ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0425-1921
Wellco/102 Hidden Lakes North/Harnett

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

Pages or sheets covered by this seal: I72769507 thru I72769519

My license renewal date for the state of North Carolina is December 31, 2025.

North Carolina COA: C-0844

April 16,2025

Gilbert, Eric

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

Job	Truss	Truss Type	Qty	Ply	Wellco/102 Hidden Lakes North/Harnett
J0425-1921	A1	ROOF SPECIAL	11	1	I72769507
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Apr 15 09:53:41 2025 Page 1
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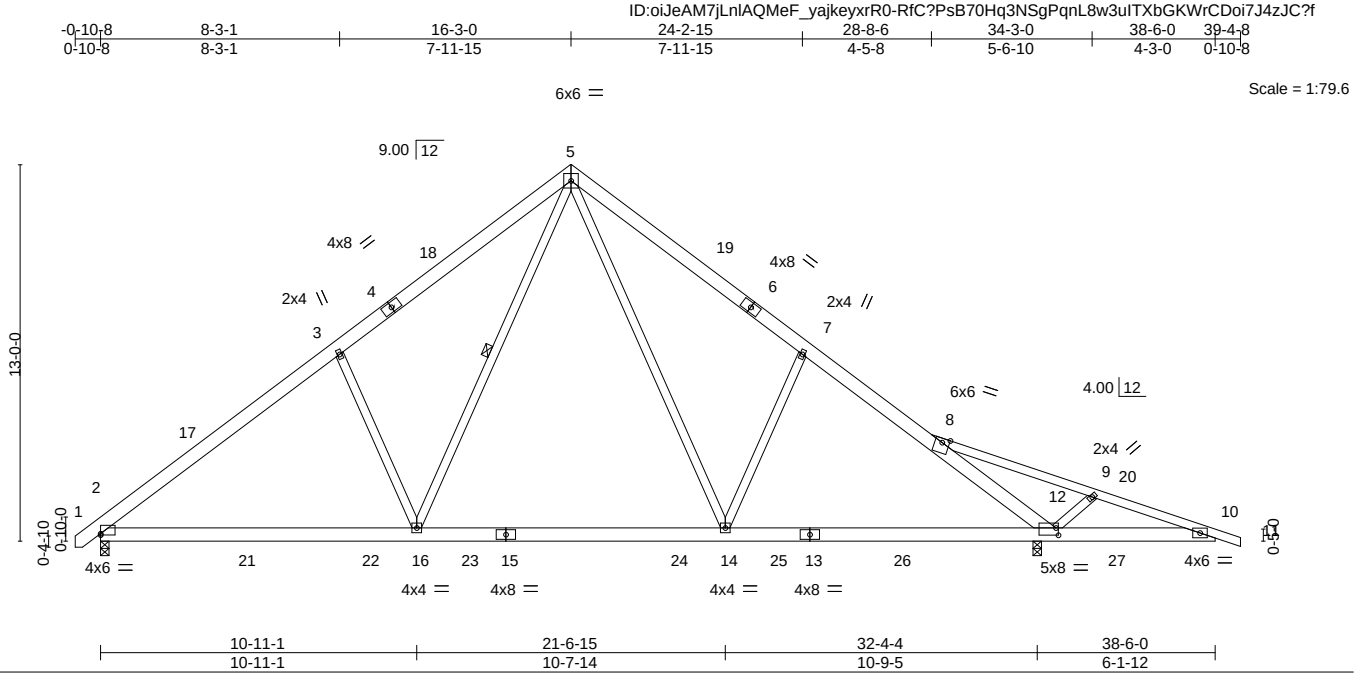

Plate Offsets (X,Y)-- [2:0-0-0,0-0-9], [12:0-1-0,0-3-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.16	2-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.26	2-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.04	12	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S		Wind(LL)	-0.05	12-14	>999	240	Weight: 267 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1 *Except*
	8-11: 2x4 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-0-10 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
	6-0-0 oc bracing: 10-12.
WEBS	1 Row at midpt 5-16

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=-311(LC 10)
Max Uplift 2=-75(LC 12), 12=-131(LC 13)
Max Grav 2=1702(LC 19), 12=2191(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2121/468, 3-5=-2010/630, 5-7=-1957/488, 7-8=-1986/365, 8-12=-2639/1218, 8-9=-930/807, 9-10=-824/523
BOT CHORD 2-16=-194/1801, 14-16=0/1175, 12-14=-41/1606, 10-12=-447/818
WEBS 3-16=-456/432, 5-16=-307/1140, 5-14=-130/1047, 9-12=-383/260, 7-14=-411/277

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-0 to 3-7-13, Interior(1) 3-7-13 to 16-3-0, Exterior(2R) 16-3-0 to 20-7-13, Interior(1) 20-7-13 to 39-4-8 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint 2 and 131 lb uplift at joint 12.
6) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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A MiTek Affiliate
818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	Wellco/102 Hidden Lakes North/Harnett
J0425-1921	B1	FINK	4	1	I72769508
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Apr 15 09:53:42 2025 Page 1
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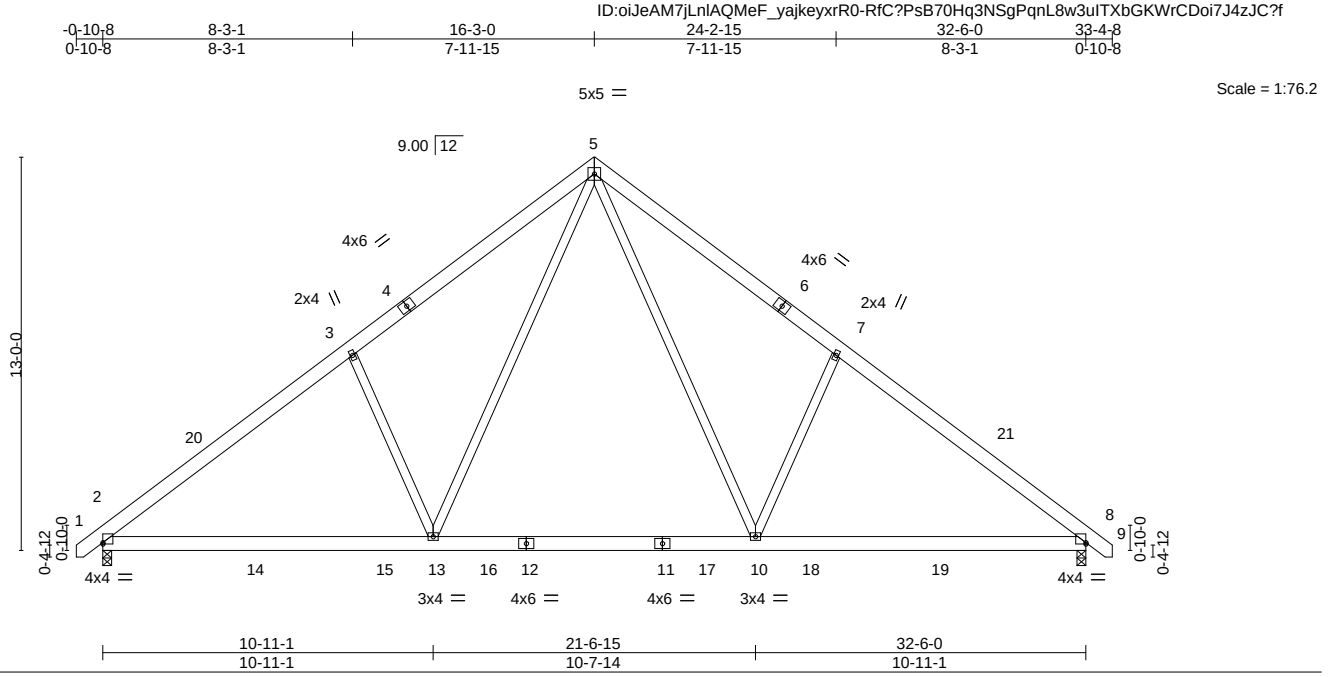

Plate Offsets (X,Y)-- [2:0-0-0,0-0-9], [8:0-0-0,0-0-9]

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	0.29	Vert(LL)	-0.16	2-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.27	2-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S		Wind(LL)	0.05	2-13	>999	240	Weight: 236 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-5 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=-306(LC 10)
Max Uplift 2=-74(LC 12), 8=-74(LC 13)
Max Grav 2=1717(LC 19), 8=1717(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2141/266, 3-5=-2032/386, 5-7=-2032/385, 7-8=-2142/266
BOT CHORD 2-13=-118/1814, 10-13=0/1189, 8-10=-68/1634
WEBS 3-13=-460/301, 5-13=-156/1133, 5-10=-156/1133, 7-10=-460/301

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-1 to 3-7-11, Interior(1) 3-7-11 to 16-3-0, Exterior(2R) 16-3-0 to 22-5-11, Interior(1) 22-5-11 to 33-3-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 2 and 74 lb uplift at joint 8.

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Job	Truss	Truss Type	Qty	Ply	Wellco/102 Hidden Lakes North/Harnett
J0425-1921	B1GE	GABLE	1	1	I72769509
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Apr 15 09:53:43 2025 Page 1
ID:oiJeAM7jLnlAQMeF_yajkeyxrR0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-10-8 8-3-1 16-3-0 24-2-15 32-6-0 33-4-8
0-10-8 8-3-1 7-11-15 7-11-15 8-3-1 0-10-8

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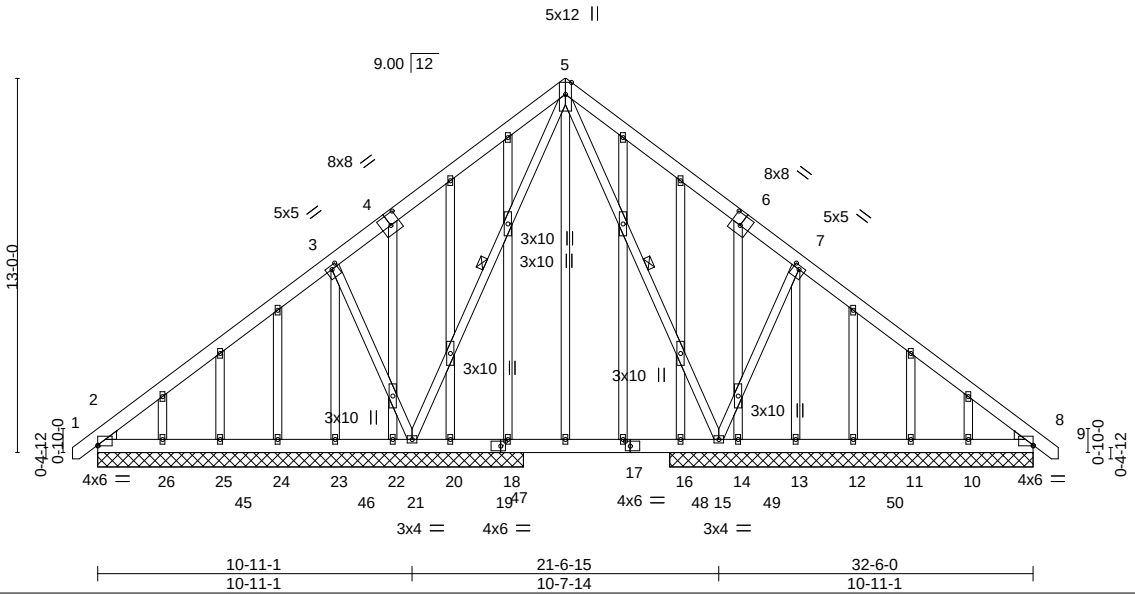

Plate Offsets (X,Y)-- [2:0-0-0,0-0-5], [3:0-2-8,0-1-8], [4:0-4-0,0-4-8], [6:0-4-0,0-4-8], [7:0-2-8,0-1-8], [8:0-0-0,0-0-5], [17:0-2-0,0-2-0], [19:0-2-0,0-2-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.02	16-18	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.02	16-18	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S		Wind(LL)	0.00	2-26	>999	240	Weight: 380 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-21, 5-15

REACTIONS. All bearings 14-9-8 except (jt=length) 15=12-7-8, 8=12-7-8, 16=12-7-8, 14=12-7-8, 13=12-7-8, 12=12-7-8, 11=12-7-8, 10=12-7-8.
(lb) - Max Horz 2=-382(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 25, 11 except 21=-414(LC 12), 15=-428(LC 13), 26=-147(LC 12), 10=-147(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 22, 23, 24, 25, 14, 13, 12, 11 except 2=316(LC 20), 21=755(LC 19), 15=548(LC 1), 8=299(LC 1), 18=435(LC 18), 26=270(LC 19), 16=471(LC 18), 10=270(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-400/146, 7-8=-352/60
BOT CHORD 2-26=-172/306, 25-26=-172/306, 24-25=-172/306, 23-24=-172/306, 22-23=-172/306, 21-22=-172/306, 20-21=-141/354, 18-20=-141/354, 16-18=-141/354, 15-16=-141/354
WEBS 3-21=-520/463, 7-15=-518/461

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-9-1 to 3-7-11, Exterior(2N) 3-7-11 to 16-3-0, Corner(3R) 16-3-0 to 20-7-13, Exterior(2N) 20-7-13 to 33-3-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 25, 11 except (jt=lb) 21=414, 15=428, 26=147, 10=147.

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Job	Truss	Truss Type	Qty	Ply	Wellco/102 Hidden Lakes North/Harnett
J0425-1921	C1	ROOF TRUSS	4	1	I72769510
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Apr 15 09:53:43 2025 Page 1
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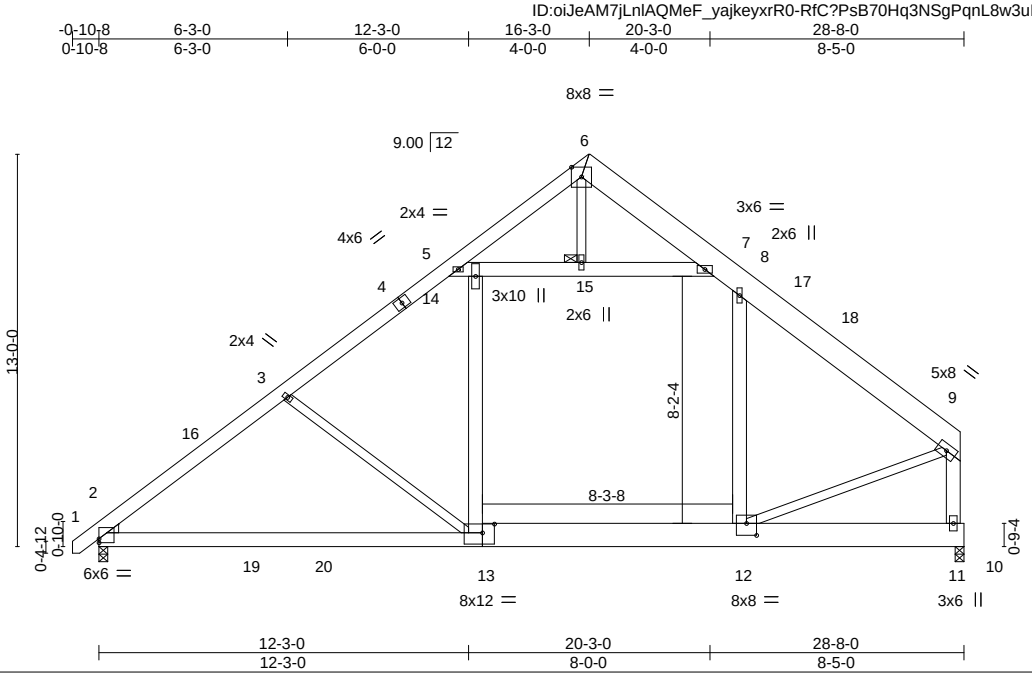

Plate Offsets (X,Y)-- [2:0-0-0,0-1-9], [12:0-4-0,0-4-12], [13:0-4-12,0-3-8]

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	0.35	Vert(LL)	-0.29	2-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.52	2-13	>655	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.02	11	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S		Wind(LL)	0.12	2-13	>999	240	Weight: 296 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1 *Except* 6-9: 2x10 SP No.1
BOT CHORD 2x6 SP No.1 *Except* 10-13: 2x10 SP No.1
WEBS 2x6 SP No.1 *Except* 3-13,9-12,6-15: 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 11-12.
JOINTS 1 Brace at Jt(s): 15

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=298(LC 9)
Max Grav 2=1740(LC 20), 11=1799(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2175/0, 3-5=-1933/0, 5-6=-492/36, 6-7=-603/14, 7-8=-1565/73, 8-9=-1942/0, 9-11=-1874/0
BOT CHORD 2-13=-21/1844, 12-13=0/1561
WEBS 3-13=-380/217, 13-14=0/928, 8-12=-88/408, 9-12=0/1715, 5-14=-1157/134, 14-15=-1178/130, 7-15=-1196/126, 6-15=0/426

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-1 to 3-7-11, Interior(1) 3-7-11 to 16-1-7, Exterior(2R) 16-1-7 to 22-4-2, Interior(1) 22-4-2 to 28-3-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Ceiling dead load (10.0 psf) on member(s). 7-8, 5-14, 14-15, 7-15; Wall dead load (5.0psf) on member(s).13-14, 8-12
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-13
7) Attic room checked for L/360 deflection.

April 16,2025

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/102 Hidden Lakes North/Harnett
J0425-1921	C1GE	GABLE	1	1	I72769511
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Apr 15 09:53:44 2025 Page 1
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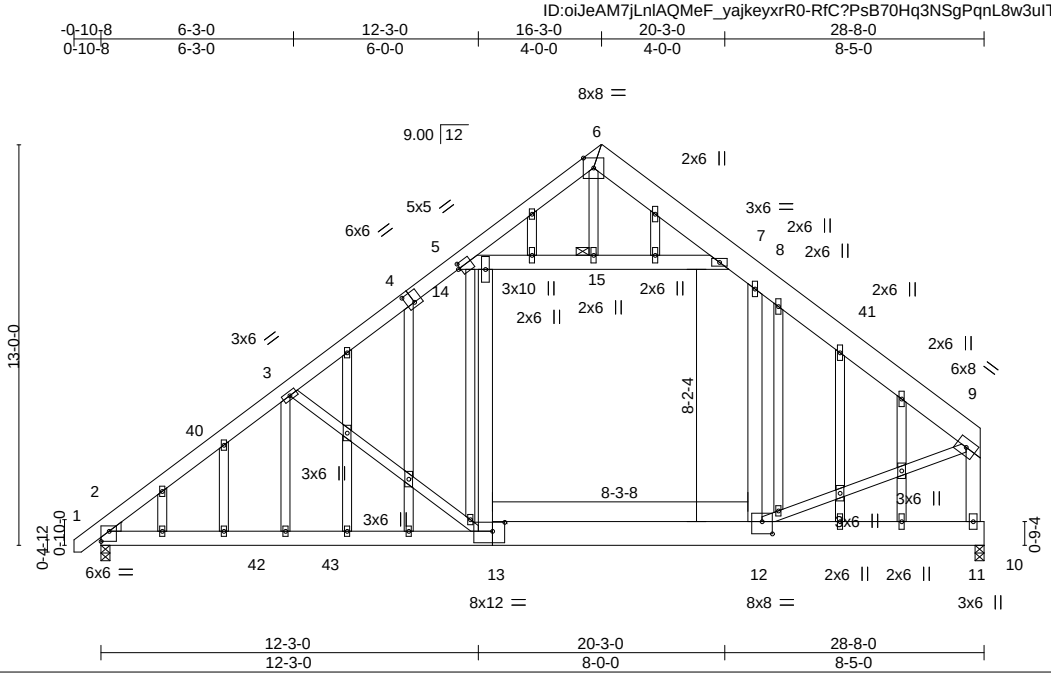

Plate Offsets (X,Y)-- [2:Edge,0-3-15], [4:0-3-0,0-4-4], [5:0-0-13,0-2-0], [12:0-4-0,0-4-12], [13:0-4-12,0-3-8]

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	0.35	Vert(LL)	-0.29	2-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.52	2-13	>655	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.02	11	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S		Wind(LL)	0.15	2-13	>999	240	Weight: 369 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1 *Except* 6-9: 2x10 SP No.1
BOT CHORD	2x6 SP No.1 *Except* 10-13: 2x10 SP No.1
WEBS	2x6 SP No.1 *Except* 3-13,9-12,6-15: 2x4 SP No.2
OTHERS	2x4 SP No.2
WEDGE	
Left: 2x4 SP No.2	

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 11-12.
JOINTS	1 Brace at Jt(s): 15

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=366(LC 9)
Max Uplift 2=-72(LC 12)
Max Grav 2=1742(LC 20), 11=1792(LC 20)

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

TOP CHORD	2-3=-2168/178, 3-5=-1928/138, 5-6=-503/54, 6-7=-607/40, 7-8=-1570/199, 8-9=-1968/69, 9-11=-1878/89
BOT CHORD	2-13=-260/1883, 12-13=0/1583
WEBS	3-13=-401/343, 13-14=0/928, 8-12=-88/408, 9-12=0/1746, 5-14=-1159/261, 14-15=-1181/259, 7-15=-1198/256, 6-15=0/426

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-9-1 to 3-7-11, Exterior(2N) 3-7-11 to 16-1-7, Corner(3R) 16-1-7 to 20-7-6 , Exterior(2N) 20-7-6 to 28-3-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Ceiling dead load (10.0 psf) on member(s). 7-8, 5-14, 14-15, 7-15; Wall dead load (5.0psf) on member(s).13-14, 8-12
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-13
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
11) Attic room checked for L/360 deflection.

April 16,2025

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/102 Hidden Lakes North/Harnett
J0425-1921	C2	ROOF TRUSS	1	2	I72769512
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Apr 15 09:53:44 2025 Page 1
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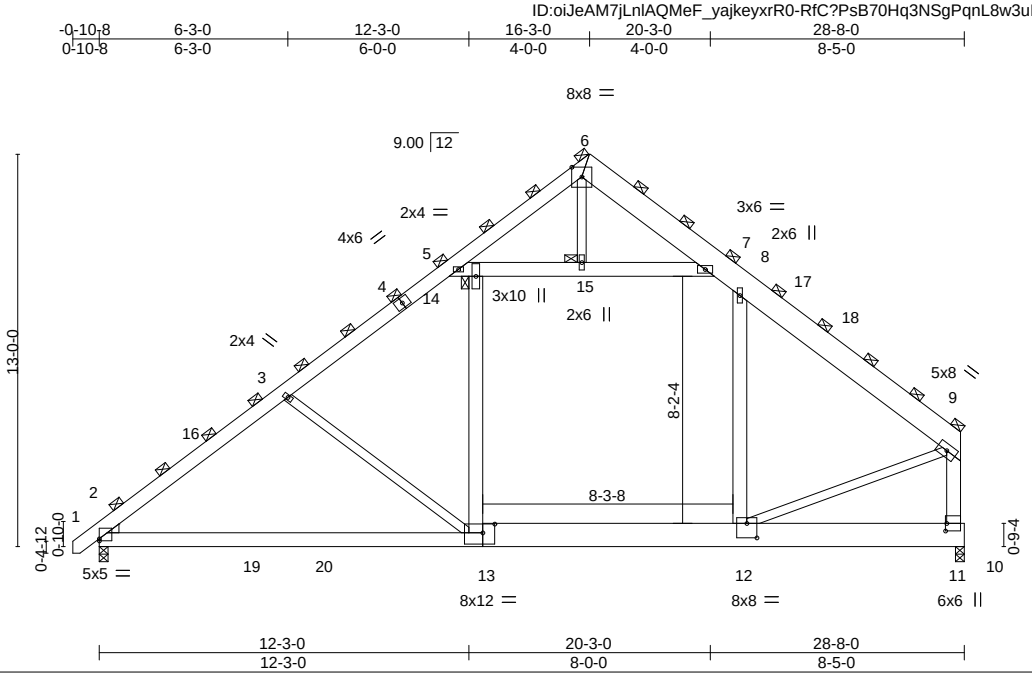

Plate Offsets (X,Y)-- [2:0-0-0,0-0-13], [11:0-3-0,0-0-8], [12:0-4-0,0-5-12], [13:0-4-12,0-3-8]

LOADING (psf)		SPACING- 4-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.24	2-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.44	2-13	>768	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.70	Horz(CT)	0.03	11	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S		Wind(LL)	0.11	2-13	>999	240	Weight: 592 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1 *Except* 6-9: 2x10 SP No.1
BOT CHORD 2x6 SP No.1 *Except* 10-13: 2x10 SP No.1
WEBS 2x6 SP No.1 *Except* 3-13,9-12,6-15: 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals (Switched from sheeted: Spacing > 2-8-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 6, 14, 9, 15

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=596(LC 9)
Max Grav 2=3668(LC 20), 11=4908(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4657/42, 3-5=-4201/34, 5-6=-1145/91, 6-7=-1204/27, 7-8=-3307/171, 8-9=-4387/0, 9-11=-4190/9
BOT CHORD 2-13=-60/3911, 12-13=0/3426, 11-12=-72/252
WEBS 3-13=-659/428, 13-14=0/1895, 8-12=-5/1238, 9-12=0/3571, 5-14=-2542/301, 14-15=-2586/293, 7-15=-2622/285, 6-15=0/867

NOTES-
1) 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, 2x10 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-1 to 3-7-11, Interior(1) 3-7-11 to 16-1-7, Exterior(2R) 16-1-7 to 22-4-2, Interior(1) 22-4-2 to 28-3-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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, with BCDL = 10.0psf.
7) Ceiling dead load (10.0 psf) on member(s). 7-8, 5-14, 14-15, 7-15; Wall dead load (5.0psf) on member(s).13-14, 8-12
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-13
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

April 16,2025

Continued on page 2

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

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-6=-120, 6-7=-120, 7-8=-160, 8-9=-120, 2-13=-40, 12-13=-80, 11-12=-160(F=-120), 10-11=-40, 5-7=-40
   Drag: 13-14=-20, 8-12=-20

Job	Truss	Truss Type	Qty	Ply	Wellco/102 Hidden Lakes North/Harnett
J0425-1921	C3	COMMON	2	2	I72769513
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Apr 15 09:53:45 2025 Page 1
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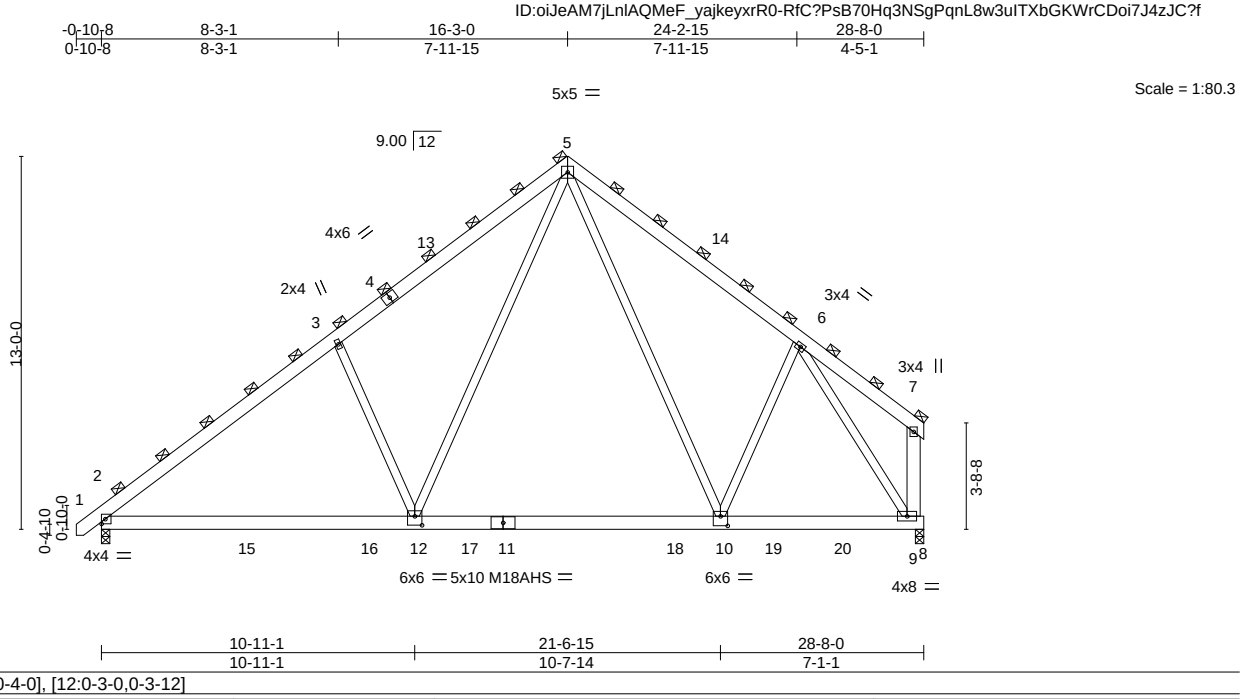

Plate Offsets (X,Y)-- [10:0-3-0,0-4-0], [12:0-3-0,0-3-12]

LOADING (psf)		SPACING- 4-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.22	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.40	10-12	>847	240	M18AHS	186/179
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.83	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S		Wind(LL)	0.14	10-12	>999	240	Weight: 462 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
7-9: 2x6 SP No.1

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals
(Switched from sheeted: Spacing > 2-8-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=600(LC 9)
Max Uplift 2=-186(LC 12), 9=-231(LC 12)
Max Grav 2=3536(LC 19), 9=4330(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4538/832, 3-5=-4310/1110, 5-6=-3677/1023
BOT CHORD 2-12=-662/3762, 10-12=-193/2322, 9-10=-423/2323
WEBS 3-12=-884/678, 5-12=-515/2787, 5-10=-383/1589, 6-10=-62/1179, 6-9=-4182/790

NOTES-
1) 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.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-0 to 3-7-13, Interior(1) 3-7-13 to 16-3-0, Exterior(2R) 16-3-0 to 20-7-13, Interior(1) 20-7-13 to 28-3-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=186, 9=231.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-120, 5-7=-120, 2-17=-40, 8-17=-160(F=-120)

April 16,2025

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

Job	Truss	Truss Type	Qty	Ply	Wellco/102 Hidden Lakes North/Harnett
J0425-1921	C4	COMMON	3	1	I72769514
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Apr 15 09:53:45 2025 Page 1
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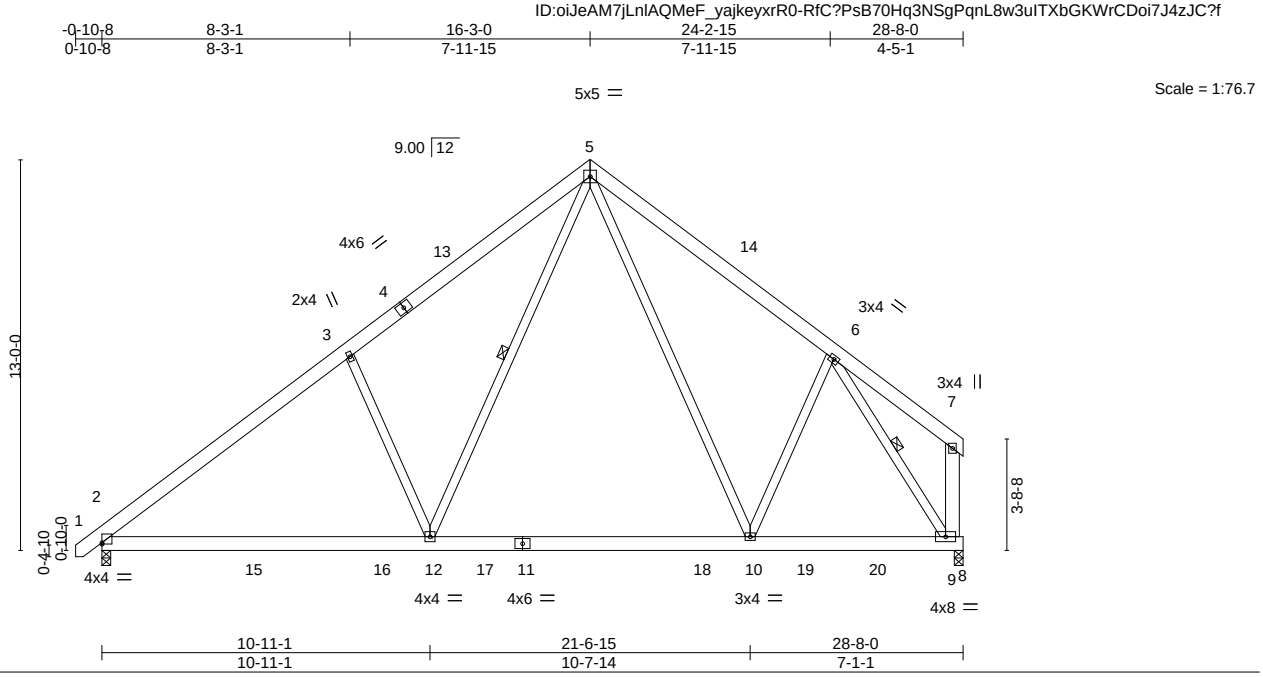

Plate Offsets (X,Y)-- [2:0-0-0,0-0-9]

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	0.29	Vert(LL)	-0.16	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.24	2-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S		Wind(LL)	0.04	2-12	>999	240	Weight: 231 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
7-9: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-5-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-12, 6-9

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=300(LC 9)
Max Uplift 2=-65(LC 12), 9=-41(LC 12)
Max Grav 2=1507(LC 19), 9=1459(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1814/302, 3-5=-1707/443, 5-6=-1292/375
BOT CHORD 2-12=-243/1531, 10-12=-28/887, 9-10=-125/818
WEBS 3-12=-468/346, 5-12=-202/1173, 5-10=-114/372, 6-10=-49/347, 6-9=-1484/243

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-0 to 3-7-13, Interior(1) 3-7-13 to 16-3-0, Exterior(2R) 16-3-0 to 20-7-13, Interior(1) 20-7-13 to 28-3-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9.

April 16,2025

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Wellco/102 Hidden Lakes North/Harnett
J0425-1921	D1	ATTIC	5	1	I72769515
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Apr 15 09:53:46 2025 Page 1
ID:oiJeAM7jLnlAQMeF_yajkeyxrR0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

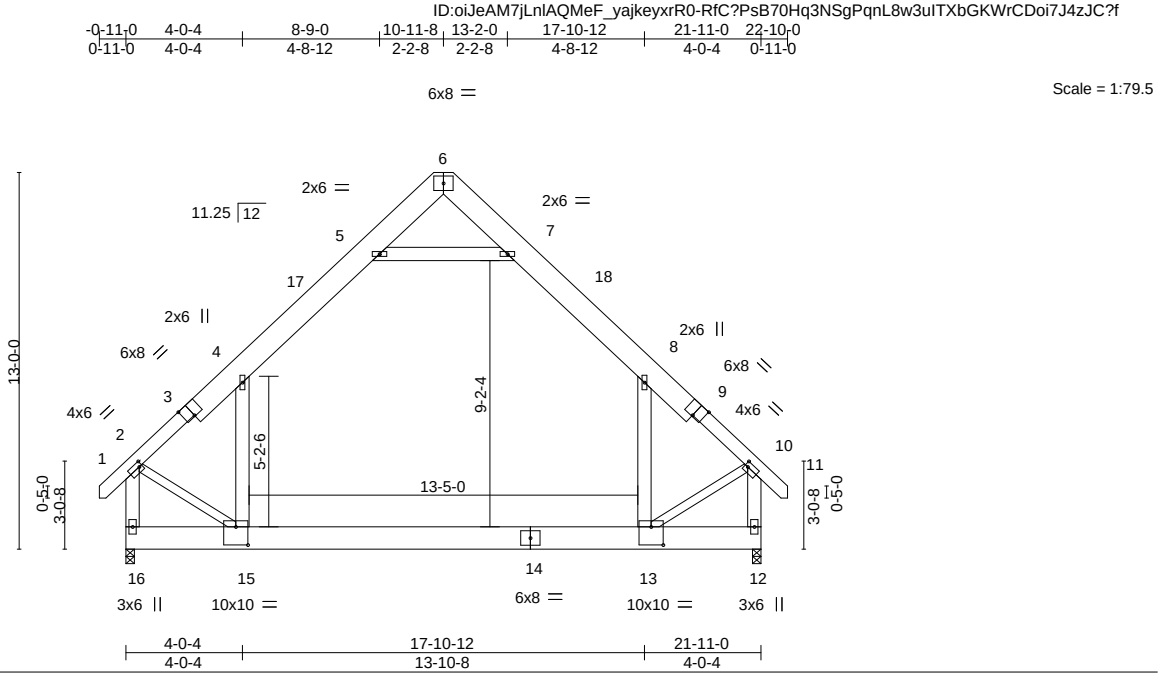

Plate Offsets (X,Y)-- [2:0-1-4,0-2-0], [3:0-4-0,Edge], [9:0-4-0,Edge], [10:0-1-4,0-2-0], [13:0-5-0,0-7-8], [15:0-5-0,0-7-8]

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	0.50	Vert(LL)	-0.22	13-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.35	13-15	>733	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S		Wind(LL)	0.05	13-15	>999	240	Weight: 258 lb	FT = 20%

LUMBER-
TOP CHORD 2x10 SP No.1 *Except* 1-3,9-11: 2x6 SP No.1
BOT CHORD 2x10 SP No.1
WEBS 2x6 SP No.1 *Except* 2-15,10-13: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-5-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-11-2 oc bracing.

REACTIONS. (size) 16=0-3-8, 12=0-3-8
Max Horz 16=-344(LC 10)
Max Grav 16=1581(LC 21), 12=1581(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1572/0, 4-5=-1056/160, 5-6=-2/429, 6-7=-2/429, 7-8=-1056/160, 8-10=-1571/0, 2-16=-1917/0, 10-12=-1917/0
BOT CHORD 15-16=-315/374, 13-15=0/1015
WEBS 5-7=-1393/175, 4-15=0/795, 8-13=0/795, 2-15=0/1131, 10-13=0/1132

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-2 to 3-7-10, Interior(1) 3-7-10 to 11-0-0, Exterior(2R) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 22-9-2 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-15, 8-13
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
7) Attic room checked for L/360 deflection.

April 16,2025

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

Job	Truss	Truss Type	Qty	Ply	Wellco/102 Hidden Lakes North/Harnett
J0425-1921	D1GE	ATTIC	1	1	I72769516
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Apr 15 09:53:46 2025 Page 1
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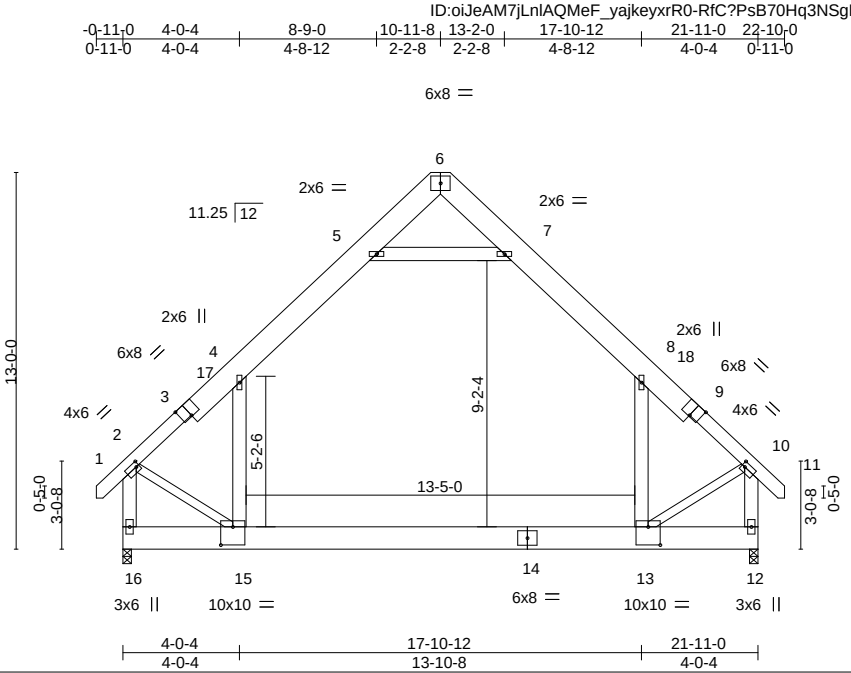

Plate Offsets (X,Y)-- [2:0-1-4,0-2-0], [3:0-4-0,Edge], [9:0-4-0,Edge], [10:0-1-4,0-2-0], [13:0-5-0,0-7-8], [15:0-5-0,0-7-8]

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	0.50	Vert(LL)	-0.22	13-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.35	13-15	>733	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S		Wind(LL)	0.05	13-15	>999	240	Weight: 258 lb	FT = 20%

LUMBER-
TOP CHORD 2x10 SP No.1 *Except* 1-3,9-11: 2x6 SP No.1
BOT CHORD 2x10 SP No.1
WEBS 2x6 SP No.1 *Except* 2-15,10-13: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-5-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-11-2 oc bracing.

REACTIONS. (size) 16=0-3-8, 12=0-3-8
Max Horz 16=431(LC 11)
Max Grav 16=1577(LC 21), 12=1577(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1584/27, 4-5=-1063/234, 5-6=-22/429, 6-7=-22/429, 7-8=-1062/234, 8-10=-1583/27, 2-16=-1932/47, 10-12=-1932/47
BOT CHORD 15-16=-403/460, 13-15=0/1045
WEBS 5-7=-1393/342, 4-15=0/795, 8-13=0/795, 2-15=0/1169, 10-13=0/1170

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-9-2 to 3-7-10, Exterior(2N) 3-7-10 to 11-0-0, Corner(3R) 11-0-0 to 15-4-13, Exterior(2N) 15-4-13 to 22-9-2 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-15, 8-13
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
7) Attic room checked for L/360 deflection.

April 16,2025

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

Job	Truss	Truss Type	Qty	Ply	Wellco/102 Hidden Lakes North/Harnett
J0425-1921	D2	ATTIC	2	1	I72769517
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Apr 15 09:53:47 2025 Page 1
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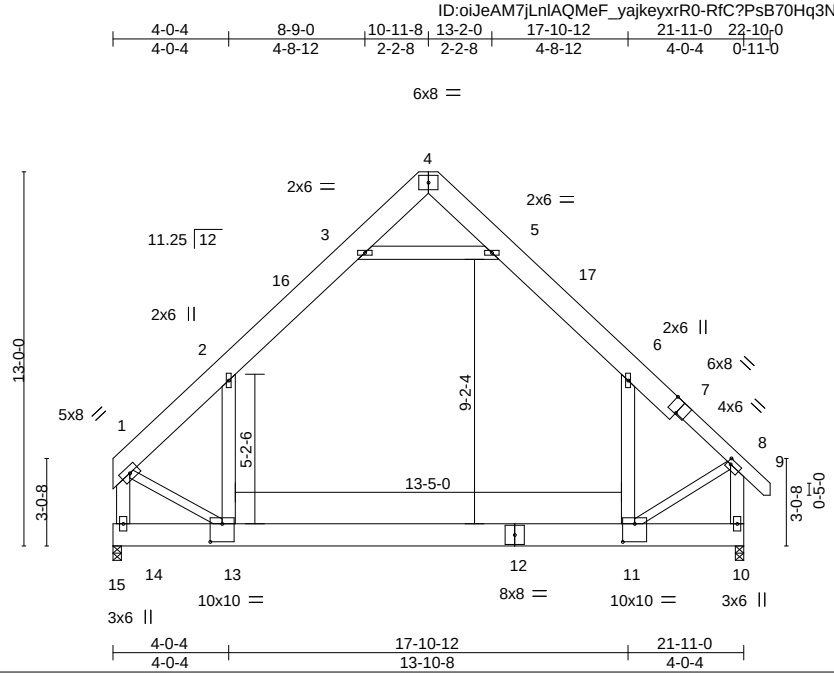

Plate Offsets (X,Y)-- [7:0-4-0,Edge], [8:0-1-8,0-2-0], [11:0-5-0,0-7-8], [13:0-5-0,0-7-8]

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	0.50	Vert(LL)	-0.22	11-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.34	11-13	>745	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S		Wind(LL)	0.04	11-13	>999	240	Weight: 260 lb	FT = 20%

LUMBER-
TOP CHORD 2x10 SP No.1 *Except* 7-9: 2x6 SP No.1
BOT CHORD 2x10 SP No.1
WEBS 2x6 SP No.1 *Except* 1-13,8-11: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-6-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-0-8 oc bracing.

REACTIONS. (size) 10=0-3-8, 14=0-3-8
Max Horz 14=312(LC 11)
Max Grav 10=1570(LC 20), 14=1549(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1589/0, 2-3=-1049/160, 3-4=0/414, 4-5=-10/411, 5-6=-1044/149, 6-8=-1548/0, 1-14=-1911/0, 8-10=-1888/0
BOT CHORD 13-14=-312/321, 11-13=0/999
WEBS 3-5=-1360/177, 2-13=0/820, 6-11=0/780, 1-13=0/1153, 8-11=0/1112

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-4-5 to 4-9-2, Interior(1) 4-9-2 to 11-0-0, Exterior(2R) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 22-9-2 zone; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Ceiling dead load (10.0 psf) on member(s). 2-3, 5-6, 3-5; Wall dead load (5.0psf) on member(s).2-13, 6-11
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
7) Attic room checked for L/360 deflection.

April 16,2025

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

Job	Truss	Truss Type	Qty	Ply	Wellco/102 Hidden Lakes North/Harnett
J0425-1921	D3	ATTIC	3	1	I72769518
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Apr 15 09:53:47 2025 Page 1
ID:oiJeAM7jLnlAQMeF_yajkeyxrR0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

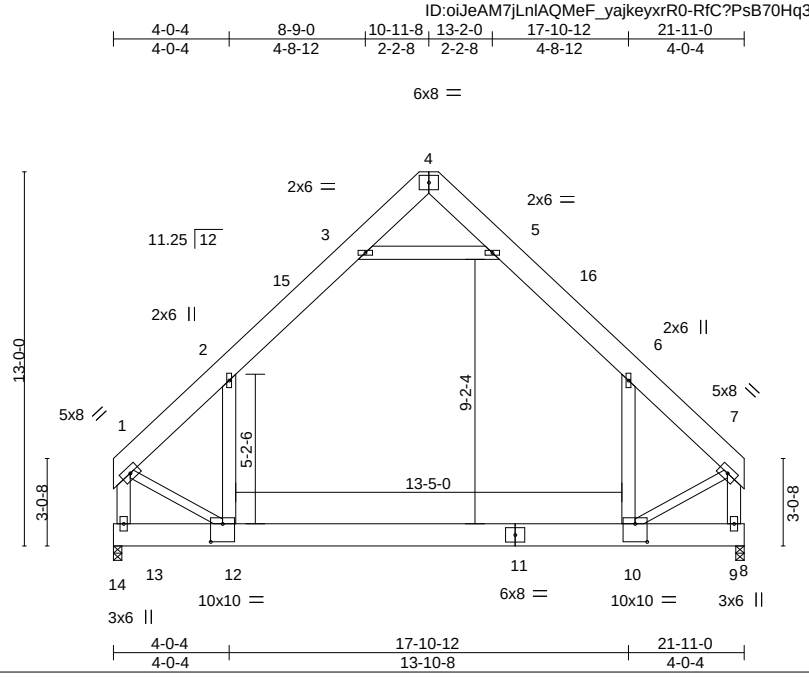

Plate Offsets (X,Y)-- [10:0-5-0,0-7-8], [12:0-5-0,0-7-8]

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	0.50	Vert(LL)	-0.22	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.34	10-12	>759	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S		Wind(LL)	0.04	10-12	>999	240	Weight: 263 lb	FT = 20%

LUMBER-
TOP CHORD 2x10 SP No.1
BOT CHORD 2x10 SP No.1
WEBS 2x6 SP No.1 *Except*
1-12,7-10: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-1-14 oc bracing.

REACTIONS. (size) 13=0-3-8, 9=0-3-8
Max Horz 13=-320(LC 8)
Max Grav 13=1542(LC 21), 9=1542(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1568/0, 2-3=-1040/155, 3-4=-7/396, 4-5=-8/396, 5-6=-1040/155, 6-7=-1567/0, 1-13=-1889/0, 7-9=-1889/0
BOT CHORD 12-13=-310/323, 10-12=0/982
WEBS 3-5=-1328/159, 2-12=0/805, 6-10=0/805, 1-12=0/1144, 7-10=0/1146

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-4-5 to 4-9-2, Interior(1) 4-9-2 to 11-0-0, Exterior(2R) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 21-7-11 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) Ceiling dead load (10.0 psf) on member(s). 2-3, 5-6, 3-5; Wall dead load (5.0psf) on member(s).2-12, 6-10
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
7) Attic room checked for L/360 deflection.

April 16,2025

ENGINEERING BY TRENCO
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Job	Truss	Truss Type	Qty	Ply	Wellco/102 Hidden Lakes North/Harnett
J0425-1921	M1GE	MONOPITCH STRUCTURAL	1	1	I72769519
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Apr 15 09:53:48 2025 Page 1
ID:oiJeAM7jLnlAQMeF_yajkeyxrR0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

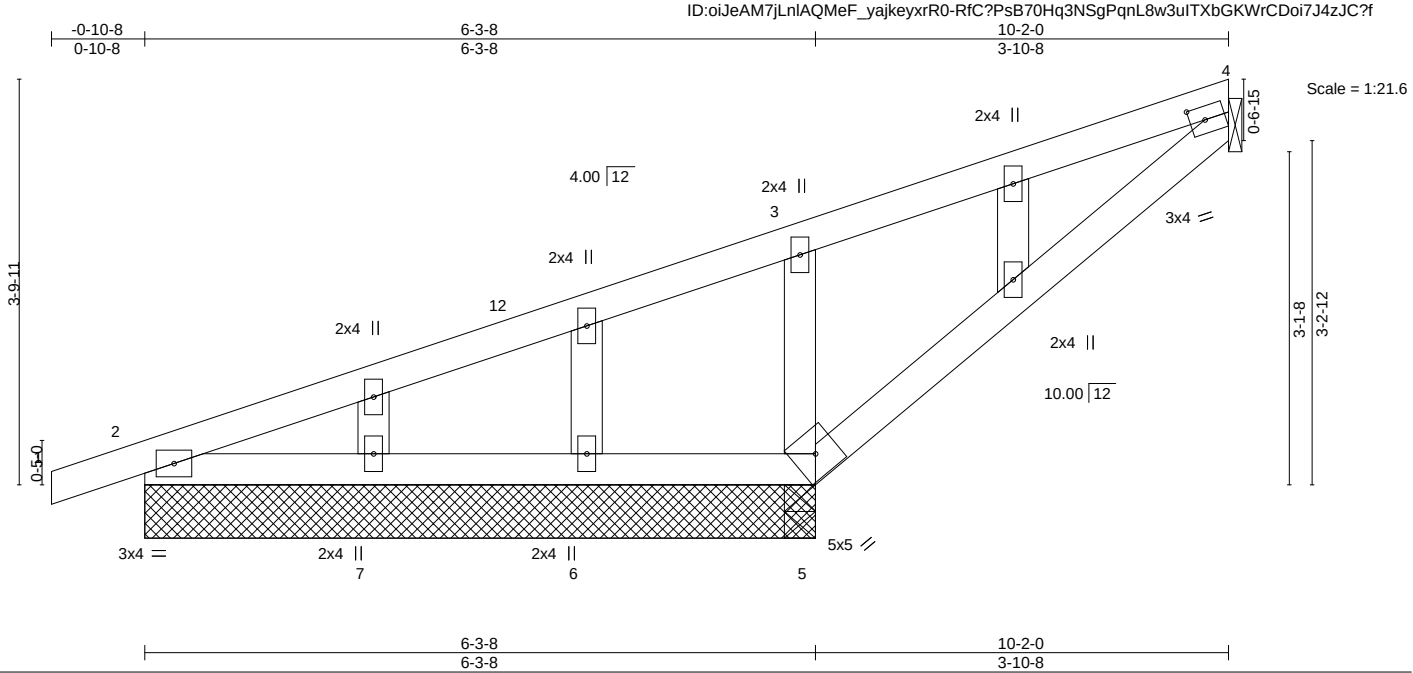

Plate Offsets (X,Y)-- [4:0-1-11,0-1-8]

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	0.29	Vert(LL)	-0.01	4-5	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S		Wind(LL)	0.00	2-7	>999	240	Weight: 42 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 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 4-5.

REACTIONS. All bearings 6-3-8 except (jt=length) 4=Mechanical.
(lb) - Max Horz 2=177(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 4, 2, 7 except 5=-174(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 4, 2, 6, 7 except 5=440(LC 1), 5=440(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-5=-353/339

NOTES-

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 10-3-12 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 studs spaced at 2-0-0 oc.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 7 except (jt=lb) 5=174.

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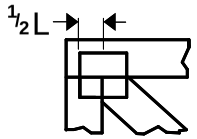
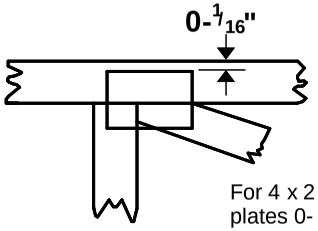
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

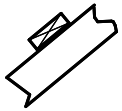
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

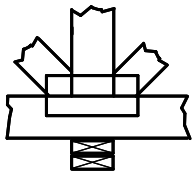
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

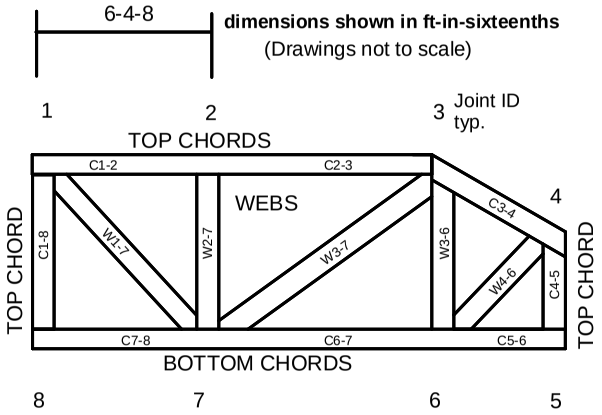


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

MiTek®

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MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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