



### 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

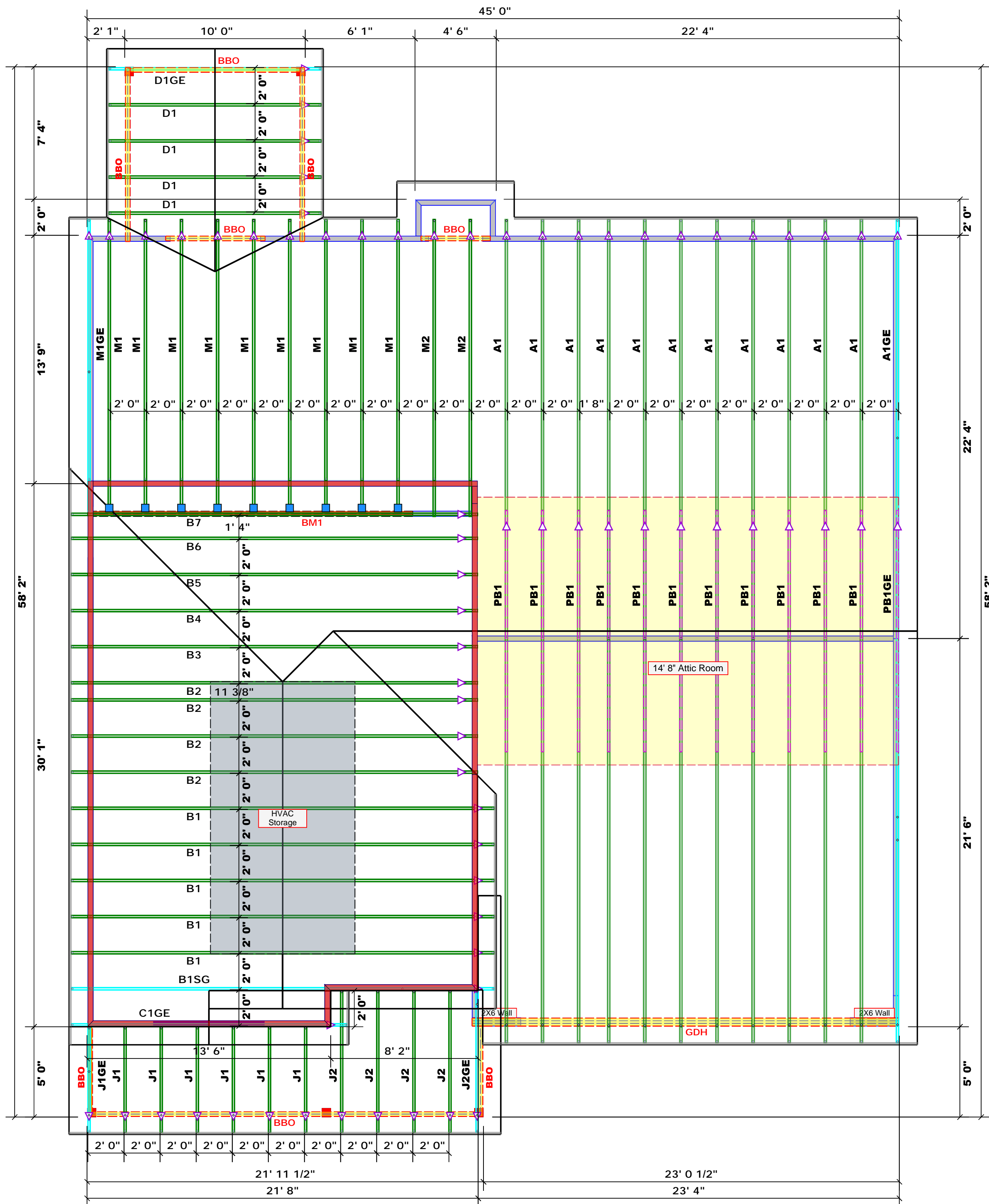
(BASED ON TABLES R502.5(1) & (b))  
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GORDER

END REACTION (L/TO)	REQ'D STUDS FOR 1' HEADERS	END REACTION (L/TO)	REQ'D STUDS FOR 2' HEADERS
1700	1	2550	1
3400	2	5100	2
5100	3	7650	3
6800	4	10200	4
8500	5	12750	5
10200	6	15300	6
11900	7		
13600	8		
15300	9		

CITY / CO.	Harnett Co. / Harnett
ADDRESS	67 Wolcott Court
MODEL	Roof
DATE REV.	08/10/22
DRAWN BY	David Landry
SALES REP.	Marshall Naylor

BUILDER	Benjamin Stout Real Estate
JOB NAME	Lot 5 Liberty Meadows
PLAN	The Caroline / 2GRF, CP
SEAL DATE	N/A
QUOTE #	
JOB #	J0822-4066

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 BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com



All Walls Shown Are Considered Load Bearing

- 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

Hatch Legend

[Red]	Second Floor Walls
[Grey]	Padded HVAC
[Yellow]	Drop Beam
[Orange]	Flush Beam

Roof Area = 2908.57 sq.ft.  
Ridge Line = 65.82 ft.  
Hip Line = 22.88 ft.  
Horiz. OH = 149.92 ft.  
Raked OH = 161.92 ft.  
Decking = 100 sheets

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

Products

PlotID	Length	Product	Pieces	Net Qty	Fab Type
BM1	18' 0"	1-3/4"x 16" LVL Kerto-S	2	2	FF
BM2	8' 0"	1-3/4"x 14" LVL Kerto-S	2	2	FF
GDH	24' 0"	1-3/4"x 18" LVL Kerto-S	3	3	FF

Connector Information

Sym	Product	Manuf	Qty	Supported Member	Header	Truss
[Blue]	MBS222	USP	9	Vals	1600/3/2"	1600/3/2"

**▲** = 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: J0822-4066  
Lot 5 Liberty Meadows

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: I53588288 thru I53588309

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

North Carolina COA: C-0844



August 11, 2022

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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 J0822-4066	Truss A1GE	Truss Type GABLE	Qty 1	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588289
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Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:19 2022 Page 1  
 ID: Mxo2zT\_1o8v8CIEXCBvR1ayxNUw-GkvhNGbR4XDQoVSLgYLRICg1\_Kvo71XmB5JJYPpGnQ  
 0-11-0 16-1-4 29-5-12 44-8-0 45-7-0  
 0-11-0 15-2-4 13-4-8 15-2-4 0-11-0

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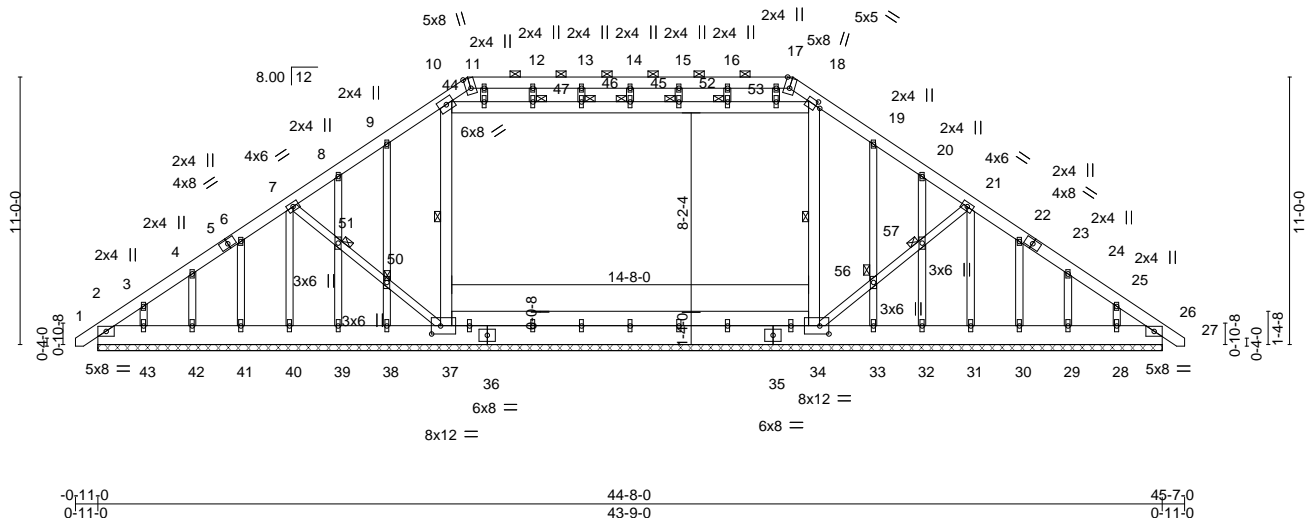


Plate Offsets (X,Y)-- [11:0-5-0,Edge], [17:0-5-0,Edge], [18:0-2-5-0-2-4], [34:0-4-8-0-4-0], [37:0-4-8-0-4-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.50	Vert(LL) 0.00	26	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.43	Vert(CT) 0.00	26	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.57	Horz(CT) 0.01	26	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 521 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-6-9 oc purlins, except 2-0-0 oc purlins (5-9-11 max.); 11-17.
BOT CHORD 2x10 SP No.1 *Except* 34-37: 2x8 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 18-44,10-37,18-34: 2x6 SP No.1	WEBS 1 Row at midpt 37-44, 18-34
OTHERS 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 45, 46, 47, 50, 51, 52, 53, 56, 57

**REACTIONS.** All bearings 43-9-0.  
 (lb) - Max Horz 2=264(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 40, 31, 26, 39, 41, 42, 43, 32, 30, 29, 28 except 38=970(LC 18), 33=929(LC 18)  
 Max Grav All reactions 250 lb or less at joint(s) 31, 41, 42, 43, 30, 29, 28 except 2=318(LC 1), 37=1671(LC 18), 34=1701(LC 18), 40=258(LC 1), 26=297(LC 1), 39=445(LC 20), 32=439(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-415/168, 3-4=-369/157, 4-6=-344/151, 6-7=-353/149, 7-8=-453/171, 8-9=-469/171, 9-10=-395/206, 10-11=-1421/329, 17-18=-1394/326, 18-19=-355/203, 19-20=-415/146, 20-21=-404/94, 21-22=-319/88, 22-24=-313/58, 24-25=-315/67, 25-26=-342/74, 11-12=-1348/322, 12-13=-1348/322, 13-14=-1348/322, 14-15=-1348/322, 15-16=-1348/322, 16-17=-1348/322  
 BOT CHORD 2-43=-114/327, 42-43=-114/327, 41-42=-114/327, 40-41=-114/327, 39-40=-114/327, 38-39=-114/327, 37-38=-114/327, 34-37=-89/383, 33-34=-52/276, 32-33=-52/276, 31-32=-52/276, 30-31=-52/276, 29-30=-52/276, 28-29=-52/276, 26-28=-52/276  
 WEBS 44-47=-180/1038, 46-47=-180/1038, 45-46=-180/1038, 45-52=-180/1038, 52-53=-180/1038, 18-53=-183/1045, 37-44=-633/104, 10-44=-511/121, 18-34=-685/0, 12-47=-7/295

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp B; 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.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x6 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.



August 11, 2022

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.**  
 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

**TRENCO**  
 818 Soundside Road  
 Edenton, NC 27932

Job J0822-4066	Truss A1GE	Truss Type GABLE	Qty 1	Ply 1	Lot 5 Liberty Meadows I53588289 Job Reference (optional)
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:19 2022 Page 2  
ID:Mxo2zT\_1o8v8CIEXCbR1ayxNUw-GkvhNGbR4XDQoVSLgYLRICgj1\_Kvo71XmB5JJPypGnQ

**NOTES-**

- 9) \* 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.
- 10) Ceiling dead load (10.0 psf) on member(s). 44-47, 46-47, 45-46, 45-52, 52-53, 18-53; Wall dead load (5.0psf) on member(s).37-44, 18-34, 33-56, 22-30
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 40, 31, 26, 39, 41, 42, 43, 32, 30, 29, 28 except (jt=lb) 38=970, 33=929.
- 12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Attic room checked for L/360 deflection.

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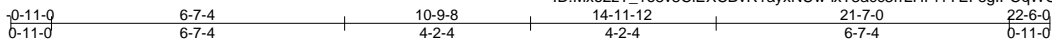


818 Soundside Road  
Edenton, NC 27932

Job J0822-4066	Truss B1	Truss Type COMMON	Qty 5	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588290
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:20 2022 Page 1  
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4x6 =

Scale = 1:48.9

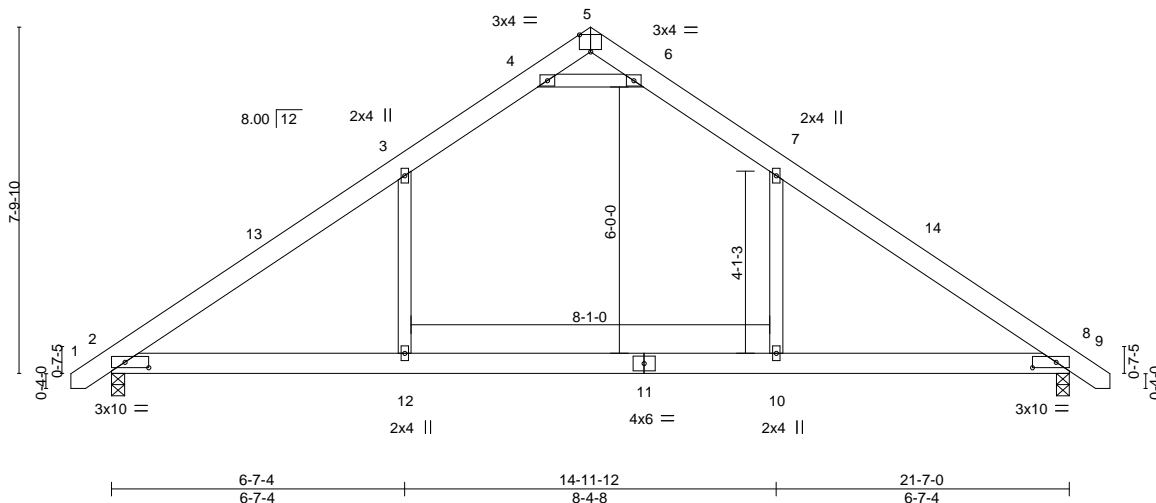


Plate Offsets (X,Y)-- [2:0-6-6,0-1-8], [5:0-3-0,Edge], [8:0-6-6,0-1-8]

<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 0.71	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.42	Vert(LL) -0.21 10-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.28	Vert(CT) -0.33 10-12 >765 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.10 12 >999 240	Weight: 133 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 5-10-12 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=152(LC 10)  
Max Uplift 2=-1(LC 12), 8=-1(LC 13)  
Max Grav 2=1022(LC 19), 8=1022(LC 20)

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

TOP CHORD 2-3=-1369/120, 3-4=-941/191, 4-5=-147/961, 5-6=-147/962, 6-7=-941/191, 7-8=-1369/120  
BOT CHORD 2-12=0/1014, 10-12=0/1014, 8-10=0/1014  
WEBS 7-10=0/467, 3-12=0/467, 4-6=-2102/392

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 10-9-8, Exterior(2) 10-9-8 to 14-11-12, Interior(1) 14-11-12 to 22-4-1 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, 8.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 11, 2022

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818 Soundside Road  
Edenton, NC 27932

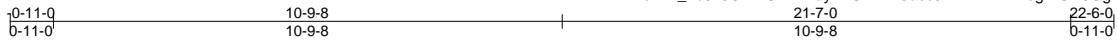


Job J0822-4066	Truss B1SG	Truss Type GABLE	Qty 1	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	I53588291
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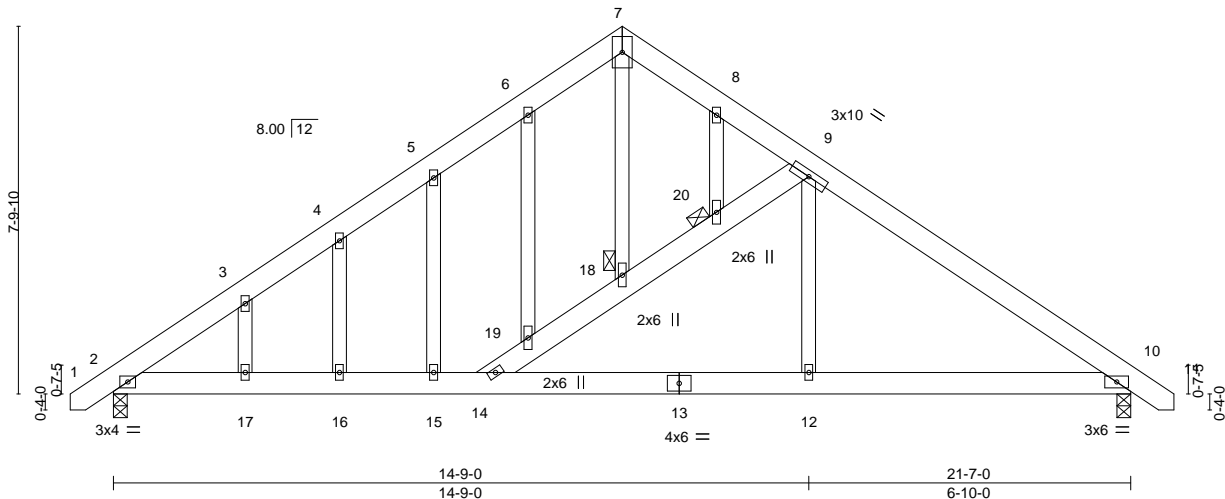
Comtech, Inc. Fayetteville, NC - 28314.

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:20 2022 Page 1

ID:Mxo2zT\_1o8v8CIEXCbVr1ayxNUw-lxT3acc3rrLHPf1YEFsglPCw8OgfXafg?rrsrypGnP



Scale = 1:46.0



<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 0.40	Vert(LL) -0.11 15-16 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.55	Vert(CT) -0.23 15-16 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 10 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.14 16 >999 240		
				Weight: 173 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 9-12: 2x4 SP No.2  
 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.  
 JOINTS 1 Brace at Jt(s): 18, 20

**REACTIONS.**

(size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=190(LC 11)  
 Max Uplift 2=110(LC 12), 10=110(LC 13)  
 Max Grav 2=906(LC 1), 10=906(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1023/86, 3-4=-921/135, 4-5=-963/193, 5-6=-834/221, 6-7=-773/264, 7-8=-862/285,  
 8-9=-825/244, 9-10=-1153/184  
 BOT CHORD 2-17=-56/763, 16-17=-56/763, 15-16=-56/763, 14-15=-56/763, 12-14=-31/833,  
 10-12=-31/833  
 WEBS 18-20=-335/146, 9-20=-270/136, 9-12=0/332, 7-18=-165/506

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; 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 studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=110, 10=110.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 11, 2022

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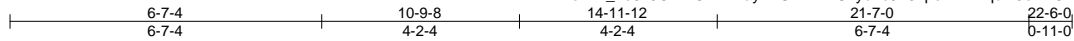


818 Soundside Road  
 Edenton, NC 27932

Job J0822-4066	Truss B2	Truss Type COMMON	Qty 4	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588292
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:21 2022 Page 1  
ID:Mxo2zT\_1o8v8CIEXCBvR1ayxNUw-D71Snydhc8T81pcknzNvqdl79o?RG40pDVaQNHyGnO



4x6 =

Scale = 1:45.9

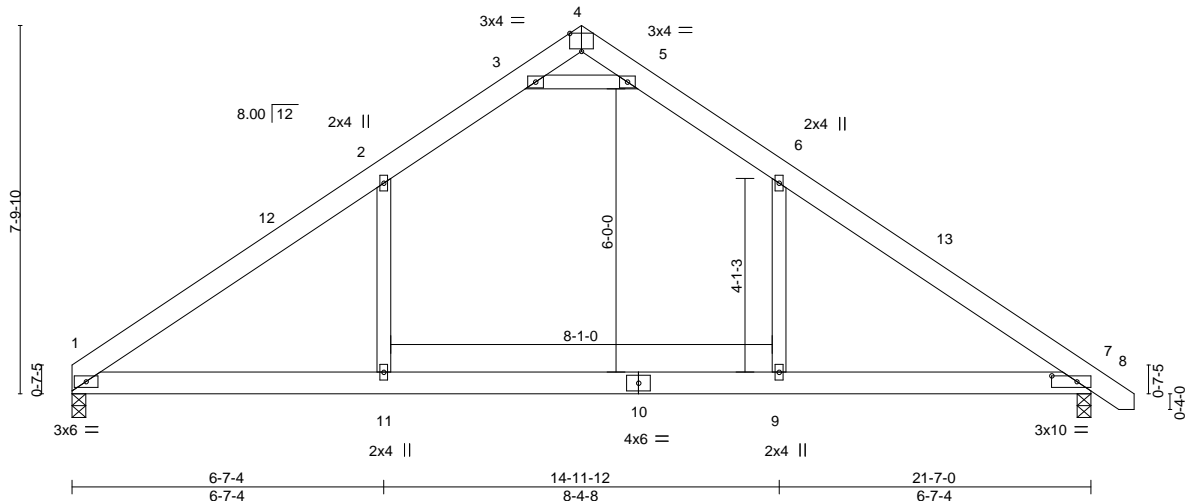


Plate Offsets (X,Y)-- [4:0-3-0,Edge], [7:0-6-6,0-1-8]

<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 0.72	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.43	Vert(LL) -0.21 9-11 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.29	Vert(CT) -0.34 9-11 >755 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 7 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.10 11 >999 240	Weight: 130 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 5-7-3 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=150(LC 8)  
Max Uplift 7=1(LC 13)  
Max Grav 1=971(LC 19), 7=1022(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1365/121, 2-3=-943/196, 3-4=-149/970, 4-5=-159/971, 5-6=-941/192, 6-7=-1372/121  
BOT CHORD 1-11=0/1017, 9-11=0/1017, 7-9=0/1017  
WEBS 6-9=0/470, 2-11=0/458, 3-5=-2115/411

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 10-9-8, Exterior(2) 10-9-8 to 14-11-12, Interior(1) 14-11-12 to 22-4-1 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) 7.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 11, 2022

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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

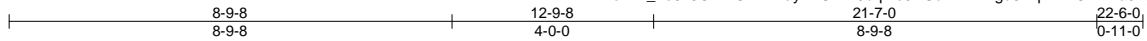


Job J0822-4066	Truss B3	Truss Type HIP	Qty 1	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588293
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Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:22 2022 Page 1

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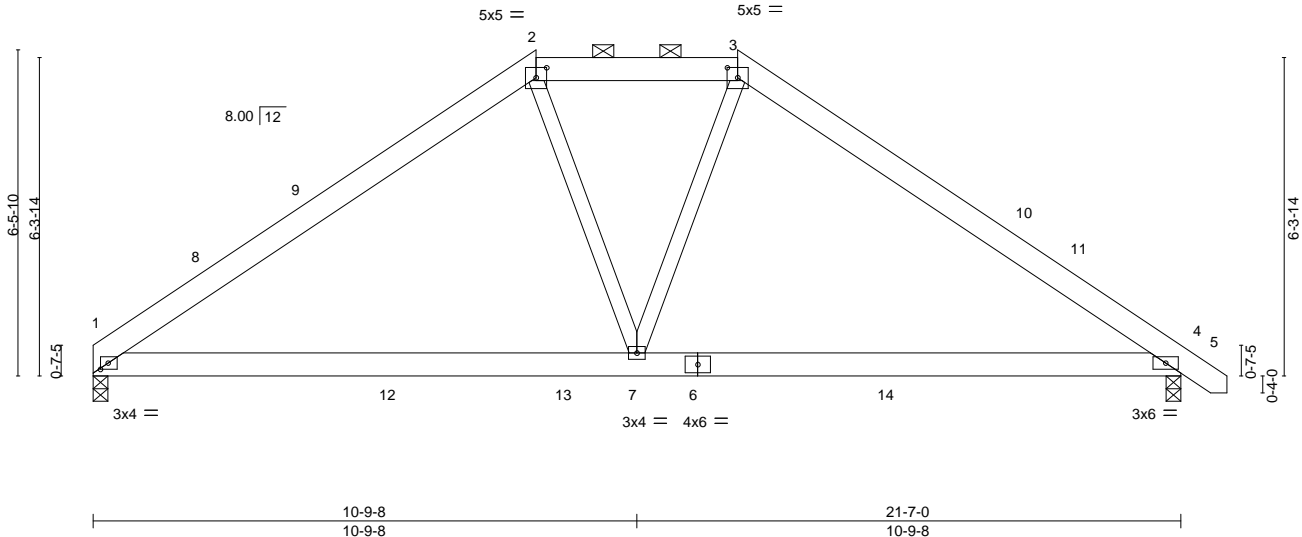


Plate Offsets (X,Y)-- [1:0-1-14,0-1-8], [2:0-2-8,0-2-6], [3:0-2-8,0-2-6]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.41	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.51	Vert(LL) -0.08 4-7 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.09	Vert(CT) -0.16 4-7 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 4 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.03 4-7 >999 240	Weight: 130 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 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 2-3.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=0-3-8, 4=0-3-8  
 Max Horz 1=122(LC 10)  
 Max Grav 1=923(LC 19), 4=975(LC 20)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1170/186, 2-3=-986/207, 3-4=-1170/182  
 BOT CHORD 1-7=-14/931, 4-7=-15/892  
 WEBS 2-7=0/369, 3-7=0/370

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 8-9-8, Exterior(2) 8-9-8 to 19-0-3, Interior(1) 19-0-3 to 22-4-1 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, with BCDL = 10.0psf.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 11, 2022

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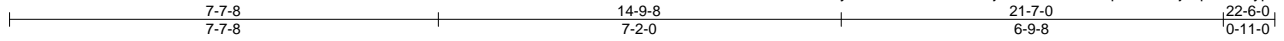
818 Soundside Road  
 Edenton, NC 27932

Job J0822-4066	Truss B4	Truss Type HALF HIP	Qty 1	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588294
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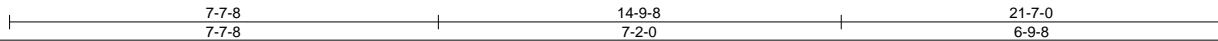
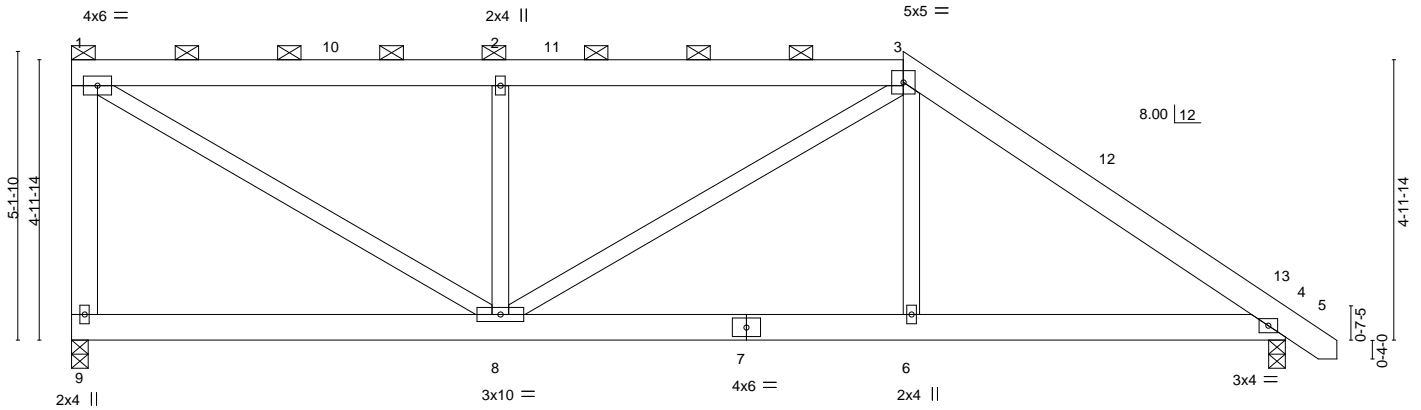
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:23 2022 Page 1

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Scale = 1:38.6



<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 0.23	Vert(LL) -0.02	8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT) -0.05	6-8	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.27	Horz(CT) 0.01	4	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL) 0.02	8	>999		
							Weight: 153 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 1-9: 2x6 SP No.1

**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.): 1-3.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 9=0-3-8, 4=0-3-8  
 Max Horz 9=131(LC 13)  
 Max Uplift 9=31(LC 8)  
 Max Grav 9=847(LC 1), 4=903(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-9=-774/180, 1-2=-981/167, 2-3=-983/169, 3-4=-1200/155  
 BOT CHORD 6-8=-7/892, 4-6=-5/898  
 WEBS 1-8=-191/1106, 2-8=-503/194, 3-6=0/299

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 14-9-8, Exterior(2) 14-9-8 to 21-0-3, Interior(1) 21-0-3 to 22-4-1 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 11, 2022

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818 Soundside Road  
 Edenton, NC 27932



Job J0822-4066	Truss B6	Truss Type HALF HIP	Qty 1	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588296
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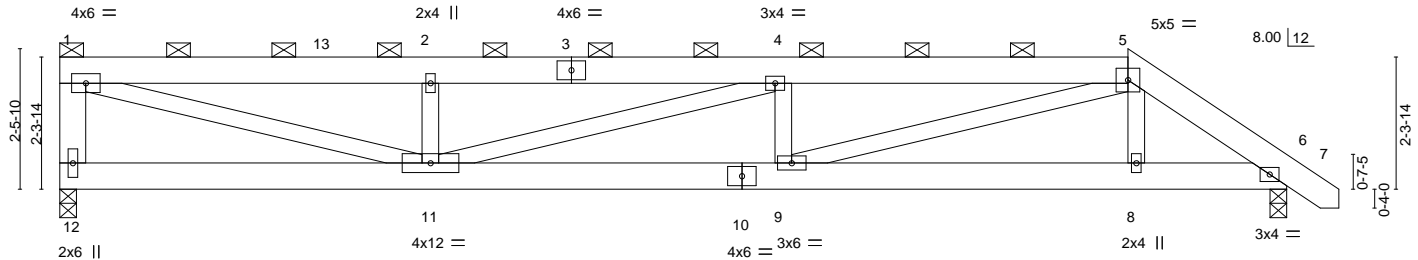
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:24 2022 Page 1

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Scale = 1:38.1



<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 0.20	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.37	Vert(LL) -0.10 9-11 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.49	Vert(CT) -0.20 9-11 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.07 9-11 >999 240	Weight: 142 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-13 max.): 1-5.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 12=0-3-8, 6=0-3-8  
 Max Horz 12=-59(LC 13)  
 Max Uplift 12=-31(LC 8), 6=-11(LC 8)  
 Max Grav 12=847(LC 1), 6=903(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-12=-763/156, 1-2=-2060/281, 2-4=-2060/281, 4-5=-2380/369, 5-6=-1400/198  
 BOT CHORD 9-11=-278/2378, 8-9=-104/1101, 6-8=-99/1111  
 WEBS 1-11=-273/1998, 2-11=-369/149, 5-9=-183/1359, 4-9=-303/134, 4-11=-332/90

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 18-9-8, Exterior(2) 18-9-8 to 22-4-1 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 6.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 11, 2022

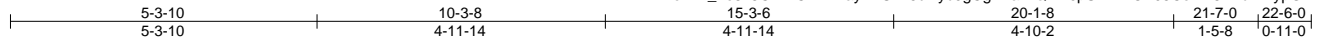
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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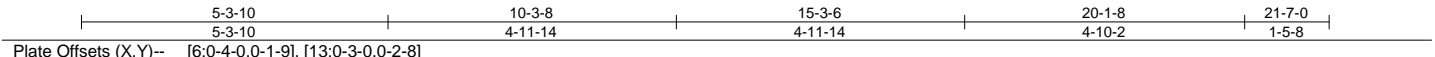
Job J0822-4066	Truss B7	Truss Type HALF HIP	Qty 1	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588297
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Scale = 1:37.5



<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 0.45	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.70	Vert(LL) -0.29 12 >891 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.65	Vert(CT) -0.57 10-12 >445 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.05 7 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.19 12 >999 240	Weight: 119 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-11-3 oc purlins, except end verticals, and 2-0-0 oc purlins (3-1-4 max.): 1-6.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 1-14: 2x6 SP No.1	

**REACTIONS.** (size) 14=0-3-8, 7=0-3-8  
 Max Horz 14=-37(LC 13)  
 Max Uplift 14=-31(LC 8), 7=-21(LC 8)  
 Max Grav 14=847(LC 1), 7=914(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-14=-706/138, 1-2=-2910/386, 2-4=-2910/386, 4-5=-3292/487, 5-6=-3292/487, 6-7=-1560/199  
 BOT CHORD 13-14=-9/310, 12-13=-507/4180, 10-12=-507/4180, 9-10=-123/1192, 7-9=-118/1230  
 WEBS 1-13=-341/2655, 4-13=-1298/198, 4-10=-907/121, 6-10=-310/2149, 6-9=0/325, 2-13=-288/124, 5-10=-290/134

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 20-1-8, Exterior(2) 20-1-8 to 22-6-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Provide adequate drainage to prevent water ponding.
  - 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.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 7.
  - 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 11, 2022

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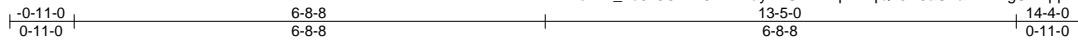
818 Soundside Road  
 Edenton, NC 27932

Job J0822-4066	Truss C1GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588298
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Comtech, Inc, Fayetteville, NC - 28314,

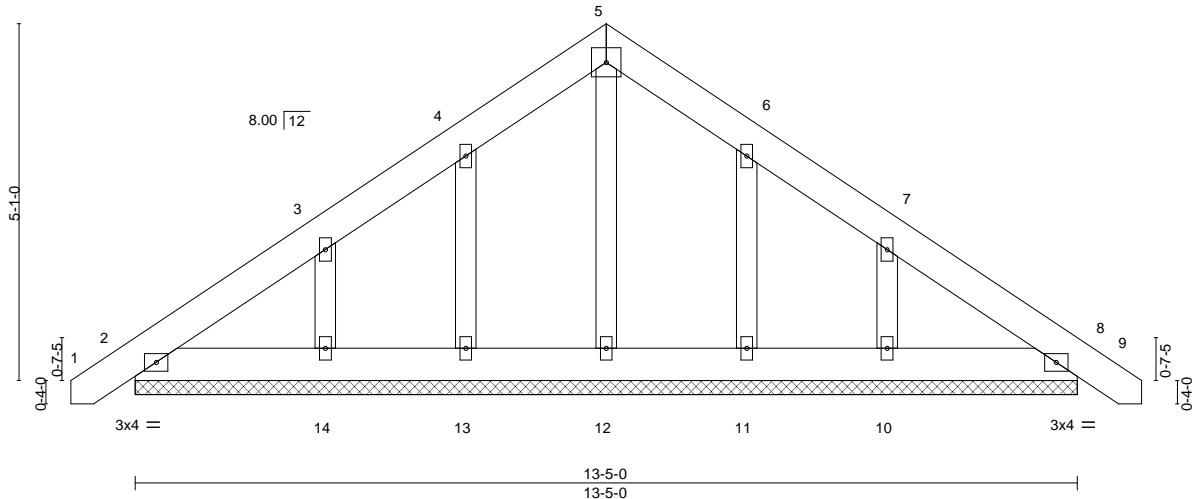
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:26 2022 Page 1

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5x5 =

Scale = 1:30.9



<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 0.02	Vert(LL) 0.00 8 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) 0.00 8 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 8 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 94 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 13-5-0.  
 (lb) - Max Horz 2=123(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

**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 Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp B; 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, 8, 13, 14, 11, 10.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 11, 2022

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818 Soundside Road  
 Edenton, NC 27932

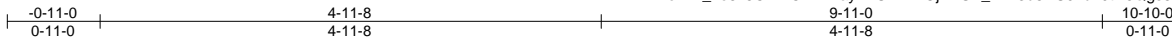


Job J0822-4066	Truss D1	Truss Type COMMON	Qty 4	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588299
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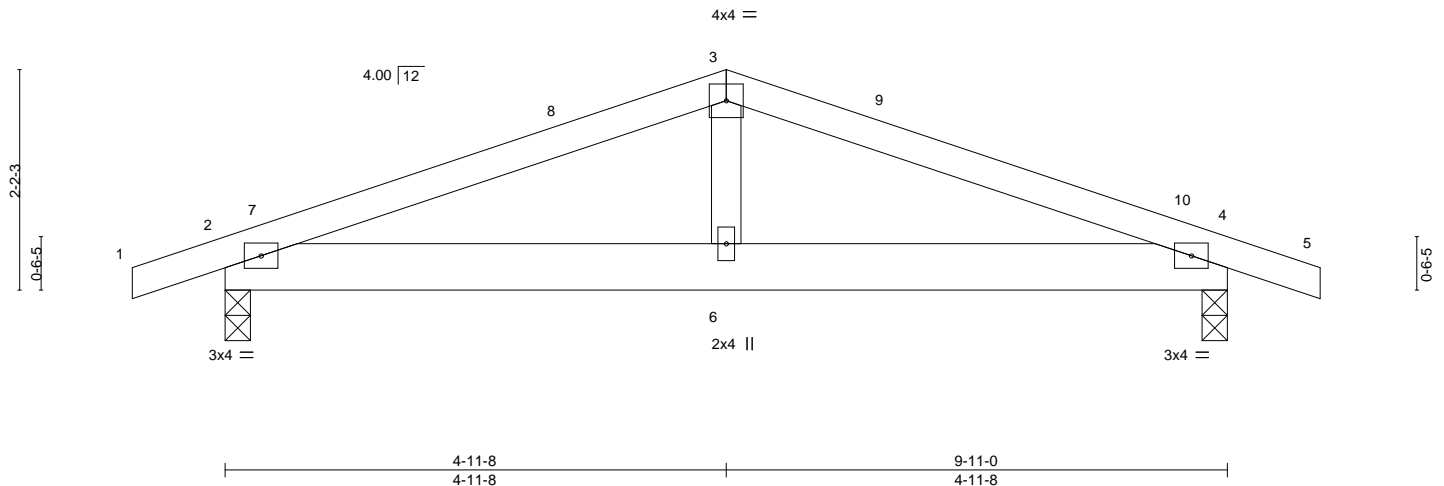
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:27 2022 Page 1

ID:Mxo2zT\_1o8v8CIEXCBvR1ayxNUw-1HOj2?iSB\_Dllk3u8DUJ4u?9tD6Qgs8icR1kxypGnl



Scale = 1:21.5



<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 0.19	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.13	Vert(LL) -0.01 6 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Vert(CT) -0.02 6 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 4 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.02 2-6 >999 240	Weight: 44 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 2=0-3-0, 4=0-3-0  
 Max Horz 2=-19(LC 17)  
 Max Uplift 2=-124(LC 8), 4=-124(LC 9)  
 Max Grav 2=449(LC 1), 4=449(LC 1)

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

TOP CHORD 2-3=-653/587, 3-4=-653/587  
 BOT CHORD 2-6=-485/562, 4-6=-485/562

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 4-11-8, Exterior(2) 4-11-8 to 9-4-5, Interior(1) 9-4-5 to 10-10-0 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=124, 4=124.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 11, 2022

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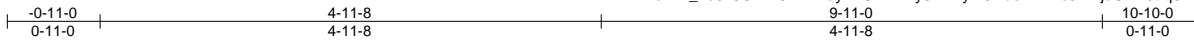
818 Soundside Road  
 Edenton, NC 27932

Job J0822-4066	Truss D1GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588300
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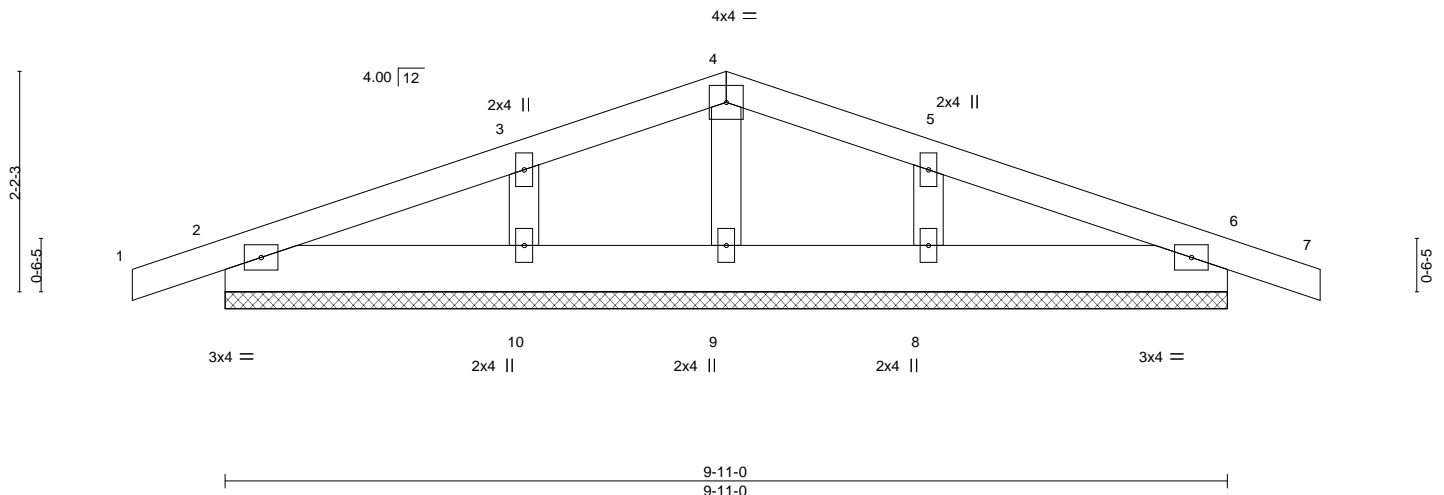
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:28 2022 Page 1

ID:Mxo2zT\_1o8v8CIEXCBvR1ayxNUw-WTy5FLi4yIL9Nue4ix?Yc5XMjdUNPJtrq5nH7NypGnH



Scale = 1:21.5



<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) 0.00 6 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) 0.00 6 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.02	Horz(CT) 0.00 6 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 46 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 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 9-11-0.  
(lb) - Max Horz 2=33(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8  
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 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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, 10, 8.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 6.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 11, 2022

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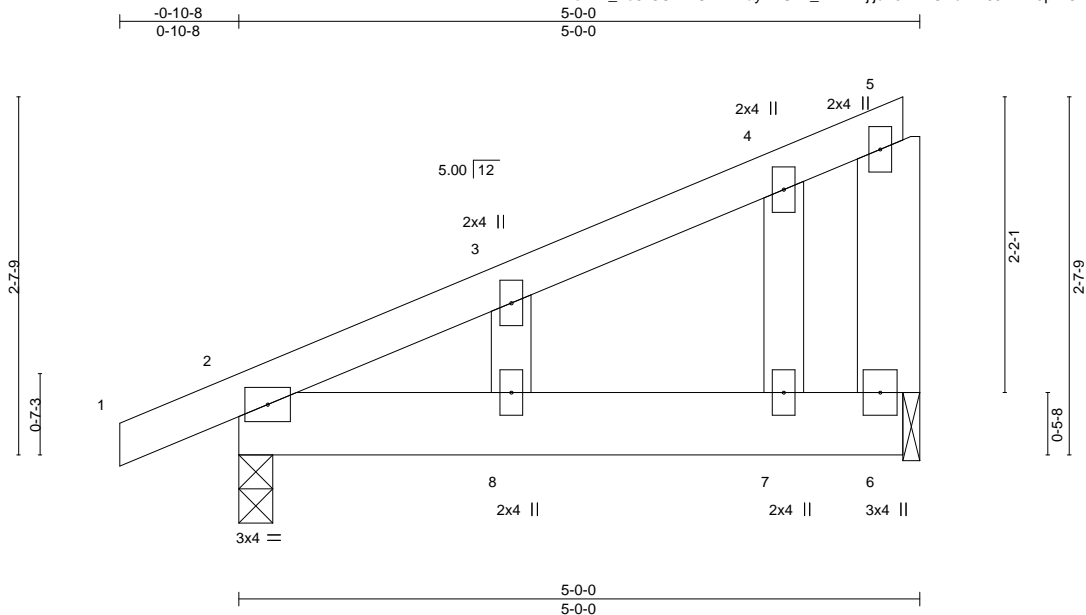
818 Soundside Road  
Edenton, NC 27932



Job J0822-4066	Truss J1GE	Truss Type GABLE	Qty 1	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588302
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8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:29 2022 Page 1  
ID:Mxo2zT\_1o8v8CIEXCbVr1ayxNUw-\_fWTTThjicT0?2DGFewN9J4WF0pW8mD?3IWrfpyGnG



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 0.09	Vert(LL) -0.01 8 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Vert(CT) -0.01 8 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) -0.00 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.01 8 >999 240	Weight: 29 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 12)  
 Max Uplift 2=-69(LC 8), 6=-63(LC 8)  
 Max Grav 2=252(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 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; 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) 2, 6.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 11, 2022

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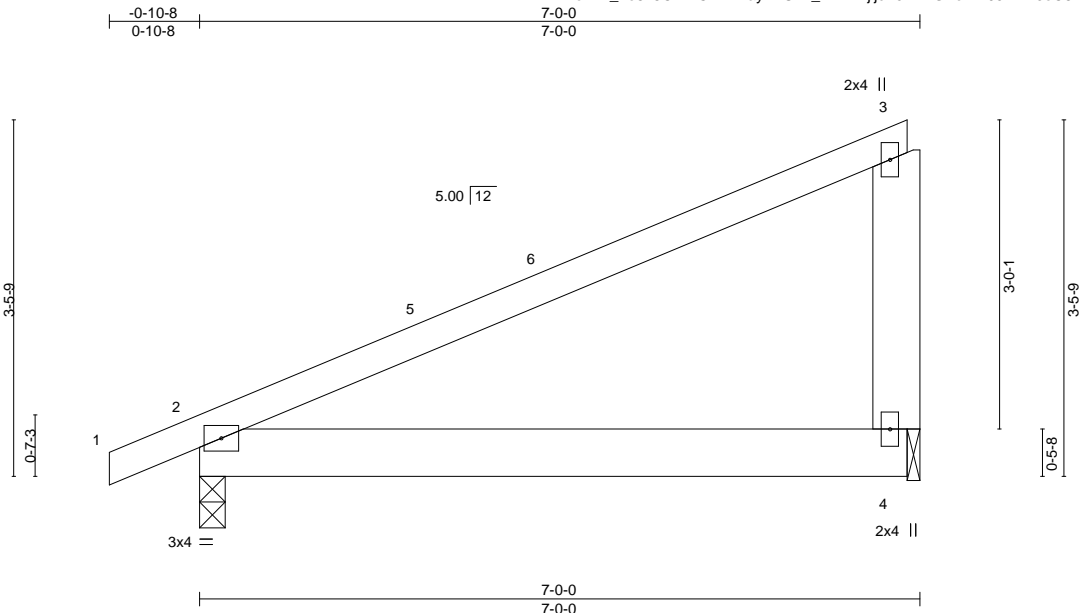


818 Soundside Road  
 Edenton, NC 27932

Job J0822-4066	Truss J2	Truss Type MONOPITCH	Qty 4	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588303
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8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:29 2022 Page 1  
ID:Mxo2zT\_1o8v8CIEXCvR1ayxNUw-\_fWTTthjicT0?2DGFeWn9J4NN0cC8mR?3lWrfypGnG



Scale = 1:21.1

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 0.64	Vert(LL)	-0.03	2-4	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	-0.05	2-4	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.05	2-4	>999	Weight: 35 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 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, 4=0-1-8  
Max Horz 2=85(LC 12)  
Max Uplift 2=-55(LC 8), 4=-59(LC 8)  
Max Grav 2=330(LC 1), 4=261(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 6-9-4 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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 11, 2022

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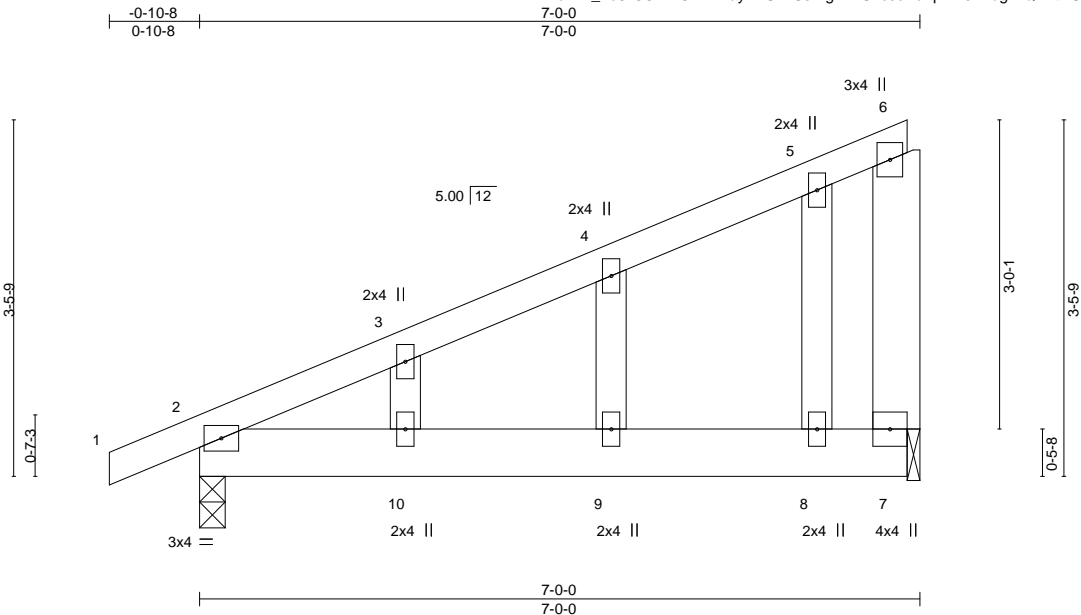


818 Soundside Road  
Edenton, NC 27932

Job J0822-4066	Truss J2GE	Truss Type GABLE	Qty 1	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588304
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:30 2022 Page 1  
ID: Mxo2zT\_1o8v8CIEXCbVr1ayxNUw-Ss4rg1kkUvcscBoTpM10iWdgWQ7BtDU8IPGOCGypGnF



Scale = 1:21.1

<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 0.17	Vert(LL) -0.02 9-10 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.19	Vert(CT) -0.05 9-10 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.01	Horz(CT) -0.00 7 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05 9-10 >999 240	Weight: 42 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 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, 7=0-1-8  
Max Horz 2=122(LC 12)  
Max Uplift 2=-86(LC 8), 7=-91(LC 8)  
Max Grav 2=330(LC 1), 7=261(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; 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) 7 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) 7.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 11, 2022

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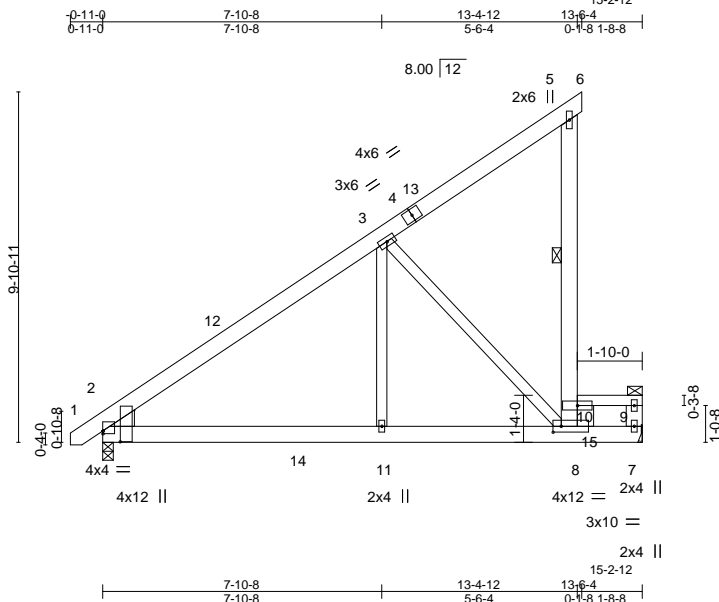
818 Soundside Road  
Edenton, NC 27932



Job J0822-4066	Truss M1	Truss Type ROOF SPECIAL	Qty 9	Ply 1	Lot 5 Liberty Meadows 153588305
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8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:31 2022 Page 1  
ID:Mxo2zT\_1o8v8CIEXCBvR1ayxNUw-w2eEuNizFDkjELNfN3ZFek9IUqNmCJdlW3?ykiypGnE



Scale = 1:61.2

Plate Offsets (X,Y)-- [2:0-3-10,0-5-15], [2:0-0-0,0-0-15], [8:0-2-12,0-2-0]

<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 0.54	Vert(LL)	-0.08 8-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.58	Vert(CT)	-0.18 8-11	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.79	Horz(CT)	0.01 7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.07 8-11	>999	240	Weight: 123 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP 2400F 2.0E \*Except\*  
 9-10: 2x4 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 3-8,3-11: 2x4 SP No.2

WEDGE  
 Left: 2x6 SP No.1

**REACTIONS.** (size) 2=0-3-8, 7=Mechanical  
 Max Horz 2=254(LC 12)  
 Max Uplift 7=39(LC 12)  
 Max Grav 2=724(LC 19), 7=1197(LC 19)

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

TOP CHORD 2-3=-845/0, 8-10=-533/109  
 BOT CHORD 2-11=-164/658, 8-11=-164/658  
 WEBS 3-8=-810/207, 7-9=-254/6, 3-11=0/540

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 13-6-4 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, with BCCL = 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) 7.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 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

Continued on page 2



August 11, 2022

**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 Liberty Meadows	153588305
J0822-4066	M1	ROOF SPECIAL	9	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:31 2022 Page 2  
ID:Mxo2zT\_1o8v8CIEXCBvR1ayxNUw-w2eEuNizFDkjELNfN3ZFk9IUqNMcUdlW3?ykiypGnE

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-60, 5-6=-60, 2-7=-20, 9-10=-40  
Concentrated Loads (lb)  
Vert: 15=-500
- 2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-50, 5-6=-50, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100  
Concentrated Loads (lb)  
Vert: 15=-438
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-5=-20, 5-6=-20, 2-7=-40, 9-10=-60  
Concentrated Loads (lb)  
Vert: 15=-375
- 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=45, 2-12=26, 5-12=20, 5-6=45, 2-7=-12, 9-10=-32  
Horz: 1-2=-57, 2-12=-38, 5-12=-32, 5-6=-57  
Concentrated Loads (lb)  
Vert: 15=86
- 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=14, 2-13=20, 5-13=26, 5-6=20, 2-7=-12, 9-10=-32  
Horz: 1-2=-26, 2-13=-32, 5-13=-38, 5-6=-32  
Concentrated Loads (lb)  
Vert: 15=86
- 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=5, 2-5=-51, 5-6=5, 2-7=-20, 9-10=-40  
Horz: 1-2=-25, 2-5=31, 5-6=-25  
Concentrated Loads (lb)  
Vert: 15=-444
- 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=-45, 2-5=-51, 5-6=-45, 2-7=-20, 9-10=-40  
Horz: 1-2=25, 2-5=31, 5-6=25  
Concentrated Loads (lb)  
Vert: 15=-444
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-0, 2-5=-13, 5-6=-18, 2-7=-12, 9-10=-32  
Horz: 1-2=-12, 2-5=1, 5-6=6  
Concentrated Loads (lb)  
Vert: 15=-115
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=1, 2-5=7, 5-6=20, 2-7=-12, 9-10=-32  
Horz: 1-2=-13, 2-5=-19, 5-6=-32  
Concentrated Loads (lb)  
Vert: 15=32
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-26, 2-5=-32, 5-6=-26, 2-7=-20, 9-10=-40  
Horz: 1-2=6, 2-5=12, 5-6=6  
Concentrated Loads (lb)  
Vert: 15=-325
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-7, 2-5=-12, 5-6=-7, 2-7=-20, 9-10=-40  
Horz: 1-2=-13, 2-5=-8, 5-6=-13  
Concentrated Loads (lb)  
Vert: 15=-285
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=9, 2-5=15, 5-6=9, 2-7=-12, 9-10=-32  
Horz: 1-2=-21, 2-5=-27, 5-6=-21  
Concentrated Loads (lb)  
Vert: 15=18
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-1, 2-5=5, 5-6=-1, 2-7=-12, 9-10=-32  
Horz: 1-2=-11, 2-5=-17, 5-6=-11  
Concentrated Loads (lb)  
Vert: 15=-44

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 Liberty Meadows	153588305
J0822-4066	M1	ROOF SPECIAL	9	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:31 2022 Page 3  
ID:Mxo2ZT\_1o8v8CIEXCbVR1ayxNUw-w2eEuNIZFDkELNf3ZFk9IUqNMcUdlW3?ykiypGnE

**LOAD CASE(S)** Standard

- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=9, 2-5=15, 5-6=9, 2-7=-12, 9-10=-32  
Horz: 1-2=-21, 2-5=-27, 5-6=-21  
Concentrated Loads (lb)  
Vert: 15=18
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-1, 2-5=5, 5-6=-1, 2-7=-12, 9-10=-32  
Horz: 1-2=-11, 2-5=-17, 5-6=-11  
Concentrated Loads (lb)  
Vert: 15=-44
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=1, 2-5=-4, 5-6=1, 2-7=-20, 9-10=-40  
Horz: 1-2=-21, 2-5=-16, 5-6=-21  
Concentrated Loads (lb)  
Vert: 15=-285
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-9, 2-5=-14, 5-6=-9, 2-7=-20, 9-10=-40  
Horz: 1-2=-11, 2-5=-6, 5-6=-11  
Concentrated Loads (lb)  
Vert: 15=-285
- 18) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-5=-20, 5-6=-20, 2-14=-20, 11-14=-80, 7-11=-20, 9-10=-120  
Concentrated Loads (lb)  
Vert: 15=-250
- 19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 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=-55, 2-5=-59, 5-6=-55, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100  
Horz: 1-2=5, 2-5=9, 5-6=5  
Concentrated Loads (lb)  
Vert: 15=-494
- 20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 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=-40, 2-5=-44, 5-6=-40, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100  
Horz: 1-2=-10, 2-5=-6, 5-6=-10  
Concentrated Loads (lb)  
Vert: 15=-464
- 21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 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=-34, 2-5=-38, 5-6=-34, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100  
Horz: 1-2=-16, 2-5=-12, 5-6=-16  
Concentrated Loads (lb)  
Vert: 15=-464
- 22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 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=-41, 2-5=-46, 5-6=-41, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100  
Horz: 1-2=-9, 2-5=-4, 5-6=-9  
Concentrated Loads (lb)  
Vert: 15=-464
- 23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-60, 5-6=-60, 2-7=-20, 9-10=-40  
Concentrated Loads (lb)  
Vert: 15=-500
- 24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-20, 5-6=-20, 2-7=-20, 9-10=-40  
Concentrated Loads (lb)  
Vert: 15=-250
- 25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-50, 5-6=-50, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100  
Concentrated Loads (lb)  
Vert: 15=-438
- 26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-20, 5-6=-20, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100

Continued on page 4

**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

Job J0822-4066	Truss M1	Truss Type ROOF SPECIAL	Qty 9	Ply 1	Lot 5 Liberty Meadows I53588305 Job Reference (optional)
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:31 2022 Page 4  
ID:Mxo2zT\_1o8v8CIEXCbVr1ayxNUw-w2eEuNizFDkjELNfN3ZFEk9IUqNMcUdlW3?ykiypGnE

**LOAD CASE(S)** Standard  
Concentrated Loads (lb)  
Vert: 15=-250

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818 Soundside Road  
Edenton, NC 27932

Job J0822-4066	Truss M1GE	Truss Type GABLE	Qty 1	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588306
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Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:32 2022 Page 1  
ID:Mxo2zT\_1o8v8CIExCBvR1ayxNUw-OECc5jlb0XsasVyrxn4UnxiwkEi1L4XRljiVG8ypGnd



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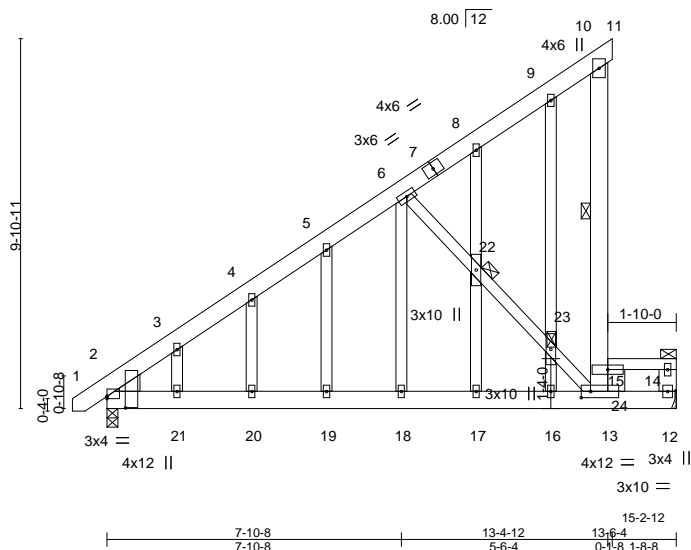


Plate Offsets (X,Y)-- [2:0-3-10,0-5-15], [2:0-0-0,0-0-11], [13:0-3-0,0-2-0]

<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 0.57	Vert(LL)	-0.08	16	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.68	Vert(CT)	-0.17	16	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.23	Horz(CT)	0.01	12	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.09	16	>999	Weight: 155 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP 2400F 2.0E \*Except\*  
 14-15: 2x4 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 6-13,6-18: 2x4 SP No.2  
 OTHERS 2x4 SP No.2  
 WEDGE  
 Left: 2x6 SP No.1

**REACTIONS.**

(size) 2=0-3-8, 12=Mechanical  
 Max Horz 2=366(LC 12)  
 Max Uplift 2=20(LC 12), 12=271(LC 12)  
 Max Grav 2=713(LC 1), 12=1499(LC 19)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-826/0, 3-4=-727/0, 4-5=-697/0, 5-6=-644/30, 6-8=-263/0, 13-15=-856/157,  
 10-15=-436/140  
 BOT CHORD 2-21=-219/618, 20-21=-219/618, 19-20=-219/618, 18-19=-219/618, 17-18=-219/618,  
 16-17=-219/618, 13-16=-219/618  
 WEBS 6-22=-747/285, 22-23=-715/274, 13-23=-724/270, 12-14=-267/13, 6-18=-113/394,  
 9-23=-57/411, 16-23=-51/427

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; 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 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.
- 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) 2 except (jt=lb) 12=271.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. Except: 6-0-0 oc bracing: 10-15  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 10-15  
 JOINTS 1 Brace at Jt(s) 14, 22, 23



August 11,2022

Continuing Engineer must review loads to verify that they are correct for the intended use of this truss.

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Job	Truss	Truss Type	Qty	Ply	Lot 5 Liberty Meadows	153588306
J0822-4066	M1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314.

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:32 2022 Page 2  
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**NOTES-**

- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) 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

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-10=-60, 10-11=-60, 2-13=-20, 12-13=-236, 14-15=-40  
Concentrated Loads (lb)  
Vert: 24=-500
- 2) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-10=-50, 10-11=-50, 2-13=-20, 12-13=-209, 14-15=-100  
Concentrated Loads (lb)  
Vert: 24=-438
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-10=-20, 10-11=-20, 2-13=-40, 12-13=-202, 14-15=-60  
Concentrated Loads (lb)  
Vert: 24=-375
- 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=45, 2-10=26, 10-11=45, 2-13=-12, 12-13=25, 14-15=-32  
Horz: 1-2=-57, 2-10=-38, 10-11=-57  
Concentrated Loads (lb)  
Vert: 24=86
- 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=20, 2-10=26, 10-11=20, 2-13=-12, 12-13=25, 14-15=-32  
Horz: 1-2=-32, 2-10=-38, 10-11=-32  
Concentrated Loads (lb)  
Vert: 24=86
- 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=5, 2-10=-51, 10-11=5, 2-13=-20, 12-13=-212, 14-15=-40  
Horz: 1-2=-25, 2-10=31, 10-11=-25  
Concentrated Loads (lb)  
Vert: 24=-444
- 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=45, 2-10=-51, 10-11=-45, 2-13=-20, 12-13=-212, 14-15=-40  
Horz: 1-2=25, 2-10=31, 10-11=25  
Concentrated Loads (lb)  
Vert: 24=-444
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-2, 2-10=-15, 10-11=-20, 2-13=-12, 12-13=-62, 14-15=-32  
Horz: 1-2=-10, 2-10=3, 10-11=8  
Concentrated Loads (lb)  
Vert: 24=-115
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=4, 2-10=10, 10-11=23, 2-13=-12, 12-13=-18, 14-15=-32  
Horz: 1-2=-16, 2-10=-22, 10-11=-35  
Concentrated Loads (lb)  
Vert: 24=-13
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-28, 2-10=-34, 10-11=-28, 2-13=-20, 12-13=-166, 14-15=-40  
Horz: 1-2=8, 2-10=14, 10-11=8  
Concentrated Loads (lb)  
Vert: 24=-337
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-4, 2-10=-9, 10-11=-4, 2-13=-20, 12-13=-143, 14-15=-40  
Horz: 1-2=-16, 2-10=-11, 10-11=-16  
Concentrated Loads (lb)  
Vert: 24=-285
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=21, 2-10=27, 10-11=21, 2-13=-12, 12-13=28, 14-15=-32  
Horz: 1-2=-33, 2-10=-39, 10-11=-33  
Concentrated Loads (lb)  
Vert: 24=92
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd 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 Liberty Meadows	153588306
J0822-4066	M1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:32 2022 Page 3  
ID:Mxo2zT\_1o8v8CIEXCbVr1ayxNUW-OECc5jlb0XsasVyrxn4UnxiwkEi1L4XRljiVG8ypGnd

**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-2=4, 2-10=10, 10-11=4, 2-13=-12, 12-13=-18, 14-15=-32

Horz: 1-2=-16, 2-10=-22, 10-11=-16

Concentrated Loads (lb)

Vert: 24=-13

14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=21, 2-10=27, 10-11=21, 2-13=-12, 12-13=28, 14-15=-32

Horz: 1-2=-33, 2-10=-39, 10-11=-33

Concentrated Loads (lb)

Vert: 24=92

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

Uniform Loads (plf)

Vert: 1-2=4, 2-10=10, 10-11=4, 2-13=-12, 12-13=-18, 14-15=-32

Horz: 1-2=-16, 2-10=-22, 10-11=-16

Concentrated Loads (lb)

Vert: 24=-13

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

Uniform Loads (plf)

Vert: 1-2=13, 2-10=8, 10-11=13, 2-13=-20, 12-13=-143, 14-15=-40

Horz: 1-2=-33, 2-10=-28, 10-11=-33

Concentrated Loads (lb)

Vert: 24=-285

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

Uniform Loads (plf)

Vert: 1-2=-4, 2-10=-9, 10-11=-4, 2-13=-20, 12-13=-143, 14-15=-40

Horz: 1-2=-16, 2-10=-11, 10-11=-16

Concentrated Loads (lb)

Vert: 24=-285

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

Uniform Loads (plf)

Vert: 1-10=-20, 10-11=-20, 2-13=-20, 12-13=-128, 14-15=-120

Concentrated Loads (lb)

Vert: 24=-250

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=-56, 2-10=-60, 10-11=-56, 2-13=-20, 12-13=-237, 14-15=-100

Horz: 1-2=6, 2-10=10, 10-11=6

Concentrated Loads (lb)

Vert: 24=-503

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=-38, 2-10=-42, 10-11=-38, 2-13=-20, 12-13=-220, 14-15=-100

Horz: 1-2=-12, 2-10=-8, 10-11=-12

Concentrated Loads (lb)

Vert: 24=-464

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=-25, 2-10=-29, 10-11=-25, 2-13=-20, 12-13=-220, 14-15=-100

Horz: 1-2=-25, 2-10=-21, 10-11=-25

Concentrated Loads (lb)

Vert: 24=-464

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=-38, 2-10=-42, 10-11=-38, 2-13=-20, 12-13=-220, 14-15=-100

Horz: 1-2=-12, 2-10=-8, 10-11=-12

Concentrated Loads (lb)

Vert: 24=-464

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

Uniform Loads (plf)

Vert: 1-10=-60, 10-11=-60, 2-13=-20, 12-13=-236, 14-15=-40

Concentrated Loads (lb)

Vert: 24=-500

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

Uniform Loads (plf)

Vert: 1-10=-20, 10-11=-20, 2-13=-20, 12-13=-128, 14-15=-40

Concentrated Loads (lb)

Vert: 24=-250

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

Uniform Loads (plf)

Vert: 1-10=-50, 10-11=-50, 2-13=-20, 12-13=-209, 14-15=-100

Concentrated Loads (lb)

Vert: 24=-438

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

Continued on page 4

**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 J0822-4066	Truss M1GE	Truss Type GABLE	Qty 1	Ply 1	Lot 5 Liberty Meadows I53588306 Job Reference (optional)
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:32 2022 Page 4  
ID:Mxo2zT\_1o8v8CIEXCvR1ayxNUw-OECc5jlb0XsasVyrxn4UnxiwkEi1L4XRjijVG8ypGnD

**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-10=-20, 10-11=-20, 2-13=-20, 12-13=-128, 14-15=-100

Concentrated Loads (lb)

Vert: 24=-250

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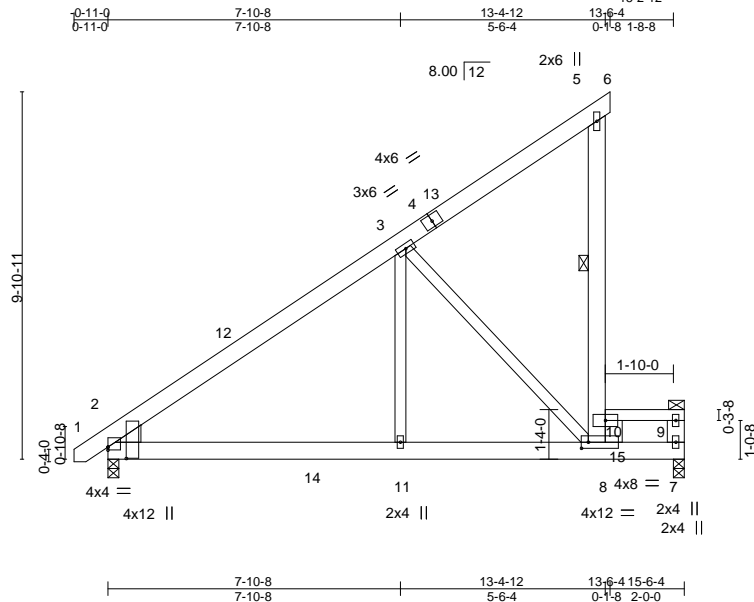


818 Soundside Road  
Edenton, NC 27932

Job J0822-4066	Truss M2	Truss Type ROOF SPECIAL	Qty 2	Ply 1	Lot 5 Liberty Meadows 153588307
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Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:33 2022 Page 1  
ID:Mxo2ZT\_1o8v8CIEXCbVr1ayxNUw-sRm\_J2mDnq\_RTFx1UUbj9F4Ve254Ofa\_MU2obypGnC



Scale = 1:58.4

Plate Offsets (X,Y)-- [2:0-3-10,0-5-15], [2:0-0-0,0-0-15], [8:0-2-4,0-2-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.63	Vert(LL)	-0.11 8-11	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.69	Vert(CT)	-0.24 8-11	>759	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.82	Horz(CT)	0.01 7	n/a	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Wind(LL)	0.10 8-11	>999	240	Weight: 124 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP 2400F 2.0E \*Except\*  
 9-10: 2x4 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 3-8,3-11: 2x4 SP No.2

WEDGE  
 Left: 2x6 SP No.1

**REACTIONS.**

(size) 2=0-3-8, 7=0-3-8  
 Max Horz =254(LC 12)  
 Max Uplift 7=25(LC 12)  
 Max Grav 2=747(LC 19), 7=1209(LC 19)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-893/0, 8-10=-559/107  
 BOT CHORD 2-11=-169/696, 8-11=-169/696  
 WEBS 3-8=-841/212, 7-9=-255/0, 3-11=0/587

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 13-6-4 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 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



August 11, 2022

Continued on page 2

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 Liberty Meadows	I53588307
J0822-4066	M2	ROOF SPECIAL	2	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:33 2022 Page 2  
ID:Mxo2zT\_1o8v8GIEXCbVr1ayxNUw-sRm\_J2mDnq\_RTFx1UUbj9F4Ve254Ofa\_MU2obypGnC

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-60, 5-6=-60, 2-7=-20, 9-10=-40  
Concentrated Loads (lb)  
Vert: 15=-500
- 2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-50, 5-6=-50, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100  
Concentrated Loads (lb)  
Vert: 15=-438
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-5=-20, 5-6=-20, 2-7=-40, 9-10=-60  
Concentrated Loads (lb)  
Vert: 15=-375
- 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=45, 2-12=26, 5-12=20, 5-6=45, 2-7=-12, 9-10=-32  
Horz: 1-2=-57, 2-12=-38, 5-12=-32, 5-6=-57  
Concentrated Loads (lb)  
Vert: 15=86
- 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=14, 2-13=20, 5-13=26, 5-6=20, 2-7=-12, 9-10=-32  
Horz: 1-2=-26, 2-13=-32, 5-13=-38, 5-6=-32  
Concentrated Loads (lb)  
Vert: 15=86
- 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=5, 2-5=-51, 5-6=5, 2-7=-20, 9-10=-40  
Horz: 1-2=-25, 2-5=31, 5-6=-25  
Concentrated Loads (lb)  
Vert: 15=-444
- 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=-45, 2-5=-51, 5-6=-45, 2-7=-20, 9-10=-40  
Horz: 1-2=25, 2-5=31, 5-6=25  
Concentrated Loads (lb)  
Vert: 15=-444
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-0, 2-5=-13, 5-6=-18, 2-7=-12, 9-10=-32  
Horz: 1-2=-12, 2-5=1, 5-6=6  
Concentrated Loads (lb)  
Vert: 15=-115
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=1, 2-5=7, 5-6=20, 2-7=-12, 9-10=-32  
Horz: 1-2=-13, 2-5=-19, 5-6=-32  
Concentrated Loads (lb)  
Vert: 15=32
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-26, 2-5=-32, 5-6=-26, 2-7=-20, 9-10=-40  
Horz: 1-2=6, 2-5=12, 5-6=6  
Concentrated Loads (lb)  
Vert: 15=-325
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-7, 2-5=-12, 5-6=-7, 2-7=-20, 9-10=-40  
Horz: 1-2=-13, 2-5=-8, 5-6=-13  
Concentrated Loads (lb)  
Vert: 15=-285
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=9, 2-5=15, 5-6=9, 2-7=-12, 9-10=-32  
Horz: 1-2=-21, 2-5=-27, 5-6=-21  
Concentrated Loads (lb)  
Vert: 15=18
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-1, 2-5=5, 5-6=-1, 2-7=-12, 9-10=-32  
Horz: 1-2=-11, 2-5=-17, 5-6=-11  
Concentrated Loads (lb)  
Vert: 15=-44

Continued on page 3

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 Liberty Meadows	153588307
J0822-4066	M2	ROOF SPECIAL	2	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:33 2022 Page 3  
ID:Mxo2zT\_1o8v8CIEXCbVr1ayxNUw-sRm\_J2mDnq\_RTFx1UUbj9F4Ve254Ofa\_MU2obypGnC

**LOAD CASE(S)** Standard

- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=9, 2-5=15, 5-6=9, 2-7=-12, 9-10=-32  
Horz: 1-2=-21, 2-5=-27, 5-6=-21  
Concentrated Loads (lb)  
Vert: 15=18
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-1, 2-5=5, 5-6=-1, 2-7=-12, 9-10=-32  
Horz: 1-2=-11, 2-5=-17, 5-6=-11  
Concentrated Loads (lb)  
Vert: 15=-44
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=1, 2-5=-4, 5-6=1, 2-7=-20, 9-10=-40  
Horz: 1-2=-21, 2-5=-16, 5-6=-21  
Concentrated Loads (lb)  
Vert: 15=-285
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-9, 2-5=-14, 5-6=-9, 2-7=-20, 9-10=-40  
Horz: 1-2=-11, 2-5=-6, 5-6=-11  
Concentrated Loads (lb)  
Vert: 15=-285
- 18) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-5=-20, 5-6=-20, 2-14=-20, 11-14=-80, 7-11=-20, 9-10=-120  
Concentrated Loads (lb)  
Vert: 15=-250
- 19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 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=-55, 2-5=-59, 5-6=-55, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100  
Horz: 1-2=5, 2-5=9, 5-6=5  
Concentrated Loads (lb)  
Vert: 15=-494
- 20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 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=-40, 2-5=-44, 5-6=-40, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100  
Horz: 1-2=-10, 2-5=-6, 5-6=-10  
Concentrated Loads (lb)  
Vert: 15=-464
- 21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 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=-34, 2-5=-38, 5-6=-34, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100  
Horz: 1-2=-16, 2-5=-12, 5-6=-16  
Concentrated Loads (lb)  
Vert: 15=-464
- 22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 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=-41, 2-5=-46, 5-6=-41, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100  
Horz: 1-2=-9, 2-5=-4, 5-6=-9  
Concentrated Loads (lb)  
Vert: 15=-464
- 23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-60, 5-6=-60, 2-7=-20, 9-10=-40  
Concentrated Loads (lb)  
Vert: 15=-500
- 24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-20, 5-6=-20, 2-7=-20, 9-10=-40  
Concentrated Loads (lb)  
Vert: 15=-250
- 25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-50, 5-6=-50, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100  
Concentrated Loads (lb)  
Vert: 15=-438
- 26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-20, 5-6=-20, 2-14=-20, 11-14=-65, 7-11=-20, 9-10=-100

Continued on page 4

**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

Job J0822-4066	Truss M2	Truss Type ROOF SPECIAL	Qty 2	Ply 1	Lot 5 Liberty Meadows I53588307 Job Reference (optional)
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:33 2022 Page 4  
ID:Mxo2zT\_1o8v8CIEXCbVr1ayxNUw-sRm\_J2mDnq\_RTFx1UUbjJ9F4Ve254Ofa\_MU2obypGnC

**LOAD CASE(S)** Standard  
Concentrated Loads (lb)  
Vert: 15=-250

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818 Soundside Road  
Edenton, NC 27932

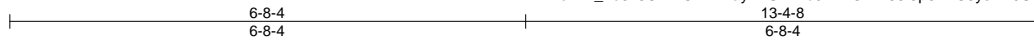


Job J0822-4066	Truss PB1	Truss Type Piggyback	Qty 11	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588308
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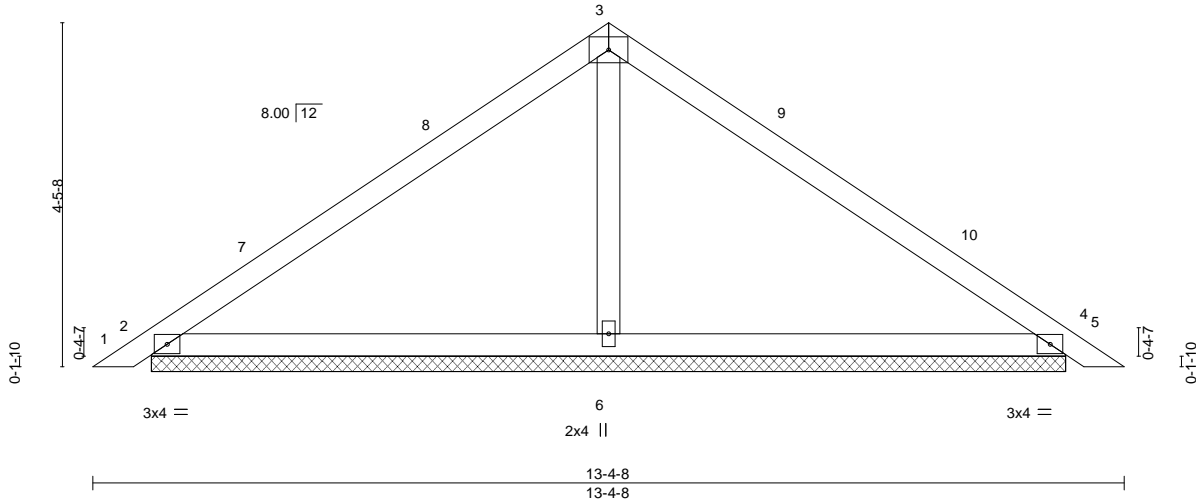
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:34 2022 Page 1

ID:Mxo2zT\_1o8v8ClEXCBvR1ayxNUw-KdJMWOnrY86I5p6E2C6ysMnJU1U8p0NkD0EcL1ypGnB



Scale = 1:28.1



<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 0.36	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.26	Vert(LL) 0.02 5 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Vert(CT) 0.03 5 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 4 n/a n/a		
	Code IRC2015/TPI2014			Weight: 47 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) 2=11-10-4, 4=11-10-4, 6=11-10-4  
 Max Horz 2=85(LC 10)  
 Max Uplift 2=17(LC 12), 4=25(LC 13)  
 Max Grav 2=265(LC 1), 4=265(LC 1), 6=478(LC 1)

**FORCES.**

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

WEBS 3-6=294/85

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-2 to 4-7-15, Interior(1) 4-7-15 to 6-8-4, Exterior(2) 6-8-4 to 11-1-1, Interior(1) 11-1-1 to 13-1-6 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) 2, 4.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



August 11, 2022

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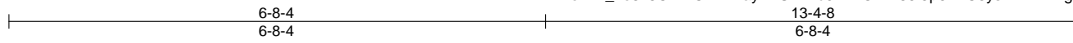
818 Soundside Road  
 Edenton, NC 27932

Job J0822-4066	Truss PB1GE	Truss Type GABLE	Qty 1	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588309
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:56:34 2022 Page 1

ID:Mxo2zT\_1o8v8CIEXCBvR1ayxNUw-KdJMWOnrY86I5p6E2C6ysMnKR1Tgp1hkD0EcL1ypGnB



4x4 =

Scale = 1:27.0

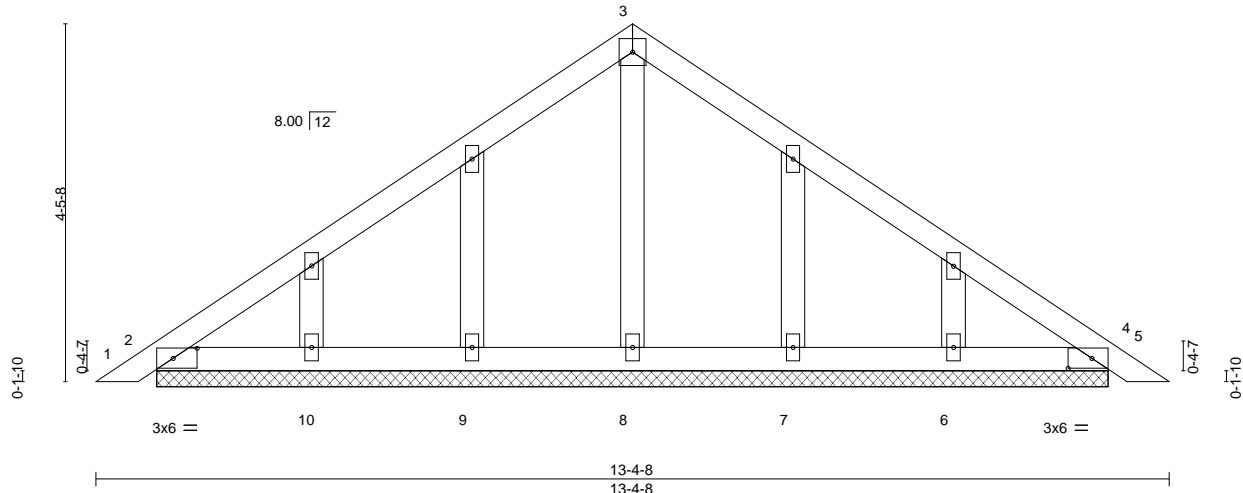


Plate Offsets (X,Y)-- [2:0-3-9,0-1-8], [4:0-3-9,0-1-8], [13:0-0-0,0-0-0], [14:0-0-0,0-0-0]

<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 0.30	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.29	Vert(LL) 0.01 5 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) 0.01 5 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 4 n/a n/a		
	Code IRC2015/TPI2014			Weight: 58 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 11-10-4.  
(lb) - Max Horz 2=106(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 4, 10, 6  
Max Grav All reactions 250 lb or less at joint(s) 8, 9, 10, 7, 6 except 2=307(LC 1), 4=307(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-408/154, 3-4=-408/154  
BOT CHORD 2-10=-43/254, 9-10=-43/254, 8-9=-43/254, 7-8=-43/254, 6-7=-43/254, 4-6=-43/254

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp B; 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, 4, 10, 6.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



August 11, 2022

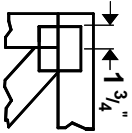
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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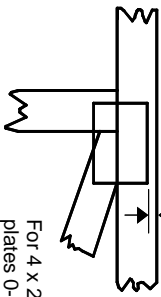
818 Soundside Road  
Edenton, NC 27932

# 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-  $\frac{1}{16}$ " 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

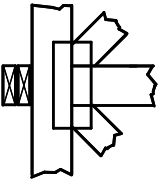
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



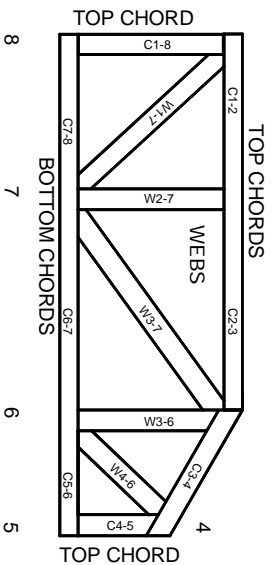
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

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



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, 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 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 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 **David Landry**  
David Landry

#### LOAD CHART FOR JACK STUDS

(BASED ON TABLES R502.5(1) & (b))  
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GORDER

END REACTION (LPT)	REQ'D STUDS FOR (LPT) HEADERS	END REACTION (LPT)	REQ'D STUDS FOR (LPT) HEADERS	END REACTION (LPT)	REQ'D STUDS FOR (LPT) 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				

All Walls Shown Are Considered Load Bearing

**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

**Plumbing Drop Notes**

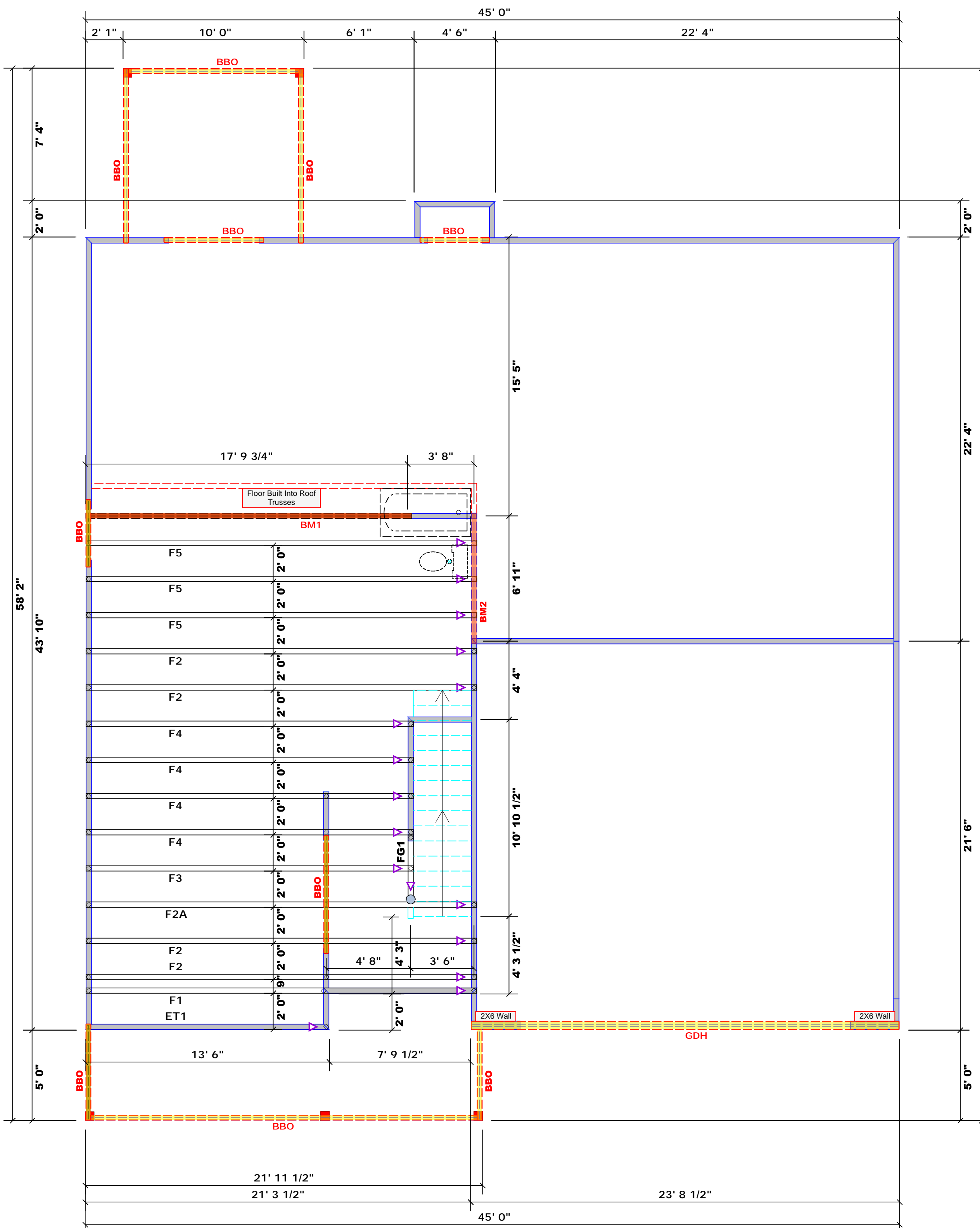
- Plumbing drop locations shown are NOT exact.
- Contractor to verify ALL plumbing drop locations prior to setting Floor Trusses.
- Adjust spacing as needed not to exceed 24"oc.

### 1 Truss Placement Plan

Scale: 1/4"=1'

Products					
PlotID	Length	Product	Plies	Net Qty	Fab Type
BM1	18' 0"	1-3/4"x 16" LVL Kerto-S	2	2	FF
BM2	8' 0"	1-3/4"x 14" LVL Kerto-S	2	2	FF
GDH	24' 0"	1-3/4"x 18" LVL Kerto-S	3	3	FF

Connector Information				Nail Information		
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
●	MSH422	USP	1	Varies	10d/3"	10d/3"



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

CITY / CO.	Harnett Co. / Harnett
ADDRESS	67 Wolcott Court
MODEL	Floor
DATE REV.	08/10/22
DRAWN BY	David Landry
SALES REP.	Marshall Naylor
BUILDER	Benjamin Stout Real Estate
JOB NAME	Lot 5 Liberty Meadows
PLAN	The Caroline / 2GRF, CP
SEAL DATE	N/A
QUOTE #	
JOB #	J0822-4067

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 BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com

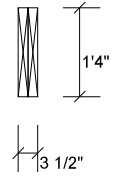
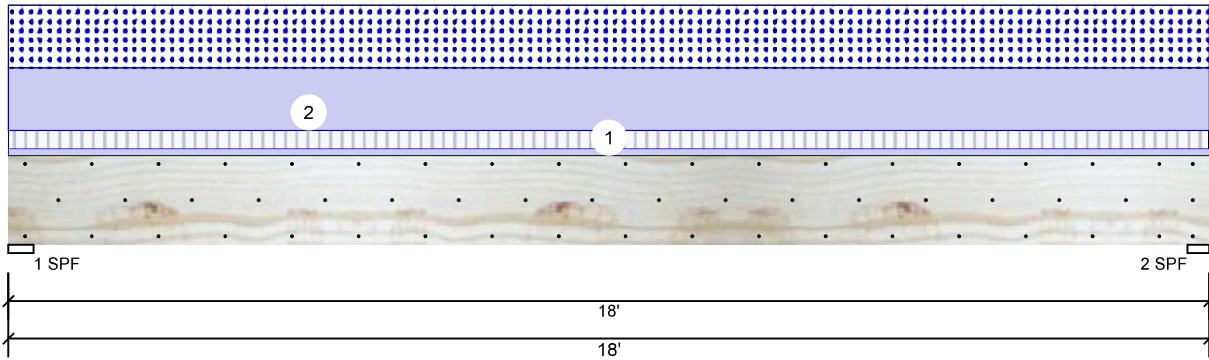


Client: Benjamin Stout Real Estate  
 Project: The Caroline  
 Address: 67 Wolcott Court

Date: 8/10/2022  
 Input by: David Landry  
 Job Name: Lot 5 Liberty Meadows  
 Project #: J0822-4067

**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

**Reactions UNPATTERNED lb (Uplift)**

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	722	2837	2454	0	0
2	Vertical	718	2823	2442	0	0

**Bearings**

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	4.500"	Vert	79%	2837 / 2454	5292	L	D+S
2 - SPF	3.938"	Vert	90%	2823 / 2442	5264	L	D+S

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	22303 ft-lb	9' 1/4"	39750 ft-lb	0.561 (56%)	D+S	L
Unbraced	22303 ft-lb	9' 1/4"	22419 ft-lb	0.995 (99%)	D+S	L
Shear	5032 lb	1'8 1/2"	13739 lb	0.366 (37%)	D+S	L
LL Defl inch	0.258 (L/810)	9' 5/16"	0.436 (L/480)	0.593 (59%)	S	L
TL Defl inch	0.557 (L/376)	9' 5/16"	0.581 (L/360)	0.958 (96%)	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 5'1 3/4" o.c.
- 7 Bottom must be laterally braced at end bearings.
- 8 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	30 PLF	80 PLF	0 PLF	0 PLF	0 PLF	Floor
2	Uniform			Far Face	272 PLF	0 PLF	272 PLF	0 PLF	0 PLF	"M" RF. TRUSSES
	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 11/3/2024

**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)

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

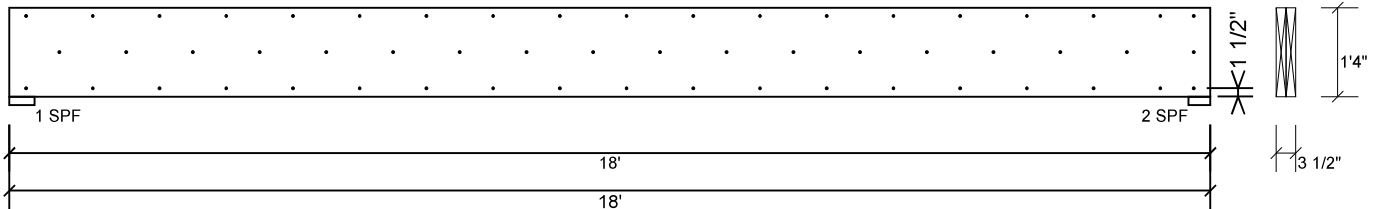


Client: Benjamin Stout Real Estate  
 Project: The Caroline  
 Address: 67 Wolcott Court

Date: 8/10/2022  
 Input by: David Landry  
 Job Name: Lot 5 Liberty Meadows  
 Project #: J0822-4067

**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	96.3 %
Load	272.0 PLF
Yield Limit per Foot	282.4 PLF
Yield Limit per Fastener	94.1 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+S
Duration Factor	1.15

<p><b>Notes</b></p> <p>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.</p> <p><b>Lumber</b></p> <ol style="list-style-type: none"> <li>1. Dry service conditions, unless noted otherwise</li> <li>2. LVL not to be treated with fire retardant or corrosive chemicals</li> </ol>	<p><b>Handling &amp; Installation</b></p> <ol style="list-style-type: none"> <li>1. LVL beams must not be cut or drilled</li> <li>2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals</li> <li>3. Damaged Beams must not be used</li> <li>4. Design assumes top edge is laterally restrained</li> <li>5. Provide lateral support at bearing points to avoid lateral displacement and rotation</li> </ol>	<p>6. For flat roofs provide proper drainage to prevent ponding</p> <p>This design is valid until 11/3/2024</p>	<p><b>Manufacturer Info</b></p> <p>Metsä Wood        301 Merritt 7 Building, 2nd Floor        Norwalk, CT 06851        (800) 622-5850  <a href="http://www.metsawood.com/us">www.metsawood.com/us</a></p>	<p>Comtech, Inc.        1001 S. Reilly Road, Suite #639        Fayetteville, NC        USA        28314        910-864-TRUS</p> 
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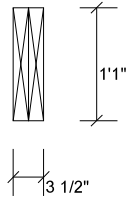
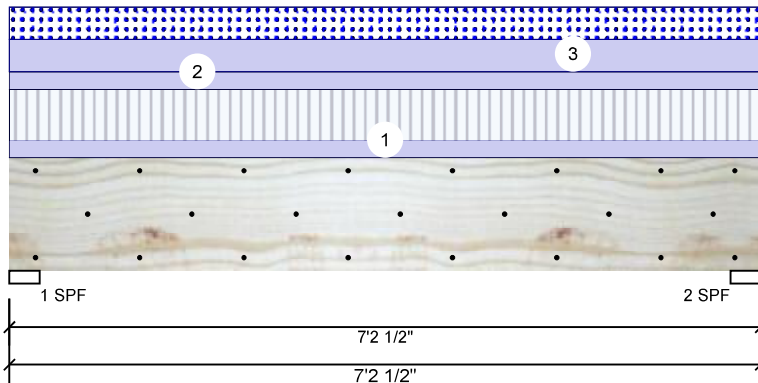


Client: Benjamin Stout Real Estate  
 Project: The Caroline  
 Address: 67 Wolcott Court

Date: 8/10/2022  
 Input by: David Landry  
 Job Name: Lot 5 Liberty Meadows  
 Project #: J0822-4067

**BM2 Kerto-S LVL 1.750" X 13.000" 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

**Reactions UNPATTERNED lb (Uplift)**

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	1254	1680	793	0	0
2	Vertical	1254	1680	793	0	0

**Bearings**

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	62%	1680 / 1535	3215	L	D+0.75(L+S)
2 - SPF	3.500"	Vert	62%	1680 / 1535	3215	L	D+0.75(L+S)

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4637 ft-lb	3'7 1/4"	23540 ft-lb	0.197 (20%)	D+L	L
Unbraced	5081 ft-lb	3'7 1/4"	13971 ft-lb	0.364 (36%)	D+0.75(L+S)	L
Shear	1826 lb	5'10"	9707 lb	0.188 (19%)	D+L	L
LL Defl inch	0.022 (L/3738)	3'7 5/16"	0.169 (L/480)	0.128 (13%)	0.75(L+S)	L
TL Defl inch	0.045 (L/1785)	3'7 5/16"	0.225 (L/360)	0.202 (20%)	D+0.75(L+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 end bearings.
- 7 Bottom must be laterally braced at end bearings.
- 8 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	116 PLF	348 PLF	0 PLF	0 PLF	0 PLF	F4
2	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
3	Uniform			Top	220 PLF	0 PLF	220 PLF	0 PLF	0 PLF	B5
	Self Weight				10 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 11/3/2024

**Manufacturer Info**  
 Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
 www.metsawood.com/us

Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
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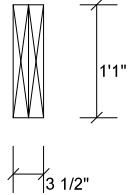
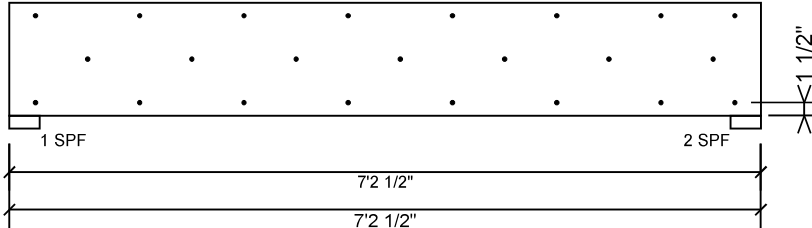


Client: Benjamin Stout Real Estate  
 Project: The Caroline  
 Address: 67 Wolcott Court

Date: 8/10/2022  
 Input by: David Landry  
 Job Name: Lot 5 Liberty Meadows  
 Project #: J0822-4067

**BM2 Kerto-S LVL 1.750" X 13.000" 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 11/3/2024

**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)

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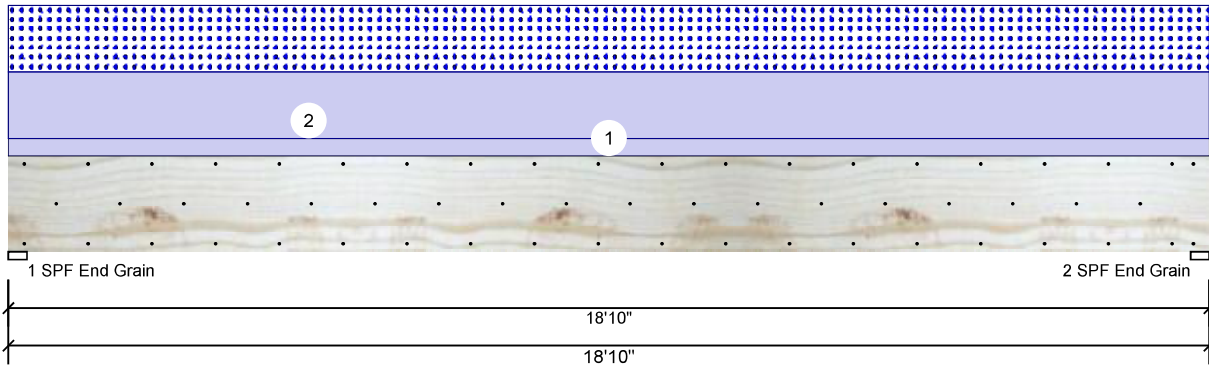


Client: Benjamin Stout Real Estate  
 Project: The Caroline  
 Address: 67 Wolcott Court

Date: 8/10/2022  
 Input by: David Landry  
 Job Name: Lot 5 Liberty Meadows  
 Project #: J0822-4067

**GDH Kerto-S LVL 1.750" X 18.000" 3-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder
Plies:	3
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:	Yes
Deck:	Not Checked

**Reactions UNPATTERNED lb (Uplift)**

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	5659	4332	0	0
2	Vertical	0	5659	4332	0	0

**Bearings**

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	65%	5659 / 4332	9991	L	D+S
2 - SPF End Grain	3.500"	Vert	65%	5659 / 4332	9991	L	D+S

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	44881 ft-lb	9'5"	77108 ft-lb	0.582 (58%)	D+S	L
Unbraced	44881 ft-lb	9'5"	45041 ft-lb	0.996 (100%)	D+S	L
Shear	8122 lb	17' 1/2"	23184 lb	0.350 (35%)	D+S	L
LL Defl inch	0.256 (L/862)	9'5 1/16"	0.460 (L/480)	0.557 (56%)	S	L
TL Defl inch	0.590 (L/374)	9'5 1/16"	0.613 (L/360)	0.963 (96%)	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 4'3 3/4" o.c.
- 7 Bottom must be laterally braced at end bearings.
- 8 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	460 PLF	0 PLF	460 PLF	0 PLF	0 PLF	A1
	Self Weight				21 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 11/3/2024

**Manufacturer Info**  
 Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
 www.metsawood.com/us

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 1001 S. Reilly Road, Suite #639  
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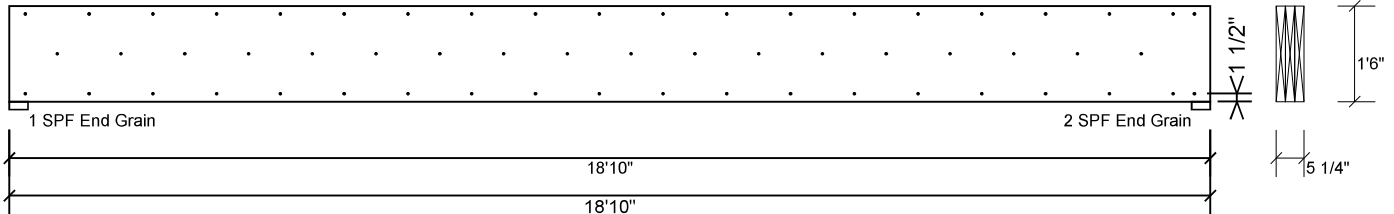


Client: Benjamin Stout Real Estate  
 Project: The Caroline  
 Address: 67 Wolcott Court

Date: 8/10/2022  
 Input by: David Landry  
 Job Name: Lot 5 Liberty Meadows  
 Project #: J0822-4067

**GDH Kerto-S LVL 1.750" X 18.000" 3-Ply - PASSED**

Level: Level



**Multi-Ply Analysis**

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Nail from both sides. 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 11/3/2024

**Manufacturer Info**

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





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**Trenco**  
818 Soundside Rd  
Edenton, NC 27932

Re: J0822-4067  
Lot 5 Liberty Meadows

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: I53588845 thru I53588852

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

North Carolina COA: C-0844



August 11, 2022

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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 J0822-4067	Truss ET1	Truss Type GABLE	Qty 1	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588845
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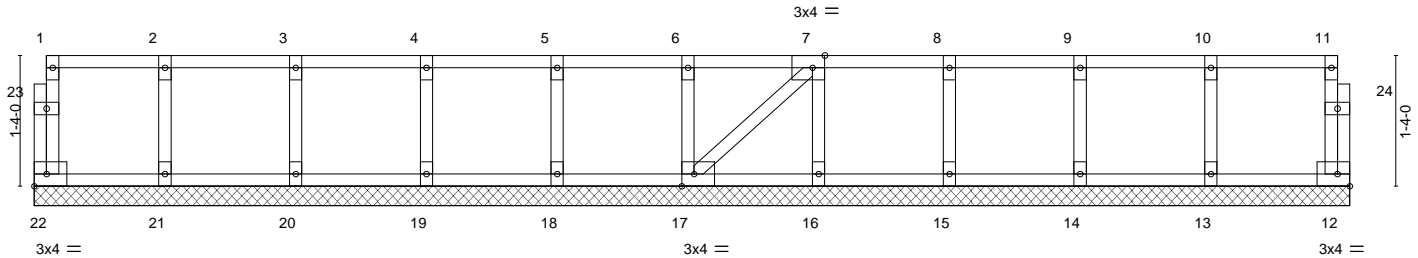
Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:58:07 2022 Page 1  
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0 1/8

0 1/8

Scale = 1:22.1



1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	9-4-0	10-8-0	12-0-0	13-5-0
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-5-0

Plate Offsets (X,Y)-- [7:0-1-8,Edge], [17:0-1-8,Edge]										
<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 0.06	Vert(LL) n/a	-	n/a	999		MT20	244/190
TCDL 10.0	Lumber DOL 1.00		BC 0.01	Vert(CT) n/a	-	n/a	999			
BCLL 0.0	Rep Stress Incr YES		WB 0.03	Horz(CT) 0.00	12	n/a	n/a			
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						Weight: 62 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 13-5-0.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 22, 12, 21, 20, 19, 18, 17, 16, 15, 14, 13

**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.



August 11, 2022

**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



Job J0822-4067	Truss F1	Truss Type Floor	Qty 1	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	I53588846
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8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:58:09 2022 Page 1  
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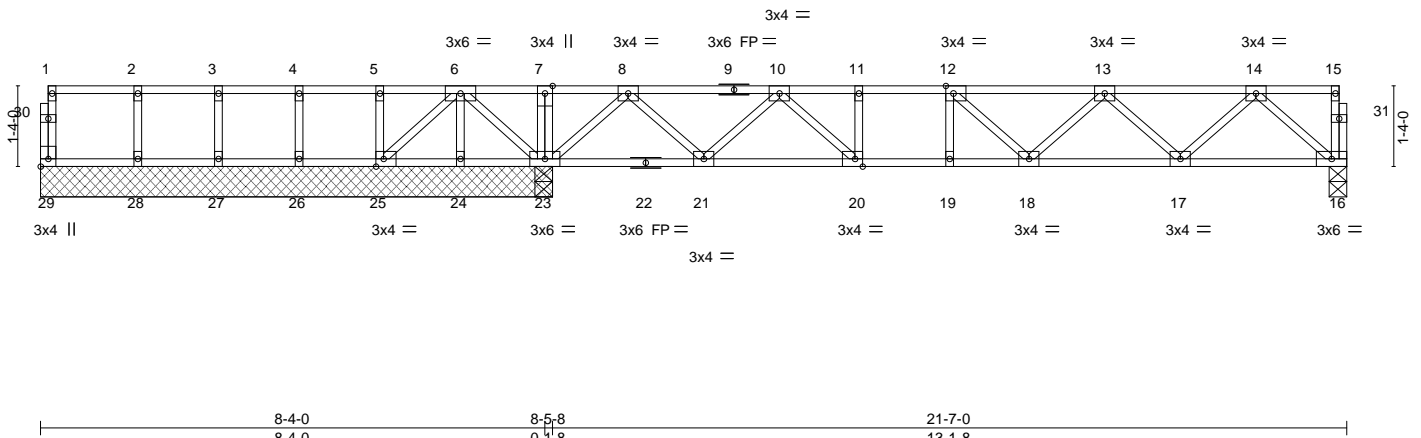


Plate Offsets (X,Y)--	[12:0-1-8,Edge], [20:0-1-8,Edge], [25:0-1-8,Edge], [29:Edge,0-1-8]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	2-0-0	TC 0.41	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.63	Vert(LL) -0.09 18-19 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.35	Vert(CT) -0.12 18-19 >999 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 16 n/a n/a		
	Code IRC2015/TPI2014			Weight: 111 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: 24-25,23-24,21-23.

**REACTIONS.** All bearings 8-5-8 except (jt=length) 16=0-3-8.  
(lb) - Max Uplift All uplift 100 lb or less at joint(s) except 24=-116(LC 4), 25=-267(LC 4)  
Max Grav All reactions 250 lb or less at joint(s) 29, 24, 25, 26, 27, 28 except 23=1357(LC 1), 23=1357(LC 1), 16=634(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 6-7=0/858, 7-8=0/858, 8-10=-505/0, 10-11=-1449/0, 11-12=-1449/0, 12-13=-1488/0, 13-14=-1057/0  
BOT CHORD 24-25=-345/0, 23-24=-345/0, 20-21=0/1044, 19-20=0/1449, 18-19=0/1449, 17-18=0/1429, 16-17=0/662  
WEBS 6-23=705/0, 6-25=0/466, 8-23=-1114/0, 8-21=0/734, 10-21=-752/0, 10-20=0/598, 14-16=-879/0, 14-17=0/549, 13-17=-518/0

- 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 116 lb uplift at joint 24 and 267 lb uplift at joint 25.
  - 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.



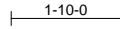
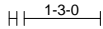
August 11, 2022

Job J0822-4067	Truss F2	Truss Type Floor	Qty 4	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	15358847
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8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:58:10 2022 Page 1  
ID:Mxo2ZT\_1o8v8CIEXCvR1ayxNUw-2OYrfrRyzC8Om6eJXc5S4smbPk7ZJJrsHyUhiTypGh

0-1-8



0-1-8  
Scale = 1:35.6

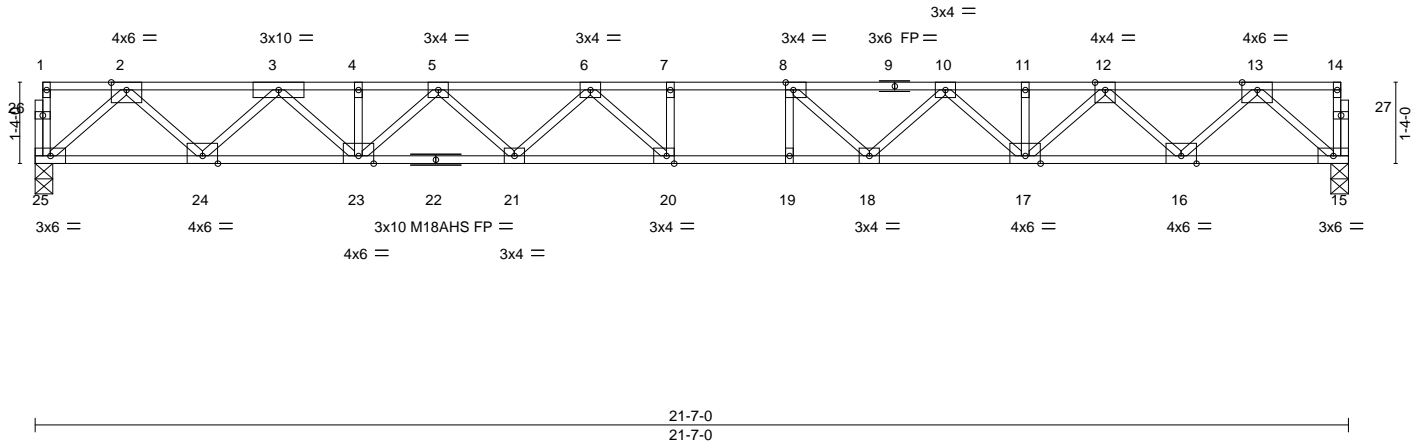


Plate Offsets (X,Y)-- [8:0-1-8,Edge], [20:0-1-8,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.86	Vert(LL)	-0.42	20	>613	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.71	Vert(CT)	-0.58	20-21	>444	360	M18AHS	186/179
BCLL 0.0	Rep Stress Incr	YES	WB 0.62	Horz(CT)	0.09	15	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S							
									Weight: 113 lb	FT = 20%F, 11%E

**LUMBER-**

TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.3(flat)

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 25=0-3-8, 15=0-3-8  
Max Grav 25=1167(LC 1), 15=1167(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2204/0, 3-4=-3798/0, 4-5=-3798/0, 5-6=-4756/0, 6-7=-5128/0, 7-8=-5128/0, 8-10=-4749/0, 10-11=-3802/0, 11-12=-3802/0, 12-13=-2203/0  
BOT CHORD 24-25=0/1276, 23-24=0/3102, 21-23=0/4408, 20-21=0/5062, 19-20=0/5128, 18-19=0/5128, 17-18=0/4399, 16-17=0/3103, 15-16=0/1275  
WEBS 13-15=-1695/0, 13-16=0/1291, 12-16=-1251/0, 12-17=0/951, 10-17=-811/0, 10-18=0/607, 2-25=-1696/0, 2-24=0/1292, 3-24=-1249/0, 3-23=0/946, 5-23=-828/0, 5-21=0/485, 6-21=-471/0, 6-20=-297/542, 8-18=-785/0, 8-19=-149/254

**NOTES-**

- Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- 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.



August 11, 2022

**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



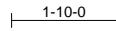
818 Soundside Road  
Edenton, NC 27932

Job J0822-4067	Truss F2A	Truss Type FLOOR	Qty 1	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588848
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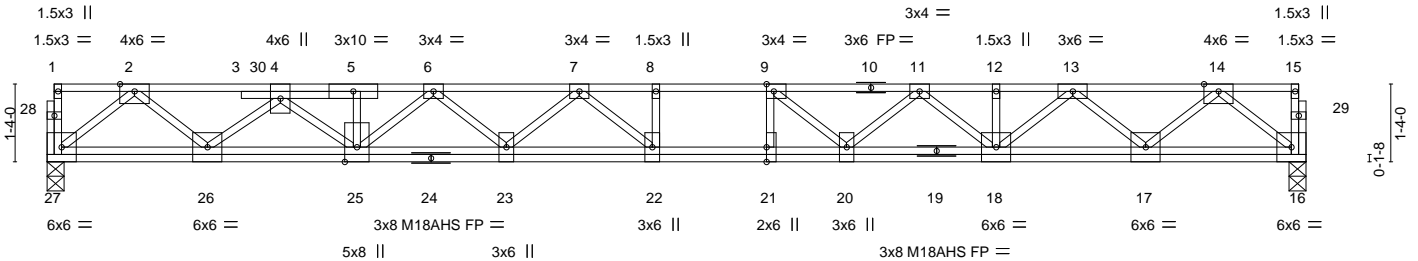
Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:58:11 2022 Page 1  
ID:Mxo2ZT\_1o8v8CIEXCbVr1ayxNUw-Xa6DsBSakVGFODV5Jchc3lkV8Yx2kk0WcEEEvypGlg

0-1-8



0-1-8  
Scale = 1:37.2



	7-10-8	21-7-0
	7-10-8	13-8-8
Plate Offsets (X,Y)--	[9:0-1-8,Edge], [21:0-3-0,0-0-0]	

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 2-0-0 1.00	TC 0.97	Vert(LL) -0.36	22	>718	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.44	Vert(CT) -0.49	22	>519	360	M18AHS	186/179
BCLL 0.0	Rep Stress Incr NO	WB 0.70	Horz(CT) 0.05	16	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 145 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SP 2400F 2.0E(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 27=0-3-8, 16=0-3-8  
Max Grav 27=1242(LC 1), 16=1182(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-4=-2507/0, 4-5=-4202/0, 5-6=-4195/0, 6-7=-5160/0, 7-8=-5507/0, 8-9=-5507/0,  
9-11=-5061/0, 11-12=-4047/0, 12-13=-4047/0, 13-14=-2340/0  
**BOT CHORD** 26-27=0/1410, 25-26=0/3622, 23-25=0/4815, 22-23=0/5455, 21-22=0/5507, 20-21=0/5507,  
18-20=0/4693, 17-18=0/3303, 16-17=0/1353  
**WEBS** 14-16=-1758/0, 14-17=0/1340, 13-17=-1306/0, 13-18=0/989, 11-18=-857/0, 11-20=0/587,  
2-27=-1832/0, 2-26=0/1474, 4-26=-1489/0, 4-25=0/743, 6-25=-823/0, 6-23=0/468,  
7-23=-463/0, 7-22=-283/454, 9-20=-896/0, 9-21=-179/407

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - All plates are MT20 plates 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.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 170 lb down at 3-7-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard  
 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (plf)  
 Vert: 16-27=-10, 1-15=-100  
 Concentrated Loads (lb)  
 Vert: 30=-90(B)



August 11, 2022

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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 ANSIP/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

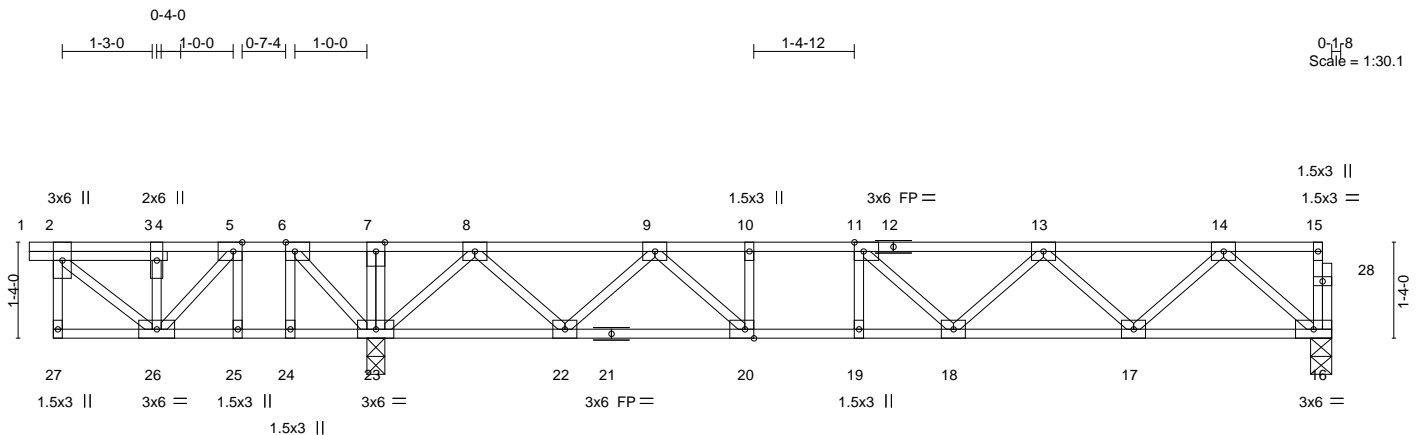


818 Soundside Road  
Edenton, NC 27932

Job J0822-4067	Truss F3	Truss Type Floor	Qty 1	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	15358849
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:58:12 2022 Page 1  
ID:Mxo2zT\_1o8v8CIEXCvR1ayxNUw-?nfb3XTCVpO6?Qohe18w9Hr1ZYqRnGJ9IGzomLypGlf



0-4-0	4-8-4	4-9-12	18-1-0
0-4-0	4-4-4	0-1-8	13-3-4

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	40.0	Plate Grip DOL	2-0-0	TC	0.50	Vert(LL)	-0.09 18-19 >999 480	MT20		244/190	
TCDL	10.0	Lumber DOL	1.00	BC	0.68	Vert(CT)	-0.12 18-19 >999 360				
BCLL	0.0	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.02 16 n/a n/a				
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							
								Weight: 100 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 6-0-0 oc bracing. Except: 10-0-0 oc bracing: 26-27,17-18,16-17.
WEBS	2x4 SP No.3 (flat)		


**REACTIONS.** (size) 23=0-3-0, 16=0-3-8  
Max Grav 23=1344(LC 1), 16=691(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 5-6=0/477, 6-7=0/1040, 7-8=0/1040, 8-9=-997/500, 9-10=-1785/41, 10-11=-1785/41, 11-13=-1730/0, 13-14=-1180/0  
 BOT CHORD 25-26=-477/0, 24-25=-477/0, 23-24=-477/0, 22-23=-727/520, 20-22=-280/1471, 19-20=-41/1785, 18-19=-41/1785, 17-18=0/1606, 16-17=0/729  
 WEBS 3-26=-253/0, 5-26=0/569, 6-23=-803/0, 8-23=-1156/0, 8-22=0/758, 9-22=-773/0, 9-20=0/710, 10-20=-289/0, 14-16=-967/0, 14-17=0/627, 13-17=-593/0

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - All plates are 3x4 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.



August 11, 2022

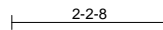
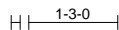
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b>          Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 818 Soundside Road Edenton, NC 27932
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Job J0822-4067	Truss F4	Truss Type Floor	Qty 4	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588850
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:58:13 2022 Page 1  
ID:Mxo2zT\_1o8v8CIEXCbVr1ayxNUw-TzDzHtUqG7WzdZnuCkf9iUO8ay8LWWhdJ\_wjLJoypGle

0-1-8



0-1-8  
Scale = 1:30.5

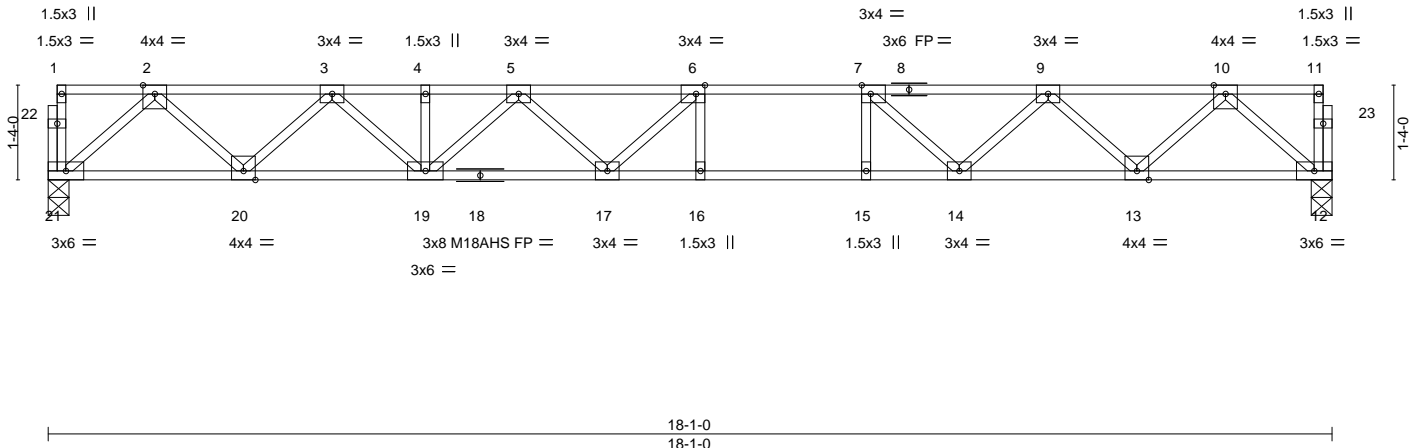


Plate Offsets (X,Y)-- [6:0-1-8,Edge], [7:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.74	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.83	Vert(LL) -0.28 16-17 >758 480	M18AHS	186/179
BCLL 0.0	Lumber DOL 1.00	WB 0.48	Vert(CT) -0.38 16-17 >558 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.05 12 n/a n/a		
	Code IRC2015/TPI2014			Weight: 94 lb	FT = 20%F, 11%E

**LUMBER-**

TOP CHORD 2x4 SP No.1 (flat)  
BOT CHORD 2x4 SP 2400F 2.0E (flat)  
WEBS 2x4 SP No.3 (flat)

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-9-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 21=0-3-8, 12=0-3-8  
Max Grav 21=975(LC 1), 12=975(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1788/0, 3-4=-2968/0, 4-5=-2968/0, 5-6=-3518/0, 6-7=-3509/0, 7-9=-2933/0, 9-10=-1790/0  
BOT CHORD 20-21=0/1057, 19-20=0/2487, 17-19=0/3397, 16-17=0/3509, 15-16=0/3509, 14-15=0/3509, 13-14=0/2478, 12-13=0/1060  
WEBS 10-12=-1409/0, 10-13=0/1015, 9-13=-957/0, 9-14=0/656, 7-14=-919/0, 7-15=-48/344, 2-21=-1405/0, 2-20=0/1016, 3-20=-972/0, 3-19=0/655, 5-19=-583/0, 5-17=0/339, 6-17=-375/282, 6-16=-308/84

**NOTES-**

- Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates 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.



August 11, 2022

**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 J0822-4067	Truss F5	Truss Type Floor	Qty 3	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588851
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:58:14 2022 Page 1  
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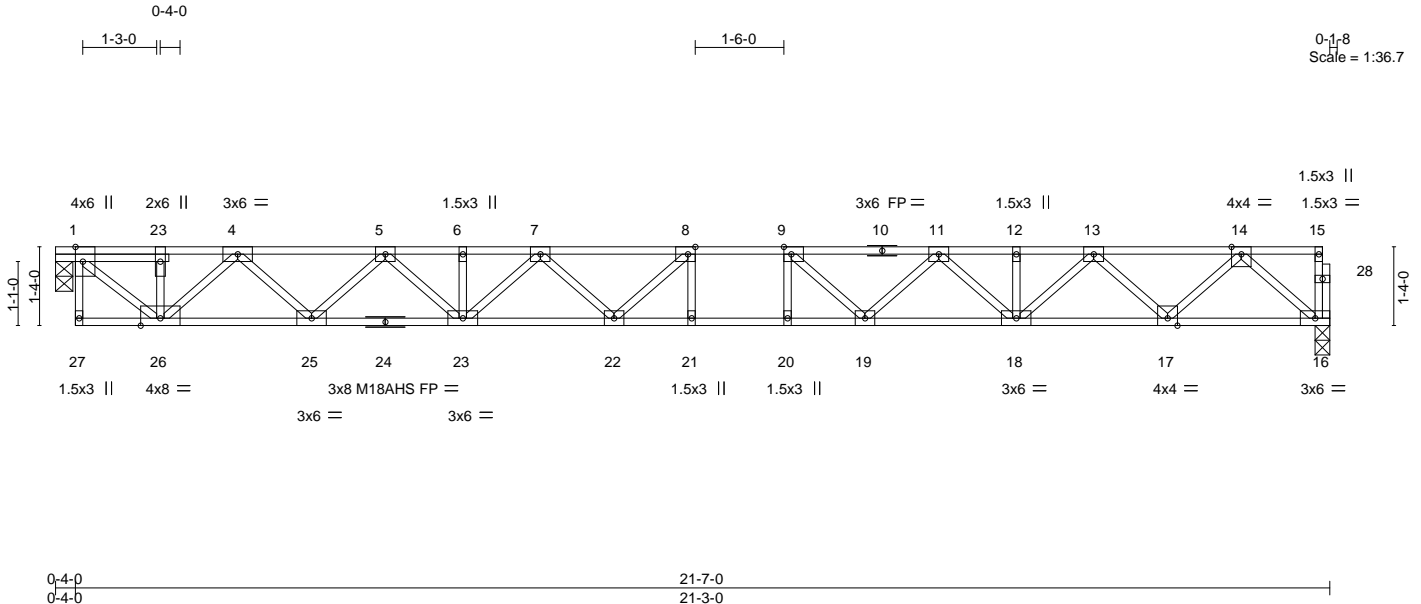


Plate Offsets (X,Y)-- [1:0-3-0,Edge], [8:0-1-8,Edge], [9:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	1-7-3 Plate Grip DOL 1.00	TC 0.52	Vert(LL) -0.35	21	>717	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.96	Vert(CT) -0.48	21	>522	360	M18AHS	186/179
BCLL 0.0	Rep Stress Incr YES	WB 0.62	Horz(CT) 0.01	16	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 115 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: 2-2-0 oc bracing: 21-22,20-21.

**REACTIONS.**

(size) 1=0-3-8, 16=0-3-0  
Max Grav 1=927(LC 1), 16=922(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1000/0, 2-4=-1000/0, 4-5=-2427/0, 5-6=-3434/0, 6-7=-3434/0, 7-8=-3922/0, 8-9=-4011/0, 9-11=-3722/0, 11-12=-2992/0, 12-13=-2992/0, 13-14=-1737/0  
BOT CHORD 25-26=0/1815, 23-25=0/3016, 22-23=0/3792, 21-22=0/4011, 20-21=0/4011, 19-20=0/4011, 18-19=0/3457, 17-18=0/2444, 16-17=0/1007  
WEBS 1-26=0/1302, 14-16=-1338/0, 14-17=0/1015, 13-17=-984/0, 13-18=0/745, 11-18=-632/0, 11-19=0/461, 9-19=-587/4, 4-26=-1108/0, 4-25=0/850, 5-25=-820/0, 5-23=0/568, 7-23=-487/0, 7-22=-21/337, 8-22=-406/185

**NOTES-**

- Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 3x4 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.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- CAUTION, Do not erect truss backwards.



August 11, 2022

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818 Soundside Road  
Edenton, NC 27932



Job J0822-4067	Truss FG1	Truss Type FLOOR	Qty 1	Ply 1	Lot 5 Liberty Meadows Job Reference (optional)	153588852
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Comtech, Inc., Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Aug 10 10:58:15 2022 Page 1

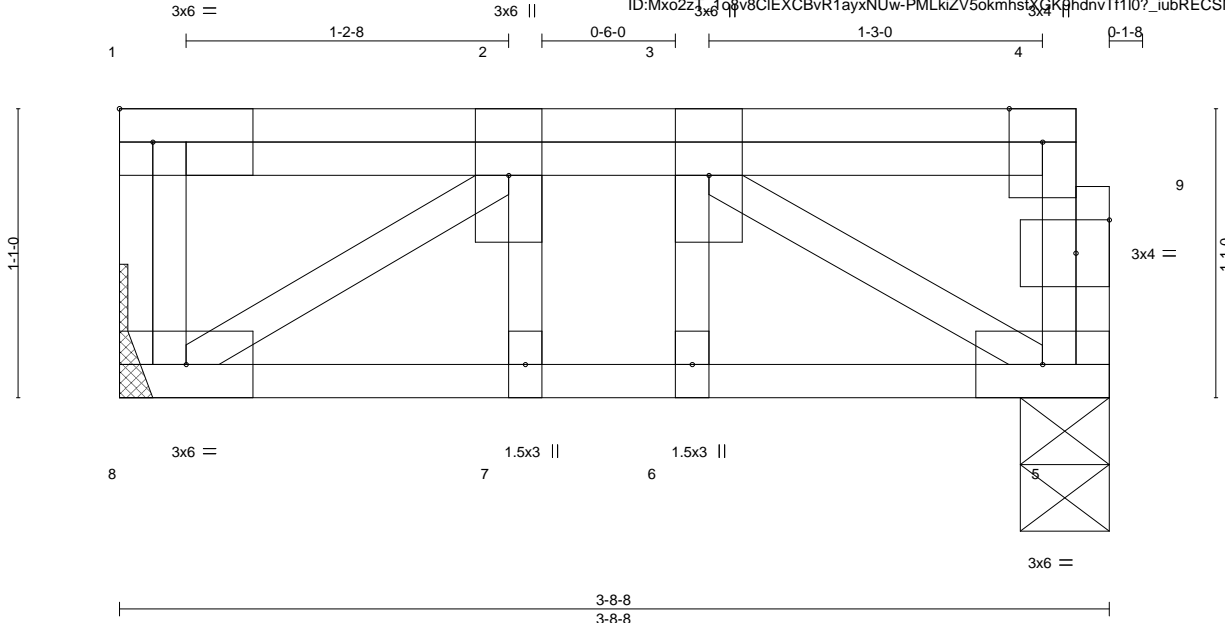


Plate Offsets (X,Y)-- [9:0-1-8,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.04	Vert(LL)	-0.00	7	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.05	Vert(CT)	-0.00	6	>999		
BCLL 0.0	Lumber DOL 1.00	WB 0.05	Horz(CT)	0.00	5	n/a		
BCDL 5.0	Rep Stress Incr NO	Matrix-S						
	Code IRC2015/TPI2014						Weight: 27 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 3-8-8 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 8=Mechanical, 5=0-4-0  
 Max Grav 8=190(LC 1), 5=184(LC 1)

**FORCES.**

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

**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.



August 11, 2022

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

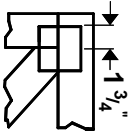
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 ANSII/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



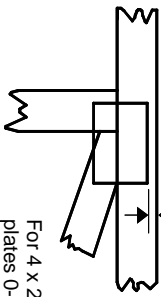
818 Soundside Road  
 Edenton, NC 27932

# 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-  $\frac{1}{16}$ " 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

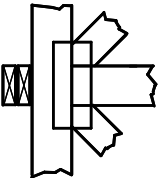
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



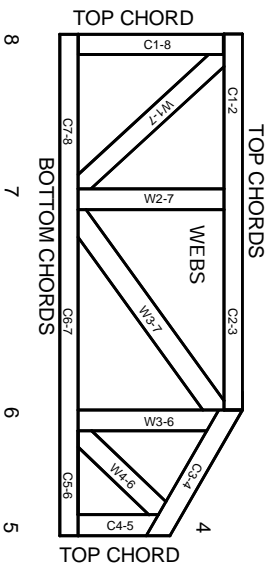
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

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



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, 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 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 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.