

RE: J0724-4216  
 Lot 140 Duncans Creek

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Customer: Project Name: J0724-4216  
 Lot/Block: Model:  
 Address: Subdivision:  
 City: State:

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

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

This package includes 27 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I64045914	A01GE	3/6/2024	21	I64045934	VB1	3/6/2024
2	I64045915	A02	3/6/2024	22	I64045935	VB2	3/6/2024
3	I64045916	A03	3/6/2024	23	I64045936	VB3	3/6/2024
4	I64045917	A03A	3/6/2024	24	I64045937	VC1	3/6/2024
5	I64045918	A04	3/6/2024	25	I64045938	VD1	3/6/2024
6	I64045919	A05	3/6/2024	26	I64045939	VD2	3/6/2024
7	I64045920	B01GE	3/6/2024	27	I64045940	VD3	3/6/2024
8	I64045921	B02-GR	3/6/2024				
9	I64045922	C01GE	3/6/2024				
10	I64045923	C02	3/6/2024				
11	I64045924	D01GE	3/6/2024				
12	I64045925	D02-GR	3/6/2024				
13	I64045926	M01GE	3/6/2024				
14	I64045927	M02	3/6/2024				
15	I64045928	M02A	3/6/2024				
16	I64045929	M03	3/6/2024				
17	I64045930	M04	3/6/2024				
18	I64045931	M05GE	3/6/2024				
19	I64045932	M06GE	3/6/2024				
20	I64045933	M07	3/6/2024				

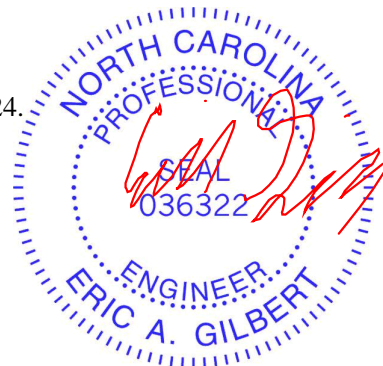
The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

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



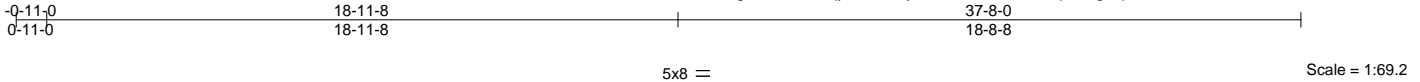
March 06, 2024

Job J0724-4216	Truss A01GE	Truss Type GABLE	Qty 2	Ply 1	Lot 140 Duncans Creek Job Reference (optional)	I64045914
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:18 2024 Page 1

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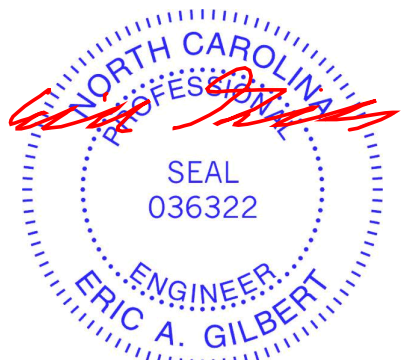
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.00	25	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 328 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS T-Brace: 2x4 SPF No.2 - 13-36, 12-37, 14-35
OTHERS 2x4 SP No.2	Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.
SLIDER Left 2x4 SP No.2 0-11-1	Brace must cover 90% of web length.

**REACTIONS.** All bearings 37-8-0.  
 (lb) - Max Horz 2=216(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 25, 2, 37, 38, 40, 41, 42, 43, 44, 45, 35, 34, 32, 31, 30, 29, 28, 27 except 46=175(LC 12), 26=234(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 36, 37, 38, 40, 41, 42, 43, 44, 45, 46, 35, 34, 32, 31, 30, 29, 28, 27, 26 except 25=255(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-340/113, 10-11=-101/306, 11-12=-124/370, 12-13=-137/406, 13-14=-137/408, 14-15=-124/372, 15-16=-101/309, 16-18=-81/250

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-9-2 to 3-7-11, Exterior(2) 3-7-11 to 18-11-8, Corner(3) 18-11-8 to 23-4-5, Exterior(2) 23-4-5 to 37-6-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 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) 25, 2, 37, 38, 40, 41, 42, 43, 44, 45, 35, 34, 32, 31, 30, 29, 28, 27 except (jt=lb) 46=175, 26=234.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



March 6, 2024

**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 J0724-4216	Truss A02	Truss Type COMMON	Qty 6	Ply 1	Lot 140 Duncans Creek Job Reference (optional)	I64045915
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:20 2024 Page 1

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6x6 =

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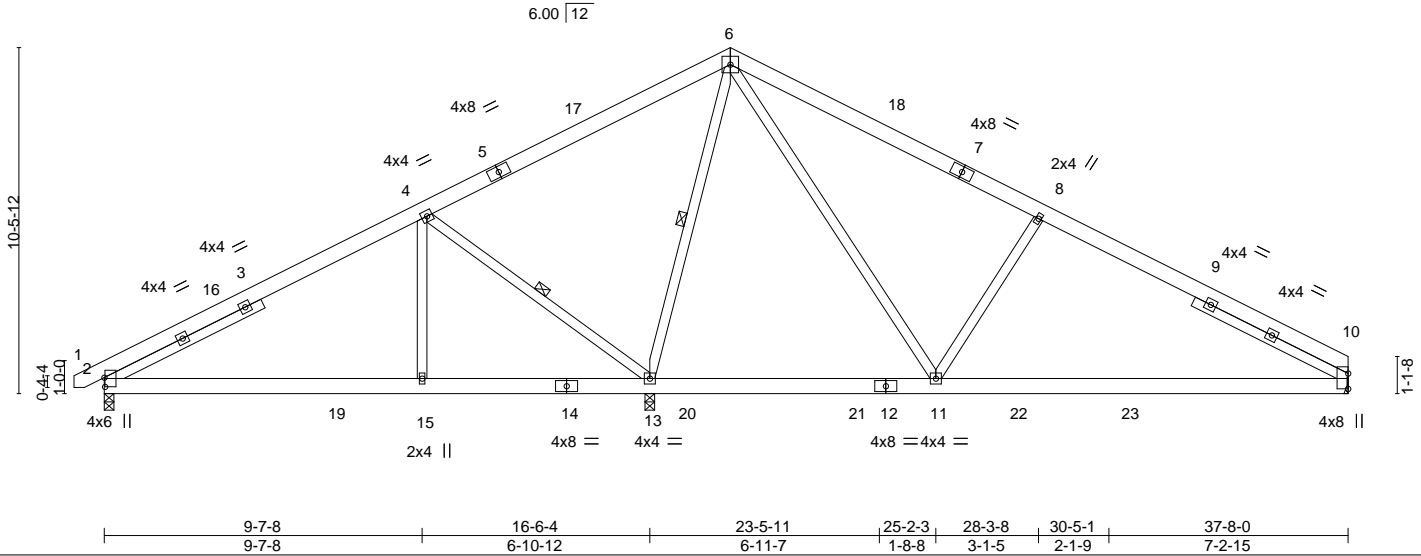


Plate Offsets (X, Y)--	[2:0-3-6,0-0-4]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	-0.15	10-11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.50	Vert(CT)	-0.31	10-11	>825		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.50	Horz(CT)	0.02	10	n/a		
BCDL 10.0	Code IRC2015/TP12014		Matrix-S	Wind(LL)	0.03	10-11	>999		
								Weight: 265 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	WEBS 1 Row at midpt 4-13, 6-13
SLIDER Left 2x4 SP No.2 5-3-12, Right 2x4 SP No.2 5-2-13	

**REACTIONS.** (size) 2=0-3-8, 13=0-3-8, 10=Mechanical  
 Max Horz 2=-134(LC 8)  
 Max Uplift 2=-88(LC 12), 13=-23(LC 12), 10=-106(LC 13)  
 Max Grav 2=676(LC 23), 13=1756(LC 2), 10=831(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-745/274, 4-6=-54/306, 6-8=-852/396, 8-10=-1090/373  
 BOT CHORD 2-15=-133/577, 13-15=-133/577, 10-11=-172/883  
 WEBS 4-15=0/372, 4-13=-839/271, 6-13=-1047/143, 6-11=-157/1033, 8-11=-538/326

- 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) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 18-11-8, Exterior(2) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 37-8-0 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) 2, 13 except (j=lb) 10=106.

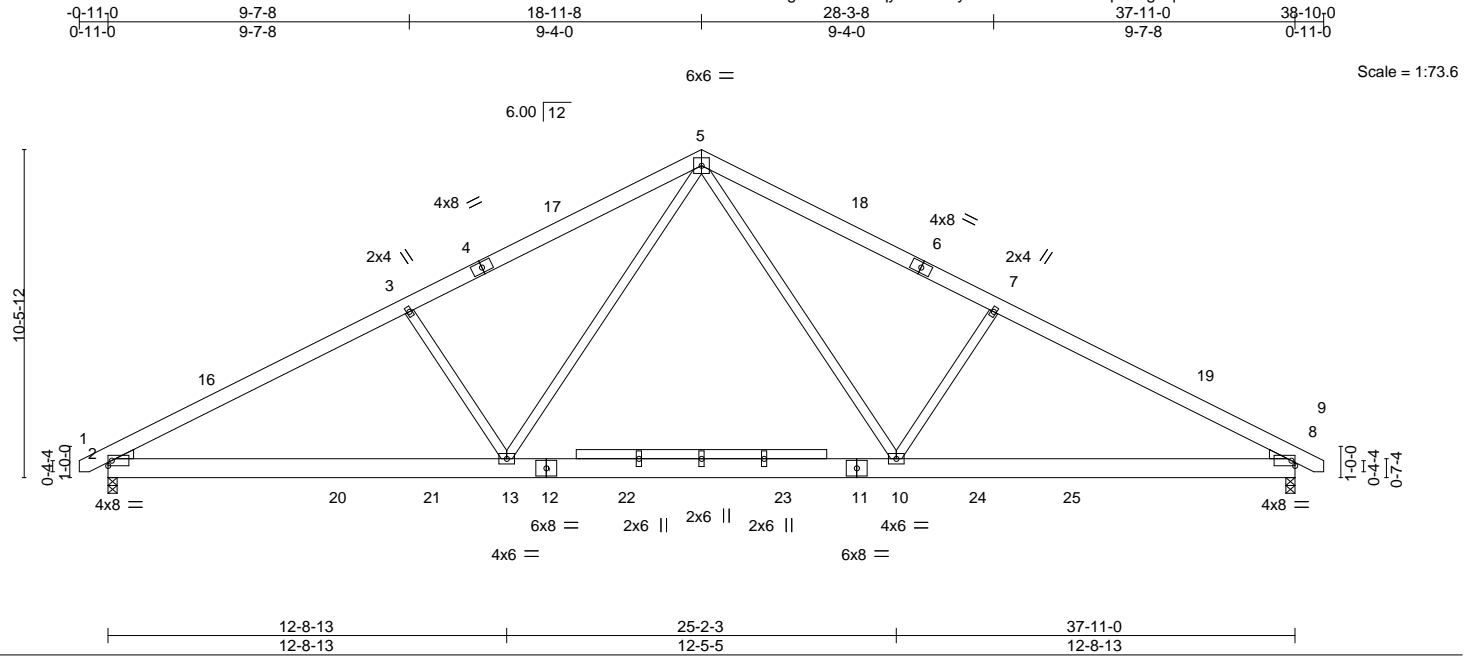


Job J0724-4216	Truss A03	Truss Type COMMON	Qty 3	Ply 1	Lot 140 Duncans Creek Job Reference (optional)	I64045916
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.50	Vert(LL)	-0.13 2-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.25 10-13	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.30	Horz(CT)	0.05 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.06 2-13	>999	240		
								Weight: 285 lb	FT = 20%

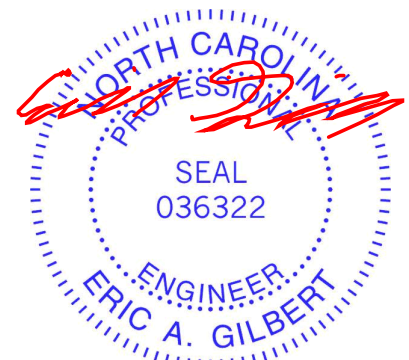
**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x8 SP No.1 \*Except\*  
14-15: 2x4 SP No.1  
WEBS 2x4 SP No.2  
WEDGE  
Left: 2x4 SP No.3, Right: 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-4-4 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=130(LC 9)  
Max Uplift 2=-2(LC 12), 8=-2(LC 13)  
Max Grav 2=1659(LC 1), 8=1659(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2761/320, 3-5=-2456/348, 5-7=-2456/348, 7-8=-2761/320  
BOT CHORD 2-13=-162/2310, 10-13=0/1581, 8-10=-155/2310  
WEBS 5-10=-20/985, 7-10=-481/334, 5-13=-20/985, 3-13=-481/334

- 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) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 18-11-8, Exterior(2) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 38-8-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 200.0lb AC unit load placed on the bottom chord, 18-11-8 from left end, supported at two points, 5-0-0 apart.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



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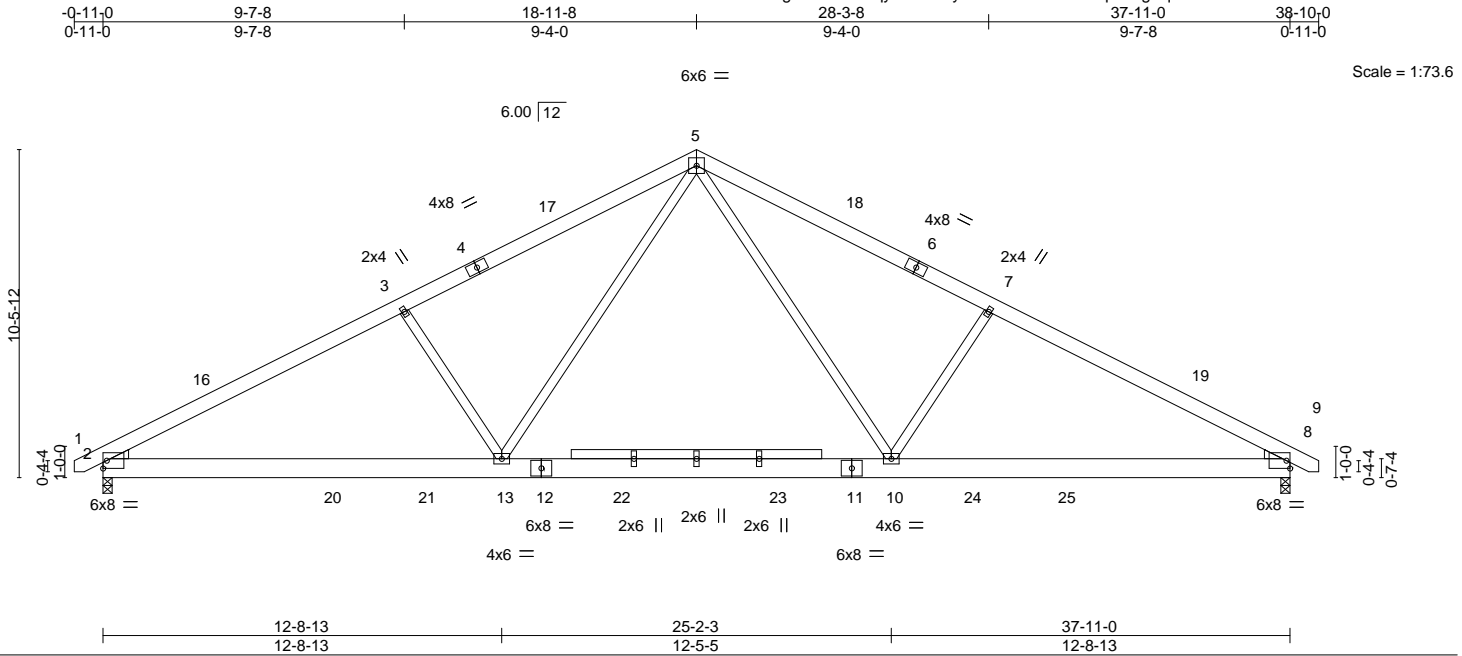
Job J0724-4216	Truss A03A	Truss Type COMMON	Qty 2	Ply 1	Lot 140 Duncans Creek I64045917
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:22 2024 Page 1

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Job Reference (optional)



LOADING (psf)	SPACING-	2-3-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.62	Vert(LL)	-0.14 2-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.57	Vert(CT)	-0.27 10-13	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.34	Horz(CT)	0.06 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.07 2-13	>999	240		
								Weight: 285 lb	FT = 20%

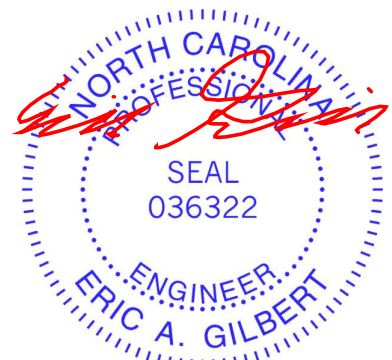
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x8 SP No.1 \*Except\*  
 14-15: 2x4 SP No.1  
 WEBS 2x4 SP No.2  
 WEDGE  
 Left: 2x4 SP No.3, Right: 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-0-8 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=146(LC 9)  
 Max Uplift 2=-15(LC 12), 8=-15(LC 13)  
 Max Grav 2=1854(LC 1), 8=1854(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3077/388, 3-5=-2734/420, 5-7=-2734/420, 7-8=-3077/388  
 BOT CHORD 2-13=-207/2574, 10-13=0/1761, 8-10=-199/2574  
 WEBS 5-10=-38/1093, 7-10=-543/374, 5-13=-38/1093, 3-13=-543/374

- 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) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 18-11-8, Exterior(2) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 38-8-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 200.0lb AC unit load placed on the bottom chord, 18-11-8 from left end, supported at two points, 5-0-0 apart.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



March 6, 2024

Job J0724-4216	Truss A04	Truss Type COMMON	Qty 1	Ply 1	Lot 140 Duncans Creek Job Reference (optional)	I64045918
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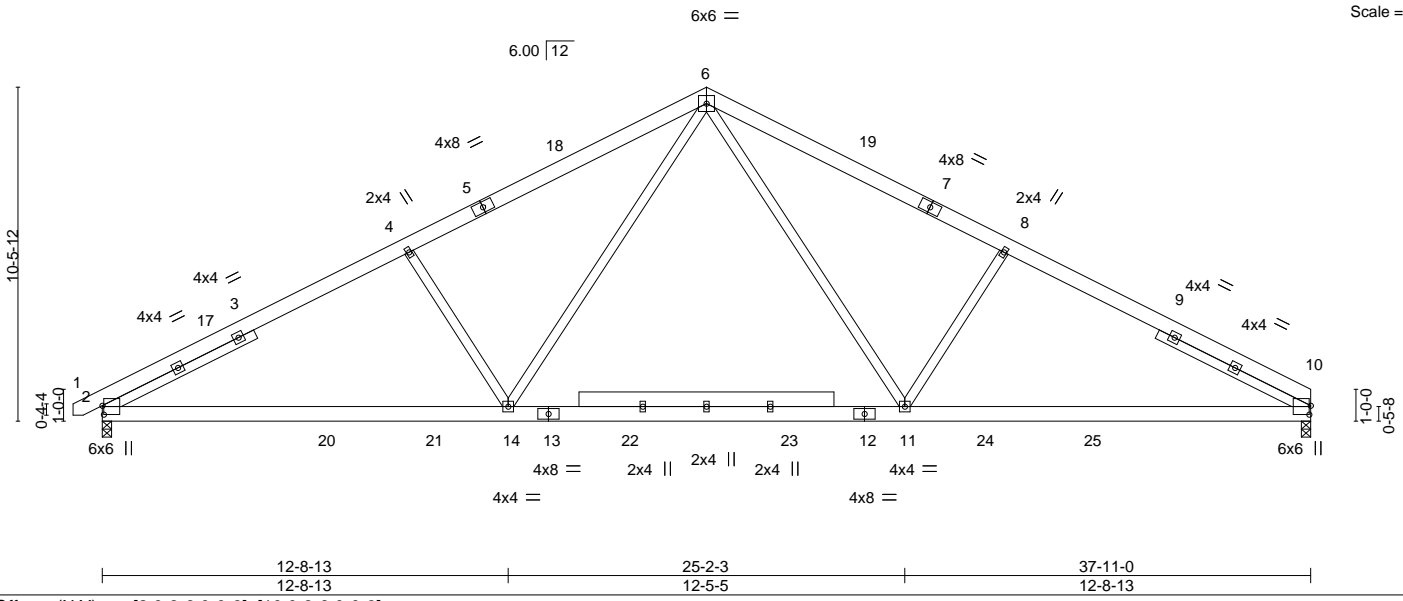
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:24 2024 Page 1

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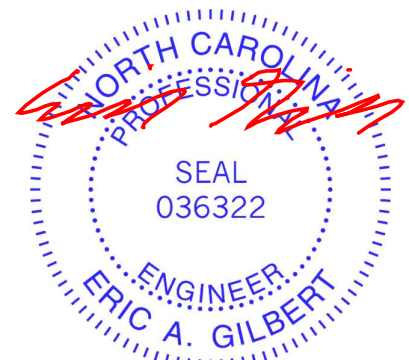
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.48	Vert(LL)	-0.23 10-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.66	Vert(CT)	-0.39 11-14	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.31	Horz(CT)	0.07 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.05 14	>999	240	Weight: 276 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-4-7 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	
SLIDER Left 2x4 SP No.2 5-3-13, Right 2x4 SP No.2 5-3-13	

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=134(LC 8)  
 Max Uplift 2=1(LC 12)  
 Max Grav 2=1663(LC 1), 10=1616(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2725/328, 4-6=-2442/351, 6-8=-2444/364, 8-10=-2726/343  
 BOT CHORD 2-14=-149/2300, 11-14=0/1599, 10-11=-154/2302  
 WEBS 6-11=-22/969, 8-11=-477/340, 6-14=-19/966, 4-14=-476/338

- 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; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 18-11-8, Exterior(2) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 37-11-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 200.0lb AC unit load placed on the bottom chord, 18-11-8 from left end, supported at two points, 5-0-0 apart.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BC DL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.



March 6, 2024

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></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 <b>ANSI/TPH Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p>	<p>ENGINEERING BY  <b>TRENCO</b>  <small>A MiTek Affiliate</small></p> <p>818 Soundside Road        Edenton, NC 27932</p>
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Job J0724-4216	Truss A05	Truss Type COMMON	Qty 5	Ply 1	Lot 140 Duncans Creek Job Reference (optional)	164045919
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:25 2024 Page 1

ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



6x6 =

Scale = 1:73.3

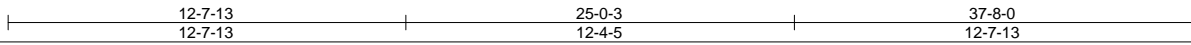
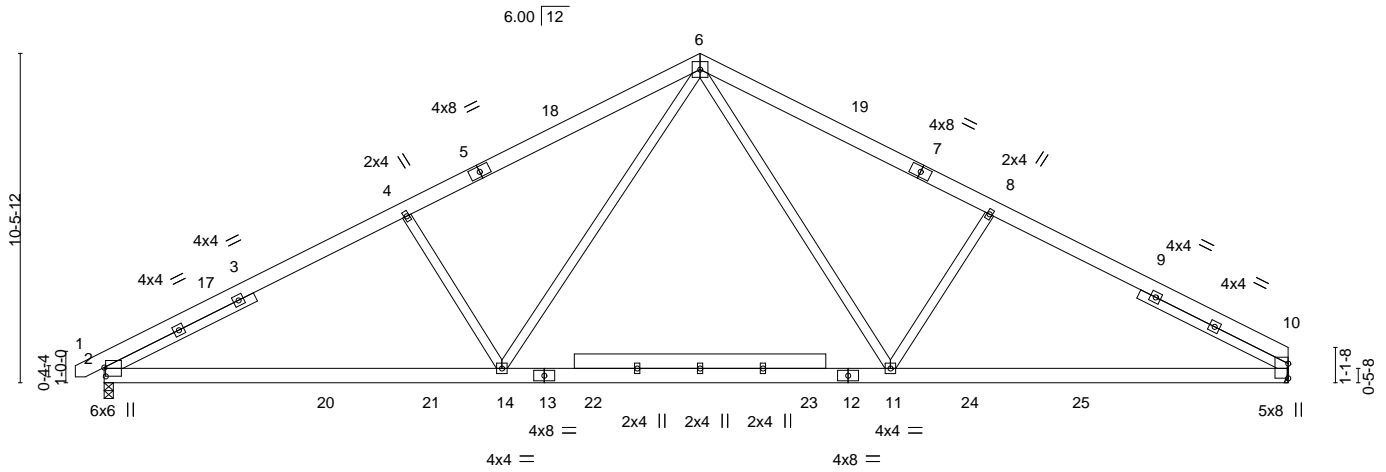


Plate Offsets (X,Y)-- [2:0-3-6,0-0-9]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.44	Vert(LL)	-0.24 10-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.65	Vert(CT)	-0.41 10-11	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.34	Horz(CT)	0.06 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.05 14	>999	240	Weight: 275 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 5-3-14, Right 2x4 SP No.2 5-3-11

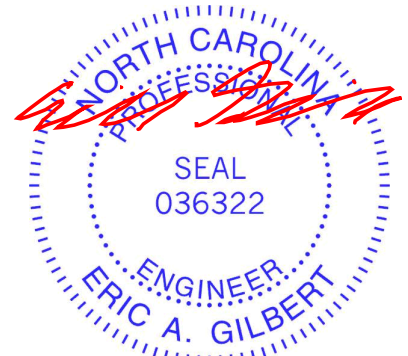
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-8-13 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 10=Mechanical  
Max Horz 2=-134(LC 8)  
Max Uplift 2=-101(LC 12), 10=-89(LC 13)  
Max Grav 2=1553(LC 1), 10=1506(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-2479/550, 4-6=-2200/578, 6-8=-2155/582, 8-10=-2436/559  
BOT CHORD 2-14=-339/2088, 11-14=-107/1436, 10-11=-336/2036  
WEBS 4-14=-495/319, 6-14=-140/852, 6-11=-129/814, 8-11=-464/312

**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) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 18-11-8, Exterior(2) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 37-8-0 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) 10 except (jt=lb) 2=101.



March 6, 2024

**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/TPH 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 J0724-4216	Truss B01GE	Truss Type GABLE	Qty 1	Ply 1	Lot 140 Duncans Creek Job Reference (optional)	I64045920
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Comtech, Inc. Fayetteville, NC - 28314,

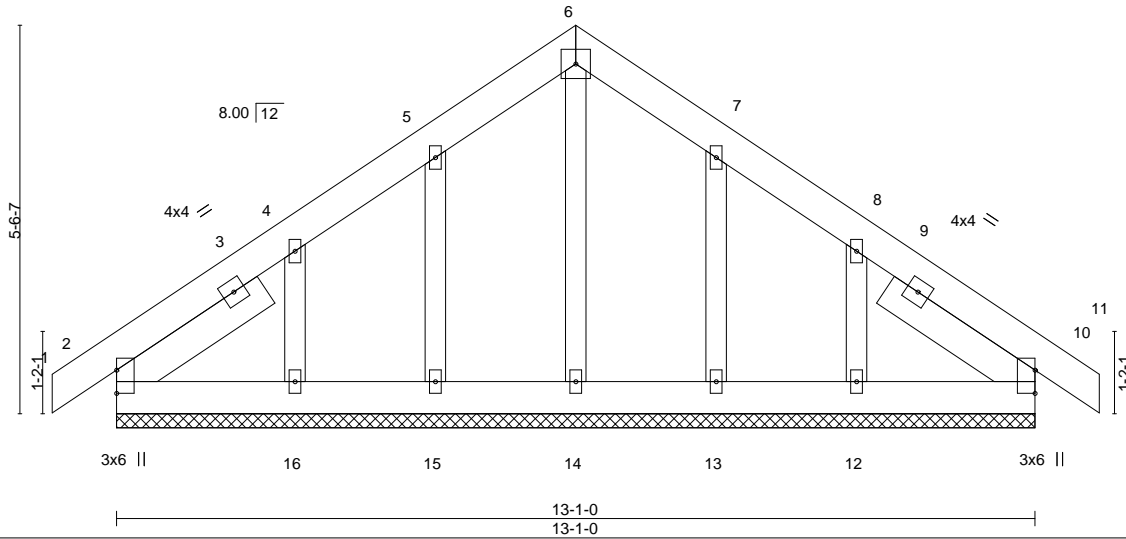
8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:26 2024 Page 1

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5x5 =

Scale = 1:32.8



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 0.02	Vert(LL)	0.00	10	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	10	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 108 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.2  
 SLIDER Left 2x6 SP No.1 2-6-0, Right 2x6 SP No.1 2-6-0

**BRACING-**

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

**REACTIONS.**

All bearings 13-1-0.  
 (lb) - Max Horz 2=150(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 15, 13 except 16=143(LC 12), 12=136(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 10, 14, 15, 16, 13, 12

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-11-0 to 3-5-13, Exterior(2) 3-5-13 to 6-6-8, Corner(3) 6-6-8 to 10-11-5, Exterior(2) 10-11-5 to 14-0-0 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, 10, 15, 13 except (jt=lb) 16=143, 12=136.



March 6, 2024

**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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 Edenton, NC 27932

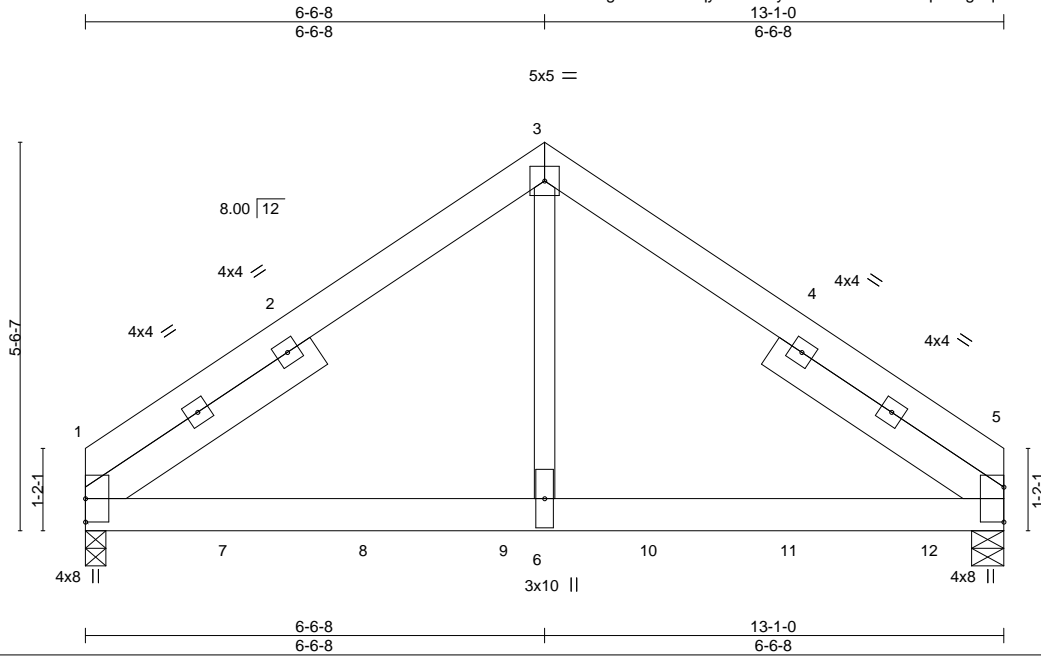


Job J0724-4216	Truss B02-GR	Truss Type Common Girder	Qty 1	Ply 2	Lot 140 Duncans Creek Job Reference (optional)	I64045921
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:28 2024 Page 1

ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	-0.06 5-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.85	Vert(CT)	-0.11 5-6	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.37	Horz(CT)	0.01 5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.05 5-6	>999	240		
								Weight: 188 lb	FT = 20%

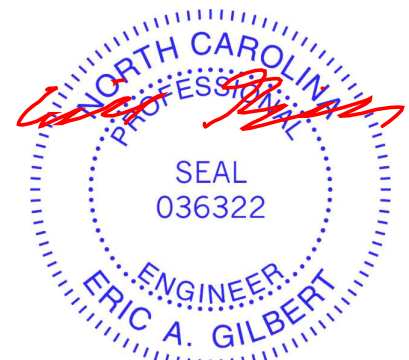
LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	
SLIDER Left 2x6 SP No.1 3-11-3, Right 2x6 SP No.1 3-11-3	

**REACTIONS.** (size) 1=0-3-8, 5=0-5-8  
 Max Horz 1=121(LC 24)  
 Max Uplift 1=-386(LC 8), 5=-448(LC 9)  
 Max Grav 1=2703(LC 1), 5=3080(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-3040/471, 3-5=-3030/469  
 BOT CHORD 1-6=-307/2358, 5-6=-307/2358  
 WEBS 3-6=-403/3046

- 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 0-9-0 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; TCCL=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=386, 5=448.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 789 lb down and 139 lb up at 2-0-12, 789 lb down and 139 lb up at 4-0-12, 789 lb down and 139 lb up at 6-0-12, 789 lb down and 139 lb up at 8-0-12, and 789 lb down and 139 lb up at 10-0-12, and 789 lb down and 139 lb up at 12-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-5=-60, 1-5=-20



March 6, 2024

Continued on page 2

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b>          Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPH Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p>	<p>ENGINEERING BY  <b>TRENCO</b>          A MiTek Affiliate</p> <p>818 Soundside Road          Edenton, NC 27932</p>
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Job J0724-4216	Truss B02-GR	Truss Type Common Girder	Qty 1	Ply <b>2</b>	Lot 140 Duncans Creek I64045921 Job Reference (optional)
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:28 2024 Page 2  
ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 7=-789(B) 8=-789(B) 9=-789(B) 10=-789(B) 11=-789(B) 12=-789(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 J0724-4216	Truss C01GE	Truss Type GABLE	Qty 1	Ply 1	Lot 140 Duncans Creek I64045922
Comtech, Inc. Fayetteville, NC - 28314,					Job Reference (optional)

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:29 2024 Page 1  
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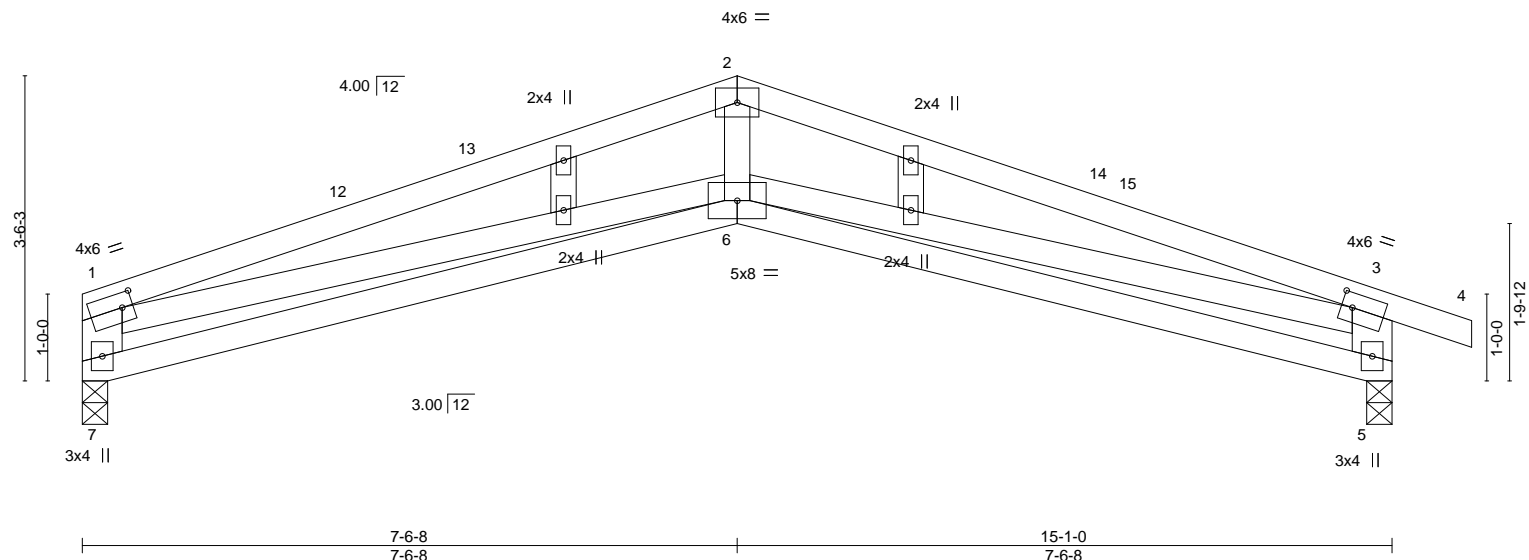
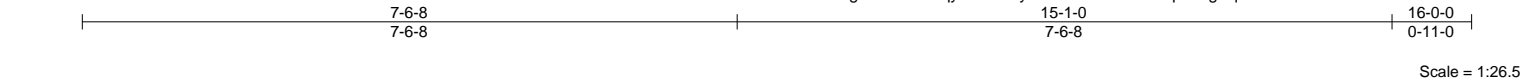


Plate Offsets (X,Y)--	[1:0-1-8,0-2-0], [3:0-1-8,0-2-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.73	Vert(LL)	-0.10	5-6	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.35	Vert(CT)	-0.23	5-6	>761		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.31	Horz(CT)	0.10	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.08	6	>999		
								Weight: 76 lb	FT = 20%

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

**REACTIONS.** (size) 7=0-3-8, 5=0-3-8  
 Max Horz 7=-34(LC 17)  
 Max Uplift 7=-136(LC 8), 5=-195(LC 9)  
 Max Grav 7=582(LC 1), 5=656(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1783/429, 2-3=-1787/444, 1-7=-592/248, 3-5=-698/339  
 BOT CHORD 6-7=-149/393, 5-6=-221/526  
 WEBS 2-6=-34/694, 1-6=-214/1269, 3-6=-177/1141

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 7-6-8, Exterior(2) 7-6-8 to 11-11-5, Interior(1) 11-11-5 to 16-0-0 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Gable 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.
  - Bearing at joint(s) 7, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=136, 5=195.



March 6, 2024

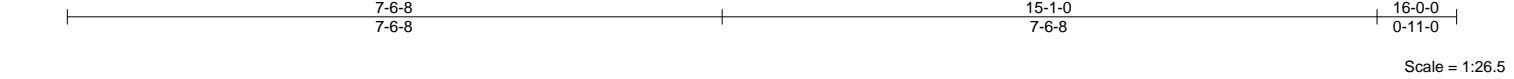
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J0724-4216	C02	SCISSORS	4	1		
Comtech, Inc. Fayetteville, NC - 28314,						8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:30 2024 Page 1
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						Job Reference (optional)

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8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:30 2024 Page 1

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Job Reference (optional)



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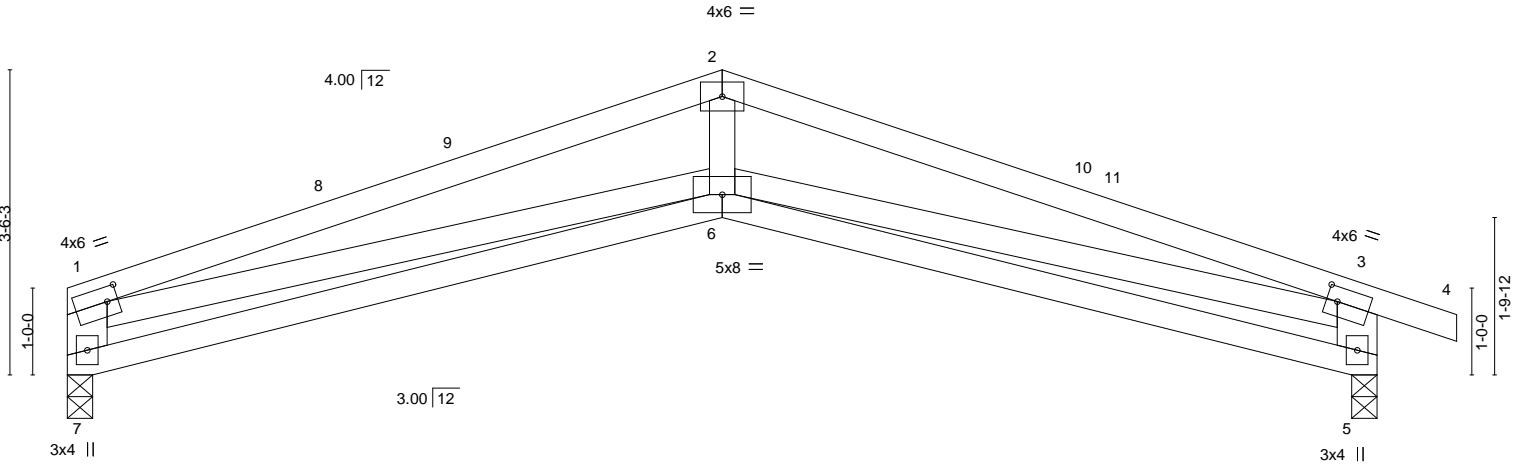


Plate Offsets (X, Y)--	[1:0-1-8,0-2-0], [3:0-1-8,0-2-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.73	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.35	Vert(LL) -0.10 5-6 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.31	Vert(CT) -0.23 5-6 >761 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.10 5 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.07 6 >999 240	Weight: 75 lb	FT = 20%

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

REACTIONS.
(size) 7=0-3-8, 5=0-3-8
Max Horz 7=-19(LC 17)
Max Uplift 7=-46(LC 8), 5=-88(LC 9)
Max Grav 7=582(LC 1), 5=656(LC 1)

FORCES.
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1783/429, 2-3=-1787/444, 1-7=-592/248, 3-5=-698/339
BOT CHORD 6-7=-144/393, 5-6=-200/526
WEBS 2-6=-34/694, 1-6=-214/1269, 3-6=-177/1141

- 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) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 7-6-8, Exterior(2) 7-6-8 to 11-11-5, Interior(1) 11-11-5 to 16-0-0 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 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) Bearing at joint(s) 7, 5 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, 5.



March 6, 2024

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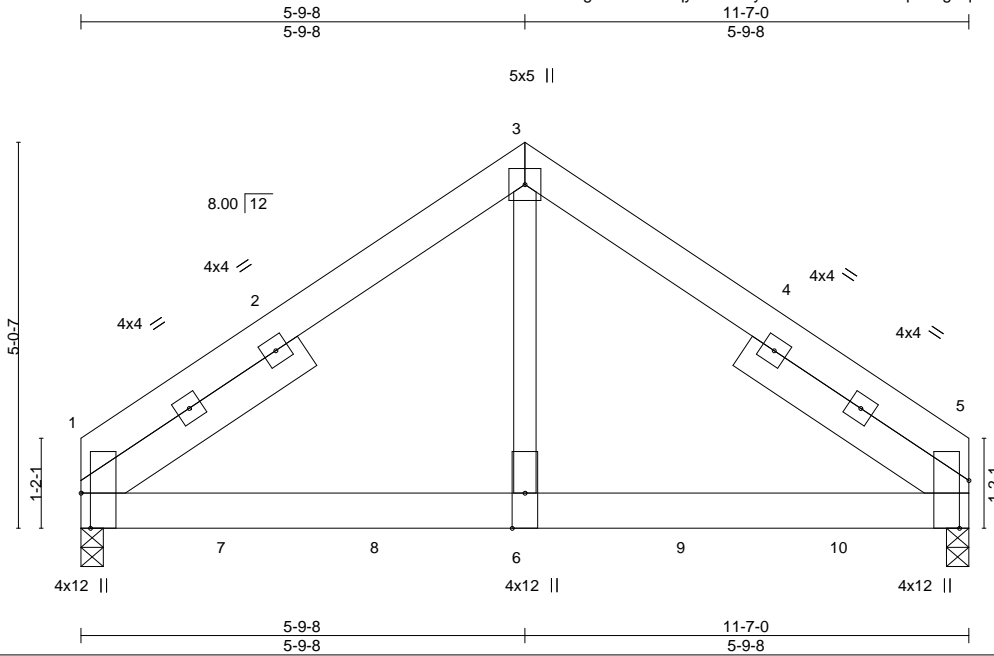


Job J0724-4216	Truss D02-GR	Truss Type Common Girder	Qty 1	Ply 2	Lot 140 Duncans Creek I64045925
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:32 2024 Page 1

ID:JQb1gK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:30.1

Plate Offsets (X,Y)--	[1:0-5-8,Edge], [5:0-7-8,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.30	Vert(LL) -0.07 1-6 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.66	Vert(CT) -0.12 1-6 >999 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.68	Horz(CT) 0.02 5 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.04 1-6 >999 240	Weight: 167 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	
SLIDER Left 2x6 SP No.1 3-5-13, Right 2x6 SP No.1 3-5-13	

<b>REACTIONS.</b>	(size) 1=0-3-8, 5=0-3-8
	Max Horz 1=109(LC 24)
	Max Uplift 1=-268(LC 8), 5=-279(LC 9)
	Max Grav 1=4574(LC 2), 5=4746(LC 2)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-3=-4995/330, 3-5=-4992/330
BOT CHORD	1-6=-199/3951, 5-6=-199/3951
WEBS	3-6=-260/5578

- 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 0-6-0 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=268, 5=279.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1702 lb down and 109 lb up at 1-11-4, 1702 lb down and 109 lb up at 3-11-4, 1702 lb down and 109 lb up at 5-11-4, and 1702 lb down and 109 lb up at 7-11-4, and 1702 lb down and 109 lb up at 9-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

<b>LOAD CASE(S)</b> Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-5=-60, 1-5=-20



March 6, 2024



Job J0724-4216	Truss D02-GR	Truss Type Common Girder	Qty 1	Ply <b>2</b>	Lot 140 Duncans Creek I64045925 Job Reference (optional)
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:33 2024 Page 2  
ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 6=-1486(B) 7=-1486(B) 8=-1486(B) 9=-1486(B) 10=-1486(B)

**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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))



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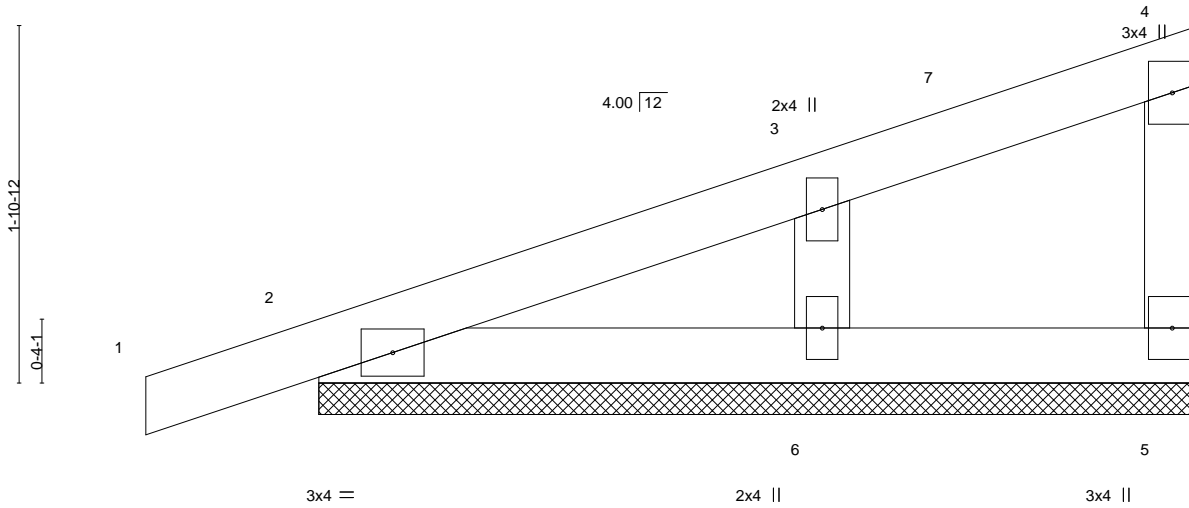
Job J0724-4216	Truss M01GE	Truss Type GABLE	Qty 1	Ply 1	Lot 140 Duncans Creek Job Reference (optional)	I64045926
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:33 2024 Page 1

ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f  
4-8-0  
4-8-0

Scale = 1:12.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00		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  
WEBS 2x4 SP No.2  
OTHERS 2x4 SP No.2

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

**REACTIONS.** (size) 5=4-8-0, 2=4-8-0, 6=4-8-0  
Max Horz 2=89(LC 8)  
Max Uplift 5=-19(LC 8), 2=-63(LC 8), 6=-74(LC 12)  
Max Grav 5=48(LC 1), 2=153(LC 1), 6=215(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-6=-157/287

- 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 Corner(3) -0-11-0 to 3-5-13, Exterior(2) 3-5-13 to 4-6-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) Gable requires continuous bottom chord bearing.
  - 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) 5, 2, 6.



March 6, 2024

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

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Job J0724-4216	Truss M02	Truss Type MONOPITCH	Qty 4	Ply 1	Lot 140 Duncans Creek Job Reference (optional)	I64045927
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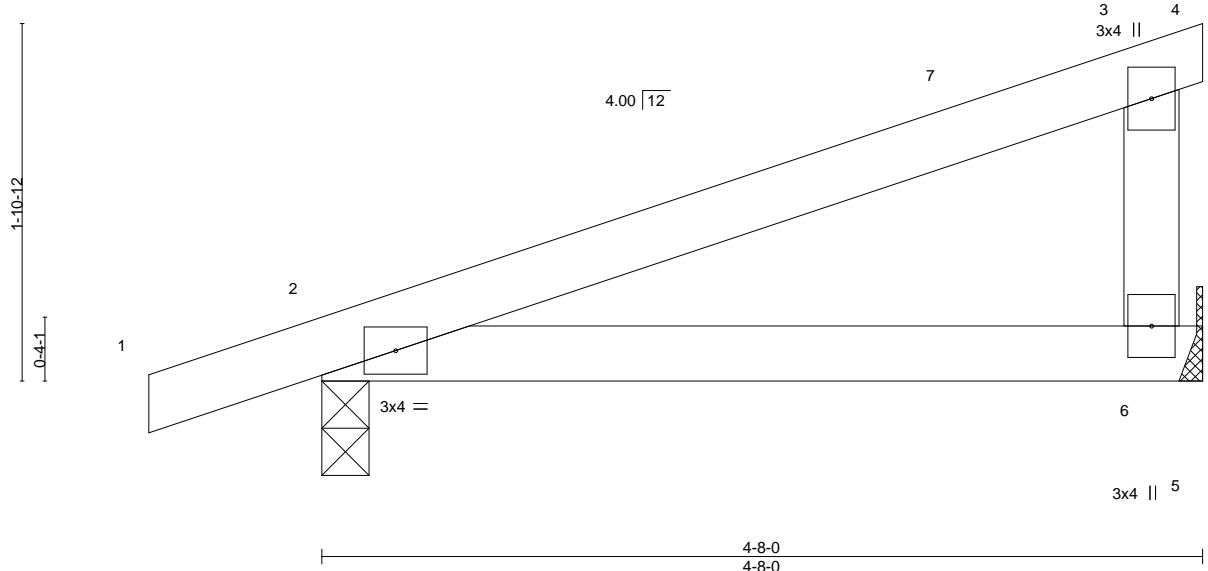
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:34 2024 Page 1

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Scale = 1:12.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	-0.02	2-6	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	-0.03	2-6	>999		
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)	0.04	2-6	>999	Weight: 18 lb	FT = 20%

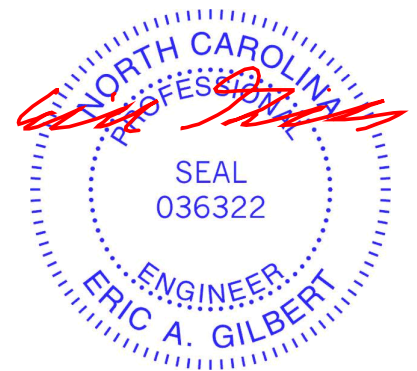
**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x4 SP No.2

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

**REACTIONS.** (size) 6=Mechanical, 2=0-3-0  
 Max Horz 2=64(LC 8)  
 Max Uplift 6=71(LC 8), 2=99(LC 8)  
 Max Grav 6=174(LC 1), 2=241(LC 1)

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

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



March 6, 2024

Job	Truss	Truss Type	Qty	Ply	Lot 140 Duncans Creek	I64045928
J0724-4216	M02A	ROOF SPECIAL	2	1		
Comtech, Inc. Fayetteville, NC - 28314,						8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:35 2024 Page 1
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						Job Reference (optional)

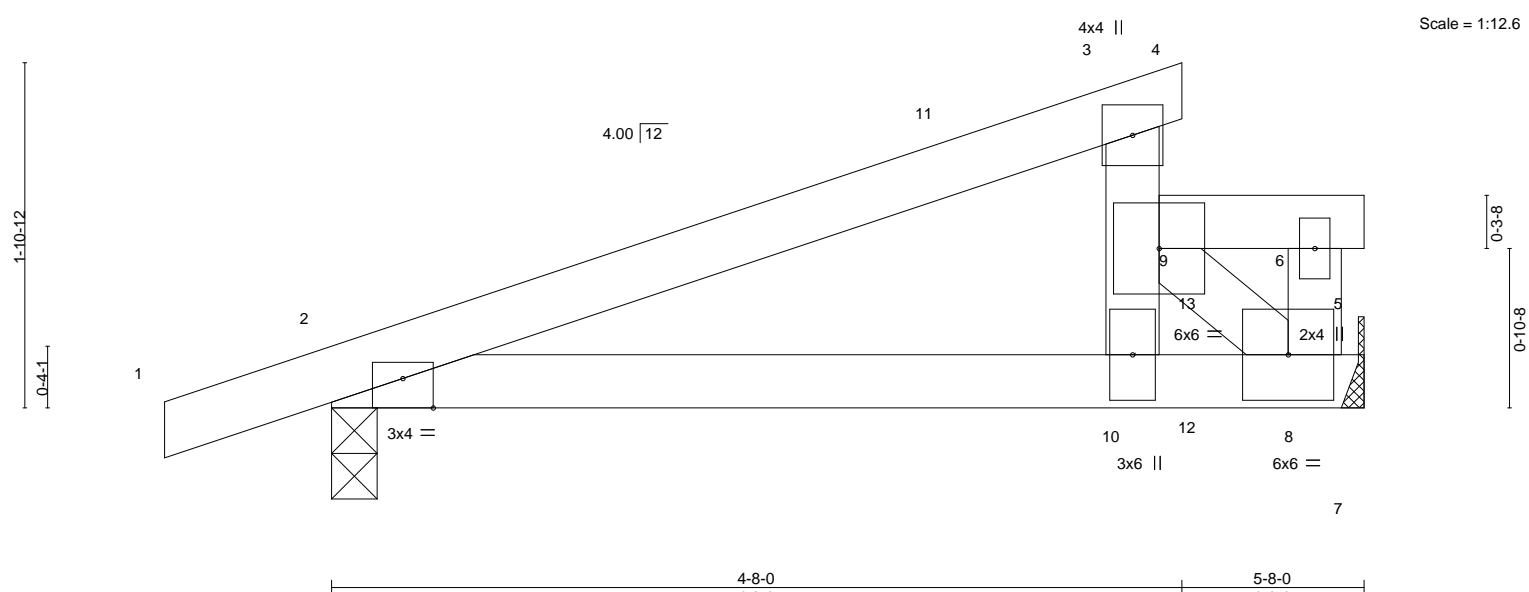
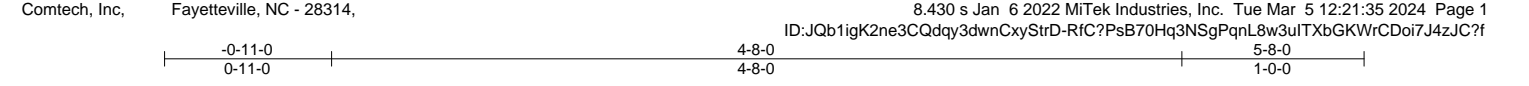


Plate Offsets (X,Y)--	[2:0-2-0,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.70	Vert(LL)	-0.02	2-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.32	Vert(CT)	-0.03	2-10	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.29	Horz(CT)	-0.01	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.05	2-10	>999	Weight: 23 lb	FT = 20%

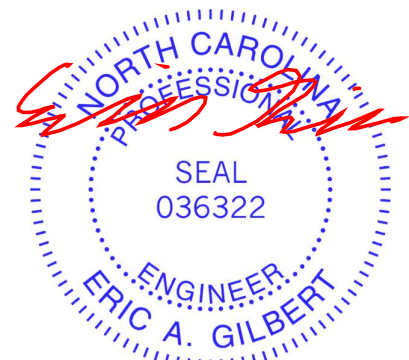
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-8-0 oc purlins, except end verticals. Except:
BOT CHORD 2x4 SP No.1	10-0-0 oc bracing: 3-9
WEBS 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 5-5-6 oc bracing.

REACTIONS.	(size)
2=0-3-0, 8=Mechanical	
Max Horz 2=64(LC 8)	
Max Uplift 2=-177(LC 8), 8=-438(LC 8)	
Max Grav 2=427(LC 1), 8=1064(LC 3)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-681/906, 9-10=-636/440
BOT CHORD	2-10=-917/609, 8-10=-1235/815
WEBS	8-9=-1083/1641

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 4-8-0 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=177, 8=438.
  - Magnitude of user added load(s) on this truss have been applied uniformly across all gravity load cases with no adjustments.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 500 lb down and 688 lb up at 4-9-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S)	Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15	
Uniform Loads (plf)	
Vert: 1-3=-60, 3-4=-20, 2-7=-20, 6-9=-25, 5-6=-20	
Concentrated Loads (lb)	
Vert: 9=-500 12=-500	



March 6, 2024

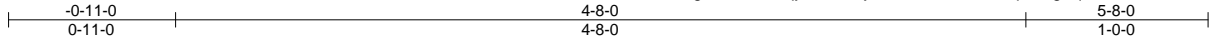
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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 <b>ANSI/TPH Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MITEK Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	Lot 140 Duncans Creek	I64045929
J0724-4216	M03	ROOF SPECIAL	1	2	Job Reference (optional)	

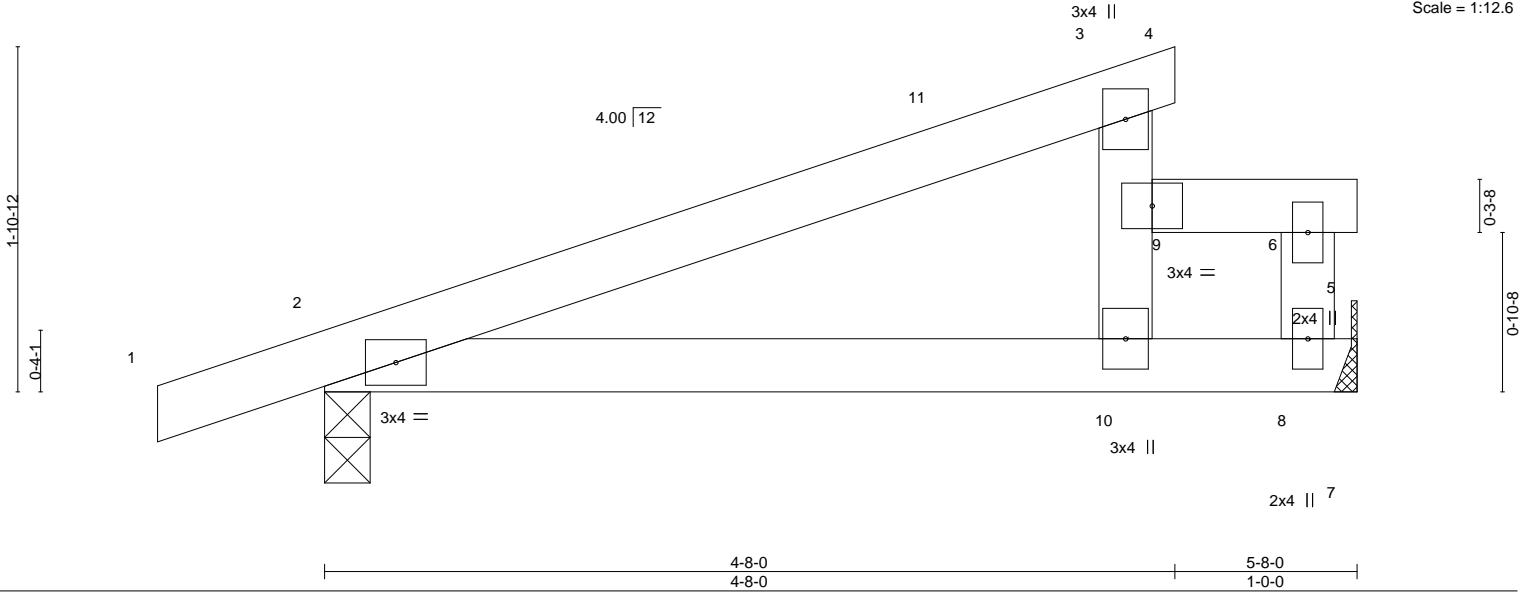
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8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:36 2024 Page 1

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Scale = 1:12.6



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 0.18	Vert(LL)	-0.01 2-10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	-0.02 2-10	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.04	Horz(CT)	-0.00 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.02 2-10	>999	240		
								Weight: 43 lb	FT = 20%

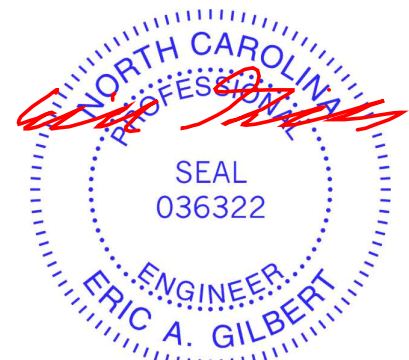
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-8-0 oc purlins, except end verticals. Except:
BOT CHORD 2x4 SP No.1	6-0-0 oc bracing: 3-9
WEBS 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-0, 8=Mechanical  
 Max Horz 2=64(LC 8)  
 Max Uplift 2=-128(LC 8), 8=-177(LC 8)  
 Max Grav 2=298(LC 1), 8=369(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-277/345  
 BOT CHORD 2-10=-383/225  
 WEBS 6-8=-247/408

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 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; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 4-8-0 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=128, 8=177.
  - Magnitude of user added load(s) on this truss have been applied uniformly across all gravity load cases with no adjustments.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s). The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-4=-20, 2-7=-20, 6-9=-170, 5-6=-20



March 6, 2024

Job J0724-4216	Truss M03	Truss Type ROOF SPECIAL	Qty 1	Ply <b>2</b>	Lot 140 Duncans Creek I64045929 Job Reference (optional)
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:36 2024 Page 2  
ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

**LOAD CASE(S)** Standard  
Concentrated Loads (lb)  
Vert: 9=-40

**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

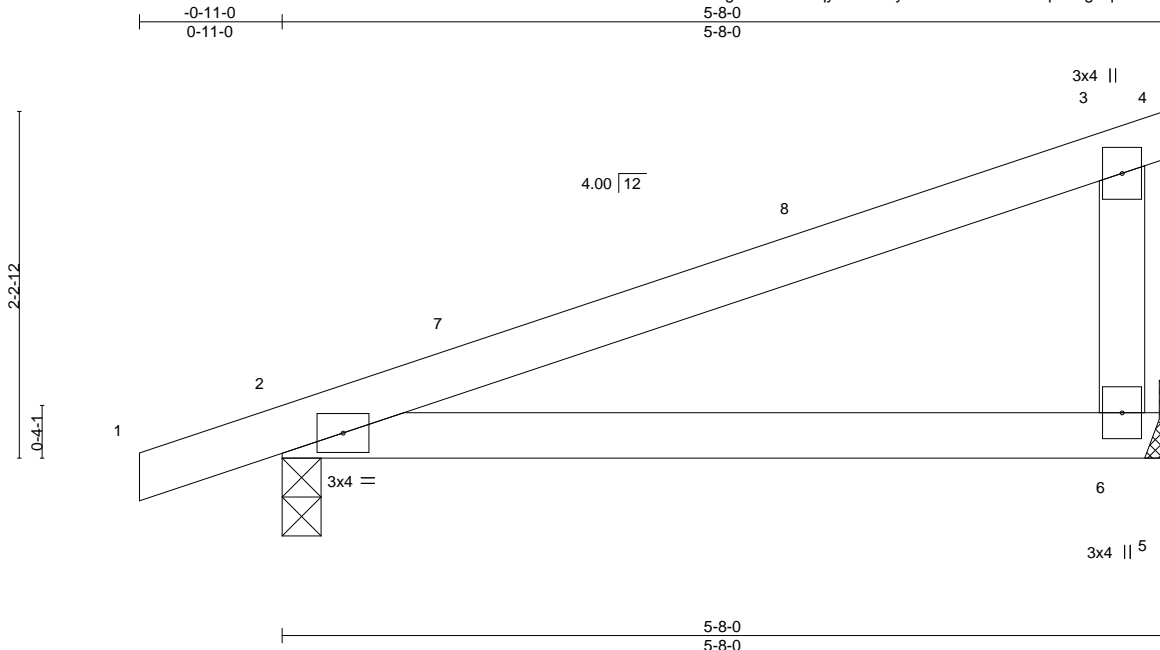


Job J0724-4216	Truss M04	Truss Type MONOPITCH	Qty 1	Ply 1	Lot 140 Duncans Creek Job Reference (optional)	I64045930
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:37 2024 Page 1

ID:JQb1gK2ne3CQdgy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:14.8

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 0.37	Vert(LL)	-0.04	2-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.26	Vert(CT)	-0.08	2-6	>786	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)	0.09	2-6	>703	240		
									Weight: 21 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-8-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 6=Mechanical, 2=0-3-0  
 Max Horz 2=75(LC 8)  
 Max Uplift 6=89(LC 8), 2=112(LC 8)  
 Max Grav 6=216(LC 1), 2=279(LC 1)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 5-8-0 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=112.



March 6, 2024

Job	Truss	Truss Type	Qty	Ply	Lot 140 Duncans Creek	I64045931
J0724-4216	M05GE	GABLE	1	1	Job Reference (optional)	

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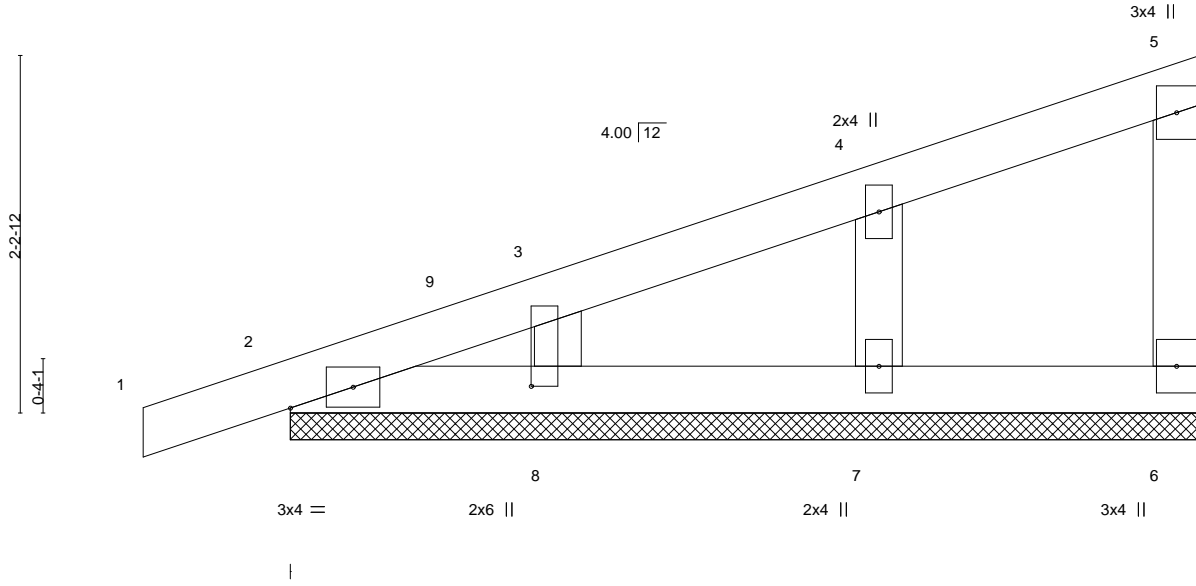


Plate Offsets (X,Y)--	[8:0-1-10,1-6-0]
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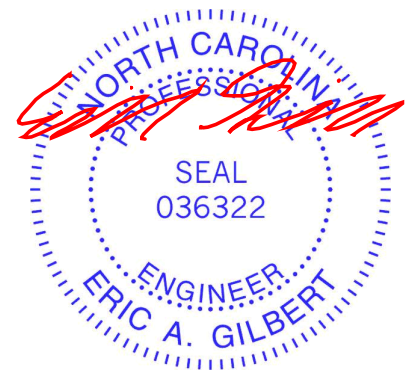
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00		n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						
								Weight: 23 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-8-0 oc purlins, except end verticals.
BOT CHORD 2x4 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.** All bearings 5-8-0.  
 (lb) - Max Horz 2=105(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7, 8  
 Max Grav All reactions 250 lb or less at joint(s) 6, 2, 7, 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 Corner(3) -0-11-0 to 3-8-0, Exterior(2) 3-8-0 to 5-6-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) Gable requires continuous bottom chord bearing.
  - 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) 6, 2, 7, 8.



March 6, 2024

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></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 <b>ANSI/TPH Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> 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 J0724-4216	Truss M06GE	Truss Type GABLE	Qty 1	Ply 1	Lot 140 Duncans Creek Job Reference (optional)	164045932
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8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:39 2024 Page 1

ID:JQb1gK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f  
10-0-0  
10-0-0

-0-11-0  
0-11-0

Scale = 1:19.9

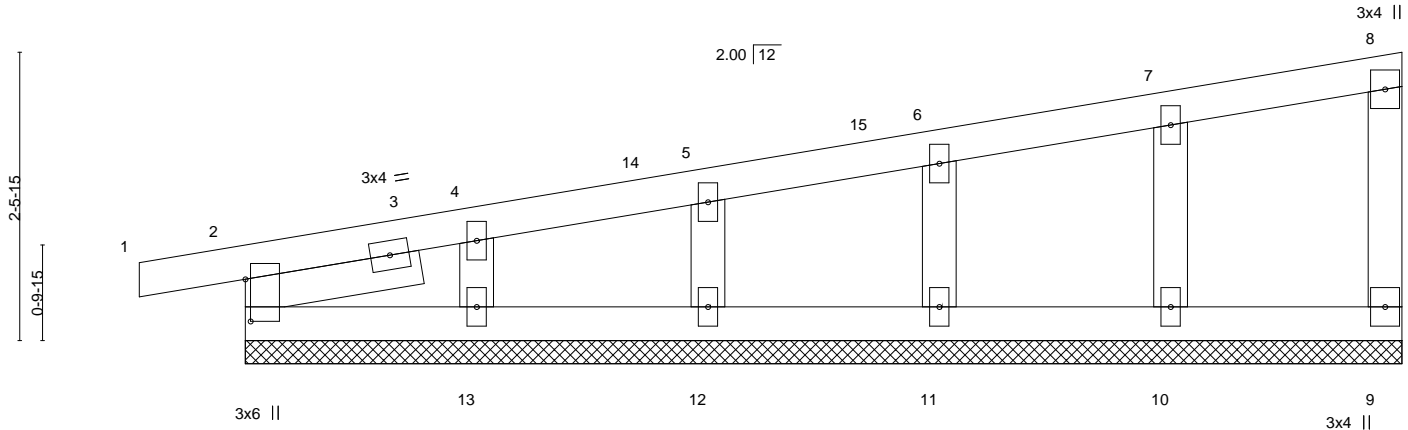


Plate Offsets (X,Y)-- [2:0-4-6,0-0-9]

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 0.06	Vert(LL)	0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	-0.00	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 43 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.2  
OTHERS 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 1-6-11

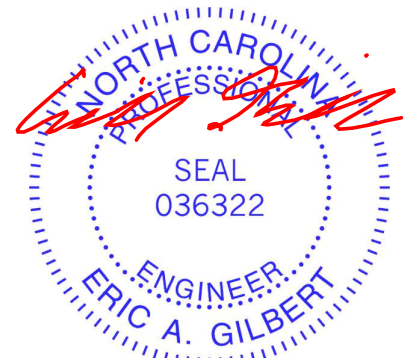
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 10-0-0.  
(lb) - Max Horz 2=87(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 9, 2, 10, 11, 12, 13  
Max Grav All reactions 250 lb or less at joint(s) 9, 2, 10, 11, 12, 13

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-11-0 to 3-5-13, Exterior(2) 3-5-13 to 9-10-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 2, 10, 11, 12, 13.



March 6, 2024

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818 Soundside Road  
Edenton, NC 27932

Job J0724-4216	Truss M07	Truss Type Monopitch	Qty 7	Ply 1	Lot 140 Duncans Creek Job Reference (optional)	164045933
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:40 2024 Page 1

ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



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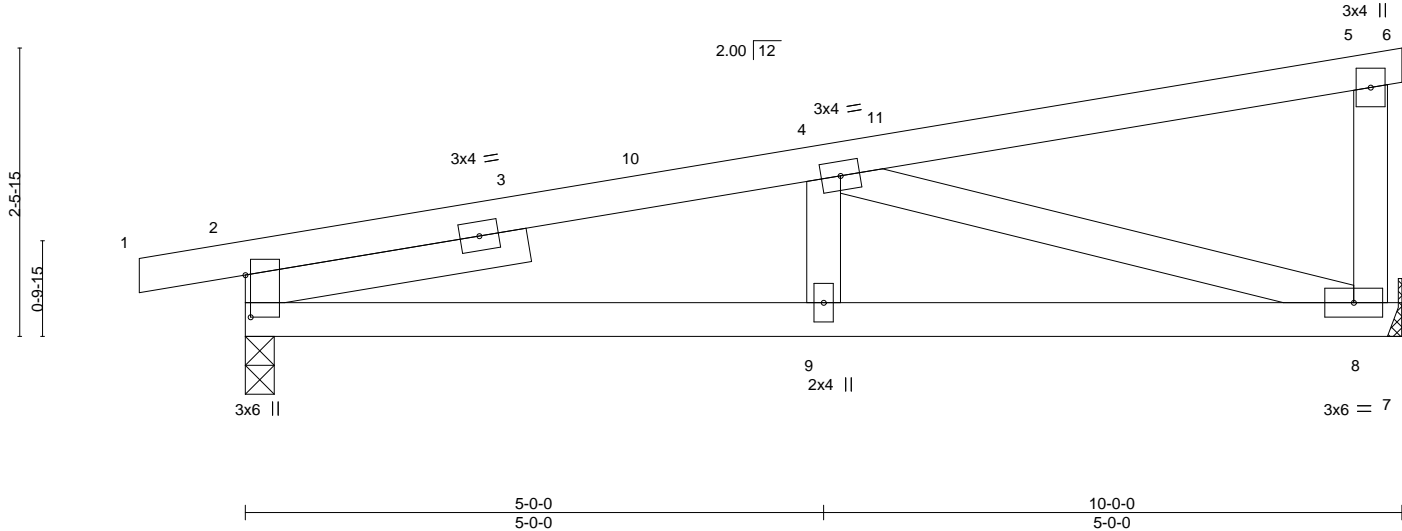


Plate Offsets (X,Y)--	[2:0-4-6,0-0-9]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	0.05	2-9	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	-0.04	2-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.30	Horz(CT)	0.01	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S							
									Weight: 46 lb	FT = 20%

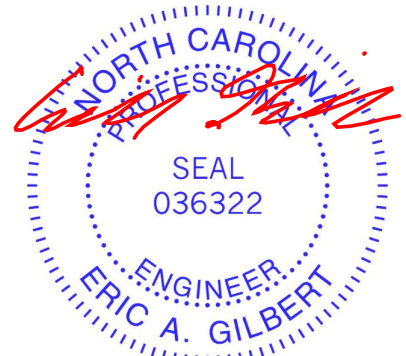
**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 2-6-0

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-9-9 oc bracing.

**REACTIONS.** (size) 8=Mechanical, 2=0-3-0  
Max Horz 2=62(LC 12)  
Max Uplift 8=157(LC 8), 2=-177(LC 8)  
Max Grav 8=398(LC 1), 2=447(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-800/779  
BOT CHORD 2-9=-819/738, 8-9=-819/738  
WEBS 4-8=-709/778, 4-9=-255/203

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 10-0-0 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=157, 2=177.



March 6, 2024

**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 J0724-4216	Truss VB1	Truss Type Valley	Qty 1	Ply 1	Lot 140 Duncans Creek I64045934
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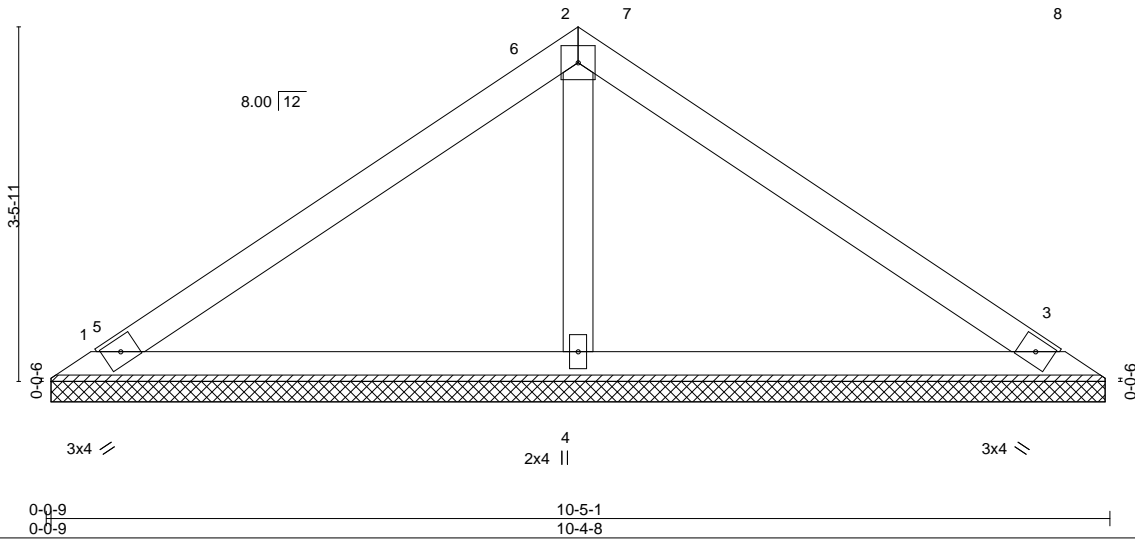
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:41 2024 Page 1

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Scale = 1:22.6



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.23	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.16	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 36 lb	FT = 20%
	Code IRC2015/TPI2014							

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

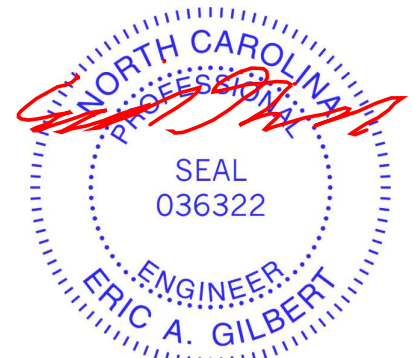
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=10-3-15, 3=10-3-15, 4=10-3-15  
 Max Horz 1=-76(LC 8)  
 Max Uplift 1=-23(LC 12), 3=-31(LC 13)  
 Max Grav 1=187(LC 1), 3=187(LC 1), 4=380(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 4-10-12, Interior(1) 4-10-12 to 5-2-8, Exterior(2) 5-2-8 to 9-7-5, Interior(1) 9-7-5 to 9-11-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



March 6, 2024

**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 J0724-4216	Truss VB2	Truss Type Valley	Qty 1	Ply 1	Lot 140 Duncans Creek I64045935
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Comtech, Inc. Fayetteville, NC - 28314,

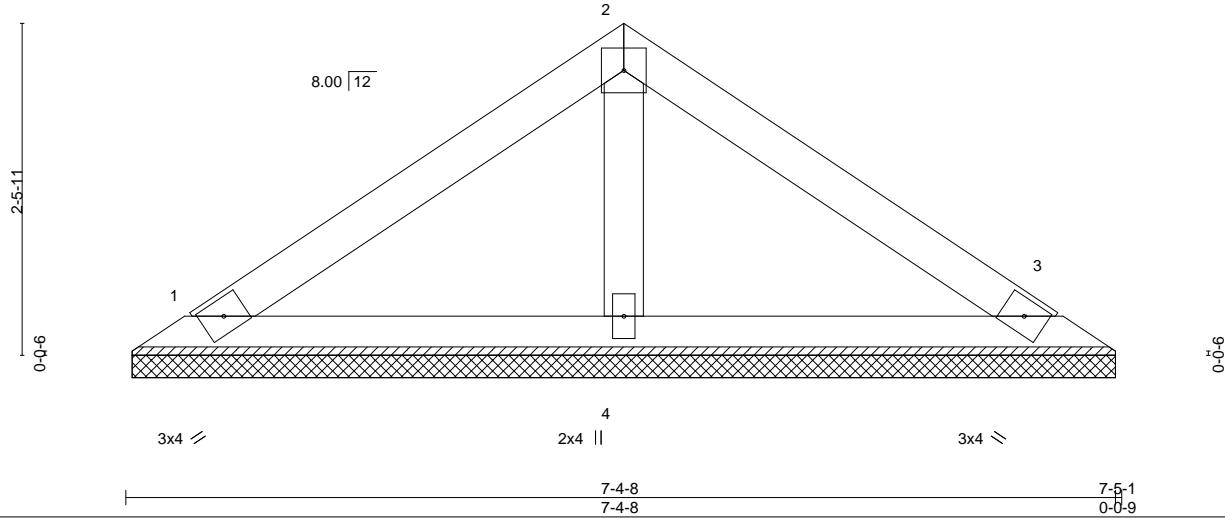
8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:42 2024 Page 1

ID:JQb1gK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:17.2



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.14	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.08	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 25 lb	FT = 20%
	Code IRC2015/TPI2014							

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

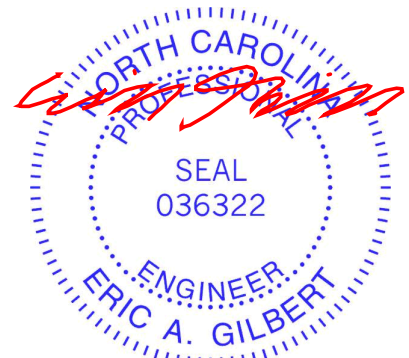
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=7-3-15, 3=7-3-15, 4=7-3-15  
 Max Horz 1=-52(LC 8)  
 Max Uplift 1=-22(LC 12), 3=-27(LC 13)  
 Max Grav 1=140(LC 1), 3=140(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; 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) 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.



March 6, 2024

**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

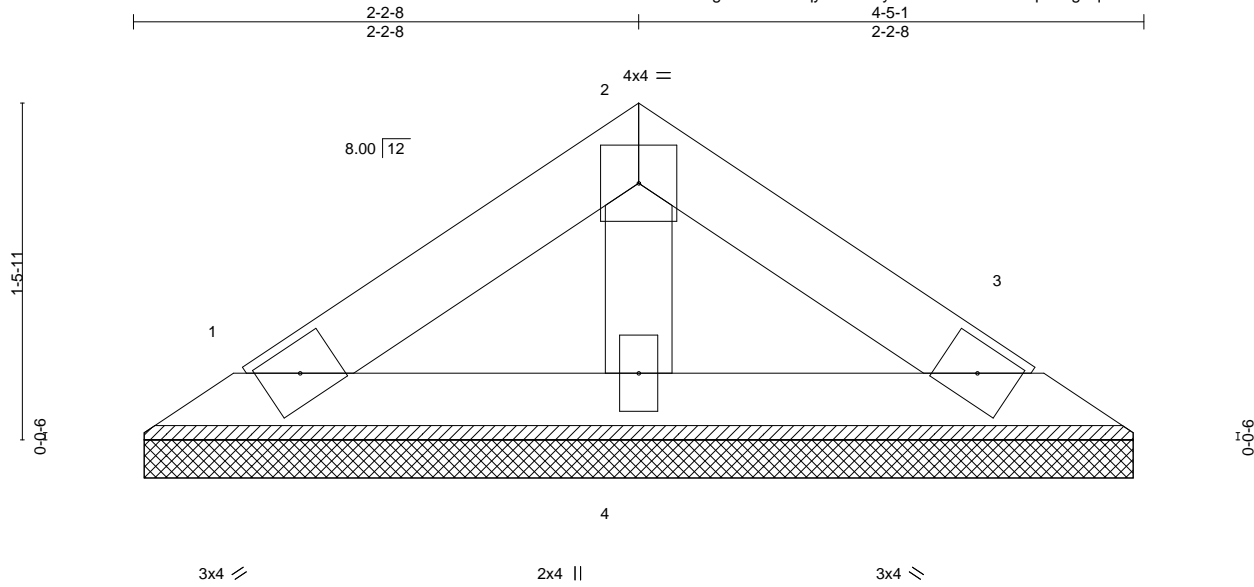


Job J0724-4216	Truss VB3	Truss Type Valley	Qty 1	Ply 1	Lot 140 Duncans Creek Job Reference (optional)	I64045936
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:42 2024 Page 1

ID:JQb1gK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:10.1

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.04	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.01	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P					Weight: 14 lb	FT = 20%

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

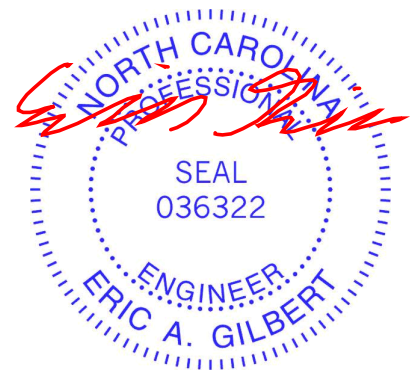
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-5-1 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=4-3-15, 3=4-3-15, 4=4-3-15  
 Max Horz 1=28(LC 11)  
 Max Uplift 1=12(LC 12), 3=14(LC 13)  
 Max Grav 1=75(LC 1), 3=75(LC 1), 4=125(LC 1)

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

**NOTES-**

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



March 6, 2024

Job	Truss	Truss Type	Qty	Ply	Lot 140 Duncans Creek	I64045937
J0724-4216	VC1	VALLEY	1	1		
						Job Reference (optional)

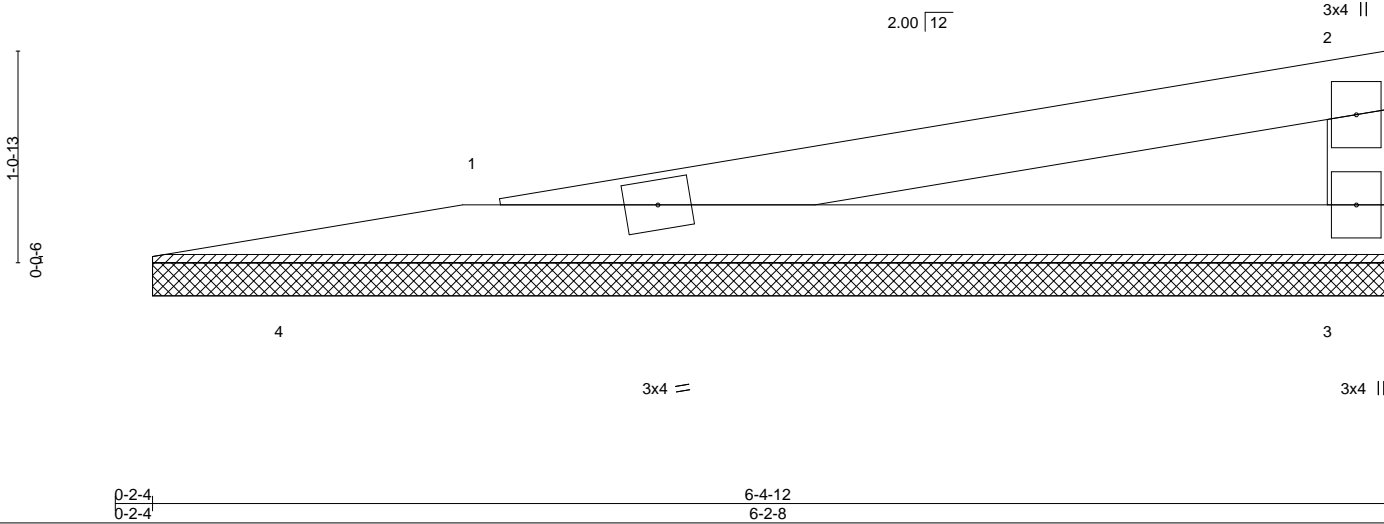
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:43 2024 Page 1

ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

6-4-12  
6-4-12

Scale = 1:11.6



LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.26	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	1	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 17 lb	FT = 20%
	Code IRC2015/TPI2014							

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

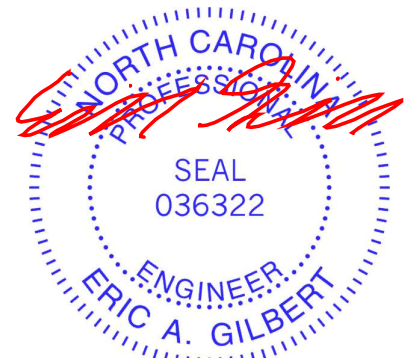
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-4-12 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=6-2-8, 3=6-2-8, 4=6-2-8  
Max Horz 4=24(LC 8)  
Max Uplift 3=26(LC 8), 4=59(LC 3)  
Max Grav 1=245(LC 3), 3=164(LC 1)

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

**NOTES-**

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



March 6, 2024

**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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))



818 Soundside Road  
Edenton, NC 27932

Job J0724-4216	Truss VD1	Truss Type Valley	Qty 1	Ply 1	Lot 140 Duncans Creek I64045938
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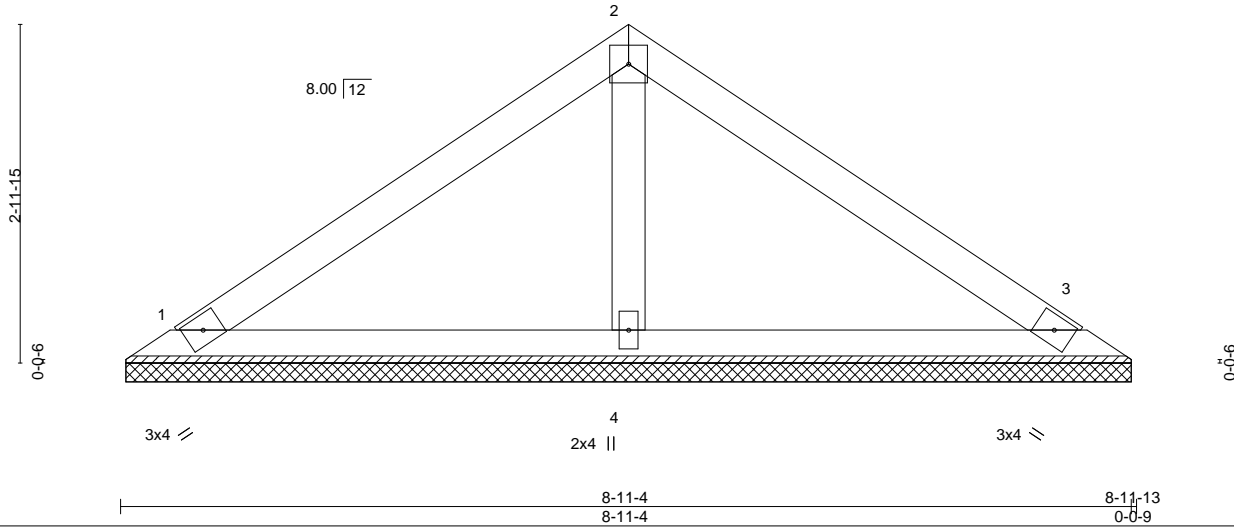
8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:44 2024 Page 1

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4x4 =

Scale = 1:20.4



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.23	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.12	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: 31 lb	FT = 20%
	Code IRC2015/TPI2014							

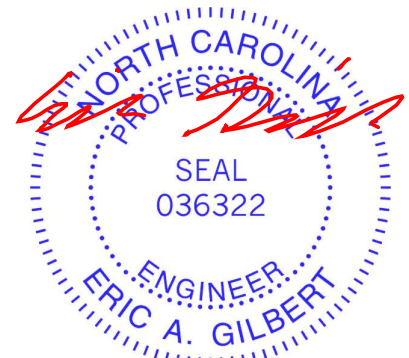
**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.2

**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=8-10-11, 3=8-10-11, 4=8-10-11  
 Max Horz 1=64(LC 8)  
 Max Uplift 1=27(LC 12), 3=34(LC 13)  
 Max Grav 1=174(LC 1), 3=174(LC 1), 4=292(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) 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.



March 6, 2024

**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 J0724-4216	Truss VD2	Truss Type Valley	Qty 1	Ply 1	Lot 140 Duncans Creek Job Reference (optional)	I64045939
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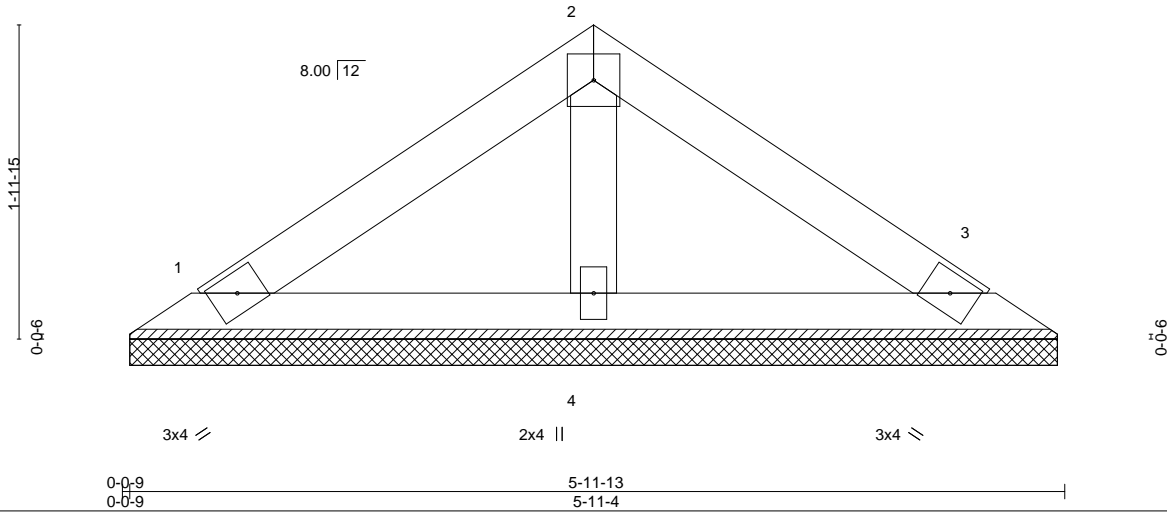
8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:45 2024 Page 1

ID:JQb1gK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:14.6



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.08	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.05	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 20 lb	FT = 20%
	Code IRC2015/TPI2014							

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

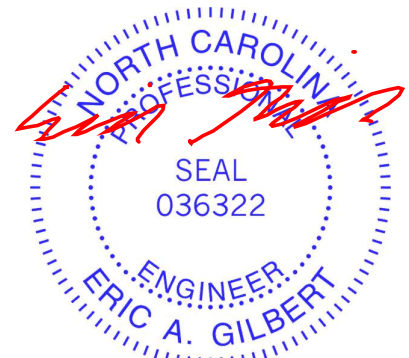
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-11-13 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=5-10-11, 3=5-10-11, 4=5-10-11  
 Max Horz 1=40(LC 9)  
 Max Uplift 1=-17(LC 12), 3=-21(LC 13)  
 Max Grav 1=109(LC 1), 3=109(LC 1), 4=182(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) 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.



March 6, 2024

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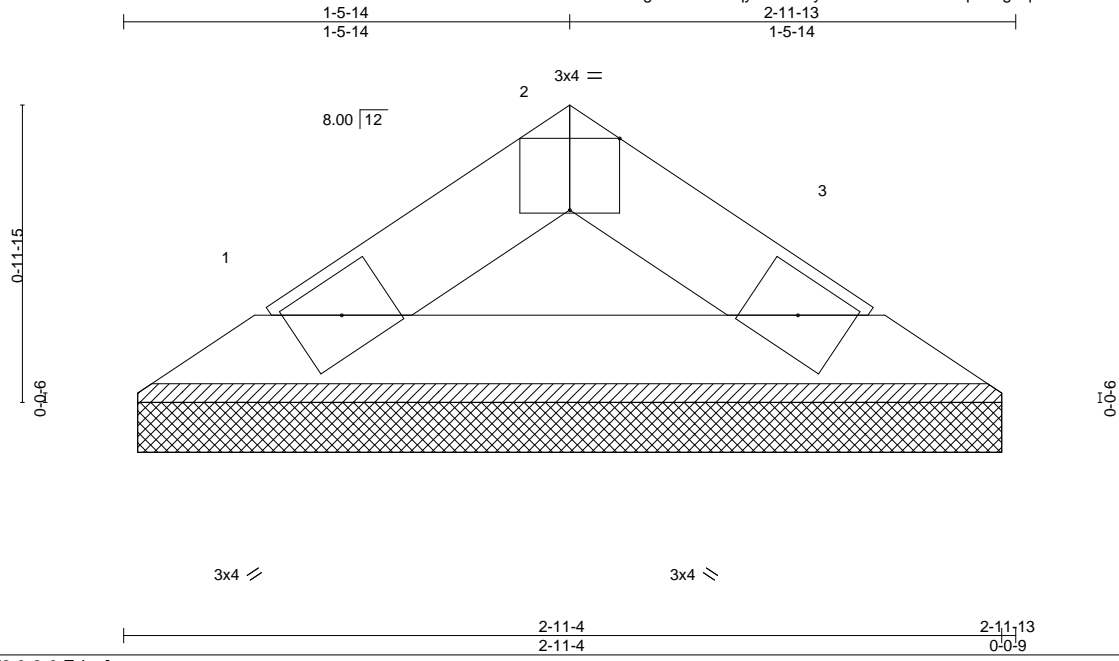
818 Soundside Road  
 Edenton, NC 27932

Job J0724-4216	Truss VD3	Truss Type Valley	Qty 1	Ply 1	Lot 140 Duncans Creek I64045940
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8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 5 12:21:46 2024 Page 1

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Scale = 1:7.7

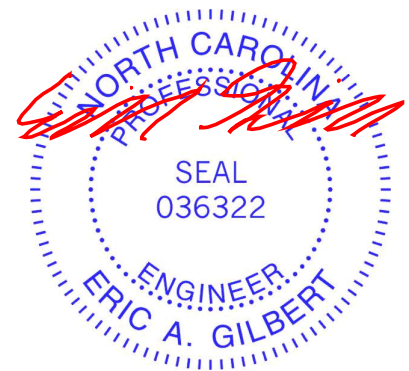
Plate Offsets (X,Y)--	[2:0-2:0,Edge]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.01	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P						Weight: 8 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 2-11-13 oc purlins.
BOT CHORD	2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=2-10-11, 3=2-10-11  
 Max Horz 1=16(LC 10)  
 Max Uplift 1=4(LC 12), 3=4(LC 13)  
 Max Grav 1=80(LC 1), 3=80(LC 1)

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

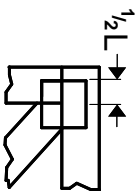
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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.



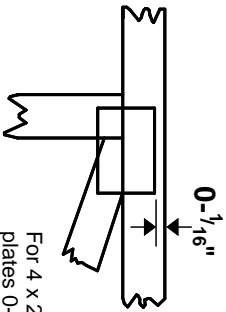
March 6, 2024

# 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\"/>



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

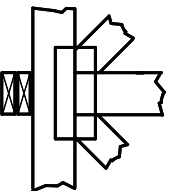
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



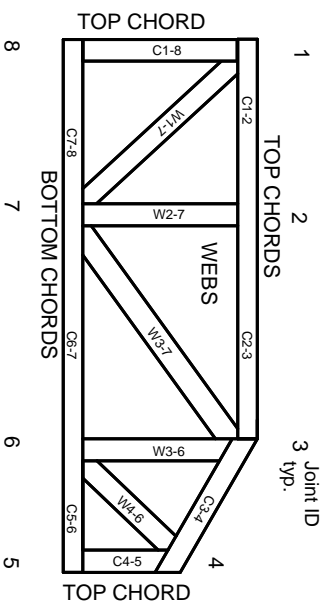
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: 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

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



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

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

# Product Code Approvals

ICC-ES Reports:

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

# Design General Notes

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

Lumber design values are in accordance with ANSI/TP1 section 6.3. These truss designs rely on Lumber values established by others.

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# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability/bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

**MITek**

ENGINEERING BY  
**TRENGO**  
A MITek Affiliate

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