

RE: J0822-4434  
 Wellco/Lot 148 Hidden Lakes/Harnett

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Customer: Project Name: J0822-4434  
 Lot/Block: Model:  
 Address: Subdivision:  
 City: State:

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.4  
 Wind Code: ASCE 7-10 Wind Speed: 130 mph  
 Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 37 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I53121381	A1	7/16/2022	21	I53121401	VA3	7/16/2022
2	I53121382	A1A	7/16/2022	22	I53121402	VA4	7/16/2022
3	I53121383	A1GE	7/16/2022	23	I53121403	VA5	7/16/2022
4	I53121384	A2	7/16/2022	24	I53121404	VA6	7/16/2022
5	I53121385	A3	7/16/2022	25	I53121405	VA7	7/16/2022
6	I53121386	A3X	7/16/2022	26	I53121406	VB1	7/16/2022
7	I53121387	A4	7/16/2022	27	I53121407	VB2	7/16/2022
8	I53121388	A4X	7/16/2022	28	I53121408	VB3	7/16/2022
9	I53121389	A5	7/16/2022	29	I53121409	VB4	7/16/2022
10	I53121390	A5X	7/16/2022	30	I53121410	VB5	7/16/2022
11	I53121391	A6	7/16/2022	31	I53121411	VB6	7/16/2022
12	I53121392	A6GE	7/16/2022	32	I53121412	VB7	7/16/2022
13	I53121393	B1GE	7/16/2022	33	I53121413	VB8	7/16/2022
14	I53121394	B2GDR	7/16/2022	34	I53121414	VB9	7/16/2022
15	I53121395	P1	7/16/2022	35	I53121415	VP1	7/16/2022
16	I53121396	P1GE	7/16/2022	36	I53121416	VP2	7/16/2022
17	I53121397	PB1	7/16/2022	37	I53121417	VP3	7/16/2022
18	I53121398	PB1GE	7/16/2022				
19	I53121399	VA1	7/16/2022				
20	I53121400	VA2	7/16/2022				

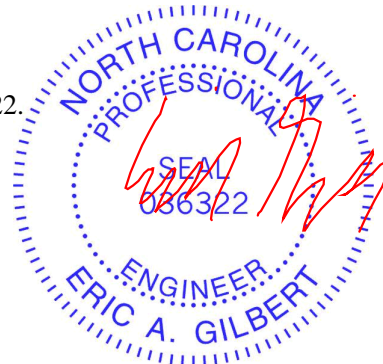
The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

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



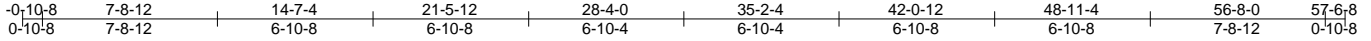
July 16, 2022

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121381
J0822-4434	A1	PIGGYBACK BASE	6	1	Job Reference (optional)	

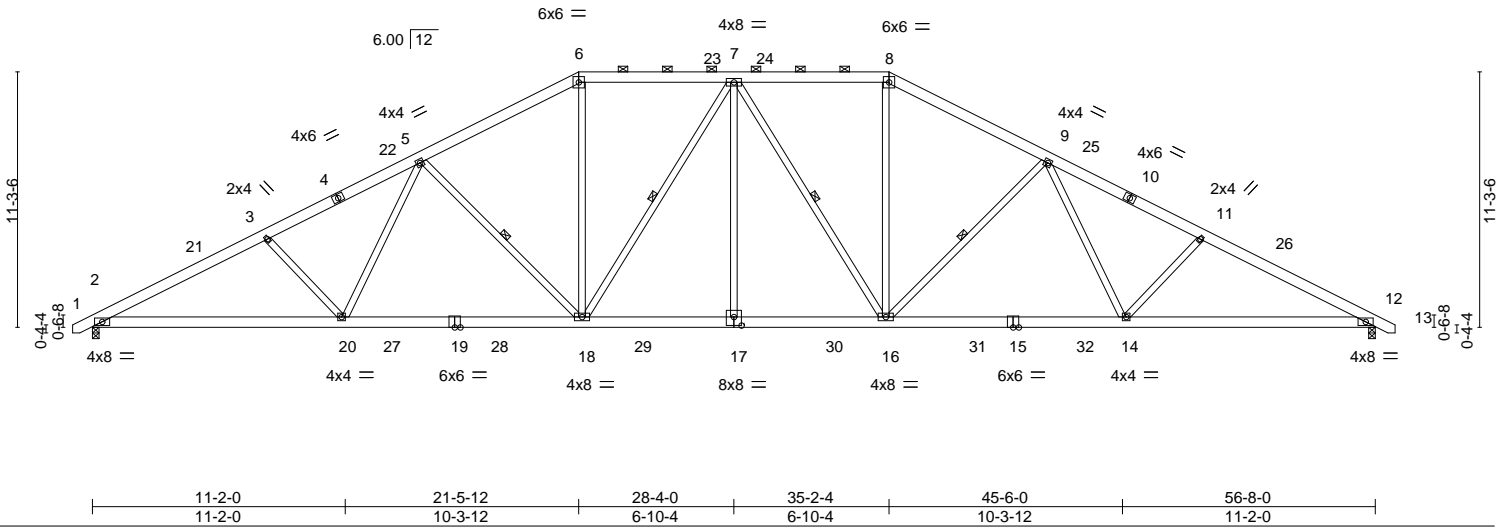
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:09 2022 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-VsS9\_y7EGGxjSZvAogonaYUzi4nL1FUSRHnumyxsW4



Scale = 1:101.8

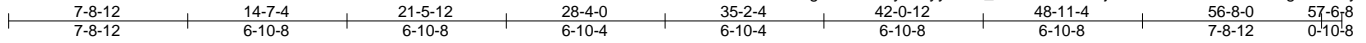


Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121382
J0822-4434	A1A	PIGGYBACK BASE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:10 2022 Page 1

ID:8XVK7MoEEgDYV6B4Zy0r5yy8ZO-20YBI8s1Z3a4jUMLNJO6m08BT6amifcgJ1KQCyxw3



Scale = 1:99.4

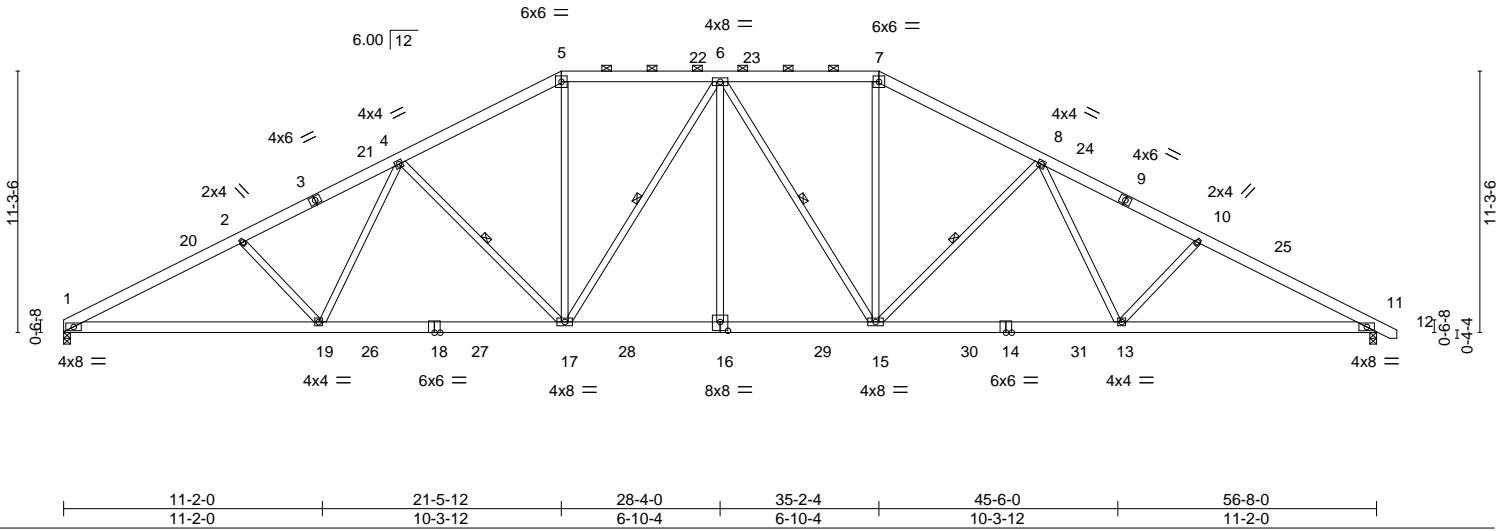


Plate Offsets (X,Y)-- [16:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL) -0.27	17-19	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.37	Vert(CT) -0.46	17-19	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.40	Horz(CT) 0.15	11	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.13	16	>999	240		
							Weight: 428 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP 2400F 2.0E  
 BOT CHORD 2x6 SP 2400F 2.0E  
 WEBS 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-7-0 oc purlins, except 2-0-0 oc purlins (5-9-6 max.); 5-7.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 4-17, 6-17, 6-15, 8-15

**REACTIONS.**

(size) 1=0-3-8, 11=0-3-8  
 Max Horz 1=-146(LC 10)  
 Max Uplift 1=-99(LC 12), 11=-111(LC 13)  
 Max Grav 1=2377(LC 2), 11=2420(LC 2)

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

TOP CHORD 1-2=-4701/1044, 2-4=-4473/1009, 4-5=-3588/928, 5-6=-3151/901, 6-7=-3150/904,  
 7-8=-3587/932, 8-10=-4470/1008, 10-11=-4697/1026  
 BOT CHORD 1-19=-822/4122, 17-19=-673/3665, 16-17=-473/3348, 15-16=-473/3348, 13-15=-670/3664,  
 11-13=-814/4117  
 WEBS 2-19=-372/271, 4-19=-68/656, 4-17=-790/333, 5-17=-200/1227, 6-17=-529/139,  
 6-16=0/378, 6-15=-529/142, 7-15=-197/1227, 8-15=-790/334, 8-13=-52/654,  
 10-13=-368/249

**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 C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 5-9-12, Interior(1) 5-9-12 to 21-5-12, Exterior(2) 21-5-12 to 29-5-15, Interior(1) 29-5-15 to 35-2-4, Exterior(2) 35-2-4 to 43-2-7, Interior(1) 43-2-7 to 57-4-10 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 99 lb uplift at joint 1 and 111 lb uplift at joint 11.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 16, 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	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121383
J0822-4434	A1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:13 2022 Page 1

ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-OdhgqKAKKUR9xADx1VijkOePhDcz7Z2MHF\_1XyxsW0

0-10-8 21-5-12 35-2-4 56-8-0 57-6-8  
 0-10-8 21-5-12 13-8-8 21-5-12 0-10-8

Scale = 1:101.8

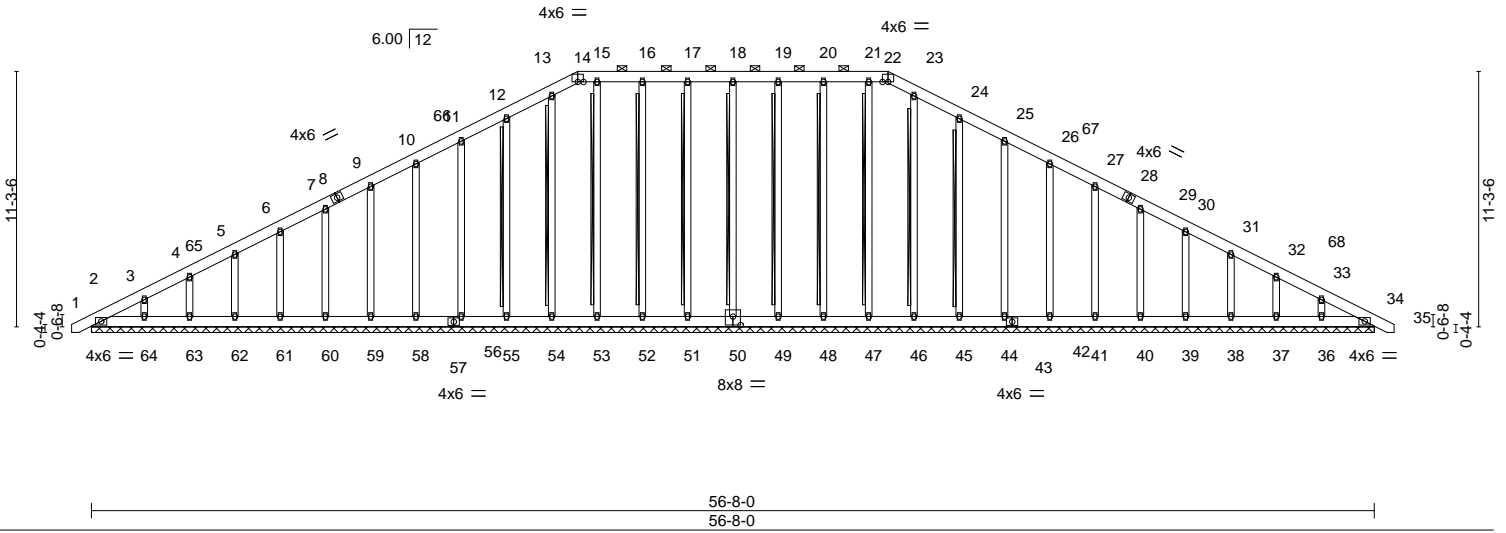


Plate Offsets (X,Y)-- [50-0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) 0.00	34	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) 0.00	34	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.01	34	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 548 lb	FT = 20%

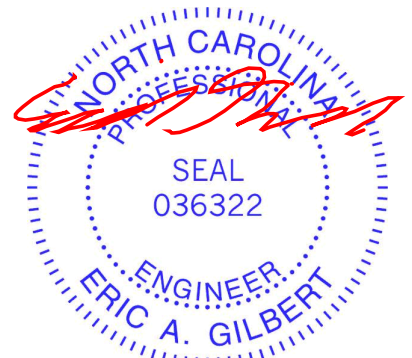
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 14-22.  
 Rigid ceiling directly applied or 10-0-0 oc bracing.  
 BOT CHORD T-Brace: 2x4 SPF No.2 - 18-50, 17-51, 16-52, 15-53, 13-54, 12-55, 19-49, 20-48, 21-47, 23-46, 24-45  
 WEBS Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
 Brace must cover 90% of web length.

**REACTIONS.** All bearings 56-8-0.  
 (lb) - Max Horz 2=225(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 62, 63, 64, 49, 48, 45, 44, 42, 41, 40, 39, 38, 37, 36  
 Max Grav All reactions 250 lb or less at joint(s) 2, 34, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 62, 63, 64, 49, 48, 47, 46, 45, 44, 42, 41, 40, 39, 38, 37, 36

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-310/105, 10-11=-94/291, 11-12=-115/351, 12-13=-137/413, 13-14=-142/420, 14-15=-132/418, 15-16=-132/418, 16-17=-132/418, 17-18=-132/418, 18-19=-132/418, 19-20=-132/418, 20-21=-132/418, 21-22=-132/418, 22-23=-142/422, 23-24=-137/415, 24-25=-115/353, 25-26=-94/294

- 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 C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-10 to 4-11-6, Exterior(2) 4-11-6 to 21-5-12, Corner(3) 21-5-12 to 27-1-12, Exterior(2) 27-1-12 to 35-2-4, Corner(3) 35-2-4 to 40-10-4, Exterior(2) 40-10-4 to 57-4-10 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 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, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 62, 63, 64, 49, 48, 45, 44, 42, 41, 40, 39, 38, 37, 36.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 16, 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



818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	I53121383
J0822-4434	A1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:14 2022 Page 2  
 ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-spF21fBN5oa0YKo7aDOyHcBsZ5ZriZpBbx?YZ\_yxsW?

**NOTES-**

12) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**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



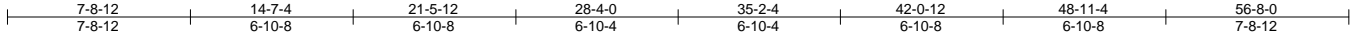


Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121385
J0822-4434	A3	ROOF TRUSS	4	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:16 2022 Page 1

ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-oCNpSLDddPqkoexWieQQM1GAYu8qANFU2FUedsyxsVz



Scale = 1:97.3

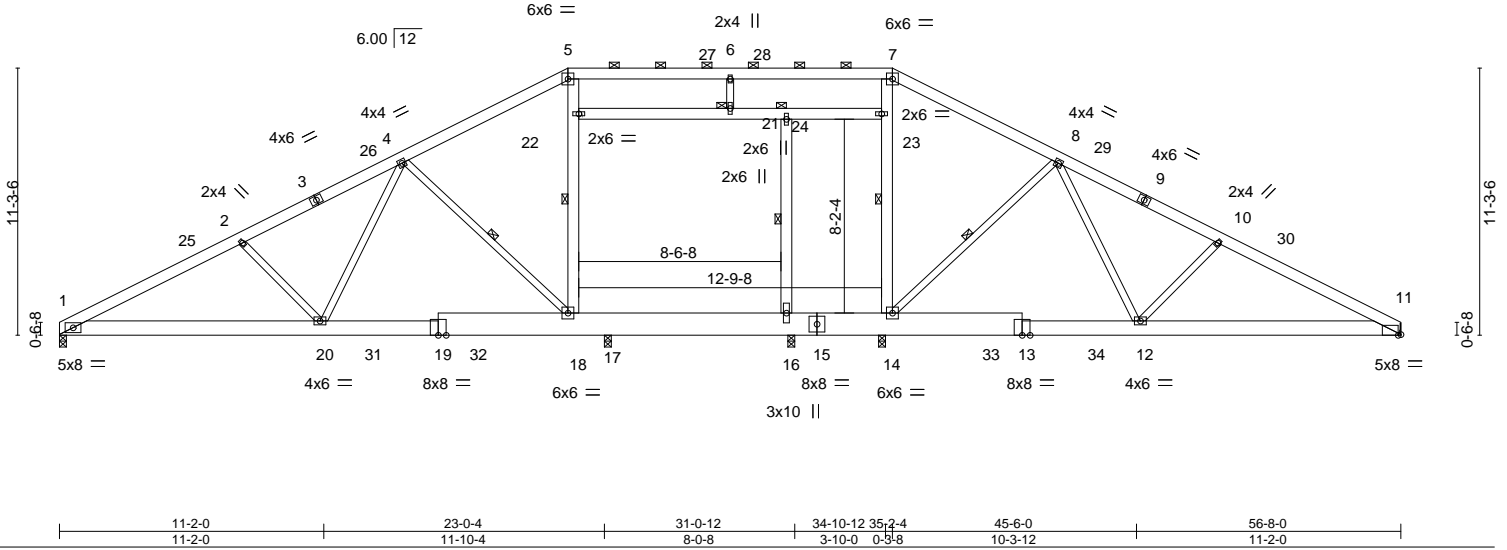


Plate Offsets (X,Y)--	[11:0-1-6,Edge]
-----------------------	-----------------

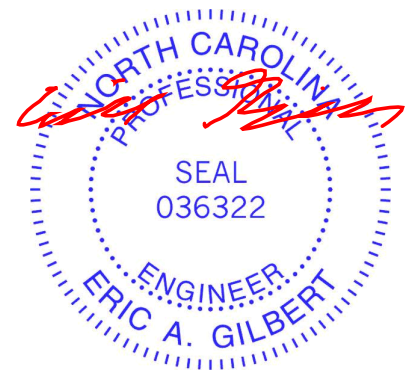
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL)	-0.07 18-20	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.44	Vert(CT)	-0.12 18-20	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.52	Horz(CT)	0.01 11	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL)	0.03 18-20	>999	240		
							Weight: 523 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 5-7.
BOT CHORD 2x8 SP No.1 *Except* 13-15,15-19: 2x12 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 5-18,7-14,22-23,16-24: 2x6 SP No.1	WEBS 1 Row at midpt 18-22, 7-14, 8-14, 16-24, 4-18
	JOINTS 1 Brace at Jt(s): 21, 24

**REACTIONS.** All bearings 0-3-8 except (jt=length) 11=Mechanical.  
 (lb) - Max Horz 1=140(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 11 except 14=102(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) except 1=763(LC 24), 14=1531(LC 2), 11=707(LC 25), 16=764(LC 27), 17=2238(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1183/234, 2-4=-866/194, 4-5=-4/501, 5-6=0/442, 6-7=0/442, 7-8=-5/502, 8-10=-716/176, 10-11=-1018/218  
 BOT CHORD 1-20=-139/976, 18-20=-37/389, 17-18=-379/356, 16-17=-379/356, 14-16=-379/356, 12-14=0/299, 11-12=-86/850  
 WEBS 18-22=-812/213, 5-22=-607/225, 6-21=-400/226, 14-23=-516/166, 7-23=-612/227, 8-14=-798/341, 8-12=-83/680, 10-12=-436/286, 16-24=-715/48, 4-18=-874/358, 4-20=-101/788, 2-20=-423/284

- 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 C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 5-9-12, Interior(1) 5-9-12 to 21-5-12, Exterior(2) 21-5-12 to 29-5-15, Interior(1) 29-5-15 to 35-2-4, Exterior(2) 35-2-4 to 43-2-7, Interior(1) 43-2-7 to 56-7-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Ceiling dead load (10.0 psf) on member(s). 21-22, 21-24, 23-24; Wall dead load (5.0psf) on member(s).18-22, 16-24
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 17-18, 16-17
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11 except (jt=lb) 14=102.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.



**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

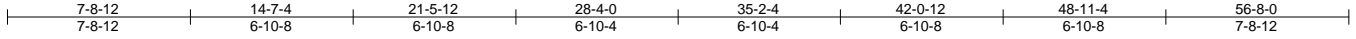
**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121386
J0822-4434	A3X	ROOF TRUSS	0	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:17 2022 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-GOxBghDF0jybPoWiGLxfuEpLNUIevqXeHvDC9lyxsVv



Scale = 1:97.3

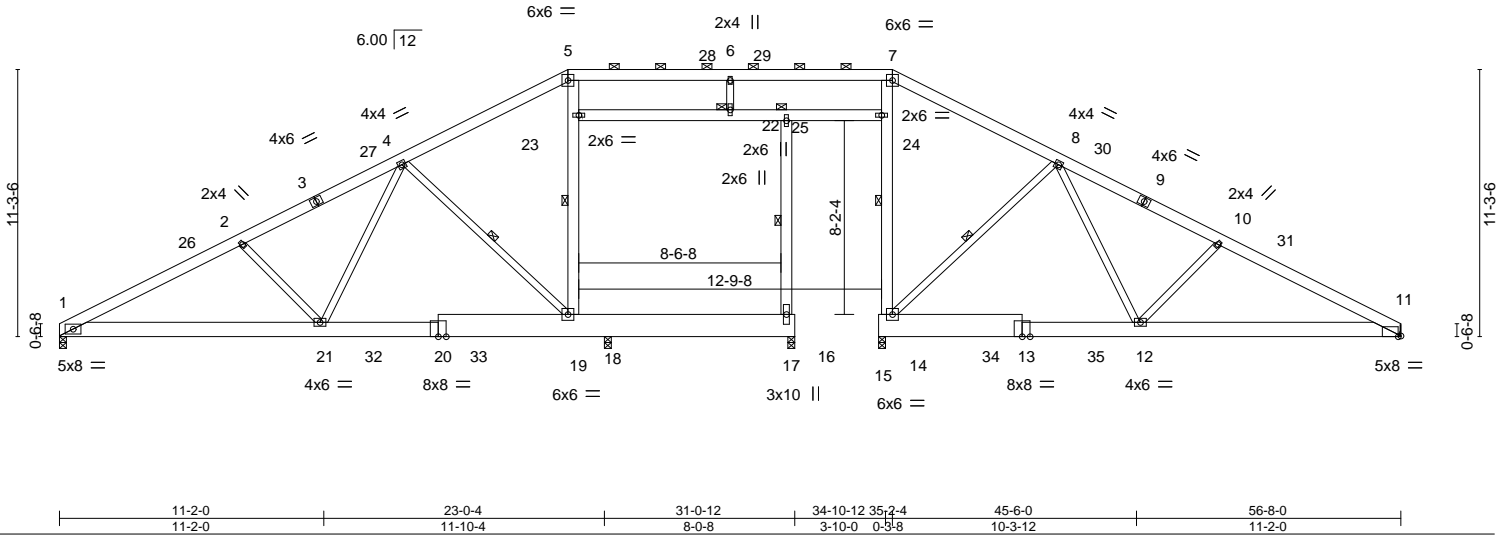


Plate Offsets (X,Y)--	[11:0-1-6,Edge]
-----------------------	-----------------

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL) -0.07 19-21 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.40	Vert(CT) -0.12 19-21 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.52	Horz(CT) 0.03 14 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03 19-21 >999 240		
				Weight: 506 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 5-7.
BOT CHORD 2x8 SP No.1 *Except* 13-15,16-20: 2x12 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 5-19,7-14,23-24,17-25: 2x6 SP No.1	WEBS 1 Row at midpt 19-23, 7-14, 8-14, 17-25, 4-19
	JOINTS 1 Brace at Jt(s): 22, 25

**REACTIONS.** All bearings 0-3-8 except (jt=length) 11=Mechanical.  
 (lb) - Max Horz 1=140(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 14 except 1=117(LC 12), 11=178(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) except 1=877(LC 24), 14=1014(LC 2), 11=854(LC 25), 17=825(LC 27), 18=2035(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1428/604, 2-4=-1113/564, 4-5=-213/453, 5-6=-159/436, 6-7=-159/436, 7-8=-212/434, 8-10=-1129/533, 10-11=-1400/574  
 BOT CHORD 1-21=-412/1197, 19-21=-245/624, 12-14=-235/611, 11-12=-404/1181  
 WEBS 19-23=-632/48, 5-23=-427/69, 6-22=-397/222, 14-24=-338/0, 7-24=-432/52, 8-14=-844/329, 8-12=-65/750, 10-12=-433/285, 17-25=-711/43, 4-19=-863/342, 4-21=-77/771, 2-21=-420/281

- 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 C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 5-9-12, Interior(1) 5-9-12 to 21-5-12, Exterior(2) 21-5-12 to 29-5-15, Interior(1) 29-5-15 to 35-2-4, Exterior(2) 35-2-4 to 43-2-7, Interior(1) 43-2-7 to 56-7-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Ceiling dead load (10.0 psf) on member(s). 22-23, 22-25, 24-25; Wall dead load (5.0psf) on member(s).19-23, 17-25
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-19, 17-18
  - 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) 14 except (jt=lb) 1=117, 11=178.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.



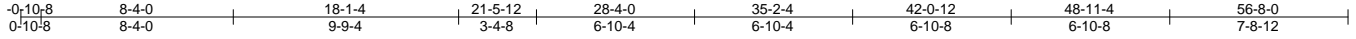


Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121387
J0822-4434	A4	ROOF TRUSS	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:19 2022 Page 1

ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-Dn2x4NFVwKCJf5g5Nmz7\_fuhi66zNhxalDilIEByxsvWw



Scale = 1:99.9

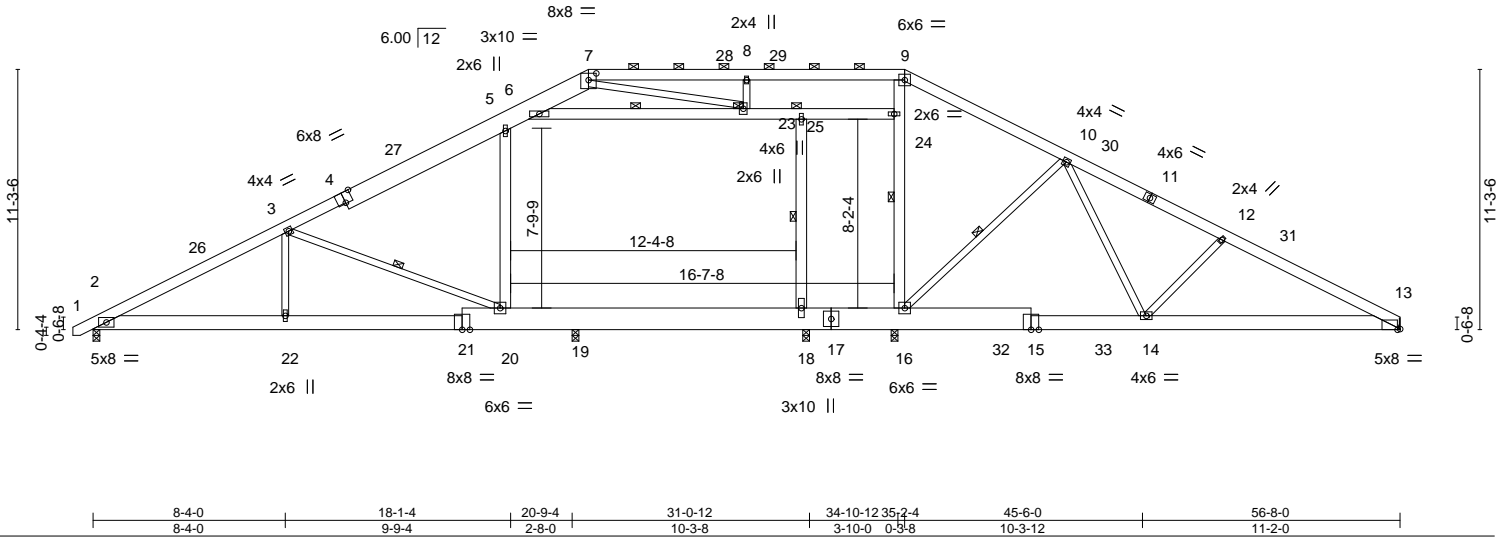


Plate Offsets (X,Y)-- [4:0-4-0,Edge], [7:0-4-0,0-3-8], [13:0-1-6,Edge]

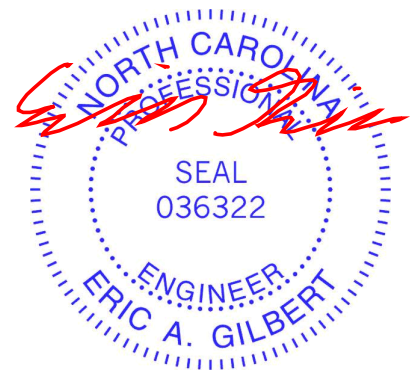
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.24	Vert(LL) -0.10	20-22	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.67	Vert(CT) -0.23	20-22	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.74	Horz(CT) 0.03	13	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.09	20-22	>999	240		
							Weight: 545 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 4-7: 2x10 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-6-5 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD 2x8 SP No.1 *Except* 15-17,17-21: 2x12 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 7-8-13 oc bracing: 19-20 6-8-13 oc bracing: 18-19.
WEBS 2x4 SP No.2 *Except* 5-20,9-16,6-24,18-25: 2x6 SP No.1	WEBS 1 Row at midpt 3-20, 9-16, 10-16, 6-23, 18-25
	JOINTS 1 Brace at Jt(s): 23, 25

**REACTIONS.** All bearings 0-3-8 except (jt=length) 13=Mechanical.  
 (lb) - Max Horz 2=146(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 13 except 16=149(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) except 2=1065(LC 24), 16=1169(LC 21), 13=1051(LC 1), 18=1075(LC 27), 19=2065(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1803/260, 3-5=-730/132, 5-6=-753/254, 6-7=-618/266, 7-8=-541/259,  
 8-9=-542/259, 9-10=-636/262, 10-12=-1469/369, 12-13=-1770/410  
 BOT CHORD 2-22=-135/1514, 20-22=-135/1514, 19-20=0/548, 18-19=0/548, 16-18=0/548,  
 14-16=-39/987, 13-14=-258/1522  
 WEBS 3-20=-1059/315, 5-20=-743/245, 8-23=-394/243, 9-24=-266/148, 10-16=-781/336,  
 10-14=-73/662, 12-14=-434/285, 3-22=0/511, 18-25=-827/49

- 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 C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 4-11-6, Interior(1) 4-11-6 to 21-5-12, Exterior(2) 21-5-12 to 29-5-15, Interior(1) 29-5-15 to 35-2-4, Exterior(2) 35-2-4 to 43-2-7, Interior(1) 43-2-7 to 56-7-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Ceiling dead load (10.0 psf) on member(s). 5-6, 6-23, 23-25, 24-25; Wall dead load (5.0psf) on member(s).5-20, 18-25
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 19-20, 18-19
  - 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, 13 except (jt=lb) 16=149.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.



July 16, 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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



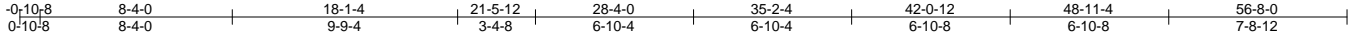


Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121389
J0822-4434	A5	ROOF TRUSS	2	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:21 2022 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-9AAiV3GmRyS0uPqTVB0b34z17vqJrb2DCXBPl4yxsVu



Scale = 1:99.9

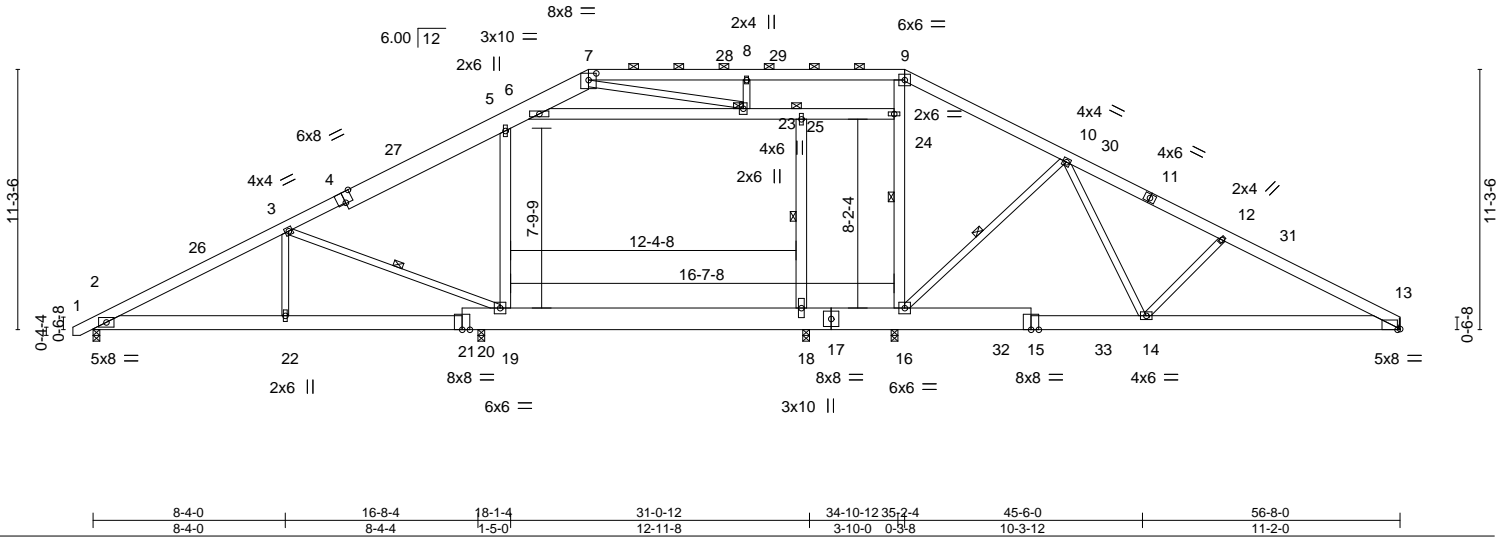


Plate Offsets (X,Y)-- [4:0-4-0,Edge], [7:0-4-0,0-3-8], [13:0-1-6,Edge]

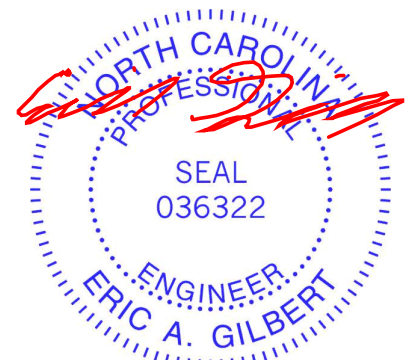
LOADING (psf)	SPACING-	CSL.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.24	Vert(LL) -0.10 18-19 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.55	Vert(CT) -0.17 18-19 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.74	Horz(CT) 0.02 13 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03 2-22 >999 240		
				Weight: 545 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 4-7: 2x10 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD 2x8 SP No.1 *Except* 15-17,17-21: 2x12 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 18-19,16-18.
WEBS 2x4 SP No.2 *Except* 5-19,9-16,6-24,18-25: 2x6 SP No.1	WEBS 1 Row at midpt 3-19, 9-16, 10-16, 18-25
	JOINTS 1 Brace at Jt(s): 23, 25

**REACTIONS.** All bearings 0-3-8 except (jt=length) 13=Mechanical.  
 (lb) - Max Horz 2=146(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 13 except 16=219(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) except 2=771(LC 24), 16=786(LC 25), 13=919(LC 25), 18=2049(LC 2), 20=1711(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1022/165, 3-5=-343/111, 5-6=-441/179, 6-7=-466/236, 9-10=-271/159,  
 10-12=-1194/271, 12-13=-1487/313  
 BOT CHORD 2-22=-82/820, 20-22=-82/842, 19-20=-82/820, 18-19=-64/291, 16-18=-64/291,  
 14-16=0/718, 13-14=-171/1269  
 WEBS 3-19=-661/292, 5-19=-917/295, 8-23=-386/241, 9-24=-391/178, 10-16=-806/337,  
 10-14=-777/700, 12-14=-434/286, 3-22=-1/270, 18-25=-848/52

- 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 C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 4-11-6, Interior(1) 4-11-6 to 21-5-12, Exterior(2) 21-5-12 to 29-5-15, Interior(1) 29-5-15 to 35-2-4, Exterior(2) 35-2-4 to 43-2-7, Interior(1) 43-2-7 to 56-7-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Ceiling dead load (10.0 psf) on member(s). 5-6, 6-23, 23-25, 24-25; Wall dead load (5.0psf) on member(s).5-19, 18-25
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-19
  - 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, 13 except (jt=lb) 16=219.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.



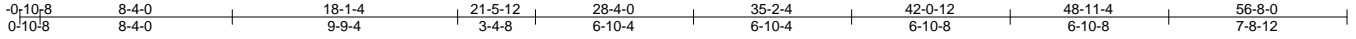
July 16, 2022

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121390
J0822-4434	A5X	ROOF TRUSS	0	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:23 2022 Page 1

ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-5YISwkl0zZik7\_scc238V3MRjRJJU6WfrgWNyyxsVs



Scale = 1:99.9

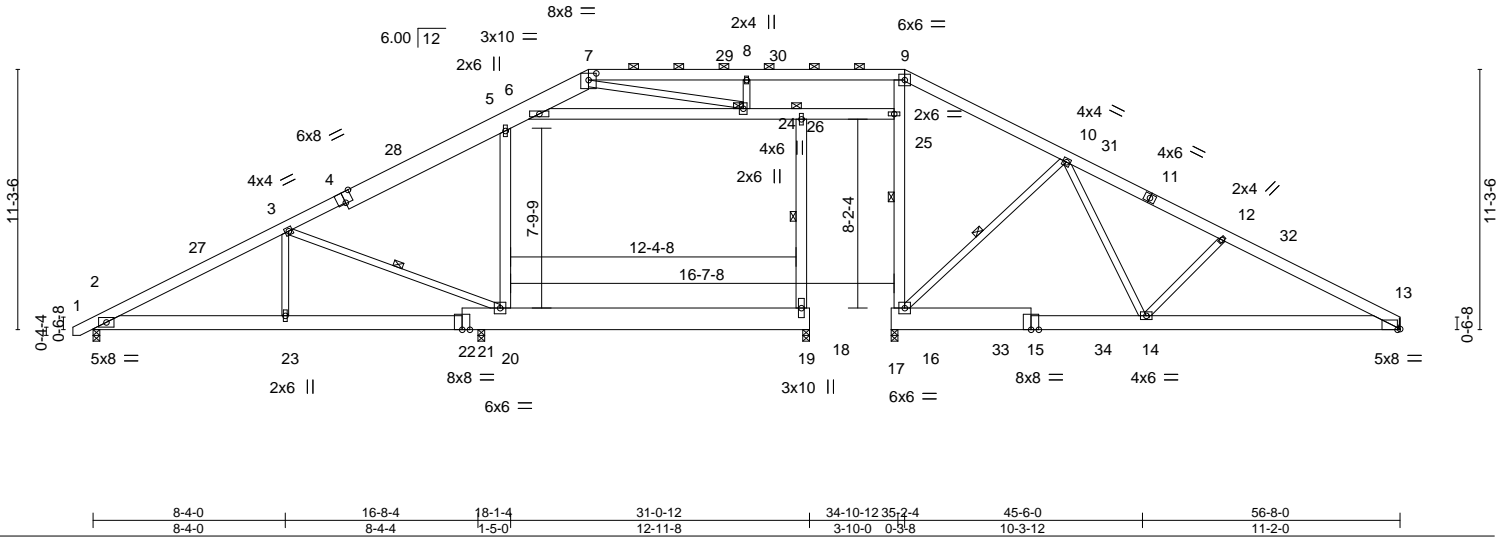


Plate Offsets (X,Y)-- [4:0-4-0,Edge], [7:0-4-0,0-3-8], [13:0-1-6,Edge]

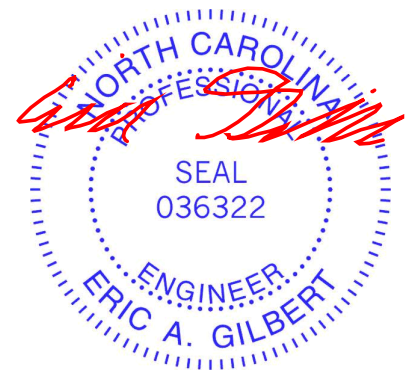
LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.25	Vert(LL) -0.17	19-20	>975	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.77	Vert(CT) -0.28	19-20	>597	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.77	Horz(CT) 0.05	13	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03	13-14	>999	240		
							Weight: 528 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 4-7: 2x10 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD 2x8 SP No.1 *Except* 15-17,18-22: 2x12 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 5-2-13 oc bracing: 19-20.
WEBS 2x4 SP No.2 *Except* 5-20,9-16,6-25,19-26: 2x6 SP No.1	WEBS 1 Row at midpt 3-20, 9-16, 10-16, 19-26
	JOINTS 1 Brace at Jt(s): 24, 26

**REACTIONS.** All bearings 0-3-8 except (jt=length) 13=Mechanical.  
 (lb) - Max Horz 2=146(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 16 except 2=107(LC 12), 13=177(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) except 2=653(LC 1), 16=964(LC 21), 13=858(LC 25), 19=1462(LC 26), 21=1924(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-751/471, 3-5=-161/356, 5-6=-316/437, 6-7=-401/321, 7-8=-199/437, 8-9=-199/437, 9-10=-218/435, 10-12=-1133/534, 12-13=-1405/576  
 BOT CHORD 2-23=-276/579, 21-23=-276/611, 20-21=-276/579, 14-16=-236/613, 13-14=-406/1185  
 WEBS 3-20=-627/299, 5-20=-947/209, 8-24=-386/241, 16-25=-284/0, 9-25=-435/46, 10-16=-839/331, 10-14=-65/750, 12-14=-434/285, 6-24=0/342, 7-24=-341/0, 19-26=-877/0

- 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 C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-8-10 to 4-11-6, Interior(1) 4-11-6 to 21-5-12, Exterior(2) 21-5-12 to 29-5-15, Interior(1) 29-5-15 to 35-2-4, Exterior(2) 35-2-4 to 43-2-7, Interior(1) 43-2-7 to 56-7-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Ceiling dead load (10.0 psf) on member(s). 5-6, 6-24, 24-26, 25-26; Wall dead load (5.0psf) on member(s).5-20, 19-26
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 19-20
  - 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) 16 except (jt=lb) 2=107, 13=177.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.



July 16, 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

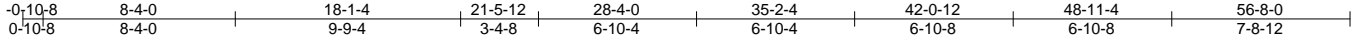
**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121391
J0822-4434	A6	ROOF TRUSS	3	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:24 2022 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-Zlsq84JektqblsY2AJZlhjBR57kU2\_AguUQ3vPyxsVr



Scale = 1:99.9

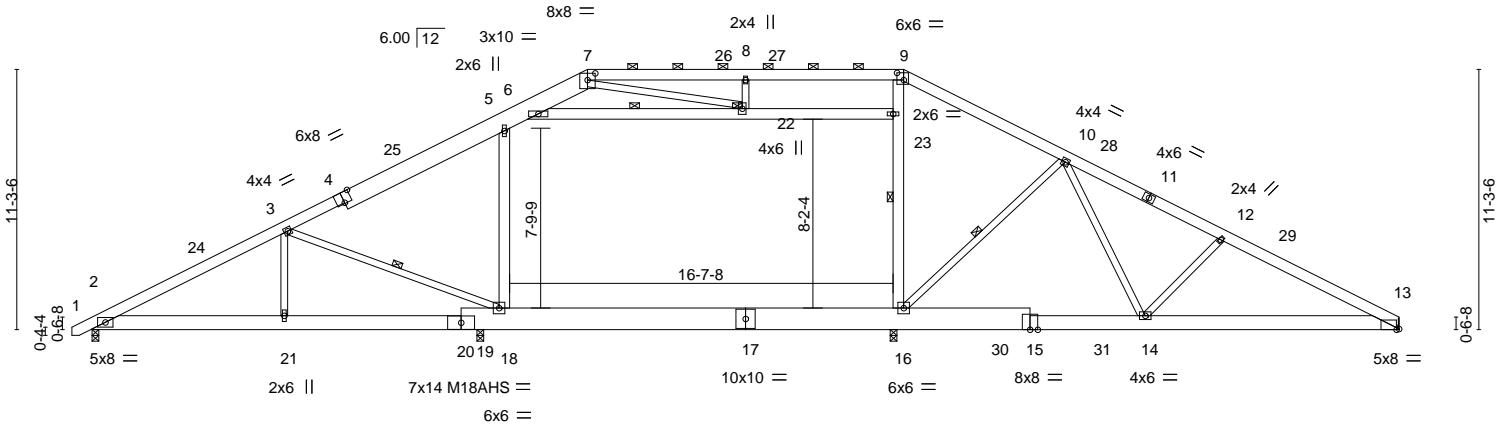


Plate Offsets (X,Y)-- [4:0-4-0,Edge], [7:0-4-0,0-3-8], [9:0-3-8,0-3-12], [13:0-1-6,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.58	Vert(LL) -0.30	16-18	>730	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.97	Vert(CT) -0.47	16-18	>461	240	M18AHS	186/179
BCLL 0.0 *	Rep Stress Incr YES	WB 0.59	Horz(CT) 0.06	13	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03	13-14	>999	240		
							Weight: 525 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1 \*Except\*  
4-7: 2x10 SP No.1  
BOT CHORD 2x8 SP No.1 \*Except\*  
15-17,17-20: 2x12 SP No.1  
WEBS 2x4 SP No.2 \*Except\*  
5-18,9-16,6-23: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-8-10 oc purlins, except  
2-0-0 oc purlins (5-2-11 max.): 7-9.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.  
WEBS 1 Row at midpt 3-18, 16-23, 10-16, 6-22  
JOINTS 1 Brace at Jt(s): 22

**REACTIONS.**

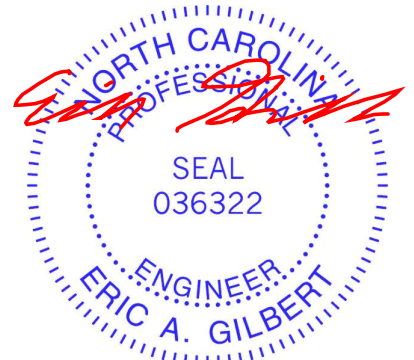
All bearings 0-3-8 except (jt=length) 13=Mechanical.  
(lb) - Max Horz 2=146(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 13  
Max Grav All reactions 250 lb or less at joint(s) except 2=1180(LC 24), 16=2051(LC 21), 13=1351(LC 25), 19=1906(LC 20)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1869/333, 3-5=-1375/215, 5-6=-1451/340, 6-7=-849/291, 7-8=-1396/365,  
8-9=-1396/364, 9-10=-1349/328, 10-12=-2108/485, 12-13=-2412/527  
BOT CHORD 2-21=-151/1570, 19-21=-151/1587, 18-19=-151/1570, 16-18=-24/1172, 14-16=-149/1602,  
13-14=-362/2097  
WEBS 3-18=-431/292, 5-18=-869/303, 16-23=-280/129, 10-16=-640/362, 10-14=-126/533,  
12-14=-446/285, 6-22=-597/131, 7-22=-163/845

**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 C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 4-11-6, Interior(1) 4-11-6 to 21-5-12, Exterior(2) 21-5-12 to 29-5-15, Interior(1) 29-5-15 to 35-2-4, Exterior(2) 35-2-4 to 43-2-7, Interior(1) 43-2-7 to 56-7-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Ceiling dead load (10.0 psf) on member(s). 5-6, 6-22, 22-23; Wall dead load (5.0psf) on member(s).5-18, 16-23
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 16-18
- 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, 13.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Attic room checked for L/360 deflection.



July 16, 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	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121392
J0822-4434	A6GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:27 2022 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-KXzm6LW1oCacKHdrR7?ILDyLKmBFLw6aSekWjyxsVo



Scale = 1:100.7

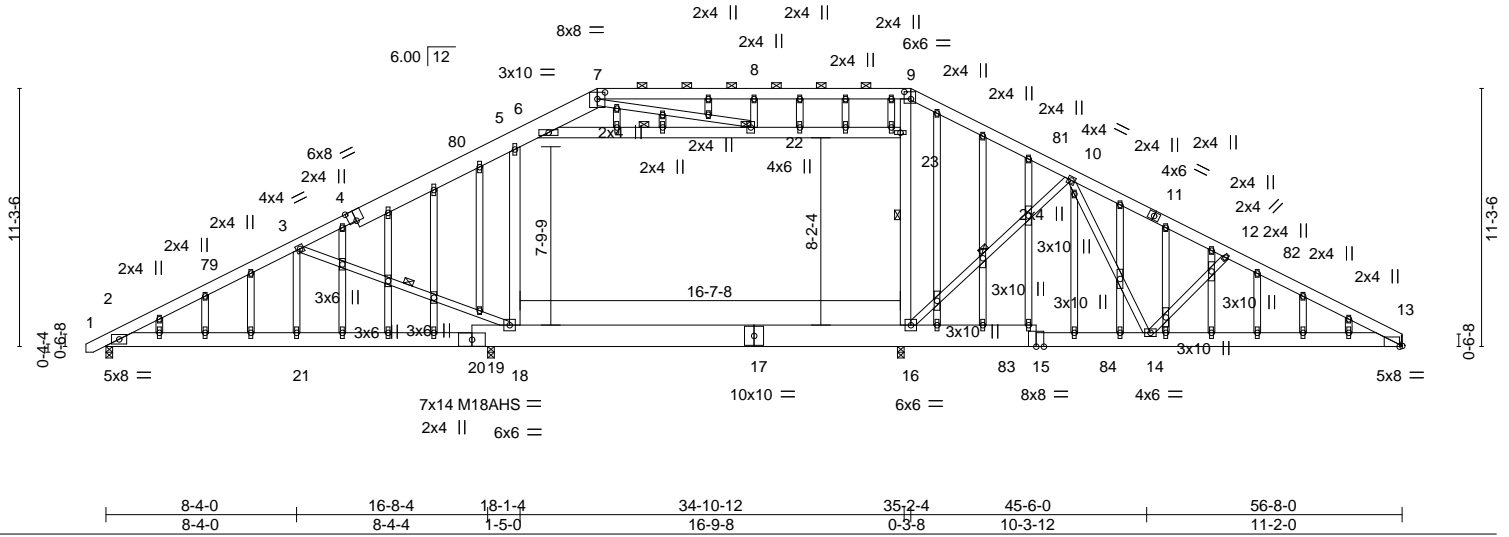


Plate Offsets (X,Y)-- [4:0-4-0,Edge], [7:0-4-0,0-3-8], [9:0-3-8,0-3-12], [13:0-1-6,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.58	Vert(LL) -0.30	16-18	>730	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.97	Vert(CT) -0.47	16-18	>461	240	M18AHS	186/179
BCLL 0.0 *	Rep Stress Incr YES	WB 0.59	Horz(CT) 0.06	13	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	13-14	>999	240		
							Weight: 648 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1 \*Except\*  
4-7: 2x10 SP No.1  
BOT CHORD 2x8 SP No.1 \*Except\*  
15-17,17-20: 2x12 SP No.1  
WEBS 2x4 SP No.2 \*Except\*  
5-18,9-16,6-23: 2x6 SP No.1  
OTHERS 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-8-10 oc purlins, except  
2-0-0 oc purlins (5-2-11 max.): 7-9.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.  
WEBS 1 Row at midpt 3-18, 16-23, 10-16, 6-22  
JOINTS 1 Brace at Jt(s): 22

**REACTIONS.**

All bearings 0-3-8 except (jt=length) 13=Mechanical.  
(lb) - Max Horz 2=232(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 16 except 2=135(LC 9), 13=171(LC 8), 19=137(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) except 2=1180(LC 24), 16=2029(LC 21), 13=1351(LC 25), 19=1882(LC 2)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1869/455, 3-5=-1375/338, 5-6=-1451/412, 6-7=-849/367, 7-8=-1396/453, 8-9=-1396/453, 9-10=-1348/397, 10-12=-2108/739, 12-13=-2412/830  
BOT CHORD 2-21=-331/1570, 19-21=-331/1587, 18-19=-331/1570, 16-18=-204/1172, 14-16=-187/1602, 13-14=-581/2097  
WEBS 3-18=-431/524, 5-18=-869/526, 16-23=-280/267, 9-23=-45/269, 10-16=-640/564, 10-14=-270/533, 12-14=-446/466, 6-22=-597/131, 7-22=-187/845

**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 C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-10 to 4-11-6, Exterior(2) 4-11-6 to 21-5-12, Corner(3) 21-5-12 to 27-1-12, Exterior(2) 27-1-12 to 35-2-4, Corner(3) 35-2-4 to 40-10-4, Exterior(2) 40-10-4 to 56-7-4 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 MT20 plates unless otherwise indicated.
- All plates are 2x6 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, with BCDL = 10.0psf.
- Ceiling dead load (10.0 psf) on member(s). 5-6, 6-22, 22-23; Wall dead load (5.0psf) on member(s).5-18, 16-23
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 16-18



July 16, 2022

Connect to plate(s) for truss connections.

**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	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121392
J0822-4434	A6GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:27 2022 Page 2  
 ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO\_KXzm6LW1oCAcKHdrR7?ILDyLKmBFLw6aSekWjyxsVo

**NOTES-**

- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16 except (jt=lb) 2=135, 13=171, 19=137.
- 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.

**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	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett
J0822-4434	B1GE	COMMON SUPPORTED GAB	1	1	153121393

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:28 2022 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-SW5LzSM9o5K1EUspP9eErZmGQkLw\_vFFp6OH2AyxvN

0-10-8 10-0-8 20-1-0 20-11-8  
0-10-8 10-0-8 10-0-8 0-10-8

5x5 =

Scale = 1:68.0

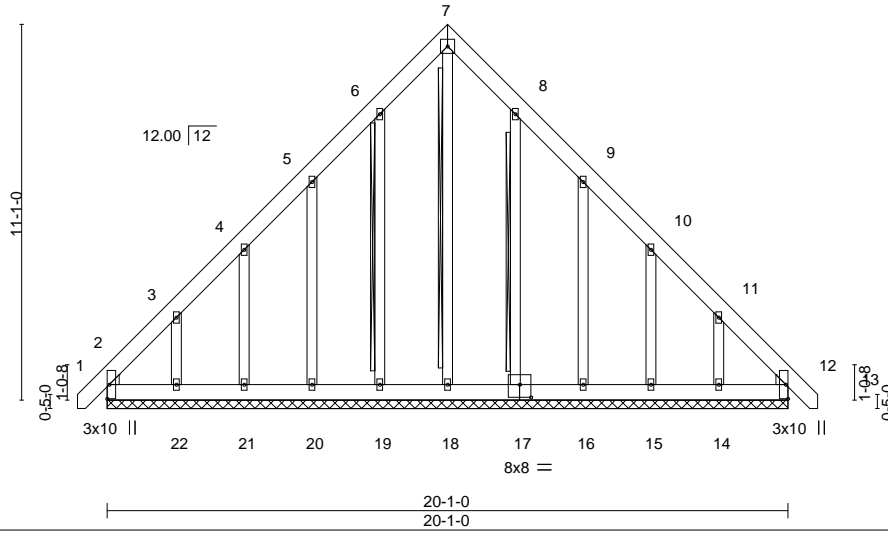


Plate Offsets (X,Y)-- [17:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.04	Vert(LL) 0.00	12	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) 0.00	12	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.01	12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 197 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS T-Brace: 2x4 SPF No.2 - 7-18, 6-19, 8-17  
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
Brace must cover 90% of web length.

**REACTIONS.**

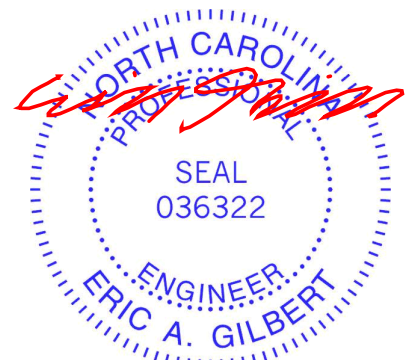
All bearings 20-1-0.  
(lb) - Max Horz 2=-324(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 17, 12 except 2=-125(LC 10),  
19=-106(LC 12), 20=-154(LC 12), 21=-135(LC 12), 22=-228(LC 12), 16=-159(LC 13), 15=-134(LC 13), 14=-222(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 18, 19, 20, 21, 22, 17, 16, 15, 14 except 2=306(LC 12), 12=270(LC 13)

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

TOP CHORD 2-3=-444/267, 11-12=-398/264  
BOT CHORD 2-22=-202/315, 21-22=-204/315, 20-21=-205/316, 19-20=-205/316, 18-19=-205/316, 17-18=-205/316, 16-17=-207/317, 15-16=-207/317, 14-15=-206/316, 12-14=-205/315

**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 C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-9-2 to 3-7-11, Exterior(2) 3-7-11 to 10-0-8, Corner(3) 10-0-8 to 14-5-5, Exterior(2) 14-5-5 to 20-10-2 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) 17, 12 except (jt=lb) 2=125, 19=106, 20=154, 21=135, 22=228, 16=159, 15=134, 14=222.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



July 16, 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



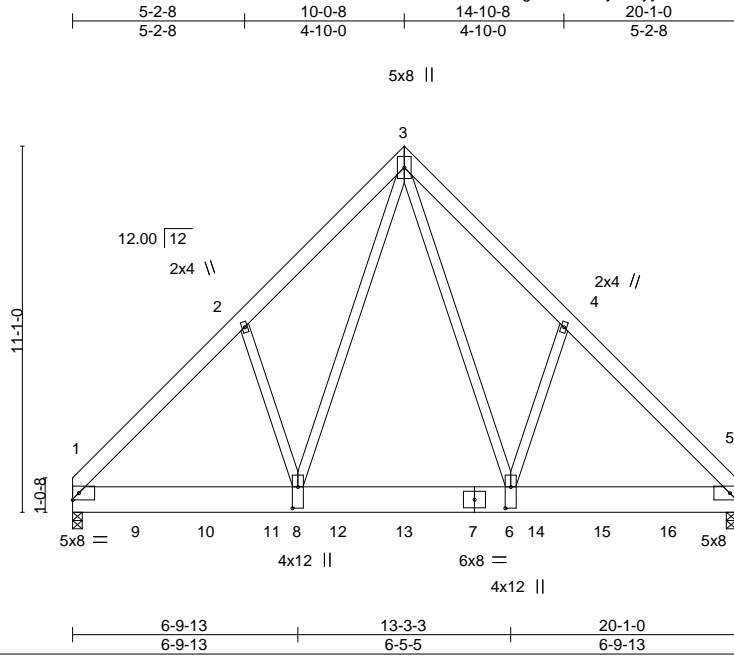
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett
J0822-4434	B2GDR	FINK	1	2	153121394

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:30 2022 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-OuD5O8NPKjblTn0CWagiw\_rZVXy5SjmYgQtO72yxsVI



Scale = 1:69.8

Plate Offsets (X,Y)-- [6:0-7-12,0-2-0], [8:0-7-12,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL) -0.05	1-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.31	Vert(CT) -0.11	1-8	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.52	Horz(CT) 0.02	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03	1-8	>999	240		
							Weight: 386 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x10 SP 2400F 2.0E  
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) 1=0-3-8, 5=0-3-8  
Max Horz 1=249(LC 7)  
Max Grav 1=6205(LC 1), 5=6066(LC 1)

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

TOP CHORD 1-2=-6252/0, 2-3=-5992/47, 3-4=-6011/0, 4-5=-6274/0  
BOT CHORD 1-8=0/4168, 6-8=0/2952, 5-6=0/4181  
WEBS 2-8=-246/389, 3-8=-398/4190, 3-6=0/4239, 4-6=-234/394

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-7-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 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 C; Enclosed; MWFRS (envelope); 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1331 lb down and 44 lb up at 1-11-4, 1331 lb down and 44 lb up at 3-11-4, 1331 lb down and 44 lb up at 5-11-4, 899 lb down and 56 lb up at 7-11-4, 899 lb down and 56 lb up at 9-11-4, 1031 lb down and 49 lb up at 11-11-4, 1289 lb down at 13-11-4, and 1289 lb down at 15-11-4, and 1289 lb down at 17-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-20, 1-3=-60, 3-5=-60  
Concentrated Loads (lb)  
Vert: 7=-1031(B) 9=-1331(B) 10=-1331(B) 11=-1331(B) 12=-899(B) 13=-899(B) 14=-1289(B) 15=-1289(B) 16=-1289(B)



July 16, 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 ANSITPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121395
J0822-4434	P1	COMMON	4	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:31 2022 Page 1  
ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-s5nUcTO150jc5xbO4HBxTBOh\_xjBHYIv4cxfVyxsvk



Scale = 1:26.1

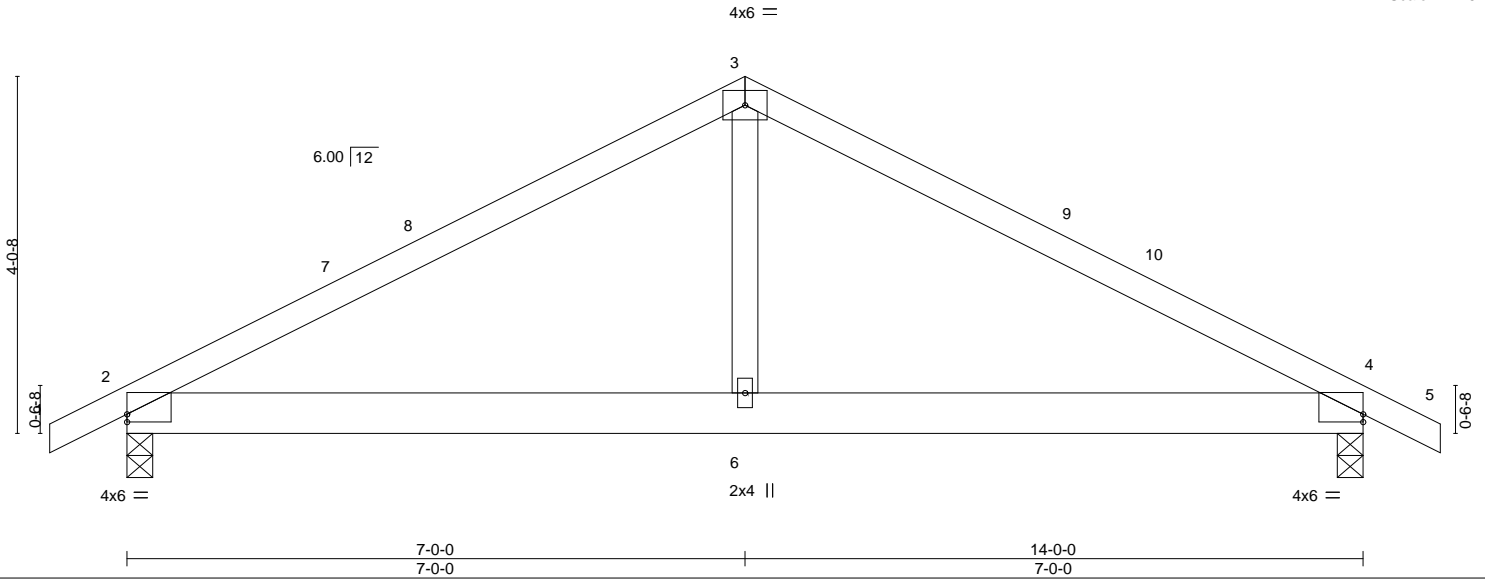


Plate Offsets (X,Y)-- [2:0-0-0,0-1-1], [4:Edge,0-1-1]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.41	Vert(LL) -0.02	4-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.22	Vert(CT) -0.05	4-6	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.10	Horz(CT) 0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	4-6	>999	240	Weight: 64 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 9-11-12 oc bracing.

**REACTIONS.**

(size) 2=0-3-8, 4=0-3-8  
Max Horz 2=-51(LC 10)  
Max Uplift 2=-125(LC 9), 4=-125(LC 8)  
Max Grav 2=610(LC 1), 4=610(LC 1)

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

TOP CHORD 2-3=-772/772, 3-4=-772/772  
BOT CHORD 2-6=-552/592, 4-6=-552/592  
WEBS 3-6=-462/352

**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 C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-10-8 to 3-6-5, Interior(1) 3-6-5 to 7-0-0, Exterior(2) 7-0-0 to 11-4-13, Interior(1) 11-4-13 to 14-10-8 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=125, 4=125.



July 16, 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



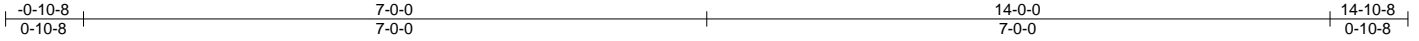
818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121396
J0822-4434	P1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:32 2022 Page 1  
ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-KHLsppPfsKrTi5Abe?IA?Pxs7LfYwj9kkMUBxyxsvj



Scale = 1:25.9

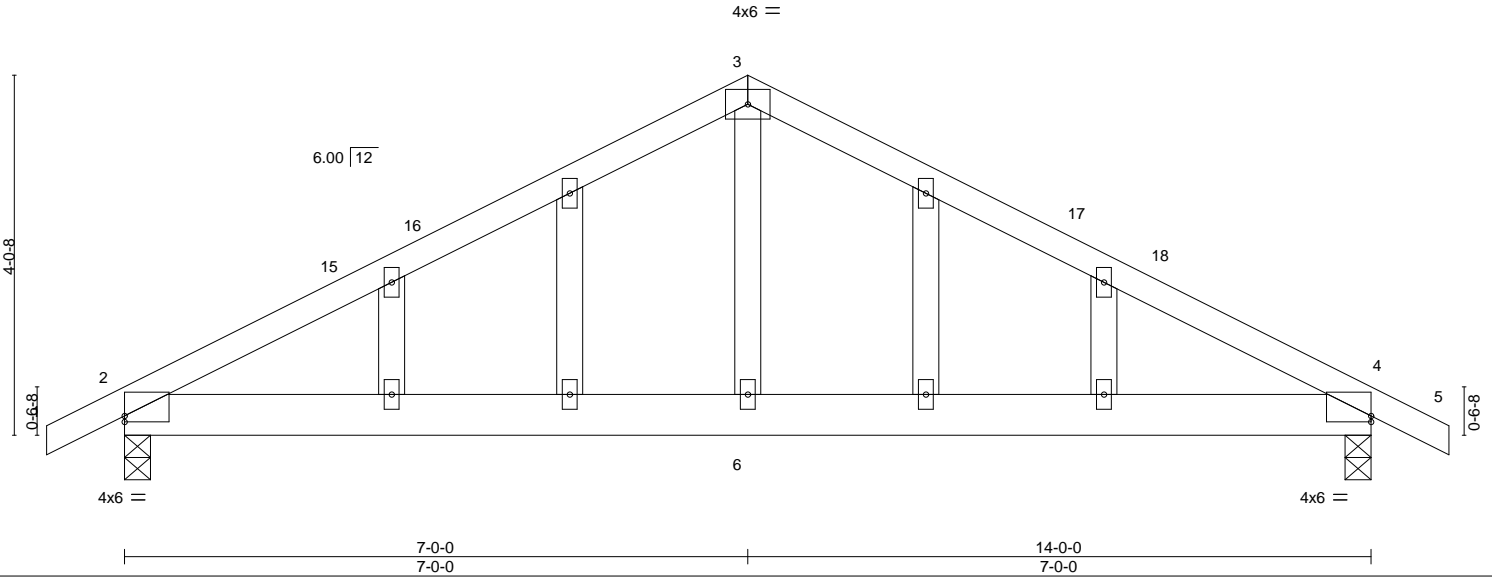


Plate Offsets (X,Y)-- [2:0-0,0-0-13], [4:Edge,0-0-13]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.45	Vert(LL) -0.02	4-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.22	Vert(CT) -0.05	4-6	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT) 0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03	2-6	>999	240	Weight: 75 lb	FT = 20%

**LUMBER-**

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

**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=0-3-8, 4=0-3-8  
Max Horz 2=80(LC 16)  
Max Uplift 2=141(LC 12), 4=141(LC 13)  
Max Grav 2=610(LC 1), 4=610(LC 1)

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

TOP CHORD 2-3=-772/461, 3-4=-772/461  
BOT CHORD 2-6=-211/592, 4-6=-211/592  
WEBS 3-6=-11/352

**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 C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 7-0-0, Corner(3) 7-0-0 to 11-4-13, Exterior(2) 11-4-13 to 14-10-8 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=141, 4=141.



July 16, 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

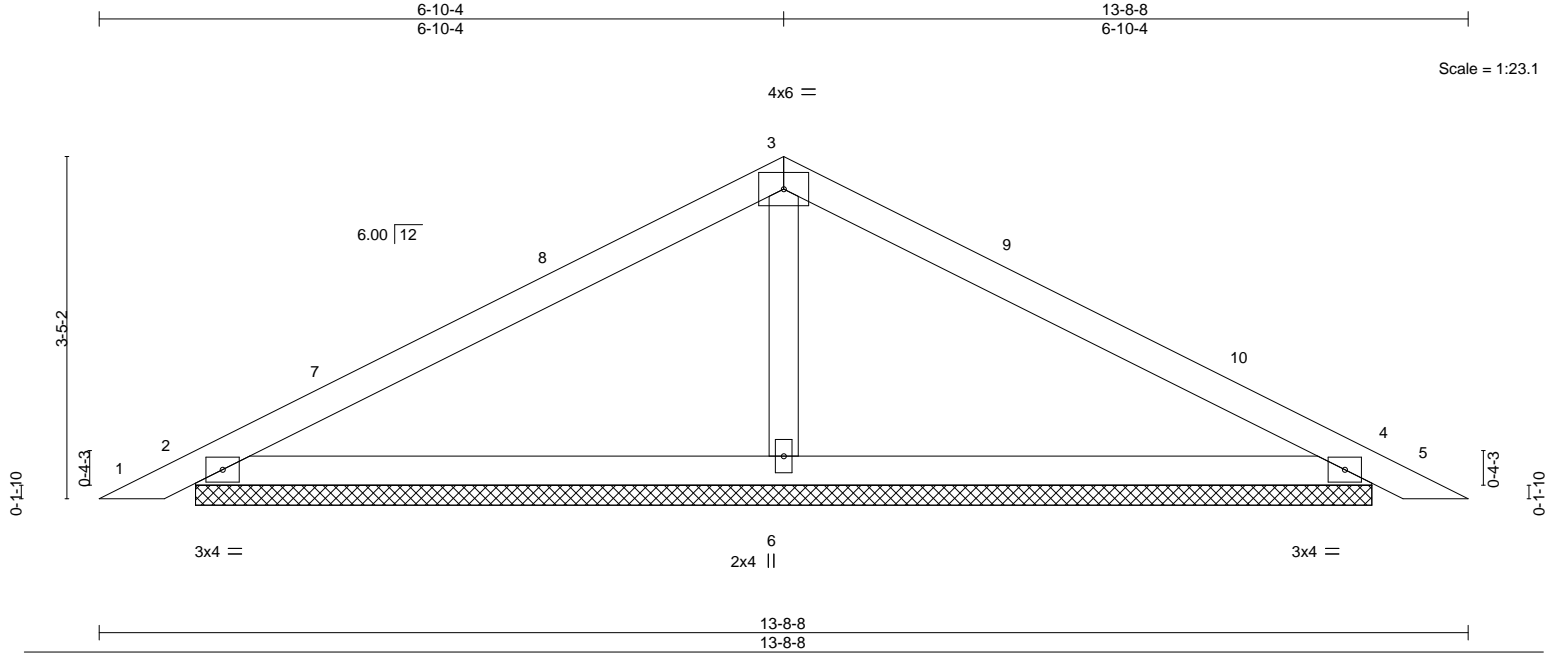


818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	I53121397
J0822-4434	PB1	PIGGYBACK	19	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:32 2022 Page 1  
ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-KHLsppPfsKrTi5Abe?IA?PxtbLfYwkUrkMUBxyxvVj



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.35	Vert(LL) 0.02	5	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.25	Vert(CT) 0.03	5	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) 0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 44 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=11-9-6, 4=11-9-6, 6=11-9-6  
Max Horz 2=43(LC 11)  
Max Uplift 2=-38(LC 12), 4=-46(LC 13)  
Max Grav 2=258(LC 23), 4=258(LC 24), 6=508(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-6=-328/176

**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 C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-15 to 4-8-11, Interior(1) 4-8-11 to 6-10-4, Exterior(2) 6-10-4 to 11-3-1, Interior(1) 11-3-1 to 13-4-9 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



July 16, 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

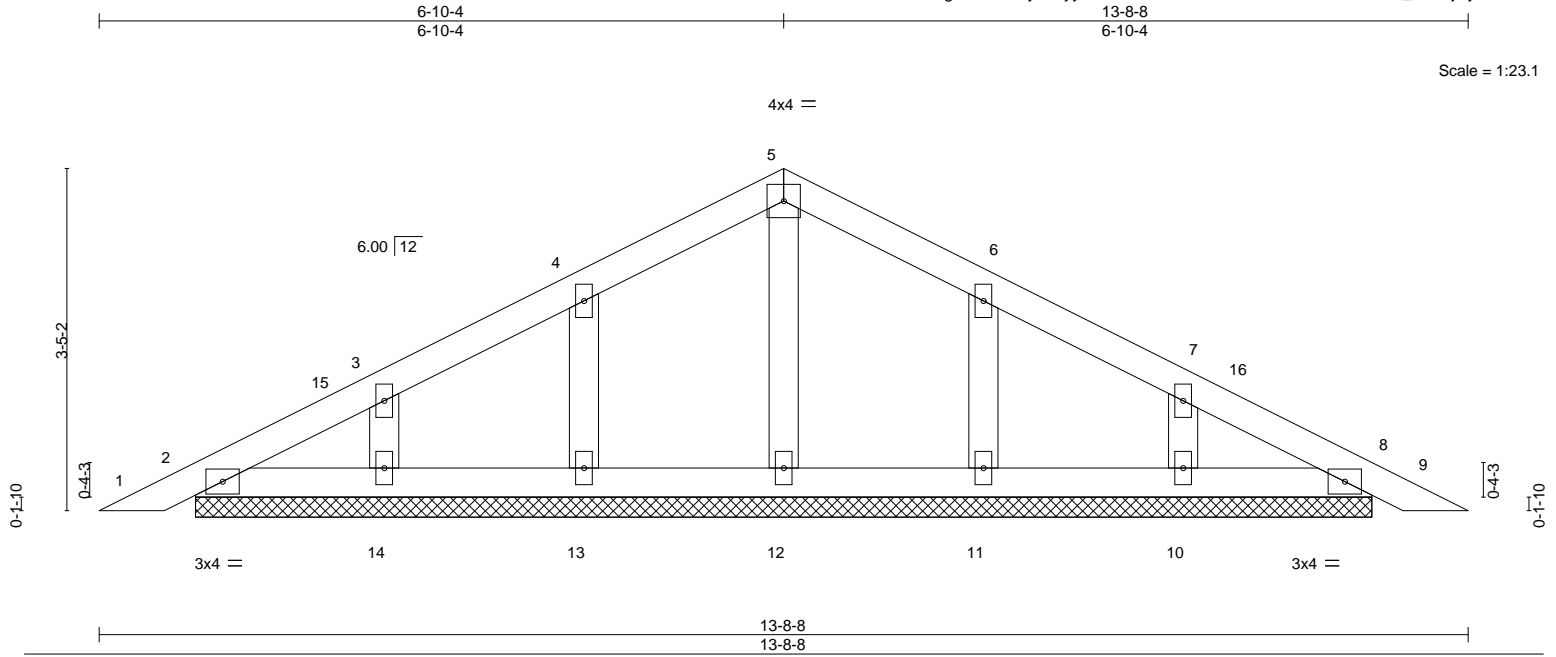


818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121398
J0822-4434	PB1GE	GABLE	2	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:33 2022 Page 1  
ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-oTvE09QHdezJKFlnciDPYcT7Jl2KfBI\_zO52jNyxsvi



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.03	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(LL) 0.00 8 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Vert(CT) 0.00 8 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 8 n/a n/a		
	Code IRC2015/TPI2014			Weight: 52 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

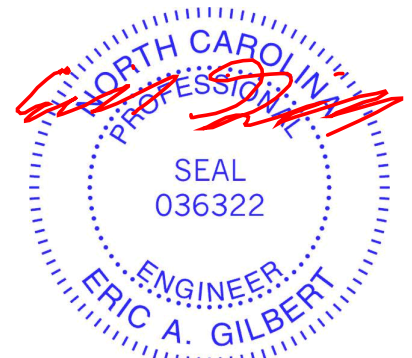
**REACTIONS.**

All bearings 11-9-6.  
(lb) - Max Horz 2=66(LC 16)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10  
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 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; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-3-15 to 4-10-4, Interior(1) 4-10-4 to 6-10-4, Exterior(2) 6-10-4 to 11-3-1, Interior(1) 11-3-1 to 13-4-9 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



July 16, 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

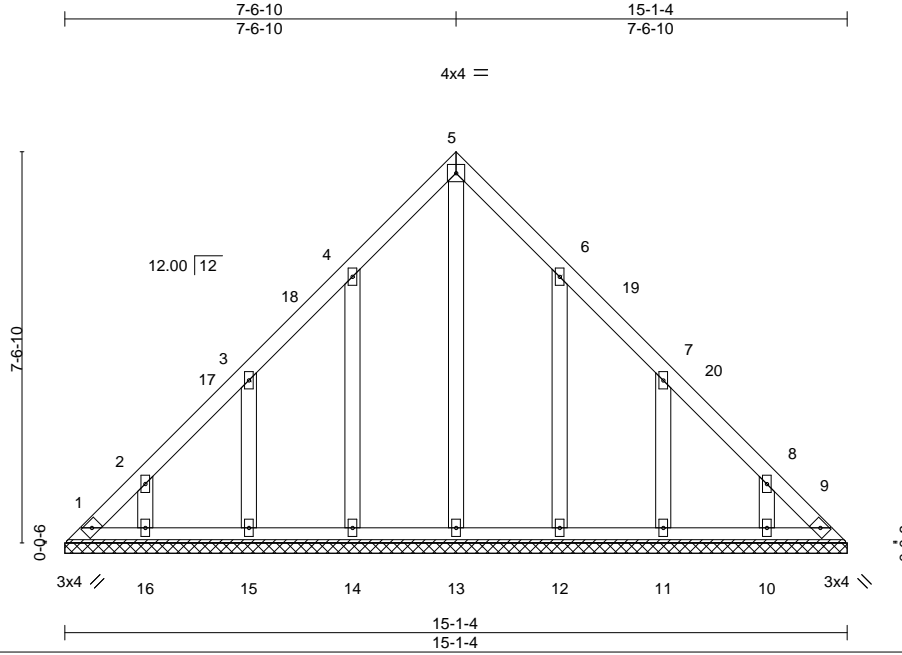


818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121399
J0822-4434	VA1	GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:35 2022 Page 1  
ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-ls0\_RrY8FD1ZZuAJ7Gtd1ZTeYjk73\_HQia9oGyxsVg



Scale = 1:44.5

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.05	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.00	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 90 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.**

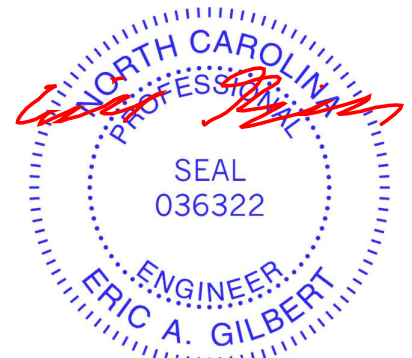
All bearings 15-1-4.  
(lb) - Max Horz 1=-216(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 14=-142(LC 12), 15=-144(LC 12), 16=-124(LC 12), 12=-140(LC 13), 11=-145(LC 13), 10=-124(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 16, 12, 11, 10

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

TOP CHORD 1-2=-289/179, 8-9=-255/169

**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 C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 7-6-10, Exterior(2) 7-6-10 to 11-11-7, Interior(1) 11-11-7 to 14-9-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb) 14=142, 15=144, 16=124, 12=140, 11=145, 10=124.



July 16, 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

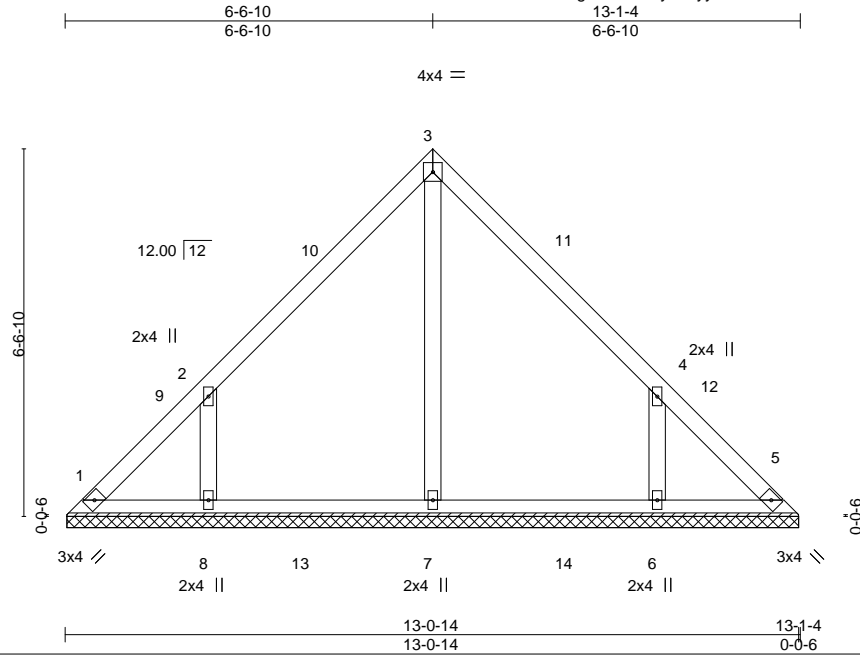


818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121400
J0822-4434	VA2	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:36 2022 Page 1  
ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-D2aNfBSAvZLuBiTmtqn6AF5cxy11sXyRfMKiKiyxsVf



Scale = 1:41.1

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 60 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 13-0-8.  
(lb) - Max Horz 1=149(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=163(LC 12), 6=163(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=386(LC 19), 8=376(LC 19), 6=376(LC 20)

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

WEBS 2-8=-358/290, 4-6=-358/290

**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 C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 6-6-10, Exterior(2) 6-6-10 to 10-11-7, Interior(1) 10-11-7 to 12-9-0 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=163, 6=163.



July 16, 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	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121401
J0822-4434	VA3	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:36 2022 Page 1  
 ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-D2aNfBSAvZLuBiTmqn6AF5cny2\_sYORfMKiKiyxVf

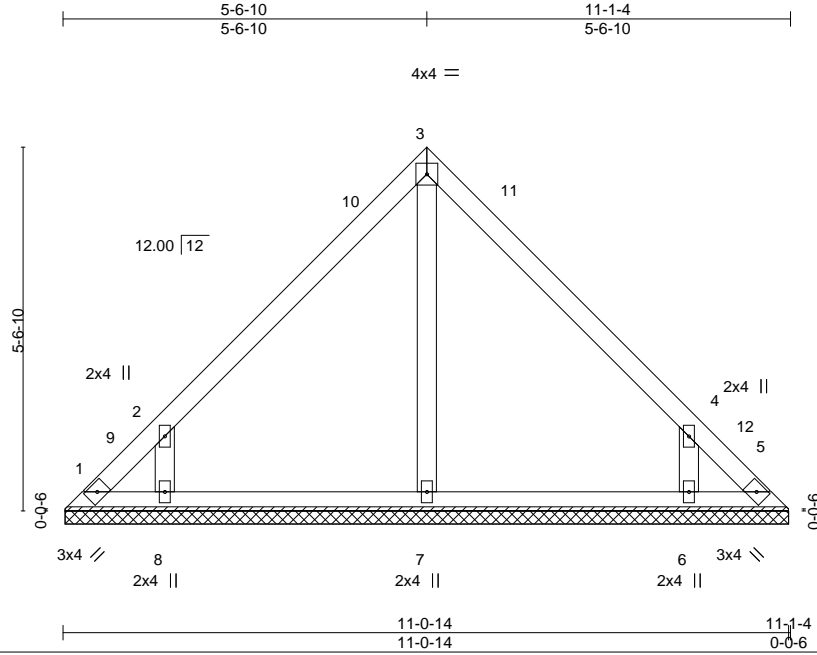


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 49 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	

**REACTIONS.** All bearings 11-0-8.  
 (lb) - Max Horz 1=125(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=166(LC 12), 6=166(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=347(LC 19), 6=347(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-373/317, 4-6=-374/318

- 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 C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 5-6-10, Exterior(2) 5-6-10 to 9-11-7, Interior(1) 9-11-7 to 10-9-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=166, 6=166.

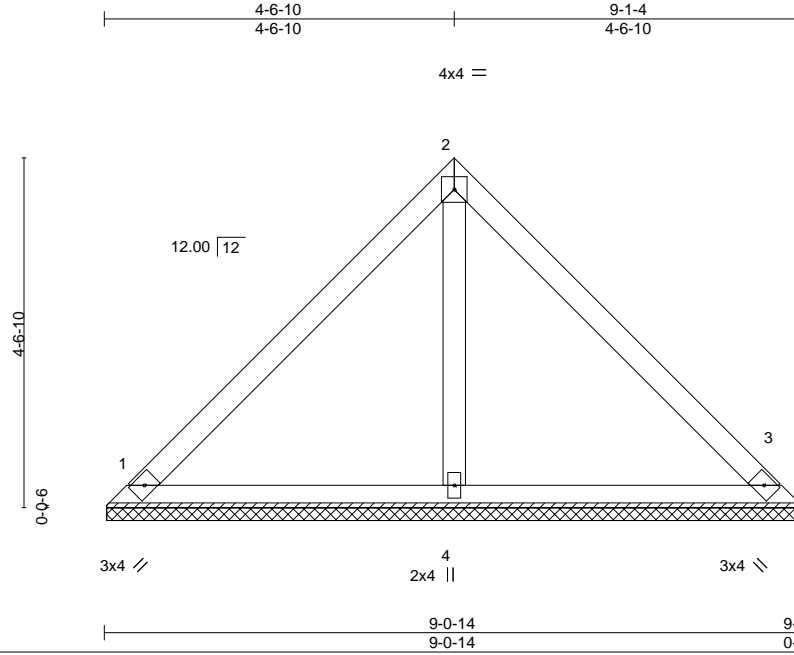


July 16, 2022

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121402
J0822-4434	VA4	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:37 2022 Page 1  
ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-hF8lsXTogsTlps2YRYLiSemrMNZb?rat03Fs8yxsVe



Scale = 1:30.0

<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	Plate Grip DOL 1.15	TC 0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.13	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						Weight: 37 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=9-0-8, 3=9-0-8, 4=9-0-8  
Max Horz 1=101(LC 9)  
Max Uplift 1=-25(LC 13), 3=-25(LC 13)  
Max Grav 1=191(LC 1), 3=190(LC 1), 4=291(LC 1)

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

**NOTES-**

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



July 16, 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

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



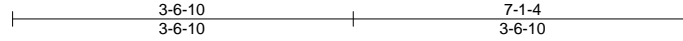
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121403
J0822-4434	VA5	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

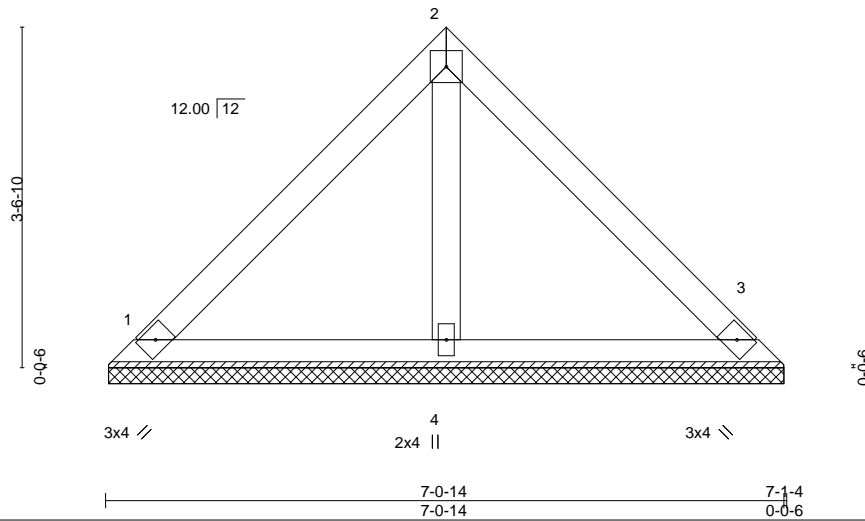
8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:38 2022 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-9Ri74tUQRAbcQ0dk\_FpaFgBxwmkfKSWk6gppPbyxsVd



4x4 =

Scale: 1/2"=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)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 28 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=7-0-8, 3=7-0-8, 4=7-0-8  
 Max Horz 1=77(LC 9)  
 Max Uplift 1=-28(LC 13), 3=-28(LC 13)  
 Max Grav 1=156(LC 1), 3=156(LC 1), 4=200(LC 1)

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

**NOTES-**

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



July 16, 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



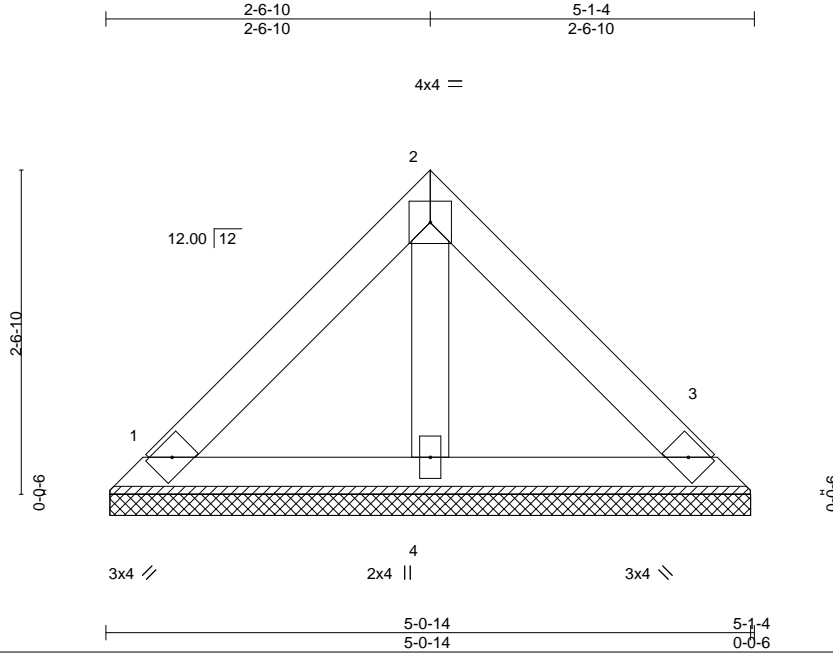
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121404
J0822-4434	VA6	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:39 2022 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-ddGVHCU2CUJT2ACxYzKpntj77A5W3vytLKYMx1yxsVc



Scale = 1:18.1

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P						Weight: 20 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-1-4 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

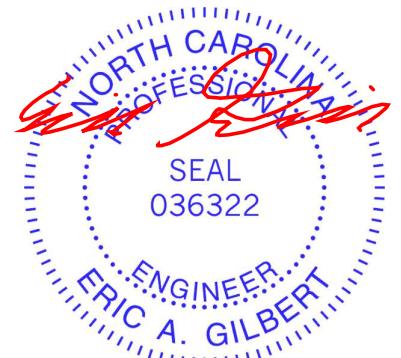
**REACTIONS.**

(size) 1=5-0-8, 3=5-0-8, 4=5-0-8  
 Max Horz 1=53(LC 11)  
 Max Uplift 1=19(LC 13), 3=19(LC 13)  
 Max Grav 1=107(LC 1), 3=107(LC 1), 4=138(LC 1)

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

**NOTES-**

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



July 16, 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

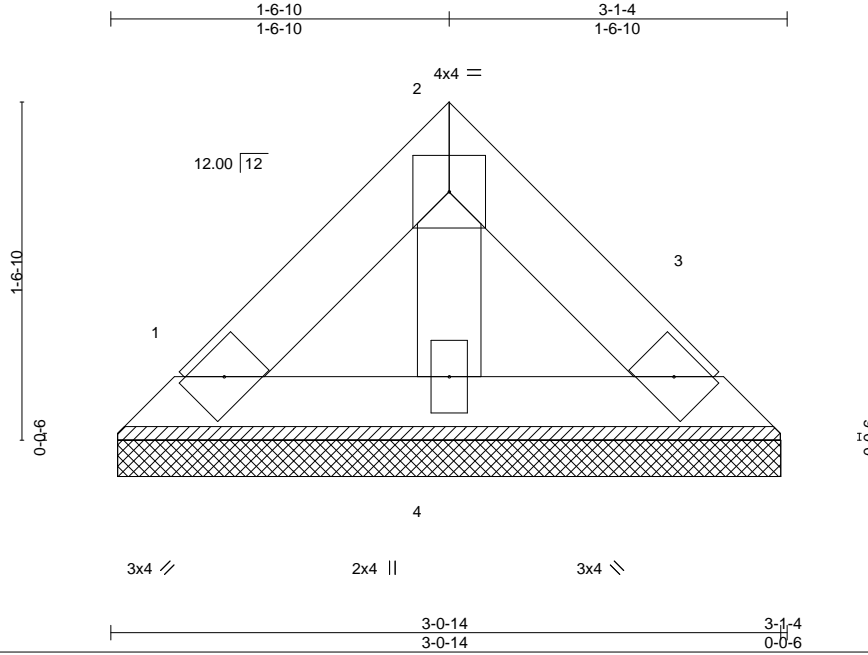


818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121405
J0822-4434	VA7	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:39 2022 Page 1  
 ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-ddGVHCU2CujT2ACxYzKpntj80A5v3v2LKYMx1yxsvC



Scale = 1:10.6

<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 0.02	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 11 lb	FT = 20%
	Code IRC2015/TPI2014							

**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 3-1-4 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=3-0-8, 3=3-0-8, 4=3-0-8  
 Max Horz 1=29(LC 9)  
 Max Uplift 1=-10(LC 13), 3=-10(LC 13)  
 Max Grav 1=58(LC 1), 3=58(LC 1), 4=75(LC 1)

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

**NOTES-**

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



July 16, 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

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



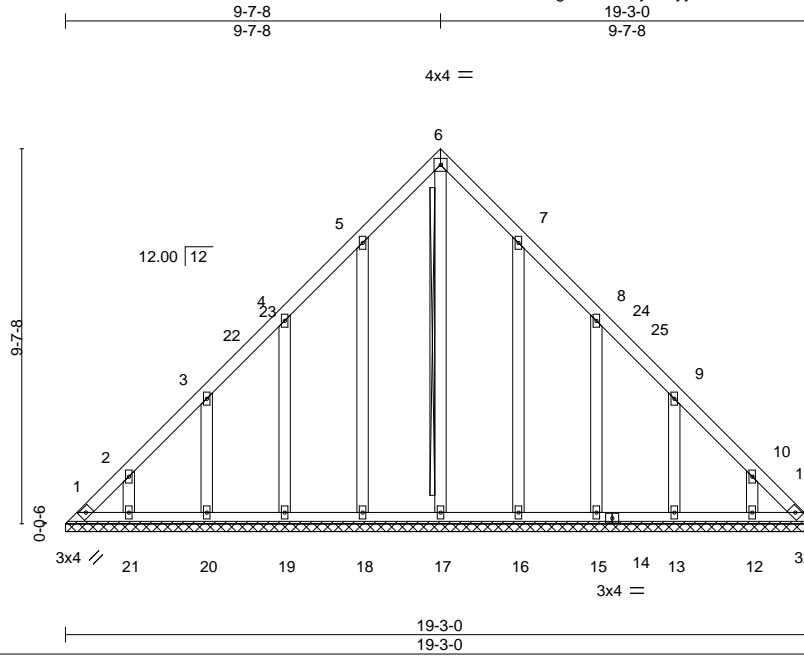
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121406
J0822-4434	VB1	GABLE	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:41 2022 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-Z0NGiuWJk5zBIUMJgONHtloU0zm1Xn2Aoe1T0vyxsVa



Scale = 1:59.1

<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 0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.17	Horz(CT)	0.01	11	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 129 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.  
 WEBS T-Brace: 2x4 SPF No.2 - 6-17  
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
 Brace must cover 90% of web length.

**REACTIONS.**

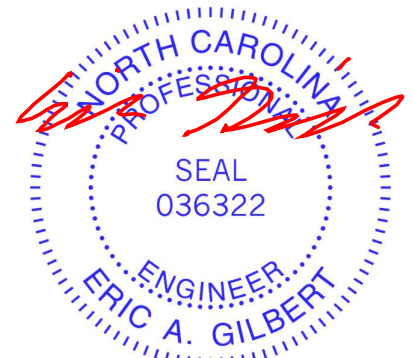
All bearings 19-3-0.  
 (lb) - Max Horz 1=-278(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 11 except 1=-133(LC 10), 18=-138(LC 12), 19=-142(LC 12), 20=-141(LC 12), 21=-127(LC 12), 16=-135(LC 13), 15=-144(LC 13), 13=-141(LC 13), 12=-127(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 11, 17, 18, 19, 20, 21, 16, 15, 13, 12 except 1=262(LC 12)

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

TOP CHORD 1-2=-384/233, 2-3=-271/194, 10-11=-340/229  
 BOT CHORD 1-21=-170/259, 20-21=-170/259, 19-20=-170/259, 18-19=-170/259, 17-18=-170/259, 16-17=-170/259, 15-16=-170/259, 13-15=-170/259, 12-13=-170/259, 11-12=-170/259

**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 C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 9-7-8, Exterior(2) 9-7-8 to 14-0-5, Interior(1) 14-0-5 to 18-10-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- 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) 11 except (jt=lb) 1=133, 18=138, 19=142, 20=141, 21=127, 16=135, 15=144, 13=141, 12=127.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



July 16, 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



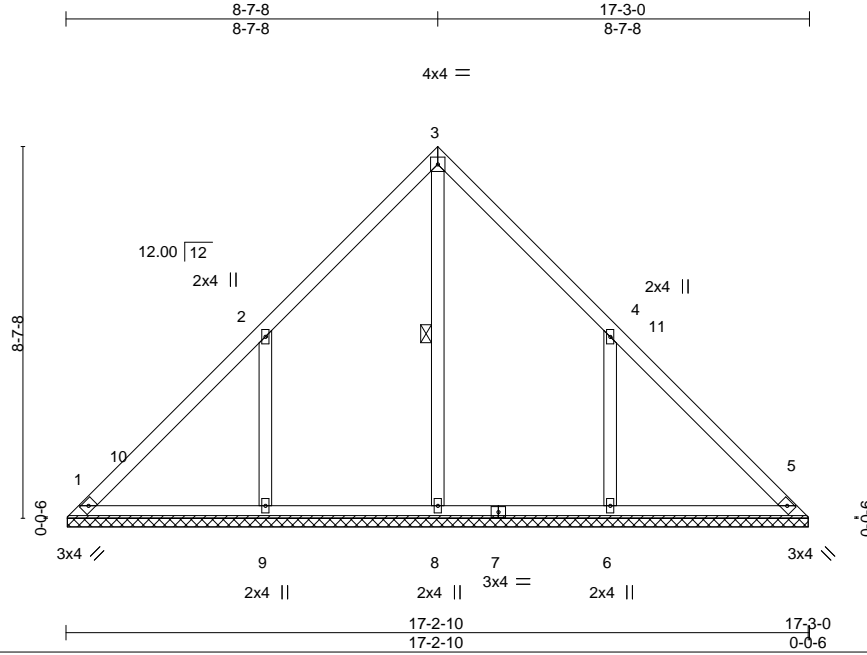
818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121407
J0822-4434	VB2	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:42 2022 Page 1  
 ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-2CxeVEXxVP52vdxWD5uWPVLcPN4xGEjJ1In0YMyxsVZ



Scale = 1:53.5

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S						Weight: 84 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.  
 WEBS 1 Row at midpt 3-8

**REACTIONS.**

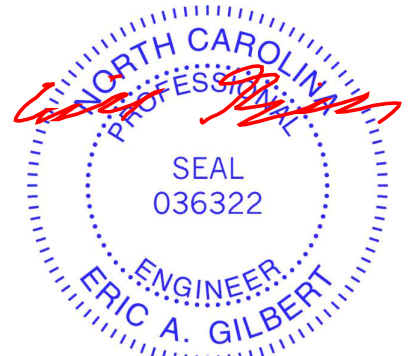
All bearings 17-2-4.  
 (lb) - Max Horz 1=-198(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-208(LC 12), 6=-208(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=415(LC 22), 9=539(LC 19), 6=539(LC 20)

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

WEBS 2-9=-447/332, 4-6=-447/332

**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 C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-7-8, Interior(1) 4-7-8 to 8-7-8, Exterior(2) 8-7-8 to 13-0-5, Interior(1) 13-0-5 to 16-10-12 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=208, 6=208.



July 16, 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

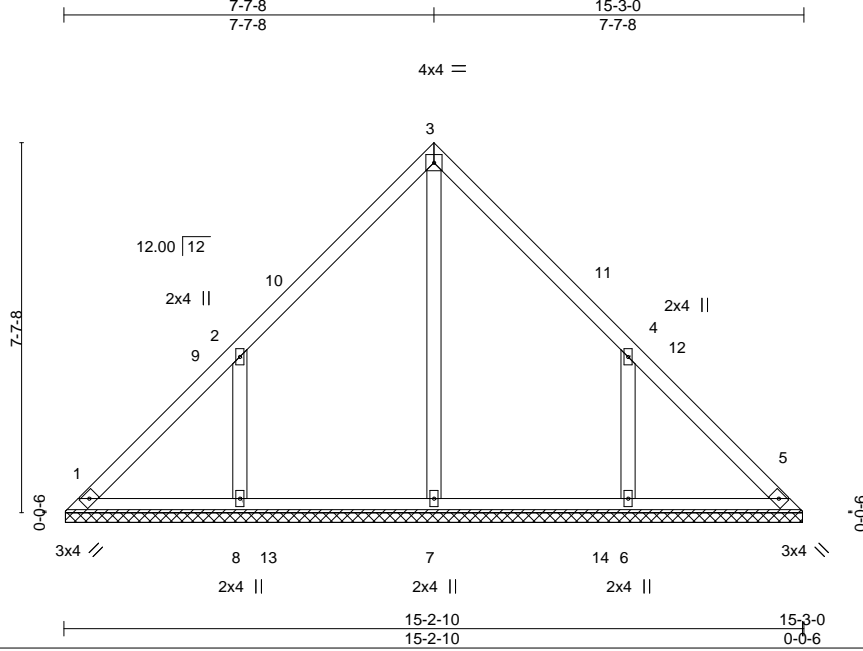


818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121408
J0822-4434	VB3	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:43 2022 Page 1  
 ID:8XVK7MoEEgDYV6B4ZyI0r5yy8ZO-WPV07aXZGiDvXnVinpPlyjuomQA?iBTGyWa4oyxvY



Scale = 1:47.5

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.16	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.18	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.12	Horz(CT) 0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 73 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 15-2-4.  
 (lb) - Max Horz 1=174(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=182(LC 12), 6=182(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=414(LC 22), 8=457(LC 19), 6=456(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-395/305, 4-6=-395/305

- 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 C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 7-7-8, Exterior(2) 7-7-8 to 12-0-5, Interior(1) 12-0-5 to 14-10-12 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=182, 6=182.



July 16, 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

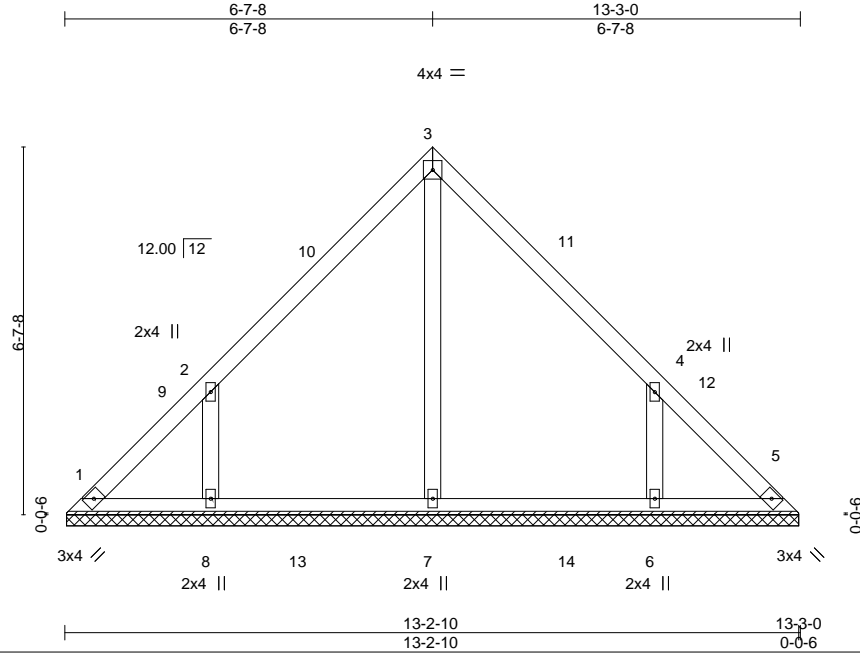
ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121409
J0822-4434	VB4	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:44 2022 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-\_b3OKwYB10Lm9x4uLWw\_UwQzvBmsk9vcUcG7cEysvX



Scale = 1:41.5

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 61 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 13-2-4.  
 (lb) - Max Horz 1=150(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=164(LC 12), 6=164(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=389(LC 19), 8=380(LC 19), 6=380(LC 20)

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

WEBS 2-8=-360/290, 4-6=-360/291

**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 C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 6-7-8, Exterior(2) 6-7-8 to 11-0-5, Interior(1) 11-0-5 to 12-10-12 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=164, 6=164.



July 16, 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	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121410
J0822-4434	VB5	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:45 2022 Page 1  
 ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-SndmYGZpoKTcm5f5vDRD18z8Ya75TcbjG?g9hyxsVW

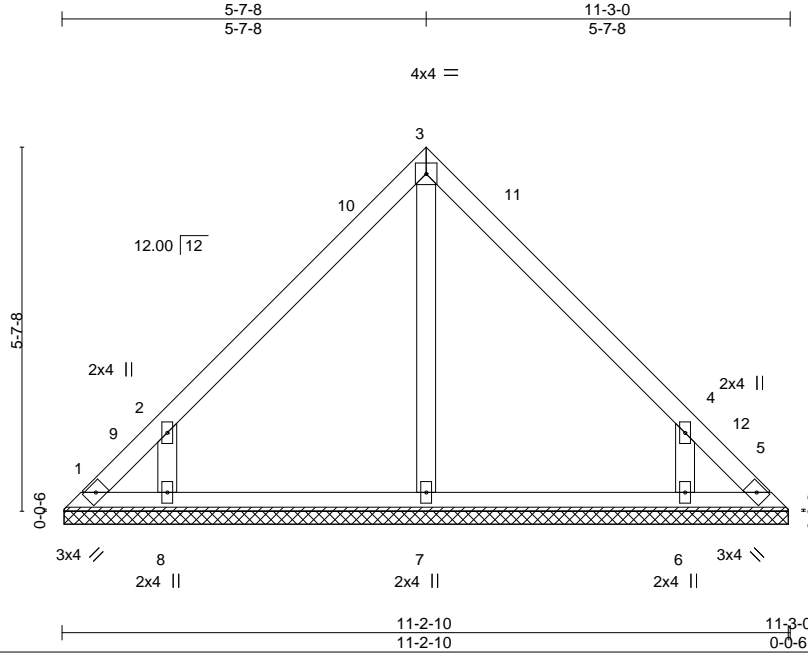


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.15	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.07	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 49 lb	FT = 20%

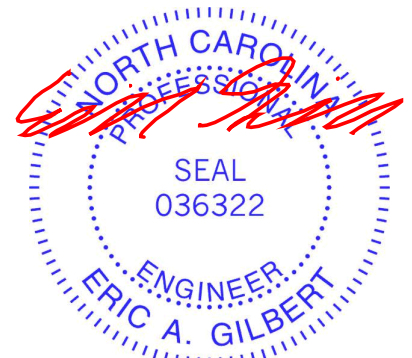
**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.2

**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 11-2-4.  
 (lb) - Max Horz 1=126(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=164(LC 12), 6=164(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=344(LC 19), 6=344(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-369/312, 4-6=-369/312

- 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 C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 5-7-8, Exterior(2) 5-7-8 to 10-0-5, Interior(1) 10-0-5 to 10-10-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=164, 6=164.



July 16, 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



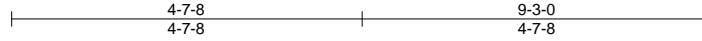
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121411
J0822-4434	VB6	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

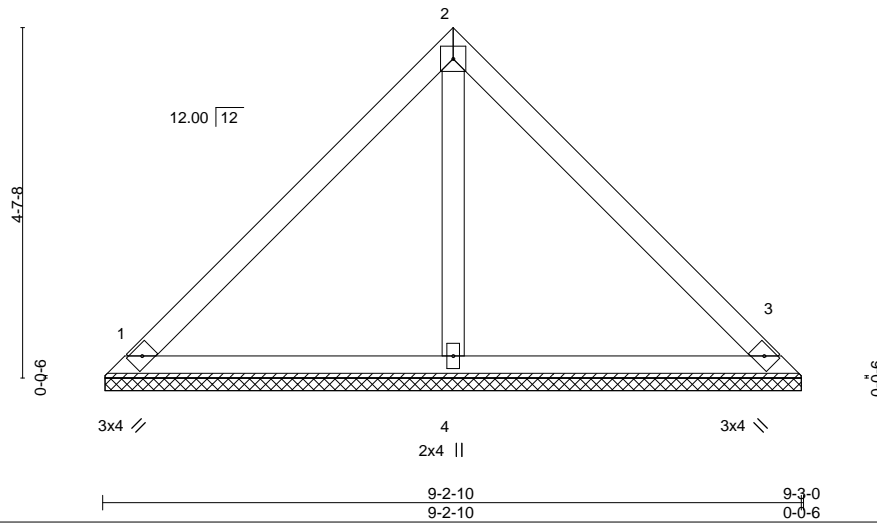
8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:46 2022 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-wzB9lcaRZdcTOFEHSxySaLWIS\_SbC41vywIEh7yxsVV



4x4 =

Scale = 1:30.4



<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	Plate Grip DOL 2-0-0	TC 0.20	Vert(LL) n/a	-	n/a	999		MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(CT) n/a	-	n/a	999			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.00	3	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						Weight: 38 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=9-2-4, 3=9-2-4, 4=9-2-4  
 Max Horz 1=-102(LC 8)  
 Max Uplift 1=-25(LC 13), 3=-25(LC 13)  
 Max Grav 1=194(LC 1), 3=194(LC 1), 4=296(LC 1)

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

**NOTES-**

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



July 16, 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

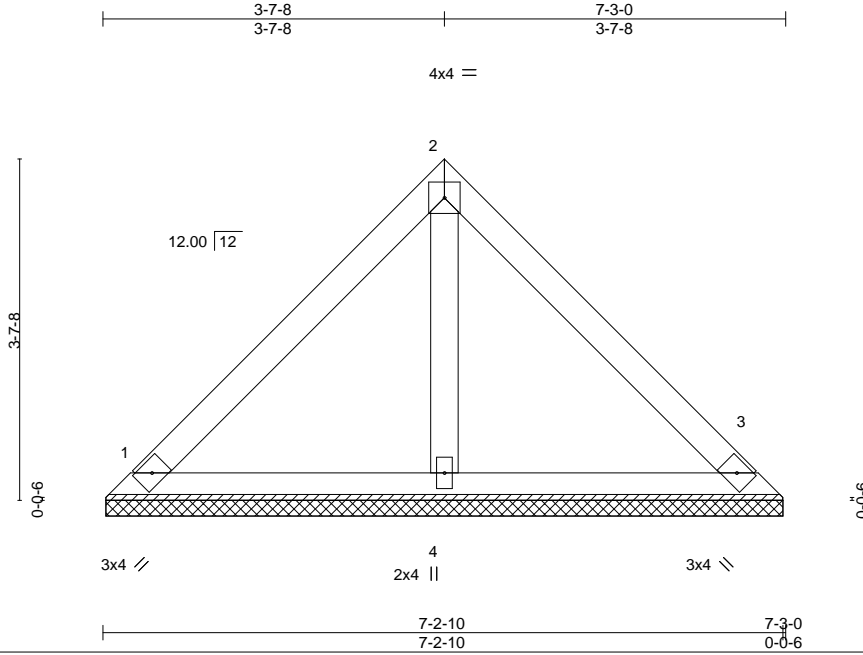


818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	I53121412
J0822-4434	VB7	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:47 2022 Page 1  
 ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-OAlXyYb3KxkK0PpT0eUh6Z2UWOpjXk2BZUnDZyxsVU



Scale = 1:24.5

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P						Weight: 29 lb	FT = 20%
	Code IRC2015/TPI2014								

**LUMBER-**

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

**BRACING-**

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

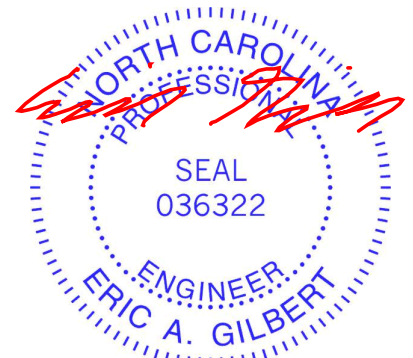
**REACTIONS.**

(size) 1=7-2-4, 3=7-2-4, 4=7-2-4  
 Max Horz 1=78(LC 9)  
 Max Uplift 1=-28(LC 13), 3=-28(LC 13)  
 Max Grav 1=159(LC 1), 3=159(LC 1), 4=205(LC 1)

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

**NOTES-**

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



July 16, 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

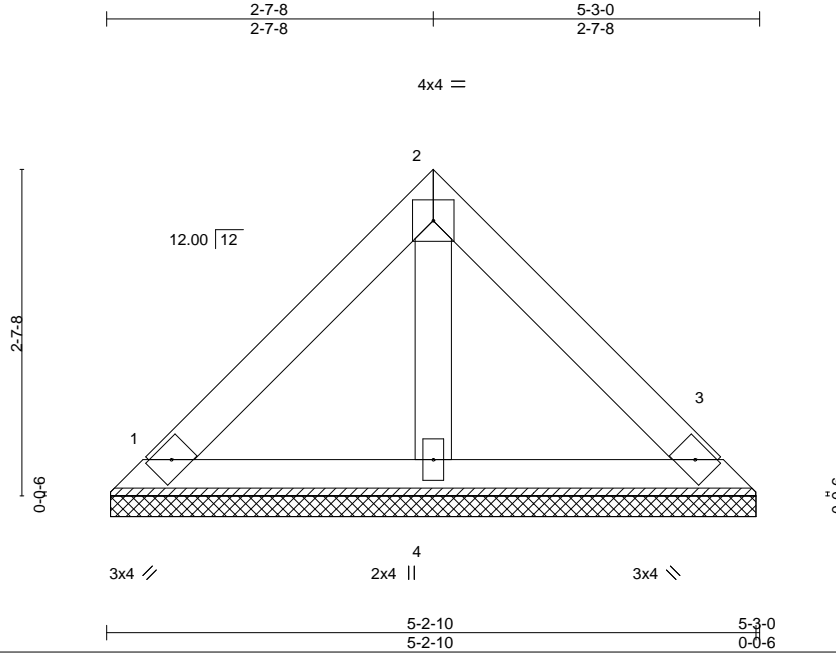


Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121413
J0822-4434	VB8	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:48 2022 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-sMJvAHbi5FsBdYOfaM?wfbgno9bg\_BCPDELI?yxsVT



Scale = 1:18.5

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P						Weight: 20 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-3-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=5-2-4, 3=5-2-4, 4=5-2-4  
 Max Horz 1=54(LC 9)  
 Max Uplift 1=-20(LC 13), 3=-20(LC 13)  
 Max Grav 1=111(LC 1), 3=111(LC 1), 4=142(LC 1)

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

**NOTES-**

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



July 16, 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



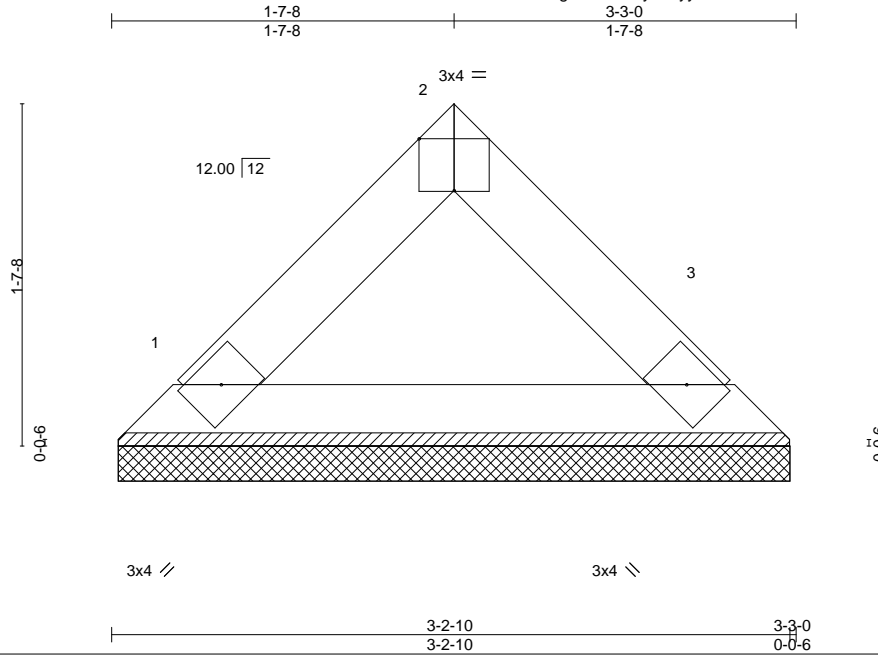
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121414
J0822-4434	VB9	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:48 2022 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-sMJvAHbi5FsBdYOfaM?wfmhgo9Lg\_MCPDEL?yxsVT



Scale = 1:10.9

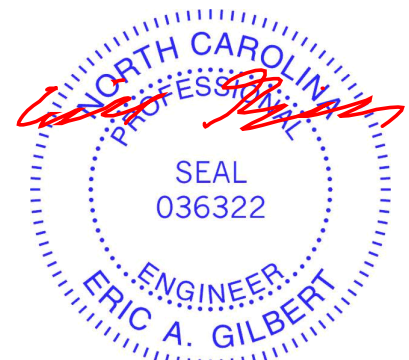
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.03	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.05	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 10 lb	FT = 20%
	Code IRC2015/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-3-0 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-2-4, 3=3-2-4  
 Max Horz 1=-31(LC 8)  
 Max Uplift 1=-3(LC 12), 3=-3(LC 12)  
 Max Grav 1=102(LC 1), 3=102(LC 1)

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

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



July 16, 2022

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121415
J0822-4434	VP1	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:49 2022 Page 1  
ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-KYsHNdcKrY\_2Fizs83W9B\_8rqCU2PR?LetzulSyxsVS

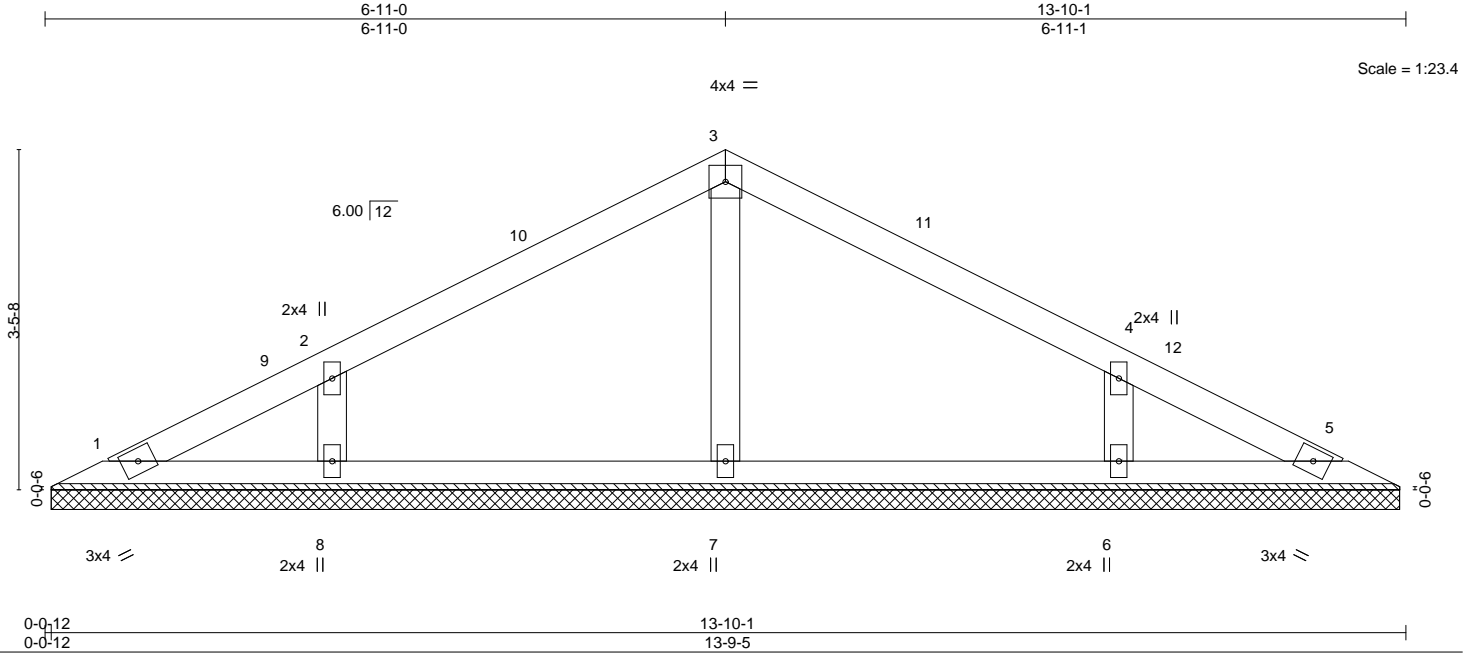


Plate Offsets (X,Y)--	[4:0-0-0,0-0-0]
-----------------------	-----------------

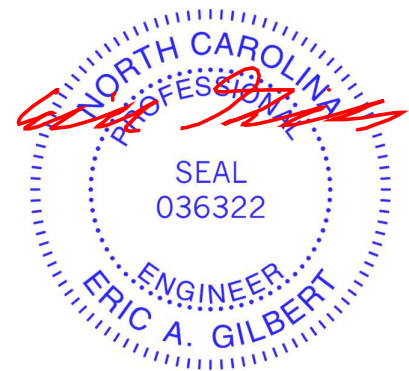
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 48 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	

**REACTIONS.** All bearings 13-8-9.  
 (lb) - Max Horz 1=41(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=284(LC 1), 8=305(LC 23), 6=305(LC 24)

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

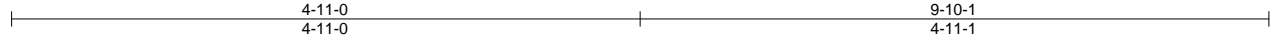
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 6-11-0, Exterior(2) 6-11-0 to 11-3-13, Interior(1)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



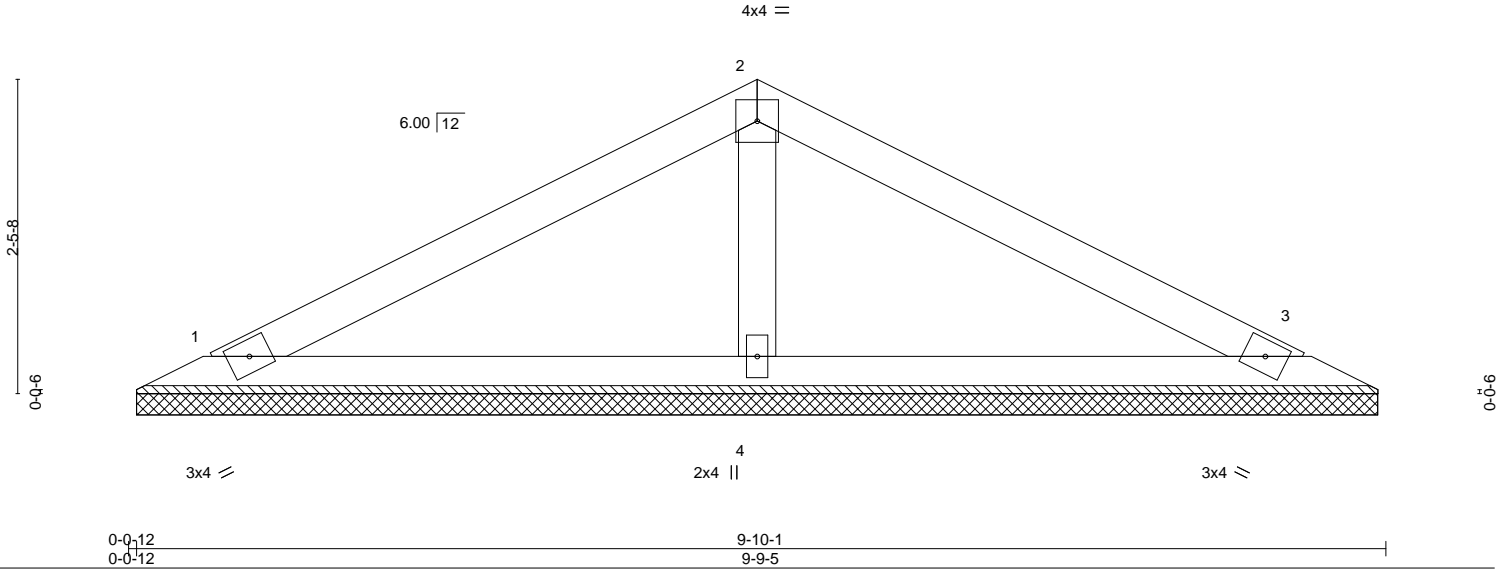
Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121416
J0822-4434	VP2	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:50 2022 Page 1  
 ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-plQfbzdycs6vtsY2hn1OkBg?fbpb8uLVtXjRquyxsvR



Scale = 1:18.0



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.19	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.13	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 31 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=9-8-9, 3=9-8-9, 4=9-8-9  
 Max Horz 1=-28(LC 10)  
 Max Uplift 1=-21(LC 12), 3=-26(LC 13)  
 Max Grav 1=158(LC 23), 3=158(LC 24), 4=370(LC 1)

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

**NOTES-**

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



July 16, 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

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

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



818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/Lot 148 Hidden Lakes/Harnett	153121417
J0822-4434	VP3	VALLEY	1	1	Job Reference (optional)	

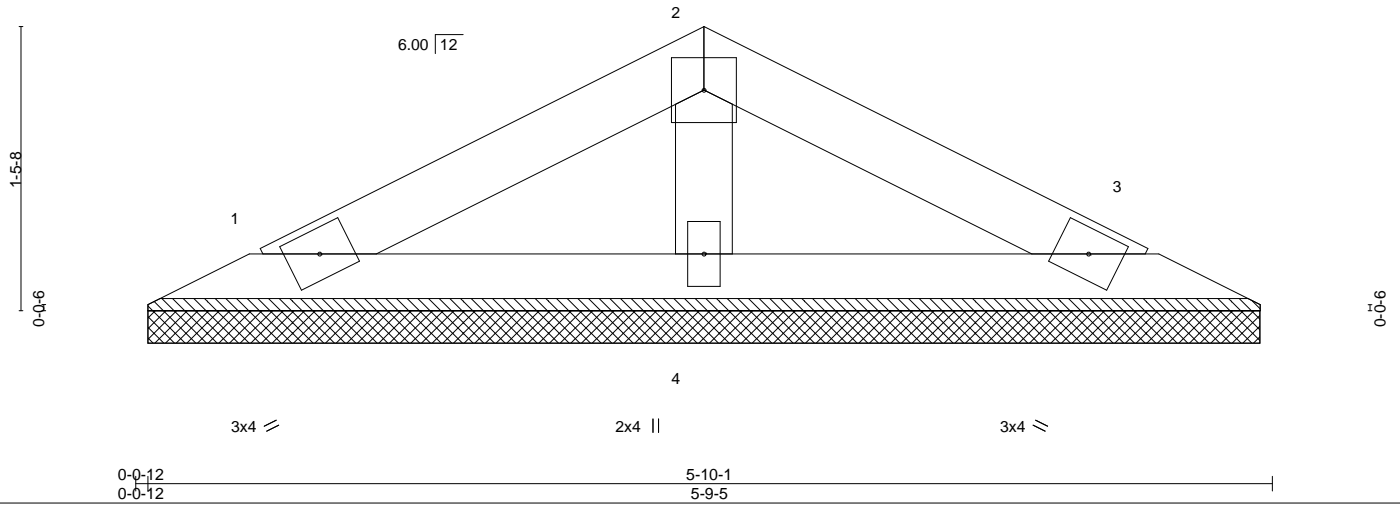
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 15 09:28:51 2022 Page 1

ID:8XVK7MoEEgDYV6B4Zyl0r5yy8ZO-Hx\_1oJeaNAEmU07EFUYdHPDBH?BlItKqe5BS?MKyxsVQ



Scale = 1:11.8



<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 0.07	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 17 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-10-1 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=5-8-9, 3=5-8-9, 4=5-8-9  
 Max Horz 1=15(LC 9)  
 Max Uplift 1=15(LC 12), 3=17(LC 13)  
 Max Grav 1=92(LC 1), 3=93(LC 1), 4=178(LC 1)

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

**NOTES-**

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



July 16, 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**

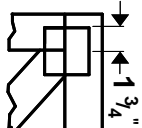
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



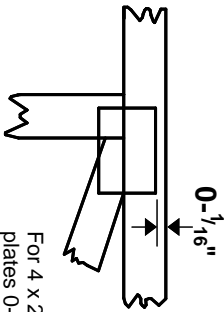
818 Soundside Road  
 Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

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

## PLATE SIZE

4 X 4

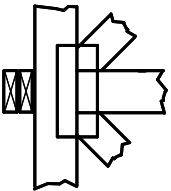
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING



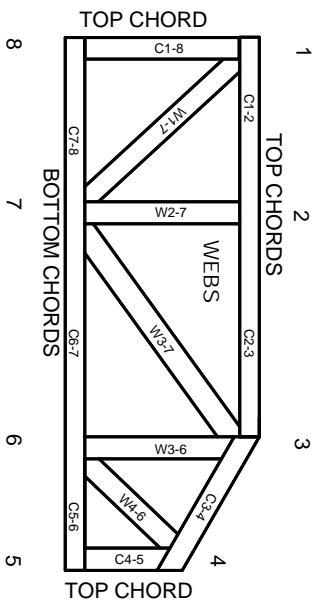
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

ANSI/TPI 1: 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, ESR1988  
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

© 2012 MITteK® All Rights Reserved



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