

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: J0923-5140
Precision/64 Liberty Meadows/Harnett

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

Pages or sheets covered by this seal: I62780832 thru I62780863

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844



December 29, 2023

Johnson, Andrew

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

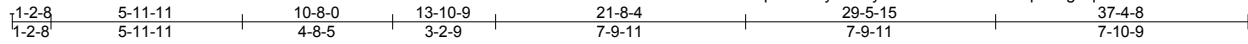
Job J0923-5140	Truss A1GE	Truss Type GABLE	Qty 1	Ply 1	Precision/64 Liberty Meadows/Harnett 162780832
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:34:58 2023 Page 1

ID:6CKkadeNkqch9TIGyVioiByMJNt-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Job Reference (optional)



5x8 =

Scale = 1:71.9

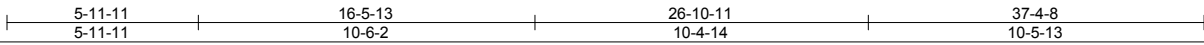
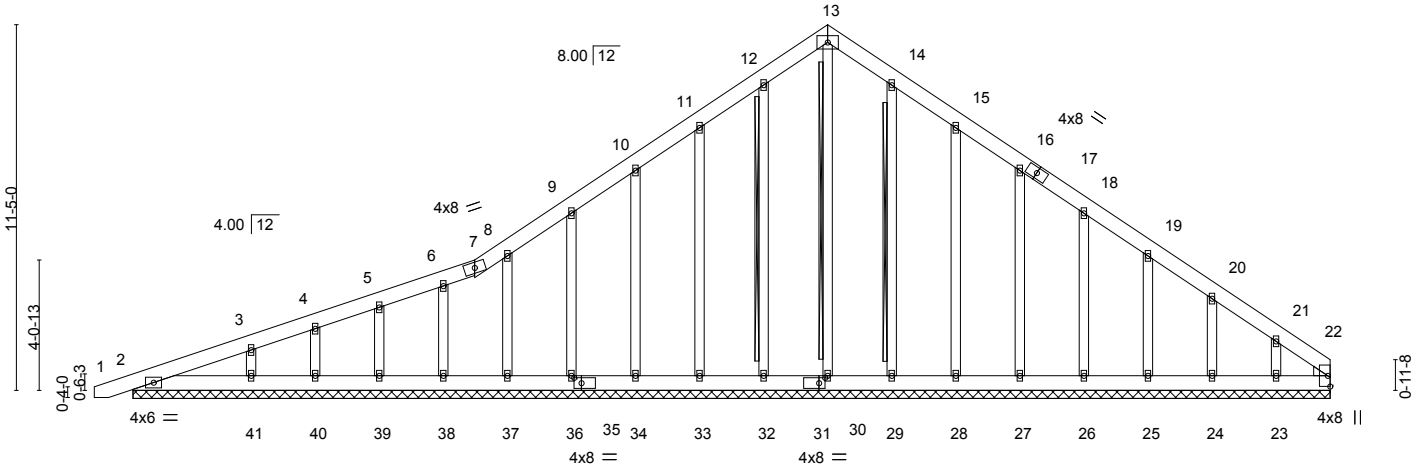


Plate Offsets (X, Y)--	[31:0-2-4,0-2-0], [35:0-2-12,0-2-0]						
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.05	Vert(LL) -0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) 0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.18	Horz(CT) 0.01	22	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					
						Weight: 323 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 OTHERS 2x4 SP No.2
 WEDGE
 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 - 13-30, 12-32, 14-29
 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 37-4-8.
 (lb) - Max Horz 2=354(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 22, 2, 32, 33, 34, 36, 37, 38, 39, 40, 41, 29, 27, 26, 25, 24 except 28=-103(LC 13), 23=-152(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 22, 2, 30, 32, 33, 34, 36, 37, 38, 39, 40, 29, 28, 27, 26, 25, 24, 23 except 41=281(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-301/98, 11-12=-223/268, 12-13=-257/295, 13-14=-257/295, 14-15=-223/250, 21-22=-294/193

- 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) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 2, 32, 33, 34, 36, 37, 38, 39, 40, 41, 29, 27, 26, 25, 24 except (jt=lb) 28=103, 23=152.
 - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



December 29, 2023

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbccomponents.com)



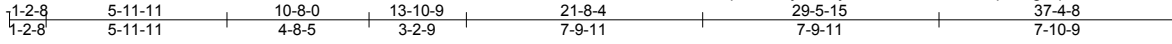
818 Soundside Road
 Edenton, NC 27932

Job J0923-5140	Truss A2	Truss Type ROOF SPECIAL	Qty 5	Ply 1	Precision/64 Liberty Meadows/Harnett 162780833
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:00 2023 Page 1

ID:6CKkadeNkqch9TIGyVioiByMJNt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



6x6 =

Scale = 1:76.1

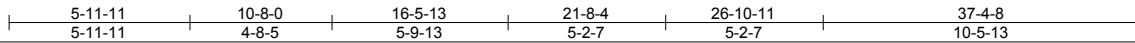
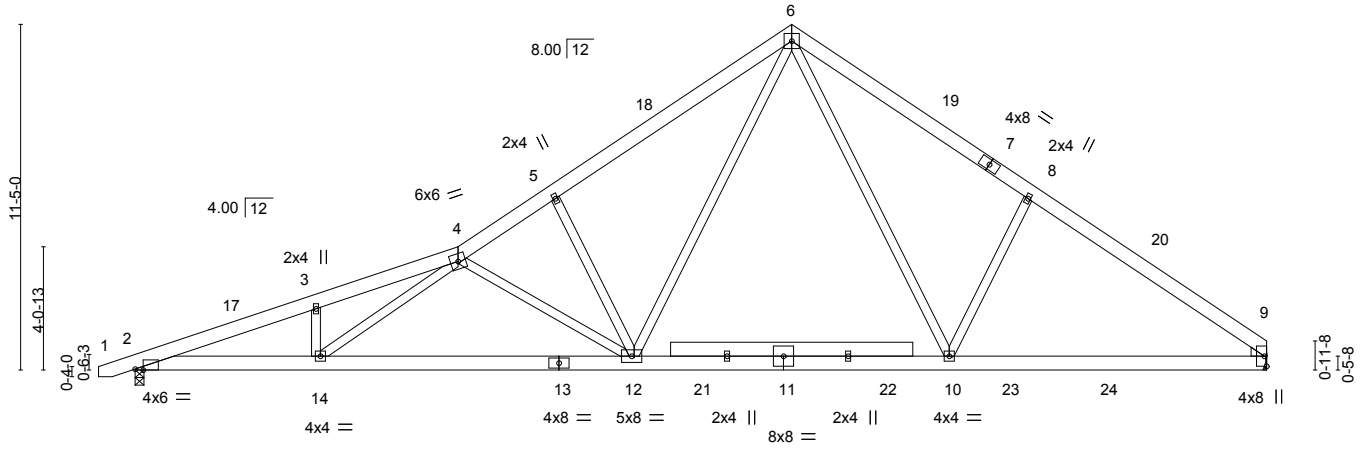


Plate Offsets (X, Y)-- [2:0-3-3,Edge]										
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	-0.24	10-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.60	Vert(CT)	-0.38	10-12	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.97	Horz(CT)	0.08	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TP12014		Matrix-S	Wind(LL)	0.11	12-14	>999	240	Weight: 285 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2
 WEDGE
 Right: 2x4 SP No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-9-5 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 9=Mechanical, 2=0-3-8
 Max Horz 2=272(LC 9)
 Max Uplift 9=66(LC 13), 2=-117(LC 12)
 Max Grav 9=1640(LC 20), 2=1555(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-3863/666, 3-4=-3820/738, 4-5=-2499/507, 5-6=-2467/599, 6-8=-2219/546,
 8-9=-2359/444
 BOT CHORD 2-14=-563/3589, 12-14=-480/3136, 10-12=-27/1397, 9-10=-228/1825
 WEBS 6-10=-162/976, 8-10=-472/306, 3-14=-262/172, 4-14=-105/691, 6-12=-286/1481,
 5-12=-459/276, 4-12=-1250/271

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) 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)-0-11-13 to 3-5-0, Interior(1) 3-5-0 to 21-8-4, Exterior(2) 21-8-4 to 26-1-1, Interior(1) 26-1-1 to 37-3-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 2=117.



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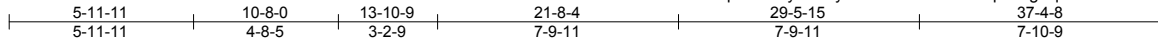


Job J0923-5140	Truss A2A	Truss Type ROOF SPECIAL	Qty 2	Ply 1	Precision/64 Liberty Meadows/Harnett Job Reference (optional)	162780834
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Comtech, Inc. Fayetteville, NC - 28314,

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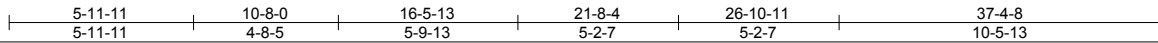
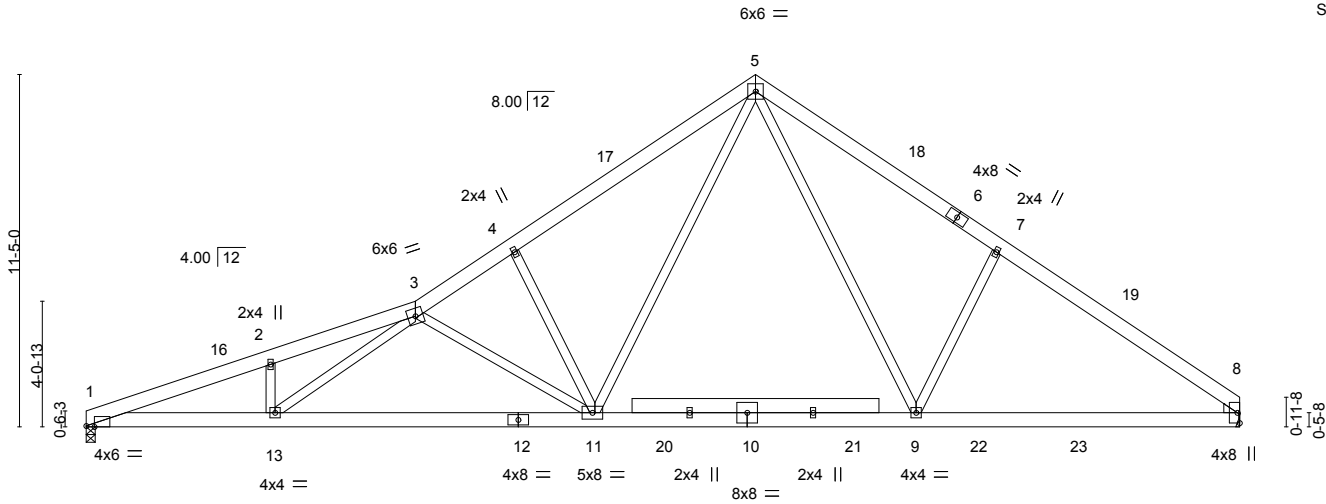


Plate Offsets (X,Y)-- [1:0-3-3,Edge]						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl
TCLL 20.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	-0.24	9-11 >999 360
TCDL 10.0	Lumber DOL	1.15	BC 0.60	Vert(CT)	-0.38	9-11 >999 240
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.98	Horz(CT)	0.08	8 n/a n/a
BCDL 10.0	Code IRC2015/TP12014		Matrix-S	Wind(LL)	0.12	11-13 >999 240
						PLATES
						MT20
						GRIP
						244/190
						Weight: 282 lb
						FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
WEDGE
Right: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-8-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-10-8 oc bracing.

REACTIONS. (size) 1=0-3-8, 8=Mechanical
Max Horz 1=267(LC 9)
Max Uplift 1=-101(LC 12), 8=-66(LC 13)
Max Grav 1=1487(LC 1), 8=1640(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3870/721, 2-3=-3842/802, 3-4=-2502/518, 4-5=-2470/611, 5-7=-2220/547, 7-8=-2360/445
BOT CHORD 1-13=-622/3609, 11-13=-504/3140, 9-11=-31/1398, 8-9=-233/1826
WEBS 5-9=-162/976, 7-9=-471/305, 2-13=-272/198, 3-13=-150/708, 5-11=-288/1483, 4-11=-459/276, 3-11=-1255/287

- 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 4-6-9, Interior(1) 4-6-9 to 21-8-4, Exterior(2) 21-8-4 to 26-1-1, Interior(1) 26-1-1 to 37-3-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 1=101.



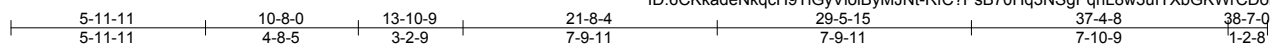
December 29, 2023

Job J0923-5140	Truss A3	Truss Type ROOF SPECIAL	Qty 2	Ply 1	Precision/64 Liberty Meadows/Harnett Job Reference (optional)	162780835
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Comtech, Inc. Fayetteville, NC - 28314,

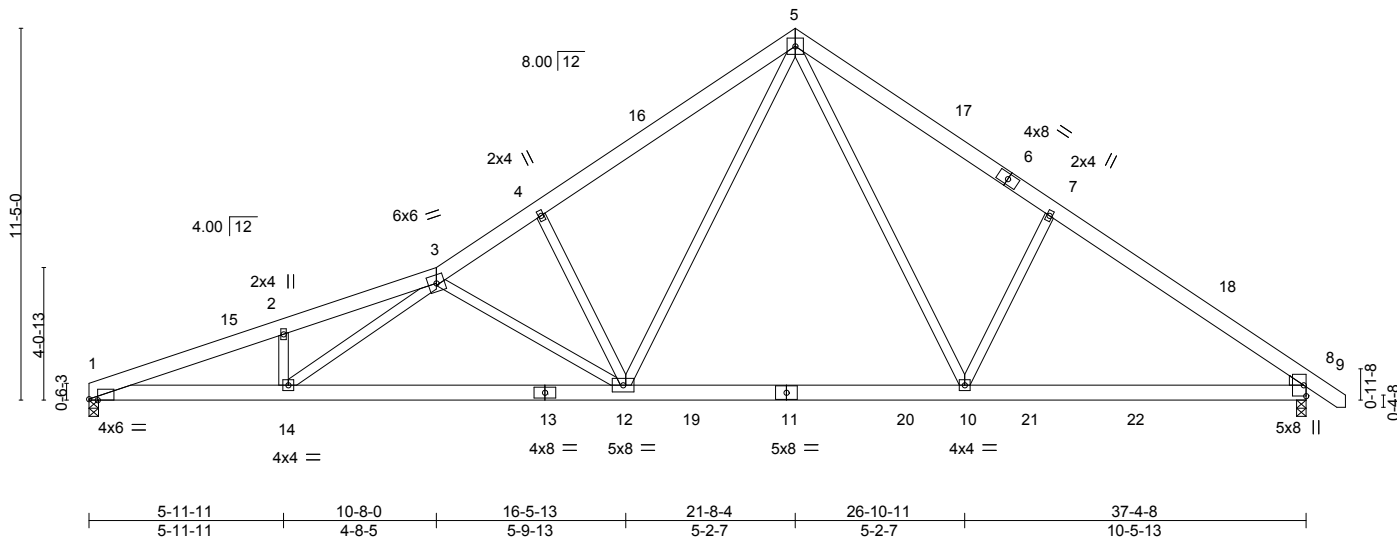
8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:02 2023 Page 1

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6x6 =

Scale = 1:70.8



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 0.45	Vert(LL) -0.25	10-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.61	Vert(CT) -0.39	10-12	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.97	Horz(CT) 0.08	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-S	Wind(LL) 0.11	12-14	>999	240	Weight: 266 lb	FT = 20%

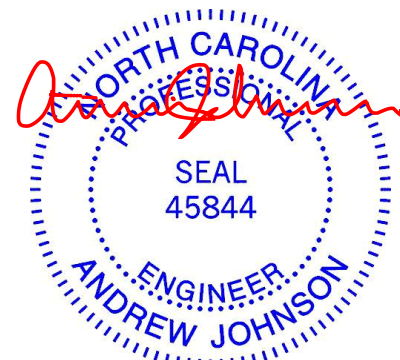
LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2
 WEDGE
 Right: 2x4 SP No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-9-1 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 9-11-9 oc bracing.

REACTIONS. (size) 1=0-3-8, 8=0-3-8
 Max Horz 1=269(LC 11)
 Max Uplift 1=-101(LC 12), 8=-82(LC 13)
 Max Grav 1=1482(LC 1), 8=1719(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-3857/719, 2-3=-3829/799, 3-4=-2514/515, 4-5=-2483/608, 5-7=-2218/529,
 7-8=-2359/430
 BOT CHORD 1-14=-612/3597, 12-14=-493/3157, 10-12=-22/1406, 8-10=-218/1814
 WEBS 5-10=-157/965, 7-10=-458/297, 2-14=-272/198, 3-14=-150/708, 5-12=-285/1498,
 4-12=-459/275, 3-12=-1252/286

- 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 4-6-9, Interior(1) 4-6-9 to 21-8-4, Exterior(2) 21-8-4 to 26-1-1, Interior(1) 26-1-1 to 38-5-7 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 1=101.



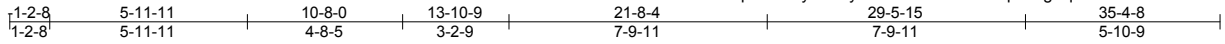
December 29, 2023

Job J0923-5140	Truss A4	Truss Type ROOF SPECIAL	Qty 2	Ply 1	Precision/64 Liberty Meadows/Harnett Job Reference (optional)	162780836
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:04 2023 Page 1

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6x6 =

Scale = 1:69.6

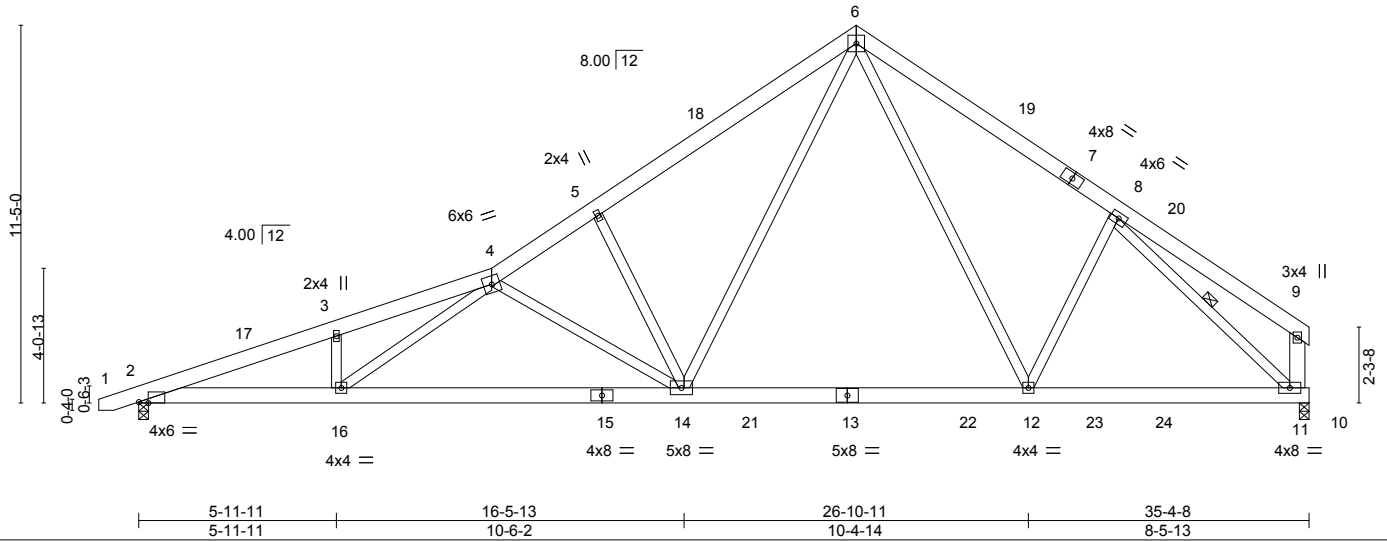


Plate Offsets (X,Y)-- [2:0-3-7,Edge]						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl
TCLL 20.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	-0.24 12-14	>999 360
TCDL 10.0	Lumber DOL	1.15	BC 0.60	Vert(CT)	-0.37 12-14	>999 240
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.91	Horz(CT)	0.06 11	n/a n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.10 14-16	>999 240
						PLATES
						MT20
						GRIP
						244/190
						Weight: 270 lb
						FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-11-3 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 9-11-12 oc bracing.
WEBS 2x4 SP No.2 *Except* 9-11: 2x6 SP No.1	WEBS 1 Row at midpt 8-11

REACTIONS. (size) 11=0-3-8, 2=0-3-8
 Max Horz 2=298(LC 9)
 Max Uplift 11=-48(LC 13), 2=-115(LC 12)
 Max Grav 11=1529(LC 20), 2=1464(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-3591/622, 3-4=-3550/693, 4-5=-2250/465, 5-6=-2220/557, 6-8=-1733/457, 8-9=-259/121, 9-11=-253/104
 BOT CHORD 2-16=-611/3333, 14-16=-540/2863, 12-14=-109/1200, 11-12=-236/1284
 WEBS 6-12=-93/525, 3-16=-267/173, 4-16=-109/697, 6-14=-273/1462, 5-14=-452/273, 8-11=-1687/294, 4-14=-1176/259

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) 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) -0-11-13 to 3-5-0, Interior(1) 3-5-0 to 21-8-4, Exterior(2) 21-8-4 to 26-1-1, Interior(1) 26-1-1 to 35-0-4 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 2=115.



December 29, 2023

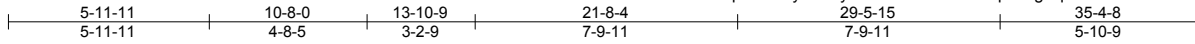
<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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/TP1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)</p>	<p>ENGINEERING BY TRENCO <small>A MiTek Affiliate</small></p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job J0923-5140	Truss A4A	Truss Type ROOF SPECIAL	Qty 1	Ply 1	Precision/64 Liberty Meadows/Harnett Job Reference (optional)	62780837
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Comtech, Inc. Fayetteville, NC - 28314,

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Scale = 1:68.5

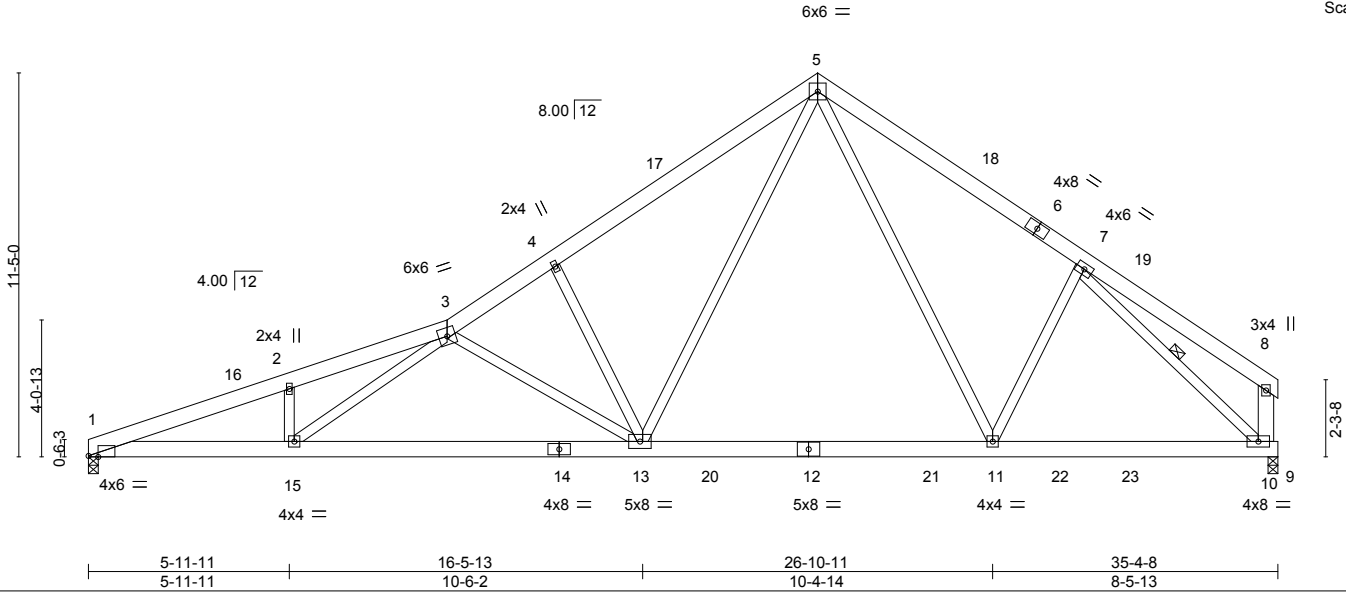


Plate Offsets (X,Y)-- [1:0-3-7,Edge]						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl
TCLL 20.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	-0.24	11-13 >999
TCDL 10.0	Lumber DOL	1.15	BC 0.60	Vert(CT)	-0.37	11-13 >999
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.92	Horz(CT)	0.06	10 n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.10	13-15 >999
						L/d
						360
						240
						n/a
						240
						Weight: 267 lb
						FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-10-14 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 9-11-1 oc bracing.
WEBS 2x4 SP No.2 *Except* 8-10: 2x6 SP No.1	WEBS 1 Row at midpt 7-10

REACTIONS. (size) 1=0-3-8, 10=0-3-8
 Max Horz 1=293(LC 9)
 Max Uplift 1=-99(LC 12), 10=-48(LC 13)
 Max Grav 1=1395(LC 1), 10=1529(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-3598/676, 2-3=-3581/756, 3-4=-2253/475, 4-5=-2222/567, 5-7=-1734/457, 7-8=-259/121, 8-10=-253/104
 BOT CHORD 1-15=-618/3353, 13-15=-542/2866, 11-13=-109/1201, 10-11=-236/1285
 WEBS 5-11=-92/525, 2-15=-277/199, 3-15=-154/713, 5-13=-274/1464, 4-13=-452/273, 7-10=-1688/295, 3-13=-1181/275

- 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 4-6-9, Interior(1) 4-6-9 to 21-8-4, Exterior(2) 21-8-4 to 26-1-1, Interior(1) 26-1-1 to 35-0-4 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 10.



December 29, 2023

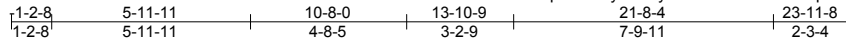
<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job J0923-5140	Truss A5	Truss Type ROOF SPECIAL	Qty 2	Ply 1	Precision/64 Liberty Meadows/Harnett Job Reference (optional)	162780838
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Comtech, Inc. Fayetteville, NC - 28314,

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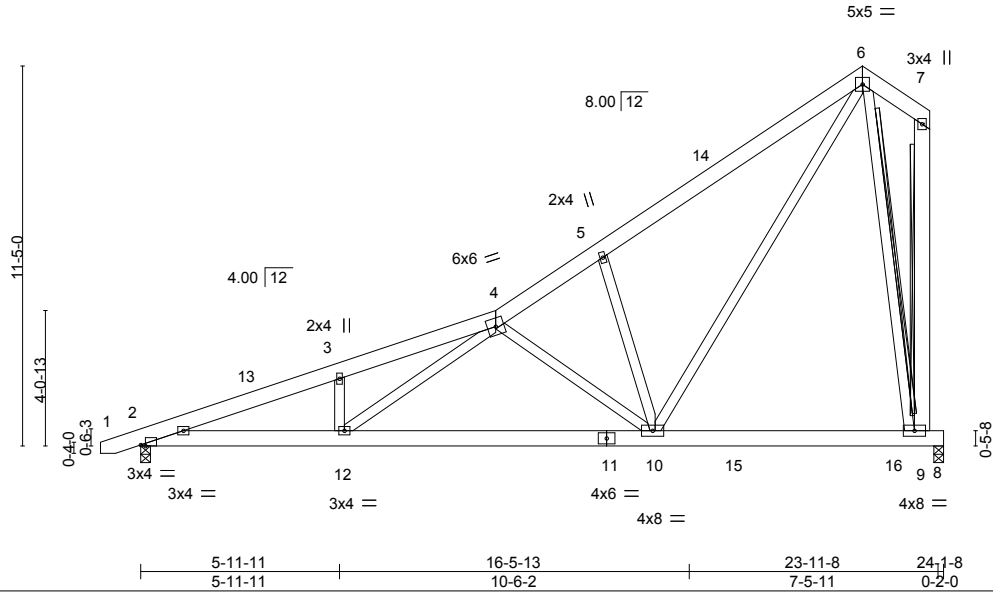


Plate Offsets (X,Y)-- [2:0-1-11,Edge]						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl L/d
TCLL 20.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	-0.14 9-10	>999 360
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.22 9-10	>999 240
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.76	Horz(CT)	0.03 8	n/a n/a
BCDL 10.0	Code IRC2015/TP12014		Matrix-S	Wind(LL)	0.06 9-10	>999 240
						PLATES GRIP
						MT20 244/190
						Weight: 206 lb FT = 20%

LUMBER-	BRACING-	
TOP CHORD 2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 5-0-2 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 7-9: 2x6 SP No.1	WEBS	T-Brace: 2x4 SPF No.2 - 6-9, 7-9 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. (size) 8=0-3-8, 2=0-3-8
 Max Horz 2=338(LC 12)
 Max Uplift 8=-142(LC 12), 2=-46(LC 12)
 Max Grav 8=1050(LC 19), 2=1022(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2278/165, 3-4=-2258/240, 4-5=-1093/63, 5-6=-1111/199
 BOT CHORD 2-12=-460/2096, 10-12=-356/1526
 WEBS 6-9=-884/325, 3-12=-296/184, 4-12=-139/720, 6-10=-276/1321, 5-10=-471/284, 4-10=-780/126

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) 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) -0-11-13 to 3-5-0, Interior(1) 3-5-0 to 21-8-4, Exterior(2) 21-8-4 to 23-5-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=1b) 8=142.
 - 6) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

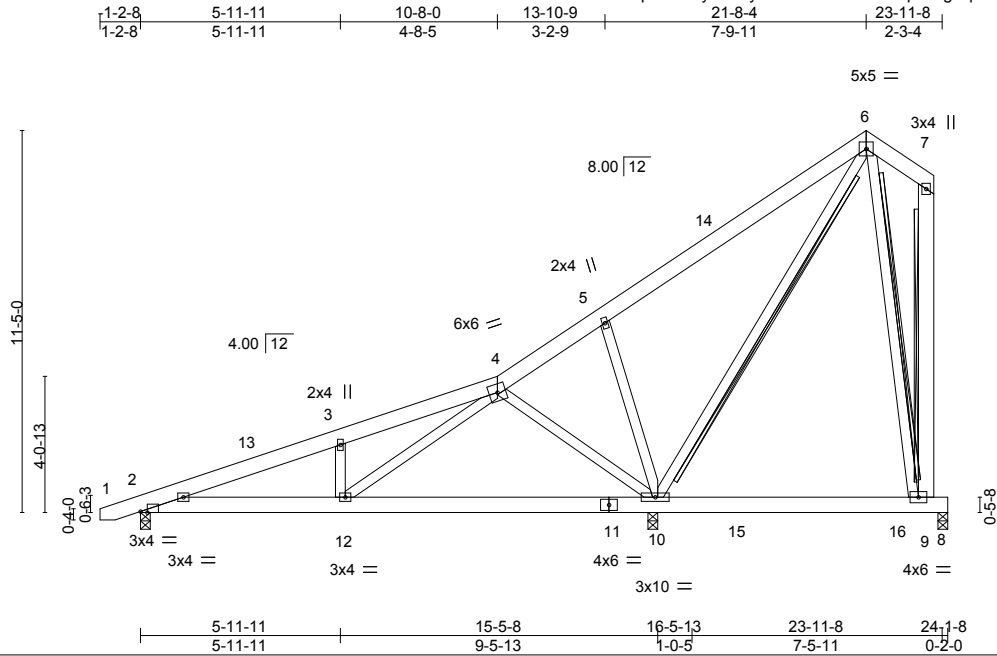


Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Harnett	162780839
J0923-5140	A6	ROOF SPECIAL	1	1		
Job Reference (optional)						

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Scale = 1:68.9

Plate Offsets (X,Y)--	[2:0-2-7,Edge]								
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 0.25	Vert(LL)	-0.09	9-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.12	9-10	>888		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.53	Horz(CT)	0.01	8	n/a		
BCDL 10.0	Code IRC2015/TP12014		Matrix-S	Wind(LL)	0.02	12	>999		
								Weight: 206 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 end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 7-9: 2x6 SP No.1	WEBS	T-Brace: 2x4 SPF No.2 - 6-9, 6-10, 7-9 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.	(size) 8=0-3-8, 10=0-3-8, 2=0-3-8 Max Horz 2=338(LC 12) Max Uplift 8=-53(LC 12), 10=-139(LC 12), 2=-91(LC 8) Max Grav 8=195(LC 19), 10=1343(LC 2), 2=551(LC 23)
FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-899/70, 3-4=-891/133, 4-5=-203/378, 5-6=-95/455 BOT CHORD 2-12=-227/797 WEBS 3-12=-334/191, 4-12=-155/811, 6-10=-601/64, 5-10=-475/285, 4-10=-398/91

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) 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) -0-11-13 to 3-5-0, Interior(1) 3-5-0 to 21-8-4, Exterior(2) 21-8-4 to 23-5-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2 except (jt=lb) 10=139.
 - 6) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

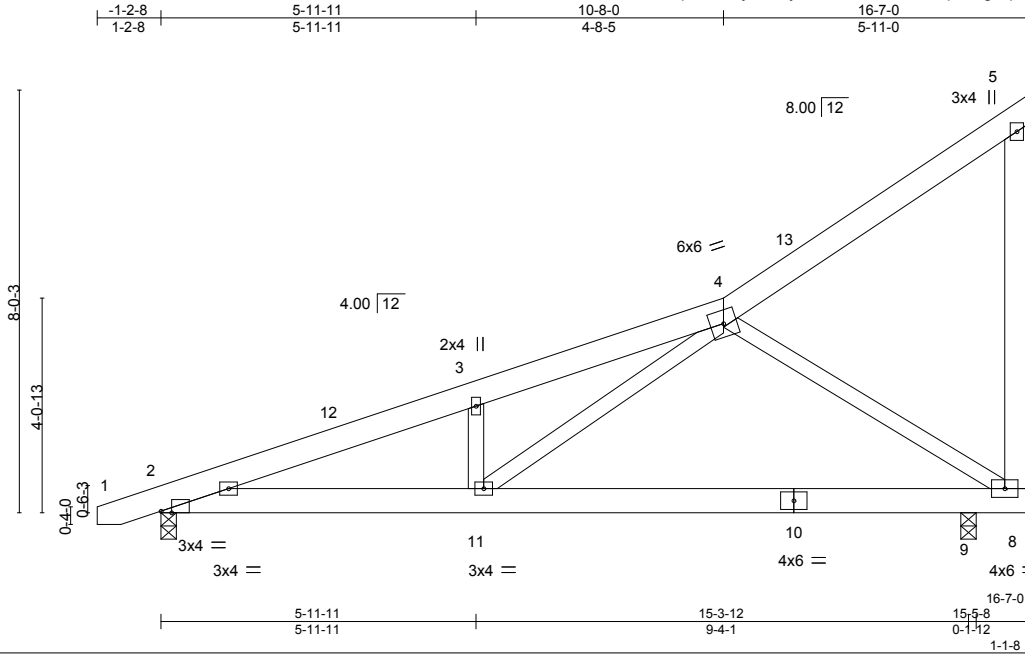


Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Harnett	162780840
J0923-5140	A7	ROOF SPECIAL	1	1	Job Reference (optional)	

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Scale = 1:43.7

Plate Offsets (X,Y)-- [2:0-2-7,Edge]		LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.05	9-11	>999	360	MT20	244/190			
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.09	9-11	>999	240					
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.01	9	n/a	n/a					
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.03	2-11	>999	240			Weight: 121 lb FT = 20%		

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6'-0" oc purlins, except end verticals.
BOT CHORD	2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10'-0" oc bracing.
WEBS	2x4 SP No.2 *Except* 5-8: 2x6 SP No.1		

REACTIONS. (size) 2=0-3-8, 9=0-3-8
 Max Horz 2=251(LC 12)
 Max Uplift 2=-74(LC 8), 9=-133(LC 12)
 Max Grav 2=673(LC 1), 9=710(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1212/13, 3-4=-1196/77
 BOT CHORD 2-11=-188/1092, 9-11=-146/547, 8-9=-146/547
 WEBS 3-11=-307/180, 4-11=-71/687, 4-8=-665/187

- NOTES-**
- 1) 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) -0-11-13 to 3-5-0, Interior(1) 3-5-0 to 16-7-0 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-0" wide will fit between the bottom chord and any other members.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 9=133.

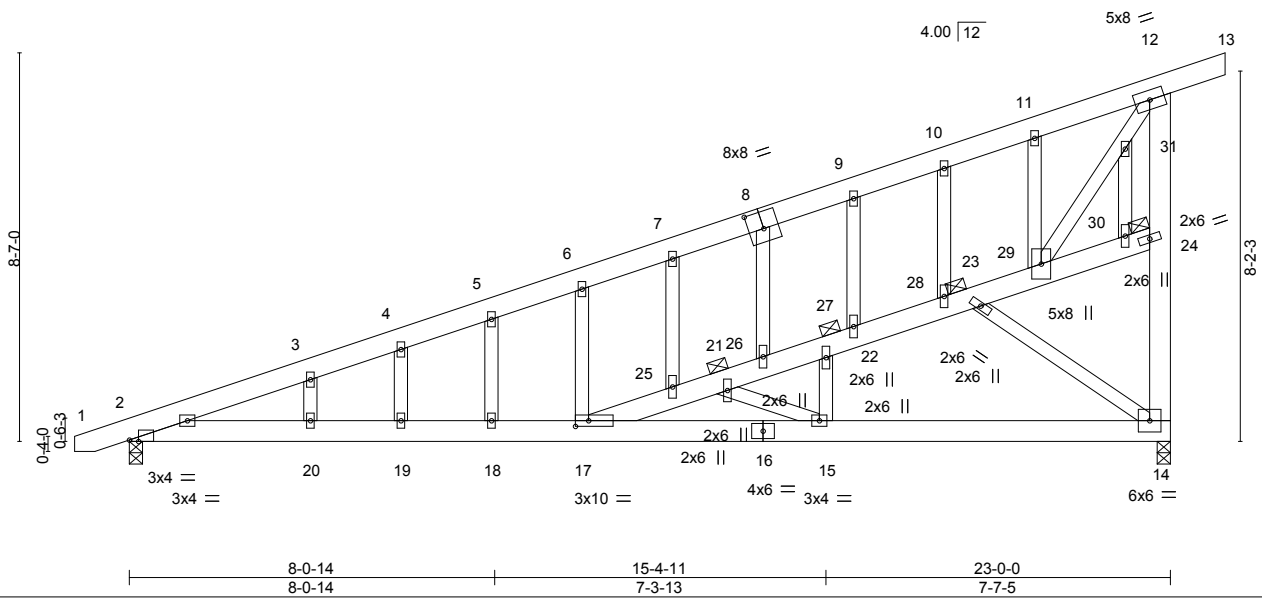
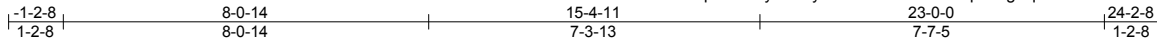


Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Harnett	62780841
J0923-5140	B1SG	GABLE	1	1		

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Scale = 1:50.9

Plate Offsets (X,Y)--	[2:0-2-7,Edge], [8:0-4-0,0-4-8], [17:0-3-8,0-1-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.54	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.50	Vert(LL) -0.20 18-19 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.89	Vert(CT) -0.40 18-19 >678 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 14 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.26 18-19 >999 240	Weight: 220 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-10-12 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	JOINTS 1 Brace at Jt(s): 21, 22, 23, 24
OTHERS 12-14,17-24: 2x6 SP No.1	
2x4 SP No.2	

REACTIONS. (size) 14=0-3-8, 2=0-3-8
 Max Horz 2=420(LC 9)
 Max Uplift 14=-337(LC 12), 2=-280(LC 8)
 Max Grav 14=992(LC 1), 2=972(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1715/430, 3-4=-1650/468, 4-5=-1624/489, 5-6=-1606/517, 6-7=-1656/576,
 7-8=-1674/614, 8-9=-1685/659, 9-10=-1607/670, 10-11=-1520/658, 11-12=-1728/785,
 14-24=-1391/722, 12-24=-1494/820
 BOT CHORD 2-20=-745/1548, 19-20=-745/1548, 18-19=-745/1548, 17-18=-745/1548, 14-15=-741/453
 WEBS 15-21=-822/381, 15-22=-40/481, 14-23=-422/848, 17-25=-713/1630, 21-25=-735/1685,
 21-26=-977/2304, 22-26=-1012/2356, 22-27=-1015/2484, 27-28=-1023/2441,
 23-28=-1014/2393, 23-29=-842/1886, 6-17=-279/192, 11-29=-776/373, 29-31=-1287/2715,
 12-31=-1201/2533

- NOTES-**
- 1) 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) zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) All plates are 2x4 MT20 unless otherwise indicated.
 - 4) Gable studs spaced at 2-0-0 oc.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=337, 2=280.



Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Hamett	162780842
J0923-5140	B2	MONOPITCH	5	1		

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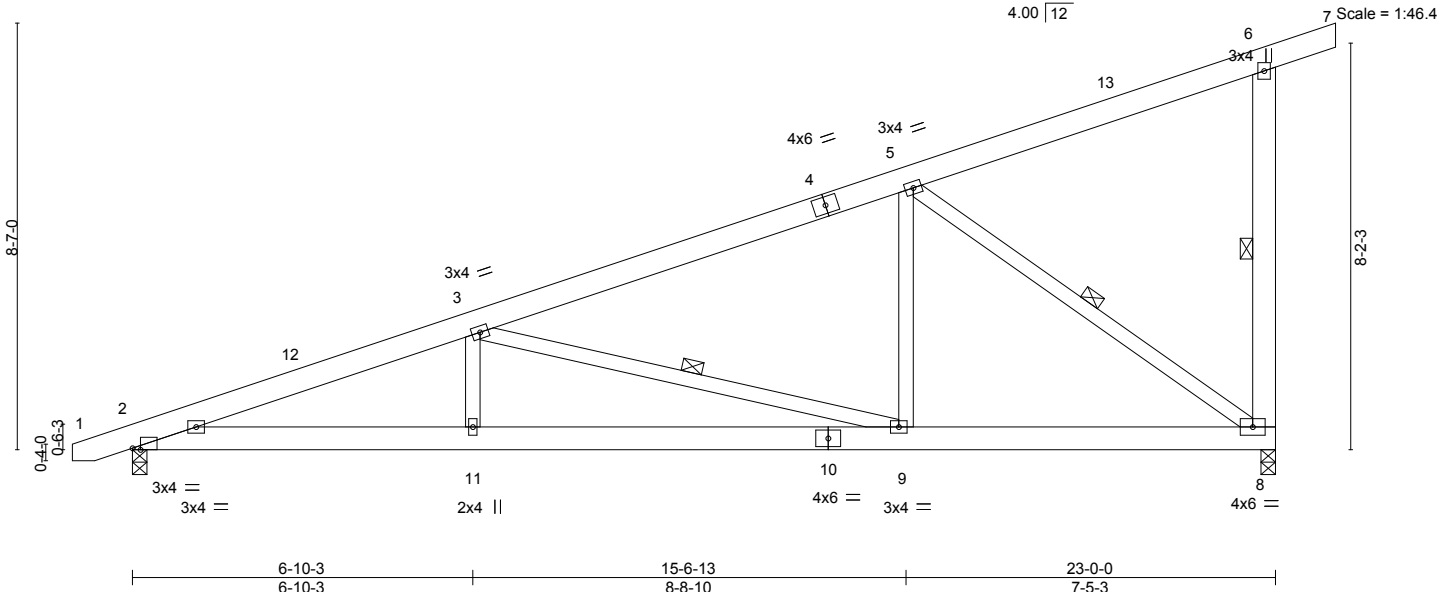
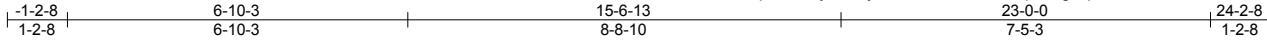


Plate Offsets (X,Y)--	[2:0-1-15,Edge]				
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) l/defl L/d
TCLL 20.0	Plate Grip DOL 1.15		TC 0.26	Vert(LL) -0.06 9-11 >999	360
TCDL 10.0	Lumber DOL 1.15		BC 0.32	Vert(CT) -0.14 9-11 >999	240
BCLL 0.0 *	Rep Stress Incr YES		WB 0.41	Horz(CT) 0.03 8 n/a n/a	
BCDL 10.0	Code IRC2015/TP12014		Matrix-S	Wind(LL) 0.05 9-11 >999	240
					PLATES MT20
					GRIP 244/190
					Weight: 169 lb FT = 20%

LUMBER-		BRACING-	
TOP CHORD 2x6 SP No.1		TOP CHORD	Structural wood sheathing directly applied or 5-2-15 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1		BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*		WEBS	1 Row at midpt 6-8, 3-9, 5-8
6-8: 2x6 SP No.1			

REACTIONS. (size) 8=0-3-8, 2=0-3-8
 Max Horz 2=318(LC 9)
 Max Uplift 8=-141(LC 12), 2=-119(LC 8)
 Max Grav 8=992(LC 1), 2=972(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2111/325, 3-5=-1065/184, 6-8=-263/200
 BOT CHORD 2-11=-509/1941, 9-11=-509/1941, 8-9=-293/936
 WEBS 3-11=0/318, 3-9=-1040/248, 5-9=0/560, 5-8=-1141/253

- NOTES-**
- 1) 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) -0-11-13 to 3-5-0, Interior(1) 3-5-0 to 24-2-8 zone; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=141, 2=119.



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

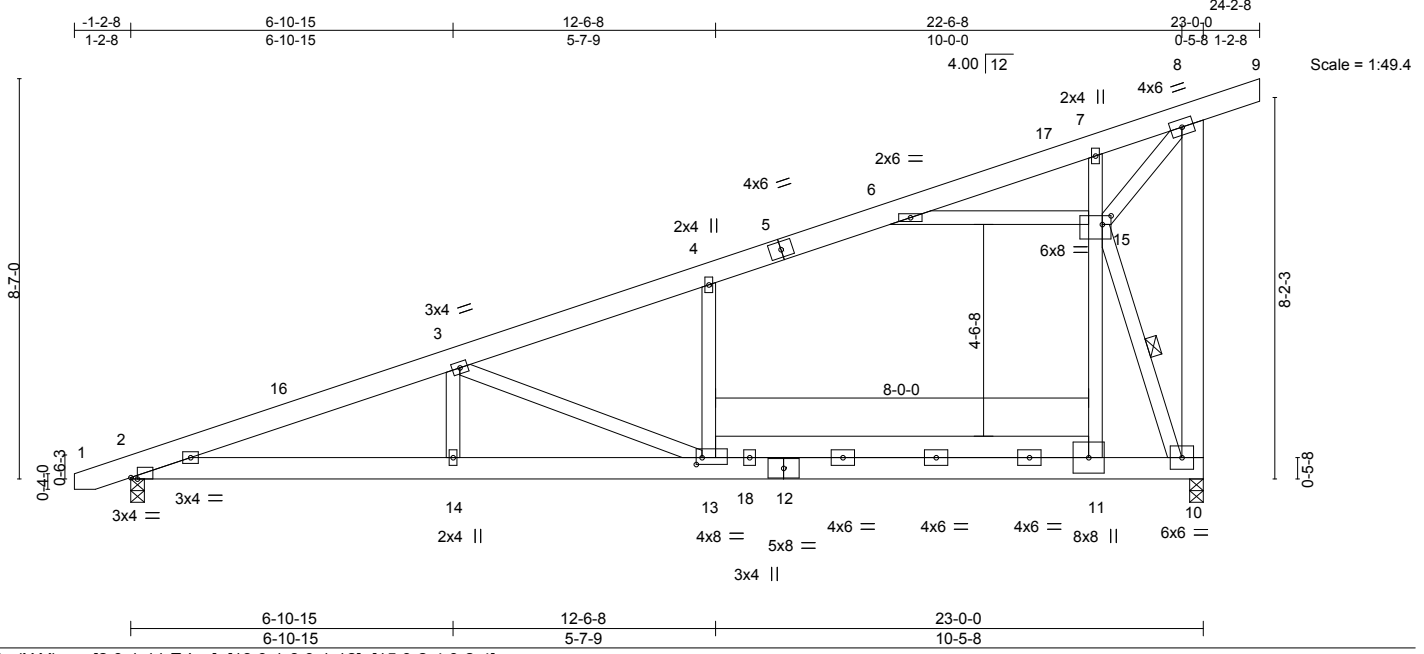
ENGINEERING BY
TRENCO
 A MiTek Affiliate

818 Soundside Road
 Edenton, NC 27932

Job J0923-5140	Truss B2-A	Truss Type MONOPIITCH	Qty 6	Ply 1	Precision/64 Liberty Meadows/Harnett Job Reference (optional)	162780843
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:12 2023 Page 1
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.39	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.51	Vert(LL) -0.24 13-14 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.76	Vert(CT) -0.47 13-14 >582 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 10 n/a n/a		
	Code IRC2015/TP12014		Wind(LL) 0.19 13-14 >999 240	Weight: 197 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP 2400F 2.0E *Except* 11-13: 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 8-10: 2x6 SP No.1	WEBS 1 Row at midpt 10-15

REACTIONS. (size) 10=0-3-8, 2=0-3-8
 Max Horz 2=318(LC 9)
 Max Uplift 10=-141(LC 12), 2=-119(LC 8)
 Max Grav 10=1116(LC 2), 2=972(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2197/341, 3-4=-1124/166, 4-6=-922/196, 6-7=-441/997, 7-8=-374/1005,
 8-10=-141/707
 BOT CHORD 2-14=-524/2035, 13-14=-524/2035, 11-13=-293/939, 10-11=-282/912
 WEBS 3-14=0/400, 3-13=-1266/276, 4-13=0/376, 11-15=-96/1082, 6-15=-1868/462,
 10-15=-2520/545, 8-15=-1499/434

- NOTES-**
- 1) 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) -0-11-13 to 3-5-0, Interior(1) 3-5-0 to 24-2-8 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=141, 2=119.



Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Harnett	162780844
J0923-5140	B3SG	GABLE	1	1		

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Job Reference (optional)

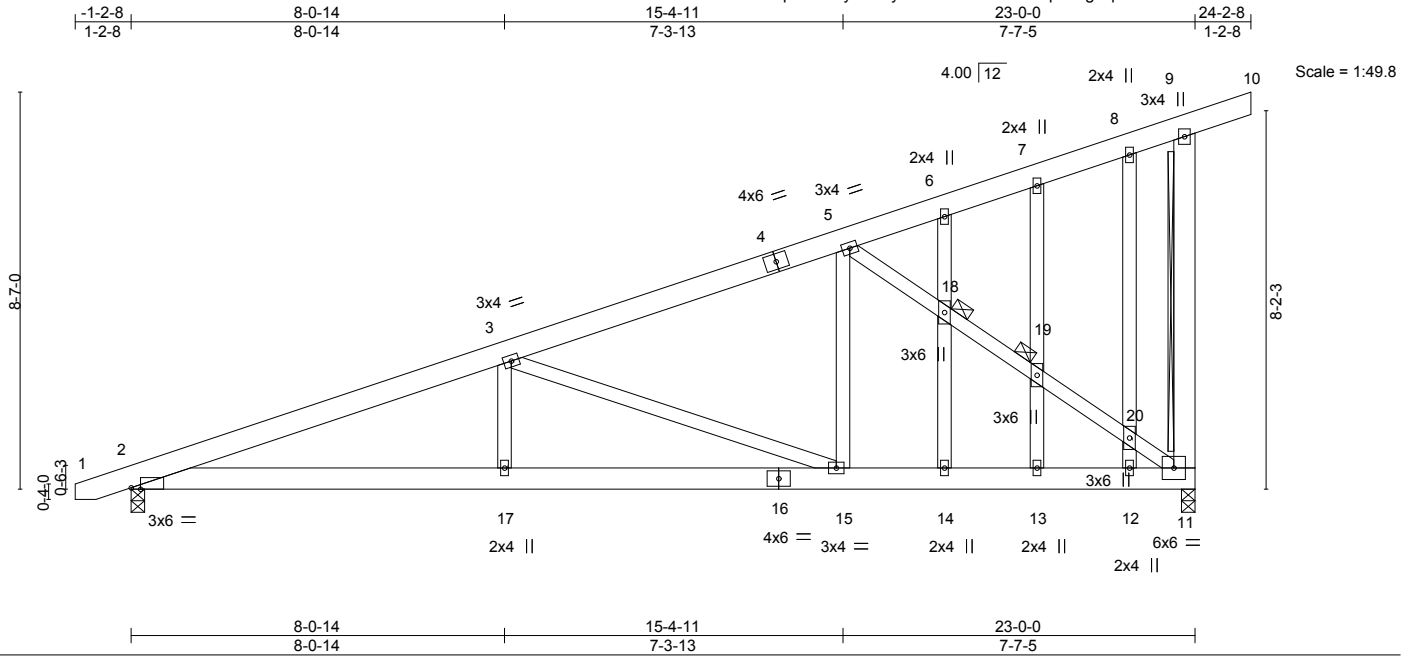


Plate Offsets (X,Y)--	[2:0-2-7,Edge]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.28	Vert(LL) -0.06 17 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.35	Vert(CT) -0.12 2-17 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.98	Horz(CT) 0.03 11 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.07 17 >999 240		
				Weight: 194 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-1-8 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 8-5-15 oc bracing.
WEBS 2x4 SP No.2 *Except* 9-11: 2x6 SP No.1	WEBS T-Brace: 2x4 SPF No.2 - 9-11 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.
OTHERS 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 18, 19

REACTIONS. (size) 11=0-3-8, 2=0-3-8
 Max Horz 2=420(LC 9)
 Max Uplift 11=337(LC 12), 2=280(LC 8)
 Max Grav 11=992(LC 1), 2=972(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1986/582, 3-5=-1053/335, 9-11=-225/255
 BOT CHORD 2-17=-853/1811, 15-17=-853/1811, 14-15=-476/932, 13-14=-476/932, 12-13=-476/932,
 11-12=-476/932
 WEBS 3-17=0/326, 3-15=-938/402, 5-15=-97/533, 5-18=-1125/472, 18-19=-1101/462,
 19-20=-1112/468, 11-20=-1139/477

NOTES-

- 1) 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) zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable studs spaced at 2-0-0 oc.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=337, 2=280.
- 7) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



December 29, 2023

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

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818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Hamett	162780845
J0923-5140	B4	MONOPIITCH	3	1		

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Job Reference (optional)

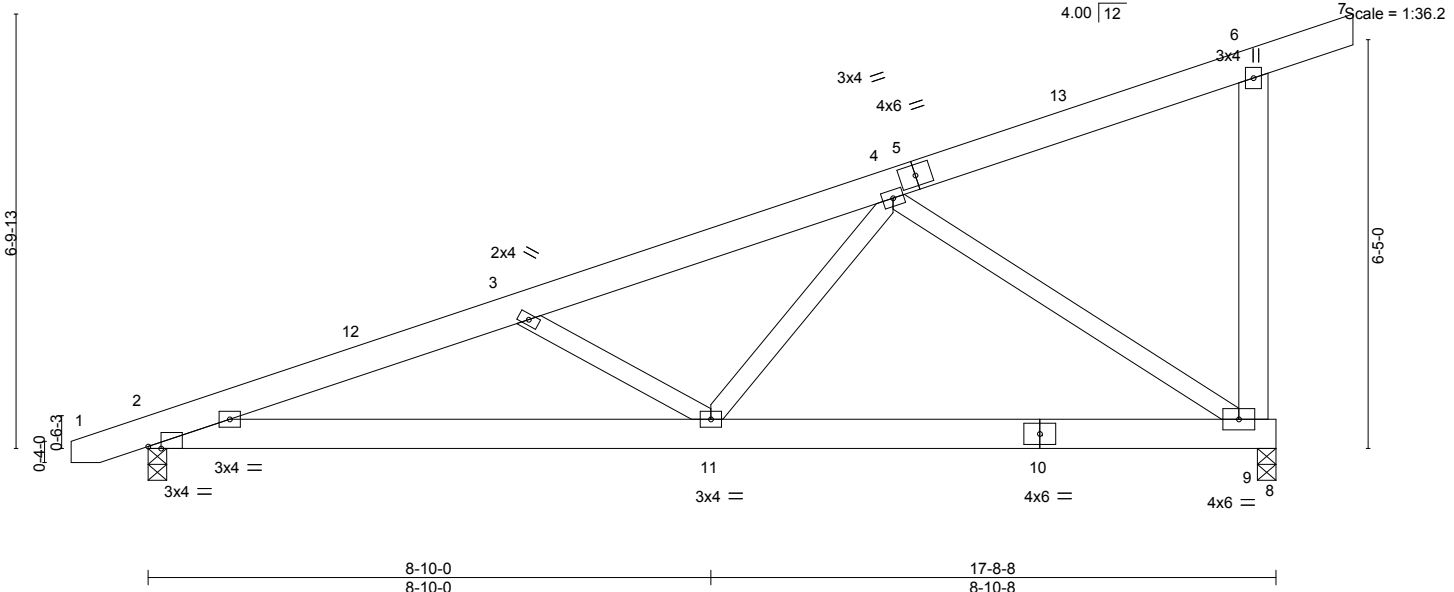
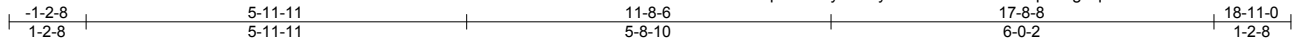


Plate Offsets (X,Y)--	[2:0-2-7,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	-0.04	2-11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.29	Vert(CT)	-0.08	2-11	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.64	Horz(CT)	0.02	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.02	11	>999	Weight: 125 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 end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 6-9: 2x6 SP No.1	

REACTIONS. (size) 9=0-3-8, 2=0-3-8
 Max Horz 2=250(LC 9)
 Max Uplift 9=-111(LC 12), 2=-99(LC 8)
 Max Grav 9=791(LC 1), 2=754(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1447/263, 3-4=-1085/145
 BOT CHORD 2-11=-404/1331, 9-11=-248/677
 WEBS 3-11=-417/223, 4-11=-12/578, 4-9=-802/219

- NOTES-**
- 1) 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) -0-11-13 to 3-5-0, Interior(1) 3-5-0 to 18-11-0 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 9=111.

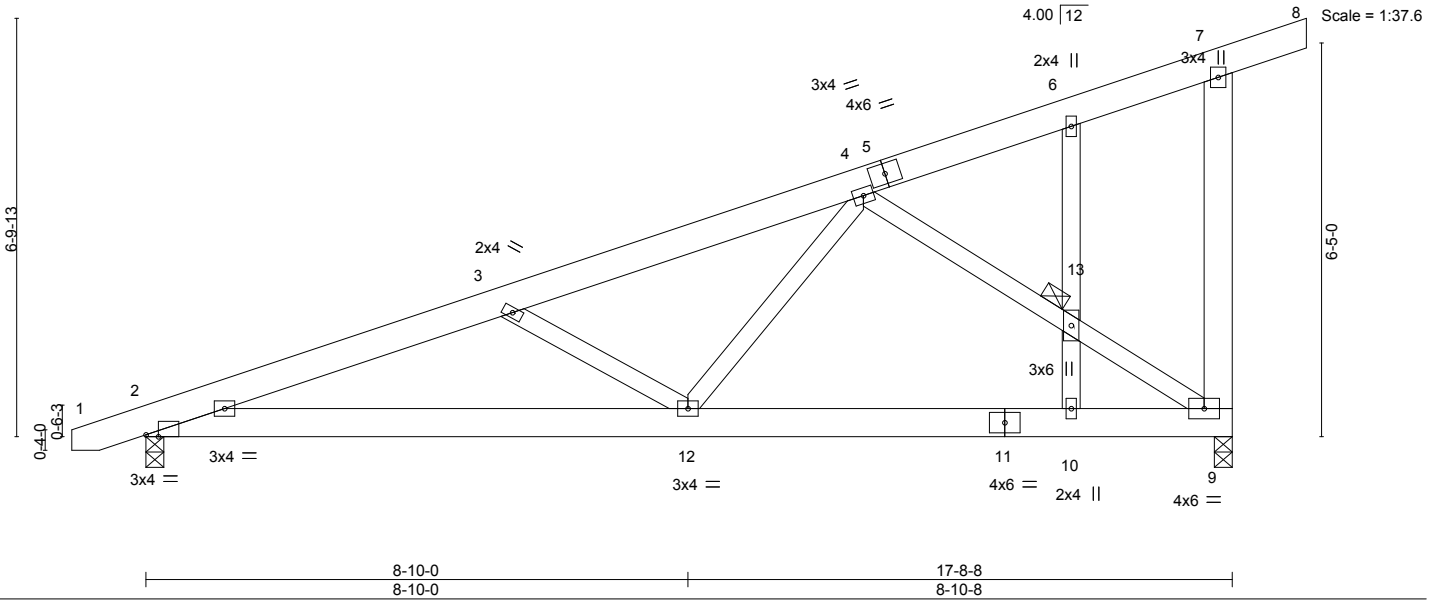
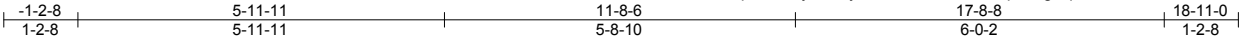


Job J0923-5140	Truss B5SG	Truss Type GABLE	Qty 1	Ply 1	Precision/64 Liberty Meadows/Harnett Job Reference (optional)	162780846
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8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:16 2023 Page 1

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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)	-0.04	2-12	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.28	Vert(CT)	-0.09	2-12	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.02	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.03	12	>999	Weight: 132 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 end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 9-4-4 oc bracing.
WEBS 2x4 SP No.2 *Except*	JOINTS 1 Brace at Jt(s): 13
OTHERS 2x4 SP No.2	

REACTIONS. (size) 9=0-3-8, 2=0-3-8
 Max Horz 2=330(LC 9)
 Max Uplift 9=269(LC 12), 2=226(LC 8)
 Max Grav 9=781(LC 1), 2=760(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1462/479, 3-4=-1102/301, 7-9=-254/200
 BOT CHORD 2-12=-708/1344, 10-12=-377/698, 9-10=-377/698
 WEBS 3-12=-412/325, 4-12=-94/538, 4-13=-822/367, 9-13=-818/363

- NOTES-**
- 1) 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) zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) Gable studs spaced at 2-0-0 oc.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=269, 2=226.



December 29, 2023

Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Hamett	162780847
J0923-5140	B6	MONOPITCH	8	1		

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8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:17 2023 Page 1
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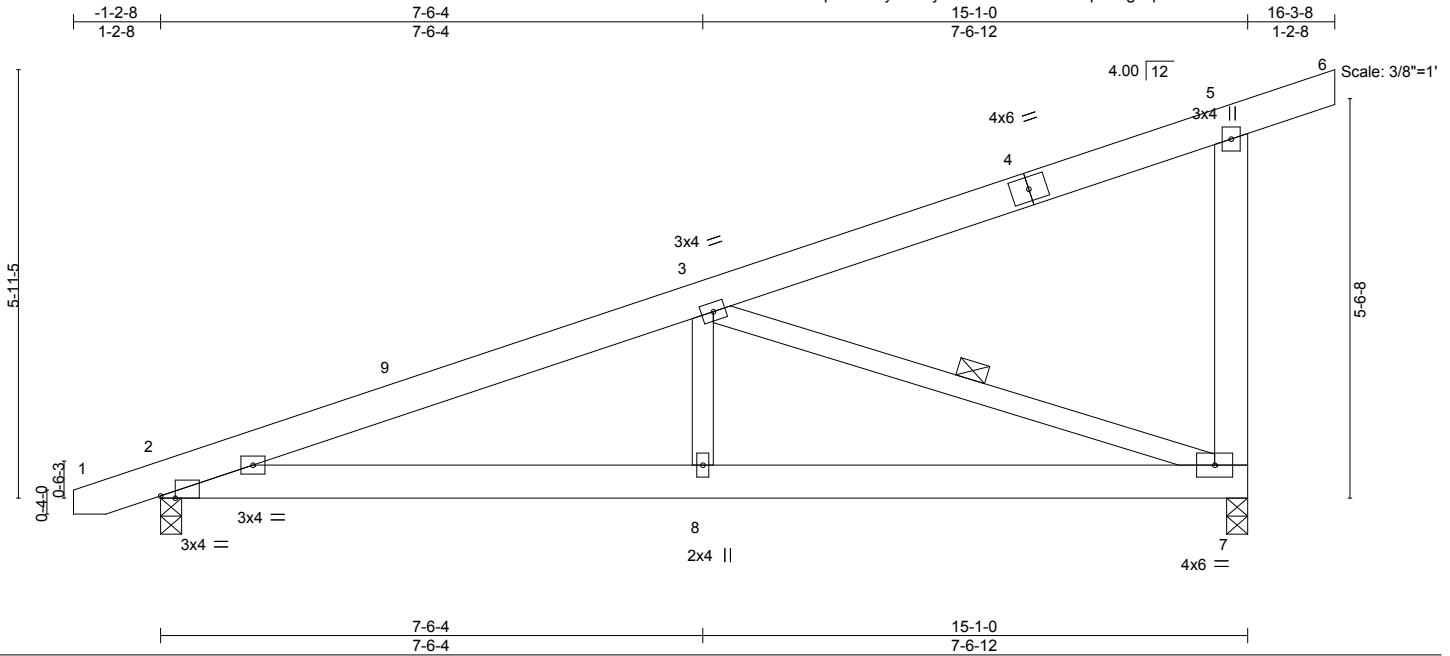


Plate Offsets (X,Y)-- [2:0-2-7,Edge]		7-6-4 7-6-4		15-1-0 7-6-12			
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.21	Vert(LL) -0.03 2-8 >999 360	MT20	244/190		
TCDL 10.0	Lumber DOL 1.15	BC 0.22	Vert(CT) -0.06 2-8 >999 240	Weight: 103 lb	FT = 20%		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.28	Horz(CT) 0.01 7 n/a n/a				
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.02 2-8 >999 240				

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2 *Except* 5-7: 2x6 SP No.1	WEBS	1 Row at midpt 3-7

REACTIONS. (size) 7=0-3-8, 2=0-3-8
 Max Horz 2=217(LC 9)
 Max Uplift 7=-101(LC 12), 2=-90(LC 8)
 Max Grav 7=676(LC 1), 2=654(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1095/159, 5-7=-279/213
 BOT CHORD 2-8=-290/975, 7-8=-290/975
 WEBS 3-8=0/336, 3-7=-999/231

- NOTES-**
- 1) 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) -0-11-13 to 3-5-0, Interior(1) 3-5-0 to 16-3-8 zone; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 7=101.



December 29, 2023

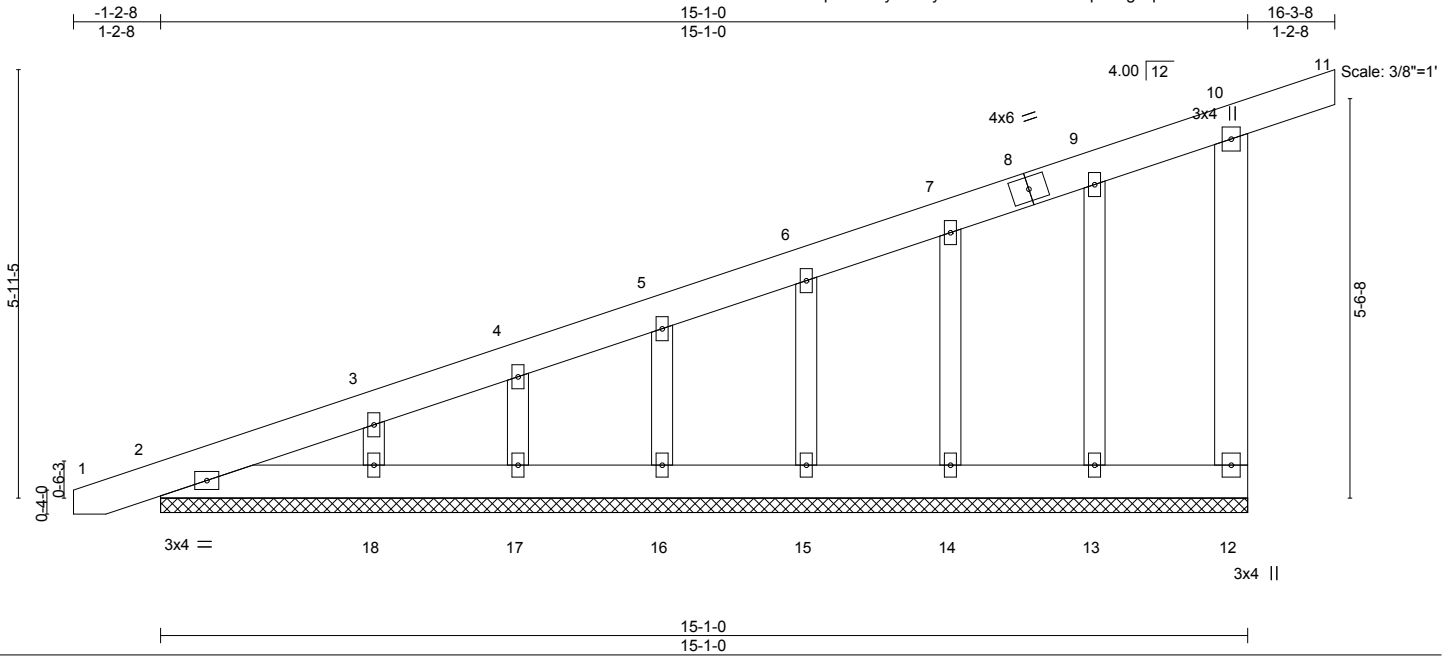
<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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/TP1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Harnett	162780848
J0923-5140	B7GE	GABLE	1	1	Job Reference (optional)	

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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 0.07	Vert(LL)	-0.00	10	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	11	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	-0.00	12	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 110 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 end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x6 SP No.1	
OTHERS 2x4 SP No.2	

REACTIONS. All bearings 15-1-0.
 (lb) - Max Horz 2=285(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 13, 14, 15, 16, 17, 18 except 12=106(LC 9)
 Max Grav All reactions 250 lb or less at joint(s) 12, 2, 13, 14, 15, 16, 17, 18

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-352/183, 3-4=-298/159, 4-5=-263/148

- NOTES-**
- 1) 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) zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) All plates are 2x4 MT20 unless otherwise indicated.
 - 4) Gable requires continuous bottom chord bearing.
 - 5) Gable studs spaced at 2-0-0 oc.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * 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.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 13, 14, 15, 16, 17, 18 except (jt=lb) 12=106.



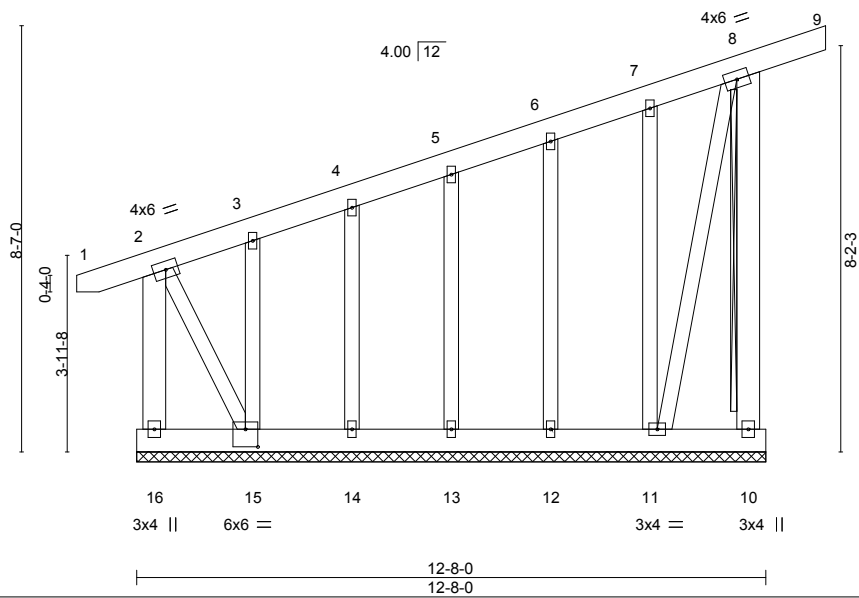
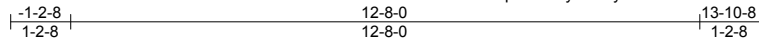
December 29, 2023

Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Hamett	162780849
J0923-5140	C1GE	MONOPITCH SUPPORTED	1	1		

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8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:19 2023 Page 1

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Scale = 1:46.4

Plate Offsets (X,Y)--	[15:0-3-0,0-4-4]
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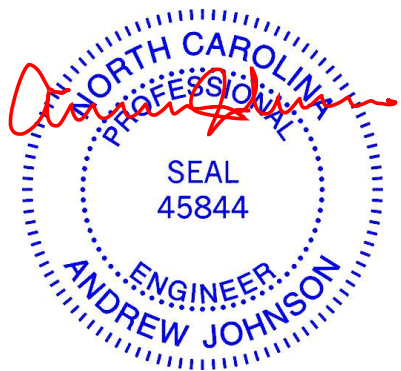
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	-0.00	8	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	0.00	8	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.19	Horz(CT)	-0.00	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 146 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 end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x6 SP No.1 *Except*	WEBS T-Brace: 2x4 SPF No.2 - 8-10
2-15,8-11: 2x4 SP No.2	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.
OTHERS 2x4 SP No.2	Brace must cover 90% of web length.

REACTIONS. All bearings 12-8-0.
 (lb) - Max Horz 16=398(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 13, 14, 12, 11 except 10=-232(LC 9), 15=-470(LC 9)
 Max Grav All reactions 250 lb or less at joint(s) 10, 13, 14, 15, 12, 11 except 16=485(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-16=-679/388, 2-3=-295/173, 3-4=-264/169, 8-10=-197/301
 BOT CHORD 15-16=-532/379
 WEBS 2-15=-496/797

- NOTES-**
- 1) 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) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) All plates are 2x4 MT20 unless otherwise indicated.
 - 4) Gable requires continuous bottom chord bearing.
 - 5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 6) Gable studs spaced at 2-0-0 oc.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * 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.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 14, 12, 11 except (jt=lb) 10=232, 15=470.
 - 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



Job J0923-5140	Truss D1GE	Truss Type GABLE	Qty 1	Ply 1	Precision/64 Liberty Meadows/Hamett Job Reference (optional)	162780850
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8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:20 2023 Page 1

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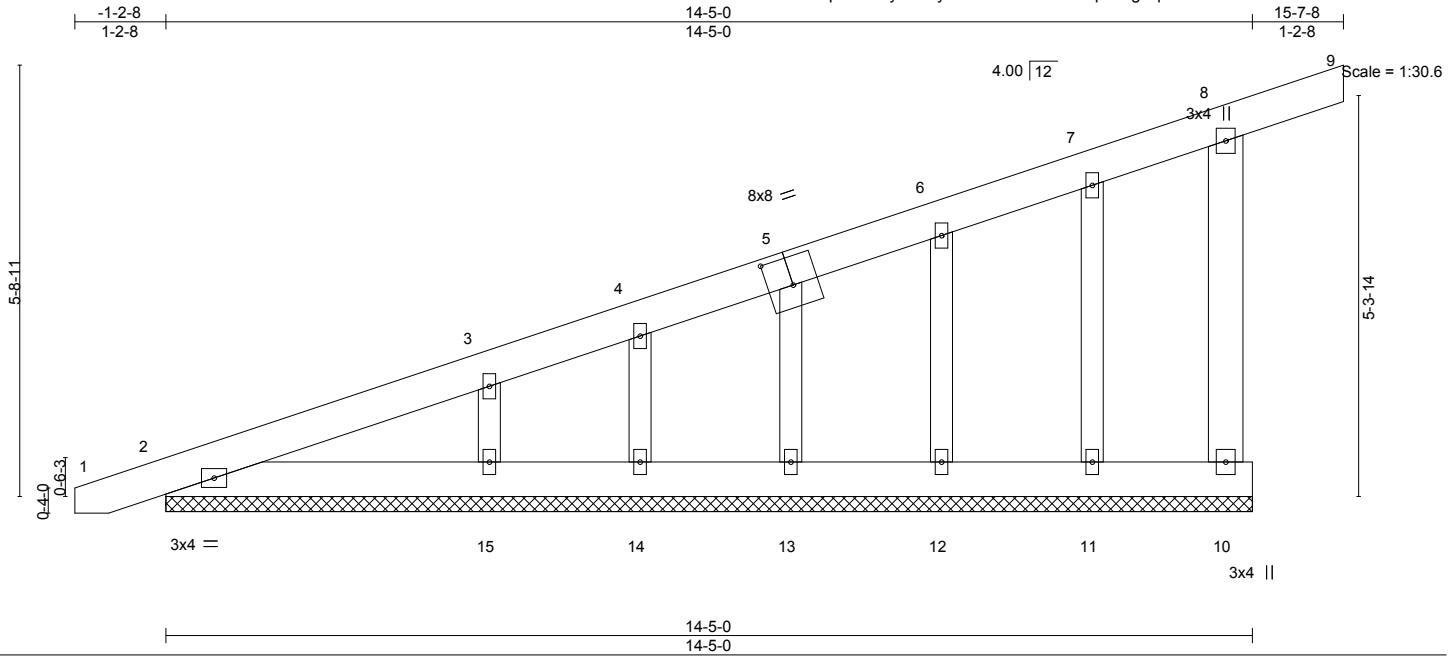


Plate Offsets (X,Y)--	[5:0-4-0,0-4-8]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) 0.00 8 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) -0.00 9 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) -0.00 10 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 103 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 end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x6 SP No.1	
OTHERS 2x4 SP No.2	

REACTIONS. All bearings 14-5-0.
 (lb) - Max Horz 2=274(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 11, 12, 13, 14 except 10=-115(LC 9), 15=-116(LC 12)
 Max Grav All reactions 250 lb or less at joint(s) 10, 2, 11, 12, 13, 14 except 15=334(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-329/177, 3-4=-252/136

- NOTES-**
- 1) 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) zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) All plates are 2x4 MT20 unless otherwise indicated.
 - 4) Gable requires continuous bottom chord bearing.
 - 5) Gable studs spaced at 2-0-0 oc.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * 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.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 11, 12, 13, 14 except (jt=lb) 10=115, 15=116.



Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Harnett	162780851
J0923-5140	D2	MONOPITCH GIRDER	1	2	Job Reference (optional)	

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8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:22 2023 Page 1
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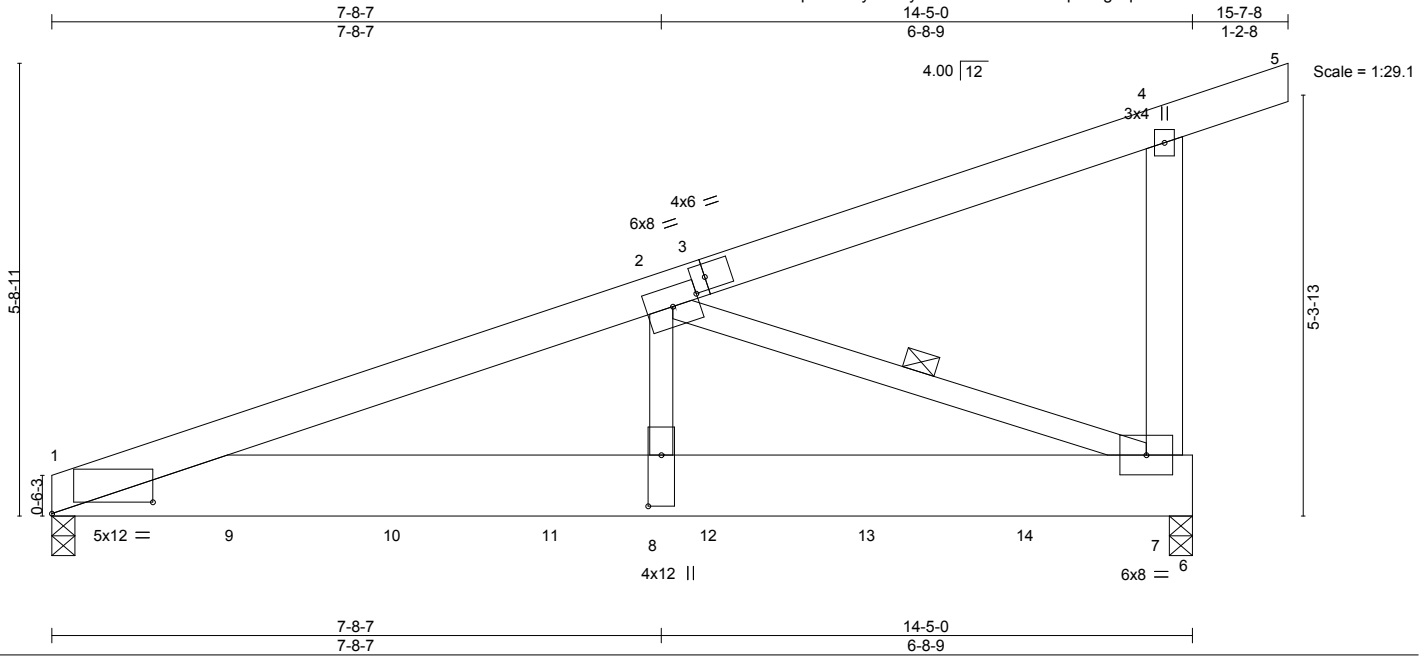


Plate Offsets (X,Y)--	[1:1-3-5,0-1-12], [3:0-2-0,0-2-0], [8:0-7-12,0-2-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.41	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.55	Vert(LL) -0.11 1-8 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.85	Vert(CT) -0.21 1-8 >797 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.03 7 n/a n/a		
	Code IRC2015/TP12014		Wind(LL) 0.07 1-8 >999 240	Weight: 234 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-0-3 oc purlins, except end verticals.
BOT CHORD 2x10 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 4-7: 2x6 SP No.1	WEBS 1 Row at midpt 2-7

REACTIONS. (size) 7=0-3-8, 1=0-3-8
 Max Horz 1=197(LC 5)
 Max Uplift 7=-335(LC 8), 1=-342(LC 4)
 Max Grav 7=5420(LC 2), 1=6557(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-9508/502, 2-4=-272/26, 4-7=-285/103
 BOT CHORD 1-8=-501/9000, 7-8=-501/9000
 WEBS 2-8=-196/5975, 2-7=-9437/567

- 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 0-3-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); end vertical right exposed; 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) 7=335, 1=342.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1567 lb down and 78 lb up at 0-1-12, 1559 lb down and 86 lb up at 2-4-4, 1559 lb down and 86 lb up at 4-4-4, 1559 lb down and 86 lb up at 6-4-4, 1559 lb down and 86 lb up at 8-4-4, and 1559 lb down and 86 lb up at 10-4-4, and 1559 lb down and 86 lb up at 12-4-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-60, 4-5=-60, 1-6=-20



Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job J0923-5140	Truss D2	Truss Type MONOPITCH GIRDER	Qty 1	Ply 2	Precision/64 Liberty Meadows/Hamett Job Reference (optional)	162780851
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8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:22 2023 Page 2
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LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 1=-1474(B) 9=-1466(B) 10=-1466(B) 11=-1466(B) 12=-1466(B) 13=-1466(B) 14=-1466(B)

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Harnett	162780852
J0923-5140	G1SG	GABLE	1	1	Job Reference (optional)	

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6-5-8
6-5-8

-1-2-8
1-2-8

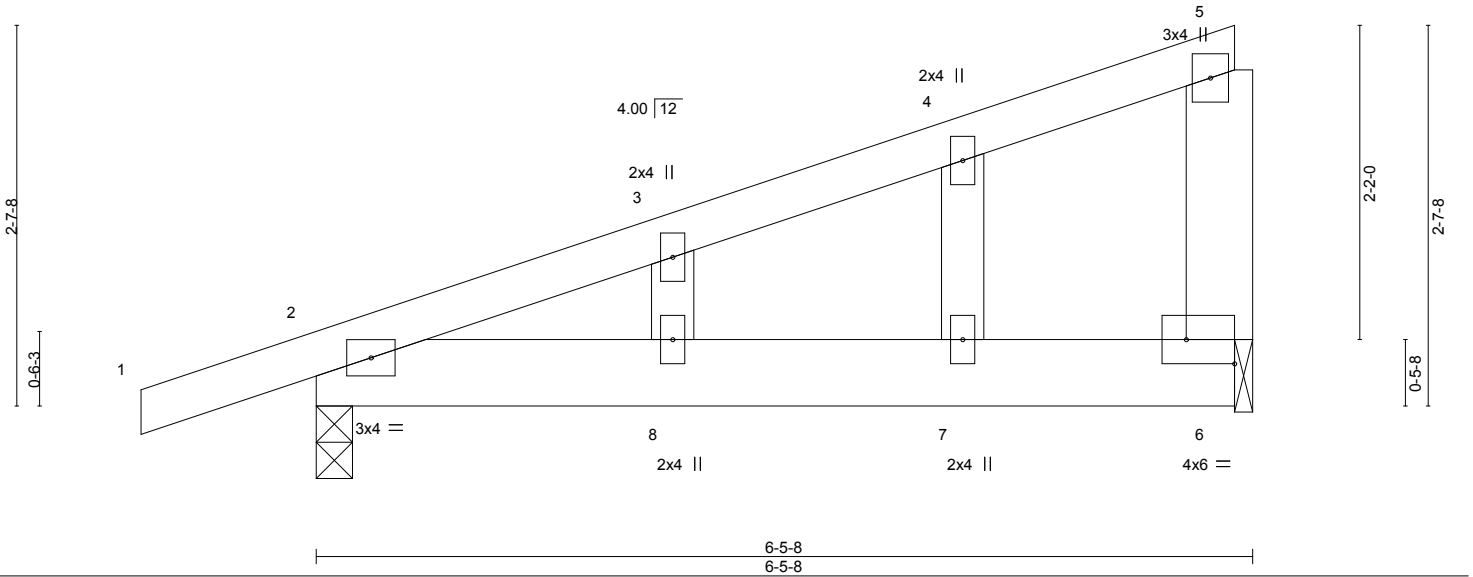


Plate Offsets (X,Y)--	[6:Edge,0-2-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	0.04	7-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	-0.03	7-8	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	-0.00	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 34 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1	
OTHERS 2x4 SP No.2	

REACTIONS. (size) 2=0-3-0, 6=0-1-8
 Max Horz 2=120(LC 8)
 Max Uplift 2=194(LC 8), 6=149(LC 8)
 Max Grav 2=333(LC 1), 6=235(LC 1)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) Gable studs spaced at 2-0-0 oc.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=194, 6=149.



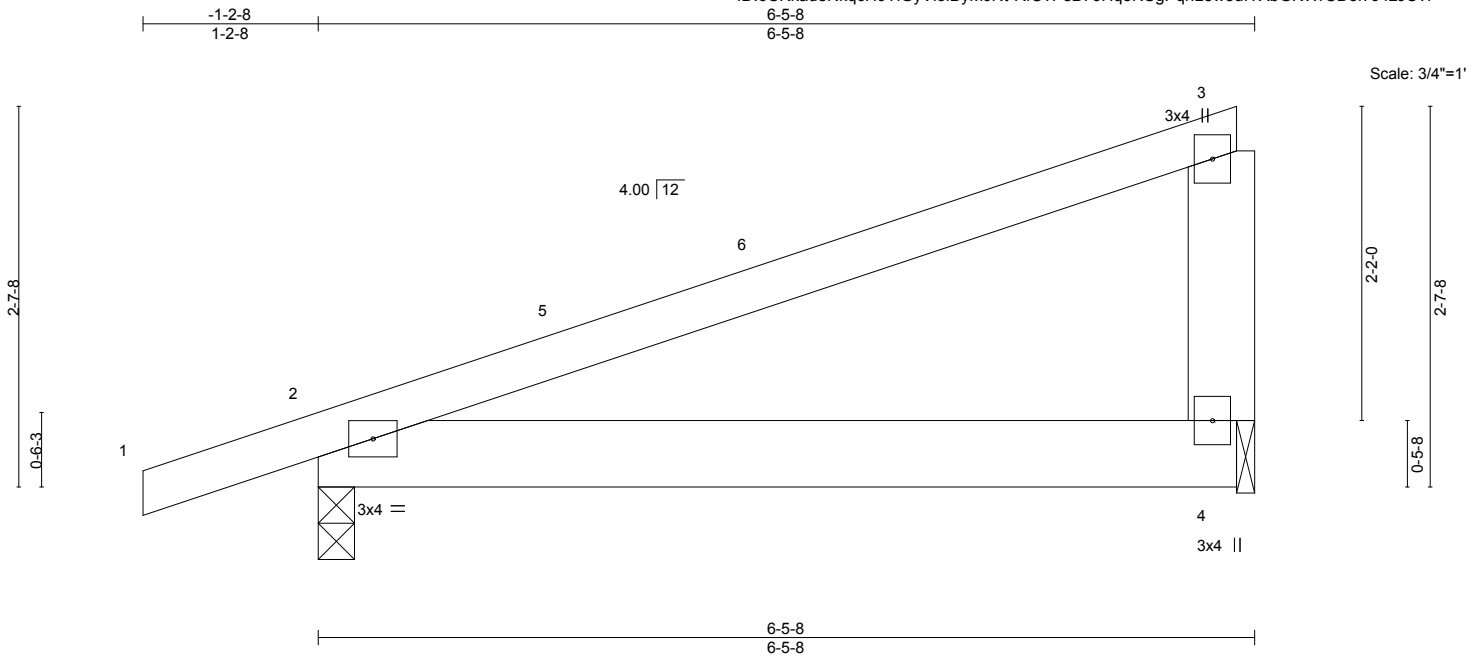
December 29, 2023

Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Harnett	162780853
J0923-5140	G2	Monopitch	3	1	Job Reference (optional)	

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6-5-8
6-5-8



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.50	Vert(LL)	-0.02	2-4	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.15	Vert(CT)	-0.04	2-4	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Wind(LL)	0.04	2-4	>999	Weight: 31 lb	FT = 20%
	Code IRC2015/TPI2014							

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

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

REACTIONS. (size) 2=0-3-0, 4=0-1-8
 Max Horz 2=85(LC 8)
 Max Uplift 2=-135(LC 8), 4=-102(LC 8)
 Max Grav 2=333(LC 1), 4=235(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 6-2-12 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=135, 4=102.



December 29, 2023

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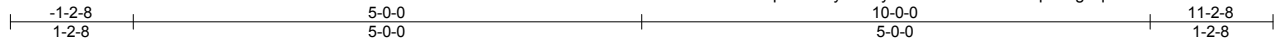
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Harnett	162780854
J0923-5140	H1	GABLE	1	1		

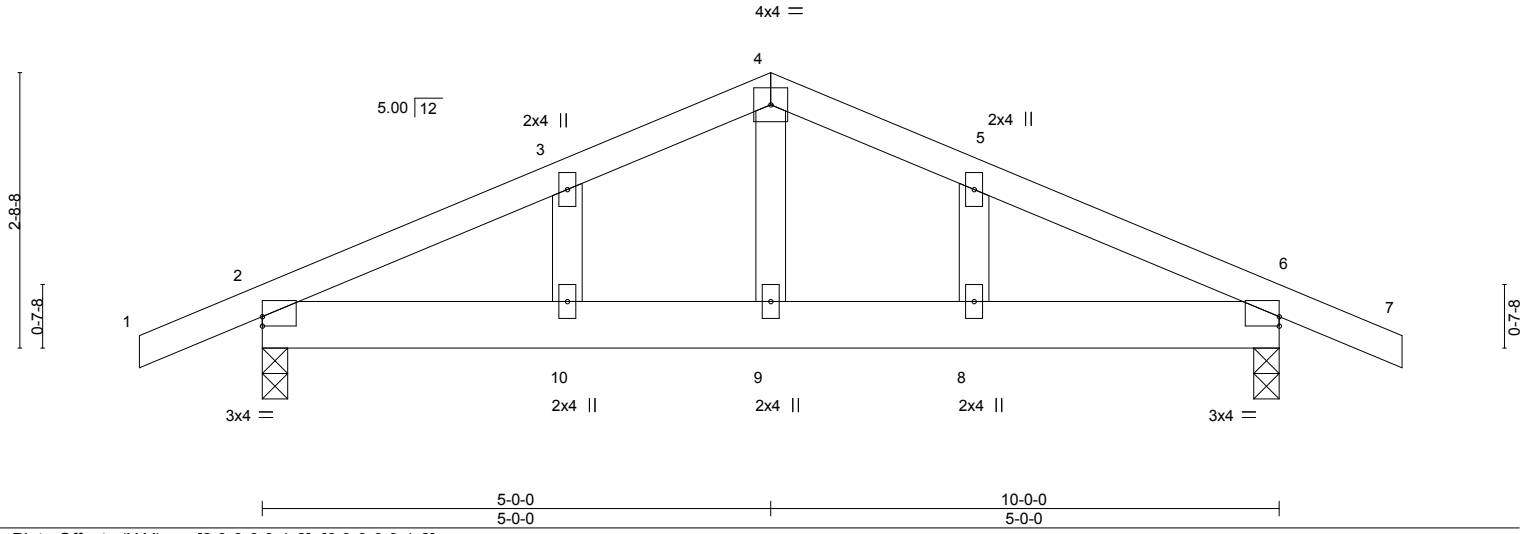
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Scale = 1:22.7



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.16	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.29	Vert(LL) -0.01 10 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Vert(CT) -0.02 10 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.02 8 >999 240	Weight: 50 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 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	
OTHERS 2x4 SP No.2	

REACTIONS. (size) 2=0-3-0, 6=0-3-0
 Max Horz 2=52(LC 12)
 Max Uplift 2=-204(LC 8), 6=-204(LC 9)
 Max Grav 2=470(LC 1), 6=470(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-542/623, 3-4=-499/662, 4-5=-499/662, 5-6=-542/624
 BOT CHORD 2-10=-482/442, 9-10=-482/442, 8-9=-482/442, 6-8=-482/442
 WEBS 4-9=-384/234

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) 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) 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
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) Gable studs spaced at 2-0-0 oc.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=204, 6=204.



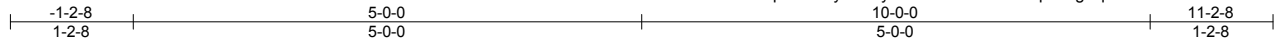
December 29, 2023

Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Harnett	162780855
J0923-5140	H2	COMMON	4	1	Job Reference (optional)	

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ID:6CKkadeNkqch9TIGyVioiByMJNt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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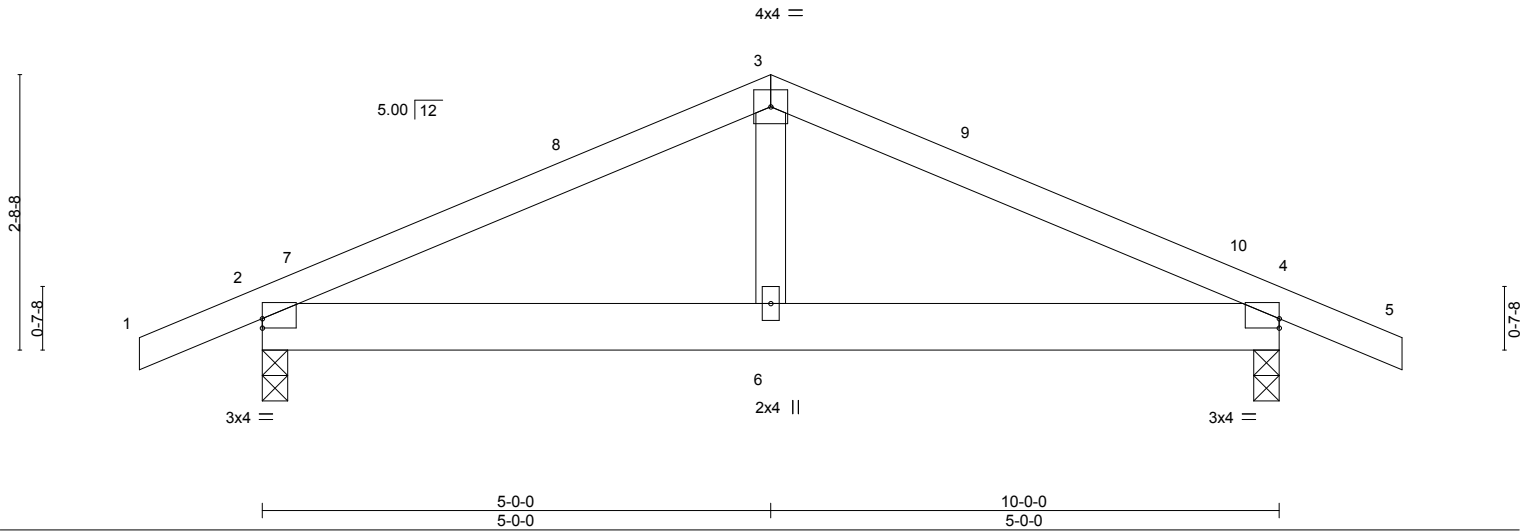


Plate Offsets (X,Y)--	[2:0-0-0,0-1-2], [4:0-0-0,0-1-2]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL) -0.01 6 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.38	Vert(CT) -0.01 2-6 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.02 2-6 >999 240	Weight: 47 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-0, 4=0-3-0
Max Horz 2=31(LC 12)
Max Uplift 2=-147(LC 8), 4=-147(LC 9)
Max Grav 2=470(LC 1), 4=470(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-553/619, 3-4=-553/619
BOT CHORD 2-6=-456/439, 4-6=-456/439
WEBS 3-6=-321/238

- 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) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 5-0-0, Exterior(2) 5-0-0 to 9-4-13, Interior(1) 9-4-13 to 11-2-8 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=147, 4=147.



December 29, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Harnett	162780856
J0923-5140	H3	COMMON	1	1		

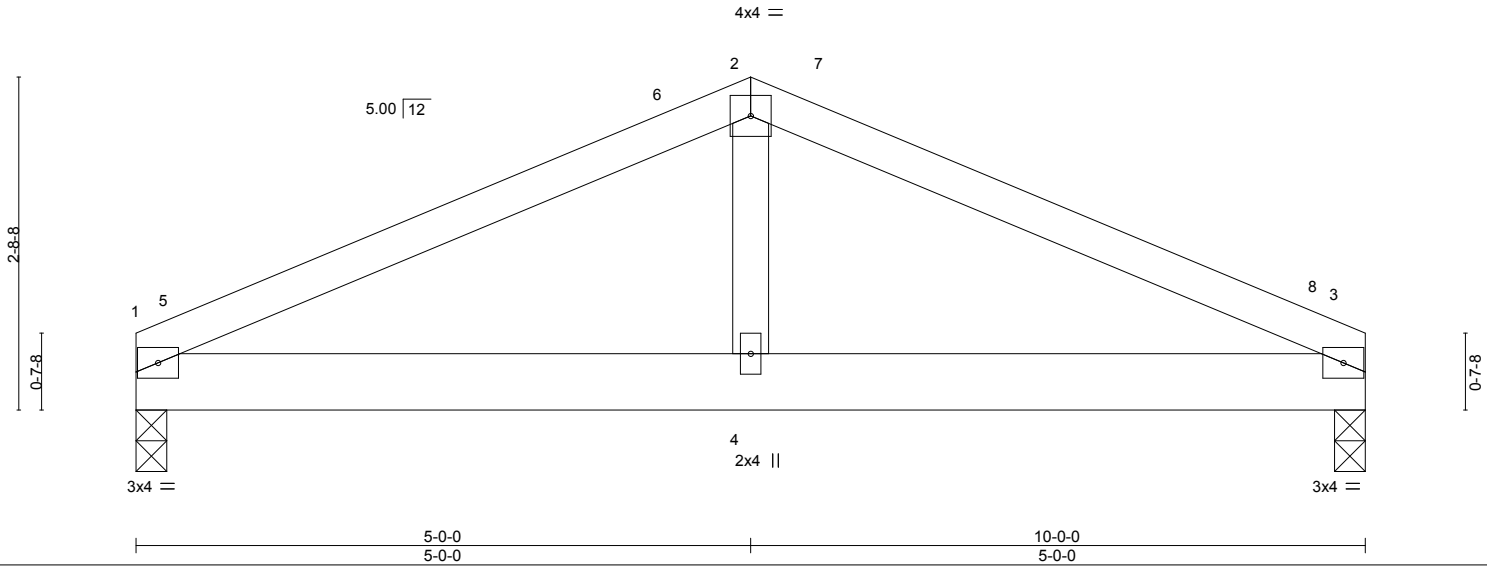
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:27 2023 Page 1

ID:6CKkadeNkqch9TIGyVioiByMJNt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:18.7



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 0.24	Vert(LL)	-0.01	4	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.35	Vert(CT)	-0.02	1-4	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.02	1-4	>999		
								Weight: 43 lb	FT = 20%

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

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

REACTIONS. (size) 1=0-3-0, 3=0-3-0
 Max Horz 1=-28(LC 17)
 Max Uplift 1=-109(LC 9), 3=-109(LC 8)
 Max Grav 1=390(LC 1), 3=390(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-579/661, 2-3=-579/661
 BOT CHORD 1-4=-518/468, 3-4=-518/468
 WEBS 2-4=-320/240

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) 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) 0-1-8 to 4-6-5, Interior(1) 4-6-5 to 5-0-0, Exterior(2) 5-0-0 to 9-4-13, Interior(1) 9-4-13 to 9-10-8 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
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=109, 3=109.



December 29, 2023

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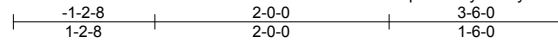
818 Soundside Road
 Edenton, NC 27932

Job J0923-5140	Truss P1GE	Truss Type MONOPITCH	Qty 1	Ply 1	Precision/64 Liberty Meadows/Harnett Job Reference (optional)	162780857
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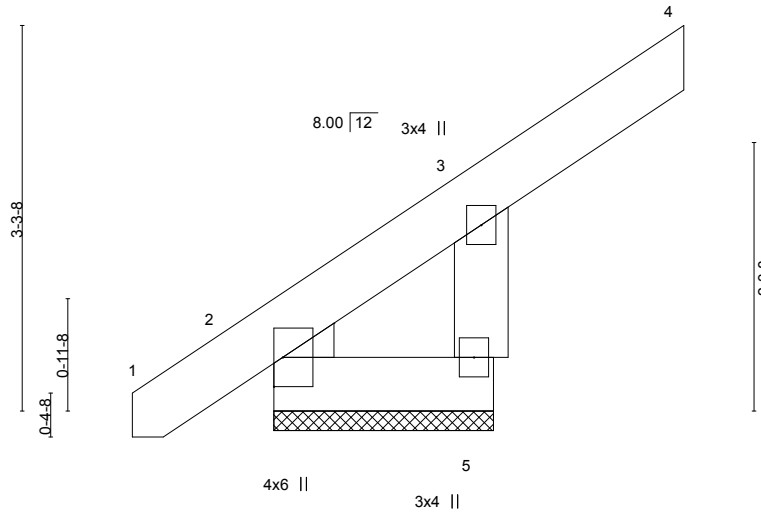
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:28 2023 Page 1

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Scale = 1:19.7



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 0.07	Vert(LL)	0.00	4	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	0.00	3	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						
								Weight: 22 lb	FT = 20%

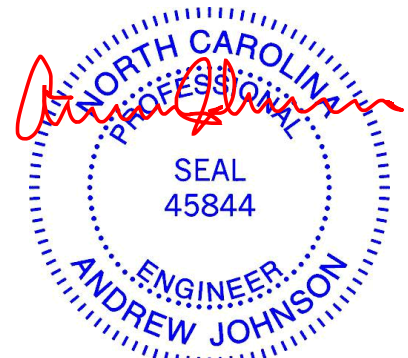
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1
WEDGE
Left: 2x4 SP No.2

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

REACTIONS. (size) 5=1-10-8, 2=1-10-8
Max Horz 2=133(LC 12)
Max Uplift 5=-176(LC 12), 2=-12(LC 8)
Max Grav 5=223(LC 19), 2=113(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-5=-253/322

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Gable requires continuous bottom chord bearing.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 5=176.



December 29, 2023

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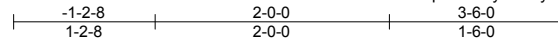
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Hamett	62780858
J0923-5140	P2	MONOPITCH	5	1		
					Job Reference (optional)	

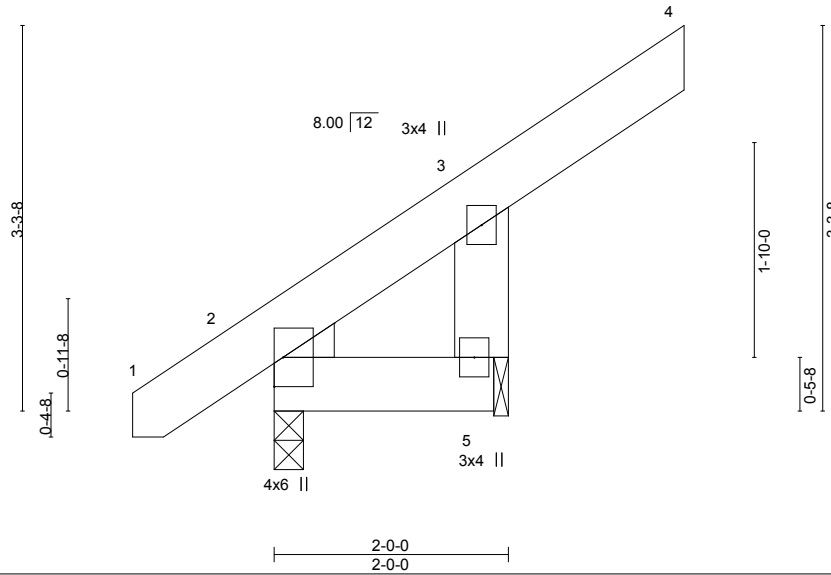
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:29 2023 Page 1

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Scale = 1:19.7



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 0.07	Vert(LL)	-0.00	2	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	2	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	240		
								Weight: 22 lb	FT = 20%	

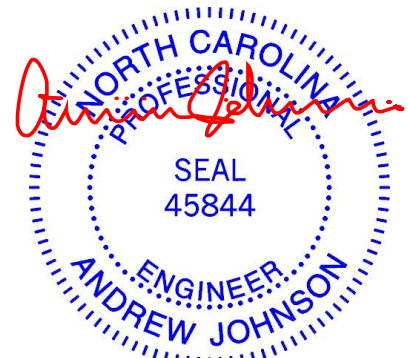
LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x6 SP No.1
 WEDGE
 Left: 2x4 SP No.2

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

REACTIONS. (size) 2=0-3-0, 5=0-1-8
 Max Horz 2=90(LC 12)
 Max Uplift 2=-11(LC 8), 5=-139(LC 9)
 Max Grav 2=106(LC 21), 5=213(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 3-5=-253/323

- NOTES-**
- 1) 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
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 5=139.



December 29, 2023

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818 Soundside Road
 Edenton, NC 27932

Job J0923-5140	Truss P3	Truss Type MONOPICH	Qty 6	Ply 1	Precision/64 Liberty Meadows/Harnett Job Reference (optional)	162780859
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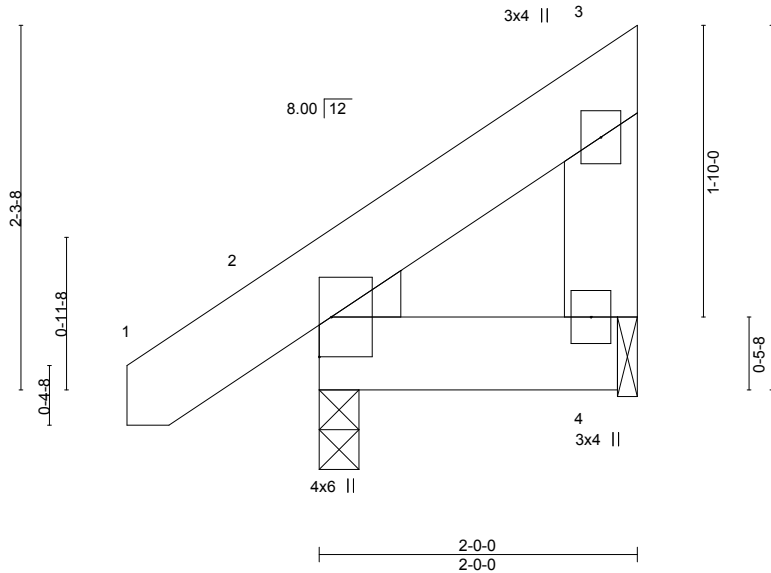
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:30 2023 Page 1

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Scale = 1:14.5



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 0.03	Vert(LL)	-0.00	2	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	2	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	Weight: 18 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x6 SP No.1
 WEDGE
 Left: 2x4 SP No.2

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

REACTIONS. (size) 2=0-3-0, 4=0-1-8
 Max Horz 2=60(LC 12)
 Max Uplift 2=-3(LC 12), 4=-27(LC 12)
 Max Grav 2=157(LC 1), 4=60(LC 19)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



December 29, 2023

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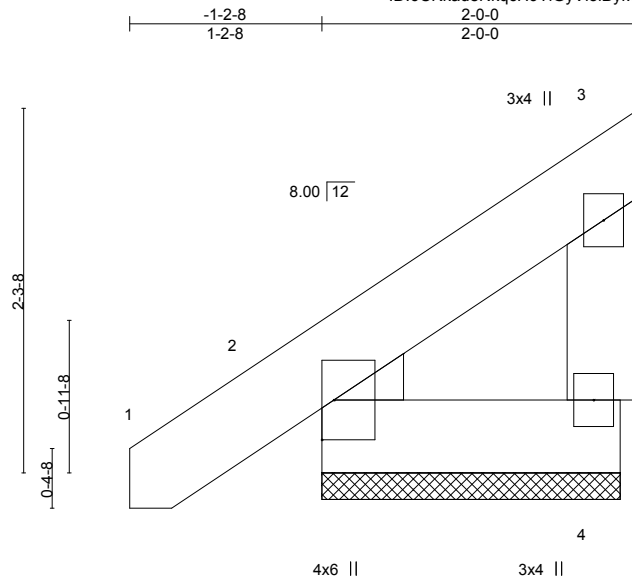
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Harnett
J0923-5140	P4GE	MONOPICH	1	1	162780860
					Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:31 2023 Page 1

ID:6CKkadeNkqch9TIGyVioiByMJNt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:14.5

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 0.03	Vert(LL)	0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 18 lb	FT = 20%

LUMBER-

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

BRACING-

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

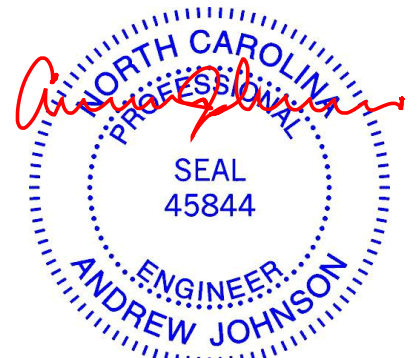
REACTIONS. (size) 4=1-10-8, 2=1-10-8

Max Horz 2=87(LC 12)
 Max Uplift 4=-46(LC 12), 2=-25(LC 12)
 Max Grav 4=64(LC 19), 2=155(LC 1)

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

NOTES-

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



December 29, 2023

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818 Soundside Road
 Edenton, NC 27932

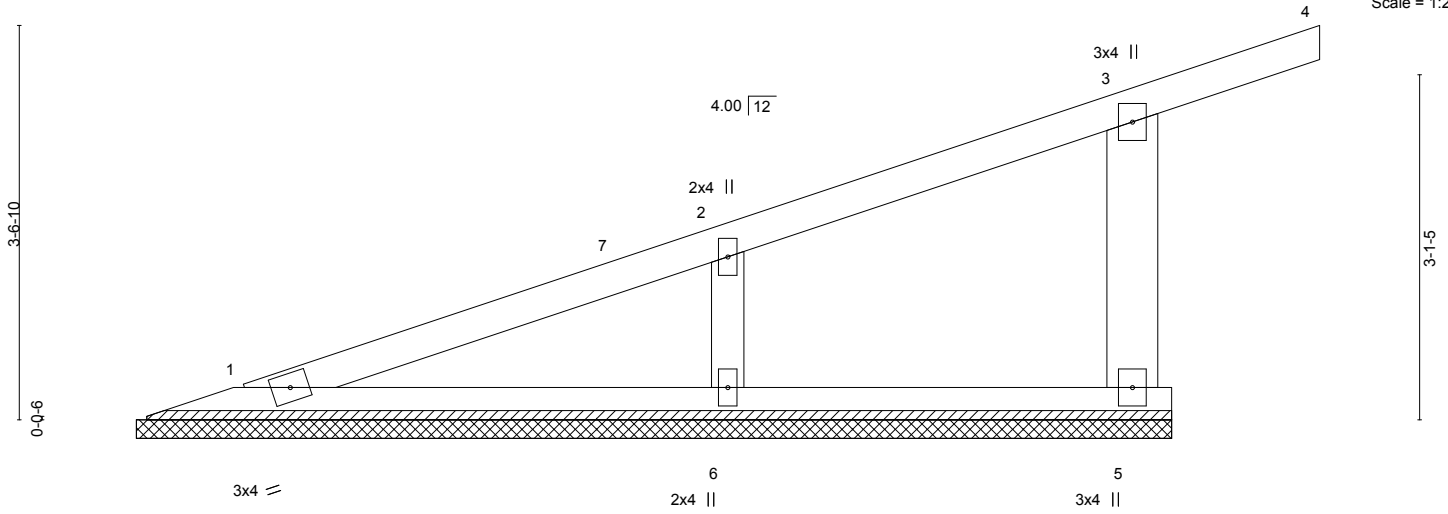
Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Harnett	162780861
J0923-5140	VD1	GABLE	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:31 2023 Page 1
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Scale = 1:20.8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL)	0.00	4	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.00	4	n/r		
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: 37 lb	FT = 20%

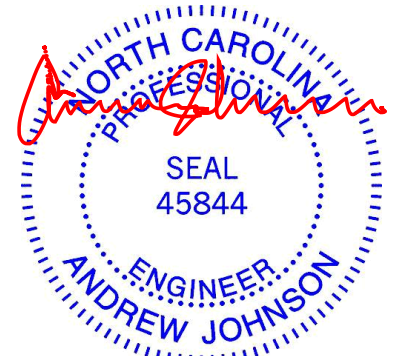
LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 WEBS 2x6 SP No.1
 OTHERS 2x4 SP No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 1=9-3-15, 5=9-3-15, 6=9-3-15
 Max Horz 1=102(LC 8)
 Max Uplift 5=-68(LC 9), 6=-55(LC 8)
 Max Grav 1=137(LC 1), 5=226(LC 1), 6=378(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-6=-272/205

- NOTES-**
- 1) 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) 0-11-11 to 5-3-15, Interior(1) 5-3-15 to 10-7-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Gable requires continuous bottom chord bearing.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6.



December 29, 2023

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

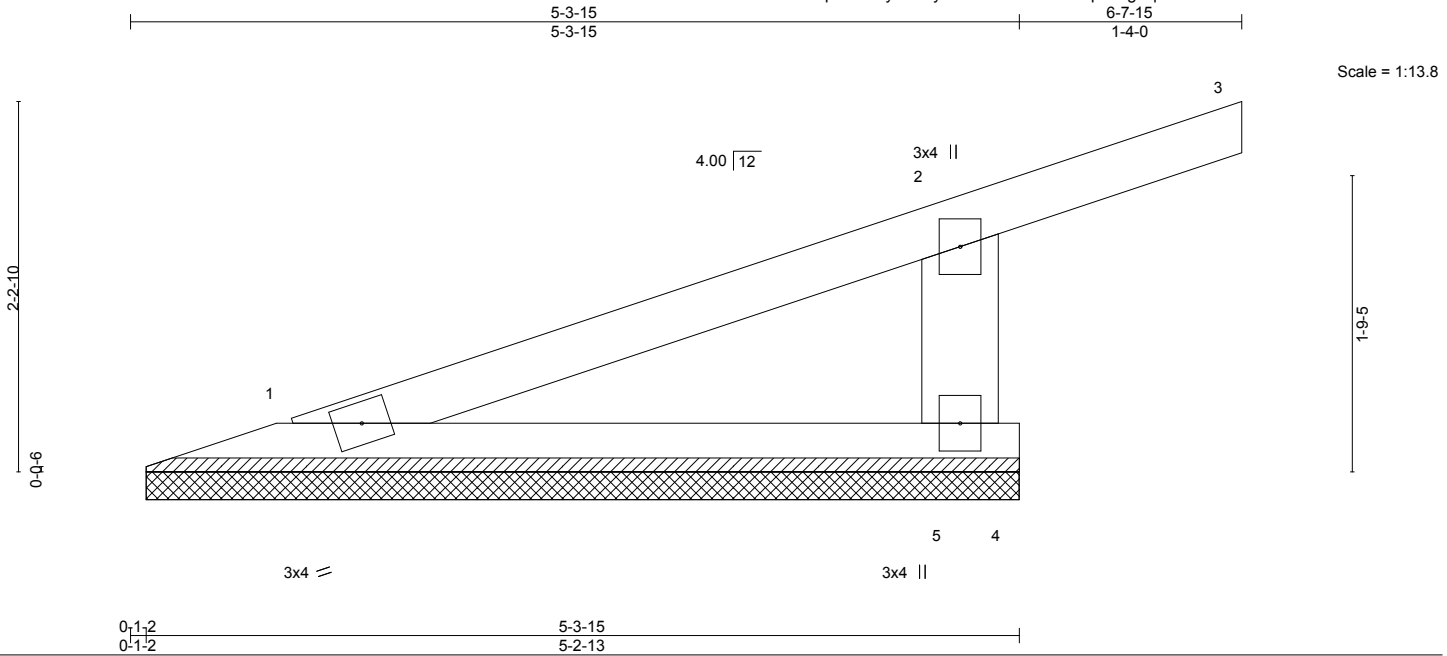


818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Harnett	162780862
J0923-5140	VD2	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:32 2023 Page 1
 ID:6CKkadeNkqch9TIGyVioiByMJNT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



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)	0.00	3	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	0.01	3	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 19 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-3-15 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1	

REACTIONS. (size) 1=5-2-13, 5=5-2-13
 Max Horz 1=59(LC 8)
 Max Uplift 5=68(LC 9)
 Max Grav 1=138(LC 1), 5=290(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-243/295

- NOTES-**
- 1) 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) 0-11-11 to 5-4-8, Interior(1) 5-4-8 to 6-7-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5.
 - 5) Non Standard bearing condition. Review required.



December 29, 2023

Job J0923-5140	Truss VH1	Truss Type VALLEY	Qty 1	Ply 1	Precision/64 Liberty Meadows/Hamett Job Reference (optional)	162780863
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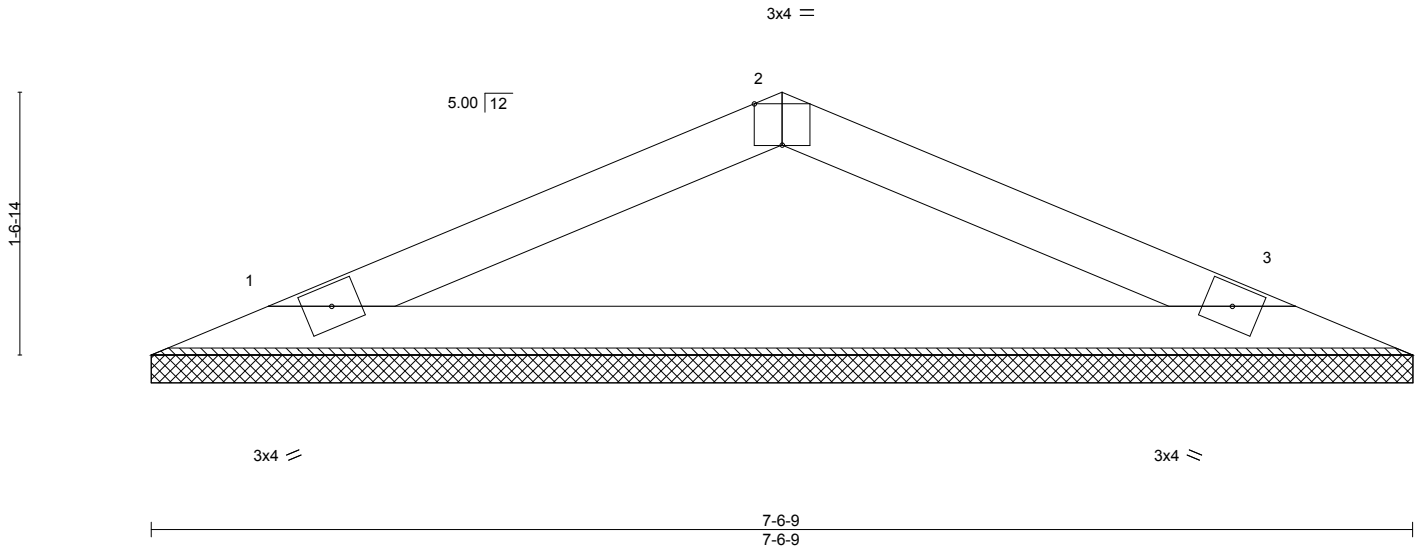
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:33 2023 Page 1

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Scale = 1:13.8



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 0.12	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 21 lb	FT = 20%

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

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=7-6-9, 3=7-6-9
Max Horz 1=15(LC 16)
Max Uplift 1=-15(LC 12), 3=-15(LC 13)
Max Grav 1=244(LC 1), 3=244(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-266/216, 2-3=-266/216

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) 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
 - 3) Gable requires continuous bottom chord bearing.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



December 29, 2023

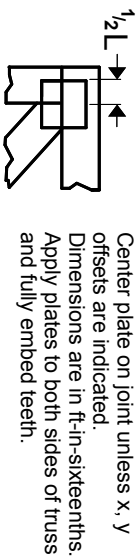
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



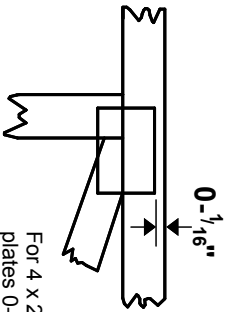
818 Soundside Road
Edenton, NC 27932

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 software or upon request.

PLATE SIZE

4 X 4

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

LATERAL BRACING LOCATION



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

BEARING

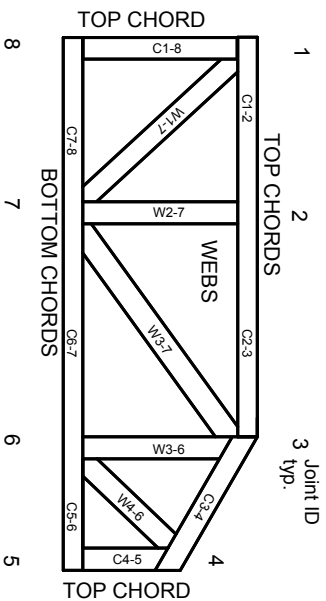


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TFP 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

MITek

ENGINEERING BY
TRENGO
A MITek Affiliate

MITek Engineering Reference Sheet: MIL-7473 rev. 1/2/2023

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: J0923-5141
Precision/64 Liberty Meadows/Harnett

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

Pages or sheets covered by this seal: I62780864 thru I62780870

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844



December 29, 2023

Johnson, Andrew

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

Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Harnett	I62780864
J0923-5141	ET1	GABLE	1	1	Job Reference (optional)	

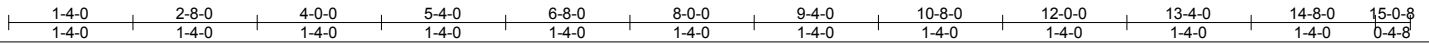
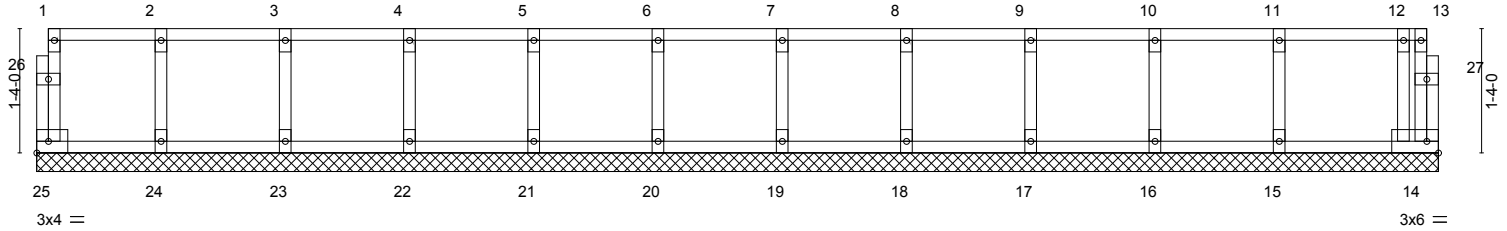
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:52 2023 Page 1
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0-1/8

0-1/8

Scale = 1:24.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 40.0	Plate Grip DOL	1.00	TC 0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.02	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	14	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-R						Weight: 68 lb	FT = 20%F, 11%E

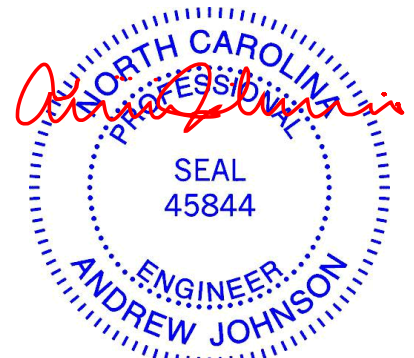
LUMBER-
 TOP CHORD 2x4 SP No.1(flat)
 BOT CHORD 2x4 SP No.1(flat)
 WEBS 2x4 SP No.3(flat)
 OTHERS 2x4 SP No.3(flat)

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

REACTIONS. All bearings 15-0-8.
 (lb) - Max Grav All reactions 250 lb or less at joint(s) 25, 14, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15

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

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



December 29, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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818 Soundside Road
 Edenton, NC 27932

Job J0923-5141	Truss F1	Truss Type FLOOR	Qty 8	Ply 1	Precision/64 Liberty Meadows/Harnett Job Reference (optional)	162780865
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:53 2023 Page 1
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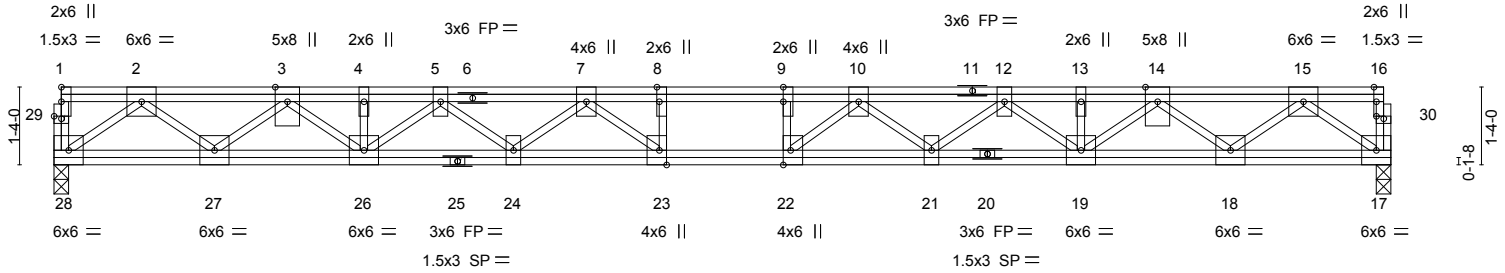
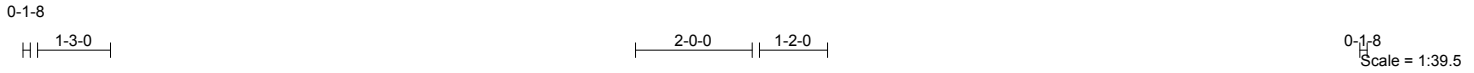


Plate Offsets (X, Y)--	[8:0-3-0,Edge], [9:0-3-0,0-0-0], [16:0-3-0,Edge], [22:0-3-0,Edge], [23:0-3-0,Edge], [29:0-1-8,0-0-8], [30:0-1-8,0-0-8]
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LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.16	Vert(LL) -0.32 22-23 >845 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.62	Vert(CT) -0.44 22-23 >615 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.65	Horz(CT) 0.05 17 n/a n/a		
BCDL 5.0	Code IRC2015/TP12014	Matrix-S			
				Weight: 181 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP 2400F 2.0E(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 28=0-3-0, 17=0-3-0
Max Grav 28=1240(LC 1), 17=1240(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2540/0, 3-4=-4486/0, 4-5=-4486/0, 5-7=-5702/0, 7-8=-6347/0, 8-9=-6347/0, 9-10=-6347/0, 10-12=-5700/0, 12-13=-4486/0, 13-14=-4486/0, 14-15=-2540/0
BOT CHORD 27-28=0/1517, 26-27=0/3619, 24-26=0/5238, 23-24=0/6134, 22-23=0/6347, 21-22=0/6134, 19-21=0/5238, 18-19=0/3619, 17-18=0/1517
WEBS 2-28=-1876/0, 2-27=0/1357, 3-27=-1428/0, 3-26=0/1124, 15-17=-1876/0, 15-18=0/1357, 14-18=-1428/0, 14-19=0/1124, 12-19=-975/0, 12-21=0/612, 10-21=-591/0, 5-26=-975/0, 5-24=0/614, 7-24=-581/0, 7-23=-229/745, 8-23=-352/63, 10-22=-226/749, 9-22=-369/68

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are 3x6 MT20 unless otherwise indicated.
 - 3) The Fabrication Tolerance at joint 25 = 11%, joint 20 = 11%
 - 4) Plates checked for a plus or minus 1 degree rotation about its center.
 - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



December 29, 2023

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</p> <p>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/TP1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Harnett	162780866
J0923-5141	F1-A	FLOOR	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:55 2023 Page 1
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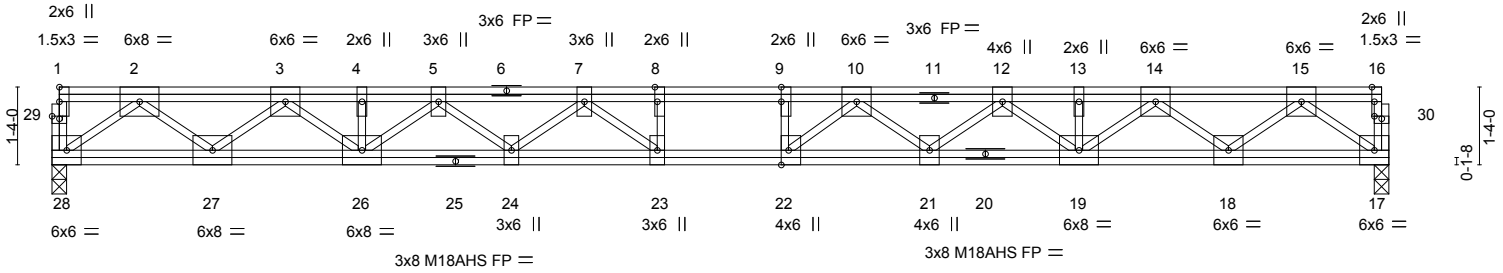
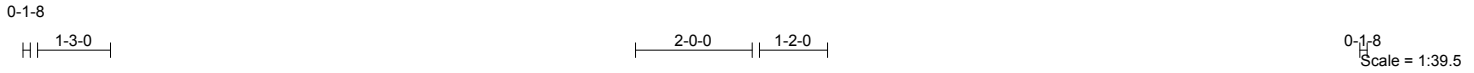


Plate Offsets (X, Y)--	[8:0-3-0,Edge], [9:0-3-0,0-0-0], [16:0-3-0,Edge], [22:0-3-0,Edge], [29:0-1-8,0-0-8], [30:0-1-8,0-0-8]
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LOADING (psf)	SPACING-	1-4-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.36	Vert(LL)	-0.35	23-24	>783	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.56	Vert(CT)	-0.47	23-24	>570	M18AHS	186/179
BCLL 0.0	Rep Stress Incr	NO	WB 0.85	Horz(CT)	0.05	17	n/a		
BCDL 5.0	Code IRC2015/TP12014		Matrix-S						
								Weight: 181 lb	FT = 20%F, 11%E

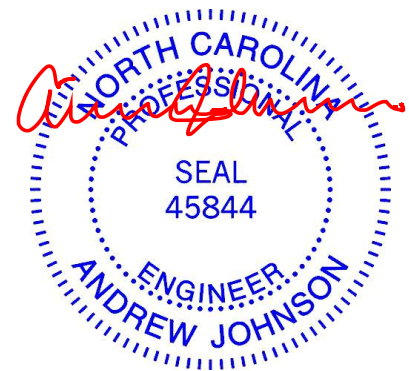
LUMBER-	BRACING-
TOP CHORD 2x4 SP 2400F 2.0E(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP 2400F 2.0E(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 28=0-3-0, 17=0-3-0
Max Grav 28=1777(LC 1), 17=1106(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-3515/0, 3-4=-5984/0, 4-5=-5984/0, 5-7=-7227/0, 7-8=-7099/0, 8-9=-7099/0, 9-10=-7099/0, 10-12=-5730/0, 12-13=-4301/0, 13-14=-4301/0, 14-15=-2347/0
 BOT CHORD 27-28=0/2165, 26-27=0/4967, 24-26=0/6854, 23-24=0/7495, 22-23=0/7099, 21-22=0/6396, 19-21=0/5135, 18-19=0/3392, 17-18=0/1366
 WEBS 2-28=-2677/0, 2-27=0/1791, 3-27=-1921/0, 3-26=0/1319, 15-17=-1688/0, 15-18=0/1302, 14-18=-1382/0, 14-19=0/1179, 12-19=-1081/0, 12-21=0/788, 10-21=-898/0, 5-26=-1127/0, 5-24=0/493, 7-24=-367/0, 7-23=-845/0, 8-23=0/296, 10-22=0/1244, 9-22=-549/0

NOTES-
 1) Unbalanced floor live loads have been considered for this design.
 2) All plates are MT20 plates unless otherwise indicated.
 3) Plates checked for a plus or minus 1 degree rotation about its center.
 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

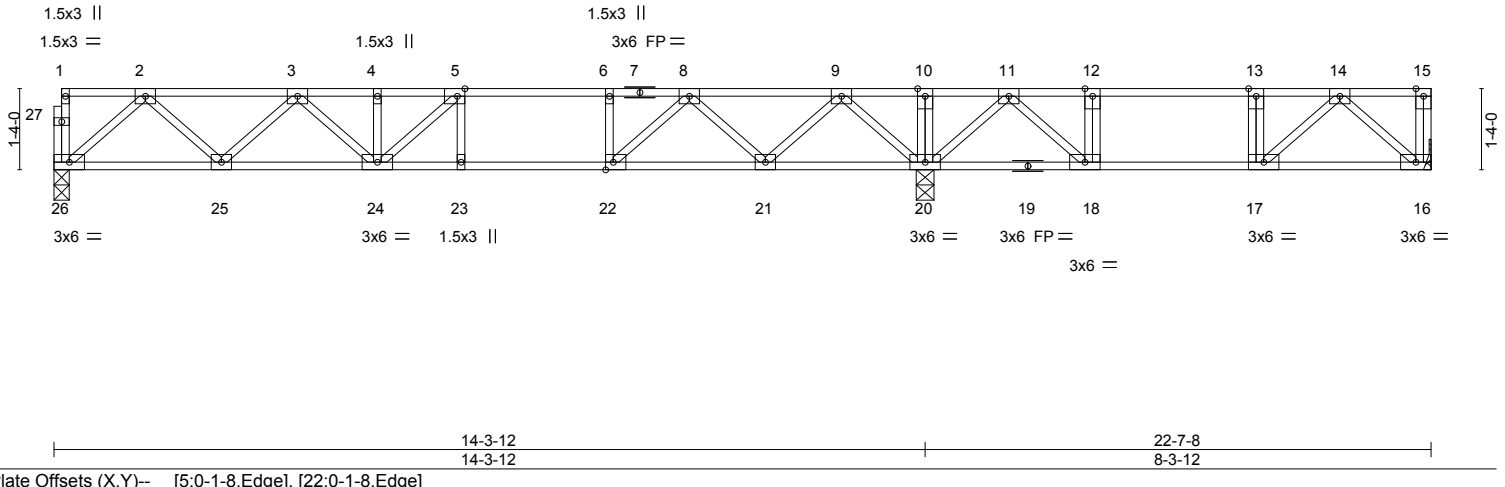
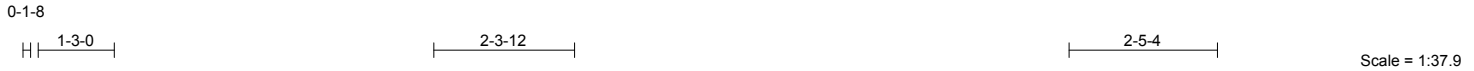
LOAD CASE(S) Standard
 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 17-28=-7, 1-8=-187, 8-16=-67



Job J0923-5141	Truss F2	Truss Type Floor	Qty 4	Ply 1	Precision/64 Liberty Meadows/Harnett 162780867
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:56 2023 Page 1
ID:6CKkadeNkqch9TIGyVioiByMJNT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.55	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.79	Vert(LL) -0.16 23-24 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.36	Vert(CT) -0.21 23-24 >803 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 16 n/a n/a		
	Code IRC2015/TP12014			Weight: 120 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 18-20.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 26=0-3-0, 20=0-3-8, 16=Mechanical
Max Grav 26=759(LC 10), 20=1309(LC 1), 16=433(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1319/0, 3-4=-2078/0, 4-5=-2078/0, 5-6=-2131/0, 6-8=-2131/0, 8-9=-1198/0, 9-10=0/452, 10-11=0/452, 11-12=-665/0, 12-13=-665/0, 13-14=-665/0
 BOT CHORD 25-26=0/814, 24-25=0/1800, 23-24=0/2131, 22-23=0/2131, 21-22=0/1722, 20-21=0/675, 18-20=-120/334, 17-18=0/665, 16-17=0/409
 WEBS 9-20=-1135/0, 9-21=0/757, 8-21=-774/0, 8-22=0/712, 6-22=-342/0, 2-26=-1081/0, 2-25=0/703, 3-25=-669/0, 3-24=0/379, 5-24=-312/157, 11-20=-642/0, 11-18=0/584, 14-16=-545/0, 14-17=-8/341, 12-18=-320/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are 3x4 MT20 unless otherwise indicated.
 - 3) Plates checked for a plus or minus 1 degree rotation about its center.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 6) CAUTION, Do not erect truss backwards.



Job	Truss	Truss Type	Qty	Ply	Precision/64 Liberty Meadows/Harnett	I62780868
J0923-5141	F3	Floor	8	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:57 2023 Page 1
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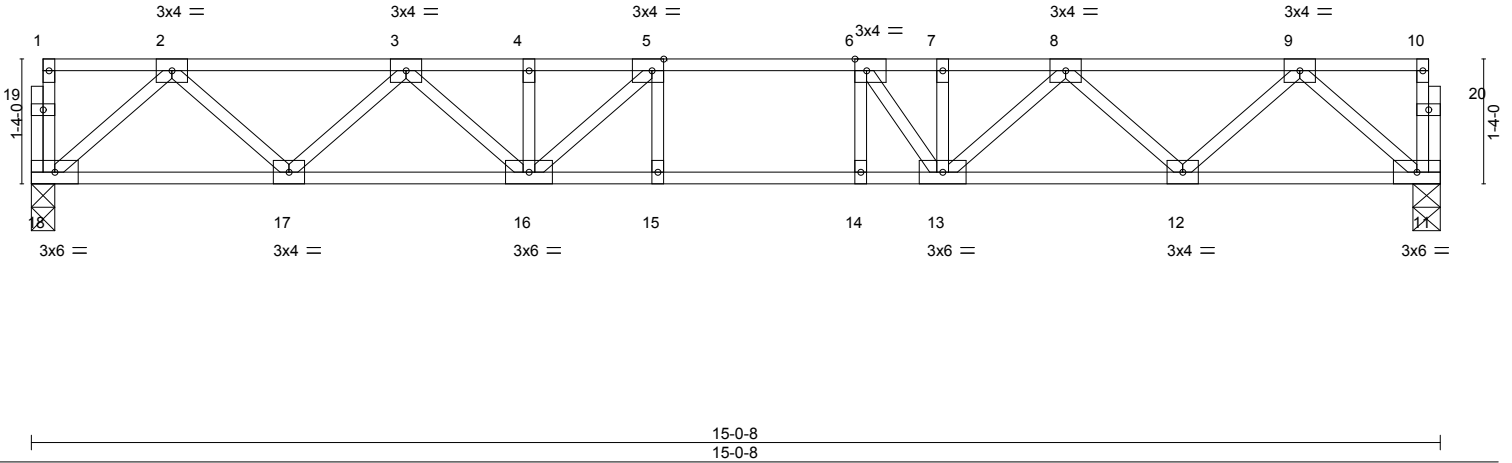
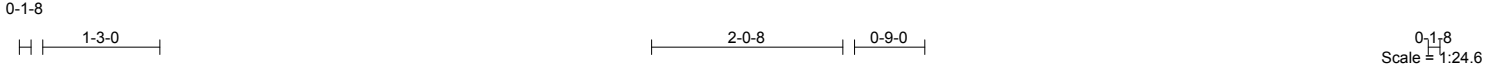


Plate Offsets (X,Y)-- [5:0-1-8,Edge], [6:0-1-8,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.42	Vert(LL)	-0.12 15-16	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.66	Vert(CT)	-0.17 15-16	>999	360		
BCLL 0.0	Rep Stress Incr	YES	WB 0.37	Horz(CT)	0.04 11	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 81 lb	FT = 20%F, 11%E

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


REACTIONS. (size) 18=0-3-0, 11=0-3-8
Max Grav 18=807(LC 1), 11=807(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1424/0, 3-4=-2269/0, 4-5=-2269/0, 5-6=-2455/0, 6-7=-2254/0, 7-8=-2254/0, 8-9=-1426/0
BOT CHORD 17-18=0/868, 16-17=0/1952, 15-16=0/2455, 14-15=0/2455, 13-14=0/2455, 12-13=0/1952, 11-12=0/868
WEBS 2-18=-1153/0, 2-17=0/774, 3-17=-733/0, 3-16=0/431, 9-11=-1153/0, 9-12=0/776, 8-12=-732/0, 8-13=0/411, 5-16=-507/40, 6-13=-606/20

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are 1.5x3 MT20 unless otherwise indicated.
 - 3) Plates checked for a plus or minus 1 degree rotation about its center.
 - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



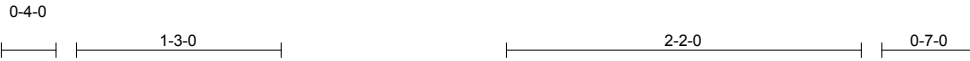
December 29, 2023

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</p> <p>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/TP1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)</p>	<p>ENGINEERING BY</p>  <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job J0923-5141	Truss F4	Truss Type FLOOR	Qty 4	Ply 1	Precision/64 Liberty Meadows/Harnett Job Reference (optional)	162780869
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:58 2023 Page 1
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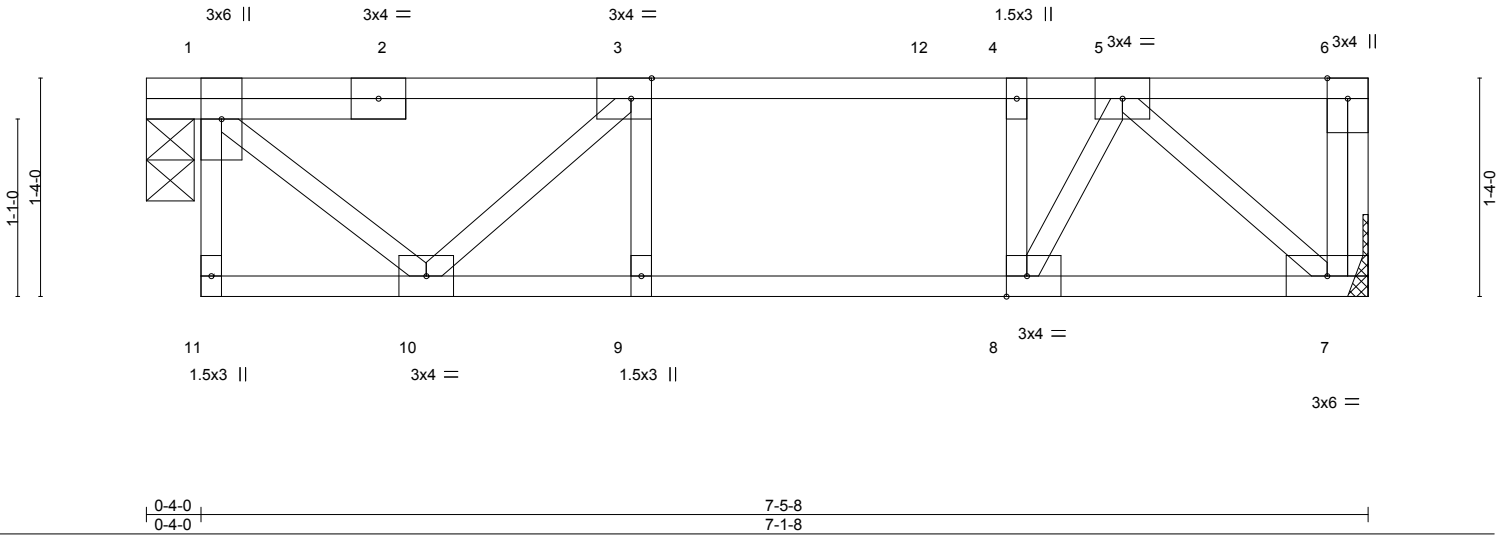


Plate Offsets (X,Y)--	[3:0-1-8,Edge], [8:0-1-8,Edge]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.30	Vert(LL) -0.03 7-8 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.32	Vert(CT) -0.03 7-8 >999 360		
BCLL 0.0	Rep Stress Incr NO	WB 0.23	Horz(CT) 0.01 7 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 41 lb	FT = 20%F, 11%E

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

REACTIONS. (size) 7=Mechanical, 1=0-3-8
Max Grav 7=628(LC 1), 1=436(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-364/0, 3-4=-685/0, 4-5=-685/0
BOT CHORD 9-10=0/685, 8-9=0/685, 7-8=0/557
WEBS 1-10=0/477, 3-10=-443/0, 5-7=-742/0, 5-8=0/333, 4-8=-256/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) Plates checked for a plus or minus 1 degree rotation about its center.
 - 3) Refer to girder(s) for truss to truss connections.
 - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 5) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
 - 6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 7-11=-10, 1-12=-100, 6-12=-220



December 29, 2023

Job J0923-5141	Truss FG1	Truss Type FLOOR GIRDER	Qty 1	Ply 1	Precision/64 Liberty Meadows/Hamett Job Reference (optional)	162780870
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Dec 29 06:35:59 2023 Page 1
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0-1-8



0-1-8
Scale = 1:14.6

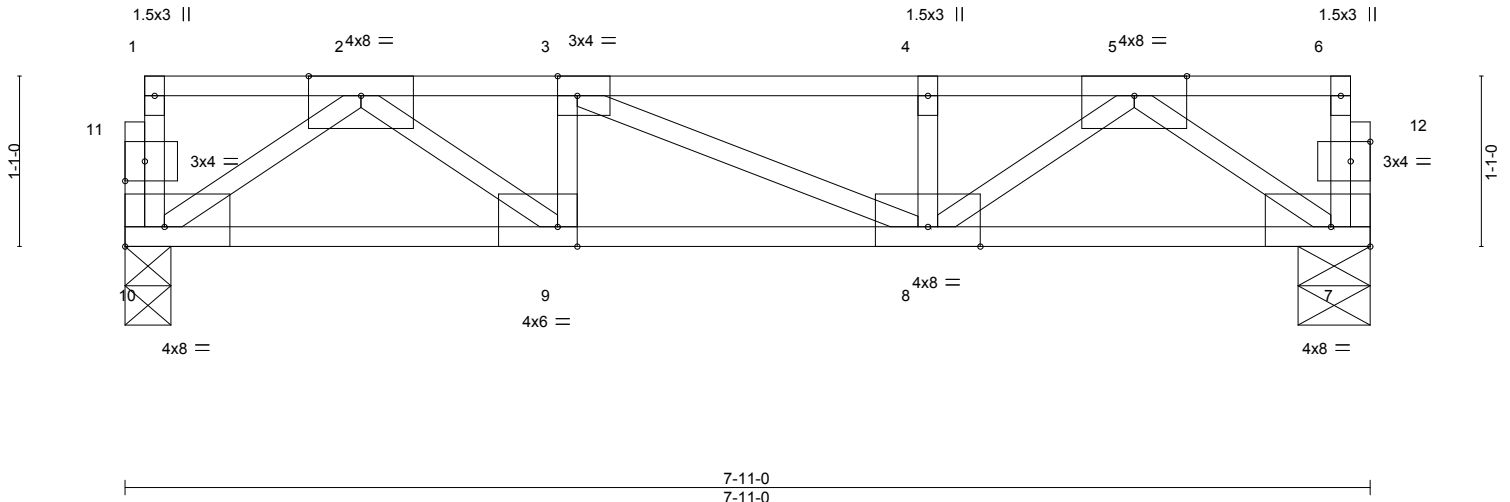


Plate Offsets (X, Y)-- [3:0-1-8,Edge], [7:Edge,0-1-8], [9:0-1-8,Edge], [10:Edge,0-1-8], [11:0-1-8,0-1-8], [12:0-1-8,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.68	Vert(LL)	-0.06	8-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.71	Vert(CT)	-0.08	8-9	>999		
BCLL 0.0	Rep Stress Incr	NO	WB 0.74	Horz(CT)	0.03	7	n/a		
BCDL 5.0	Code IRC2015/TP12014		Matrix-P						
								Weight: 42 lb	FT = 20%F, 11%E

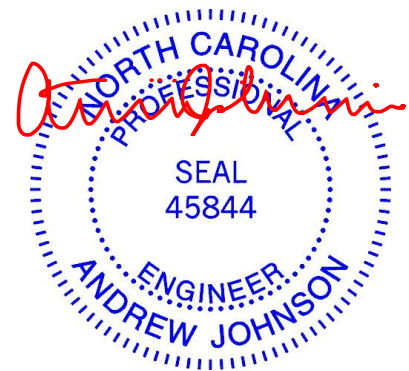
LUMBER-	BRACING-
TOP CHORD 2x4 SP 2400F 2.0E(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 10=0-3-8, 7=0-5-8
Max Grav 10=1735(LC 1), 7=1735(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-10=-261/0, 6-7=-261/0, 2-3=-3357/0, 3-4=-3359/0, 4-5=-3359/0
BOT CHORD 9-10=0/2110, 8-9=0/3357, 7-8=0/2110
WEBS 2-10=-2551/0, 2-9=0/1544, 3-9=-888/0, 5-7=-2551/0, 5-8=0/1546, 4-8=-890/0

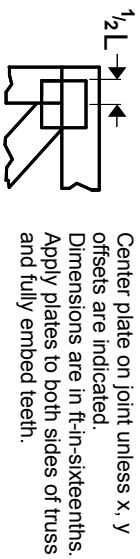
NOTES-
1) Plates checked for a plus or minus 1 degree rotation about its center.
2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 7-10=-10, 1-6=-450

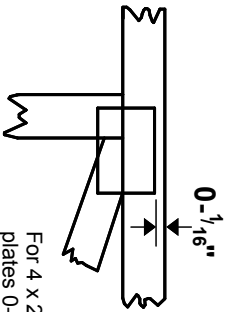


Symbols

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 software or upon request.

PLATE SIZE

4 X 4

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

LATERAL BRACING LOCATION



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

BEARING

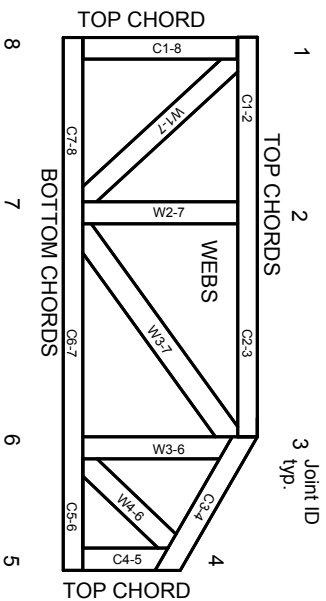


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TFP 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

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ENGINEERING BY
TRANGO
A MITek Affiliate

MITek Engineering Reference Sheet: MIL-7473 rev. 1/2/2023

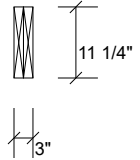
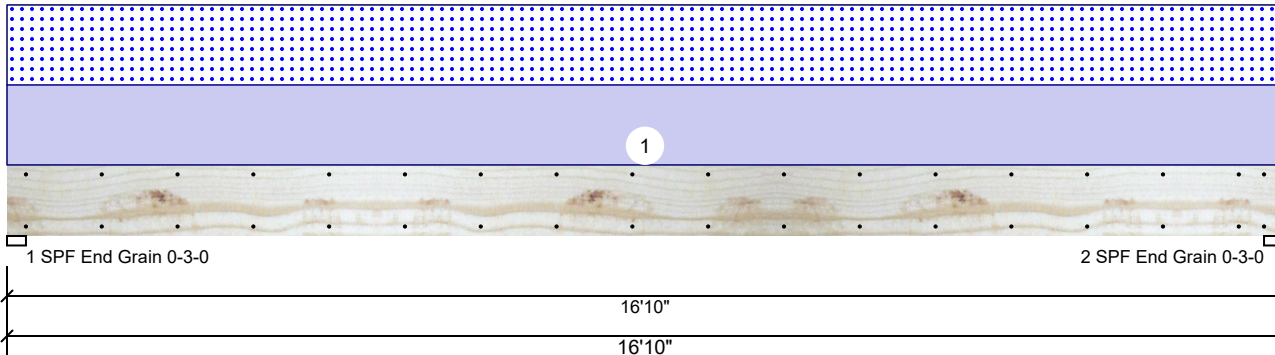
General Safety Notes

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

GDH SP #2 2.000" X 12.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	337	337	0	0
2	Vertical	0	337	337	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	13%	337 / 337	673	L	D+S
2 - SPF End Grain	3.000"	Vert	13%	337 / 337	673	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2709 ft-lb	8'5"	4548 ft-lb	0.596 (60%)	D+S	L
Unbraced	2709 ft-lb	8'5"	2710 ft-lb	1.000 (100%)	D+S	L
Shear	578 lb	1'2 1/4"	4528 lb	0.128 (13%)	D+S	L
LL Defl inch	0.133 (L/1490)	8'5 1/16"	0.411 (L/480)	0.322 (32%)	S	L
TL Defl inch	0.265 (L/745)	8'5 1/16"	0.549 (L/360)	0.483 (48%)	D+S	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at a maximum of 14' 3/16" o.c.
- 7 Bottom must be laterally braced at end bearings.
- 8 Lateral slenderness ratio based on single ply width.

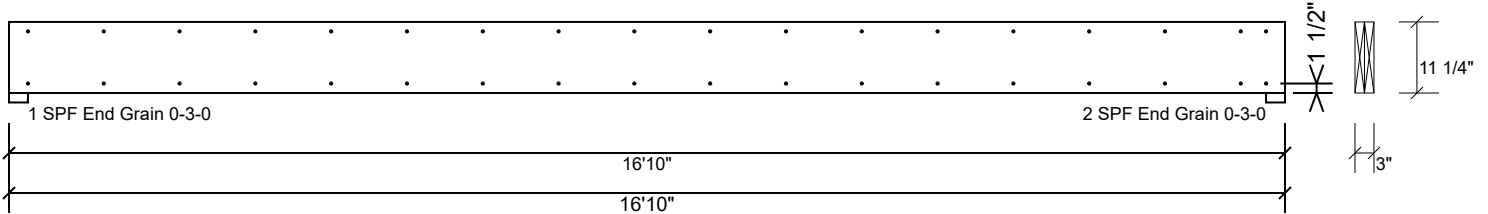
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	40 PLF	0 PLF	40 PLF	0 PLF	0 PLF	P3

Manufacturer Info

This design is valid until 6/28/2026

GDH SP #2 2.000" X 12.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

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

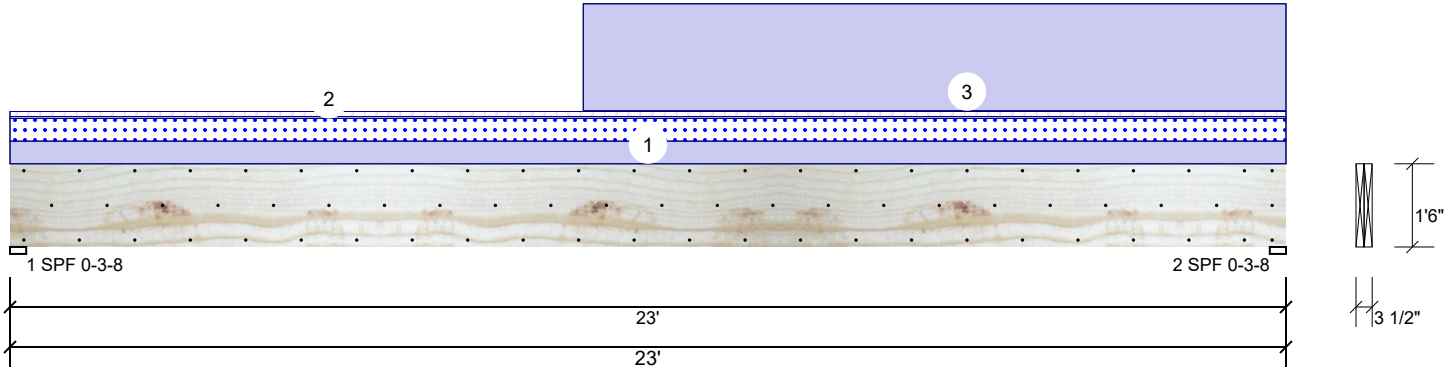
Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	202.6 PLF
Yield Limit per Fastener	101.3 lb.
C _m	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Manufacturer Info	

This design is valid until 6/28/2026

DB1 Kerto-S LVL 1.750" X 18.000" 2-Ply - PASSED

Level: Level



Member Information

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

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	No
Deck:	Not Checked

Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	278	1762	621	0	0
2	Vertical	278	3241	621	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	47%	1762 / 674	2436	L	D+0.75(L+S)
2 - SPF	3.500"	Vert	75%	3241 / 674	3915	L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	15112 ft-lb	13'2 7/8"	38683 ft-lb	0.391 (39%)	D	Uniform
Unbraced	18767 ft-lb	12'11 3/4"	18779 ft-lb	0.999 (100%)	D+0.75(L+S) L	
Shear	2761 lb	21'2 1/2"	12096 lb	0.228 (23%)	D	Uniform
LL Defl inch	0.107 (L/2523)	11'6 1/16"	0.564 (L/480)	0.190 (19%)	0.75(L+S) L	
TL Defl inch	0.522 (L/519)	11'11 11/16"	0.752 (L/360)	0.694 (69%)	D+0.75(L+S) L	

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Near Face	54 PLF	0 PLF	54 PLF	0 PLF	0 PLF	P TRUSSES
2	Tie-In Far	0-0-0 to 23-0-0	0-7-4	Far Face	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	FLOOR LOADING
2	Tie-In Near	0-0-0 to 23-0-0	0-0-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	FLOOR LOADING
3	Part. Uniform	10-4-0 to 23-0-0		Top	255 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL & C1GE
	Self Weight				14 PLF					

Notes

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Lumber

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

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

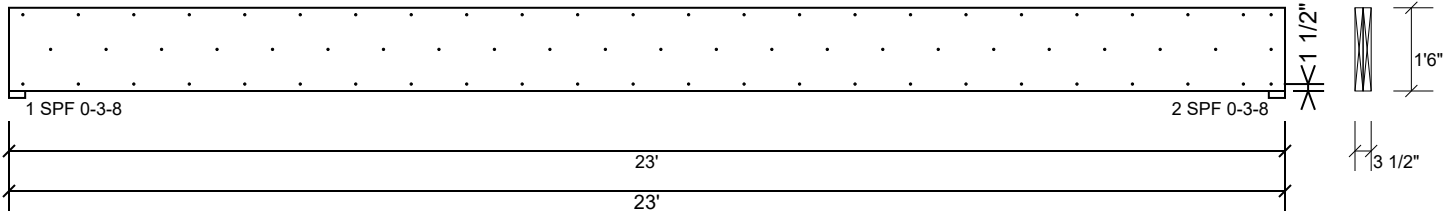
This design is valid until 6/28/2026

Manufacturer Info

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

DB1 Kerto-S LVL 1.750" X 18.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

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

Capacity	19.1 %
Load	54.0 PLF
Yield Limit per Foot	282.4 PLF
Yield Limit per Fastener	94.1 lb.
C _m	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+S
Duration Factor	1.15

Notes

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Lumber

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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

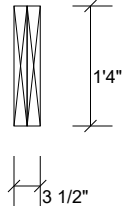
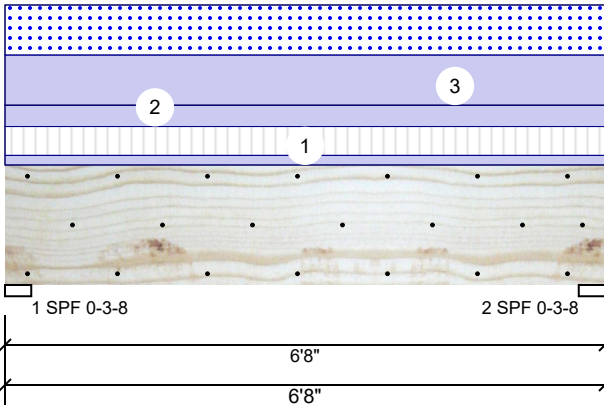
This design is valid until 6/28/2026

Manufacturer Info

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

FB2 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	540	1558	937	0	0
2	Vertical	540	1558	937	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	51%	1558 / 1108	2666	L	D+0.75(L+S)
2 - SPF	3.500"	Vert	51%	1558 / 1108	2666	L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3879 ft-lb	3'4"	39750 ft-lb	0.098 (10%)	D+0.75(L+S)	L
Unbraced	3879 ft-lb	3'4"	18821 ft-lb	0.206 (21%)	D+0.75(L+S)	L
Shear	1617 lb	5' 1/2"	13739 lb	0.118 (12%)	D+0.75(L+S)	L
LL Defl inch	0.008 (L/9314)	3'4"	0.156 (L/480)	0.052 (5%)	0.75(L+S)	L
TL Defl inch	0.019 (L/3870)	3'4"	0.208 (L/360)	0.093 (9%)	D+0.75(L+S)	L

Design Notes

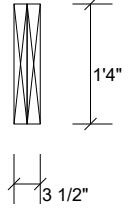
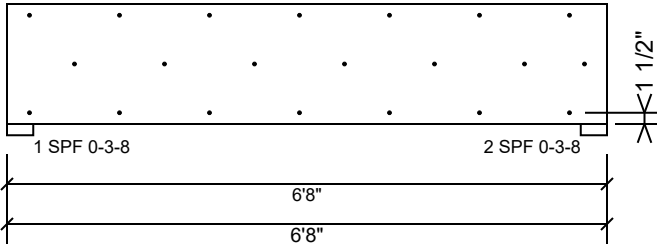
- Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- Refer to last page of calculations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

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Near Face	54 PLF	162 PLF	0 PLF	0 PLF	0 PLF	F2
2	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL
3	Uniform			Top	281 PLF	0 PLF	281 PLF	0 PLF	0 PLF	B2-A
	Self Weight				12 PLF					

<p>Notes</p> <p>Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.</p> <p>Lumber</p> <ol style="list-style-type: none"> Dry service conditions, unless noted otherwise LVL not to be treated with fire retardant or corrosive chemicals 	<p>Handling & Installation</p> <ol style="list-style-type: none"> LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals Damaged Beams must not be used Design assumes top edge is laterally restrained Provide lateral support at bearing points to avoid lateral displacement and rotation 	<p>4. For flat roofs provide proper drainage to prevent ponding</p>	<p>Manufacturer Info</p> <p>Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us</p>
			<p>This design is valid until 6/28/2026</p>

FB2 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

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

Capacity	44.0 %
Load	108.0 PLF
Yield Limit per Foot	245.6 PLF
Yield Limit per Fastener	81.9 lb.
C _m	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+L
Duration Factor	1.00

Notes

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

Lumber

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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

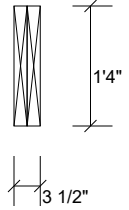
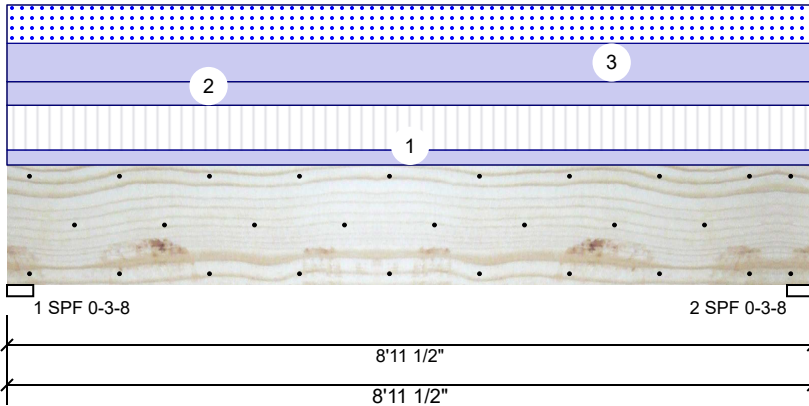
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This design is valid until 6/28/2026

FB1 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	1021	1807	873	0	0
2	Vertical	1021	1807	873	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	62%	1807 / 1421	3228	L	D+0.75(L+S)
2 - SPF	3.500"	Vert	62%	1807 / 1421	3228	L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5731 ft-lb	4'5 3/4"	34565 ft-lb	0.166 (17%)	D+L	L
Unbraced	6541 ft-lb	4'5 3/4"	13975 ft-lb	0.468 (47%)	D+0.75(L+S)	L
Shear	2224 lb	1'7 1/2"	11947 lb	0.186 (19%)	D+L	L
LL Defl inch	0.022 (L/4718)	4'5 13/16"	0.213 (L/480)	0.102 (10%)	0.75(L+S)	L
TL Defl inch	0.049 (L/2077)	4'5 13/16"	0.284 (L/360)	0.173 (17%)	D+0.75(L+S)	L

Design Notes

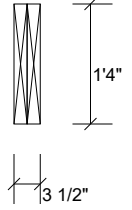
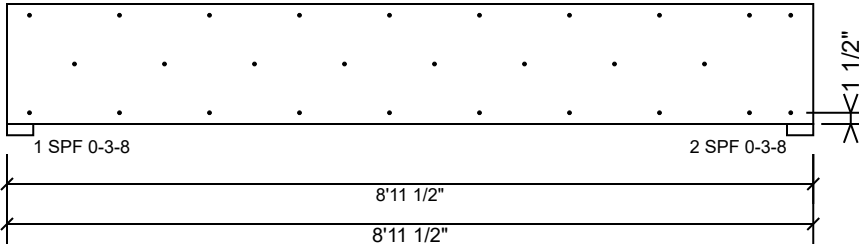
- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page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

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Near Face	76 PLF	228 PLF	0 PLF	0 PLF	0 PLF	F4
2	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL
3	Uniform			Top	195 PLF	0 PLF	195 PLF	0 PLF	0 PLF	B4
	Self Weight				12 PLF					

<p>Notes</p> <p>Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.</p> <p>Lumber</p> <ol style="list-style-type: none"> 1. Dry service conditions, unless noted otherwise 2. LVL not to be treated with fire retardant or corrosive chemicals 	<p>Handling & Installation</p> <ol style="list-style-type: none"> 1. LVL beams must not be cut or drilled 2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals 3. Damaged Beams must not be used 4. Design assumes top edge is laterally restrained 5. Provide lateral support at bearing points to avoid lateral displacement and rotation 	<p>4. For flat roofs provide proper drainage to prevent ponding</p>	<p>Manufacturer Info</p> <p>Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us</p>
			<p>This design is valid until 6/28/2026</p>

FB1 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

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

Capacity	61.9 %
Load	152.0 PLF
Yield Limit per Foot	245.6 PLF
Yield Limit per Fastener	81.9 lb.
C _m	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+L
Duration Factor	1.00

Notes

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Lumber

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

chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
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