job Reference (optional)	

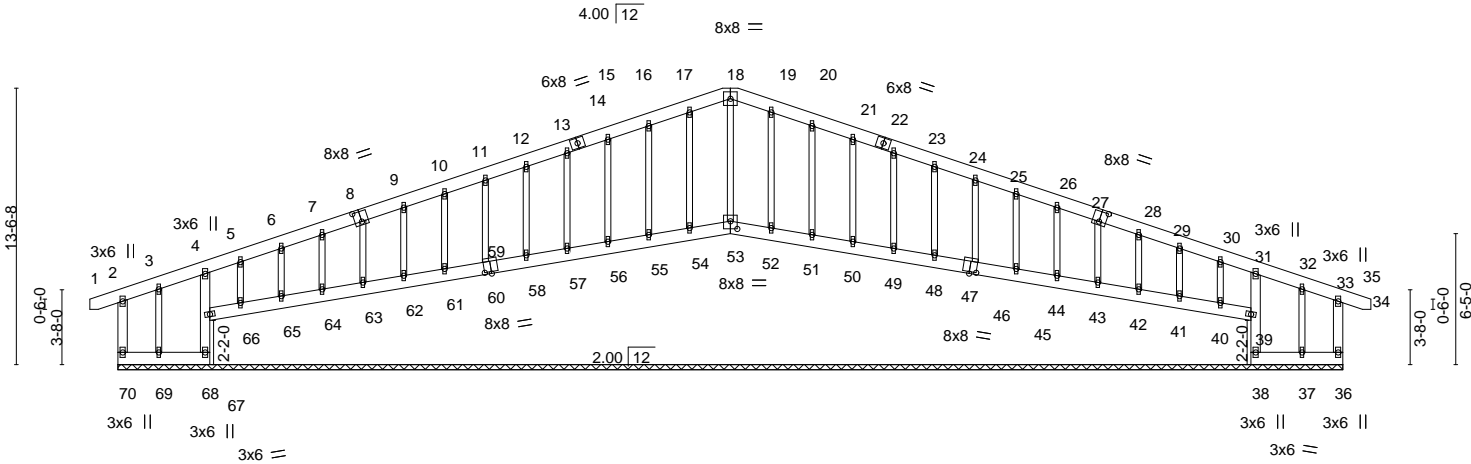
Comtech, Inc., Fayetteville, NC - 28314,

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ID:wQfAwI6J8Z4LdqOnbXV_OszRpX7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

1-4-8 4-6-0 30-0-0 55-6-0 60-0-0 61-4-8
1-4-8 4-6-0 25-6-0 25-6-0 4-6-0 1-4-8

Scale = 1:112.9



	4-6-0		30-0-0		55-6-0		59-6-8	60-0-0
	4-6-0		25-6-0		25-6-0		4-0-8	0-5-8
Plate Offsets (X,Y)--	[8:0-4-0,0-6-0], [28:0-4-0,0-6-0], [47:0-4-0,0-1-2], [53:0-4-0,0-4-8], [59:0-4-0,0-1-2]							
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 0.08	Vert(LL) -0.00	34	n/r	120	MT20 244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.11	Vert(CT) -0.00	34	n/r	120	
BCLL 0.0 *	Rep Stress Incr YES		WB 0.10	Horz(CT) 0.02	36	n/a	n/a	
BCDL 10.0	Code IBC2021/TPI2014		Matrix-R					
							Weight: 580 lb	FT = 20%

LUMBER-

TOP CHORD 2x8 SP No.1
BOT CHORD 2x8 SP No.1 *Except*
4-68,32-38: 2x6 SP No.1
WEBS 2x6 SP No.1
OTHERS 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 67-68,38-39.

REACTIONS.

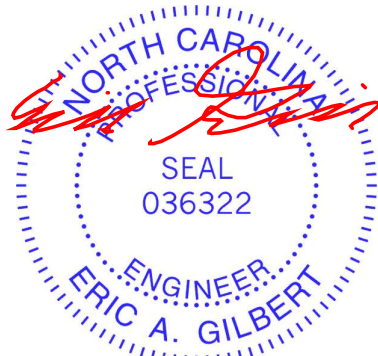
All bearings 60-0-0.
(lb) - Max Horz 70=89(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 68, 36, 39, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 69, 52, 51, 50, 49, 48, 46, 45, 44, 43, 42, 41, 37 except 70=-104(LC 13), 67=-128(LC 13), 66=-199(LC 12), 40=-141(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 70, 68, 53, 38, 36, 67, 39, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 69, 52, 51, 50, 49, 48, 46, 45, 44, 43, 42, 41, 40, 37

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

TOP CHORD 11-12=-128/272, 12-13=-141/294, 13-15=-154/317, 15-16=-167/340, 16-17=-181/364, 17-18=-186/375, 18-19=-186/371, 19-20=-181/360, 20-21=-167/336, 21-23=-154/313, 23-24=-141/291, 24-25=-128/268

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-2-1 to 4-9-15, Interior(1) 4-9-15 to 30-0-0, Exterior(2R) 30-0-0 to 36-0-0, Interior(1) 36-0-0 to 61-2-1 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 5) All plates are 2x6 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * 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 is continuous between the bottom chord and any other members.



February 12, 2025

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ENGINEERING BY
TRENCO
A MiTek Affiliate

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition
J0225-0815	A1-GE	GABLE	2	1	I71378829
					Job Reference (optional)

- NOTES-**
- 11) Bearing at joint(s) 67, 39 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 68, 36, 39, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 69, 52, 51, 50, 49, 48, 46, 45, 44, 43, 42, 41, 37 except (jt=lb) 70=104, 67=128, 66=199, 40=141.
 - 13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 52, 51, 50, 49, 48, 46, 45, 44, 43, 42, 41, 40.

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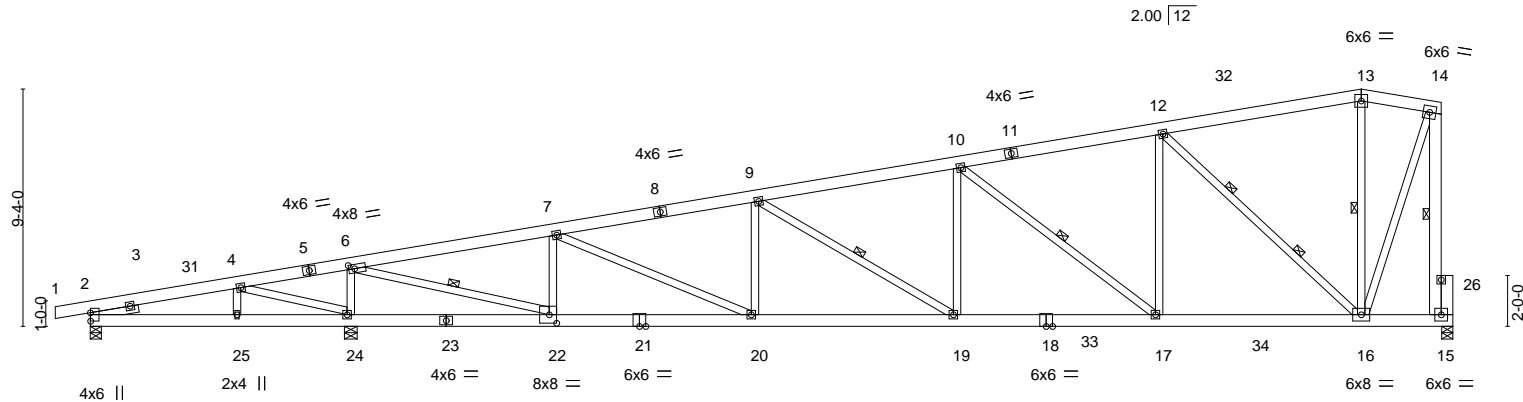
Job	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition	171378832
J0225-0815	B1	COMMON	15	1		
Job Reference (optional)						

Comtech, Inc., Fayetteville, NC - 28314,

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ID:wQfAwI6J8Z4LdqOnbXV_OszRpX7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

1-4-8	5-9-5	10-3-0	18-2-6	26-1-13	34-1-3	42-0-10	50-0-0	53-7-4
1-4-8	5-9-5	4-5-11	7-11-6	7-11-6	7-11-6	7-11-6	7-11-6	3-7-4

Scale = 1:90.6



	5-9-5	10-3-0	18-2-6	26-1-13	34-1-3	42-0-10	50-0-0	53-7-4
	5-9-5	4-5-11	7-11-6	7-11-6	7-11-6	7-11-6	7-11-6	3-7-4
Plate Offsets (X,Y)--	[2:0-3-15,0-0-2], [6:0-2-12,0-2-0], [22:0-3-8,0-4-0]							

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.40	Vert(LL)	-0.23	19-20	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.50	Vert(CT)	-0.42	19-20	>999	240	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.99	Horz(CT)	0.07	15	n/a	n/a	
BCDL 10.0	Code IBC2021/TPI2014		Matrix-AS	Wind(LL)	0.15	20	>999	240	
								Weight: 413 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2 *Except*	WEBS 1 Row at midpt 6-22, 9-19, 10-17, 13-16, 14-15
15-26,14-15: 2x6 SP No.1	2 Rows at 1/3 pts 12-16
SLIDER Left 2x4 SP No.2 1-11-0	

REACTIONS.	(size) 2=0-5-4, 24=0-6-0, 15=0-5-4
	Max Horz 2=296(LC 11)
	Max Uplift 2=-57(LC 8), 24=-265(LC 12), 15=-155(LC 8)
	Max Grav 2=220(LC 25), 24=2702(LC 2), 15=1879(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-4=-324/383, 4-6=-558/1144, 6-7=-2843/716, 7-9=-3671/923, 9-10=-3245/838, 10-12=-2189/626, 12-13=-726/331, 13-14=-707/349, 14-15=-1901/504
BOT CHORD	2-25=-444/107, 24-25=-444/107, 22-24=-1119/293, 20-22=-888/2766, 19-20=-1056/3591, 17-19=-924/3168, 16-17=-671/2129
WEBS	4-24=-798/278, 6-24=-2141/636, 6-22=-933/4018, 7-22=-872/365, 7-20=-184/904, 9-19=-526/168, 10-19=0/604, 10-17=-1322/339, 12-17=-106/1217, 12-16=-2036/509, 13-16=-138/251, 14-16=-497/1814

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; 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(2E) -1-4-8 to 3-11-13, Interior(1) 3-11-13 to 50-0-0, Exterior(2E) 50-0-0 to 52-11-0 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) All plates are 4x4 MT20 unless otherwise indicated.
 - 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) 2 except (jt=lb) 24=265, 15=155.
 - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition	171378833
J0225-0815	B2	COMMON	4	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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ID:wQfAwI6J8Z4LdqOnbXV_OszRpX7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

1-4-8	5-9-5	10-3-0	18-2-6	26-1-13	34-1-3	42-0-10	50-0-0	53-2-12
1-4-8	5-9-5	4-5-11	7-11-6	7-11-6	7-11-6	7-11-6	7-11-6	3-2-12

Scale = 1:90.4

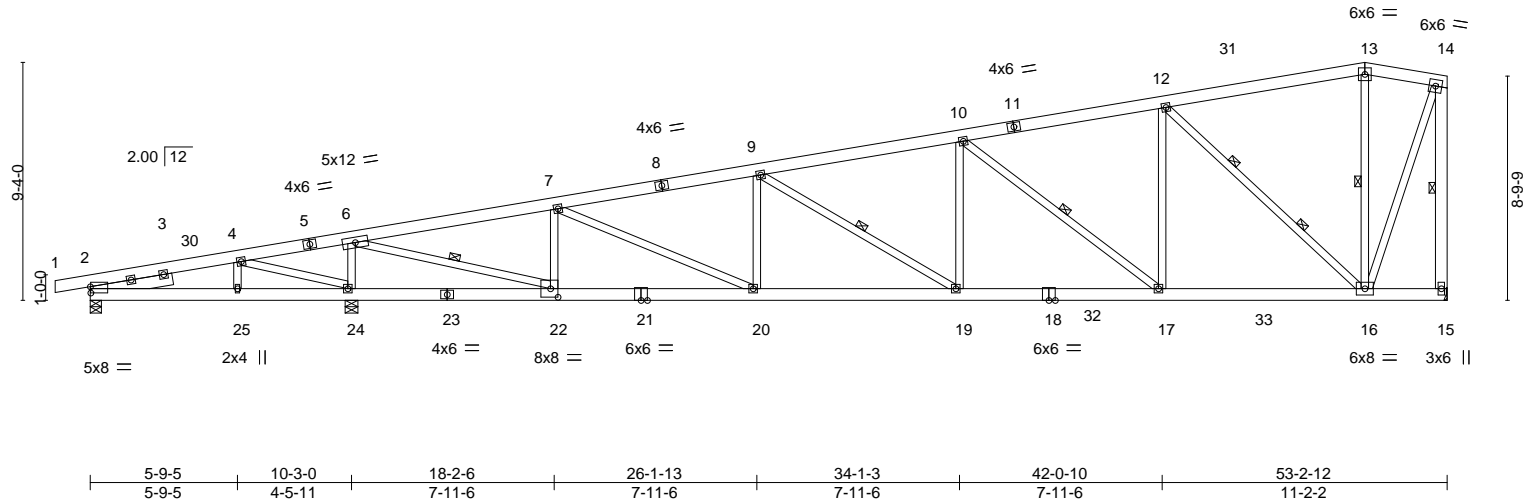


Plate Offsets (X,Y)-- [2:0-0-3,0-2-15], [22:0-3-8,0-4-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.	DEFL.		in (loc)		l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.23	19-20	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.41	19-20	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.07	15	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-AS		Wind(LL)	0.14	20	>999	240	Weight: 413 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2 *Except*	WEBS 1 Row at midpt 6-22, 9-19, 14-15, 10-17, 13-16
14-15: 2x6 SP No.1	2 Rows at 1/3 pts 12-16
SLIDER Left 2x6 SP No.1 3-3-0	

REACTIONS.	(size) 15=Mechanical, 24=0-6-0, 2=0-5-4
	Max Horz 2=296(LC 11)
	Max Uplift 15=153(LC 8), 24=267(LC 12), 2=56(LC 8)
	Max Grav 15=1880(LC 2), 24=2718(LC 2), 2=204(LC 25)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-4=-373/481, 4-6=-598/1223, 6-7=-2784/709, 7-9=-3626/916, 9-10=-3207/831, 10-12=-2156/619, 12-13=-697/324, 13-14=-674/341, 14-15=-1855/484
BOT CHORD	2-25=-525/119, 24-25=-525/119, 22-24=-1181/299, 20-22=-861/2709, 19-20=-1038/3546, 17-19=-910/3130, 16-17=-660/2096
WEBS	4-24=-774/266, 6-24=-2156/648, 6-22=-947/4039, 7-22=-878/369, 7-20=-193/918, 9-19=-519/168, 10-19=0/599, 10-17=-1315/338, 12-17=-107/1217, 12-16=-2034/506, 13-16=-166/263, 14-16=-503/1803

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-4-8 to 3-11-6, Interior(1) 3-11-6 to 50-0-0, Exterior(2E) 50-0-0 to 53-0-0 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) All plates are 4x4 MT20 unless otherwise indicated.
 - 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) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 15=153, 24=267.
 - 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 12, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition	171378834
J0225-0815	B3	Common	6	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Feb 12 09:31:24 2025 Page 1
ID:wQfAwI6J8Z4LdqOnbXV_OszRpX7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

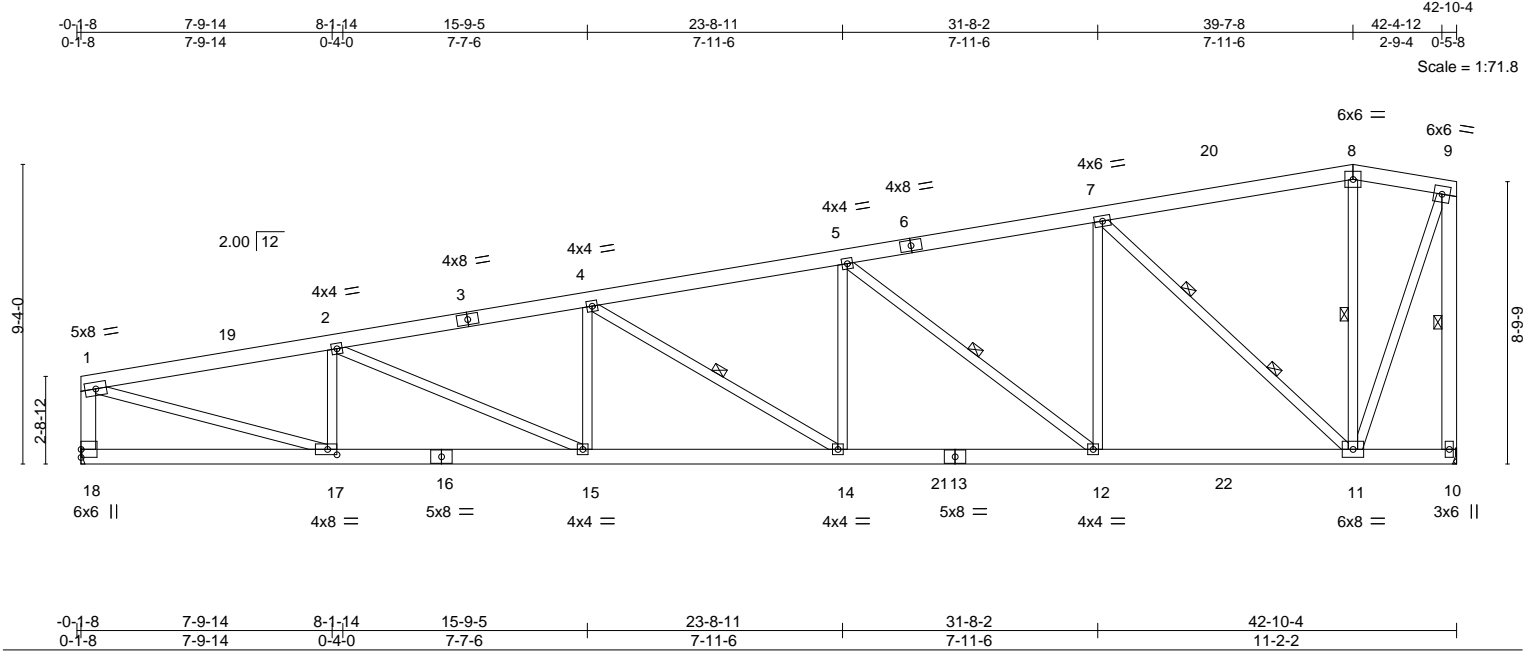


Plate Offsets (X, Y)-- [17:0-3-8,0-2-0]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	-0.23 14-15	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.52	Vert(CT)	-0.42 14-15	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.86	Horz(CT)	0.09 10	n/a	n/a		
BCDL 10.0	Code IBC2021/TPI2014		Matrix-AS	Wind(LL)	0.14 14-15	>999	240	Weight: 347 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SP No.2 *Except*	WEBS	1 Row at midpt 9-10, 4-14, 5-12, 8-11
	1-18,9-10: 2x6 SP No.1		2 Rows at 1/3 pts 7-11

REACTIONS.		(size) 10=Mechanical, 18=Mechanical
		Max Horz 18=294(LC 11)
		Max Uplift 10=-159(LC 8), 18=-173(LC 8)
		Max Grav 10=1944(LC 2), 18=1862(LC 2)

FORCES.		(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-3419/803, 2-4=-3978/967, 4-5=-3403/860, 5-7=-2250/633, 7-8=-714/327, 8-9=-692/344, 1-18=-1710/481, 9-10=-1918/493	
BOT CHORD	17-18=-606/564, 15-17=-1186/3340, 14-15=-1214/3893, 12-14=-1004/3324, 11-12=-699/2189	
WEBS	2-17=-735/334, 2-15=-112/607, 1-17=-767/3265, 4-14=-678/246, 5-14=-32/694, 5-12=-1444/387, 7-12=-146/1296, 7-11=-2132/550, 8-11=-159/254, 9-11=-525/1865	

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; 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(2E) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 39-7-8, Exterior(2E) 39-7-8 to 42-7-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, 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) except (jt=lb) 10=159, 18=173.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 12, 2025

Job	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition	171378835
J0225-0815	B4	Jack-Closed	6	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Feb 12 09:31:25 2025 Page 1

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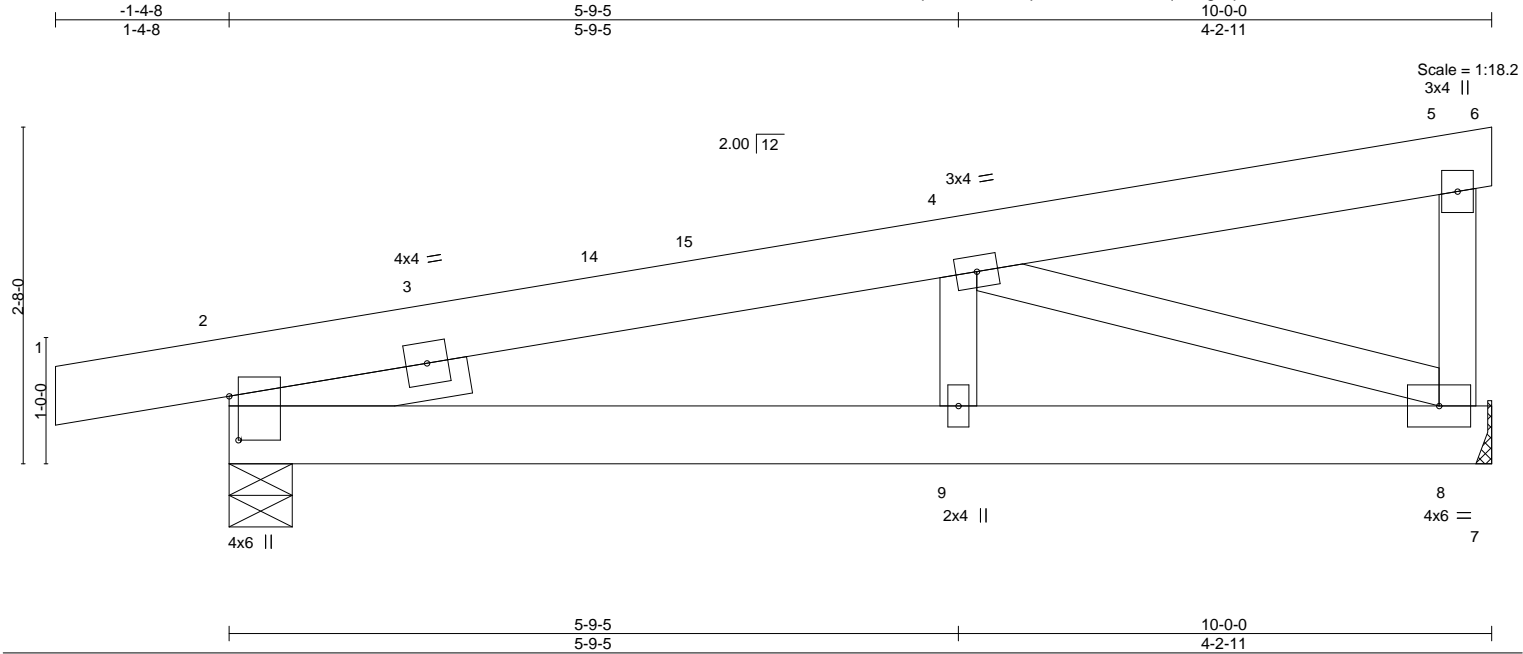


Plate Offsets (X,Y)-- [2:0-4-3,0-0-14]		5-9-5		10-0-0	
		5-9-5		4-2-11	
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) l/defl L/d
TCLL 20.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.01 9 >999 360
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.02 9-12 >999 240
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.19	Horz(CT)	0.01 8 n/a n/a
BCDL 10.0	Code IBC2021/TPI2014		Matrix-AS	Wind(LL)	0.01 9 >999 240
				PLATES	GRIP
				MT20	244/190
				Weight: 63 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 1-11-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 8=Mechanical, 2=0-6-0
Max Horz 2=78(LC 11)
Max Uplift 8=45(LC 12), 2=92(LC 8)
Max Grav 8=394(LC 1), 2=477(LC 1)

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

TOP CHORD 2-4=-652/310
BOT CHORD 2-9=-451/624, 8-9=-451/624
WEBS 4-8=-636/424

NOTES-

- 1) Wind: ASCE 7-16; 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(2E) -1-4-8 to 3-0-5, Interior(1) 3-0-5 to 10-0-0 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 12,2025

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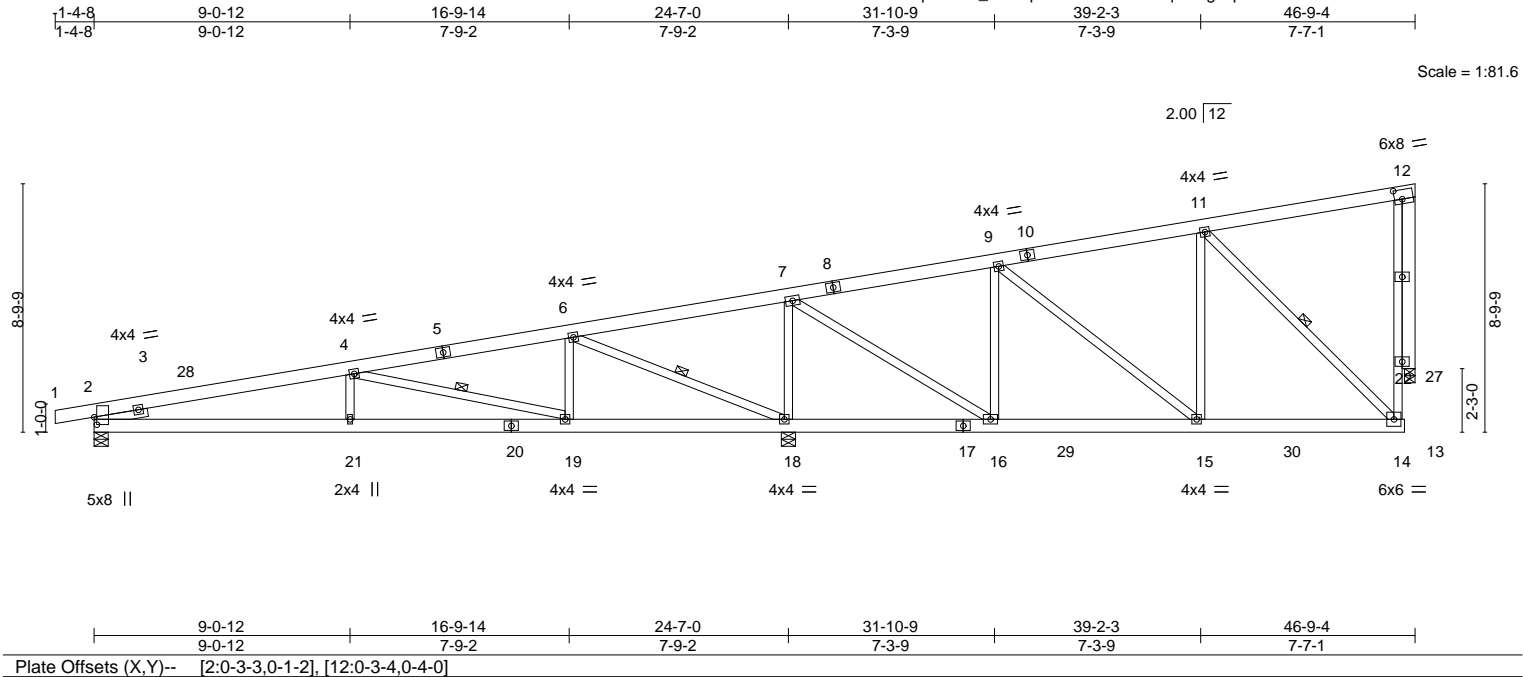
ENGINEERING BY
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition	171378836
J0225-0815	C1	Monopitch	6	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Feb 12 09:31:25 2025 Page 1
ID:wQfAwI6J8Z4LdqOnbXV_OszRpX7-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.36	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.30	Vert(LL) -0.10 19-21 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.62	Vert(CT) -0.19 19-21 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.04 27 n/a n/a		
	Code IBC2021/TPI2014		Wind(LL) 0.07 21 >999 240	Weight: 345 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x6 SP No.1
SLIDER Left 2x4 SP No.2 1-11-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-19, 6-18, 11-14

REACTIONS.

(size) 2=0-6-0, 18=0-6-0, 27=0-4-8
Max Horz 2=221(LC 12)
Max Uplift 2=-111(LC 8), 18=-249(LC 12), 27=-85(LC 8)
Max Grav 2=837(LC 2), 18=2637(LC 2), 27=692(LC 2)

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

TOP CHORD 2-4=-1823/359, 4-6=-424/39, 6-7=-444/1408, 9-11=-501/72, 14-22=-80/549,
12-22=-80/549
BOT CHORD 2-21=-652/1766, 19-21=-652/1766, 18-19=-262/383, 16-18=-1356/260, 14-15=-168/466
WEBS 4-21=0/296, 4-19=-1435/403, 6-19=-8/639, 6-18=-1889/487, 7-18=-1599/504,
7-16=-360/1765, 9-16=-703/280, 9-15=-63/426, 11-14=-584/171, 12-27=-694/179

NOTES-

- Wind: ASCE 7-16; 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(2E) -1-4-8 to 3-3-10, Interior(1) 3-3-10 to 46-2-0 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 4x6 MT20 unless otherwise indicated.
- 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.
- Bearing at joint(s) 27 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) 27 except (jt=lb) 2=111, 18=249.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 12,2025

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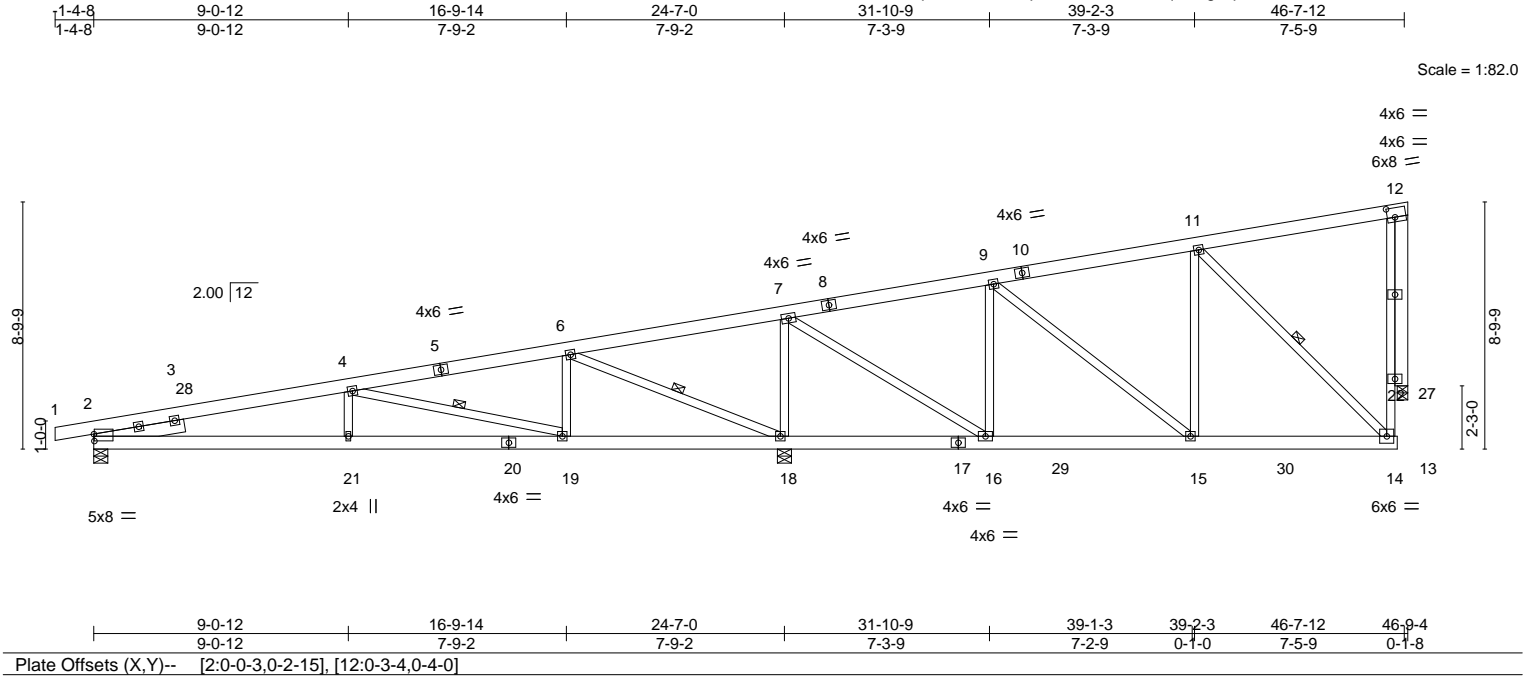
ENGINEERING BY
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A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition	171378837
J0225-0815	C2	Monopitch	15	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Feb 12 09:31:26 2025 Page 1
ID:wQfAwI6J8Z4LdqOnbXV_OszRpX7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



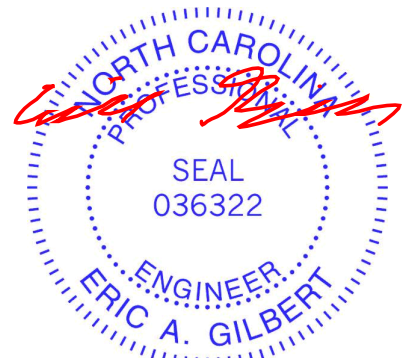
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.36	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.30	Vert(LL) -0.09 19-21 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.62	Vert(CT) -0.18 19-21 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.04 27 n/a n/a		
	Code IBC2021/TPI2014		Wind(LL) 0.07 21 >999 240		
				Weight: 349 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 4-19, 6-18, 11-14
OTHERS 2x6 SP No.1	
SLIDER Left 2x6 SP No.1 3-3-0	

REACTIONS.	(size) 18=0-6-0, 2=0-6-0, 27=0-4-8
	Max Horz 2=221(LC 12)
	Max Uplift 18=248(LC 12), 2=111(LC 8), 27=86(LC 8)
	Max Grav 18=2617(LC 2), 2=846(LC 2), 27=703(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-4=-1871/371, 4-6=-471/47, 6-7=-439/1357, 9-11=-512/75, 14-22=-82/560, 12-22=-82/560
BOT CHORD	2-21=-658/1823, 19-21=-658/1823, 18-19=-266/429, 16-18=-1306/250, 14-15=-169/477
WEBS	4-21=0/294, 4-19=-1447/405, 6-19=-5/638, 6-18=-1883/487, 7-18=-1581/501, 7-16=-358/1737, 9-16=-688/279, 9-15=-61/406, 11-15=-83/250, 11-14=-599/174, 12-27=-705/181

- NOTES-**
- 1) Wind: ASCE 7-16; 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(2E) -1-4-8 to 3-3-8, Interior(1) 3-3-8 to 46-2-0 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) All plates are 4x4 MT20 unless otherwise indicated.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 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) Bearing at joint(s) 27 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27 except (jt=lb) 18=248, 2=111.
 - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 12, 2025

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ENGINEERING BY
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A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition	171378838
J0225-0815	C3	Monopitch	4	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Feb 12 09:31:26 2025 Page 1
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-1-4-8 9-0-12 16-9-1 16-9-14 24-7-0 24-9-4
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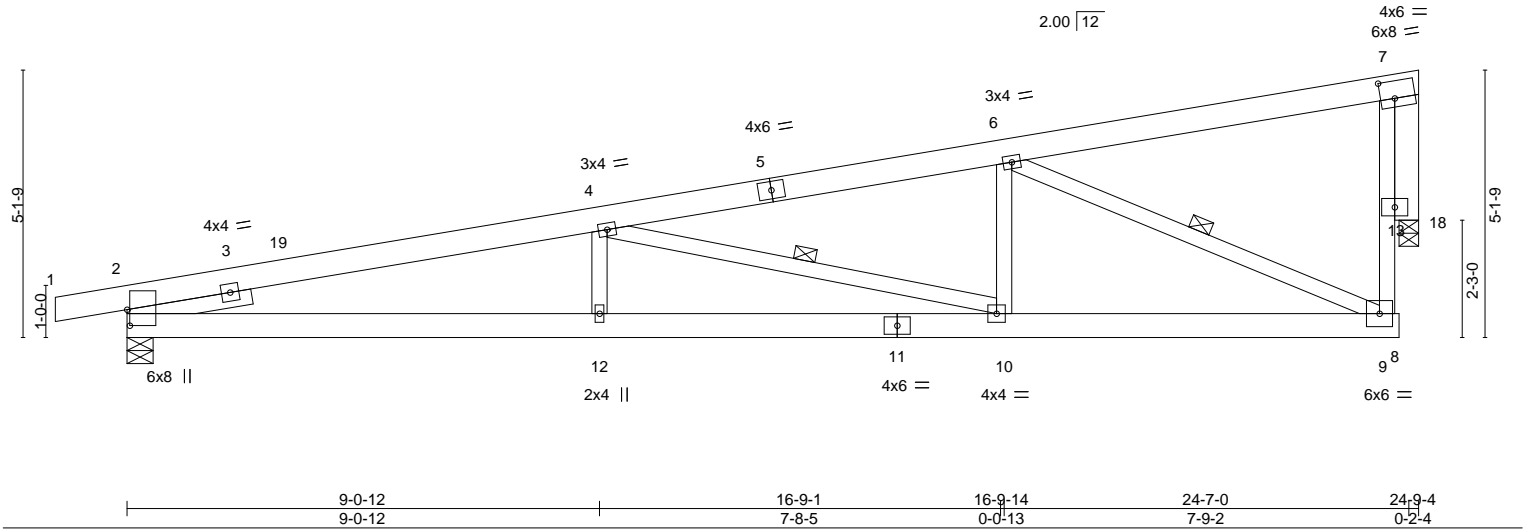


Plate Offsets (X,Y)--		[2:0-3-11,0-0-10], [7:0-3-4,0-4-0]						
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0		Plate Grip DOL 1.15		TC 0.53		Vert(LL) -0.14 10-12 >999 360	MT20	244/190
TCDL 10.0		Lumber DOL 1.15		BC 0.46		Vert(CT) -0.28 10-12 >999 240		
BCLL 0.0 *		Rep Stress Incr YES		WB 0.52		Horz(CT) 0.06 18 n/a n/a		
BCDL 10.0		Code IBC2021/TPI2014		Matrix-AS		Wind(LL) 0.11 10-12 >999 240	Weight: 164 lb	FT = 20%

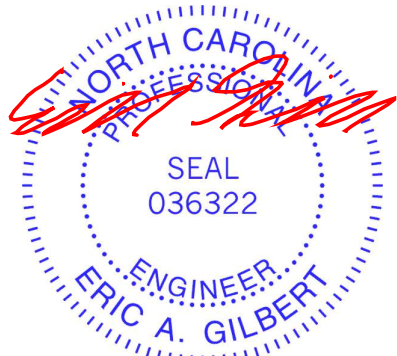
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x6 SP No.1
SLIDER Left 2x4 SP No.2 2-5-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-10, 6-9

REACTIONS. (size) 2=0-6-0, 18=0-4-8
Max Horz 2=120(LC 9)
Max Uplift 2=-144(LC 8), 18=-111(LC 12)
Max Grav 2=1068(LC 1), 18=953(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2779/653, 4-6=-1737/408, 9-13=-161/793, 7-13=-161/793
BOT CHORD 2-12=-814/2699, 10-12=-814/2699, 9-10=-508/1690
WEBS 4-12=0/257, 4-10=-1044/317, 6-10=0/536, 6-9=-1710/463, 7-18=-972/264

- NOTES-**
- 1) Wind: ASCE 7-16; 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(2E) -1-4-8 to 3-0-5, Interior(1) 3-0-5 to 24-2-0 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=144, 18=111.
 - 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 12,2025

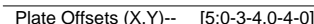
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

ENGINEERING BY
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818 Soundside Road
Edenton, NC 27932

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Feb 12 09:31:27 2025 Page 1
ID:wQfAw6J8Z4LdgOnbXV OszRpX7-RfC?PsB70Hg3NSaPanL8w3uITxbGKWrCDoi7J4zJC?f



LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2 *Except*
	1-11: 2x6 SP No.1
OTHERS	2x6 SP No.1

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 2-8, 4-7

REACTIONS.

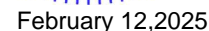
(size) 11=Mechanical, 13=0-4-8
 Max Horz 11=203(LC 9)
 Max Uplift 11=-67(LC 8), 13=-115(LC 12)
 Max Gray 11=987(LC 2), 13=985(LC 2)

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

TOP CHORD 1-2=-916/223, 2-4=-809/157, 7-12=-186/843, 5-12=-186/843, 1-11=-876/241
BOT CHORD 10-11=-335/261, 8-10=-402/878, 7-8=-284/769
WEBS 1-10=-196/1011, 2-10=-340/210, 4-8=0/488, 4-7=-989/298, 5-13=-988/282

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 21-4-12 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 13=115.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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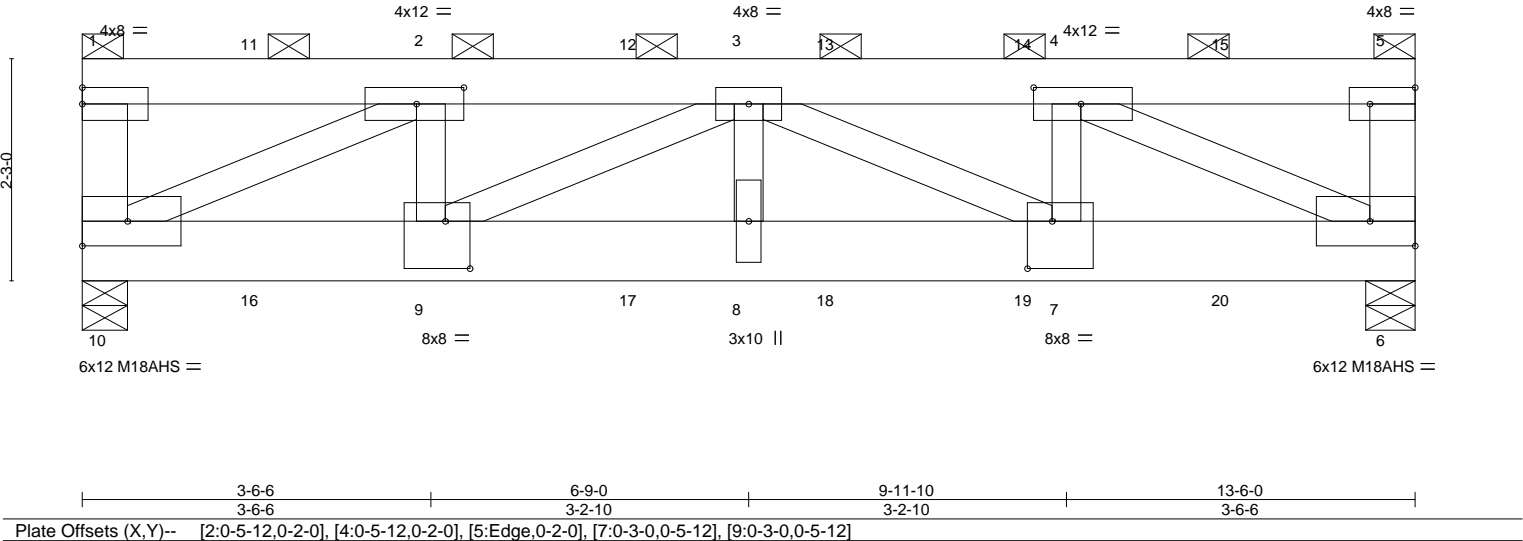
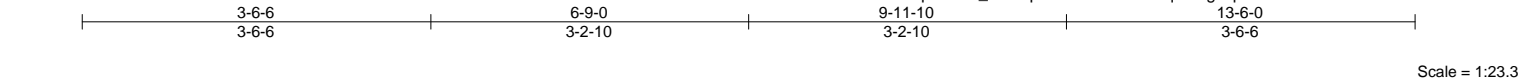


818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition	I71378840
J0225-0815	G1	Flat Girder	1	3	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Feb 12 09:31:27 2025 Page 1
ID:wQfAwI6J8Z4LdqOnbXV_OszRpX7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.73	in (loc) l/defl L/d	MT20 244/190	
TCDL 10.0	Plate Grip DOL 1.15	BC 0.65	Vert(LL) -0.15 8 >999 360	M18AHS 186/179	
BCLL 0.0 *	Lumber DOL 1.15	WB 0.90	Vert(CT) -0.27 8 >585 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.06 6 n/a n/a		
	Code IBC2021/TPI2014		Wind(LL) 0.10 8 >999 240	Weight: 308 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except*
1-10,5-6: 2x6 SP No.1

BRACING-

TOP CHORD 2-0-0 oc purlins (5-0-8 max.): 1-5, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 10=0-5-8, 6=0-6-0
Max Horz 10=60(LC 7)
Max Uplift 10=1281(LC 4), 6=1233(LC 5)
Max Grav 10=14258(LC 2), 6=13717(LC 2)

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

TOP CHORD 1-10=1852/188, 1-2=1825/181, 2-3=21373/1922, 3-4=21039/1893, 4-5=1735/173,
5-6=1626/168
BOT CHORD 9-10=1947/21373, 8-9=2569/28385, 7-8=2569/28385, 6-7=1902/21039
WEBS 2-10=22037/1979, 2-9=472/5816, 3-9=7950/723, 3-8=271/3492, 3-7=8328/755,
4-7=478/5887, 4-6=21761/1953

NOTES-

- 3-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.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 4-7 2x4 - 2 rows staggered at 0-4-0 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.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- 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) 10=1281, 6=1233.
- 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) 2587 lb down and 250 lb up at 1-9-4, 2587 lb down and 250 lb up at 3-7-4, 2587 lb down and 250 lb up at 5-7-4, 2587 lb down and 250 lb up at 7-7-4, and 2587 lb down and 250 lb up at 9-7-4, and 2587 lb down and 250 lb up at 11-7-4 on top chord, and 1924 lb down and 179 lb up at 1-9-4, 1924 lb down and 179 lb up at 3-7-4, 1924 lb down and 179 lb up at 5-7-4, 1924 lb down and 179 lb up at 7-7-4, and 1924 lb down and 179 lb up at 9-7-4, and 1924 lb down and 179 lb up at 11-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



February 12,2025

Continued on page 2

LOAD CASE(S) - Standard

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ENGINEERING BY
TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition
J0225-0815	G1	Flat Girder	1	3	171378840
					Job Reference (optional)

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-5=-60, 6-10=-20
- Concentrated Loads (lb)
- Vert: 2=-2345 9=-1676(F) 11=-2345 12=-2345 13=-2345 14=-2345 15=-2345 16=-1676(F) 17=-1676(F) 18=-1676(F) 19=-1676(F) 20=-1676(F)

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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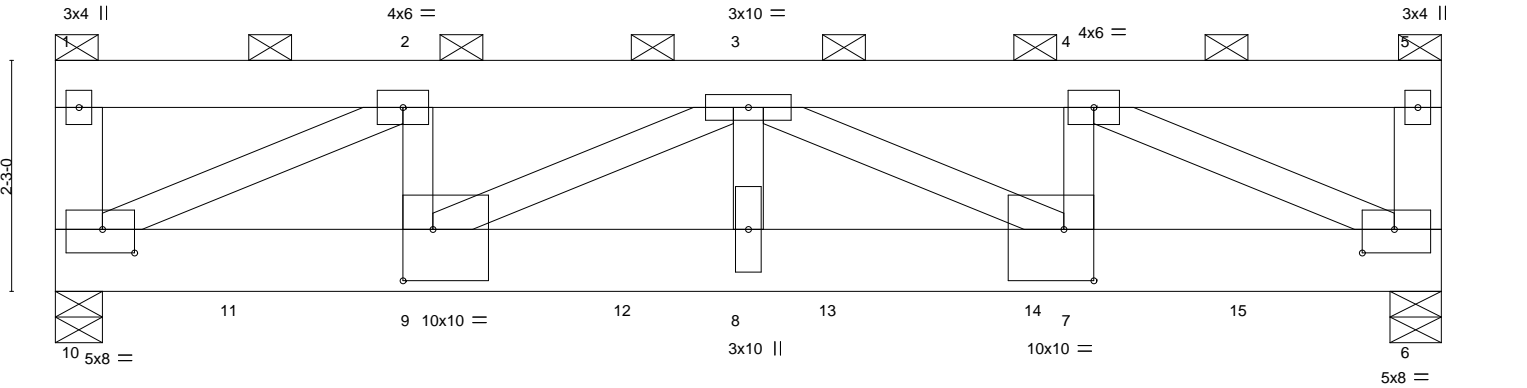
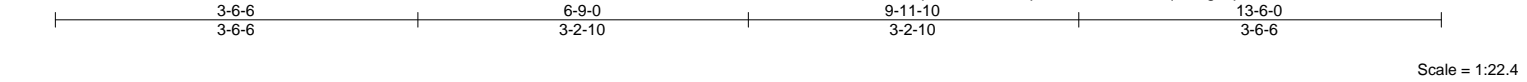


818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition	171378841
J0225-0815	G2	Flat Girder	1	3	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Feb 12 09:31:28 2025 Page 1
ID:wQfAwI6J8Z4LdqOnbXV_OszRpX7-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f



		3-6-6		6-9-0		9-11-10		13-6-0	
		3-6-6		3-2-10		3-2-10		3-6-6	
Plate Offsets (X,Y)--		[6:0-3-12,0-2-12], [7:0-3-8,0-6-0], [9:0-3-8,0-6-0], [10:0-3-12,0-2-12]							
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.08 8 >999 360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.15 8 >999 240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.04 6 n/a n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-MS		Wind(LL)	0.06 8 >999 240	Weight: 308 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP No.1
WEBS 2x4 SP No.2 *Except*
1-10,5-6: 2x6 SP No.1

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-5, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 10=0-5-8, 6=0-6-0
Max Horz 10=60(LC 7)
Max Uplift 10=-799(LC 4), 6=-770(LC 5)
Max Grav 10=7094(LC 2), 6=6834(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-10=-374/64, 1-2=-853/113, 2-3=-10723/1210, 3-4=-10559/1193, 4-5=-816/109,
5-6=-365/62
BOT CHORD 9-10=-1235/10723, 8-9=-1603/14066, 7-8=-1603/14066, 6-7=-1202/10559
WEBS 2-10=-11127/1253, 2-9=-542/5290, 3-9=-3789/435, 3-8=-343/3452, 3-7=-3975/455,
4-7=-533/5209, 4-6=-10984/1236

NOTES-

- 3-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.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 4-7 2x4 - 2 rows staggered at 0-4-0 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.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); end vertical left and right exposed; 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) 10=799, 6=770.
- 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) 374 lb down and 65 lb up at 1-9-4, 1842 lb down and 193 lb up at 1-9-4, 374 lb down and 65 lb up at 3-7-4, 1842 lb down and 193 lb up at 3-7-4, 374 lb down and 65 lb up at 5-7-4, 1842 lb down and 193 lb up at 5-7-4, 374 lb down and 65 lb up at 7-7-4, 1842 lb down and 193 lb up at 7-7-4, 374 lb down and 65 lb up at 9-7-4, 1842 lb down and 193 lb up at 9-7-4, and 374 lb down and 65 lb up at 11-7-4, and 1842 lb down and 193 lb up at 11-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S)

Standard
Continued on page 2



February 12, 2025

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition
J0225-0815	G2	Flat Girder	1	3	I71378841
					Job Reference (optional)

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-5=-60, 6-10=-20
- Concentrated Loads (lb)
- Vert: 9=-2050(F=-374, B=-1676) 11=-2050(F=-374, B=-1676) 12=-2050(F=-374, B=-1676) 13=-2050(F=-374, B=-1676) 14=-2050(F=-374, B=-1676)
- 15=-2050(F=-374, B=-1676)

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition	I71378842
J0225-0815	G3	Flat Girder	1	3	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Feb 12 09:31:29 2025 Page 1

ID:wQfAwI6J8Z4LdqOnbXV_OszRpX7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f

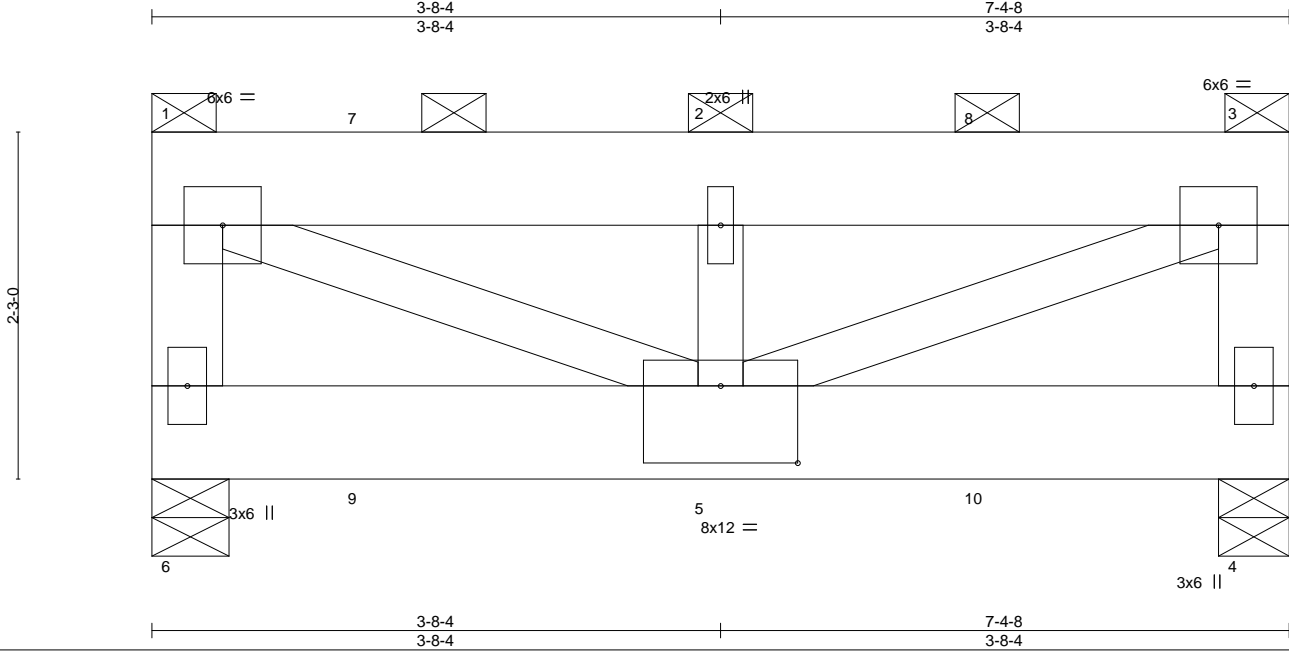


Plate Offsets (X,Y)--		[5:0-6-0,0-6-0]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP	
TCLL	20.0	Plate Grip DOL 1.15		TC 0.21		Vert(LL) -0.02 5 >999 360				MT20		244/190	
TCDL	10.0	Lumber DOL 1.15		BC 0.29		Vert(CT) -0.04 5 >999 240							
BCLL	0.0 *	Rep Stress Incr NO		WB 0.47		Horz(CT) -0.00 4 n/a n/a							
BCDL	10.0	Code IBC2021/TPI2014		Matrix-MP		Wind(LL) 0.01 5 >999 240				Weight: 185 lb		FT = 20%	

LUMBER-

TOP CHORD 2x8 SP No.1
BOT CHORD 2x8 SP No.1
WEBS 2x4 SP No.2 *Except*
1-6,3-4: 2x6 SP No.1

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 6=0-6-0, 4=0-5-8
Max Horz 6=-57(LC 4)
Max Uplift 6=-445(LC 4), 4=-672(LC 5)
Max Grav 6=4636(LC 2), 4=7067(LC 2)

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

TOP CHORD 1-6=-3348/346, 1-2=-5189/492, 2-3=-5189/492, 3-4=-4176/439
WEBS 1-5=-557/5747, 2-5=-1529/225, 3-5=-557/5747

NOTES-

- 3-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, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row 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.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); end vertical left and right exposed; 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) 6=445, 4=672.
- 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) 935 lb down and 116 lb up at 1-5-4, 935 lb down and 116 lb up at 3-5-4, and 935 lb down and 116 lb up at 5-5-4, and 964 lb down and 115 lb up at 7-1-12 on top chord, and 1860 lb down and 173 lb up at 1-5-4, 1860 lb down and 173 lb up at 3-5-4, and 1860 lb down and 173 lb up at 5-5-4, and 1872 lb down and 162 lb up at 7-1-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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



February 12,2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition
J0225-0815	G3	Flat Girder	1	3	I71378842
					Job Reference (optional)

LOAD CASE(S) Standard
Uniform Loads (plf)
Vert: 1-3=-60, 4-6=-20
Concentrated Loads (lb)
Vert: 4=-1631(F) 5=-1619(F) 2=-775 3=-810 7=-775 8=-775 9=-1619(F) 10=-1619(F)

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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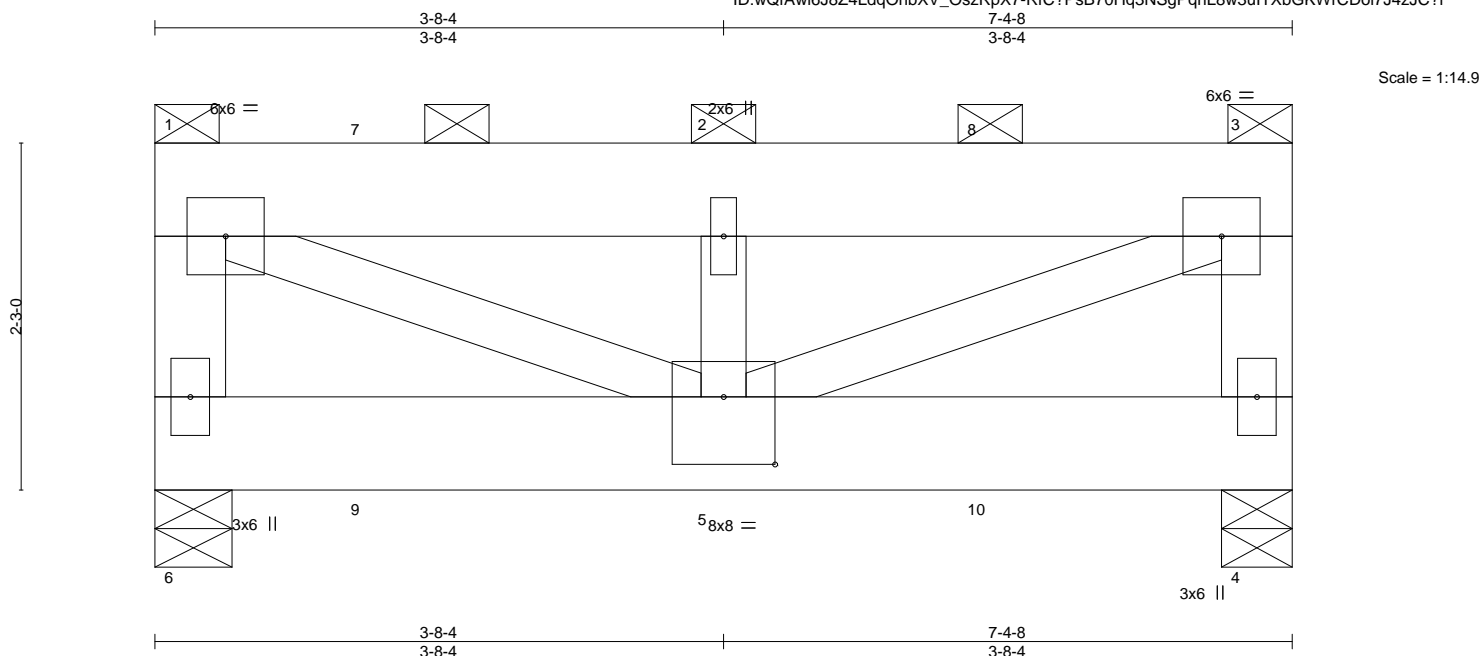


Plate Offsets (X,Y)-- [5:0-4,0-0,5-4]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.01	5	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.02	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.30	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-MP		Wind(LL)	0.01	5	>999	240	Weight: 185 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x8 SP No.1	TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals.
BOT CHORD	2x8 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2 *Except*		
	1-6,3-4: 2x6 SP No.1		

REACTIONS. (size) 6=0-6-0, 4=0-5-8
 Max Horz 6=-57(LC 4)
 Max Uplift 6=-304(LC 4), 4=-352(LC 5)
 Max Grav 6=3006(LC 1), 4=3721(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-2338/258, 1-2=-3342/332, 2-3=-3342/332, 3-4=-2209/245
WEBS 1-5=-380/3701, 2-5=-1727/238, 3-5=-380/3701

NOTES-

- 1) 3-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, 2x8 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-7-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) 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.
- 3) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) Provide adequate drainage to prevent water ponding.
- 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) 6=304, 4=352.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 893 lb down and 112 lb up at 1-5-4, and 893 lb down and 112 lb up at 3-5-4, and 893 lb down and 112 lb up at 5-5-4 on top chord, and 967 lb down and 87 lb up at 1-5-4, 967 lb down and 87 lb up at 3-5-4, and 967 lb down and 87 lb up at 5-5-4, and 979 lb down and 76 lb up at 7-1-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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



February 12, 2025

Continued on page 2



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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition
J0225-0815	G4	Flat Girder	1	3	I71378843
					Job Reference (optional)

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 4=-855(F) 5=-843(F) 2=-893 7=-893 8=-893 9=-843(F) 10=-843(F)

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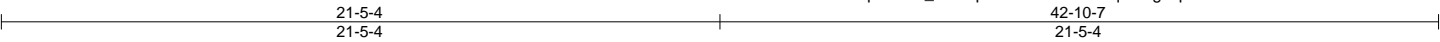
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition
J0225-0815	VA-1	GABLE	1	1	I71378844
					Job Reference (optional)

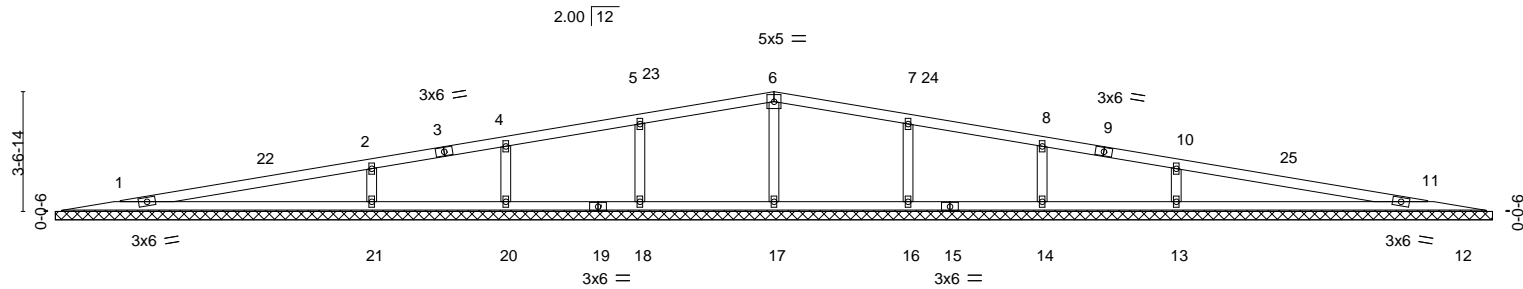
Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Feb 12 09:31:30 2025 Page 1

ID:wQfAwI6J8Z4LdqOnbXV_OszRpX7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:68.7



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	n/a	MT20	244/190		
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	n/a				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00				
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S							
										Weight: 141 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 42-10-7.
(lb) - Max Horz 1=39(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 18, 20, 21, 16, 14, 13, 11 except 12=-219(LC 1)
Max Grav All reactions 250 lb or less at joint(s) 1, 20, 14, 12 except 17=282(LC 1), 18=373(LC 25), 21=615(LC 25), 16=366(LC 26), 13=551(LC 26), 11=523(LC 1)

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

WEBS 5-18=-283/186, 2-21=-445/247, 7-16=-279/185, 10-13=-418/238

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; 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(2E) 1-11-4 to 6-4-1, Interior(1) 6-4-1 to 21-5-4, Exterior(2R) 21-5-4 to 25-10-1, Interior(1) 25-10-1 to 40-11-3 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 18, 20, 21, 16, 14, 13, 11 except (jt=lb) 12=219.



February 12, 2025

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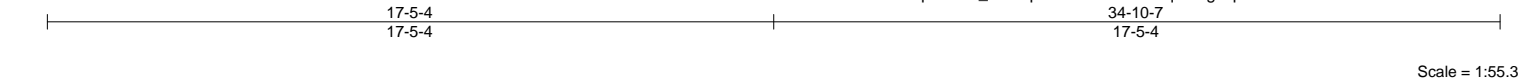
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mt Pisgah Church Addition	171378845
J0225-0815	VA-2	Valley	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Feb 12 09:31:30 2025 Page 1
ID:wQfAwI6J8Z4LdqOnbXV_OszRpX7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f



34-8-3										34-10-7	
34-8-3										0-2-4	
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 0.46		Vert(LL) n/a - n/a 999				MT20 244/190	
TCDL 10.0		Lumber DOL 1.15		BC 0.35		Vert(CT) n/a - n/a 999					
BCLL 0.0 *		Rep Stress Incr YES		WB 0.05		Horz(CT) 0.00 7 n/a n/a					
BCDL 10.0		Code IBC2021/TPI2014		Matrix-S						Weight: 109 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 34-5-15.
(lb) - Max Horz 16=31(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 14, 15, 10, 9 except 16=220(LC 25), 8=220(LC 26)
Max Grav All reactions 250 lb or less at joint(s) 16, 14, 10, 8 except 1=524(LC 25), 7=524(LC 26), 12=338(LC 1), 15=547(LC 1), 9=547(LC 1)

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

WEBS 2-15=414/237, 6-9=414/237

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; 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(2E) 1-11-4 to 6-4-1, Interior(1) 6-4-1 to 17-5-4, Exterior(2R) 17-5-4 to 21-10-1, Interior(1) 21-10-1 to 32-11-3 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 14, 15, 10, 9 except (jt=lb) 16=220, 8=220.



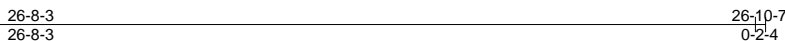
February 12,2025

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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Scale = 1:42.5

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.

ONS. All bearings 26-5-15.
(lb) - Max Horz 11=23(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 10, 7 except 11=216(LC 25), 6=216(LC 26)
Max Grav All reactions 250 lb or less at joint(s) 11, 9, 6 except 1=518(LC 25), 5=518(LC 26), 10=568(LC 1),
7=568(LC 1)

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

WEBS 2-10=-430/268, 4-7=-430/268

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; 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(2E) 1-11-4 to 6-4-1, Interior(1) 6-4-1 to 13-5-4, Exterior(2R) 13-5-4 to 17-10-1, Interior(1) 17-10-1 to 24-11-3 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 10, 7 except (it=lb) 11=216, 6=216.



February 12, 2025

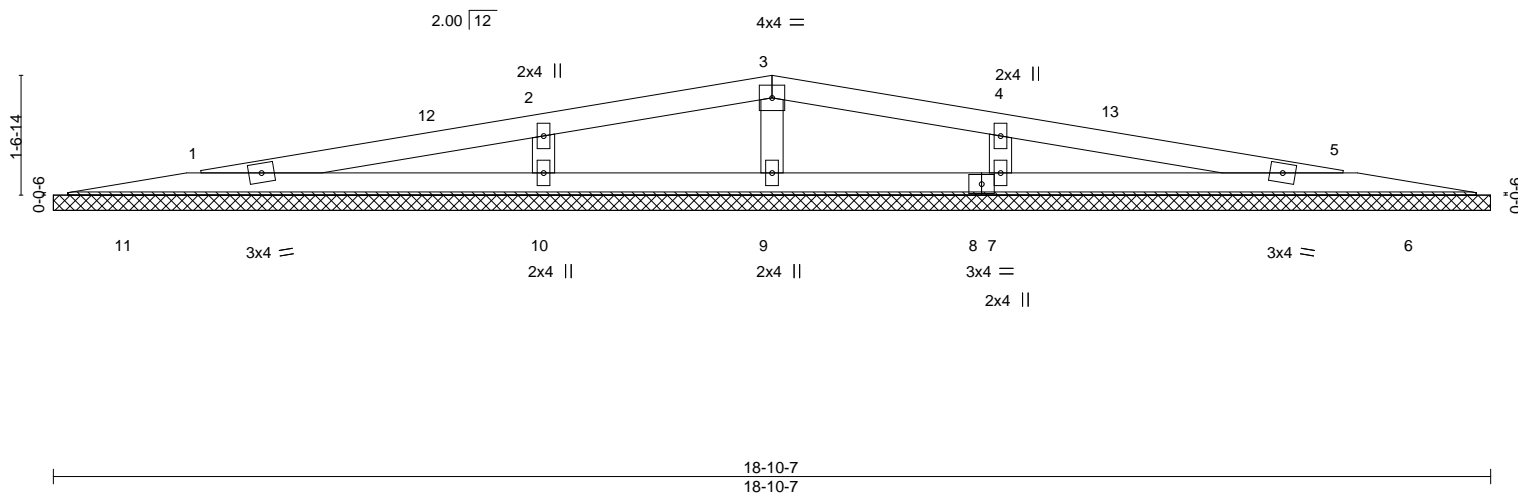


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818 Soundside Road
Edenton, NC 27932

Scale = 1:30.3



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 0.16	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.11	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.04	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S		Weight: 53 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.

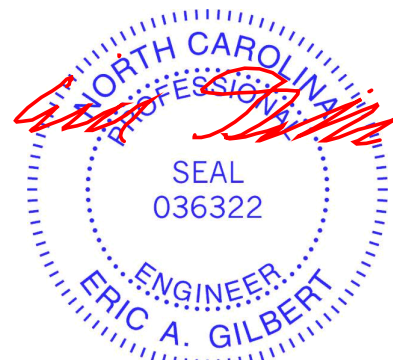
ONS. All bearings 18-10-7.
(lb) - Max Horz 11=-15(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6, 11, 10, 7
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6, 9, 11 except 10=354(LC 25), 7=354(LC 26)

FORCES.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-10=-268/207. 4-7=-268/207

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; 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(2E) 1-11-4 to 6-5-4, Interior(1) 6-5-4 to 9-5-4, Exterior(2R) 9-5-4 to 13-10-1, Interior(1) 13-10-1 to 16-11-3 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 6, 11, 10, 7.



February 12, 2025



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Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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

PLATE SIZE

4 X 4

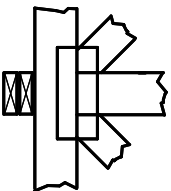
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

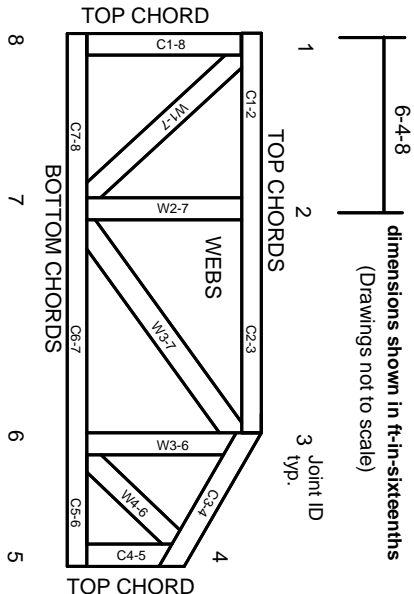


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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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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 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

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