

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: J0823-4065

Precision/41 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: I60801063 thru I60801082

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844



September 15, 2023

Garcia, Juan

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 J0823-4065	Truss A1-GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Precision/41 Liberty Meadows/Hamett Job Reference (optional)	160801063
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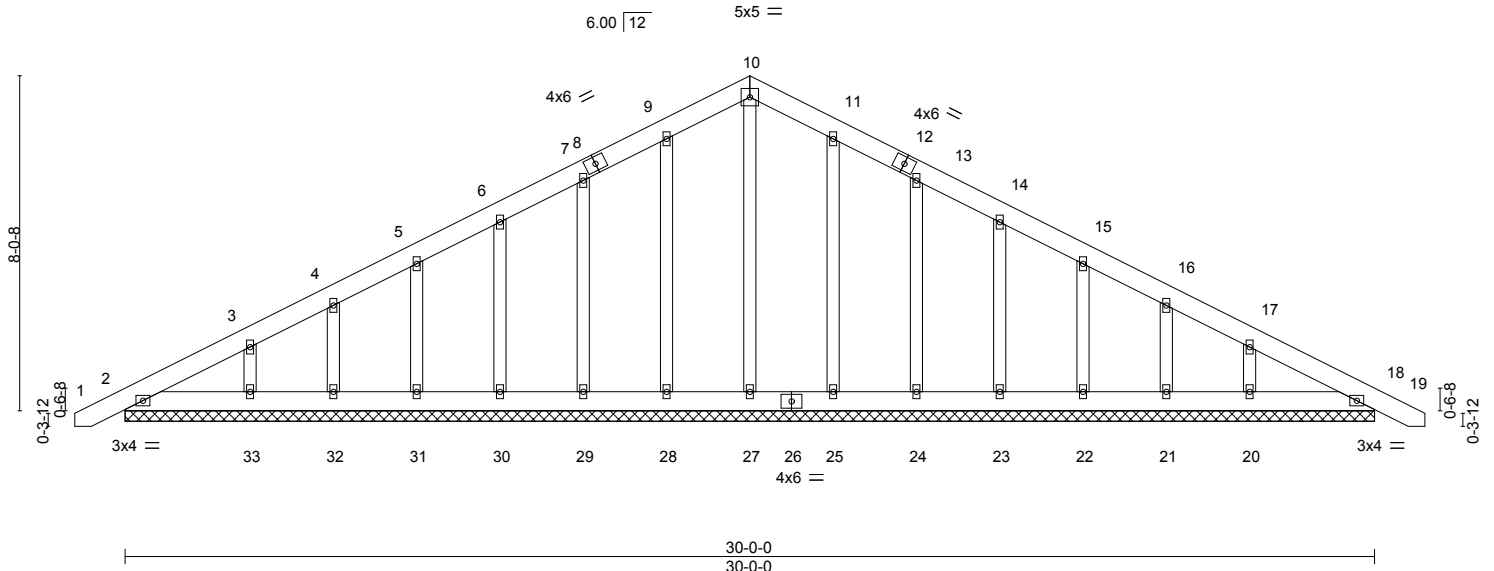
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:00:04 2023 Page 1

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Scale = 1:55.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.04	Vert(LL)	0.00	18	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	18	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.00	18	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 231 lb	FT = 20%

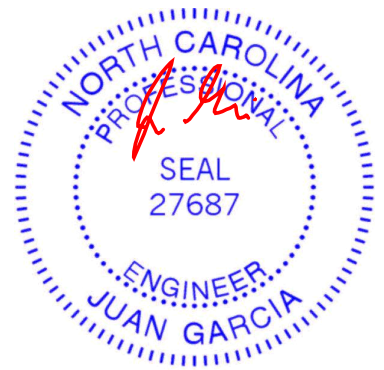
LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 OTHERS 2x4 SP No.2

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

REACTIONS. All bearings 30-0-0.
 (lb) - Max Horz 2=162(LC 16)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 28, 29, 30, 31, 32, 33, 25, 24, 23, 22, 21, 20, 18
 Max Grav All reactions 250 lb or less at joint(s) 2, 27, 28, 29, 30, 31, 32, 33, 25, 24, 23, 22, 21, 20, 18

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 9-10=-106/268, 10-11=-106/268

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 28, 29, 30, 31, 32, 33, 25, 24, 23, 22, 21, 20, 18.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



September 15, 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)

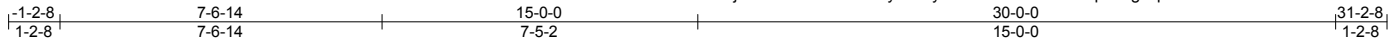
ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job J0823-4065	Truss A2-GE	Truss Type COMMON STRUCTURAL GA	Qty 1	Ply 1	Precision/41 Liberty Meadows/Hamett Job Reference (optional)	160801064
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:00:06 2023 Page 1

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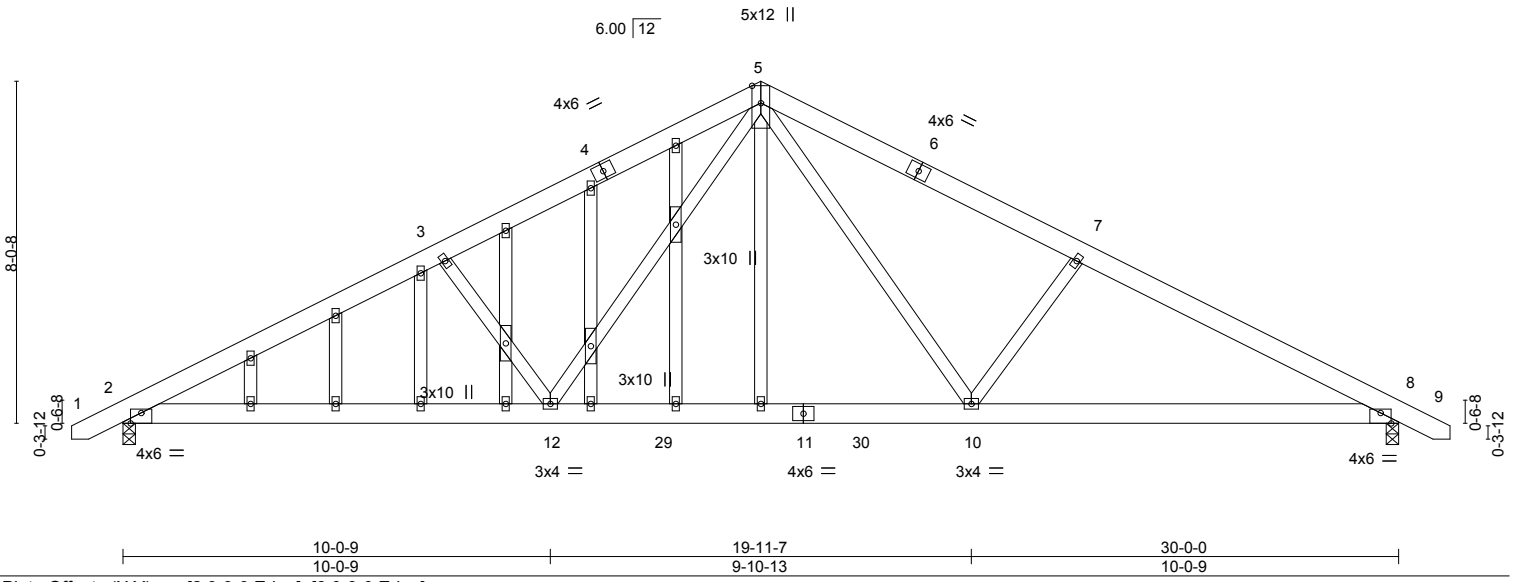


Plate Offsets (X, Y)-- [2:0-3-0,Edge], [8:0-3-0,Edge]	10-0-9 10-0-9	19-11-7 9-10-13	30-0-0 10-0-9
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d
TCLL 20.0	Plate Grip DOL 1.15	TC 0.24	Vert(LL) -0.12 10-12 >999 360
TCDL 10.0	Lumber DOL 1.15	BC 0.38	Vert(CT) -0.20 10-12 >999 240
BCLL 0.0 *	Rep Stress Incr YES	WB 0.33	Horz(CT) 0.04 8 n/a n/a
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.06 12 >999 240
			PLATES MT20
			GRIP 244/190
			Weight: 236 lb FT = 20%

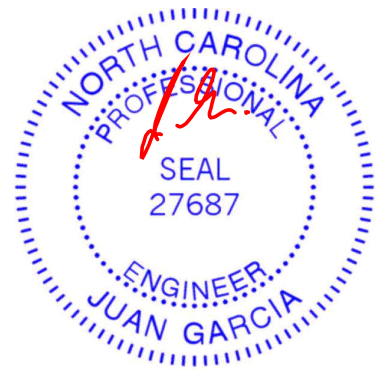
LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2
 OTHERS 2x4 SP No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-2-8 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
 Max Horz 2=162(LC 12)
 Max Uplift 2=-277(LC 12), 8=-277(LC 13)
 Max Grav 2=1258(LC 1), 8=1258(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2076/762, 3-5=-1837/752, 5-7=-1837/752, 7-8=-2076/762
 BOT CHORD 2-12=-545/1787, 10-12=-207/1173, 8-10=-550/1787
 WEBS 5-10=-232/708, 7-10=-442/381, 5-12=-232/708, 3-12=-442/381

- 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; 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) All plates are 2x4 MT20 unless otherwise indicated.
 - 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 20.0psf 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.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=277, 8=277.



September 15, 2023

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 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria 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)

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TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job J0823-4065	Truss A3	Truss Type FINK	Qty 6	Ply 1	Precision/41 Liberty Meadows/Harnett 160801065
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Comtech, Inc. Fayetteville, NC - 28314,

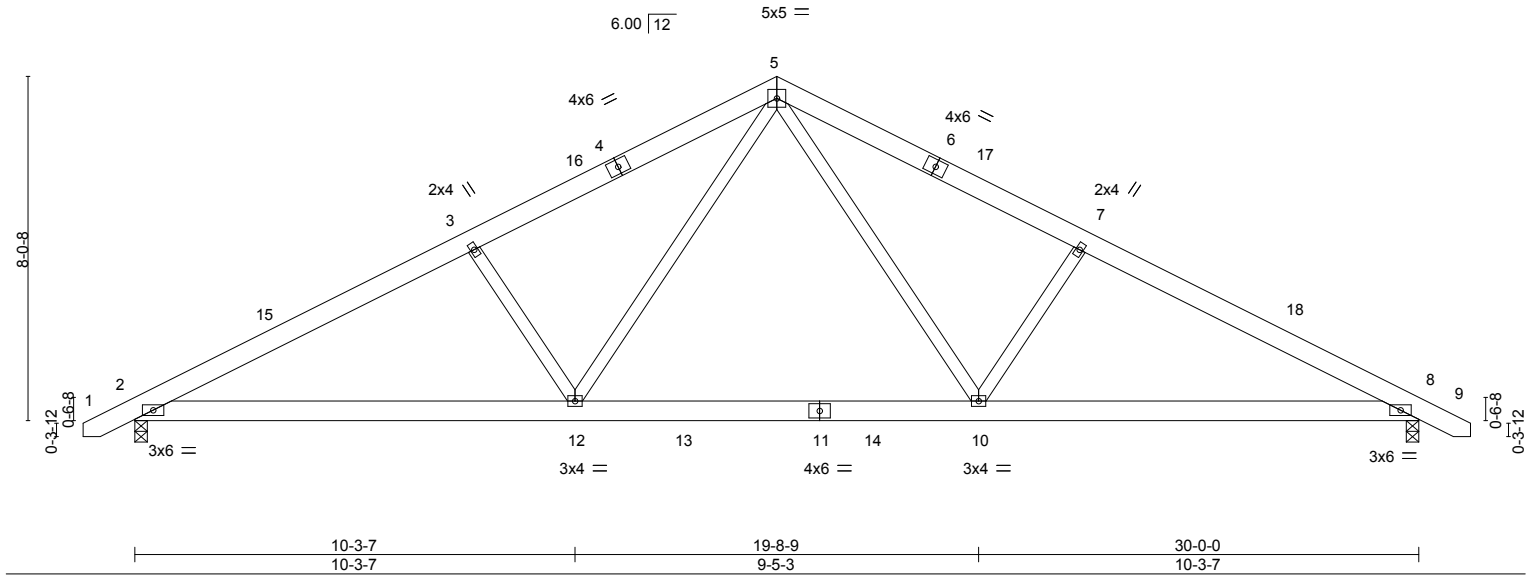
8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:00:07 2023 Page 1

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Job Reference (optional)



Scale = 1:53.8



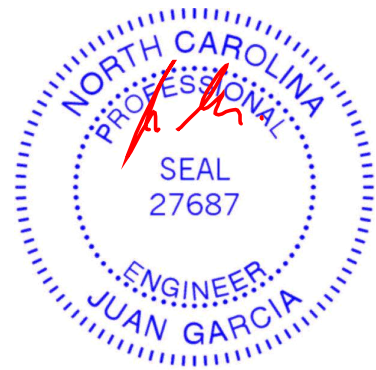
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.25	Vert(LL)	-0.14 10-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.41	Vert(CT)	-0.21 10-12	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.18	Horz(CT)	0.04 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.04 2-12	>999	240		
								Weight: 193 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-1-15 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	


REACTIONS. (size) 2=0-3-8, 8=0-3-8
 Max Horz 2=104(LC 11)
 Max Uplift 2=-88(LC 12), 8=-88(LC 13)
 Max Grav 2=1258(LC 1), 8=1258(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2051/461, 3-5=-1838/477, 5-7=-1838/477, 7-8=-2051/461
 BOT CHORD 2-12=-287/1789, 10-12=-88/1190, 8-10=-302/1761
 WEBS 3-12=-443/272, 5-12=-130/758, 5-10=-130/758, 7-10=-443/272

- 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) -1-0-2 to 3-4-11, Interior(1) 3-4-11 to 15-0-0, Exterior(2) 15-0-0 to 19-4-13, Interior(1) 19-4-13 to 31-0-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



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<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>ENGINEERING BY</p>  <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job J0823-4065	Truss A4	Truss Type COMMON	Qty 5	Ply 1	Precision/41 Liberty Meadows/Harnett Job Reference (optional)	160801066
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Comtech, Inc. Fayetteville, NC - 28314,

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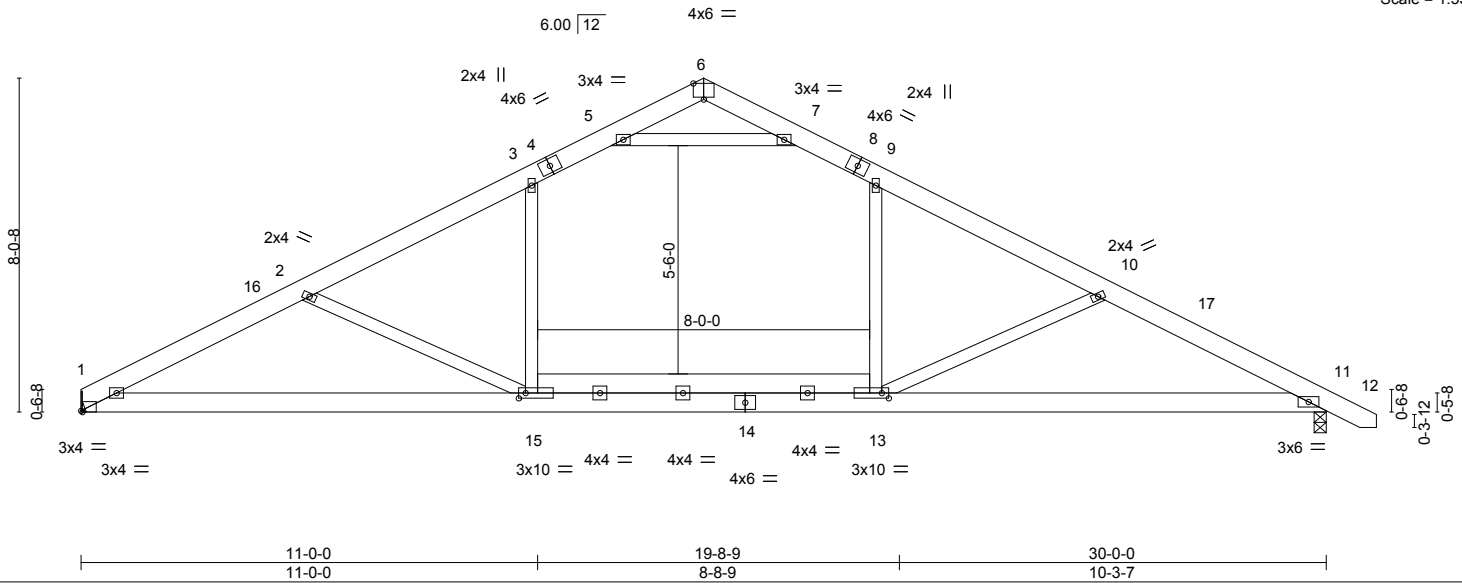


Plate Offsets (X,Y)--	[1:0-0-6,Edge], [6:0-3-0,Edge], [13:0-2-0,0-1-8], [15:0-2-0,0-1-8]
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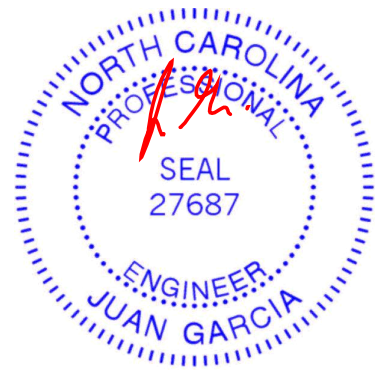
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.56	Vert(LL)	-0.21	1-15	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.47	Vert(CT)	-0.34	1-15	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.68	Horz(CT)	0.05	11	n/a		
BCDL 10.0	Code IRC2015/TP12014		Matrix-S	Wind(LL)	0.13	1-15	>999	Weight: 210 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-9-10 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	

REACTIONS. (size) 1=Mechanical, 11=0-3-8
 Max Horz 1=-106(LC 10)
 Max Uplift 1=-72(LC 12), 11=-88(LC 13)
 Max Grav 1=1228(LC 2), 11=1289(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-2336/556, 2-3=-1938/410, 3-5=-1546/420, 5-6=-36/506, 6-7=-38/503,
 7-9=-1548/412, 9-10=-1935/395, 10-11=-2311/511
 BOT CHORD 1-15=-407/2098, 13-15=-155/1632, 11-13=-362/2024
 WEBS 9-13=0/585, 10-13=-563/235, 3-15=-7/596, 2-15=-591/283, 5-7=-2190/491

- 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) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 15-0-0, Exterior(2) 15-0-0 to 19-1-12, Interior(1) 19-1-12 to 31-0-2 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) 1, 11.



September 15, 2023

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 A MITEK AFFILIATE

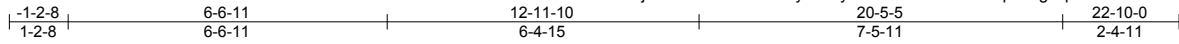
818 Soundside Road
 Edenton, NC 27932

Job J0823-4065	Truss A5	Truss Type ROOF SPECIAL	Qty 9	Ply 1	Precision/41 Liberty Meadows/Harnett Job Reference (optional)	160801067
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:00:09 2023 Page 1

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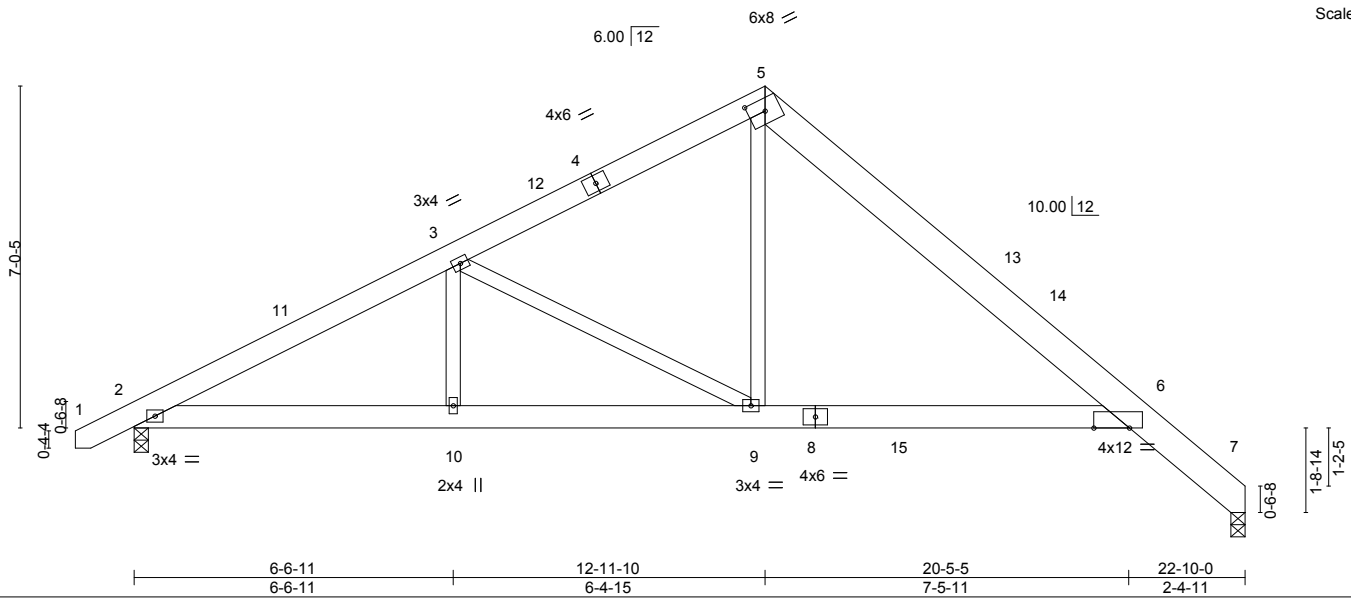


Plate Offsets (X,Y)--	[5:0-4-3,0-3-0], [6:0-8-13,Edge]
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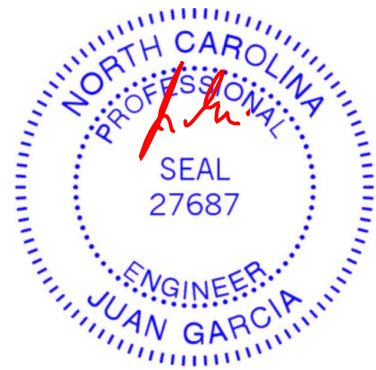
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.78	Vert(LL)	-0.19	6-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.59	Vert(CT)	-0.40	6-9	>684		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.45	Horz(CT)	0.27	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.15	6-9	>999	Weight: 149 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 5-7: 2x8 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-8-15 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	

REACTIONS. (size) 7=0-3-8, 2=0-3-8
 Max Horz 2=192(LC 11)
 Max Uplift 7=-37(LC 13), 2=-76(LC 12)
 Max Grav 7=920(LC 20), 2=976(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1527/321, 3-5=-1051/290, 5-6=-1123/269, 6-7=-546/162
 BOT CHORD 2-10=-155/1281, 9-10=-155/1281, 6-9=0/879
 WEBS 3-9=-526/179, 5-9=-32/581

- 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) -1-0-10 to 3-4-3, Interior(1) 3-4-3 to 12-11-10, Exterior(2) 12-11-10 to 17-4-7, Interior(1) 17-4-7 to 22-8-4 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) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.



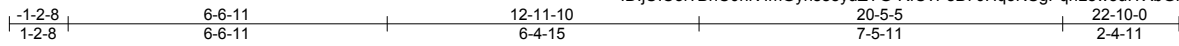
September 15, 2023

<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>ENGINEERING BY</p> <p>TRENCO</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	Precision/41 Liberty Meadows/Harnett	160801068
J0823-4065	A6-GE	GABLE	1	1	Job Reference (optional)	

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Scale = 1:47.4

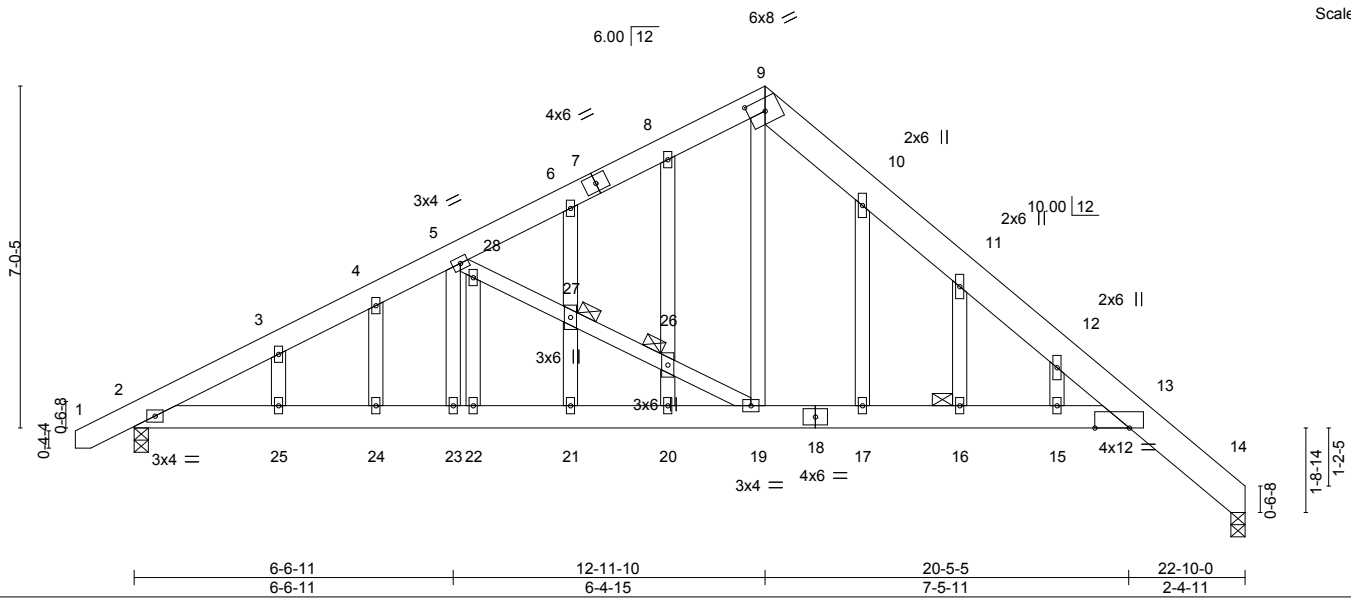


Plate Offsets (X,Y)--	[9:0-4-3,0-3-0], [13:0-8-9,Edge]
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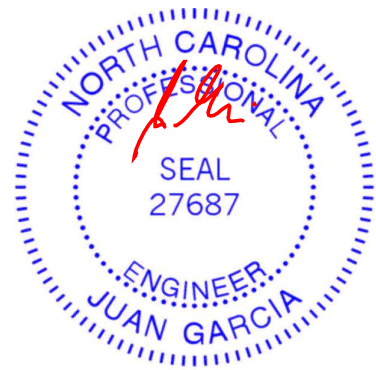
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.78	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.66	Vert(LL) -0.19 15-16 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.17	Vert(CT) -0.39 15-16 >695 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.23 14 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.22 15-16 >999 240	Weight: 183 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 9-14: 2x8 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-2-3 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	JOINTS 1 Brace at Jt(s): 26, 27, 16
OTHERS 2x4 SP No.2	

REACTIONS. (size) 14=0-3-8, 2=0-3-8
 Max Horz 2=246(LC 11)
 Max Uplift 14=161(LC 13), 2=-229(LC 12)
 Max Grav 14=911(LC 1), 2=976(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1497/421, 3-4=-1426/470, 4-5=-1386/498, 5-6=-1039/353, 6-8=-998/400,
 8-9=-942/429, 9-10=-991/428, 10-11=-1035/363, 11-12=-1116/311, 12-13=-1037/229,
 13-14=-539/192
 BOT CHORD 2-25=-286/1258, 24-25=-286/1258, 23-24=-286/1258, 22-23=-286/1258, 21-22=-286/1258,
 20-21=-286/1258, 19-20=-286/1258, 17-19=-66/877, 16-17=-67/877, 15-16=-68/877,
 13-15=-71/884
 WEBS 5-28=-517/263, 27-28=-484/239, 26-27=-488/244, 19-26=-493/243, 9-19=-247/592

- 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) 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
 - 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) All plates are 2x4 MT20 unless otherwise indicated.
 - 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) Bearing at joint(s) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=161, 2=229.



September 15, 2023

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ENGINEERING BY
TRENCO
 A MiTek Affiliate

818 Soundside Road
 Edenton, NC 27932

Job J0823-4065	Truss B1-GE	Truss Type GABLE	Qty 1	Ply 1	Precision/41 Liberty Meadows/Harnett Job Reference (optional)	160801069
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ID:jUICoITBhCOnVImGynse8yuZYG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoiJ4zJC?f



5x5 =

Scale = 1:68.1

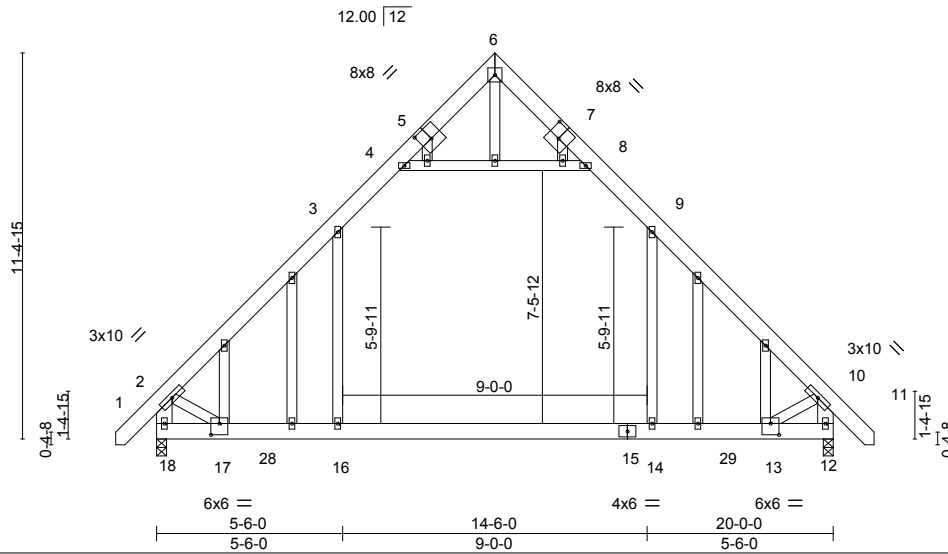


Plate Offsets (X,Y)-- [5:0-4-0,0-4-8], [7:0-4-0,0-4-8], [13:0-3-0,0-4-0], [17:0-3-0,0-4-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.34	Vert(LL)	-0.22	14-16	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.50	Vert(CT)	-0.32	14-16	>740		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.42	Horz(CT)	0.01	12	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.15	16	>999		
								Weight: 182 lb	FT = 20%

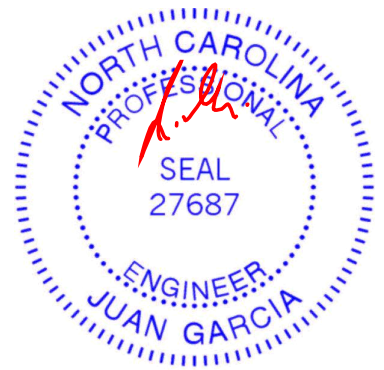
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
10-12,2-18: 2x6 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. (size) 12=0-3-8, 18=0-3-8
Max Horz 18=-332(LC 10)
Max Uplift 12=-150(LC 13), 18=-150(LC 12)
Max Grav 12=1067(LC 20), 18=1067(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1126/227, 3-4=-682/288, 8-9=-682/288, 9-10=-1126/227
BOT CHORD 17-18=-332/332, 16-17=-59/770, 14-16=-59/771, 13-14=-59/770
WEBS 9-14=-15/474, 3-16=-15/474, 4-8=-764/413, 10-12=-1428/251, 10-13=-71/926,
2-18=-1428/251, 2-17=-71/927

- 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; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) All plates are 2x4 MT20 unless otherwise indicated.
 - 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, with BCDL = 10.0psf.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=150, 18=150.



September 15, 2023

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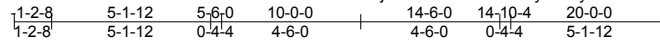
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job J0823-4065	Truss B2	Truss Type COMMON	Qty 3	Ply 1	Precision/41 Liberty Meadows/Hamett 160801070
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8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:00:13 2023 Page 1

ID:jUICoITBhC0nIvImGynse8yuZYG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoiJ4zJC?f



Scale = 1:74.5

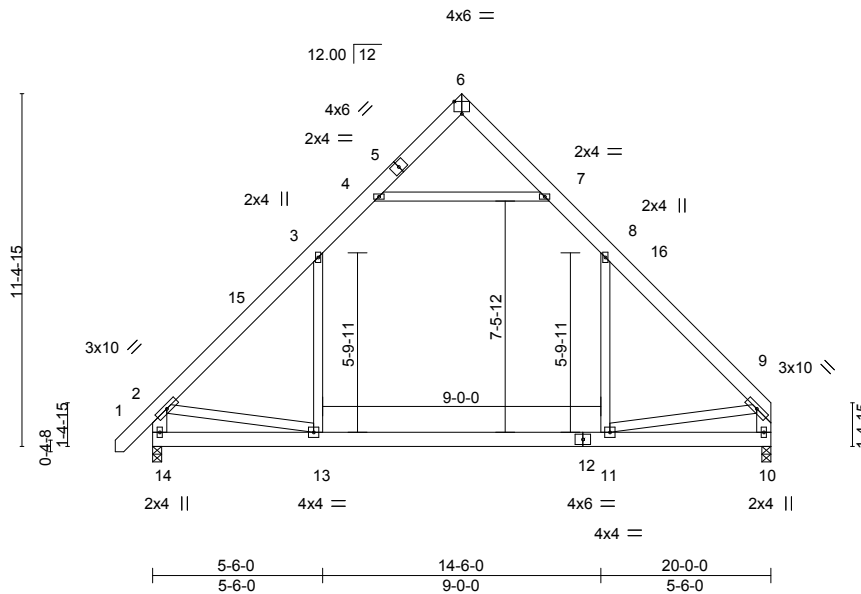


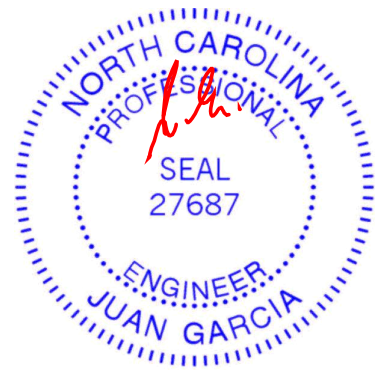
Plate Offsets (X,Y)-- [6:0-3-0,Edge]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	-0.18 11-13	>999	360
TCDL 10.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	-0.25 11-13	>950	240
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.43	Horz(CT)	0.01 10	n/a	n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.11 11	>999	240
						Weight: 162 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 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 *Except* 2-14,9-10: 2x6 SP No.1	

REACTIONS. (size) 14=0-3-8, 10=0-3-8
 Max Horz 14=255(LC 9)
 Max Uplift 14=-37(LC 12), 10=-32(LC 12)
 Max Grav 14=977(LC 19), 10=920(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1052/187, 3-4=-648/257, 7-8=-647/264, 8-9=-1049/172
 BOT CHORD 13-14=-255/244, 11-13=-12/693
 WEBS 8-11=0/396, 3-13=-1/399, 4-7=-770/361, 2-14=-1021/262, 2-13=0/724, 9-10=-964/190,
 9-11=-12/707

- 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) -1-0-14 to 3-3-15, Interior(1) 3-3-15 to 10-0-0, Exterior(2) 10-0-0 to 14-7-15, Interior(1) 14-7-15 to 19-9-4 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) 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) 14, 10.



September 15, 2023

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Job J0823-4065	Truss B3	Truss Type COMMON	Qty 3	Ply 1	Precision/41 Liberty Meadows/Hamett 160801071
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Comtech, Inc. Fayetteville, NC - 28314,

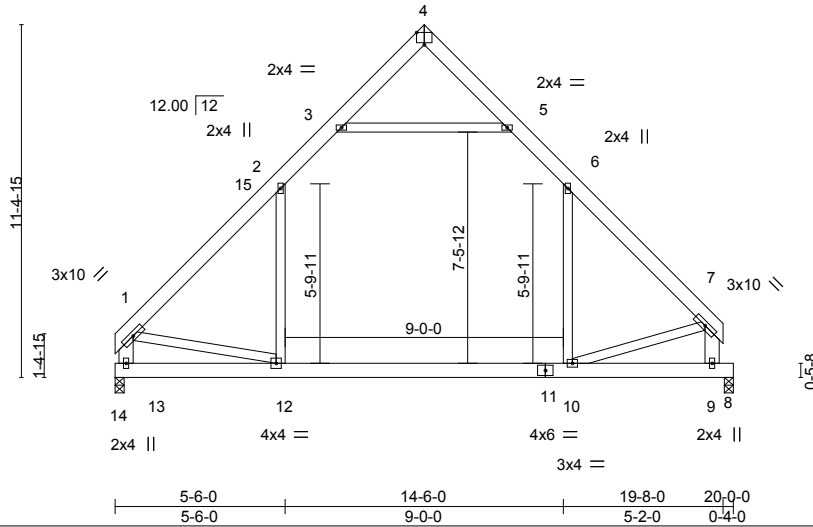
8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:00:13 2023 Page 1

ID:JUICoITBhCOnIvImGynse8yuZYG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



4x6 =

Scale = 1:74.5



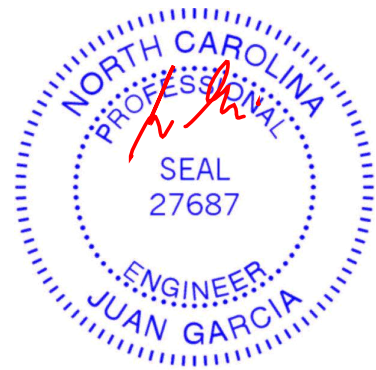
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	-0.17	10-12	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.24	10-12	>989		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.42	Horz(CT)	0.01	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.11	10	>999		
								Weight: 158 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 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 *Except* 7-9,1-13: 2x6 SP No.1	

REACTIONS. (size) 8=0-3-8, 13=0-3-8
 Max Horz 13=231(LC 9)
 Max Uplift 8=-27(LC 12), 13=-27(LC 13)
 Max Grav 8=894(LC 19), 13=930(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-1044/170, 2-3=-656/262, 5-6=-642/261, 6-7=-1057/184
 BOT CHORD 10-12=-16/693
 WEBS 6-10=0/426, 2-12=0/386, 3-5=-754/358, 7-10=-17/729, 7-9=-1055/200, 1-13=-977/188,
 1-12=-9/713

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) 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) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 10-0-0, Exterior(2) 10-0-0 to 14-7-15, Interior(1) 14-7-15 to 19-3-12 zone; end vertical left 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) 8, 13.



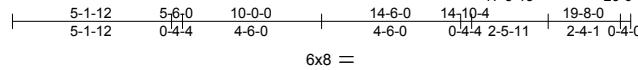
September 15, 2023

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Job J0823-4065	Truss B3-GRD	Truss Type COMMON	Qty 1	Ply 3	Precision/41 Liberty Meadows/Harnett Job Reference (optional)	160801072
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Scale = 1:74.5

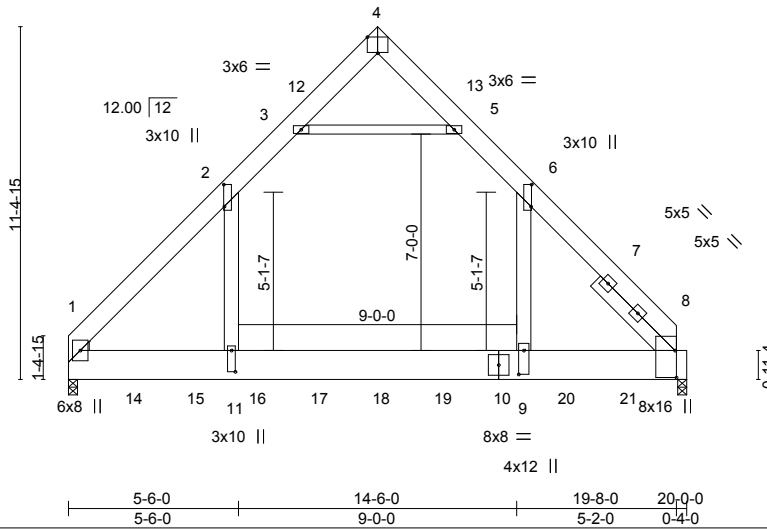


Plate Offsets (X,Y)--	[2:0-8-8,0-0-4], [4:0-4-0,Edge], [6:0-8-8,0-0-4], [8:0-10-8,0-0-9], [9:0-9-4,0-2-0], [11:0-8-4,0-1-8]
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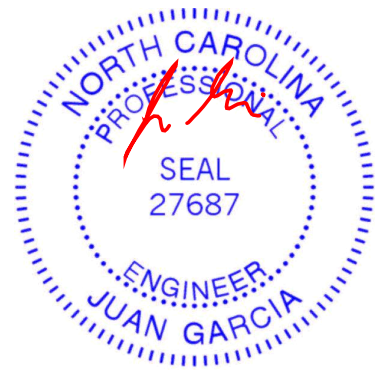
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.98	Vert(LL)	-0.19 9-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.33	Vert(CT)	-0.26 9-11	>900	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.37	Horz(CT)	0.01 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TP12014		Matrix-S	Wind(LL)	0.01 11	>999	240		
								Weight: 675 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x8 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x12 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1 *Except* 3-5: 2x4 SP No.2	
WEDGE Left: 2x4 SP No.3	
SLIDER Right 2x6 SP No.1 3-4-14	

REACTIONS.	(size)
8=0-3-8, 1=0-3-8	
Max Horz 1=252(LC 24)	
Max Uplift 8=64(LC 8), 1=65(LC 9)	
Max Grav 8=8827(LC 14), 1=8959(LC 14)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-10284/143, 2-3=-5203/188, 3-4=-1355/987, 4-5=-1350/1081, 5-6=-5125/186, 6-8=-10204/147
BOT CHORD	1-11=-61/6249, 9-11=-61/6249, 8-9=-61/6249
WEBS	6-9=-66/7118, 2-11=-32/7114, 3-5=-7986/191

- NOTES-**
- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x12 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 1.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 891 lb down and 72 lb up at 8-0-12, and 872 lb down and 61 lb up at 10-0-0, and 891 lb down and 72 lb up at 12-0-12 on top chord, and 1642 lb down at 2-0-0, 1642 lb down at 4-0-0, 1642 lb down at 6-0-0, 1642 lb down at 8-0-0, 1642 lb down at 10-0-0, 1642 lb down at 12-0-0, 1642 lb down at 14-0-0, and 1642 lb down at 16-0-0, and 1642 lb down at 18-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



September 15, 2023

LOAD CASE(S) Standard
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 J0823-4065	Truss B3-GRD	Truss Type COMMON	Qty 1	Ply 3	Precision/41 Liberty Meadows/Hamett Job Reference (optional)	I60801072
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:00:15 2023 Page 2
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LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-8=-60, 1-8=-20

Concentrated Loads (lb)

Vert: 4=-851 10=-418(B) 12=-851 13=-851 14=-418(B) 15=-418(B) 16=-418(B) 17=-418(B) 18=-418(B) 19=-418(B) 20=-418(B) 21=-418(B)

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/41 Liberty Meadows/Harnett	160801073
J0823-4065	C1-GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

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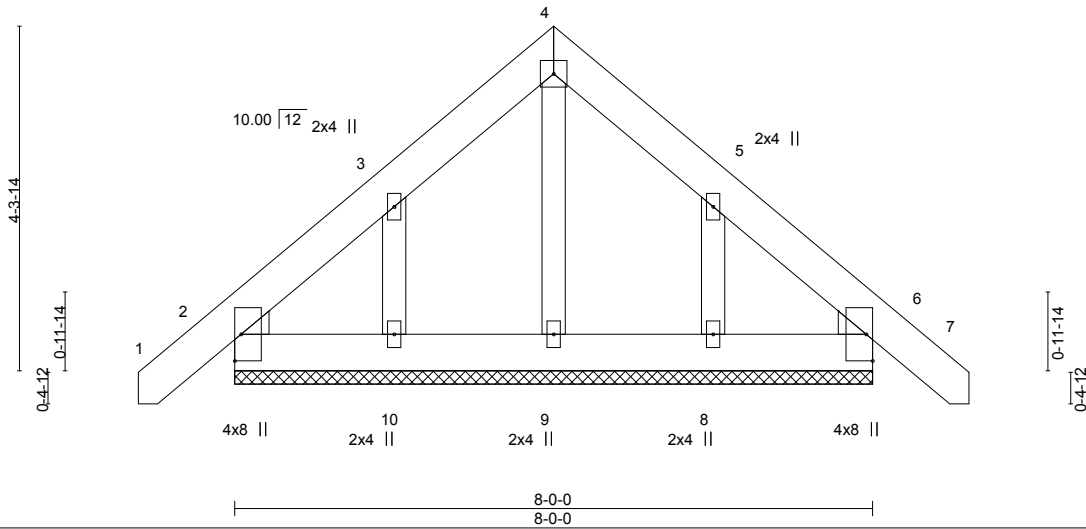
8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:00:16 2023 Page 1

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4x4 =

Scale = 1:28.9



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	6	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	7	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P					Weight: 63 lb	FT = 20%

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

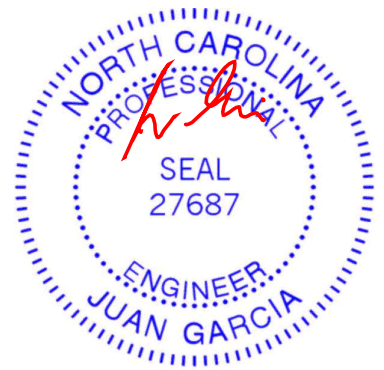
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 8-0-0.
 (lb) - Max Horz 2=127(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=143(LC 12), 8=140(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

NOTES-

- 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) 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
- 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 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, 6 except (jt=lb) 10=143, 8=140.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 6.



September 15, 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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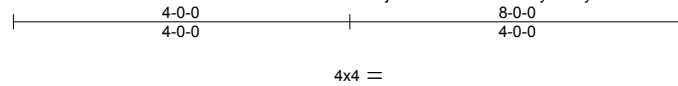
ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job J0823-4065	Truss C2-GRD	Truss Type COMMON GIRDER	Qty 1	Ply 2	Precision/41 Liberty Meadows/Harnett Job Reference (optional)	160801074
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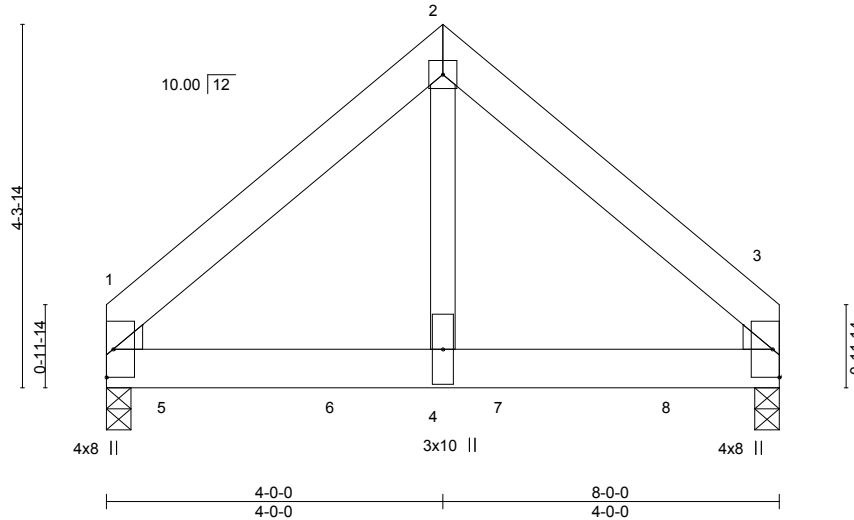
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:00:17 2023 Page 1

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Scale = 1:27.4



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.36	Vert(LL)	-0.02 3-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.54	Vert(CT)	-0.03 3-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.37	Horz(CT)	0.01 3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.01 3-4	>999	240		
								Weight: 101 lb	FT = 20%

LUMBER-

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

WEDGE
Left: 2x4 SP No.2, Right: 2x4 SP No.2

BRACING-

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

REACTIONS.

(size) 1=0-3-8, 3=0-3-8
Max Horz 1=-91(LC 23)
Max Uplift 1=-186(LC 8), 3=-168(LC 9)
Max Grav 1=2832(LC 2), 3=2542(LC 2)

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

TOP CHORD 1-2=-2320/172, 2-3=-2320/172
BOT CHORD 1-4=-96/1615, 3-4=-96/1615
WEBS 2-4=-145/2987

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: 2x6 - 2 rows staggered at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=186, 3=168.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1211 lb down and 88 lb up at 0-9-4, 1208 lb down and 92 lb up at 2-9-4, and 1208 lb down and 92 lb up at 4-9-4, and 1208 lb down and 92 lb up at 6-9-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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



September 15, 2023

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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818 Soundside Road
Edenton, NC 27932

Job J0823-4065	Truss C2-GRD	Truss Type COMMON GIRDER	Qty 1	Ply 2	Precision/41 Liberty Meadows/Hamett Job Reference (optional)	I60801074
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:00:17 2023 Page 2
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LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 5=-1174(B) 6=-1170(B) 7=-1170(B) 8=-1170(B)

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818 Soundside Road
Edenton, NC 27932

Job J0823-4065	Truss M1-GE	Truss Type GABLE	Qty 1	Ply 1	Precision/41 Liberty Meadows/Harnett Job Reference (optional)	160801075
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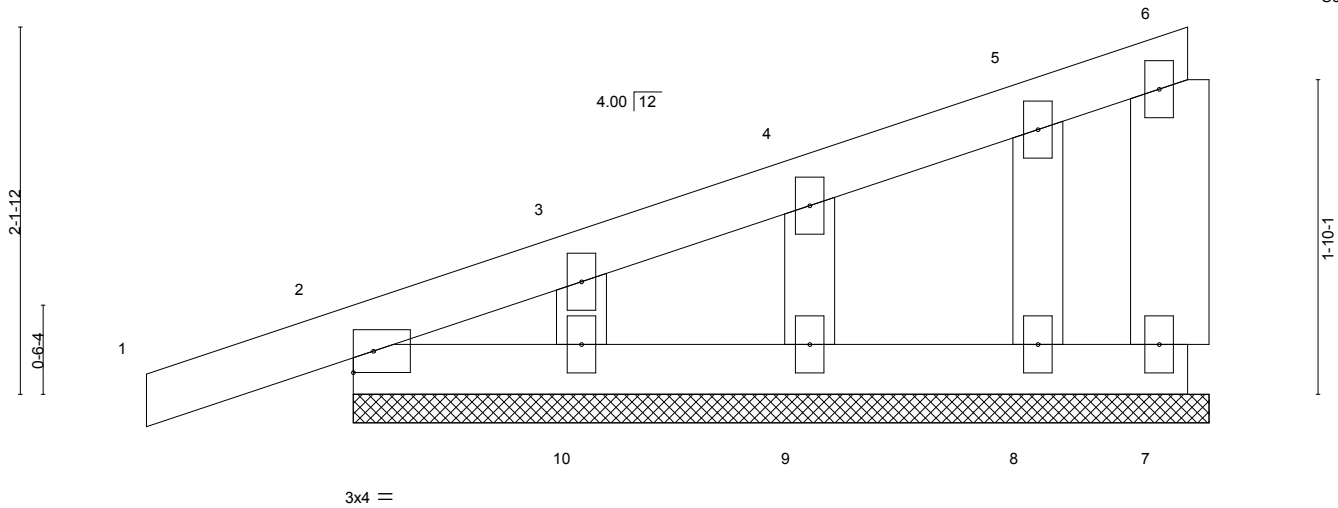
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:00:18 2023 Page 1

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Scale = 1:13.5



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 0.07	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 0.02	Horz(CT)	0.00		n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 24 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 5-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 5-0-0.
 (lb) - Max Horz 2=96(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 7, 2, 10, 9, 8
 Max Grav All reactions 250 lb or less at joint(s) 7, 2, 10, 9, 8

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) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 1-4-0 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) 7, 2, 10, 9, 8.



September 15, 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

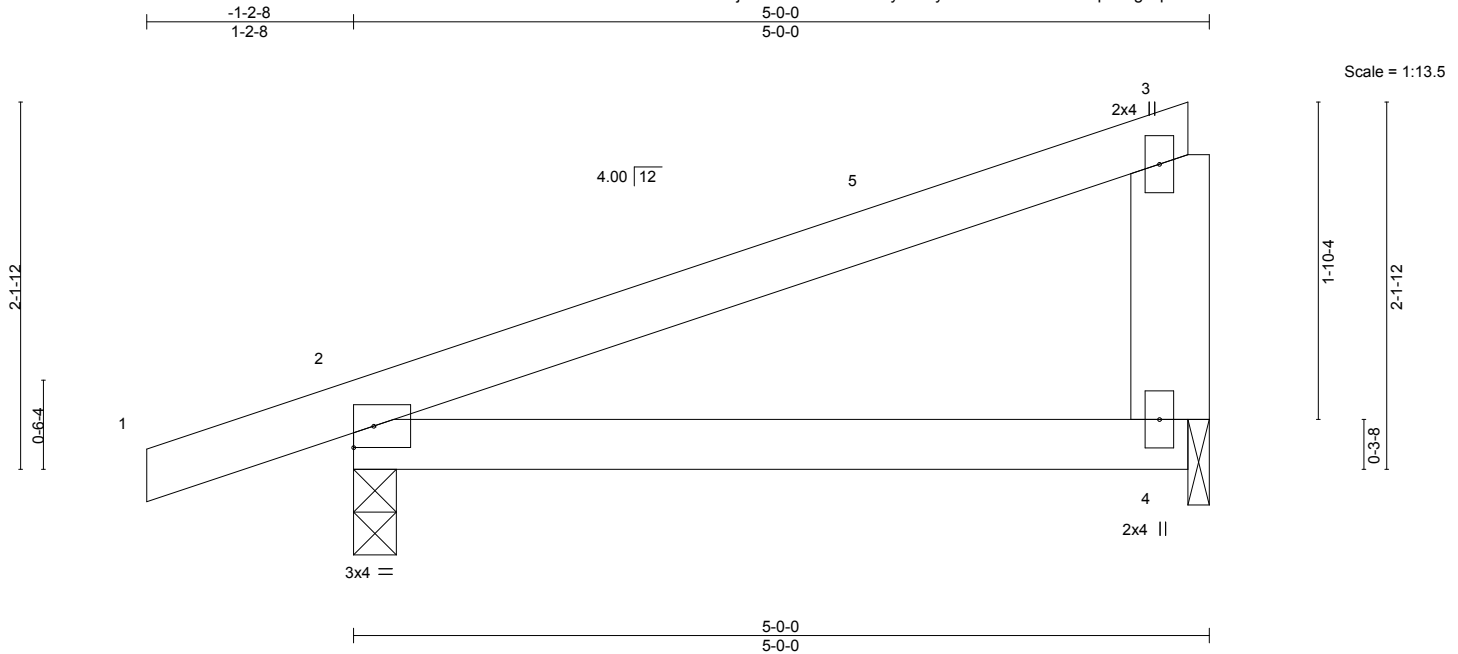
Job J0823-4065	Truss M2	Truss Type MONOPICH	Qty 5	Ply 1	Precision/41 Liberty Meadows/Harnett 160801076
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8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:00:19 2023 Page 1

ID:jUICoITBhC0nIvImGynse8yuZYG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Job Reference (optional)



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 0.33	Vert(LL)	-0.02 2-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	-0.05 2-4	>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)	0.05 2-4	>999	240	Weight: 21 lb	FT = 20%

LUMBER-

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

BRACING-

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

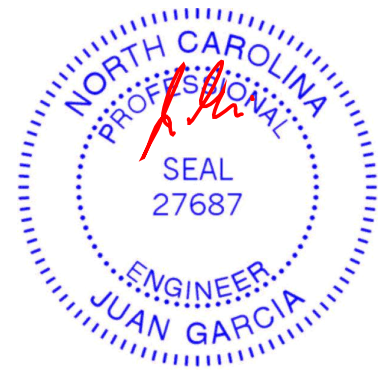
REACTIONS.

(size) 2=0-3-0, 4=0-1-8
 Max Horz 2=68(LC 8)
 Max Uplift 2=-115(LC 8), 4=-76(LC 8)
 Max Grav 2=277(LC 1), 4=174(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 4-9-4 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) 4 except (jt=6) 2=115.



September 15, 2023

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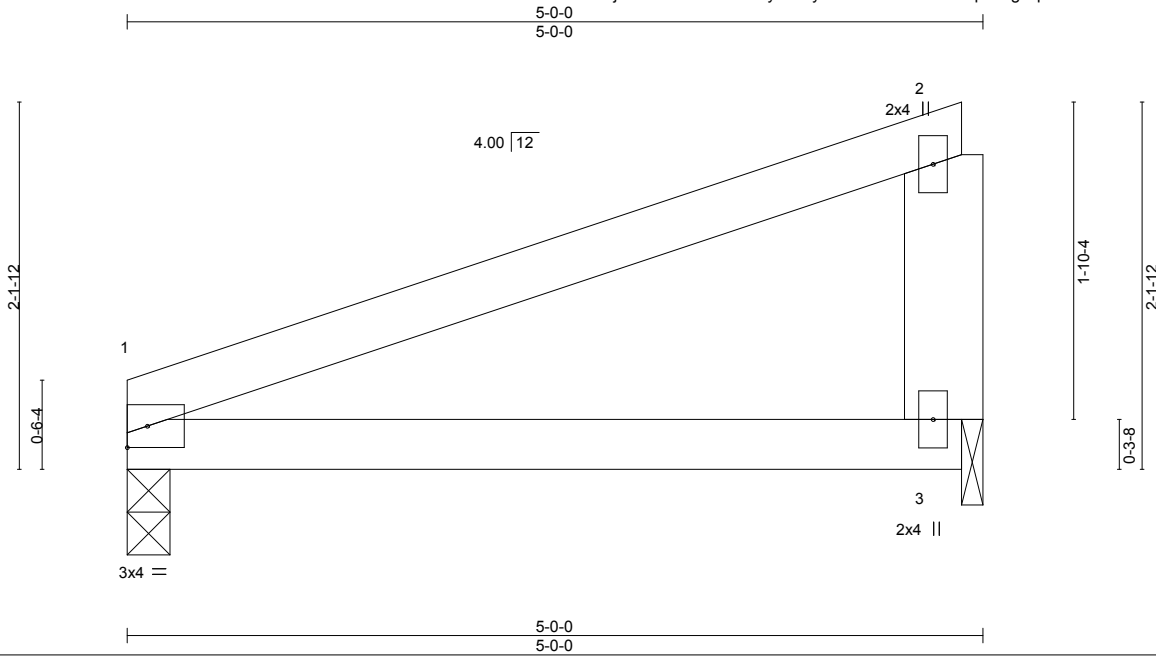
818 Soundside Road
 Edenton, NC 27932

Job J0823-4065	Truss M3	Truss Type MONOPITCH	Qty 1	Ply 1	Precision/41 Liberty Meadows/Harnett Job Reference (optional)	160801077
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8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:00:20 2023 Page 1

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Scale = 1:13.5

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0 Plate Grip DOL 1.15	TC 0.31	Vert(LL) -0.02	1-3	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.37	Vert(CT) -0.05	1-3	>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) 0.05	1-3	>999	240	Weight: 19 lb	FT = 20%

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

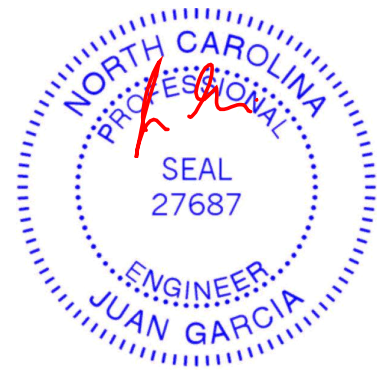
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-0, 3=0-1-8
 Max Horz 1=59(LC 8)
 Max Uplift 1=60(LC 8), 3=83(LC 8)
 Max Grav 1=186(LC 1), 3=186(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) 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) 3 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) 3.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



September 15, 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
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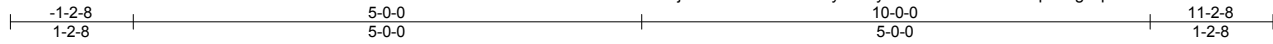
818 Soundside Road
 Edenton, NC 27932

Job J0823-4065	Truss P1-GE	Truss Type GABLE	Qty 1	Ply 1	Precision/41 Liberty Meadows/Hamett Job Reference (optional)	160801078
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:00:21 2023 Page 1

ID:jUICoITBhCOnIvmGynse8yuZYG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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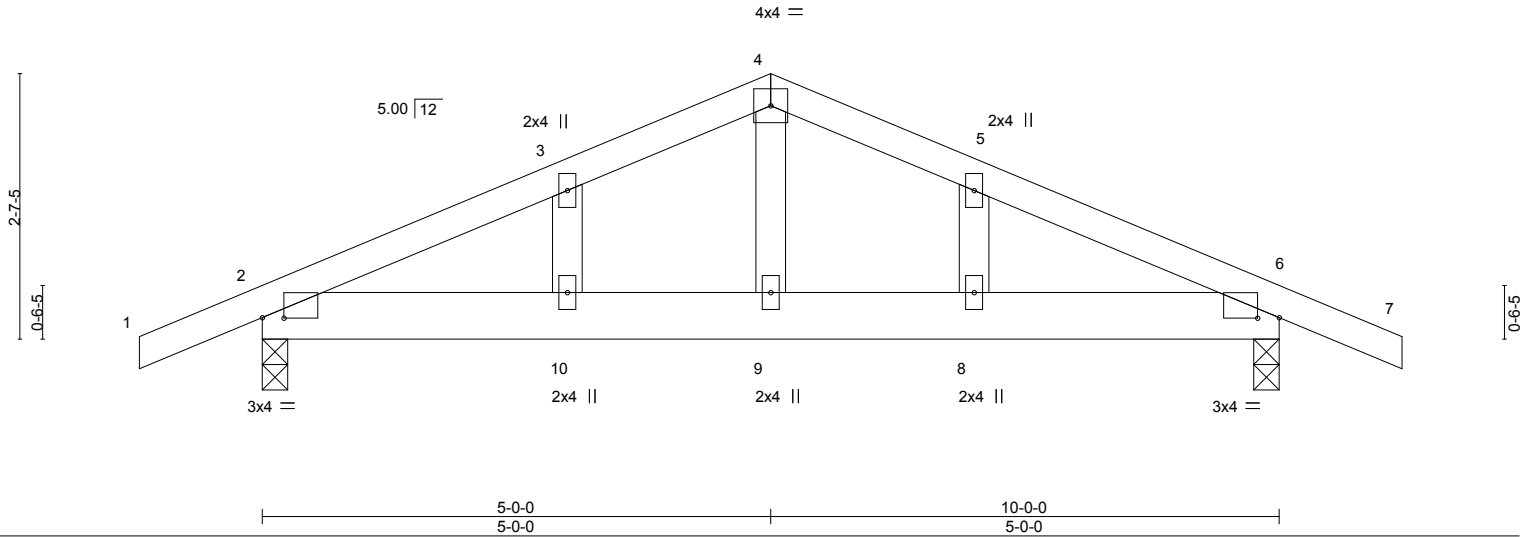


Plate Offsets (X,Y)--	[2:0-2-9,0-0-1], [6:0-2-9,0-0-1]
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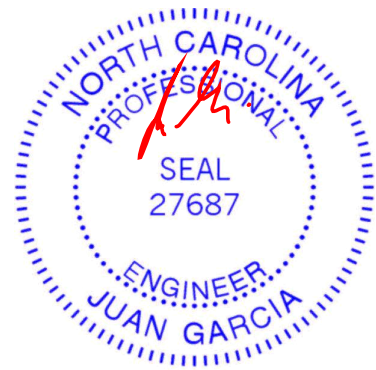
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.13	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.13	Vert(LL) -0.01 8 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Vert(CT) -0.02 8 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.02 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 13)
 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=-559/645, 3-4=-523/687, 4-5=-523/687, 5-6=-559/645
 BOT CHORD 2-10=-507/464, 9-10=-507/464, 8-9=-507/464, 6-8=-507/464
 WEBS 4-9=-399/250

- 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.



September 15, 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)

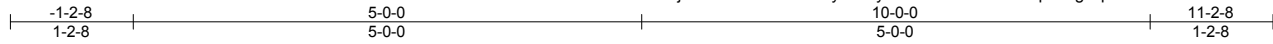
818 Soundside Road
Edenton, NC 27932

Job J0823-4065	Truss P2	Truss Type COMMON	Qty 5	Ply 1	Precision/41 Liberty Meadows/Hamett 160801079
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:00:22 2023 Page 1

ID:jUICoITBhCOnIvImGynse8yuZYG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



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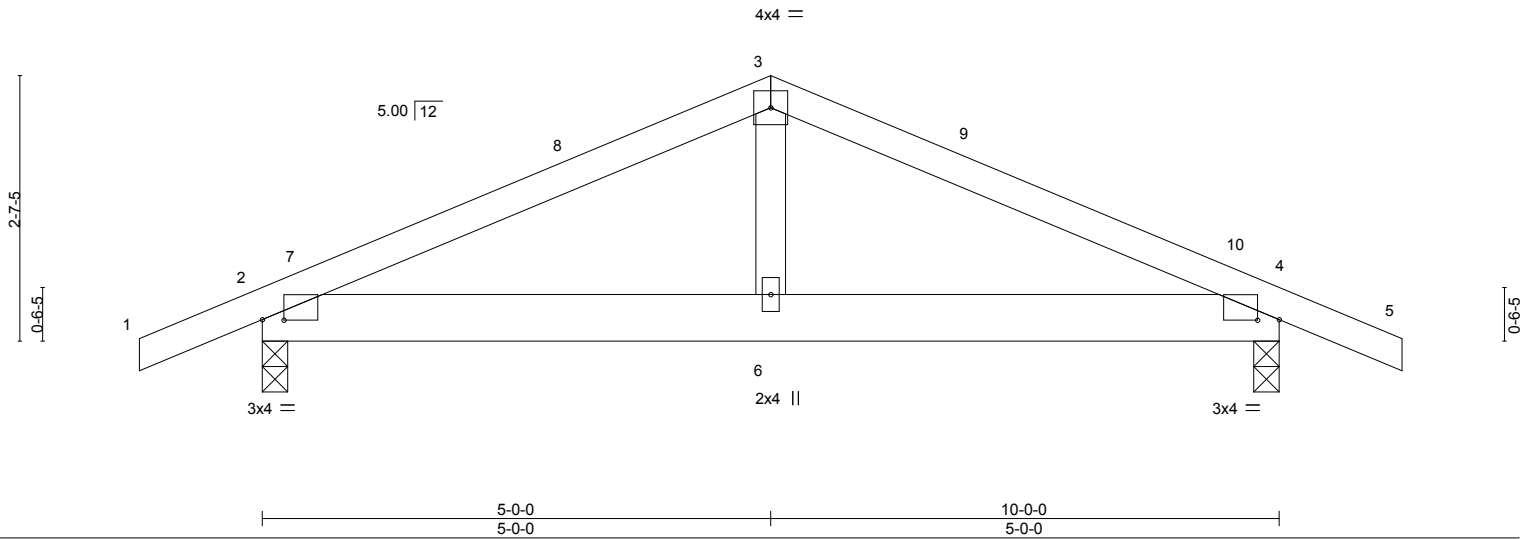


Plate Offsets (X,Y)--	[2:0-2-9,0-0-1], [4:0-2-9,0-0-1]
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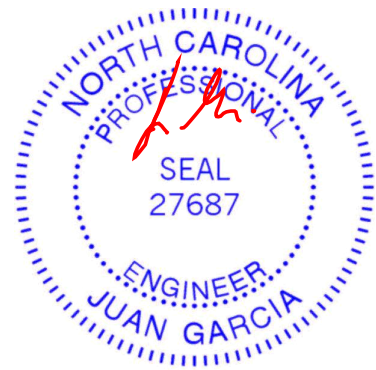
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.21	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(LL) -0.01 6 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Vert(CT) -0.02 4-6 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 4 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.02 4-6 >999 240	Weight: 46 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	

REACTIONS. (size) 2=0-3-0, 4=0-3-0
 Max Horz 2=-31(LC 17)
 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=-567/636, 3-4=-567/636
 BOT CHORD 2-6=-476/457, 4-6=-476/457
 WEBS 3-6=-318/237

- 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) -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
 - 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) 2=147, 4=147.



September 15, 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>ENGINEERING BY</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job J0823-4065	Truss VC1	Truss Type VALLEY	Qty 1	Ply 1	Precision/41 Liberty Meadows/Harnett 160801080
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Comtech, Inc. Fayetteville, NC - 28314,

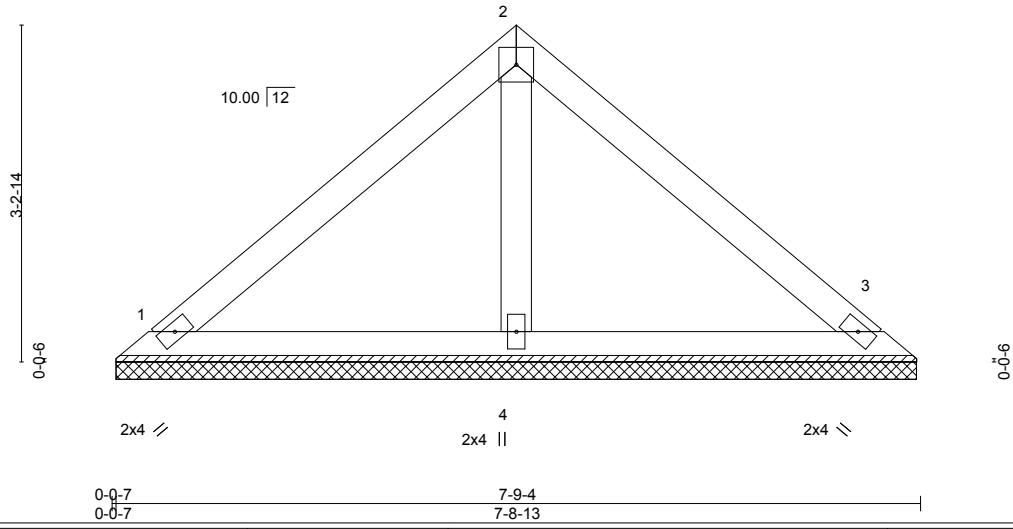
8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:00:22 2023 Page 1

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4x4 =

Scale = 1:22.1



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.18	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 29 lb	FT = 20%
	Code IRC2015/TPI2014							

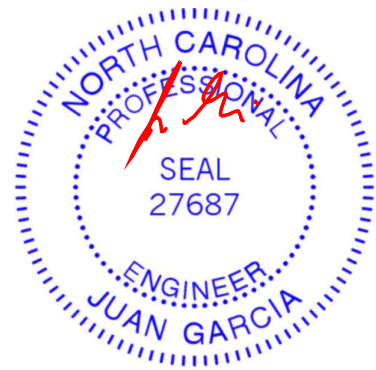
LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 OTHERS 2x4 SP No.2

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

REACTIONS. (size) 1=7-8-5, 3=7-8-5, 4=7-8-5
 Max Horz 1=70(LC 8)
 Max Uplift 1=24(LC 13), 3=31(LC 13)
 Max Grav 1=161(LC 1), 3=161(LC 1), 4=235(LC 1)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) 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
 - 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) 1, 3.
 - 6) N/A



September 15, 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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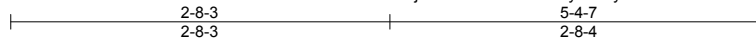
818 Soundside Road
 Edenton, NC 27932

Job J0823-4065	Truss VC2	Truss Type VALLEY	Qty 1	Ply 1	Precision/41 Liberty Meadows/Harnett 160801081
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Comtech, Inc. Fayetteville, NC - 28314,

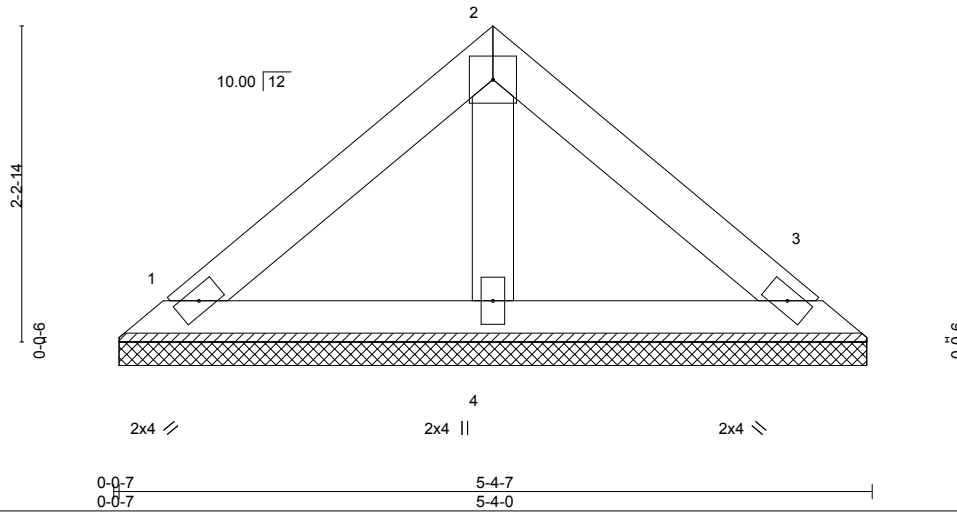
8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:00:23 2023 Page 1

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4x4 =

Scale = 1:16.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 19 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-4-7 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-3-8, 3=5-3-8, 4=5-3-8
 Max Horz 1=-46(LC 10)
 Max Uplift 1=-16(LC 13), 3=-20(LC 13)
 Max Grav 1=106(LC 1), 3=106(LC 1), 4=154(LC 1)

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

- 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) 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.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
 - 6) N/A



September 15, 2023

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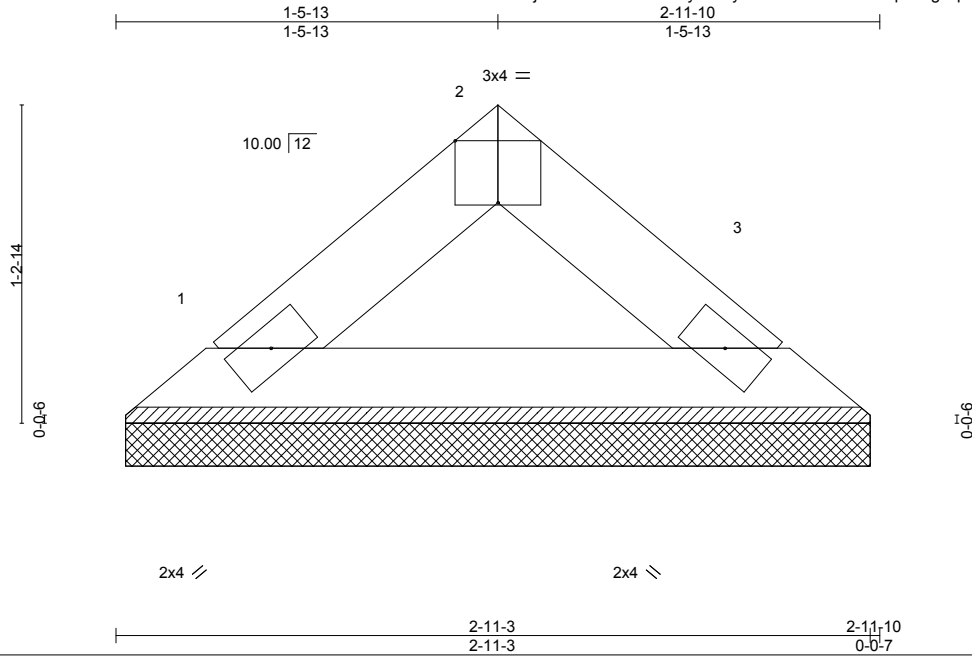
818 Soundside Road
 Edenton, NC 27932

Job J0823-4065	Truss VC3	Truss Type VALLEY	Qty 1	Ply 1	Precision/41 Liberty Meadows/Hamett Job Reference (optional)	160801082
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:00:24 2023 Page 1

ID:jUICoITBhC0nlVImGynse8yuZYG-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:9.0

Plate Offsets (X, Y)-- [2:0-2-0,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 0.02	Vert(LL) n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	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: 9 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-11-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-10-12, 3=2-10-12
Max Horz 1=-22(LC 8)
Max Uplift 1=-4(LC 12), 3=-4(LC 13)
Max Grav 1=87(LC 1), 3=87(LC 1)

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

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.



September 15, 2023

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

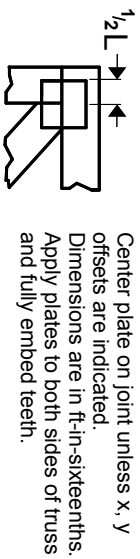
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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)

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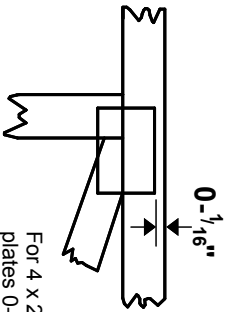
818 Soundside Road
Edenton, NC 27932

Symbols

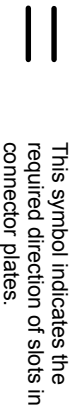
PLATE LOCATION AND ORIENTATION



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



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



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

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

PLATE SIZE

4 X 4

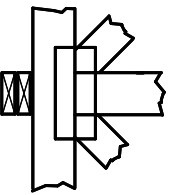
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

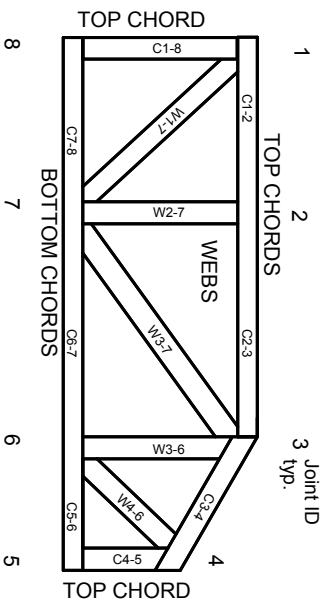


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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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MITek

ENGINEERING BY
TRINGCO
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 I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/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.

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: J0823-4066

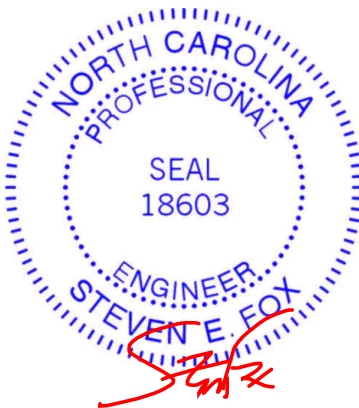
Precision/41 Liberty Meadows/Harnett

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: I60801083 thru I60801097

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844



September 15, 2023

Fox, Steve

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/41 Liberty Meadows/Harnett	160801083
J0823-4066	ET1	GABLE	1	1	Job Reference (optional)	

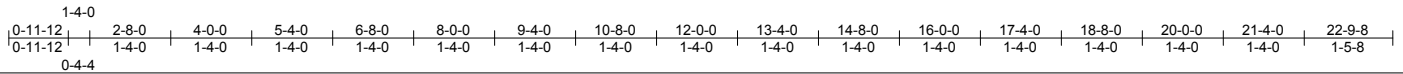
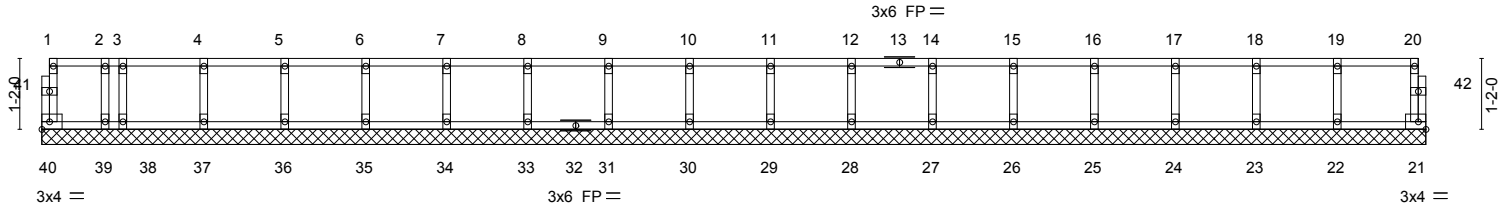
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:01:04 2023 Page 1
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0-1-8

0-1-8

Scale = 1:37.9



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 0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.01	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	21	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-R						Weight: 96 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 22-9-8.
 (lb) - Max Grav All reactions 250 lb or less at joint(s) 40, 21, 39, 38, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22

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.



September 15, 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/41 Liberty Meadows/Hamett	I60801084
J0823-4066	ET2	GABLE	1	1	Job Reference (optional)	

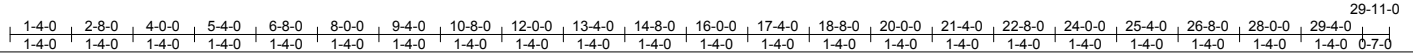
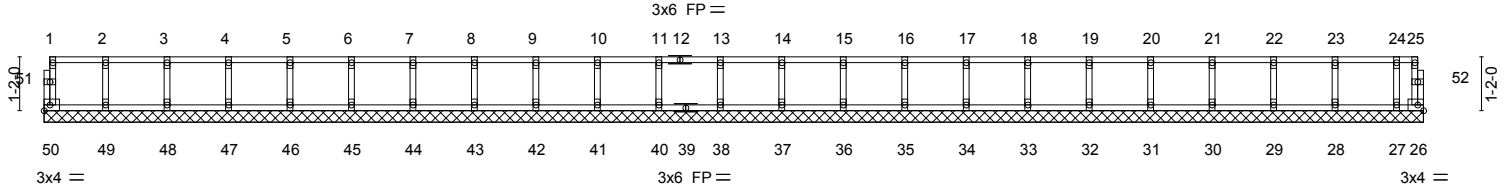
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:01:05 2023 Page 1
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0-1/8

0-1/8

Scale = 1:50.0



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 0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.01	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	26	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-R							
									Weight: 124 lb	FT = 20%F, 11%E

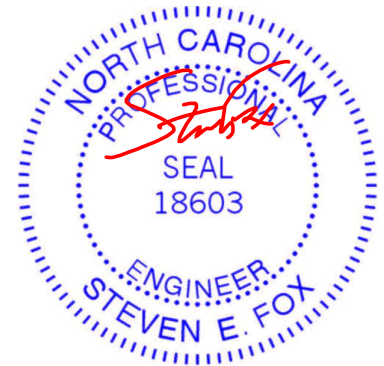
LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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 29-11-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 50, 26, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27

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.



September 15, 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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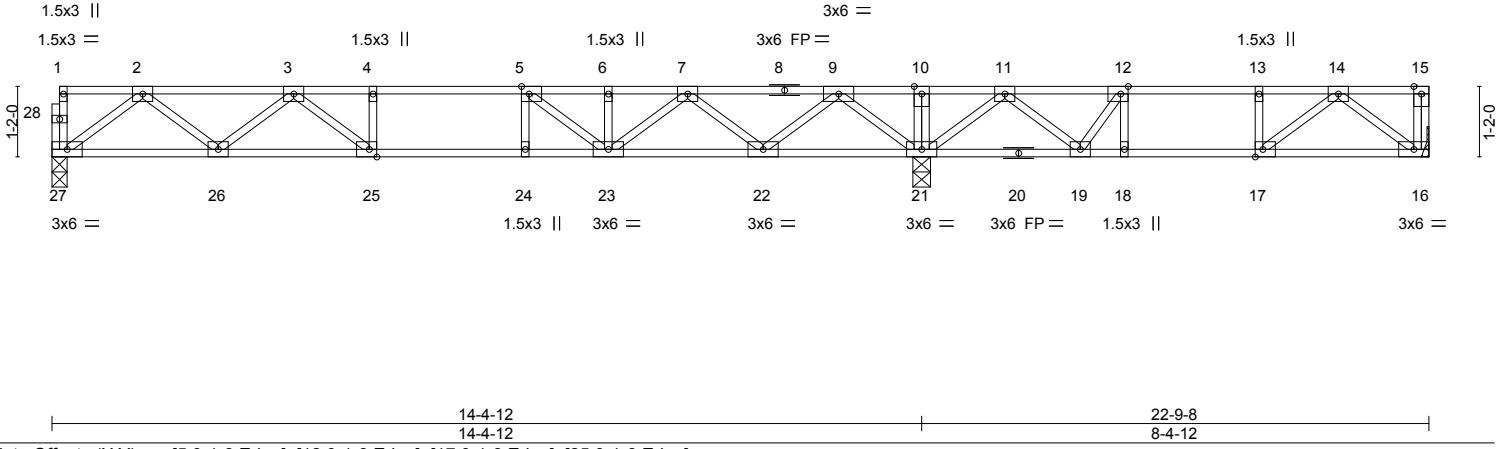


818 Soundside Road
Edenton, NC 27932

Job J0823-4066	Truss F01	Truss Type Floor	Qty 9	Ply 1	Precision/41 Liberty Meadows/Harnett Job Reference (optional)	160801085
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:01:07 2023 Page 1
ID:jUICoITBhC0nlVImGynse8yuZYG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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 0.57	Vert(LL)	-0.12 25-26	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.60	Vert(CT)	-0.15 25-26	>999	360		
BCLL 0.0	Rep Stress Incr	NO	WB 0.44	Horz(CT)	0.03 16	n/a	n/a		
BCDL 5.0	Code IRC2015/TP12014		Matrix-S						
								Weight: 114 lb	FT = 20%F, 11%E

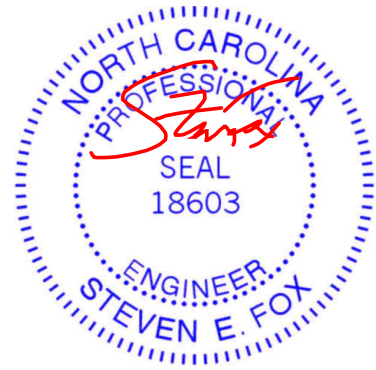
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 27=0-3-0, 21=0-3-8, 16=Mechanical
Max Grav 27=710(LC 10), 21=1473(LC 1), 16=1641(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 15-16=-1306/0, 2-3=-1402/0, 3-4=-2185/0, 4-5=-2185/0, 5-6=-1882/0, 6-7=-1882/0, 7-9=-807/0, 9-10=0/1225, 10-11=0/1225, 11-12=-430/429, 12-13=-634/202, 13-14=-634/202
BOT CHORD 26-27=0/879, 25-26=0/1895, 24-25=0/2185, 23-24=0/2185, 22-23=0/1470, 19-21=-696/91, 18-19=-202/634, 17-18=-202/634, 16-17=-36/422
WEBS 2-27=-1100/0, 2-26=0/681, 3-26=-641/0, 3-25=0/496, 9-21=-1328/0, 9-22=0/933, 11-21=-834/0, 11-19=0/624, 14-16=-529/46, 14-17=-212/272, 7-22=-898/0, 7-23=0/556, 5-23=-641/0, 12-19=-614/0

- 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.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 16-27=-10, 1-15=-100
Concentrated Loads (lb)
Vert: 15=-1250



September 15, 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

Job J0823-4066	Truss F02-A	Truss Type Floor	Qty 2	Ply 1	Precision/41 Liberty Meadows/Harnett	160801087
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Comtech, Inc., Fayetteville, NC 28309

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 13:28:58 2023 Page 1
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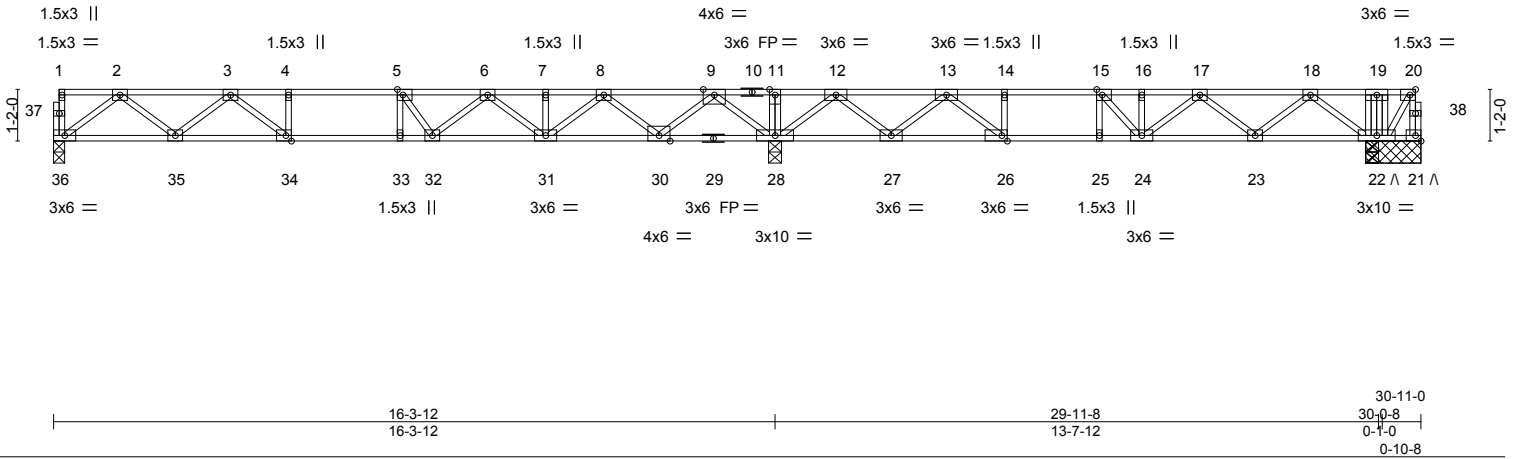


Plate Offsets (X,Y)-- [5:0-1-8,Edge], [15:0-1-8,Edge], [20:0-1-8,Edge], [26:0-1-8,Edge], [34:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 2-0-0	TC 0.99	Vert(LL) -0.19	33	>999	480		MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.97	Vert(CT) -0.25	33	>783	360			
BCLL 0.0	Rep Stress Incr NO	WB 0.57	Horz(CT) 0.04	21	n/a	n/a			
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S							
								Weight: 159 lb	FT = 20%F, 11%E

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

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

REACTIONS. All bearings 1-3-0 except (jt=length) 36=0-3-0, 28=0-3-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) except 36=761(LC 3), 22=3693(LC 4), 22=3596(LC 1), 22=3596(LC 1), 28=1963(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1522/0, 3-4=-2499/0, 4-5=-2499/0, 5-6=-2428/0, 6-7=-1711/0, 7-8=-1711/0, 8-9=-245/424, 9-10=0/2343, 10-11=0/2343, 11-12=0/2343, 12-13=-542/1160, 13-14=-1714/418, 14-15=-1714/418, 15-16=-1825/118, 16-17=-1825/118, 17-18=-1205/12
BOT CHORD 35-36=0/945, 34-35=0/2089, 33-34=0/2499, 32-33=0/2499, 31-32=0/2200, 30-31=-155/1097, 29-30=-1123/0, 28-29=-1123/0, 27-28=-1472/0, 26-27=-827/1189, 25-26=-418/1714, 24-25=-418/1714, 23-24=-48/1637, 22-23=-2/750
WEBS 2-36=-1183/0, 2-35=0/751, 3-35=-738/0, 3-34=0/594, 4-34=-267/0, 9-28=-1610/0, 9-30=0/1187, 19-22=-2995/0, 12-28=-1400/0, 12-27=0/955, 13-27=-1017/0, 13-26=0/1038, 14-26=-432/0, 15-25=-304/0, 18-22=-1042/0, 8-30=-1158/0, 8-31=0/835, 6-31=-662/0, 6-32=0/489, 5-32=-484/0, 18-23=-14/592, 17-23=-563/46, 16-24=-286/0, 15-24=0/651

- 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) "A" indicates Released bearing: allow for upward movement at joint(s) 21, 22.
 - 5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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.
 - 7) 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: 21-36=-10, 1-19=-100, 19-20=-220
Concentrated Loads (lb)
Vert: 19=-2832



September 15, 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/41 Liberty Meadows/Harnett	160801088
J0823-4066	F03	Floor	3	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:01:11 2023 Page 1
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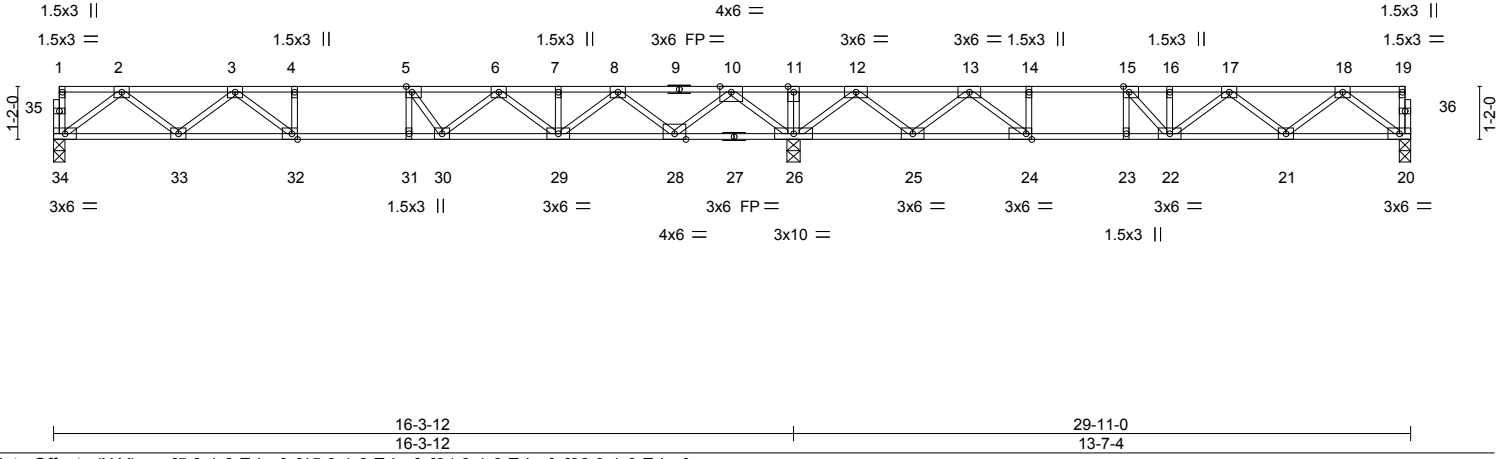


Plate Offsets (X,Y)--	[5:0-1-8,Edge], [15:0-1-8,Edge], [24:0-1-8,Edge], [32:0-1-8,Edge]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.87	Vert(LL) -0.19 31 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.90	Vert(CT) -0.25 31 >783 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.57	Horz(CT) 0.04 20 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S			
				Weight: 149 lb	FT = 20%F, 11%E

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

REACTIONS. (size) 34=0-3-0, 20=0-3-0, 26=0-3-8
Max Grav 34=761(LC 3), 20=650(LC 4), 26=1967(LC 1)

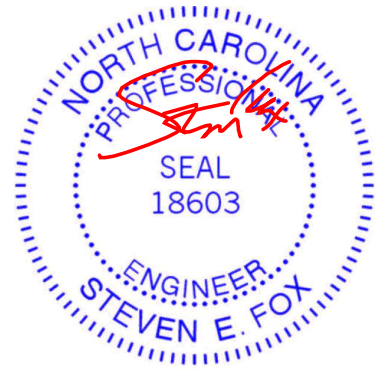
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-1522/0, 3-4=-2500/0, 4-5=-2500/0, 5-6=-2429/0, 6-7=-1712/0, 7-8=-1712/0, 8-10=-246/417, 10-11=0/2340, 11-12=0/2340, 12-13=-559/1148, 13-14=-1743/392, 14-15=-1743/392, 15-16=-1862/83, 16-17=-1862/83, 17-18=-1252/0

BOT CHORD 33-34=0/945, 32-33=0/2090, 31-32=0/2500, 30-31=0/2500, 29-30=0/2201, 28-29=-149/1099, 26-28=-1116/0, 25-26=-1464/0, 24-25=-810/1211, 23-24=-392/1743, 22-23=-392/1743, 21-22=-7/1679, 20-21=0/798

WEBS 2-34=-1183/0, 2-33=0/752, 3-33=-739/0, 3-32=0/596, 4-32=-268/0, 10-26=-1610/0, 10-28=0/1187, 18-20=-998/0, 18-21=-17/591, 17-21=-555/54, 16-22=-291/0, 12-26=-1407/0, 12-25=0/961, 13-25=-1024/0, 8-28=-1157/0, 8-29=0/834, 6-29=-662/0, 6-30=0/488, 5-30=-483/0, 13-24=0/1051, 14-24=-437/0, 15-22=0/666, 15-23=-309/0

- 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) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 5) CAUTION, Do not erect truss backwards.



September 15, 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	Truss	Truss Type	Qty	Ply	Precision/41 Liberty Meadows/Harnett	60801089
J0823-4066	F04	Floor	2	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:01:12 2023 Page 1
ID:JUIColTBhC0nlVmGynse8yuZYG-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:27.1

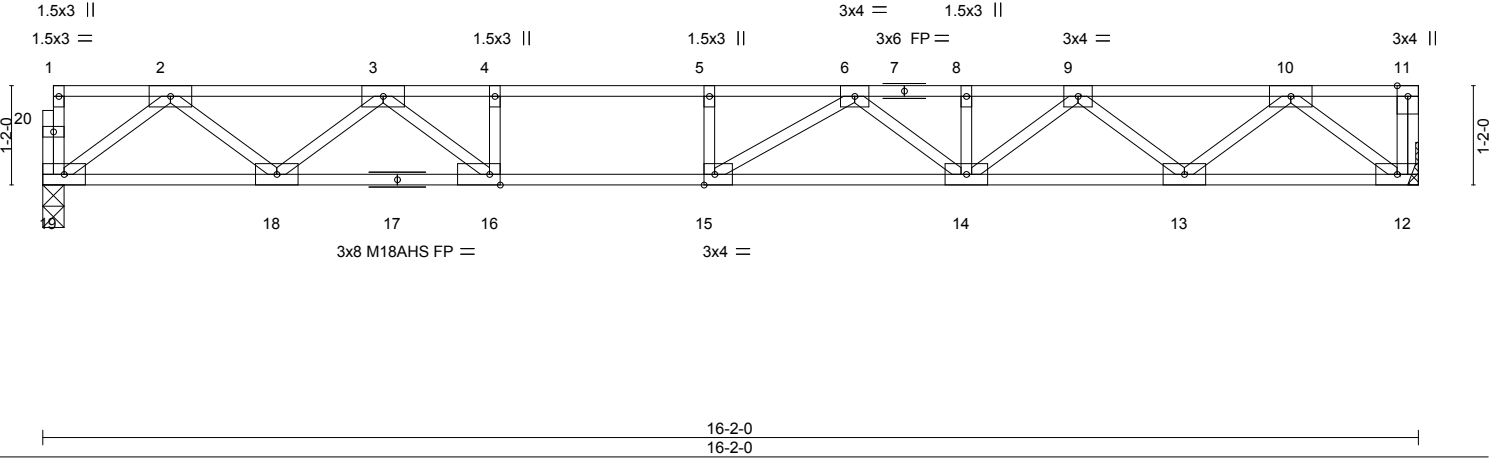


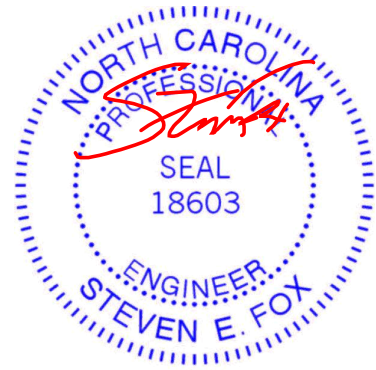
Plate Offsets (X,Y)--	[15:0-1-8,Edge], [16:0-1-8,Edge]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00		TC 0.68	Vert(LL) -0.29	14-15	>665	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00		BC 0.64	Vert(CT) -0.39	14-15	>490	360	M18AHS	186/179
BCLL 0.0	Rep Stress Incr YES		WB 0.49	Horz(CT) 0.04	12	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) *Except* 1-7: 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) *Except* 12-17: 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) 19=0-3-0, 12=Mechanical
Max Grav 19=869(LC 1), 12=875(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1777/0, 3-4=-3174/0, 4-5=-3174/0, 5-6=-3174/0, 6-8=-2950/0, 8-9=-2950/0, 9-10=-1800/0
BOT CHORD 18-19=0/1086, 16-18=0/2493, 15-16=0/3174, 14-15=0/3237, 13-14=0/2501, 12-13=0/1084
WEBS 2-19=-1360/0, 2-18=0/900, 3-18=-933/0, 3-16=0/1037, 4-16=-464/0, 10-12=-1360/0, 10-13=0/933, 9-13=-912/0, 9-14=0/573, 6-14=-367/0, 6-15=-300/384

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are MT20 plates unless otherwise indicated.
 - 3) All plates are 3x6 MT20 unless otherwise indicated.
 - 4) Plates checked for a plus or minus 1 degree rotation about its center.
 - 5) Refer to girder(s) for truss to truss connections.
 - 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.
 - 7) CAUTION, Do not erect truss backwards.



September 15, 2023

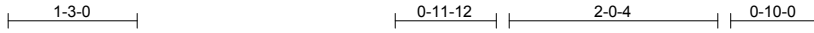
<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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 J0823-4066	Truss F05	Truss Type Floor	Qty 2	Ply 1	Precision/41 Liberty Meadows/Harnett Job Reference (optional)	160801090
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:01:13 2023 Page 1

ID:jUICoITBhC0niVmGynse8yuZYG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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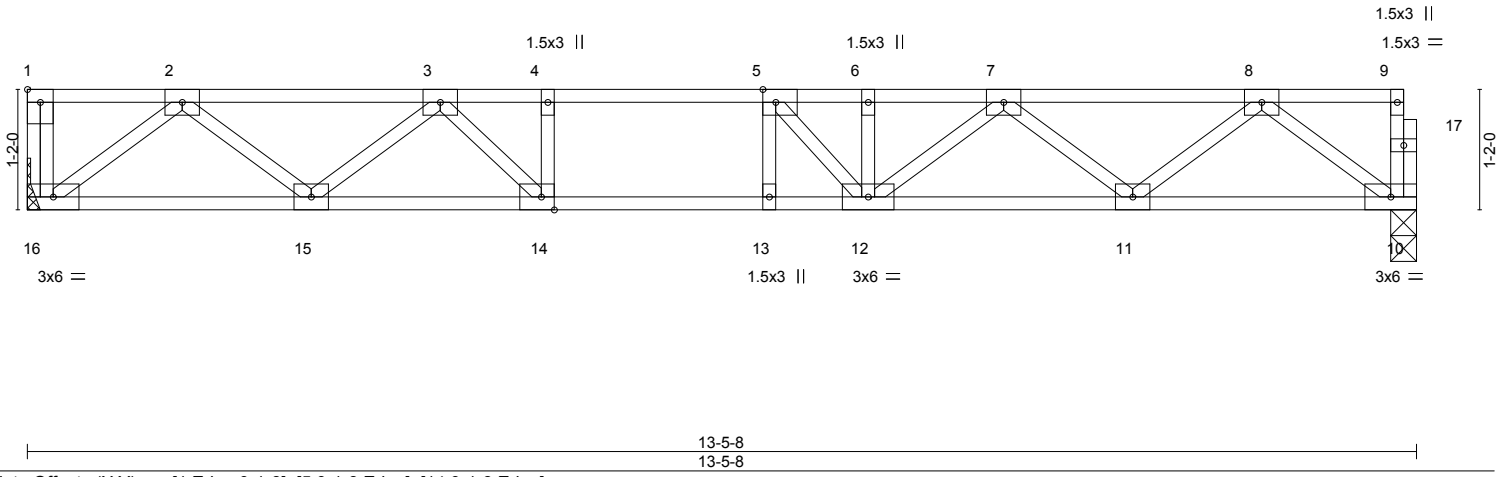


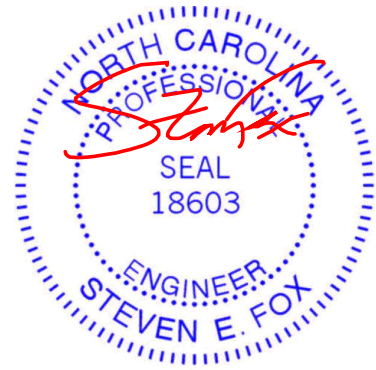
Plate Offsets (X,Y)-- [1:Edge,0-1-8], [5:0-1-8,Edge], [14:0-1-8,Edge]					
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.47	Vert(LL) -0.12 12-13 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.68	Vert(CT) -0.16 12-13 >961 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.33	Horz(CT) 0.03 10 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 69 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) 16=Mechanical, 10=0-3-0
Max Grav 16=726(LC 1), 10=720(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1422/0, 3-4=-2238/0, 4-5=-2238/0, 5-6=-2198/0, 6-7=-2198/0, 7-8=-1431/0
BOT CHORD 15-16=0/891, 14-15=0/1942, 13-14=0/2238, 12-13=0/2238, 11-12=0/1940, 10-11=0/891
WEBS 8-10=-1115/0, 8-11=0/703, 7-11=-662/0, 7-12=0/330, 5-12=-377/177, 4-14=-307/0, 2-16=-1118/0, 2-15=0/690, 3-15=-677/0, 3-14=0/601

- 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.



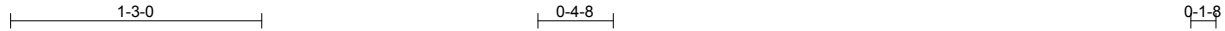
September 15, 2023

<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>ENGINEERING BY</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job J0823-4066	Truss F06	Truss Type Floor	Qty 1	Ply 1	Precision/41 Liberty Meadows/Harnett Job Reference (optional)	I60801091
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:01:14 2023 Page 1
ID:jUICoITBhC0nIvImGynse8yuZYG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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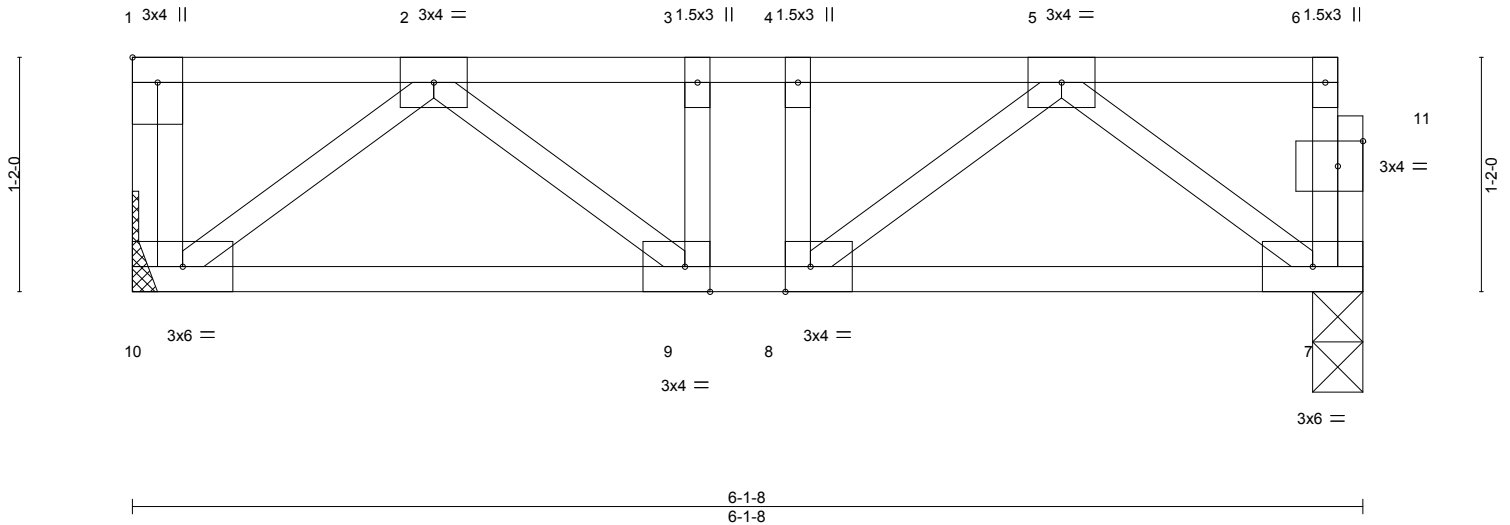


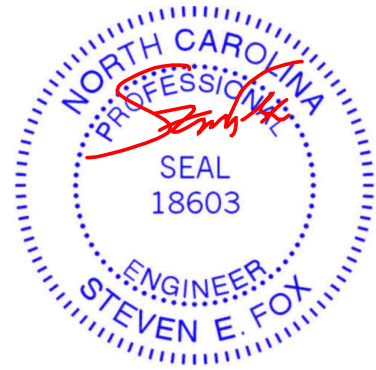
Plate Offsets (X,Y)--	[1:Edge,0-1-8], [8:0-1-8,Edge], [9:0-1-8,Edge], [11:0-1-8,0-1-8]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.08	Vert(LL) -0.01 7-8 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.10	Vert(CT) -0.01 7-8 >999 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.10	Horz(CT) 0.00 7 n/a n/a		
BCDL 5.0	Code IRC2015/TP12014	Matrix-S		Weight: 35 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) 10=Mechanical, 7=0-3-0
Max Grav 10=323(LC 1), 7=317(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-463/0, 3-4=-463/0, 4-5=-463/0
BOT CHORD 9-10=0/339, 8-9=0/463, 7-8=0/337
WEBS 2-10=-425/0, 5-7=-419/0

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



September 15, 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 J0823-4066	Truss F07	Truss Type Floor	Qty 1	Ply 1	Precision/41 Liberty Meadows/Hamett Job Reference (optional)	160801092
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:01:14 2023 Page 1
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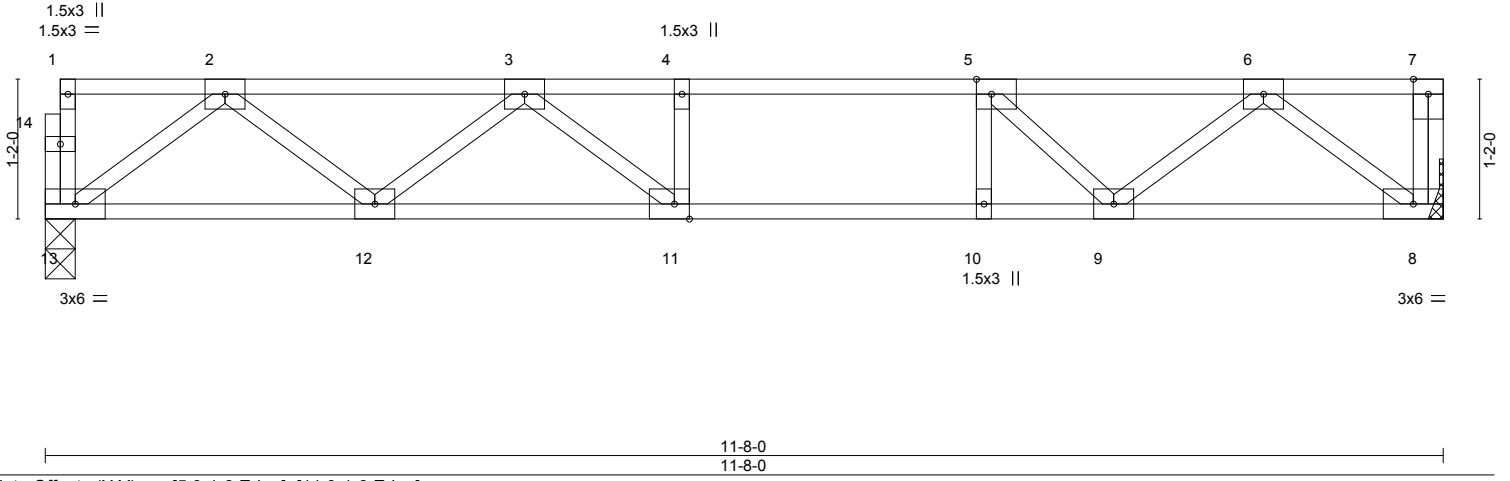


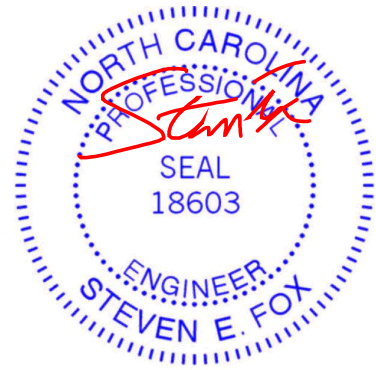
Plate Offsets (X,Y)--	[5:0-1-8,Edge], [11:0-1-8,Edge]						
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP		
TCLL 40.0	Plate Grip DOL 1.00	TC 0.53	Vert(LL) -0.13 11-12 >999 480	MT20	244/190		
TCDL 10.0	Lumber DOL 1.00	BC 0.69	Vert(CT) -0.17 11-12 >802 360				
BCLL 0.0	Rep Stress Incr YES	WB 0.29	Horz(CT) 0.02 8 n/a n/a				
BCDL 5.0	Code IRC2015/TP12014	Matrix-S					
						Weight: 58 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) 13=0-3-0, 8=Mechanical
Max Grav 13=622(LC 1), 8=628(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1195/0, 3-4=-1648/0, 4-5=-1648/0, 5-6=-1206/0
BOT CHORD 12-13=0/765, 11-12=0/1564, 10-11=0/1648, 9-10=0/1648, 8-9=0/735
WEBS 2-13=-958/0, 2-12=0/560, 3-12=-479/0, 3-11=-42/350, 6-8=-922/0, 6-9=0/612, 5-9=-647/0

- 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.



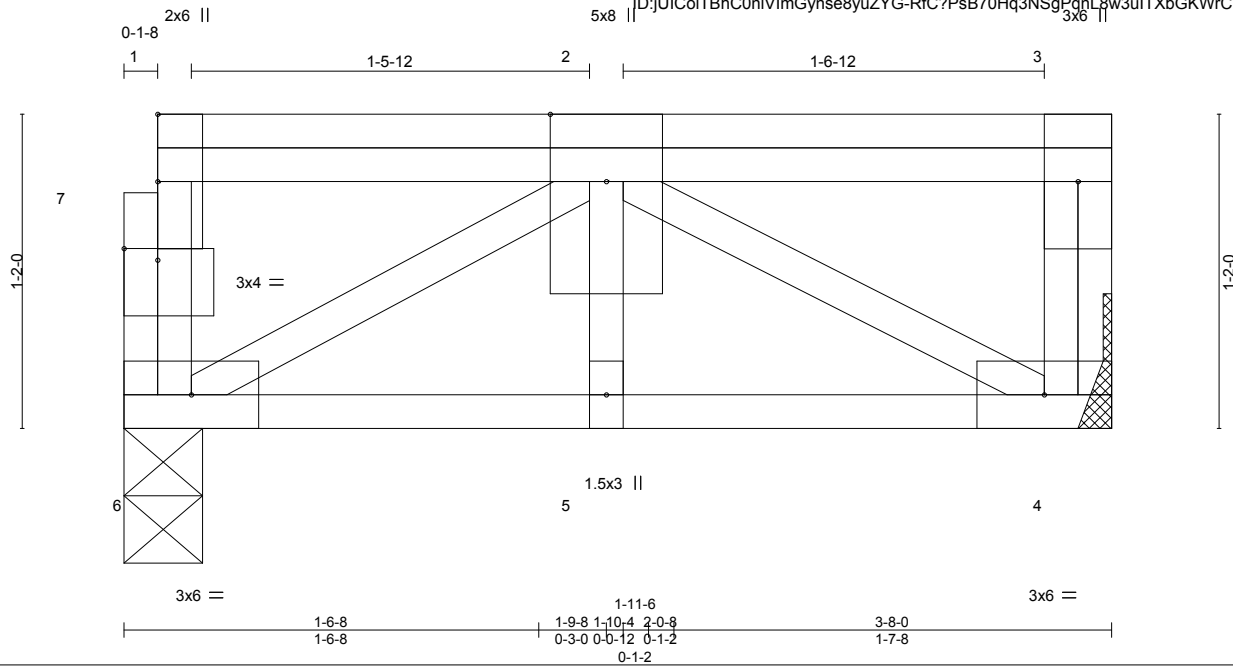
September 15, 2023

<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 A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job J0823-4066	Truss FG-1	Truss Type FLOOR GIRDER	Qty 1	Ply 1	Precision/41 Liberty Meadows/Harnett 160801093
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Comtech, Inc. Fayetteville, NC - 28314,

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Scale = 1:8.6

Plate Offsets (X,Y)--	[7:0-1-8,0-0-8]				
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 0.10	Vert(LL) -0.01 5 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.14	Vert(CT) -0.01 5 >999 360		
BCLL 0.0	Rep Stress Incr NO	WB 0.16	Horz(CT) 0.00 4 n/a n/a		
BCDL 5.0	Code IRC2015/TP12014	Matrix-P		Weight: 27 lb	FT = 20%F, 11%E

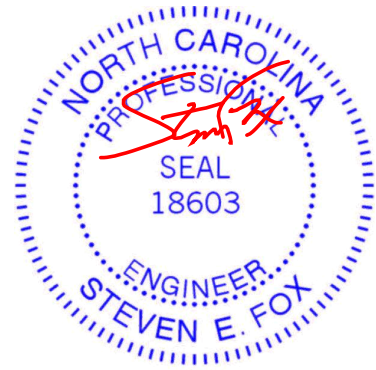
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 3-8-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 6=0-3-8, 4=Mechanical
Max Grav 6=494(LC 1), 4=502(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 5-6=0/580, 4-5=0/580
WEBS 2-4=-665/0, 2-6=-662/0

- NOTES-**
- Plates checked for a plus or minus 1 degree rotation about its center.
 - Refer to girder(s) for truss to truss connections.
 - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - CAUTION, Do not erect truss backwards.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 223 lb down at 1-9-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 4-6=-10, 1-3=-220
Concentrated Loads (lb)
Vert: 2=-223(F)



September 15, 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/41 Liberty Meadows/Harnett	160801094
J0823-4066	FG-2	GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.530 s Feb 23 2022 MiTek Industries, Inc. Fri Sep 15 16:11:33 2023 Page 2
 ID:jUIColTBhC0nIVImGynse8yuZYG-uuVgJmYUDn6sYLuFVt6ErmNE_UibLybAPesZacydKnu

LOAD CASE(S)

- Concentrated Loads (lb)
Vert: 8=-402(F)
- 3) 1st Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 14-21=-10, 1-5=-100, 5-13=-20
Concentrated Loads (lb)
Vert: 8=-482(F)
- 4) 2nd Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 14-21=-10, 1-5=-20, 5-13=-100
Concentrated Loads (lb)
Vert: 8=-402(F)
- 5) 3rd unbalanced Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 14-21=-10, 1-5=-100, 5-13=-20
Concentrated Loads (lb)
Vert: 8=-482(F)
- 6) 4th unbalanced Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 14-21=-10, 1-5=-20, 5-13=-100
Concentrated Loads (lb)
Vert: 8=-402(F)

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)

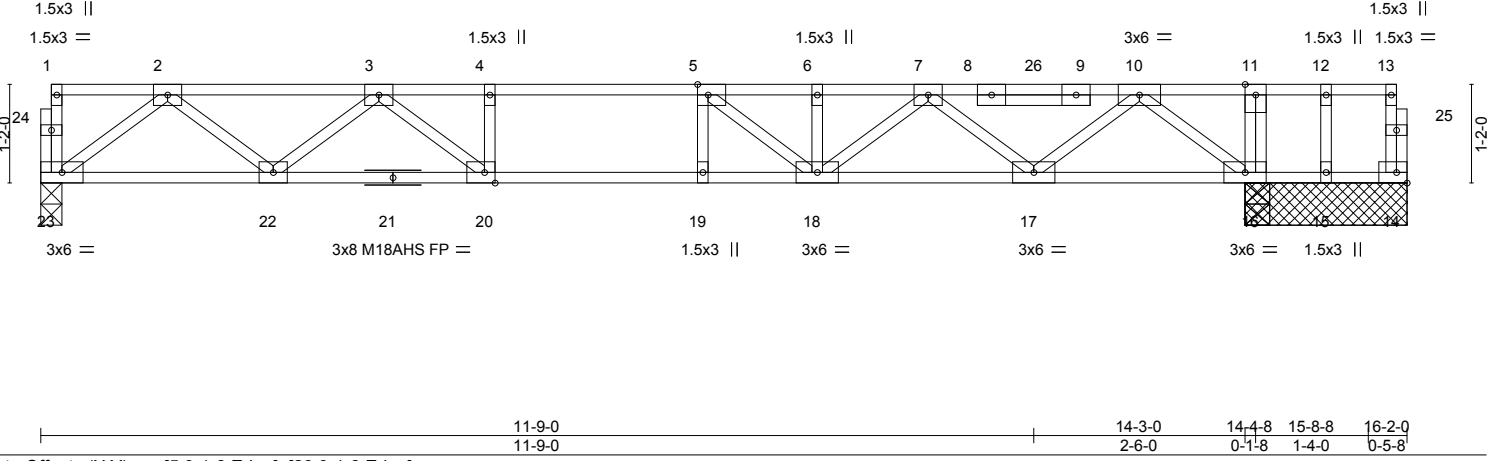
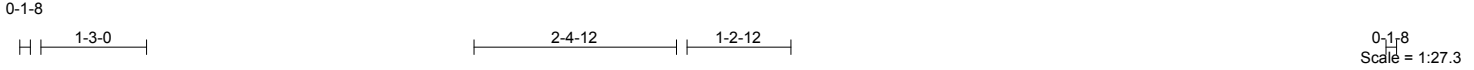


818 Soundside Road
Edenton, NC 27932

Job J0823-4066	Truss FG-3	Truss Type GABLE	Qty 1	Ply 1	Precision/41 Liberty Meadows/Harnett Job Reference (optional)	160801095
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:01:17 2023 Page 1
ID:JUICoITBhC0nIVImGynse8yuZYG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.83	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.62	Vert(LL) -0.19 18-19 >895 480	M18AHS	186/179
BCLL 0.0	Lumber DOL 1.00	WB 0.44	Vert(CT) -0.26 18-19 >646 360		
BCDL 5.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.04 14 n/a n/a		
	Code IRC2015/TPI2014			Weight: 84 lb	FT = 20%F, 11%E

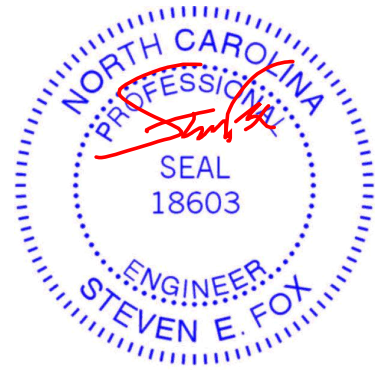
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat) *Except* 14-21: 2x4 SP 2400F 2.0E(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	
OTHERS 2x4 SP No.3(flat)	

REACTIONS. All bearings 1-11-0 except (jt=length) 23=0-3-0.
 (lb) - Max Uplift All uplift 100 lb or less at joint(s) except 15=119(LC 1)
 Max Grav All reactions 250 lb or less at joint(s) 14 except 23=829(LC 1), 16=1299(LC 1), 16=1299(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1681/0, 3-4=-2910/0, 4-5=-2910/0, 5-6=-2944/0, 6-7=-2944/0, 7-10=-1952/0
 BOT CHORD 22-23=0/1031, 20-22=0/2347, 19-20=0/2910, 18-19=0/2910, 17-18=0/2683, 16-17=0/1247
 WEBS 2-23=-1292/0, 2-22=0/846, 3-22=-867/0, 3-20=0/719, 4-20=-321/0, 10-16=-1562/0,
 10-17=0/918, 7-17=-951/0, 7-18=0/332

- NOTES-**
- All plates are MT20 plates unless otherwise indicated.
 - All plates are 3x4 MT20 unless otherwise indicated.
 - Plates checked for a plus or minus 1 degree rotation about its center.
 - Gable studs spaced at 1-4-0 oc.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 119 lb uplift at joint 15.
 - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - CAUTION, Do not erect truss backwards.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 336 lb down at 11-9-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 14-23=-10, 1-13=-100
 Concentrated Loads (lb)
 Vert: 26=-336(F)



September 15, 2023

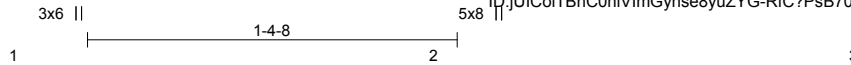
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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)

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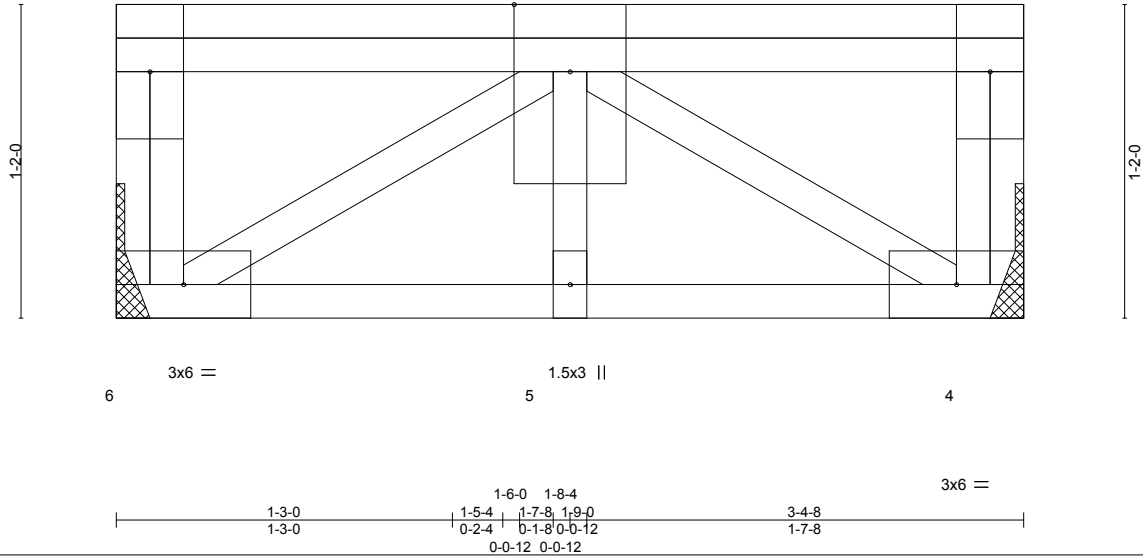
Job J0823-4066	Truss FG-4	Truss Type FLOOR GIRDER	Qty 1	Ply 1	Precision/41 Liberty Meadows/Harnett Job Reference (optional)	I60801096
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:01:18 2023 Page 1



Scale = 1:8.6



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.05	Vert(LL)	-0.00	5	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.13	Vert(CT)	-0.01	5	>999		
BCLL 0.0	Lumber DOL 1.00	WB 0.15	Horz(CT)	0.00	4	n/a		
BCDL 5.0	Rep Stress Incr NO	Matrix-P					Weight: 26 lb	FT = 20%F, 11%E
	Code IRC2015/TPI2014							

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-4-8 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=Mechanical, 4=Mechanical
 Max Grav 6=436(LC 1), 4=436(LC 1)

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

BOT CHORD 5-6=0/553, 4-5=0/553
 WEBS 2-4=-653/0, 2-6=-653/0

NOTES-

- Plates checked for a plus or minus 1 degree rotation about its center.
- Refer to girder(s) for truss to truss connections.
- Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 528 lb down at 1-6-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 4-6=-10, 1-3=-100
 Concentrated Loads (lb)
 Vert: 2=-528(B)



September 15, 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 J0823-4066	Truss FG-5	Truss Type GABLE	Qty 1	Ply 1	Precision/41 Liberty Meadows/Harnett Job Reference (optional)	160801097
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Fri Sep 15 02:01:19 2023 Page 1
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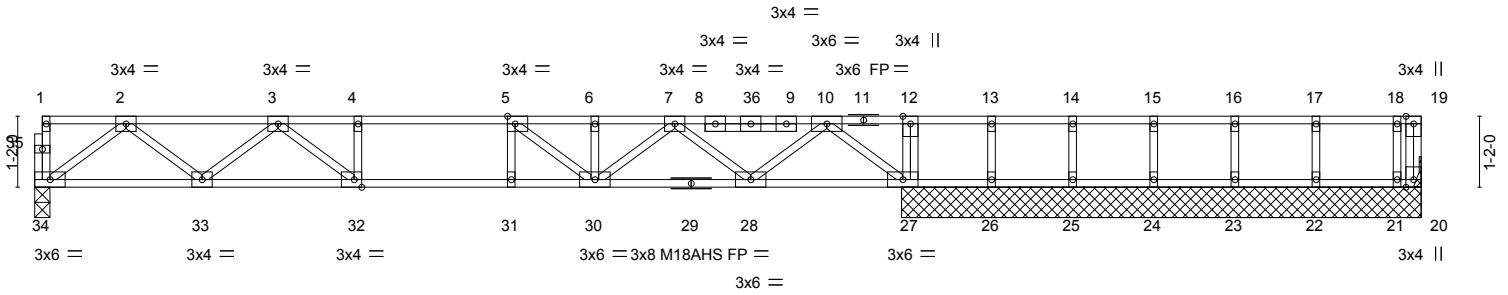


Plate Offsets (X,Y)--	[5:0-1-8,Edge], [32:0-1-8,Edge]	14-3-0	14-3-0	15-8-12	14-4-12	17-0-12	18-4-12	19-8-12	21-0-12	22-4-12	22-9-8
		14-3-0	0-1-12	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	0-4-12

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 0.84	Vert(LL)	-0.19	30-31	>884	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.63	Vert(CT)	-0.27	30-31	>639	M18AHS	186/179
BCLL 0.0	Rep Stress Incr	NO	WB 0.45	Horz(CT)	0.04	20	n/a		
BCDL 5.0	Code IRC2015/TP12014		Matrix-S						
								Weight: 111 lb	FT = 20%F, 11%E

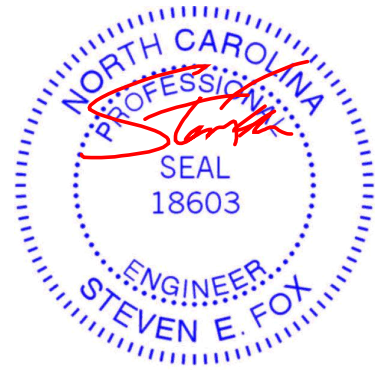
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP 2400F 2.0E(flat) *Except* 20-29: 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	
OTHERS 2x4 SP No.3(flat)	

REACTIONS. All bearings 8-6-8 except (jt=length) 34=0-3-0.
 (lb) - Max Uplift All uplift 100 lb or less at joint(s) 20, 20
 Max Grav All reactions 250 lb or less at joint(s) 26, 25, 24, 23, 22, 21 except 34=831(LC 1), 27=1236(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1686/0, 3-4=-2928/0, 4-5=-2928/0, 5-6=-2965/0, 6-7=-2965/0, 7-10=-1971/0
 BOT CHORD 33-34=0/1034, 32-33=0/2357, 31-32=0/2928, 30-31=0/2928, 28-30=0/2702, 27-28=0/1252
 WEBS 2-34=-1295/0, 2-33=0/848, 3-33=-874/0, 3-32=0/729, 4-32=-323/0, 10-27=-1571/0,
 10-28=0/936, 7-28=-951/0, 7-30=0/336

- NOTES-**
- All plates are MT20 plates unless otherwise indicated.
 - All plates are 1.5x3 MT20 unless otherwise indicated.
 - Plates checked for a plus or minus 1 degree rotation about its center.
 - Gable studs spaced at 1-4-0 oc.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20.
 - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - CAUTION, Do not erect truss backwards.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 336 lb down at 11-9-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 20-34=-10, 1-19=-100
 Concentrated Loads (lb)
 Vert: 36=-336(B)



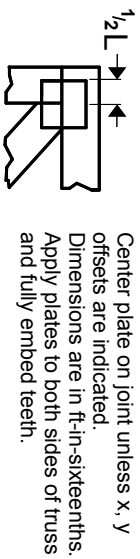
September 15, 2023

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)

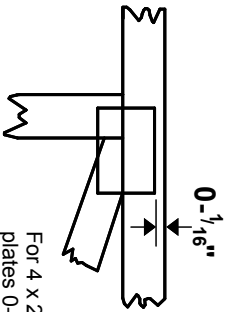
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Symbols

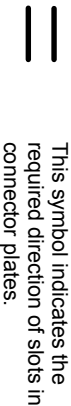
PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ \" from outside edge of truss.



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

* Plate location details available in MITek 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

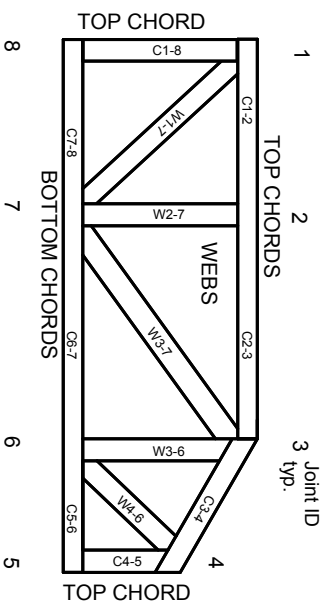


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.

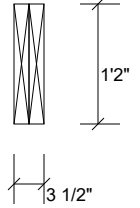
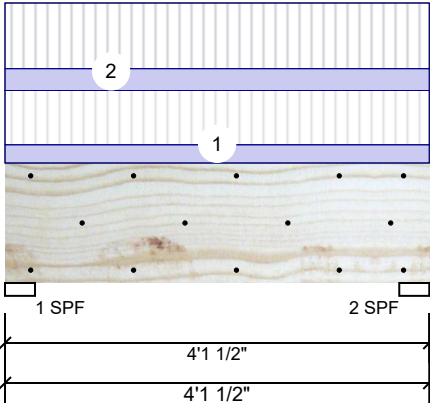
MITek

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

BM2 Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level



Member Information

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

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

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	1235	435	0	0	0
2	Vertical	1235	435	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	32%	435 / 1235	1670	L	D+L
2 - SPF	3.500"	Vert	32%	435 / 1235	1670	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1361 ft-lb	2' 3/4"	26999 ft-lb	0.050 (5%)	D+L	L
Unbraced	1361 ft-lb	2' 3/4"	23153 ft-lb	0.059 (6%)	D+L	L
Shear	1434 lb	2'8"	10453 lb	0.137 (14%)	D+L	L
LL Defl inch	0.004 (L/11315)	2' 13/16"	0.092 (L/480)	0.042 (4%)	L	L
TL Defl inch	0.005 (L/8369)	2' 13/16"	0.122 (L/360)	0.043 (4%)	D+L	L

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Near Face	91 PLF	271 PLF	0 PLF	0 PLF	0 PLF	F05
2	Uniform			Far Face	109 PLF	328 PLF	0 PLF	0 PLF	0 PLF	F04
	Self Weight				11 PLF					

Notes

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

Lumber

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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

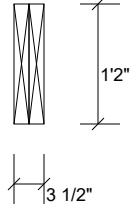
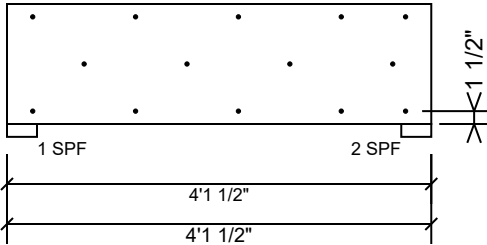
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us

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



BM2 Kerto-S LVL 1.750" X 14.000" 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	89.0 %
Load	218.5 PLF
Yield Limit per Foot	245.6 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+L
Duration Factor	1.00

Notes

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

Lumber

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

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

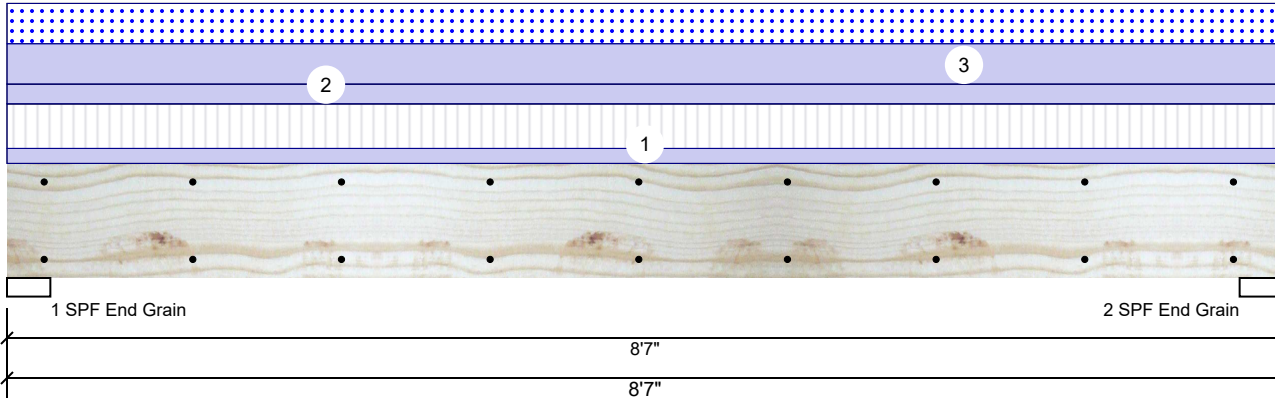
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Norwalk, CT 06851
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28314
910-864-TRUS



BM1 Kerto-S LVL 1.750" X 9.250" 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:	360	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	1163	1988	1051	0	0
2	Vertical	1163	1988	1051	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	35%	1988 / 1661	3649	L	D+0.75(L+S)
2 - SPF End Grain	3.500"	Vert	35%	1988 / 1661	3649	L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	7016 ft-lb	4'3 1/2"	14423 ft-lb	0.486 (49%)	D+0.75(L+S)	L
Unbraced	7016 ft-lb	4'3 1/2"	8689 ft-lb	0.807 (81%)	D+0.75(L+S)	L
Shear	2751 lb	1' 3/4"	7943 lb	0.346 (35%)	D+0.75(L+S)	L
LL Defl inch	0.094 (L/1042)	4'3 9/16"	0.271 (L/360)	0.345 (35%)	0.75(L+S)	L
TL Defl inch	0.206 (L/474)	4'3 9/16"	0.406 (L/240)	0.506 (51%)	D+0.75(L+S)	L

Design Notes

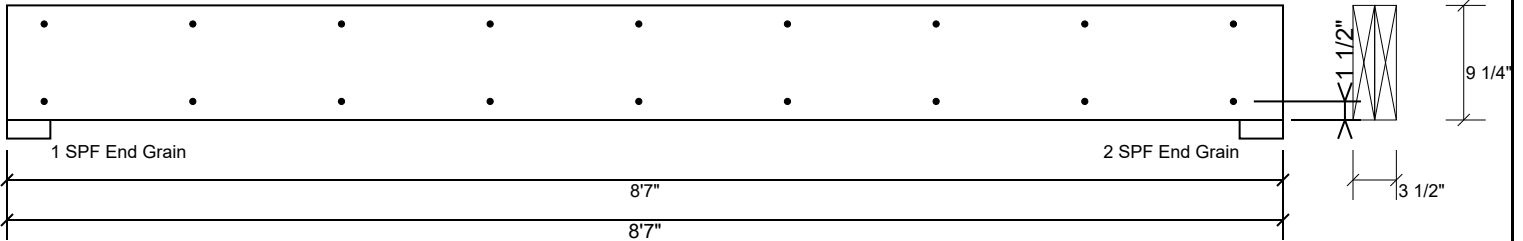
- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at end bearings.
- 7 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	91 PLF	271 PLF	0 PLF	0 PLF	0 PLF	F01
2	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL
3	Uniform			Top	245 PLF	0 PLF	245 PLF	0 PLF	0 PLF	A5
	Self Weight				7 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> <p>1. Dry service conditions, unless noted otherwise 2. LVL not to be treated with fire retardant or corrosive chemicals</p> <p>Handling & Installation</p> <p>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>	<p>6. 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>Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS</p>
		<p>This design is valid until 11/3/2024</p>	

BM1 Kerto-S LVL 1.750" X 9.250" 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	163.7 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

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

Lumber

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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

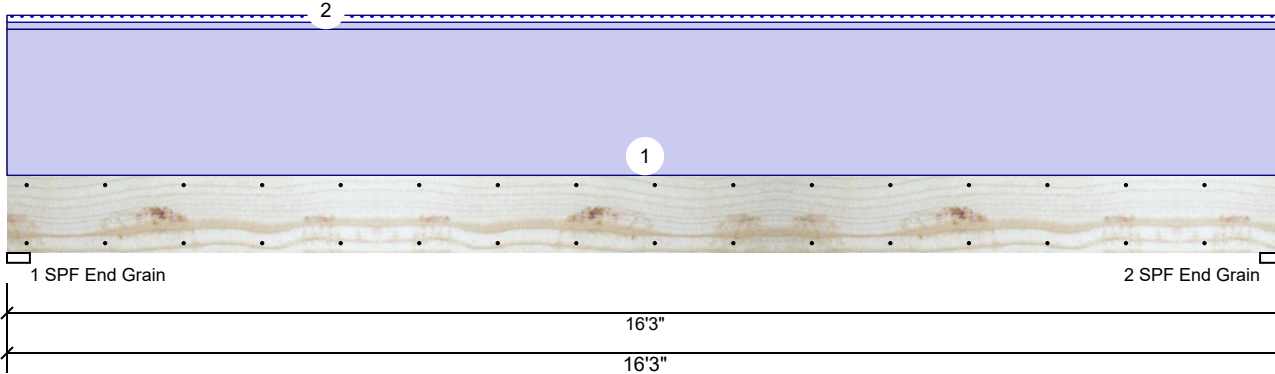
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GDH Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Member Information

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

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	1863	81	0	0
2	Vertical	0	1863	81	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	19%	1863 / 81	1944	L	D+S
2 - SPF End Grain	3.500"	Vert	19%	1863 / 81	1944	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	7146 ft-lb	8'1 1/2"	17919 ft-lb	0.399 (40%)	D	Uniform
Unbraced	7146 ft-lb	8'1 1/2"	17919 ft-lb	0.399 (40%)	D	Uniform
Shear	1578 lb	14'11 5/8"	7980 lb	0.198 (20%)	D	Uniform
LL Defl inch (L/12477)	0.015	8'1 9/16"	0.395 (L/480)	0.038 (4%)	S	L
TL Defl inch (L/522)	0.363	8'1 9/16"	0.526 (L/360)	0.690 (69%)	D+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 2 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 continuously laterally braced.
- Bottom must be laterally braced at 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			Top	210 PLF	0 PLF	0 PLF	0 PLF	0 PLF	B1-GE
2	Tie-In	0-0-0 to 16-3-0	0-6-0	Top	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	RAKE OH
	Self Weight				9 PLF					

Notes

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

Lumber

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

chemicals

Handling & Installation

- 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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

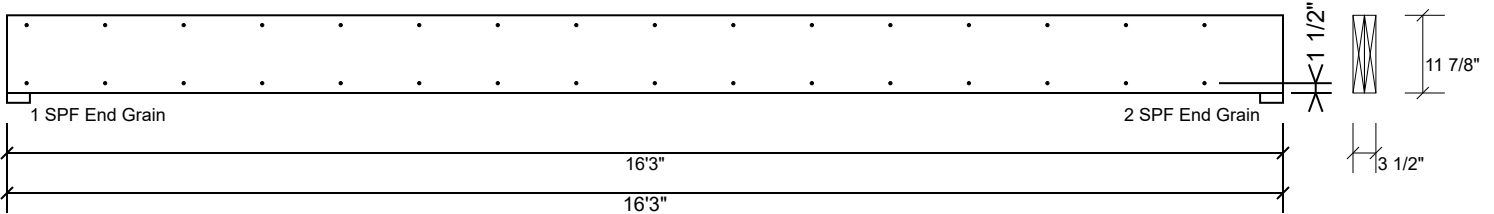
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GDH Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

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

Notes

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

Lumber

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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
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This design is valid until 11/3/2024

Manufacturer Info

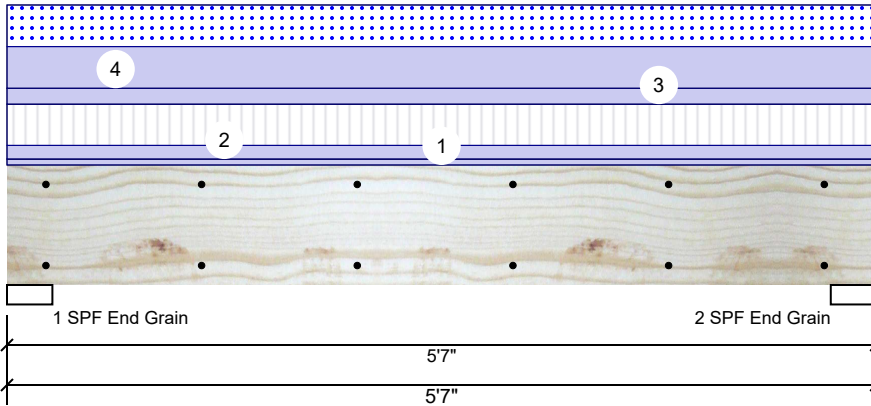
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HDR1 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



Member Information

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

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

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	868	1645	877	0	0
2	Vertical	868	1645	877	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	29%	1645 / 1309	2953	L	D+0.75(L+S)
2 - SPF End Grain	3.500"	Vert	29%	1645 / 1309	2953	L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3473 ft-lb	2'9 1/2"	14423 ft-lb	0.241 (24%)	D+0.75(L+S)	L
Unbraced	3473 ft-lb	2'9 1/2"	11505 ft-lb	0.302 (30%)	D+0.75(L+S)	L
Shear	1835 lb	4'6 1/4"	7943 lb	0.231 (23%)	D+0.75(L+S)	L
LL Defl inch	0.021 (L/2896)	2'9 1/2"	0.128 (L/480)	0.166 (17%)	0.75(L+S)	L
TL Defl inch	0.048 (L/1283)	2'9 1/2"	0.171 (L/360)	0.281 (28%)	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 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at end bearings.
- 7 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	45 PLF	0 PLF	0 PLF	0 PLF	0 PLF	wall
2	Uniform			Top	103 PLF	311 PLF	0 PLF	0 PLF	0 PLF	floor trusses
3	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	wall
4	Uniform			Top	314 PLF	0 PLF	314 PLF	0 PLF	0 PLF	roof trusses
	Self Weight				7 PLF					

Notes

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

Lumber

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

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

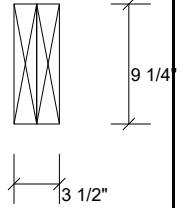
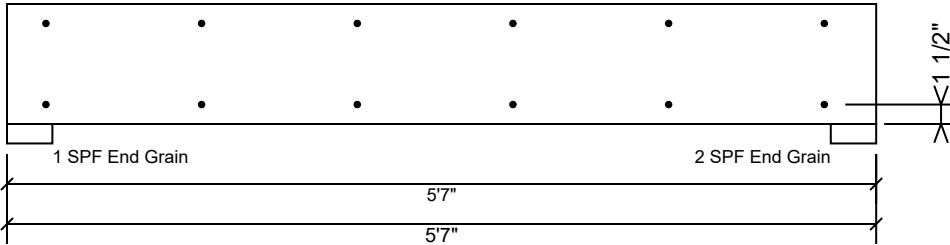
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HDR1 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

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

Notes

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

Lumber

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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

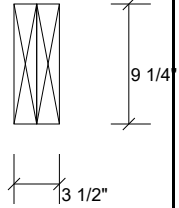
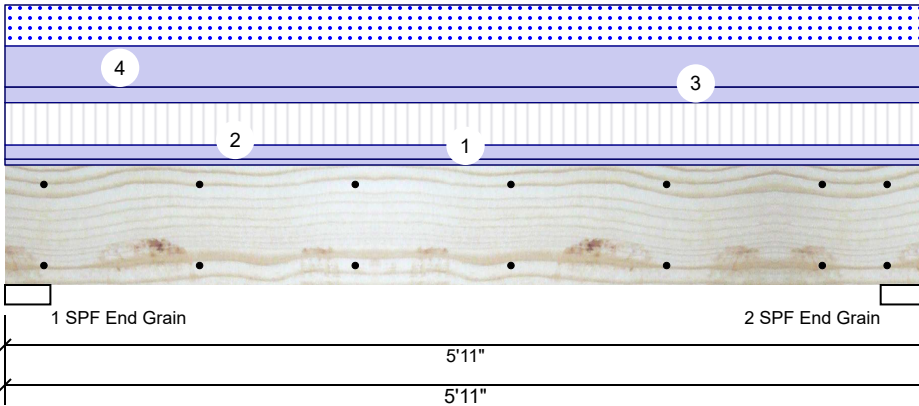
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HDR2 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



Member Information

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

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

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	961	1758	929	0	0
2	Vertical	961	1758	929	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	31%	1758 / 1418	3176	L	D+0.75(L+S)
2 - SPF End Grain	3.500"	Vert	31%	1758 / 1418	3176	L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3998 ft-lb	2'11 1/2"	14423 ft-lb	0.277 (28%)	D+0.75(L+S)	L
Unbraced	3998 ft-lb	2'11 1/2"	11110 ft-lb	0.360 (36%)	D+0.75(L+S)	L
Shear	2041 lb	1' 3/4"	7943 lb	0.257 (26%)	D+0.75(L+S)	L
LL Defl inch	0.027 (L/2418)	2'11 1/2"	0.136 (L/480)	0.198 (20%)	0.75(L+S)	L
TL Defl inch	0.061 (L/1080)	2'11 1/2"	0.182 (L/360)	0.333 (33%)	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 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at end bearings.
- 7 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	45 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL
2	Uniform			Top	108 PLF	325 PLF	0 PLF	0 PLF	0 PLF	FLOOR TRUSSES
3	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL
4	Uniform			Top	314 PLF	0 PLF	314 PLF	0 PLF	0 PLF	ROOF TRUSSES
	Self Weight				7 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 chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

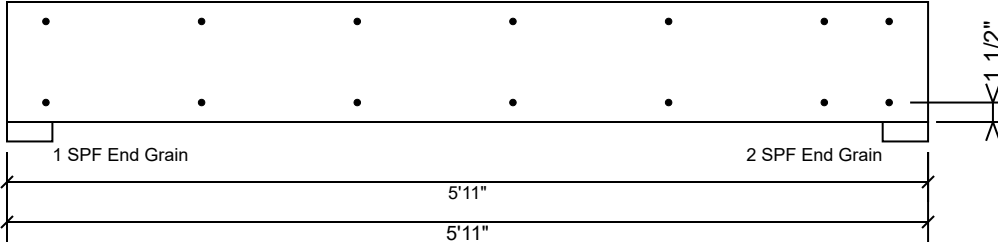
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HDR2 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

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

Notes

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

Lumber

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chemicals

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