ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0425-1814
143 Knight Rd.

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: I72472687 thru I72472745

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

North Carolina COA: C-0844

April 2,2025

Gilbert, Eric

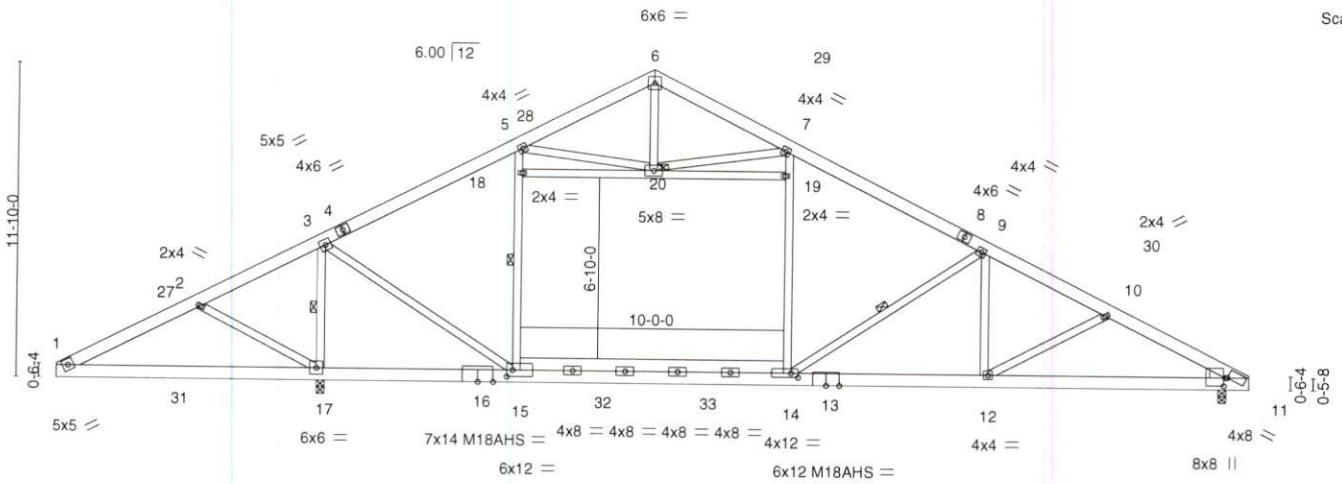
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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	143 Knight Rd.	
J0425-1814	A1	Common	2	1	Job Reference (optional)	I72472687

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:30 2025 Page 1
ID:3uc_web?qzKYDQhfz3?QKCyb7J2-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

5-5-8	10-0-4	17-7-8	22-7-8	27-7-8	35-2-12	39-9-8	45-3-0
5-5-8	4-6-12	7-7-4	5-0-0	5-0-0	7-7-4	4-6-12	5-5-8

Scale = 1:87.3



9-10-8	10-0-4	17-7-8	27-7-8	35-2-12	44-4-8	45-3-0
9-10-8	0-1-12	7-7-4	10-0-0	7-7-4	9-1-12	0-10-8

Plate Offsets (X,Y)-- [11:0-3-12,0-0-11], [11:0-0-13,Edge], [14:0-3-4,0-2-0], [15:0-2-12,0-3-0]

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	0.70	Vert(LL)	-0.59	12-14	>714	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-1.08	12-14	>391	240	M18AHS	186/179
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.03	11	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.48	12-14	>887	240	Weight: 362 lb	FT = 25%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP 2400F 2.0E *Except*
14-15: 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
5-15,7-14: 2x4 SP No.1
WEDGE
Right: 2x4 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-17, 5-15, 9-14
JOINTS 1 Brace at Jt(s): 20

REACTIONS. (size) 17=0-3-8, 11=0-3-8
Max Horz 17=153(LC 9)
Max Uplift 17=-62(LC 12), 11=-43(LC 13)
Max Grav 17=2704(LC 2), 11=1534(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-672/608, 2-3=-892/988, 3-5=-1319/93, 5-6=-653/173, 6-7=-498/134, 7-9=-1558/52, 9-10=-2398/177, 10-11=-2370/198
BOT CHORD 1-17=-440/593, 15-17=-908/963, 14-15=0/1273, 12-14=-28/2155, 11-12=-104/1984
WEBS 2-17=-499/426, 3-17=-2466/792, 3-15=-722/2459, 15-18=-441/451, 5-18=-423/444, 14-19=0/662, 7-19=0/647, 9-14=-1145/392, 9-12=-64/450, 18-20=-377/132, 19-20=-132/361, 5-20=-453/46, 7-20=-1123/96

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) 0-0-0 to 4-6-5, Interior(1) 4-6-5 to 22-7-8, Exterior(2R) 22-7-8 to 27-1-13, Interior(1) 27-1-13 to 44-2-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 125.0lb AC unit load placed on the bottom chord, 22-7-8 from left end, supported at two points, 4-0-0 apart.
4) All plates are MT20 plates unless otherwise indicated.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 11.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

April 2,2025

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818 Soundside Road
Edenton, NC 27932

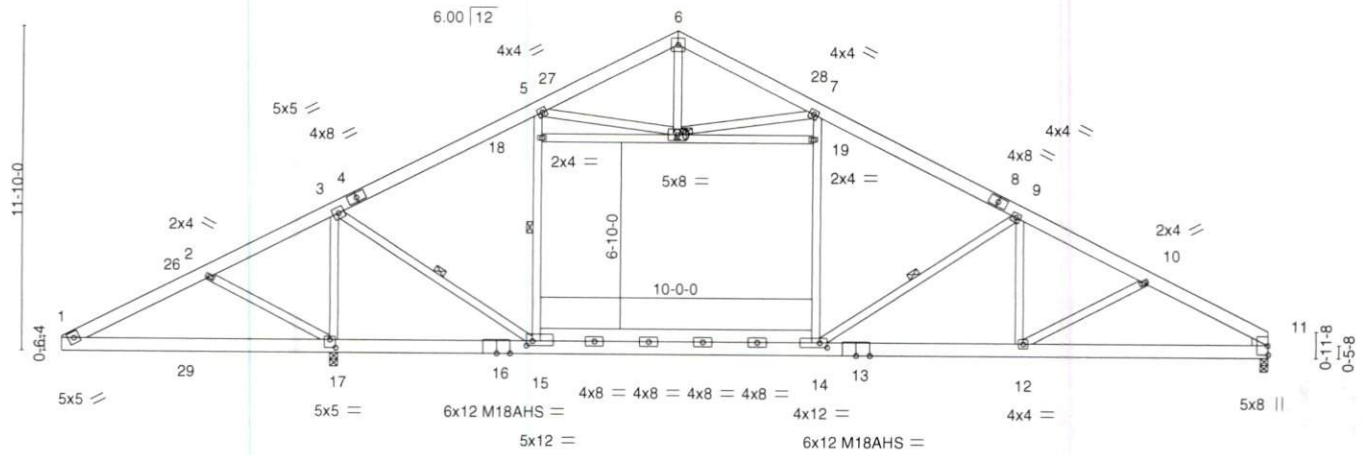
Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472688
J0425-1814	A1A	Common	9	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:30 2025 Page 1
ID:3uc_web?qzKYDQhfz3?QKCyb7J2-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

5-5-8	10-0-4	17-7-8	22-7-8	27-7-8	35-2-12	39-9-8	44-4-8
5-5-8	4-6-12	7-7-4	5-0-0	5-0-0	7-7-4	4-6-12	4-7-0

6x6 =

Scale = 1:84.6



9-10-8	10-0-4	17-7-8	27-7-8	35-2-12	44-4-8
9-10-8	0-1-12	7-7-4	10-0-0	7-7-4	9-1-12

Plate Offsets (X,Y)-- [14:0-3-4,0-2-0], [15:0-2-12,0-2-0], [17:0-2-8,0-3-8]

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	0.69	Vert(LL)	-0.60	12-14	>689	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-1.06	12-14	>388	240	M18AHS	186/179
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.48	12-14	>861	240	Weight: 358 lb	FT = 25%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP 2400F 2.0E *Except*
	14-15: 2x6 SP No.1
WEBS	2x4 SP No.2 *Except*
	5-15,7-14: 2x4 SP No.1
WEDGE	
Right: 2x4 SP No.1	

BRACING-

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 3-15, 5-15, 9-14
JOINTS	1 Brace at Jt(s): 20

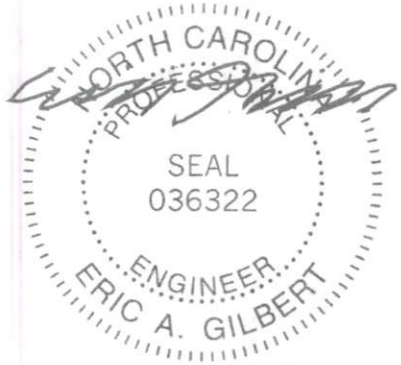
REACTIONS. (size) 17=0-3-8, 11=0-3-8
Max Horz 17=153(LC 9)
Max Uplift 17=-141(LC 12), 11=-102(LC 13)
Max Grav 17=2632(LC 2), 11=1458(LC 20)

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

TOP CHORD	1-2=-673/606, 2-3=-895/985, 3-5=-1240/182, 5-6=-631/198, 6-7=-478/154, 7-9=-1473/148, 9-10=-2352/268, 10-11=-2362/282
BOT CHORD	1-17=-440/593, 15-17=-904/969, 14-15=0/1200, 12-14=-109/2109, 11-12=-173/1996
WEBS	2-17=-495/431, 3-17=-2381/885, 3-15=-824/2367, 15-18=-469/422, 5-18=-452/414, 14-19=0/614, 7-19=0/599, 9-14=-1178/393, 9-12=-56/501, 18-20=-370/143, 19-20=-142/355, 5-20=-406/96, 7-20=-1063/168

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) 0-0-0 to 4-5-4, Interior(1) 4-5-4 to 22-7-8, Exterior(2R) 22-7-8 to 27-0-12, Interior(1) 27-0-12 to 44-4-8 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
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) except (jt=lb) 17=141, 11=102.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472689
J0425-1814	A2	Hip	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:31 2025 Page 1

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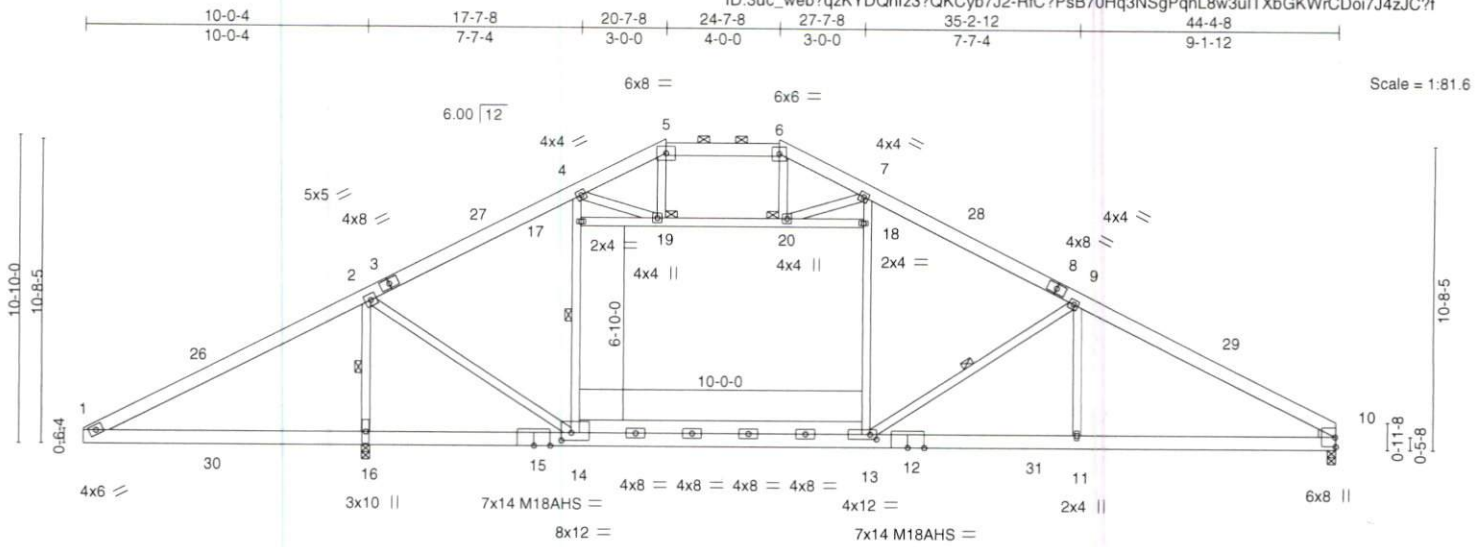

Plate Offsets (X,Y)-- [13:0-2-12,0-2-0], [14:0-4-4,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.82	11-13	>505	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-1.31	11-13	>314	240	M18AHS	186/179
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.52	11-13	>792	240	Weight: 337 lb	FT = 25%

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP 2400F 2.0E *Except*
13-14: 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
4-14,7-13: 2x4 SP No.1
WEDGE
Right: 2x4 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-16, 4-14, 9-13
JOINTS 1 Brace at Jt(s): 19, 20

REACTIONS. (size) 16=0-3-8, 10=0-3-8
Max Horz 16=139(LC 9)
Max Uplift 16=-129(LC 12), 10=-97(LC 13)
Max Grav 16=2701(LC 2), 10=1554(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-906/1004, 2-4=-1356/162, 4-5=-925/217, 5-6=-707/195, 6-7=-754/172, 7-9=-1585/139, 9-10=-2667/270
BOT CHORD 1-16=-787/881, 14-16=-816/870, 13-14=0/1263, 11-13=-124/2295, 10-11=-124/2295
WEBS 2-16=-2670/1035, 9-11=-54/656, 14-17=-392/357, 4-17=-438/380, 2-14=-707/2378, 13-18=0/731, 7-18=0/781, 9-13=-1279/435, 17-19=-380/137, 19-20=-542/80, 18-20=-136/373, 7-20=-962/119

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) 0-0-0 to 4-5-4, Interior(1) 4-5-4 to 20-7-8, Exterior(2E) 20-7-8 to 24-7-8, Exterior(2R) 24-7-8 to 30-10-13, Interior(1) 30-10-13 to 44-4-8 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 16=129.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.
J0425-1814	A3	Hip	1	1	I72472690
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:32 2025 Page 1
ID:3uc_web?qzKYDQhfz3?QKCyb7J2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

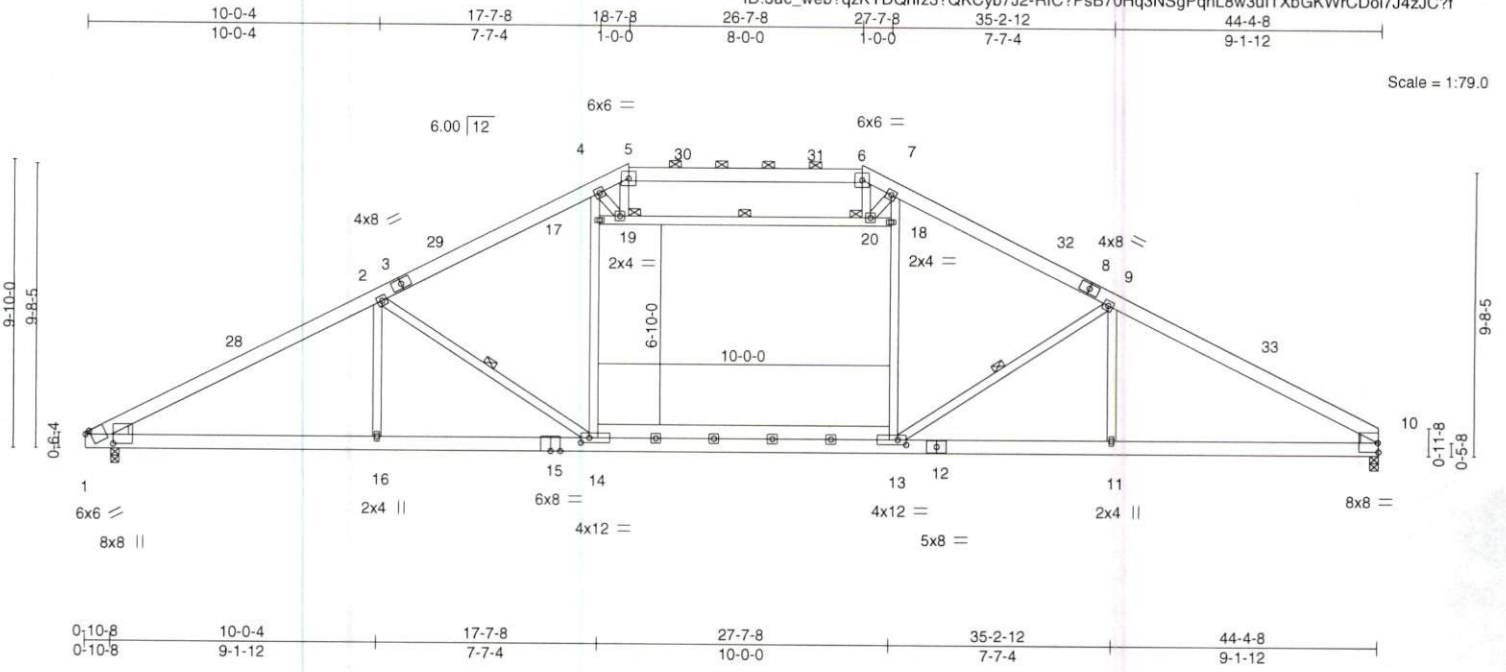

Plate Offsets (X,Y)-- [1:0-1-13,0-0-9], [1:0-3-12,0-11-7], [10:Edge,0-3-13], [13:0-3-8,0-2-0], [14:0-3-8,0-2-0]

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	0.46	Vert(LL)	-0.34	11-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.46	11-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.17	14-16	>999	240	Weight: 329 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (5-5-9 max.): 5-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-14, 9-13, 19-20
JOINTS 1 Brace at Jt(s): 19, 20

REACTIONS. (size) 1=0-3-8, 10=0-3-8
Max Horz 1=-115(LC 8)
Max Uplift 1=-70(LC 12), 10=-84(LC 13)
Max Grav 1=2034(LC 2), 10=1996(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3349/606, 2-4=-2869/602, 4-5=-2118/562, 5-6=-1855/507, 6-7=-2113/562, 7-9=-2874/603, 9-10=-3401/614
BOT CHORD 1-16=-437/2878, 14-16=-437/2878, 13-14=-267/2502, 11-13=-439/2934, 10-11=-439/2934
WEBS 9-11=0/268, 2-14=-649/222, 14-17=-11/778, 4-17=-7/791, 9-13=-701/224, 13-18=-13/795, 7-18=-10/814, 19-20=-659/100, 4-19=-918/146, 5-19=-103/667, 7-20=-921/147, 6-20=-102/662

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) 1-0-4 to 5-5-8, Interior(1) 5-5-8 to 18-7-8, Exterior(2R) 18-7-8 to 24-10-13, Interior(1) 24-10-13 to 26-7-8, Exterior(2R) 26-7-8 to 32-10-13, Interior(1) 32-10-13 to 44-4-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 4x4 MT20 unless otherwise indicated.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 10.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 2,2025

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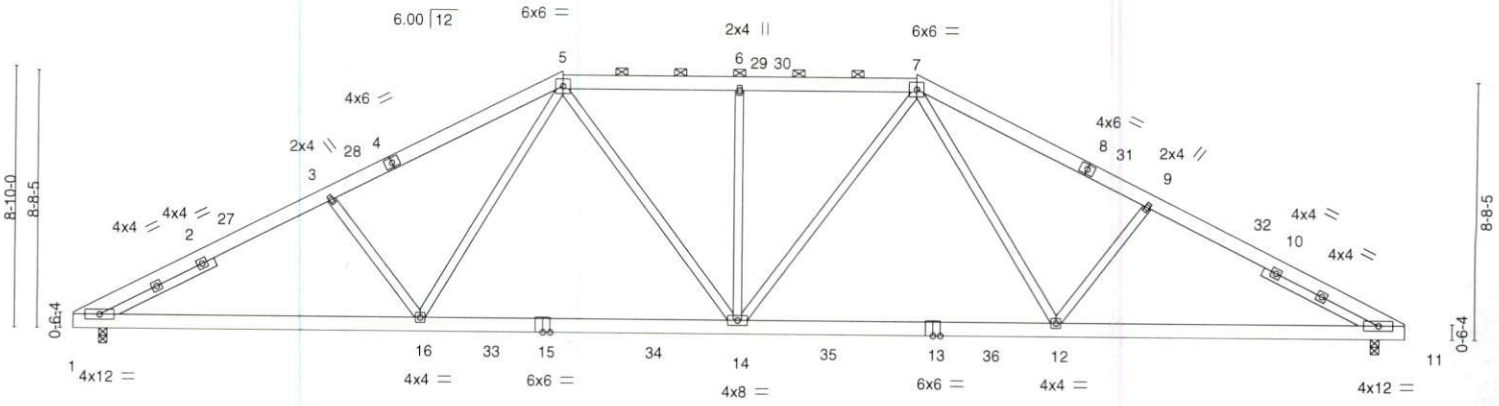
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.
J0425-1814	A4	Hip	1	1	I72472691
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:32 2025 Page 1
ID:3uc_web?qzKYDQhfz3?QKCyb7J2-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

8-9-2	16-7-8	22-7-8	28-7-8	36-5-14	45-3-0
8-9-2	7-10-6	6-0-0	6-0-0	7-10-6	8-9-2

Scale = 1:78.2



0-10-8	11-9-14	22-7-8	33-5-2	44-4-8	45-3-0
0-10-8	10-11-6	10-9-10	10-9-10	10-11-6	0-10-8

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	0.28	Vert(LL)	-0.26	14-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.41	14-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.11	11	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.08	14-16	>999	240	Weight: 316 lb	FT = 25%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 4-3-14, Right 2x4 SP No.2 4-3-14

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-7-3 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 1=0-3-8, 11=0-3-8
Max Horz 1=101(LC 9)
Max Uplift 1=-58(LC 12), 11=-58(LC 13)
Max Grav 1=2038(LC 2), 11=2038(LC 2)

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

TOP CHORD	1-3=-3338/638, 3-5=-3198/639, 5-6=-2812/613, 6-7=-2813/613, 7-9=-3198/639, 9-11=-3338/638
BOT CHORD	1-16=-480/2919, 14-16=-306/2492, 12-14=-299/2492, 11-12=-473/2919
WEBS	3-16=-298/239, 5-16=-65/690, 5-14=-63/663, 6-14=-375/161, 7-14=-64/663, 7-12=-65/691, 9-12=-298/239

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) 1-0-4 to 5-6-9, Interior(1) 5-6-9 to 16-7-8, Exterior(2R) 16-7-8 to 23-0-5, Interior(1) 23-0-5 to 28-7-8, Exterior(2R) 28-7-8 to 35-0-5, Interior(1) 35-0-5 to 44-2-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) 1, 11.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 2,2025

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

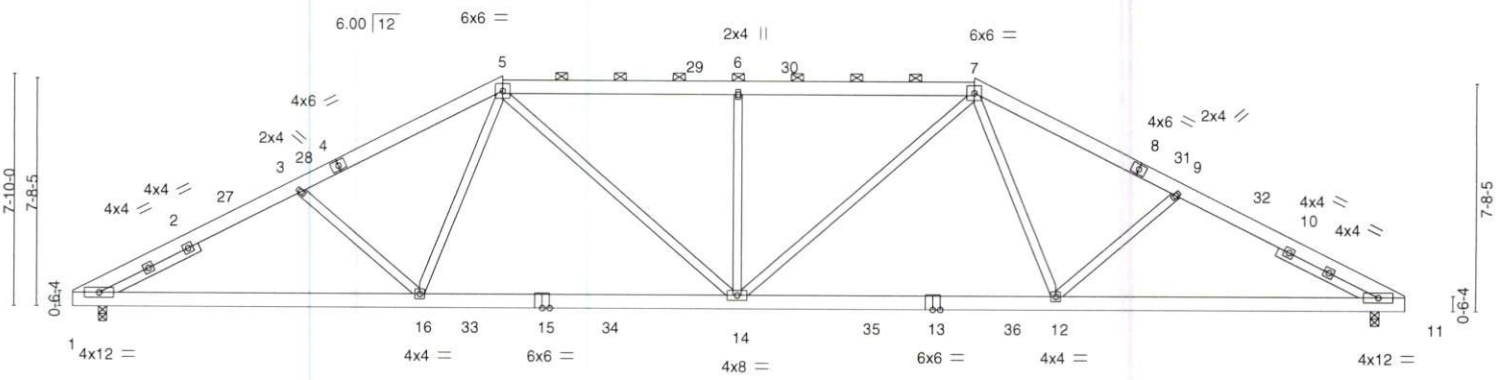
Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472692
J0425-1814	A5	Hip	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:33 2025 Page 1
ID:3uc_web?qzKYDQhfz3?QKCyb7J2-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

7-9-2	14-7-8	22-7-8	30-7-8	37-5-14	45-3-0
7-9-2	6-10-6	8-0-0	8-0-0	6-10-6	7-9-2

Scale = 1:78.2



0-10-8	11-9-14	22-7-8	33-5-2	44-4-8	45-3-0
0-10-8	10-11-6	10-9-10	10-9-10	10-11-6	0-10-8

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	0.27	Vert(LL)	-0.25	14-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.41	14-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.11	11	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.09	14-16	>999	240	Weight: 310 lb	FT = 25%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 3-9-1, Right 2x4 SP No.2 3-9-1

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-3-6 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 1=0-3-8, 11=0-3-8
Max Horz 1=-88(LC 10)
Max Uplift 1=-44(LC 12), 11=-44(LC 13)
Max Grav 1=2016(LC 2), 11=2016(LC 2)

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

TOP CHORD	1-3=-3290/641, 3-5=-3165/606, 5-6=-3143/656, 6-7=-3143/656, 7-9=-3165/606, 9-11=-3290/641
BOT CHORD	1-16=-489/2862, 14-16=-338/2614, 12-14=-332/2614, 11-12=-483/2862
WEBS	5-16=0/565, 5-14=-96/816, 6-14=-535/231, 7-14=-96/816, 7-12=0/566

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) 1-0-4 to 5-6-9, Interior(1) 5-6-9 to 14-7-8, Exterior(2R) 14-7-8 to 21-0-5, Interior(1) 21-0-5 to 30-7-8, Exterior(2R) 30-7-8 to 37-0-5, Interior(1) 37-0-5 to 44-2-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) 1, 11.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 2,2025

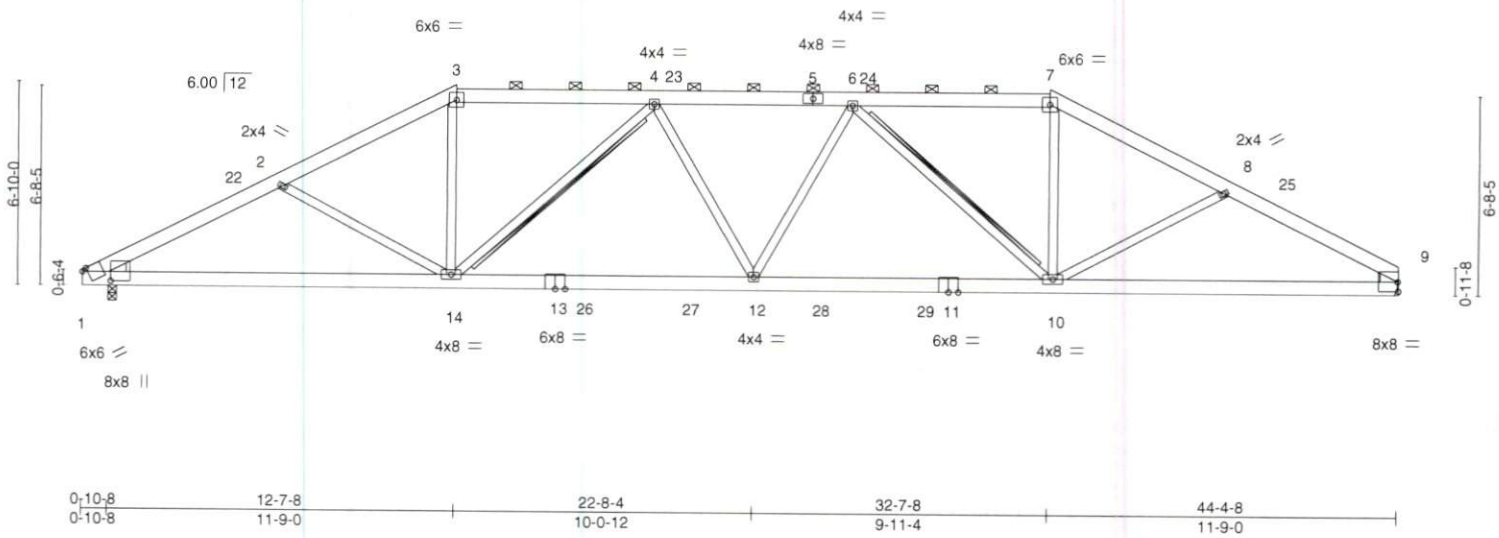
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	A6	Hip	1	1	Job Reference (optional)	I72472693

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:34 2025 Page 1
ID:3uc_web?qzKYDQhfz3?QKCyb7J2-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

6-9-2	12-7-8	19-3-8	25-11-8	32-7-8	38-5-14	44-4-8
6-9-2	5-10-6	6-8-0	6-8-0	6-8-0	5-10-6	5-10-10

Scale = 1:77.6



0-10-8	12-7-8	22-8-4	32-7-8	44-4-8
0-10-8	11-9-0	10-0-12	9-11-4	11-9-0

Plate Offsets (X,Y)-- [1:0-1-13,0-0-9], [1:0-3-12,0-11-7], [9:Edge,0-3-13]

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)	-0.26	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.43	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.12	9	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.11	12-14	>999	240	Weight: 299 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-0-9 max.): 3-7.
BOT CHORD Rigid ceiling directly applied.
WEBS T-Brace: 2x4 SPF No.2 - 4-14, 6-10
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance.
Brace must cover 90% of web length.

REACTIONS. (size) 1=0-3-8, 9=Mechanical
Max Horz 1=-76(LC 8)
Max Uplift 1=-41(LC 9), 9=-54(LC 8)
Max Grav 1=1986(LC 2), 9=1948(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3239/640, 2-3=-3108/586, 3-4=-2747/571, 4-6=-3557/676, 6-7=-2769/575, 7-8=-3139/590, 8-9=-3304/649
BOT CHORD 1-14=-490/2774, 12-14=-477/3412, 10-12=-484/3424, 9-10=-495/2852
WEBS 3-14=-61/982, 4-14=-979/193, 4-12=0/353, 6-12=0/342, 6-10=-966/189, 7-10=-65/1007

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) 1-0-4 to 5-5-8, Interior(1) 5-5-8 to 12-7-8, Exterior(2R) 12-7-8 to 18-10-13, Interior(1) 18-10-13 to 32-7-8, Exterior(2R) 32-7-8 to 38-8-14, Interior(1) 38-8-14 to 44-4-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) 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) 1, 9.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

April 2,2025

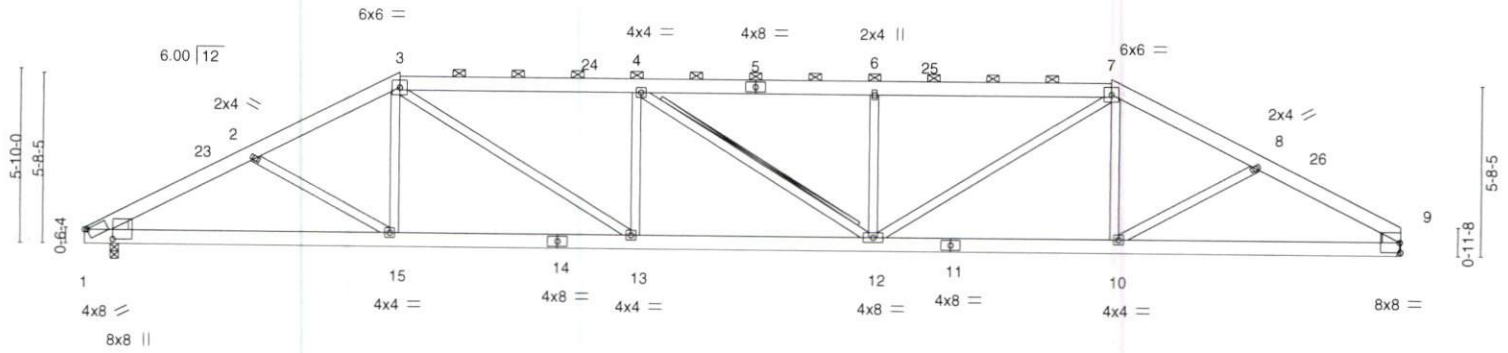
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	A7	Hip	1	1	Job Reference (optional)	I72472694

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:34 2025 Page 1
ID:3uc_web?qzKYDQhfz3?QKCyb7J2-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

5-9-2	10-7-8	18-7-8	26-7-8	34-7-8	39-5-14	44-4-8
5-9-2	4-10-6	8-0-0	8-0-0	8-0-0	4-10-6	4-10-10

Scale = 1:77.6



0-10-8	10-7-8	18-7-8	26-7-8	34-7-8	44-4-8
0-10-8	9-9-0	8-0-0	8-0-0	8-0-0	9-9-0

Plate Offsets (X,Y)-- [1:0-0-13,Edge], [1:0-3-12,0-11-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.19	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.38	12-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.10	9	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.14	12-13	>999	240	Weight: 300 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-11-6 max.): 3-7.
BOT CHORD Rigid ceiling directly applied.
WEBS T-Brace: 2x4 SPF No.2 - 4-12
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance.
Brace must cover 90% of web length.

REACTIONS. (size) 1=0-3-8, 9=Mechanical
Max Horz 1=-63(LC 8)
Max Uplift 1=-68(LC 9), 9=-80(LC 8)
Max Grav 1=1755(LC 1), 9=1734(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2868/619, 2-3=-2799/598, 3-4=-3537/775, 4-6=-3542/774, 6-7=-3544/775, 7-8=-2839/606, 8-9=-2941/632
BOT CHORD 1-15=-476/2422, 13-15=-384/2503, 12-13=-576/3536, 10-12=-396/2533, 9-10=-484/2505
WEBS 2-15=-45/263, 3-15=0/251, 3-13=-229/1318, 4-13=-558/219, 6-12=-511/228, 7-12=-223/1292, 7-10=0/284

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) 1-0-4 to 5-6-3, Interior(1) 5-6-3 to 10-7-8, Exterior(2R) 10-7-8 to 16-10-13, Interior(1) 16-10-13 to 34-7-8, Exterior(2R) 34-7-8 to 40-10-13, Interior(1) 40-10-13 to 44-4-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) 1, 9.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

April 2,2025

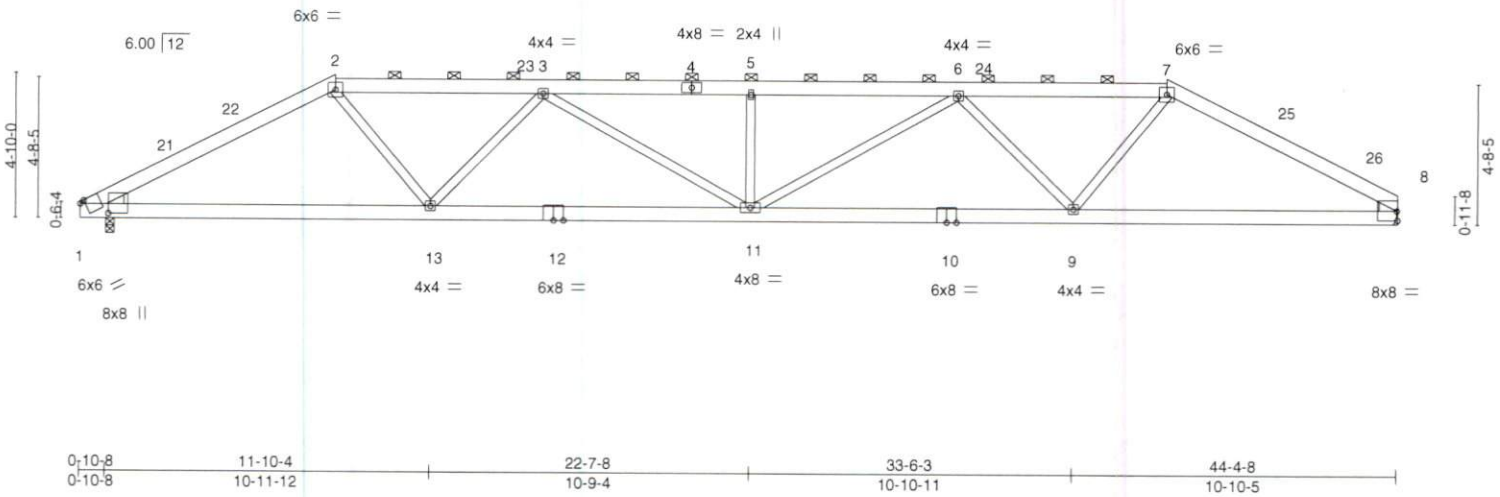
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472695
J0425-1814	A8	Hip	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:35 2025 Page 1
ID:3uc_web?qzKYDQhfz3?QKCyb7J2-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

8-7-8	15-7-8	22-7-8	29-7-8	36-7-8	44-4-8
8-7-8	7-0-0	7-0-0	7-0-0	7-0-0	7-9-0

Scale = 1:77.6



0-10-8	11-10-4	22-7-8	33-6-3	44-4-8
0-10-8	10-11-12	10-9-4	10-10-11	10-10-5

Plate Offsets (X,Y)-- [1:0-1-13,0-0-9], [1:0-3-12,0-11-7], [2:0-0-0,0-0-0], [7:0-0-0,0-0-0], [8:Edge,0-3-13]

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	0.46	Vert(LL)	-0.26	11-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.54	11-13	>995	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.13	8	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.20	11	>999	240	Weight: 274 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-6-9 max.): 2-7.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 1=0-3-8, 8=Mechanical
Max Horz 1=-50(LC 8)
Max Uplift 1=-93(LC 9), 8=-105(LC 8)
Max Grav 1=1755(LC 1), 8=1734(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2962/624, 2-3=-3269/666, 3-5=-4520/878, 5-6=-4520/878, 6-7=-3284/667, 7-8=-3004/629
BOT CHORD 1-13=-440/2537, 11-13=-698/3988, 9-11=-710/4008, 8-9=-453/2584
WEBS 2-13=-105/1253, 3-13=-1139/293, 3-11=-55/669, 5-11=-391/166, 6-11=-50/648, 6-9=-1131/292, 7-9=-101/1228

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) 1-0-4 to 5-5-8, Interior(1) 5-5-8 to 8-7-8, Exterior(2R) 8-7-8 to 14-10-13, Interior(1) 14-10-13 to 36-7-8, Exterior(2R) 36-7-8 to 42-10-13, Interior(1) 42-10-13 to 44-4-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) 1 except (jt=lb) 8=105.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 2,2025

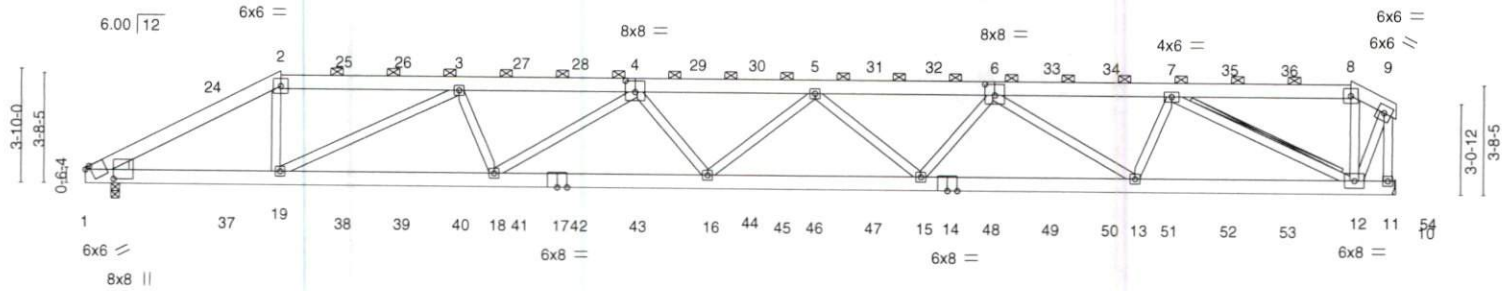
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	A9GR	Hip Girder	1	2	Job Reference (optional)	I72472696

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:39 2025 Page 1
ID:3uc_web?qzKYDQhfz3?QKCyb7J2-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

6-7-8	12-7-15	18-8-5	24-8-12	30-9-3	36-9-9	42-10-0	44-4-8
6-7-8	6-0-7	6-0-7	6-0-7	6-0-7	6-0-7	6-0-7	1-6-8

Scale = 1:78.1



0-10-8	6-7-8	13-10-6	21-1-5	28-4-3	35-7-2	42-10-0	44-4-8
0-10-8	5-9-0	7-2-14	7-2-14	7-2-14	7-2-14	7-2-14	1-6-8

Plate Offsets (X,Y)-- [1:0-1-13,0-0-9], [1:0-3-12,0-11-7], [4:0-4-0,0-4-8], [6:0-4-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.37	15-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.75	15-16	>709	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.82	Horz(CT)	0.16	11	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-MS		Wind(LL)	0.33	15-16	>999	240	Weight: 593 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-10 max.): 2-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS T-Brace: 2x4 SPF No.2 - 7-12
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance.
Brace must cover 90% of web length.

REACTIONS. (size) 1=0-3-8, 11=Mechanical
Max Horz 1=77(LC 8)
Max Uplift 1=-429(LC 5), 11=-447(LC 4)
Max Grav 1=3235(LC 1), 11=3234(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5564/790, 2-3=-4766/713, 3-4=-9153/1295, 4-5=-10759/1504, 5-6=-10022/1391, 6-7=-6879/953, 7-8=-1224/166, 8-9=-1299/154, 9-11=-3293/370
BOT CHORD 1-19=-715/4858, 18-19=-1286/8661, 16-18=-1559/10521, 15-16=-1596/10752, 13-15=-1369/9263, 12-13=-906/6154
WEBS 2-19=-185/2149, 3-19=-4430/670, 3-18=-19/1417, 4-18=-1667/332, 4-16=0/487, 5-15=-980/280, 6-15=-30/1247, 6-13=-2883/509, 7-13=-122/2075, 7-12=-5567/847, 9-12=-372/3075

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, 2x4 - 1 row 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); cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are 4x4 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=429, 11=447.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2

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NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 39 lb down and 35 lb up at 4-8-4, 109 lb down and 81 lb up at 6-7-8, 90 lb down and 81 lb up at 8-7-8, 90 lb down and 81 lb up at 10-7-8, 90 lb down and 81 lb up at 12-7-8, 90 lb down and 81 lb up at 14-7-8, 90 lb down and 81 lb up at 16-7-8, 90 lb down and 81 lb up at 18-7-8, 90 lb down and 81 lb up at 20-7-8, 90 lb down and 81 lb up at 22-7-8, 90 lb down and 81 lb up at 24-7-8, 90 lb down and 81 lb up at 26-7-8, 90 lb down and 81 lb up at 28-7-8, 90 lb down and 81 lb up at 30-7-8, 90 lb down and 81 lb up at 32-7-8, 90 lb down and 81 lb up at 34-7-8, 90 lb down and 81 lb up at 36-7-8, 90 lb down and 81 lb up at 38-7-8, and 90 lb down and 81 lb up at 40-7-8, and 106 lb down and 81 lb up at 42-10-0 on top chord, and 296 lb down and 88 lb up at 4-8-4, 63 lb down at 6-8-4, 63 lb down at 8-7-8, 63 lb down at 10-7-8, 63 lb down at 12-7-8, 63 lb down at 14-7-8, 63 lb down at 16-7-8, 63 lb down at 18-7-8, 63 lb down at 20-7-8, 63 lb down at 22-7-8, 63 lb down at 24-7-8, 63 lb down at 26-7-8, 63 lb down at 28-7-8, 63 lb down at 30-7-8, 63 lb down at 32-7-8, 63 lb down at 34-7-8, 63 lb down at 36-7-8, 63 lb down at 38-7-8, and 63 lb down at 40-7-8, and 63 lb down at 42-7-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 2-22=-60, 2-8=-60, 8-9=-60, 1-10=-20

Concentrated Loads (lb)

Vert: 2=-90(F) 19=-52(F) 3=-90(F) 4=-90(F) 5=-90(F) 15=-52(F) 6=-90(F) 7=-90(F) 8=-90(F) 25=-90(F) 26=-90(F) 27=-90(F) 28=-90(F) 29=-90(F) 30=-90(F) 31=-90(F) 32=-90(F) 33=-90(F) 34=-90(F) 35=-90(F) 36=-90(F) 37=-296(F) 38=-52(F) 39=-52(F) 40=-52(F) 41=-52(F) 42=-52(F) 43=-52(F) 44=-52(F) 45=-52(F) 46=-52(F) 47=-52(F) 48=-52(F) 49=-52(F) 50=-52(F) 51=-52(F) 52=-52(F) 53=-52(F) 54=-52(F)

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472697
J0425-1814	B1	Common	2	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:39 2025 Page 1
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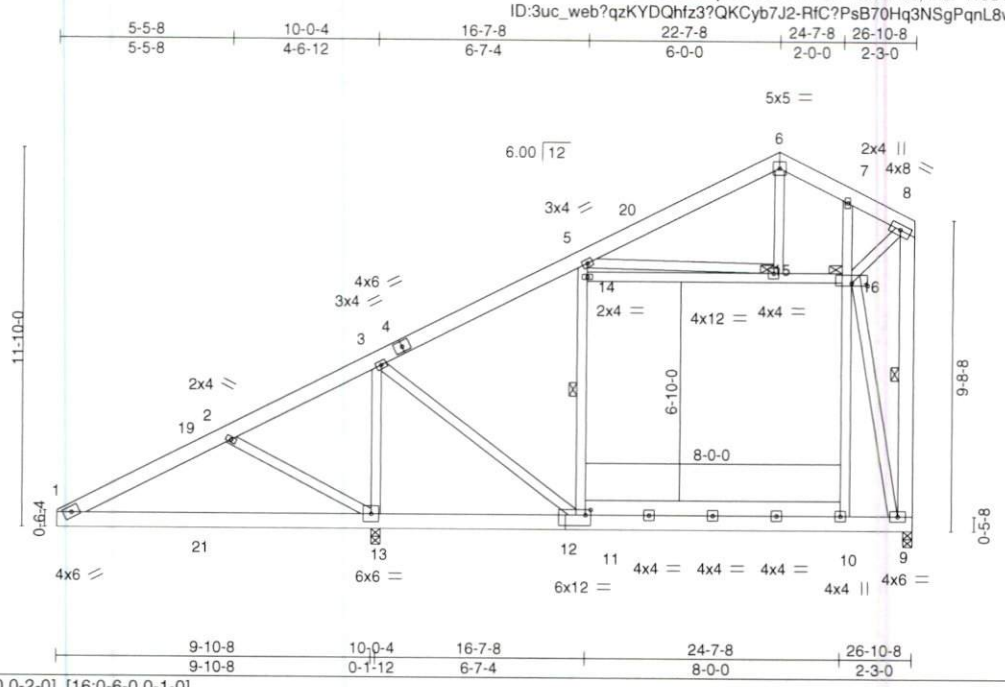

Plate Offsets (X,Y)-- [12:0-2-0,0-2-0], [16:0-6-0,0-1-0]

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	0.23	Vert(LL)	-0.04	10-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06	10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.86	Horz(CT)	-0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	-0.05	11-13	>999	240	Weight: 266 lb	FT = 25%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2 *Except*
	8-9: 2x6 SP No.1

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 5-11, 8-9
JOINTS	1 Brace at Jt(s): 15, 16

REACTIONS. (size) 13=0-3-8, 9=0-3-8
Max Horz 13=328(LC 12)
Max Uplift 13=-77(LC 12), 9=-104(LC 12)
Max Grav 13=1905(LC 2), 9=655(LC 19)

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

TOP CHORD	1-2=-654/575, 2-3=-866/896, 3-5=-292/54, 5-6=-307/306, 6-7=-254/265, 7-8=-216/329, 8-9=-294/468
BOT CHORD	1-13=-429/577, 11-13=-763/576
WEBS	2-13=-390/414, 3-13=-1392/700, 3-11=-548/1115, 11-14=-495/467, 5-14=-493/468, 10-16=-50/511, 7-16=-312/270, 15-16=-370/196, 5-15=-388/212, 8-16=-313/241, 9-16=-801/453

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) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 22-7-8, Exterior(2E) 22-7-8 to 26-7-12 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb) 9=104.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	B2	Hip	1	1	Job Reference (optional)	I72472698

Comtech, Inc, Fayetteville, NC - 28314,

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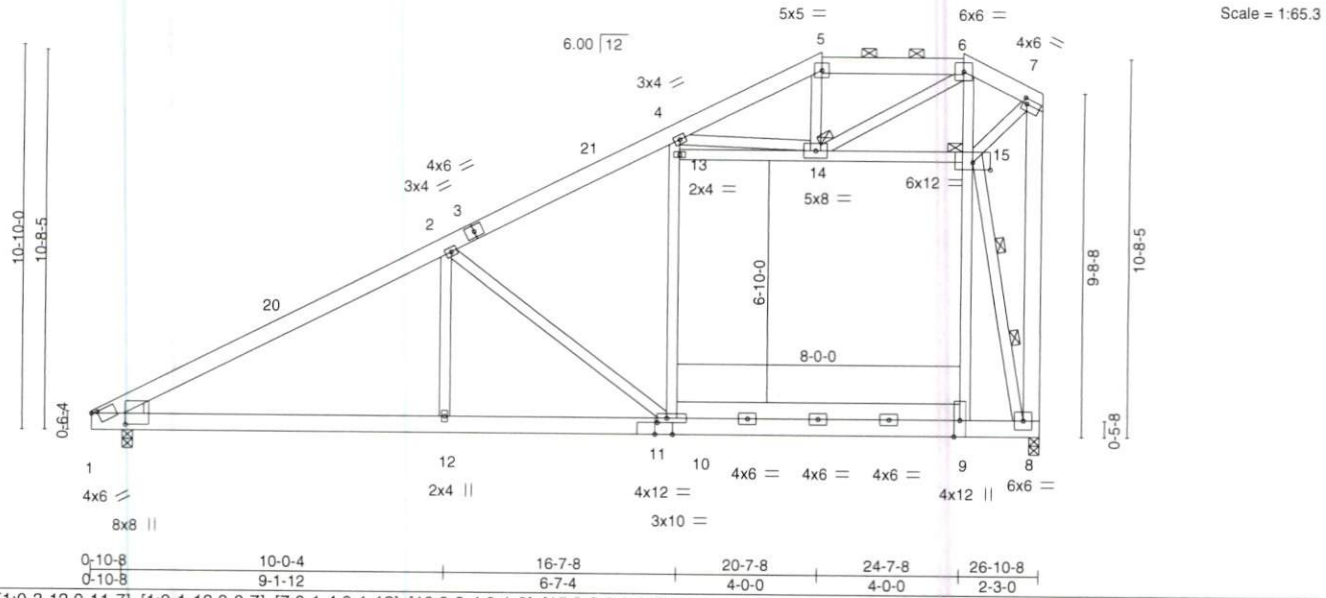

Plate Offsets (X,Y)-- [1:0-3-12,0-11-7], [1:0-1-13,0-0-7], [7:0-1-4,0-1-12], [10:0-3-4,0-1-8], [15:0-6-0,0-2-8]

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	0.36	Vert(LL)	-0.21	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.36	10-12	>887	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.14	10-12	>999	240	Weight: 260 lb	FT = 25%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP 2400F 2.0E *Except* 9-10: 2x6 SP No.1
WEBS	2x4 SP No.2 *Except* 7-8: 2x6 SP No.1
WEDGE	Left: 2x4 SP No.1

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied.
WEBS	2 Rows at 1/3 pts 8-15
JOINTS	1 Brace at Jt(s): 14, 15

REACTIONS. (size) 8=0-3-8, 1=0-3-8
Max Horz 1=298(LC 12)
Max Uplift 8=-106(LC 12), 1=-30(LC 12)
Max Grav 8=1279(LC 2), 1=1194(LC 19)

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

TOP CHORD	1-2=-1734/199, 2-4=-1052/143, 4-5=-75/448, 5-6=-19/313, 6-7=-427/1590, 7-8=-525/1939
BOT CHORD	1-12=-413/1485, 10-12=-413/1485, 9-10=-213/847, 8-9=-210/827
WEBS	2-12=0/361, 10-13=-7/637, 4-13=-8/637, 2-10=-798/262, 9-15=-42/830, 6-15=-1408/488, 14-15=-2153/569, 4-14=-1309/283, 5-14=-410/158, 7-15=-1985/557, 8-15=-3619/921, 6-14=-390/1180

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) 1-0-4 to 5-5-1, Interior(1) 5-5-1 to 20-7-8, Exterior(2E) 20-7-8 to 26-7-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) 1 except (jt=lb) 8=106.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.
J0425-1814	B3	Hip	1	1	I72472699
					Job Reference (optional)

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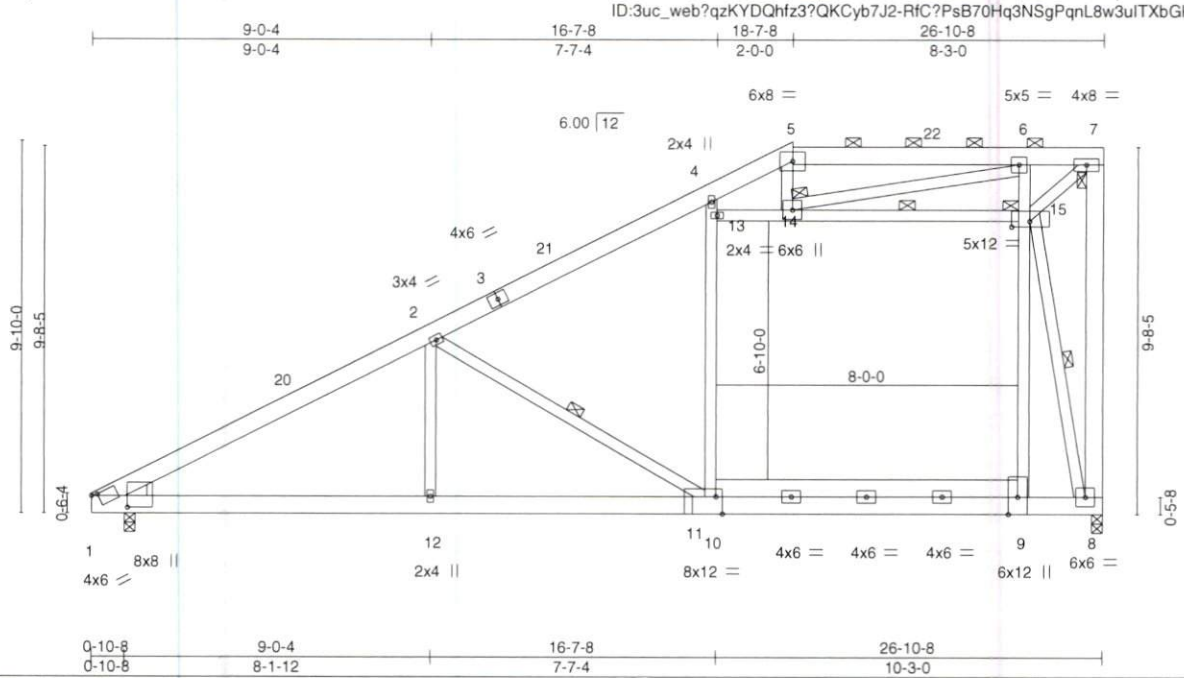

Plate Offsets (X,Y)-- [1:0-3-12,0-11-7], [1:0-1-13,0-0-7], [11:0-2-0,Edge], [15:0-5-12,0-1-12]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.35	10-12	>914	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.61	10-12	>521	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.24	10-12	>999	240	Weight: 251 lb	FT = 25%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
7-8: 2x6 SP No.1
WEDGE
Left: 2x4 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-10, 14-15, 8-15
JOINTS 1 Brace at Jt(s): 14, 7, 15

REACTIONS. (size) 1=0-3-8, 8=0-3-8
Max Horz 1=284(LC 12)
Max Uplift 1=-28(LC 12), 8=-94(LC 9)
Max Grav 1=1188(LC 19), 8=1279(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1816/217, 2-4=-1005/118, 4-5=-532/145, 5-6=-729/195, 6-7=-421/1463, 7-8=-398/1324
BOT CHORD 1-12=-448/1564, 10-12=-448/1564, 9-10=-195/770, 8-9=-191/743
WEBS 2-12=0/358, 2-10=-958/297, 10-13=0/592, 4-13=0/562, 9-15=-132/1167, 6-15=-734/310, 14-15=-2201/601, 5-14=-473/134, 6-14=-611/2196, 7-15=-1963/564, 8-15=-3290/848

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) 1-0-4 to 5-5-1, Interior(1) 5-5-1 to 18-7-8, Exterior(2R) 18-7-8 to 24-9-4, Interior(1) 24-9-4 to 26-7-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) 1, 8.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472700
J0425-1814	B4	Half Hip	1	1	Job Reference (optional)	

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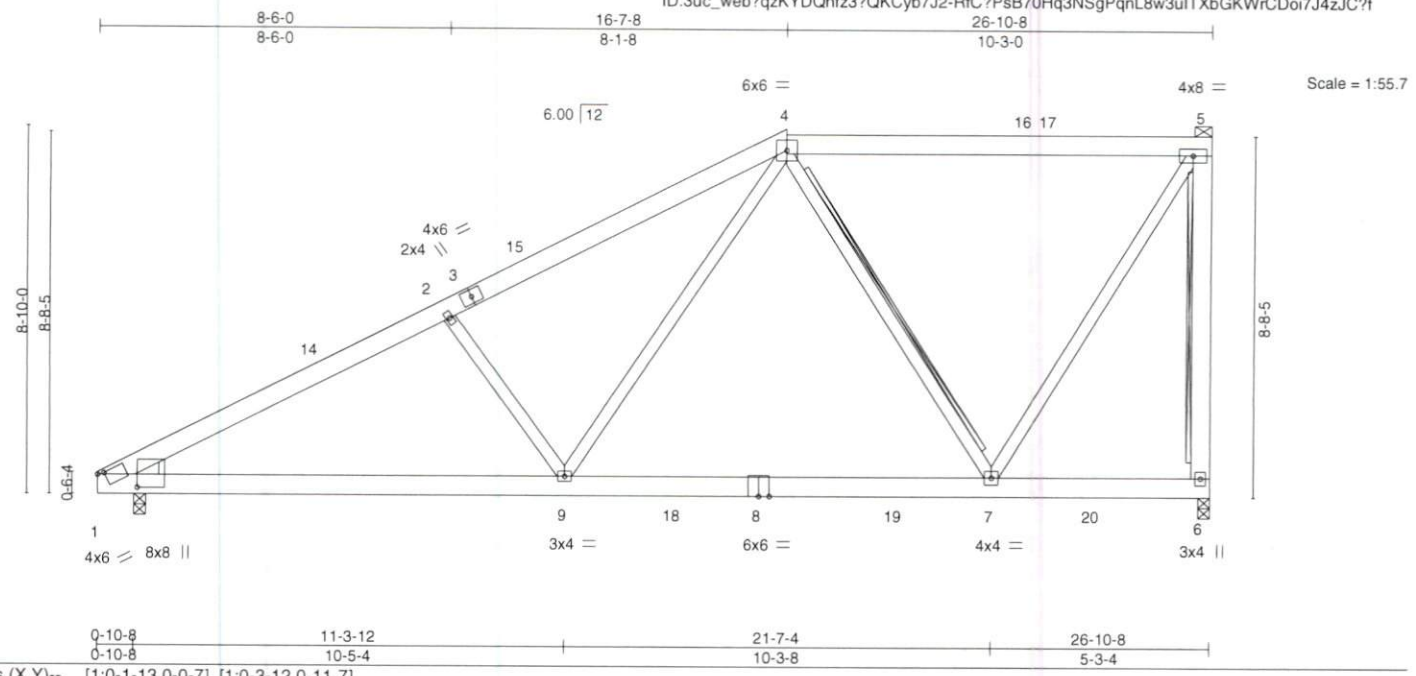

Plate Offsets (X,Y)-- [1:0-1-13,0-0-7], [1:0-3-12,0-11-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.17	7-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.25	7-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.03	7-9	>999	240	Weight: 198 lb	FT = 25%

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
5-6: 2x6 SP No.1
WEDGE
Left: 2x4 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.
WEBS T-Brace: 2x4 SPF No.2 - 5-6, 4-7
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance.
Brace must cover 90% of web length.

REACTIONS. (size) 6=0-3-8, 1=0-3-8
Max Horz 1=251(LC 12)
Max Uplift 6=-98(LC 9), 1=-31(LC 12)
Max Grav 6=1262(LC 2), 1=1193(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1765/256, 2-4=-1570/261, 4-5=-610/102, 5-6=-1182/277
BOT CHORD 1-9=-450/1497, 7-9=-250/909
WEBS 2-9=-363/257, 4-9=-96/826, 4-7=-622/290, 5-7=-160/1104

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) 1-0-4 to 5-5-1, Interior(1) 5-5-1 to 16-7-8, Exterior(2R) 16-7-8 to 22-10-3, Interior(1) 22-10-3 to 26-7-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) 6, 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472701
J0425-1814	B5	Half Hip	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:42 2025 Page 1
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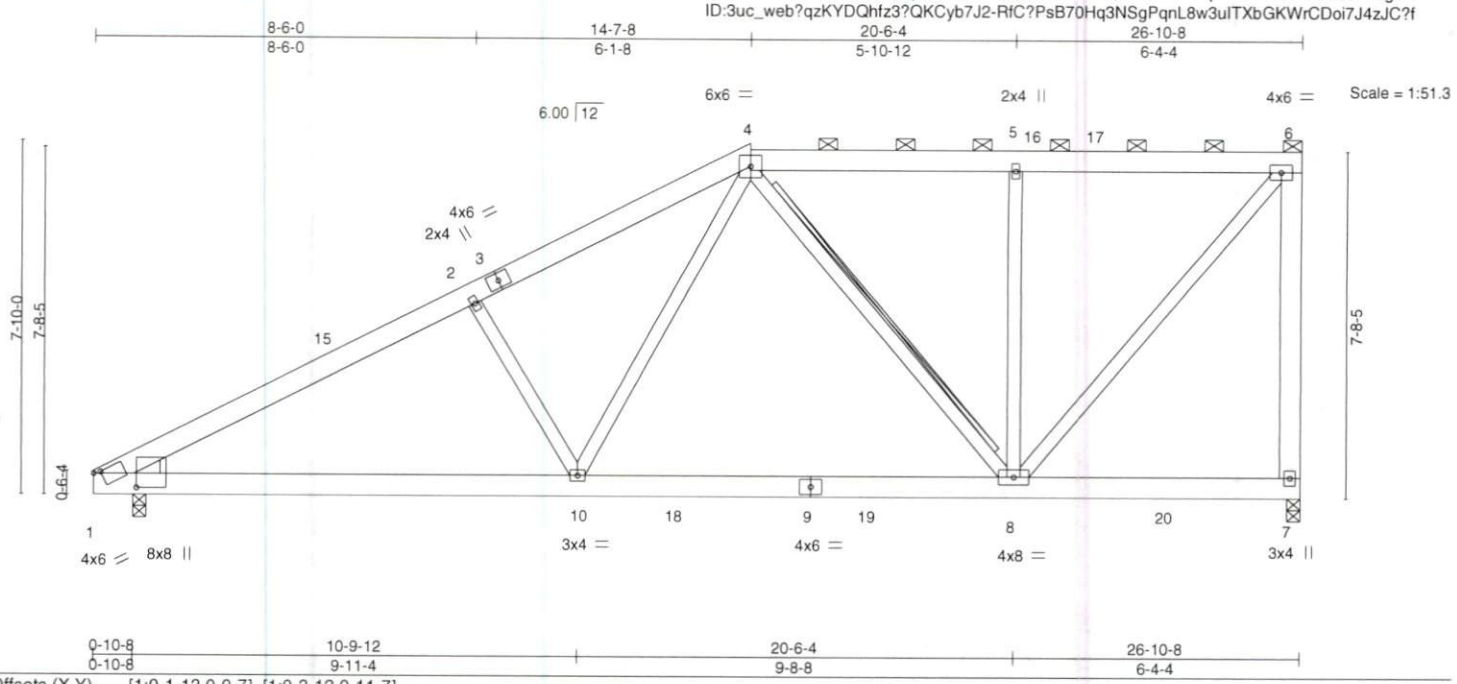

Plate Offsets (X,Y)-- [1:0-1-13,0-0-7], [1:0-3-12,0-11-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.13	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.20	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.03	8-10	>999	240	Weight: 201 lb	FT = 25%

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
6-7: 2x6 SP No.1
WEDGE
Left: 2x4 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied.
WEBS T-Brace: 2x4 SPF No.2 - 4-8
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance.
Brace must cover 90% of web length.

REACTIONS. (size) 7=0-3-8, 1=0-3-8
Max Horz 1=219(LC 12)
Max Uplift 7=-101(LC 9), 1=-31(LC 12)
Max Grav 7=1239(LC 2), 1=1188(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1751/275, 2-4=-1583/293, 4-5=-841/169, 5-6=-840/167, 6-7=-1112/277
BOT CHORD 1-10=-427/1481, 8-10=-266/1041
WEBS 2-10=-316/235, 4-10=-94/721, 4-8=-341/158, 5-8=-403/190, 6-8=-252/1270

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) 1-0-4 to 5-5-1, Interior(1) 5-5-1 to 14-7-8, Exterior(2R) 14-7-8 to 20-10-3, Interior(1) 20-10-3 to 26-7-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) 1 except (jt=lb) 7=101.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	B6	Half Hip	1	1		I72472702
					Job Reference (optional)	

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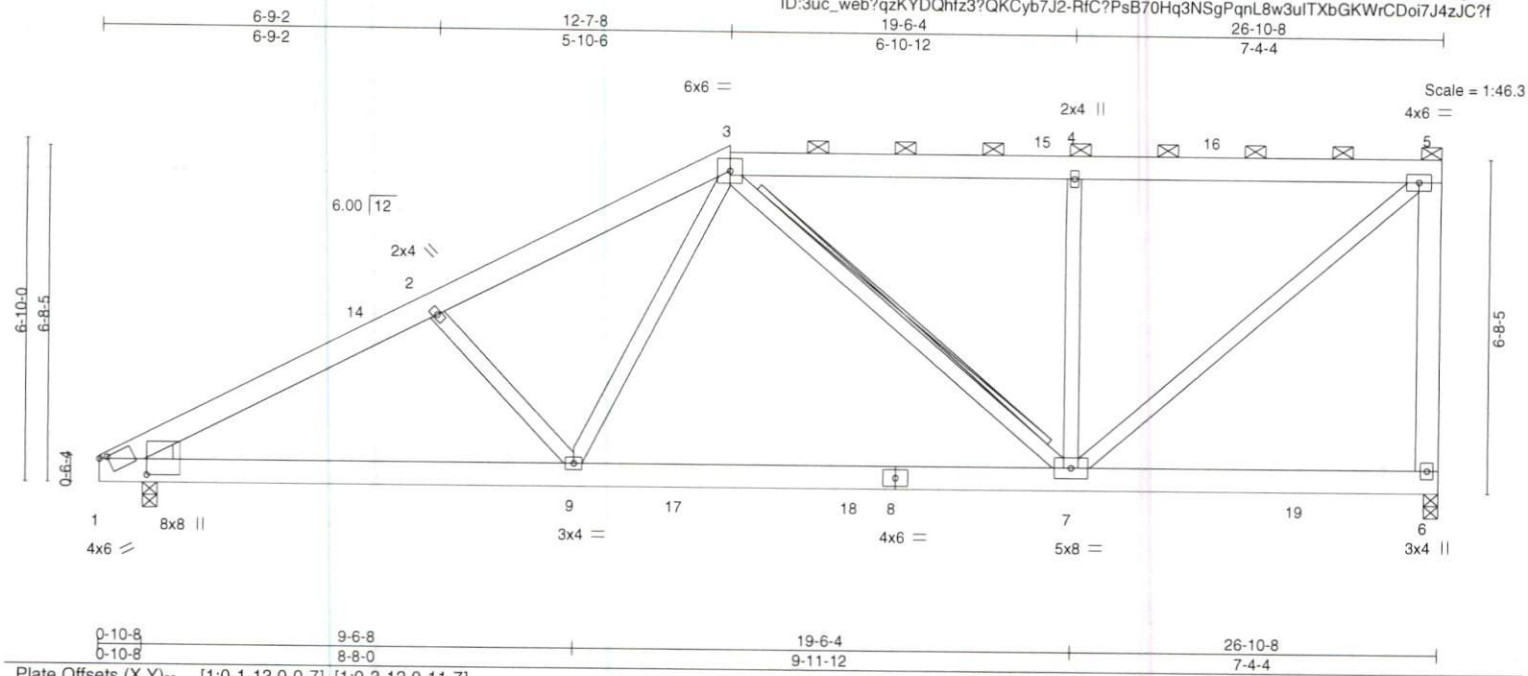

Plate Offsets (X,Y)-- [1:0-1-13,0-0-7], [1:0-3-12,0-11-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.13	7-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.21	7-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.03	7-9	>999	240	Weight: 194 lb	FT = 25%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
5-6: 2x6 SP No.1
WEDGE
Left: 2x4 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied.
WEBS T-Brace: 2x4 SPF No.2 - 3-7
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance.
Brace must cover 90% of web length.

REACTIONS. (size) 1=0-3-8, 6=0-3-8
Max Horz 1=186(LC 12)
Max Uplift 1=-27(LC 12), 6=-104(LC 9)
Max Grav 1=1185(LC 2), 6=1215(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1790/308, 2-3=-1626/292, 3-4=-1057/209, 4-5=-1056/208, 5-6=-1061/270
BOT CHORD 1-9=-437/1516, 7-9=-293/1189
WEBS 3-9=-31/562, 4-7=-471/216, 5-7=-268/1360

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) 1-0-4 to 5-5-1, Interior(1) 5-5-1 to 12-7-8, Exterior(2R) 12-7-8 to 18-10-3, Interior(1) 18-10-3 to 26-7-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) 1 except (jt=lb) 6=104.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.
J0425-1814	B7	Half Hip	1	1	I72472703
					Job Reference (optional)

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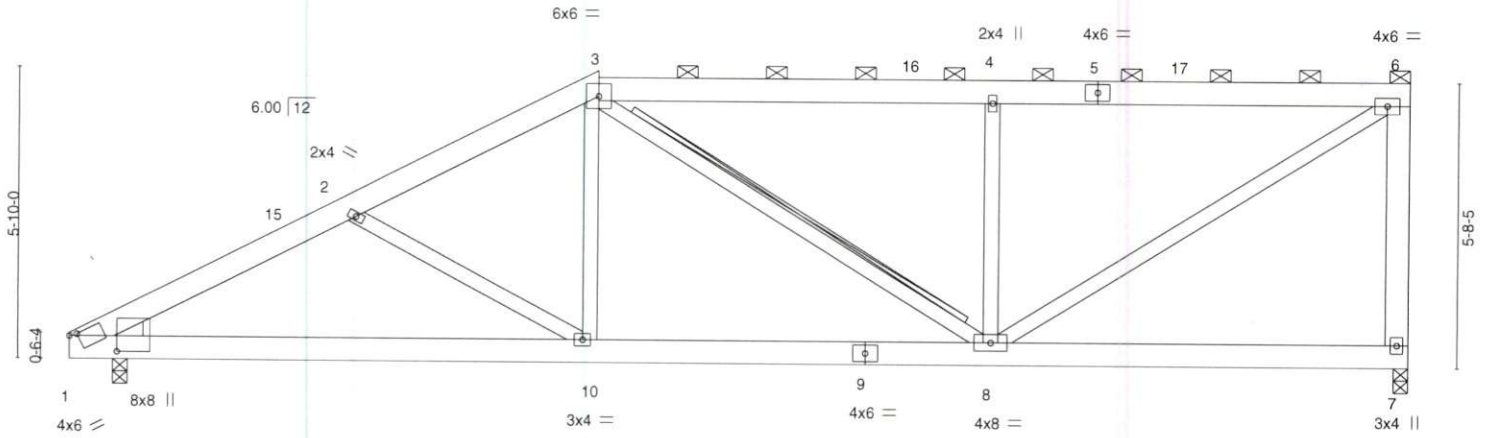
ID:3uc_web?qzKYDQhfz3?QKCyb7J2-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

5-9-2	10-7-8	18-6-4	26-10-8
5-9-2	4-10-6	7-10-12	8-4-4

Scale = 1:46.3



0-10-8	10-7-8	18-6-4	26-10-8
0-10-8	9-9-0	7-10-12	8-4-4

Plate Offsets (X,Y)-- [1:0-1-13,0-0-7], [1:0-3-12,0-11-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.05	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.10	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.04	8-10	>999	240	Weight: 190 lb	FT = 25%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
6-7: 2x6 SP No.1
WEDGE
Left: 2x4 SP No.1

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

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=153(LC 12)
Max Uplift 1=-20(LC 12), 7=-106(LC 9)
Max Grav 1=1046(LC 1), 7=1025(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1578/343, 2-3=-1388/294, 3-4=-1173/265, 4-6=-1171/264, 6-7=-943/268
BOT CHORD 1-10=-432/1324, 8-10=-304/1212
WEBS 3-10=0/343, 4-8=-537/242, 6-8=-305/1331

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) 1-0-4 to 5-6-3, Interior(1) 5-6-3 to 10-7-8, Exterior(2R) 10-7-8 to 16-10-3, Interior(1) 16-10-3 to 26-7-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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 except (jt=lb) 7=106.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472704
J0425-1814	B8	Half Hip	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:43 2025 Page 1
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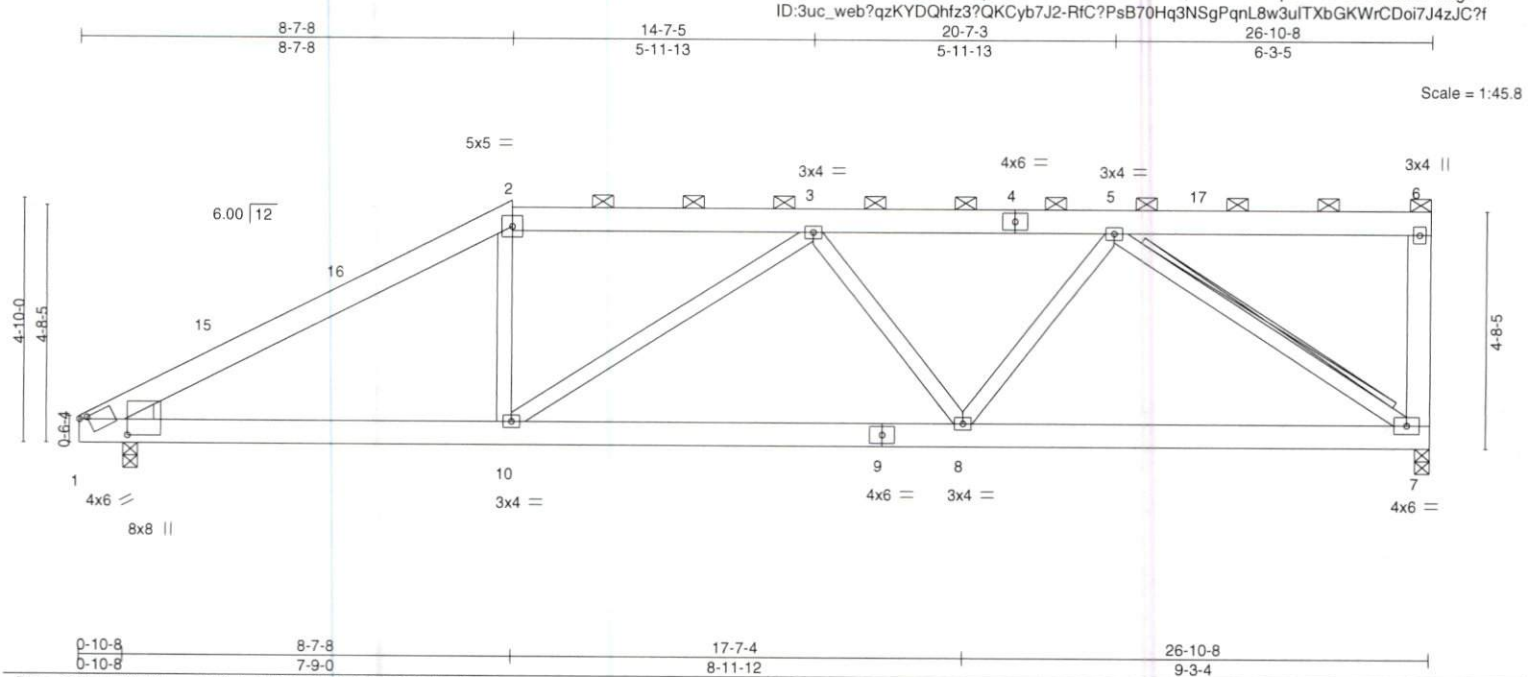

Plate Offsets (X,Y)-- [1:0-1-13,0-0-7], [1:0-3-12,0-11-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.05	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.12	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.04	8-10	>999	240	Weight: 179 lb	FT = 25%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
6-7: 2x6 SP No.1
WEDGE
Left: 2x4 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-6.
BOT CHORD Rigid ceiling directly applied.
WEBS T-Brace: 2x4 SPF No.2 - 5-7
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance.
Brace must cover 90% of web length.

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=121(LC 12)
Max Uplift 1=-31(LC 9), 7=-108(LC 9)
Max Grav 1=1046(LC 1), 7=1025(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1583/315, 2-3=-1312/335, 3-5=-1424/267
BOT CHORD 1-10=-331/1321, 8-10=-368/1566, 7-8=-253/1144
WEBS 2-10=0/403, 3-10=-420/111, 5-8=-24/523, 5-7=-1336/308

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) 1-0-4 to 5-5-1, Interior(1) 5-5-1 to 8-7-8, Exterior(2R) 8-7-8 to 14-7-5, Interior(1) 14-7-5 to 26-7-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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 except (jt=lb) 7=108.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472705
J0425-1814	B9GR	Half Hip Girder	1	2	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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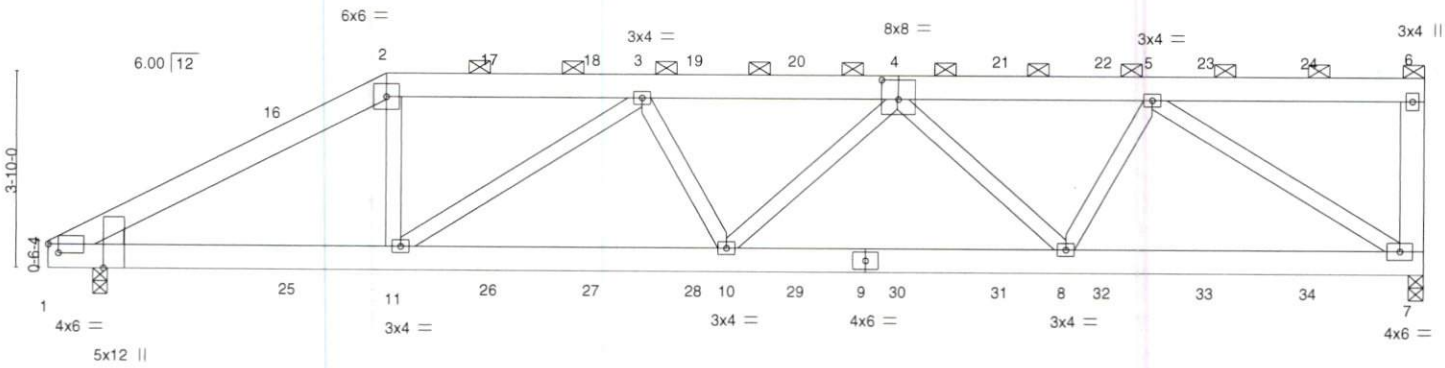
6-7-8	11-7-6	16-7-4	21-7-2	26-10-8
6-7-8	4-11-14	4-11-14	4-11-14	5-3-6

Scale = 1:45.0



0-10-8	6-7-8	13-3-5	19-11-3	26-10-8
0-10-8	5-9-0	6-7-13	6-7-13	6-11-5

Plate Offsets (X,Y)-- [1:0-2-6,0-2-1], [1:0-5-8,Edge], [4:0-4-0,0-4-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.06	10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.12	10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.39	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-MS		Wind(LL)	0.05	10	>999	240	Weight: 358 lb	FT = 25%

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
6-7: 2x6 SP No.1
WEDGE
Left: 2x4 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=92(LC 8)
Max Uplift 1=-238(LC 5), 7=-328(LC 5)
Max Grav 1=1911(LC 1), 7=1997(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3016/430, 2-3=-2631/402, 3-4=-3724/516, 4-5=-2864/379, 6-7=-332/134
BOT CHORD 1-11=-400/2588, 10-11=-574/3654, 8-10=-552/3544, 7-8=-374/2372
WEBS 2-11=-40/1001, 3-11=-1288/231, 3-10=0/304, 4-10=0/308, 4-8=-972/247, 5-8=-12/1114, 5-7=-2768/446

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); cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
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) except (jt=lb) 1=238, 7=328.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 2,2025

Continued on page 2

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

NOTES-

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 39 lb down and 35 lb up at 4-8-4, 109 lb down and 81 lb up at 6-7-8, 90 lb down and 81 lb up at 8-7-8, 90 lb down and 81 lb up at 10-7-8, 90 lb down and 81 lb up at 12-7-8, 90 lb down and 81 lb up at 14-7-8, 90 lb down and 81 lb up at 16-7-8, 90 lb down and 81 lb up at 18-7-8, 90 lb down and 81 lb up at 20-7-8, 90 lb down and 81 lb up at 22-7-8, and 90 lb down and 81 lb up at 24-7-8, and 120 lb down and 74 lb up at 26-7-12 on top chord, and 296 lb down and 88 lb up at 4-8-4, 63 lb down at 6-8-4, 63 lb down at 8-7-8, 63 lb down at 10-7-8, 63 lb down at 12-7-8, 63 lb down at 14-7-8, 63 lb down at 16-7-8, 63 lb down at 18-7-8, 63 lb down at 20-7-8, and 63 lb down at 22-7-8, and 63 lb down at 24-7-8 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: 2-14=-60, 2-6=-60, 1-7=-20
   Concentrated Loads (lb)
   Vert: 2=-90(B) 6=-120(B) 11=-52(B) 4=-90(B) 17=-90(B) 18=-90(B) 19=-90(B) 20=-90(B) 21=-90(B) 22=-90(B) 23=-90(B) 24=-90(B) 25=-296(B) 26=-52(B) 27=-52(B) 28=-52(B) 29=-52(B) 30=-52(B) 31=-52(B) 32=-52(B) 33=-52(B) 34=-52(B)

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472706
J0425-1814	C1	Common	7	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:45 2025 Page 1
ID:3uc_web?qzKYDQhfz3?QKCyb7J2-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

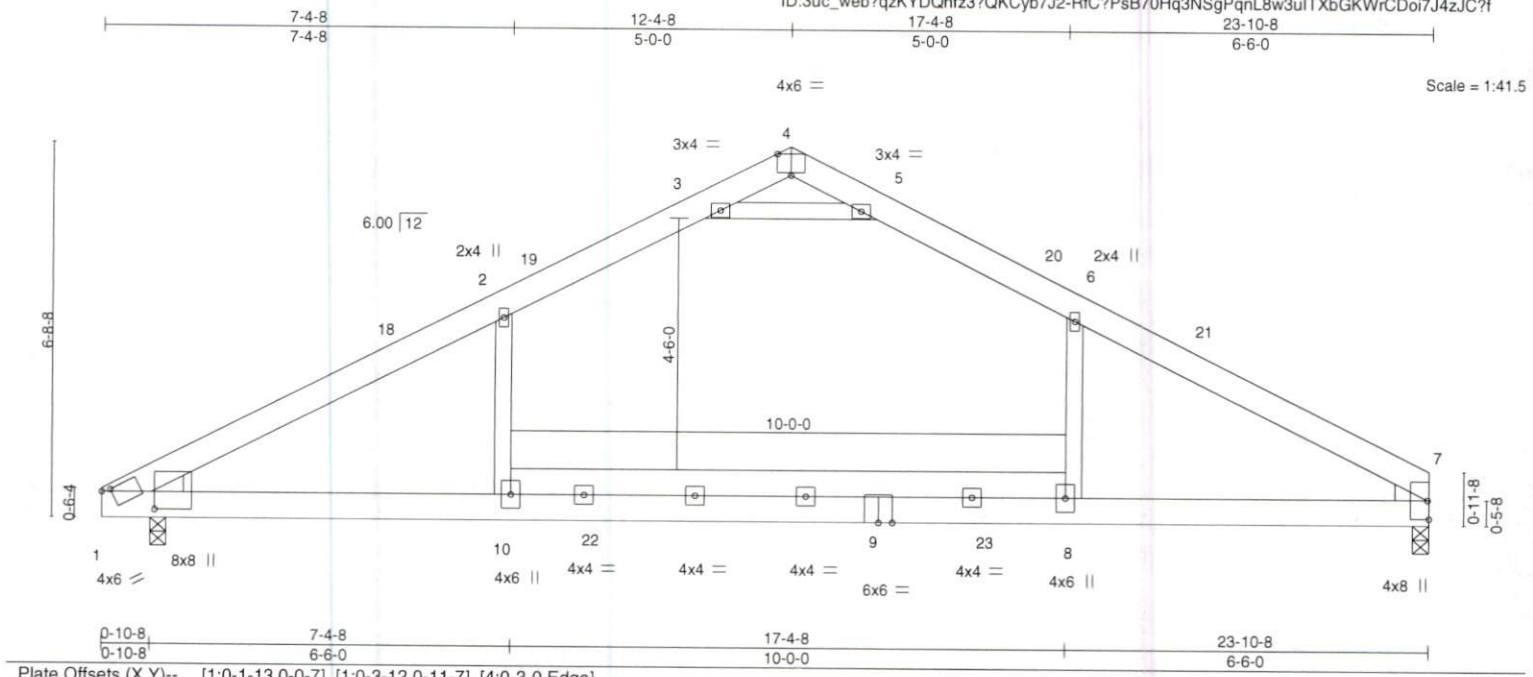


Plate Offsets (X,Y)-- [1:0-1-13,0-0-7], [1:0-3-12,0-11-7], [4:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.21	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.34	8-10	>841	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.10	8	>999	240	Weight: 158 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=-76(LC 8)
Max Uplift 1=-41(LC 12), 7=-55(LC 13)
Max Grav 1=1115(LC 2), 7=1077(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1526/338, 2-3=-1214/399, 3-4=-146/915, 4-5=-147/918, 5-6=-1211/398, 6-7=-1522/338
BOT CHORD 1-10=-202/1227, 8-10=-205/1228, 7-8=-202/1227
WEBS 6-8=0/492, 2-10=0/493, 3-5=-2252/592

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) 1-0-4 to 5-5-1, Interior(1) 5-5-1 to 12-4-8, Exterior(2R) 12-4-8 to 16-9-5, Interior(1) 16-9-5 to 23-10-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

April 2,2025

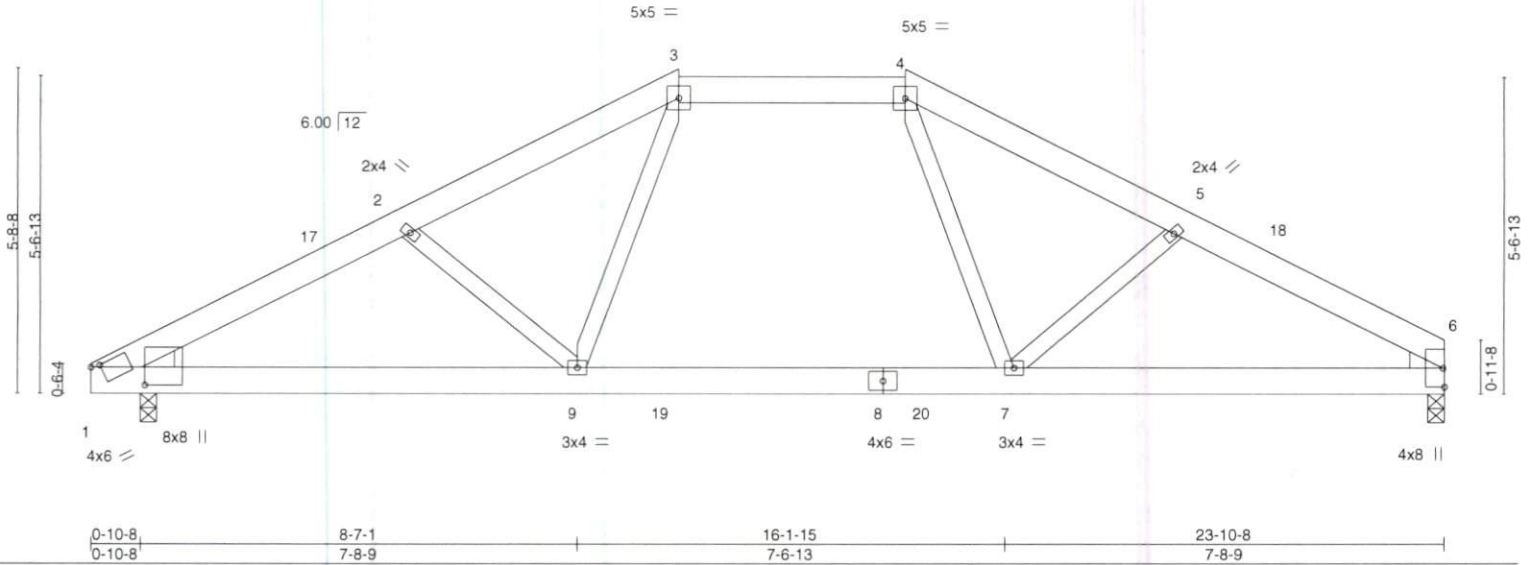
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472707
J0425-1814	C2	Hip	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:45 2025 Page 1
ID:3uc_web?qzKYDQhfz3?QKCyb7J2-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

5-7-10	10-4-8	14-4-8	19-1-6	23-10-8
5-7-10	4-8-14	4-0-0	4-8-14	4-9-2

Scale = 1:40.7



0-10-8	8-7-1	16-1-15	23-10-8
0-10-8	7-8-9	7-6-13	7-8-9

Plate Offsets (X,Y)-- [1:0-1-13,0-0-7], [1:0-3-12,0-11-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.09	7-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.13	7-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.03	9	>999	240	Weight: 146 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 1=0-3-8, 6=0-3-8
Max Horz 1=-62(LC 8)
Max Uplift 1=-31(LC 12), 6=-45(LC 13)
Max Grav 1=1078(LC 2), 6=1039(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1584/369, 2-3=-1460/337, 3-4=-1162/340, 4-5=-1485/341, 5-6=-1623/374
BOT CHORD 1-9=-272/1334, 7-9=-150/1162, 6-7=-272/1381
WEBS 3-9=-2/405, 4-7=-10/441

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) 1-0-4 to 5-5-5, Interior(1) 5-5-5 to 10-4-8, Exterior(2E) 10-4-8 to 14-4-8, Exterior(2R) 14-4-8 to 20-7-3, Interior(1) 20-7-3 to 23-10-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) 1, 6.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 2,2025

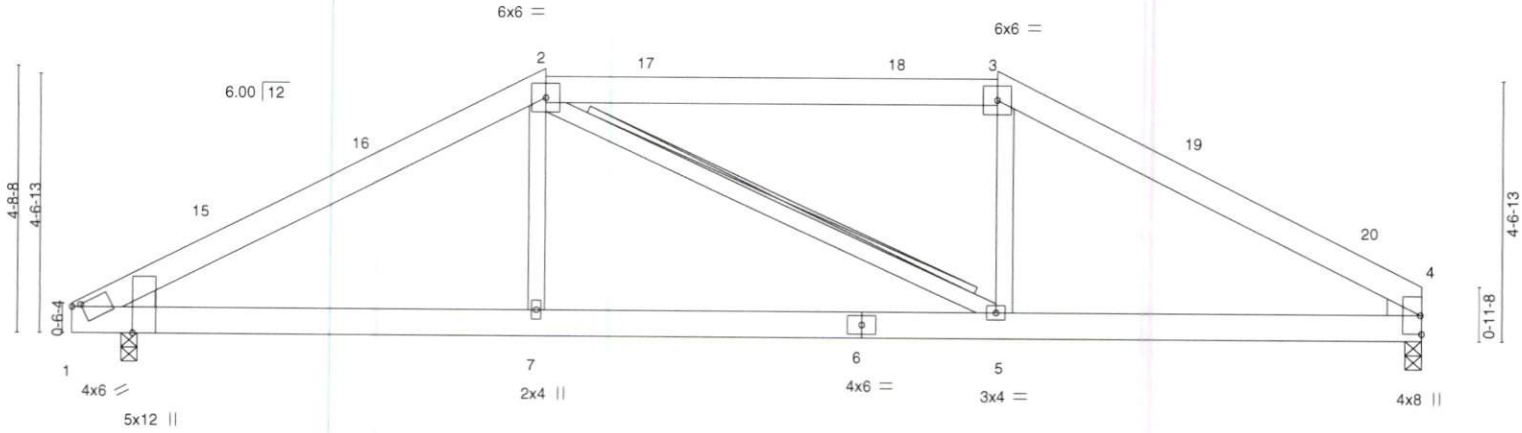
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472708
J0425-1814	C3	Hip	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:46 2025 Page 1
ID:3uc_web?qzKYDQhfz3?QKCyb7J2-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

8-4-8 | 16-4-8 | 23-10-8
8-4-8 | 8-0-0 | 7-6-0

Scale = 1:40.8



0-10-8 | 8-4-8 | 16-4-8 | 23-10-8
0-10-8 | 7-6-0 | 8-0-0 | 7-6-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.04	5-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.10	5-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.02	4	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.03	5-7	>999	240	Weight: 142 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 2-3.
BOT CHORD Rigid ceiling directly applied.
WEBS T-Brace: 2x4 SPF No.2 - 2-5
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. (size) 1=0-3-8, 4=0-3-8
Max Horz 1=-49(LC 8)
Max Uplift 1=-18(LC 12), 4=-32(LC 13)
Max Grav 1=935(LC 1), 4=914(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1388/339, 2-3=-1175/371, 3-4=-1409/343
BOT CHORD 1-7=-212/1157, 5-7=-215/1153, 4-5=-208/1180
WEBS 2-7=0/290, 3-5=0/296

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) 1-0-4 to 5-5-1, Interior(1) 5-5-1 to 8-4-8, Exterior(2R) 8-4-8 to 14-7-3, Interior(1) 14-7-3 to 16-4-8, Exterior(2R) 16-4-8 to 22-7-3, Interior(1) 22-7-3 to 23-10-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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, 4.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	C4GR	Hip Girder	1	2	Job Reference (optional)	I72472709

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:47 2025 Page 1
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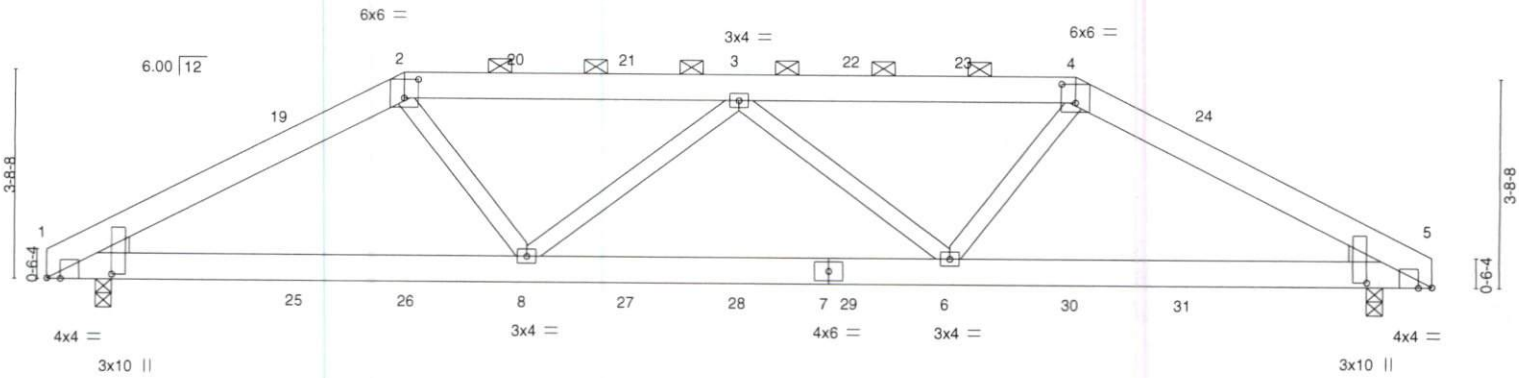
6-4-8	12-4-8	18-4-8	24-9-0
6-4-8	6-0-0	6-0-0	6-4-8

Scale = 1:41.2



0-10-8	8-7-1	16-1-15	23-10-8	24-9-0
0-10-8	7-8-9	7-6-13	7-8-9	0-10-8

Plate Offsets (X,Y)-- [1:0-0-14,1-1-15], [1:0-2-14,Edge], [2:0-3-0,0-4-0], [4:0-3-0,0-4-0], [5:0-2-14,Edge], [5:0-0-14,1-1-15]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.04	6-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.08	6-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-MS		Wind(LL)	0.03	8	>999	240	Weight: 293 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 2-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Horz 1=-42(LC 27)
Max Uplift 1=-222(LC 8), 5=-222(LC 9)
Max Grav 1=1718(LC 1), 5=1718(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2572/381, 2-3=-2709/358, 3-4=-2709/358, 4-5=-2572/381
BOT CHORD 1-8=-324/2218, 6-8=-486/3119, 5-6=-292/2218
WEBS 2-8=-16/889, 3-8=-573/243, 3-6=-573/243, 4-6=-16/889

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); cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
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) except (jt=lb) 1=222, 5=222.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 39 lb down and 35 lb up at 4-5-4, 102 lb down and 78 lb up at 6-4-8, 83 lb down and 78 lb up at 8-4-8, 83 lb down and 78 lb up at 10-4-8, 83 lb down and 78 lb up at 12-4-8, 83 lb down and 78 lb up at 14-4-8, 83 lb down and 78 lb up at 16-4-8, and 102 lb down and 78 lb up at 18-4-8, and 39 lb down and 35 lb up at 20-3-12 on top chord, and 266 lb down and 82 lb up at 4-5-4, 59 lb down at 6-5-4, 59 lb down at 8-4-8, 59 lb down at 10-4-8, 59 lb down at 12-4-8, 59 lb down at 14-4-8, 59 lb down at 16-4-8, and 59 lb down at 18-3-12, and 266 lb down and 82 lb up at 20-3-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Continued on page 2

LOAD CASE(S) Standard

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

April 2,2025

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: 1-2=-60, 2-4=-60, 4-5=-60, 9-14=-20
   Concentrated Loads (lb)
   Vert: 8=-49(B) 2=-83(B) 3=-83(B) 6=-49(B) 4=-83(B) 20=-83(B) 21=-83(B) 22=-83(B) 23=-83(B) 25=-266(B) 26=-49(B) 27=-49(B) 28=-49(B) 29=-49(B) 30=-49(B) 31=-266(B)

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472710
J0425-1814	D1GR	Hip Girder	1	2	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

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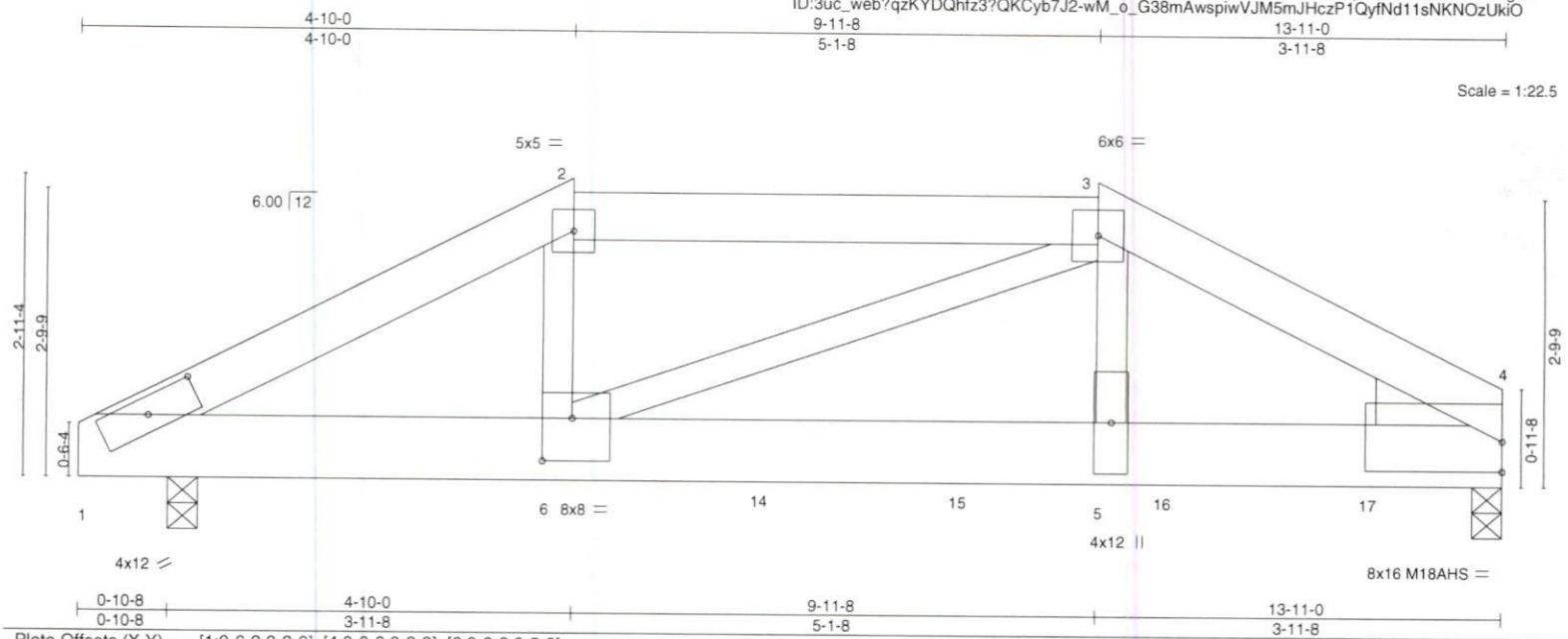

Plate Offsets (X,Y)-- [1:0-6-2,0-2-0], [4:0-0-0,0-3-9], [6:0-3-8,0-5-0]

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	0.49	Vert(LL)	-0.09	5-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.18	5-6	>908	240	M18AHS	186/179
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.54	Horz(CT)	0.03	4	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-MS		Wind(LL)	0.07	5-6	>999	240	Weight: 187 lb	FT = 25%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.2
WEDGE
Right: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-1 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 2-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8 (min. 0-1-8), 4=0-3-8 (min. 0-2-6)
Max Horz 1=-26(LC 4)
Max Uplift 1=-336(LC 8), 4=-418(LC 9)
Max Grav 1=3607(LC 1), 4=5798(LC 1)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-6924/713, 2-3=-5887/628, 3-4=-8786/766
BOT CHORD 1-6=-624/6075, 5-6=-630/7503, 4-5=-649/7783
WEBS 2-6=-282/3002, 3-6=-1821/79, 3-5=-312/4437

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: 2x8 - 2 rows staggered at 0-3-0 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); cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 336 lb uplift at joint 1 and 418 lb uplift at joint 4.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3214 lb down and 467 lb up at 6-9-0, 1714 lb down and 125 lb up at 8-8-4, and 1714 lb down and 100 lb up at 10-8-4, and 1928 lb down and 74 lb up at 12-8-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

April 2,2025

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: 2-9=-60, 2-3=-60, 3-4=-60, 1-11=-20

Concentrated Loads (lb)

Vert: 14=-3214(B) 15=-1714(B) 16=-1714(B) 17=-1714(B)

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	D2GR	Hip Girder	1	2	Job Reference (optional)	I72472711

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:49 2025 Page 1
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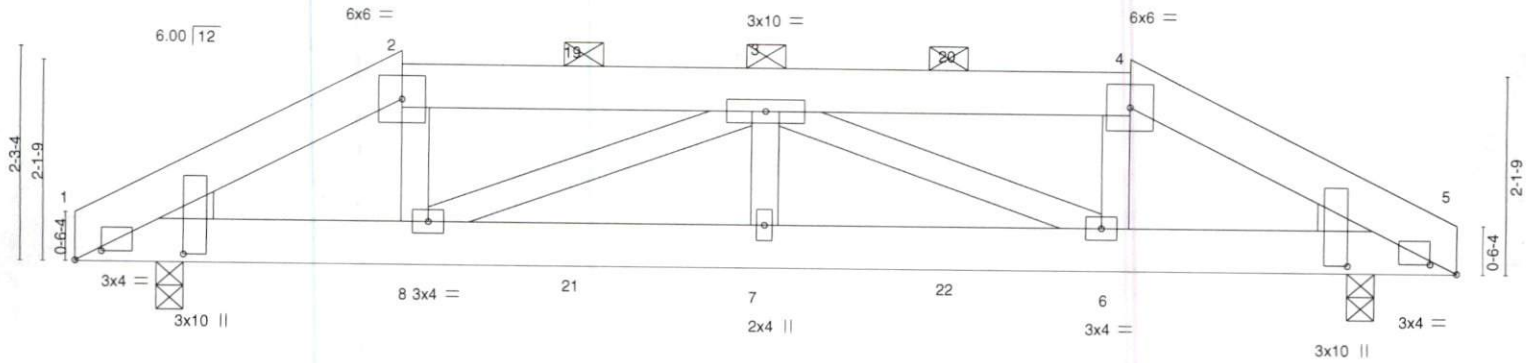


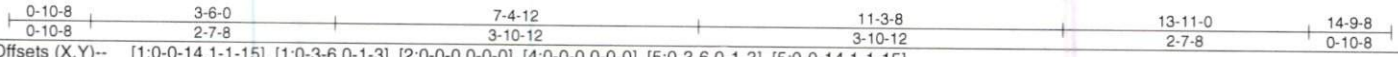


Plate Offsets (X,Y)-- [1:0-0-14,1-1-15], [1:0-3-6,0-1-3], [2:0-0-0,0-0-0], [4:0-0-0,0-0-0], [5:0-3-6,0-1-3], [5:0-0-14,1-1-15]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.01	7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.02	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.04	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-MS		Wind(LL)	0.01	7	>999	240	Weight: 180 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 2-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

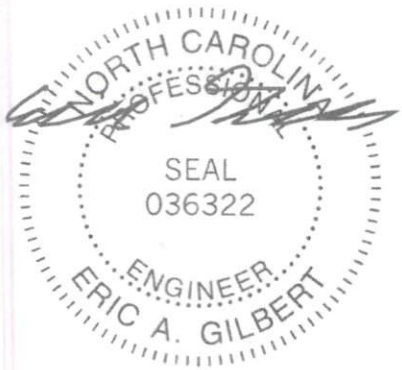
REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Horz 1=22(LC 26)
Max Uplift 1=-127(LC 8), 5=-127(LC 9)
Max Grav 1=683(LC 1), 5=683(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-876/216, 2-3=-771/201, 3-4=-771/201, 4-5=-876/216
BOT CHORD 1-8=-180/748, 7-8=-256/1197, 6-7=-256/1197, 5-6=-164/748
WEBS 2-8=-40/252, 3-8=-484/98, 3-6=-484/97, 4-6=-40/252

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 0-8-0 oc, Except member 8-3 2x4 - 1 row at 0-9-0 oc, member 6-3 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); cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
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) except (jt=lb) 1=127, 5=127.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 26 lb down and 37 lb up at 3-6-0, 26 lb down and 37 lb up at 5-4-12, 26 lb down and 37 lb up at 7-4-12, and 26 lb down and 37 lb up at 9-4-12, and 26 lb down and 37 lb up at 11-3-8 on top chord, and 71 lb down and 69 lb up at 3-6-0, 13 lb down at 5-4-12, 13 lb down at 7-4-12, and 13 lb down at 9-4-12, and 71 lb down and 69 lb up at 11-2-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

Continued on page 2



April 2,2025

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: 1-2=-60, 2-4=-60, 4-5=-60, 9-14=-20
   Concentrated Loads (lb)
   Vert: 2=-2(F) 4=-2(F) 8=-71(F) 7=-10(F) 6=-71(F) 3=-2(F) 19=-2(F) 20=-2(F) 21=-10(F) 22=-10(F)

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472712
J0425-1814	E1	Common	3	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:49 2025 Page 1
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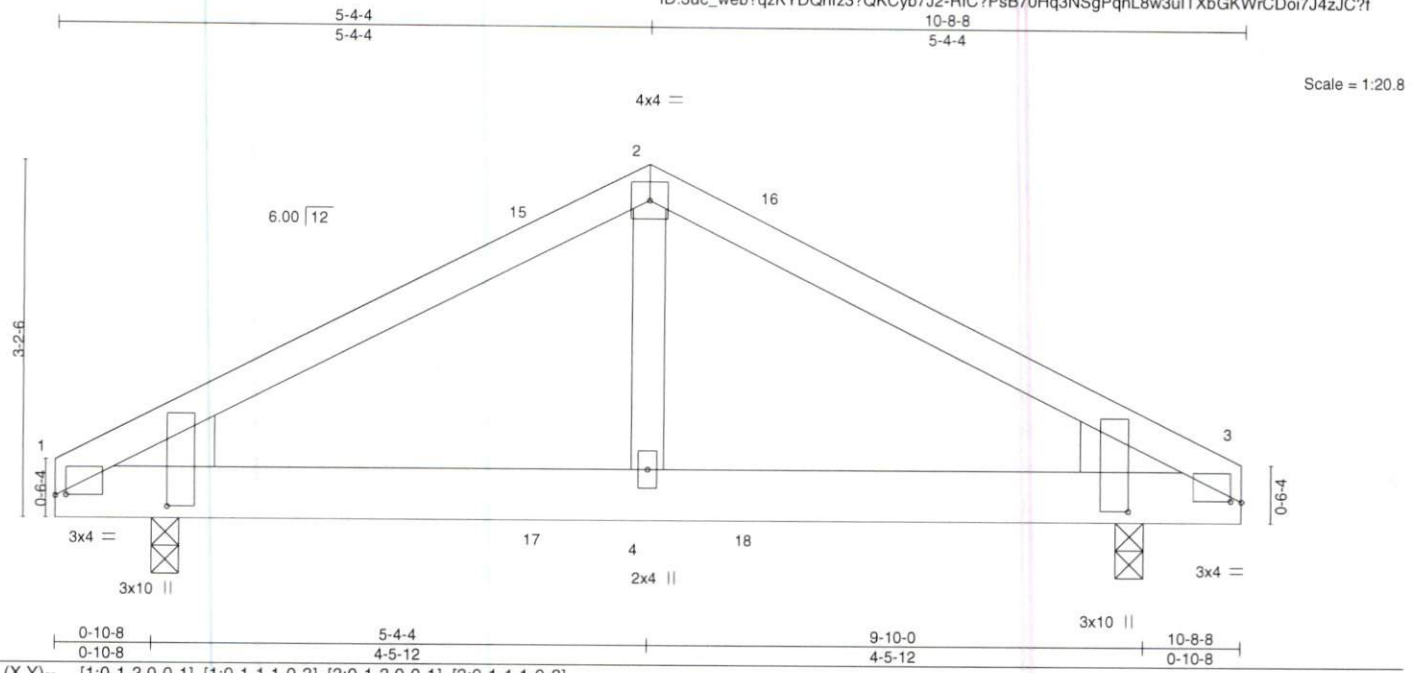

Plate Offsets (X,Y)-- [1:0-1-3,0-0-1], [1:0-1-1,1-0-3], [3:0-1-3,0-0-1], [3:0-1-1,1-0-3]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.00	4-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.01	4-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.01	4-9	>999	240	Weight: 51 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 1=0-3-0, 3=0-3-0
Max Horz 1=-35(LC 8)
Max Uplift 1=-97(LC 9), 3=-97(LC 8)
Max Grav 1=428(LC 1), 3=428(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-390/645, 2-3=-390/645
BOT CHORD 1-4=-457/299, 3-4=-457/299
WEBS 2-4=-344/153

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) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 5-4-4, Exterior(2R) 5-4-4 to 9-10-0, Interior(1) 9-10-0 to 10-8-8 zone; cantilever left and right exposed ; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472713
J0425-1814	E1GE	GABLE	1	1	Job Reference (optional)	

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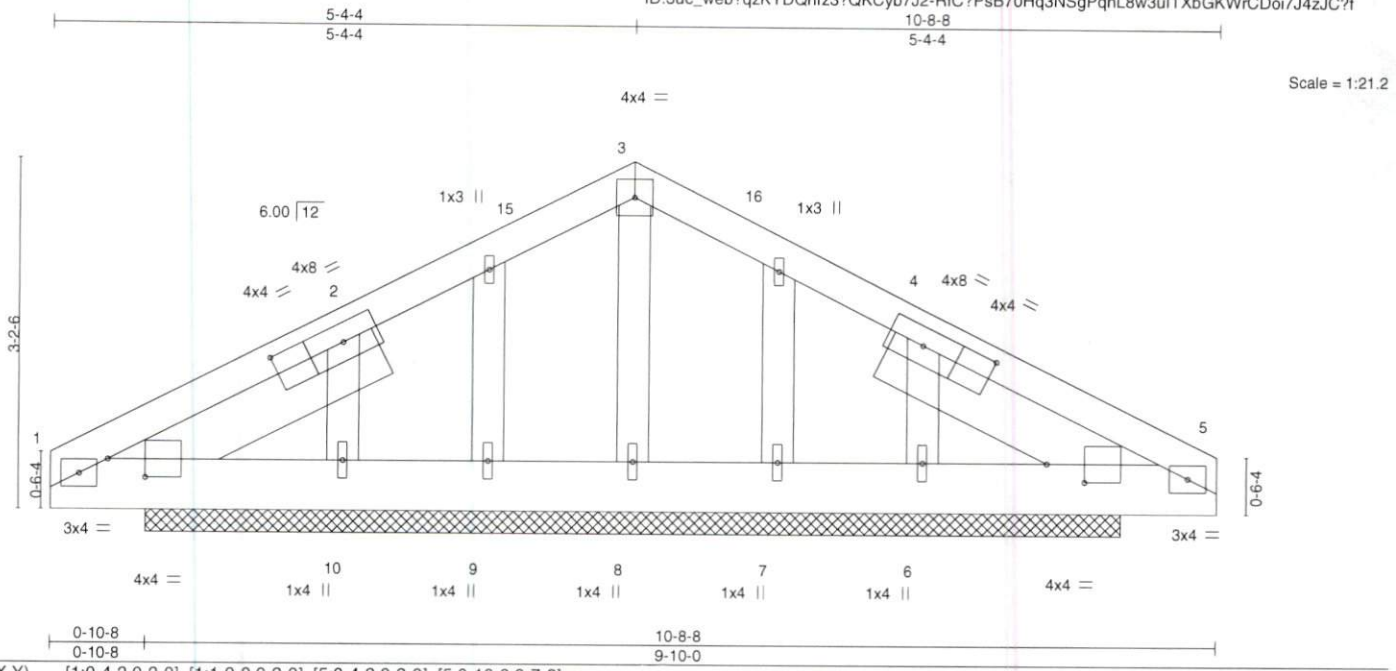

Plate Offsets (X,Y)-- [1:0-4-2,0-2-0], [1:1-9-0,0-2-0], [5:0-4-2,0-2-0], [5:0-10-0,0-7-8]

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	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 68 lb	FT = 25%

LUMBER-

TOP CHORD	2x4 SP No.1
BOT CHORD	2x6 SP No.1
OTHERS	2x4 SP No.2
SLIDER	Left 2x6 SP No.1 2-8-6, Right 2x6 SP No.1 2-8-6

BRACING-

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

REACTIONS. All bearings 8-11-8.
(lb) - Max Horz 1=-57(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 9, 10, 7, 6
Max Grav All reactions 250 lb or less at joint(s) 8, 9, 10, 7, 6 except 1=286(LC 1), 5=286(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-407/377, 3-5=-407/377
BOT CHORD 1-10=-205/289, 9-10=-205/289, 8-9=-205/289, 7-8=-205/289, 6-7=-205/289, 5-6=-205/289

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) 0-0-0 to 4-4-13, Exterior(2N) 4-4-13 to 5-4-4, Corner(3R) 5-4-4 to 9-9-1, Exterior(2N) 9-9-1 to 10-8-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable studs spaced at 1-4-0 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) 1, 5, 9, 10, 7, 6.
8) Non Standard bearing condition. Review required.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	QH1	GABLE	1	1	Job Reference (optional)	I72472714

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:51 2025 Page 1

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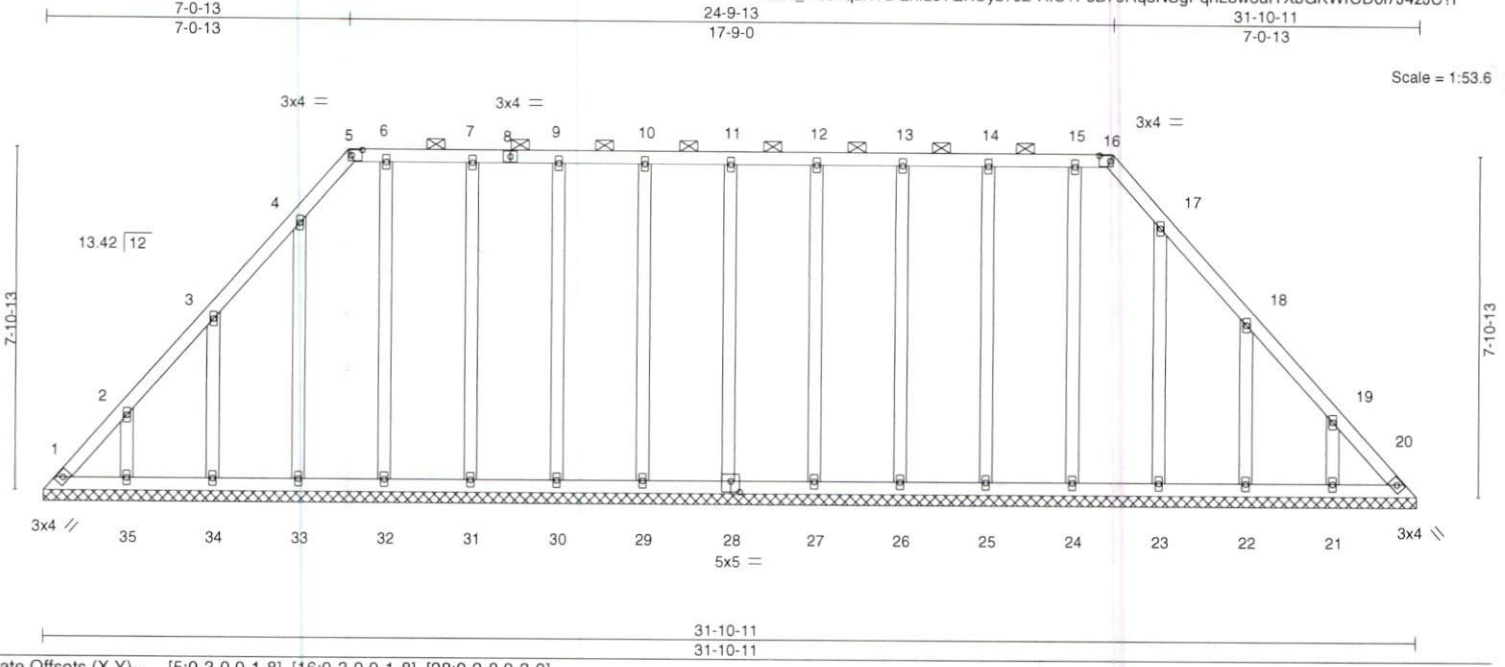

Plate Offsets (X,Y)-- [5:0-3-0,0-1-8], [16:0-3-0,0-1-8], [28:0-2-8,0-3-0]

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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	20	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 236 lb	FT = 25%

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, except 2-0-0 oc purlins (6-0-0 max.): 5-16.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 31-10-11.

(lb) - Max Horz 1=-188(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 20, 28, 29, 30, 31, 32, 33, 35, 27, 26, 25, 23, 21 except 34=-109(LC 12), 22=-111(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 20, 28, 29, 30, 31, 32, 33, 34, 35, 27, 26, 25, 24, 23, 22, 21

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 7-16; 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) 0-3-15 to 4-8-11, Interior(1) 4-8-11 to 7-1-10, Exterior(2R) 7-1-10 to 13-4-5, Interior(1) 13-4-5 to 24-9-1, Exterior(2R) 24-9-1 to 30-11-11, Interior(1) 30-11-11 to 31-6-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
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) 1, 20, 28, 29, 30, 31, 32, 33, 35, 27, 26, 25, 23, 21 except (jt=lb) 34=109, 22=111.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.
J0425-1814	QH2	GABLE	1	1	I72472715
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

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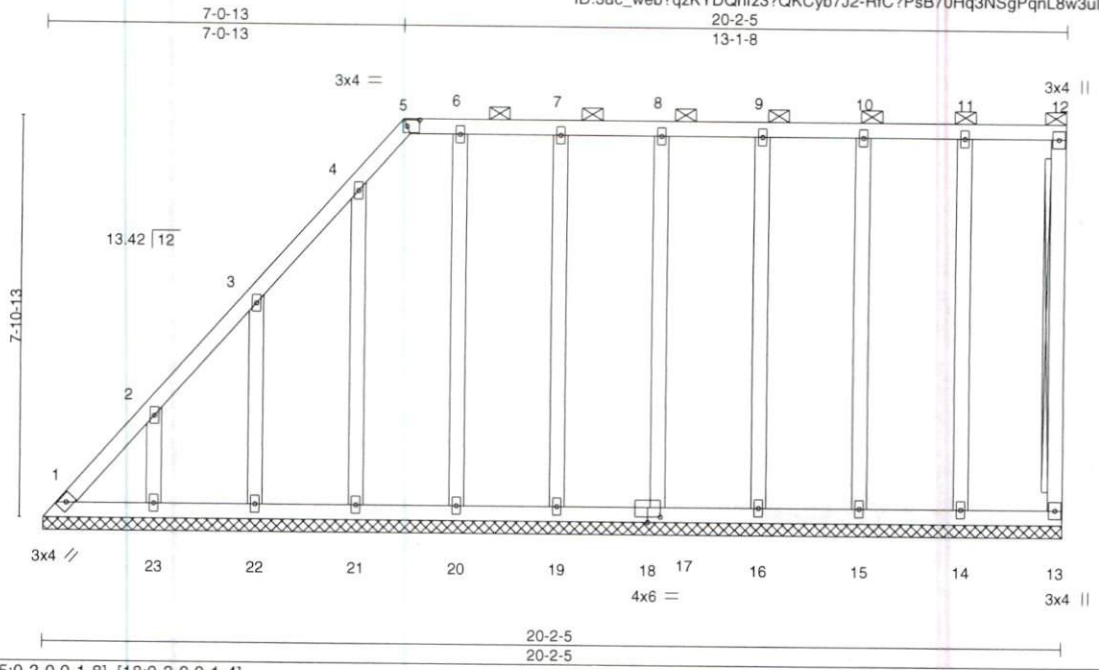

Plate Offsets (X,Y)-- [5:0-3-0,0-1-8], [18:0-3-0,0-1-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	13	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 159 lb	FT = 25%

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, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-12.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	T-Brace: 2x4 SPF No.2 - 12-13 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. All bearings 20-2-5.
(lb) - Max Horz 1=248(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 13, 14, 15, 16, 17, 19, 20, 21, 22 except 23=-106(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-413/385, 2-3=-275/256

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) 0-3-15 to 4-8-11, Interior(1) 4-8-11 to 7-1-10, Exterior(2R) 7-1-10 to 13-4-5, Interior(1) 13-4-5 to 20-0-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
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) 1, 13, 14, 15, 16, 17, 19, 20, 21, 22 except (jt=lb) 23=106.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	QH3	GABLE	2	1	Job Reference (optional)	I72472716

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:52 2025 Page 1
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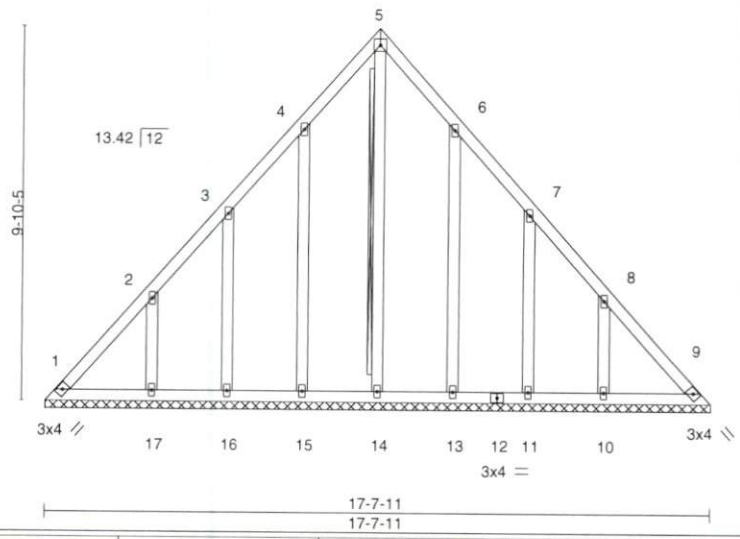
8-9-13 / 8-9-13 | 17-7-11 / 8-9-13

4x4 =

Scale = 1:61.1



17-7-11 / 17-7-11

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)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 121 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS T-Brace: 2x4 SPF No.2 - 5-14
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance.
Brace must cover 90% of web length.

REACTIONS. All bearings 17-7-11.
(lb) - Max Horz 1=-235(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 15, 16, 13, 11 except 17=-129(LC 12), 10=-129(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 14, 15, 16, 13, 11 except 17=254(LC 19), 10=254(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-263/236, 8-9=-263/236
WEBS 2-17=-261/200, 8-10=-261/200

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) 0-3-15 to 4-9-13, Interior(1) 4-9-13 to 8-9-13, Exterior(2R) 8-9-13 to 13-2-10, Interior(1) 13-2-10 to 17-3-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
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) 1, 9, 15, 16, 13, 11 except (jt=lb) 17=129, 10=129.
8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	QH4	GABLE	1	1	Job Reference (optional)	I72472717

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:52 2025 Page 1
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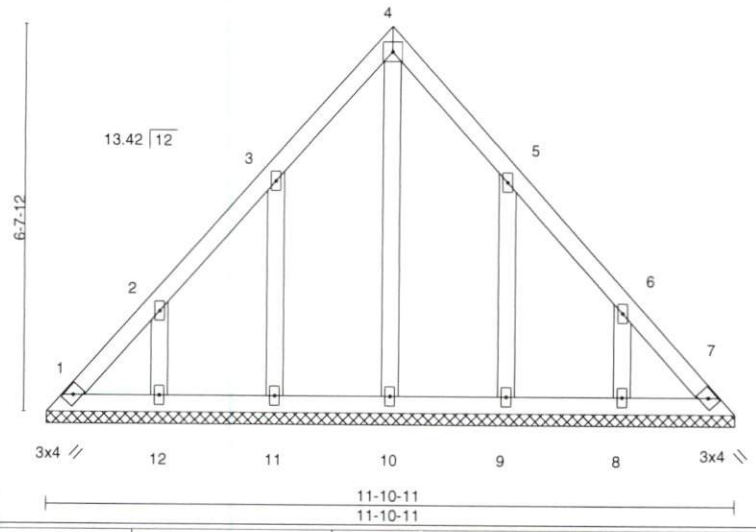
5-11-5 / 5-11-5 — 11-10-11 / 5-11-5

4x4 =

Scale = 1:39.8



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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 68 lb	FT = 25%

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

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

REACTIONS. All bearings 11-10-11.
(lb) - Max Horz 1=-155(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 12, 8 except 11=-102(LC 12), 9=-102(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 12, 9, 8

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; 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) 0-3-15 to 4-8-11, Interior(1) 4-8-11 to 5-11-5, Exterior(2R) 5-11-5 to 10-4-2, Interior(1) 10-4-2 to 11-6-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
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) 1, 7, 12, 8 except (jt=lb) 11=102, 9=102.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472718
J0425-1814	QH5	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:53 2025 Page 1
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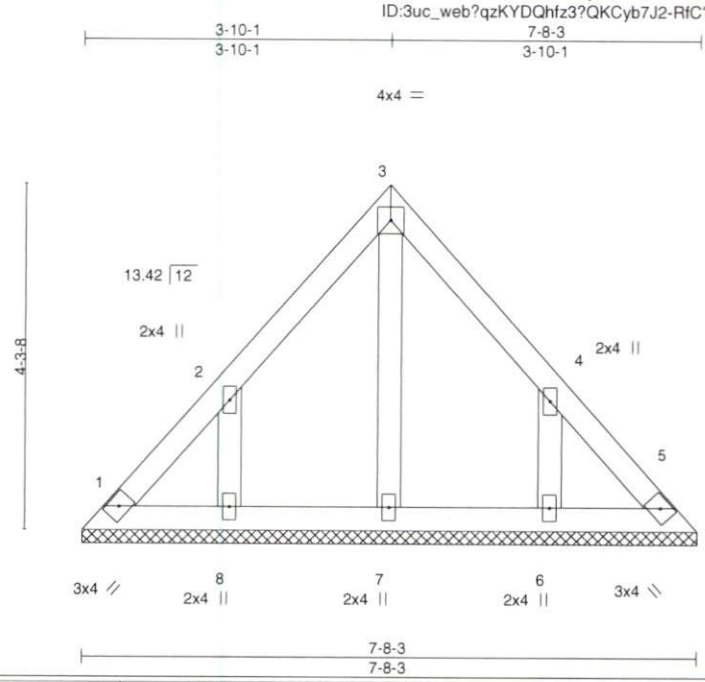

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-P							Weight: 37 lb	FT = 25%

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

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

REACTIONS. All bearings 7-8-3.
(lb) - Max Horz 1=97(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-111(LC 12), 6=-111(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-253/201, 4-6=-253/201

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) 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, 5 except (jt=lb) 8=111, 6=111.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	V1GE	Valley	1	1	Job Reference (optional)	I72472719

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:54 2025 Page 1
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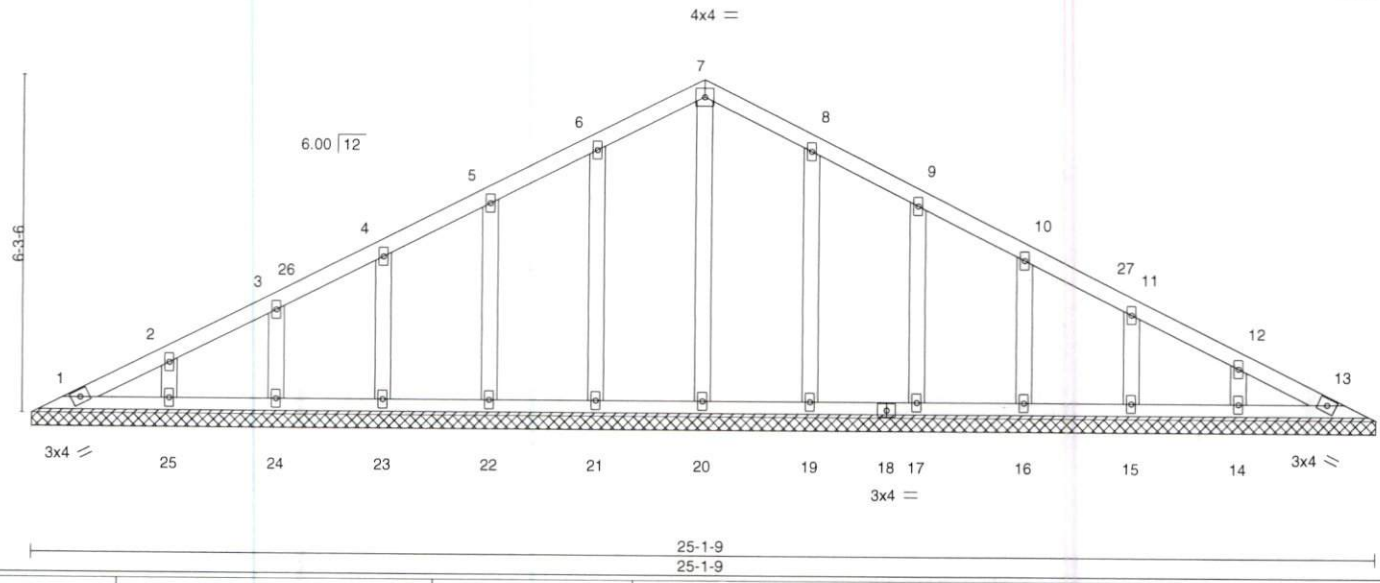
12-6-12 / 12-6-12 | 25-1-9 / 12-6-12

Scale = 1:43.1



25-1-9 / 25-1-9

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	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	13	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 126 lb	FT = 25%

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

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

REACTIONS. All bearings 25-1-9.
(lb) - Max Horz 1=-121(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 1, 21, 22, 23, 24, 25, 19, 17, 16, 15, 14
Max Grav All reactions 250 lb or less at joint(s) 1, 13, 20, 21, 22, 23, 24, 25, 19, 17, 16, 15, 14

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 7-16; 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) 0-7-7 to 5-0-3, Exterior(2N) 5-0-3 to 12-6-12, Corner(3R) 12-6-12 to 16-11-9, Exterior(2N) 16-11-9 to 24-6-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 21, 22, 23, 24, 25, 19, 17, 16, 15, 14.

April 2,2025

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TRENCO
A MiTek Affiliate
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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	V2	Valley	1	1	Job Reference (optional)	I72472720

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:54 2025 Page 1
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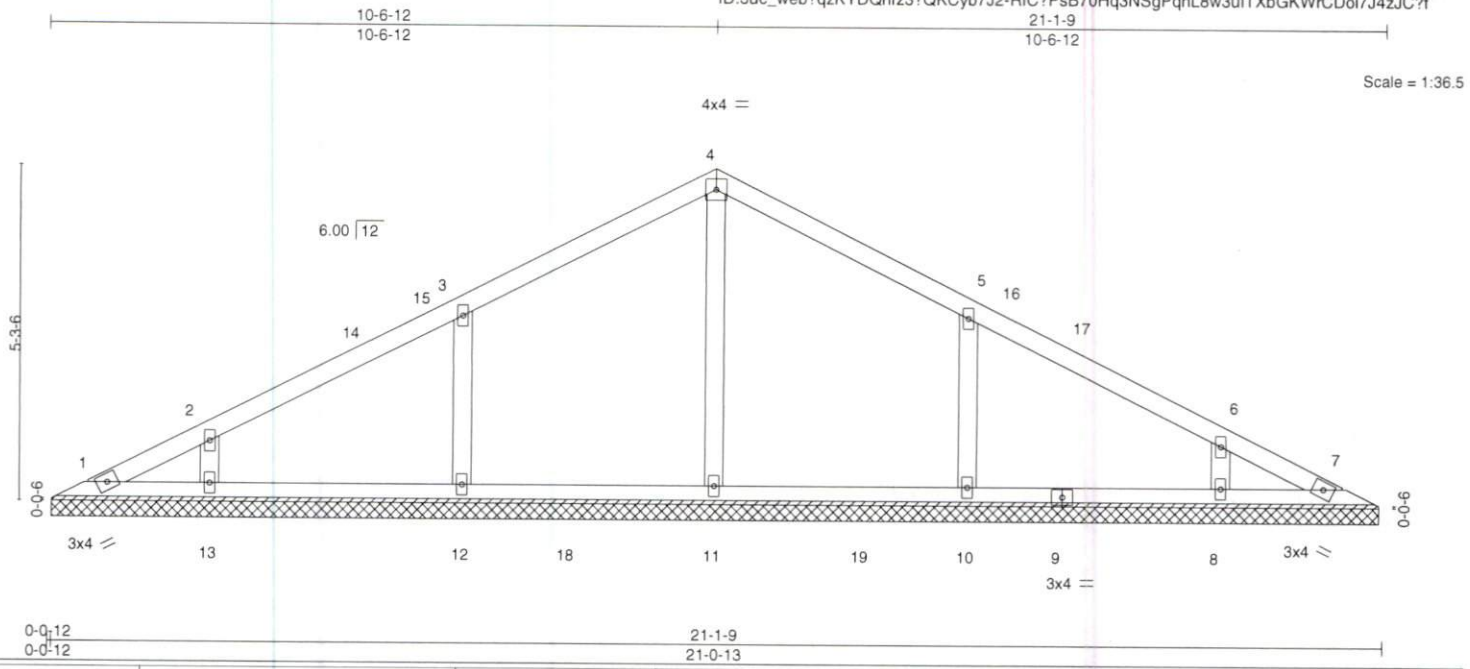

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 81 lb	FT = 25%

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

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

REACTIONS. All bearings 21-0-1.
(lb) - Max Horz 1=-65(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 13, 10, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=416(LC 19), 12=394(LC 19), 13=289(LC 19), 10=394(LC 20), 8=288(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-12=-268/215, 5-10=-268/215

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) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 10-6-12, Exterior(2R) 10-6-12 to 14-11-9, Interior(1) 14-11-9 to 20-5-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 12, 13, 10, 8.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472721
J0425-1814	V3	Valley	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:55 2025 Page 1
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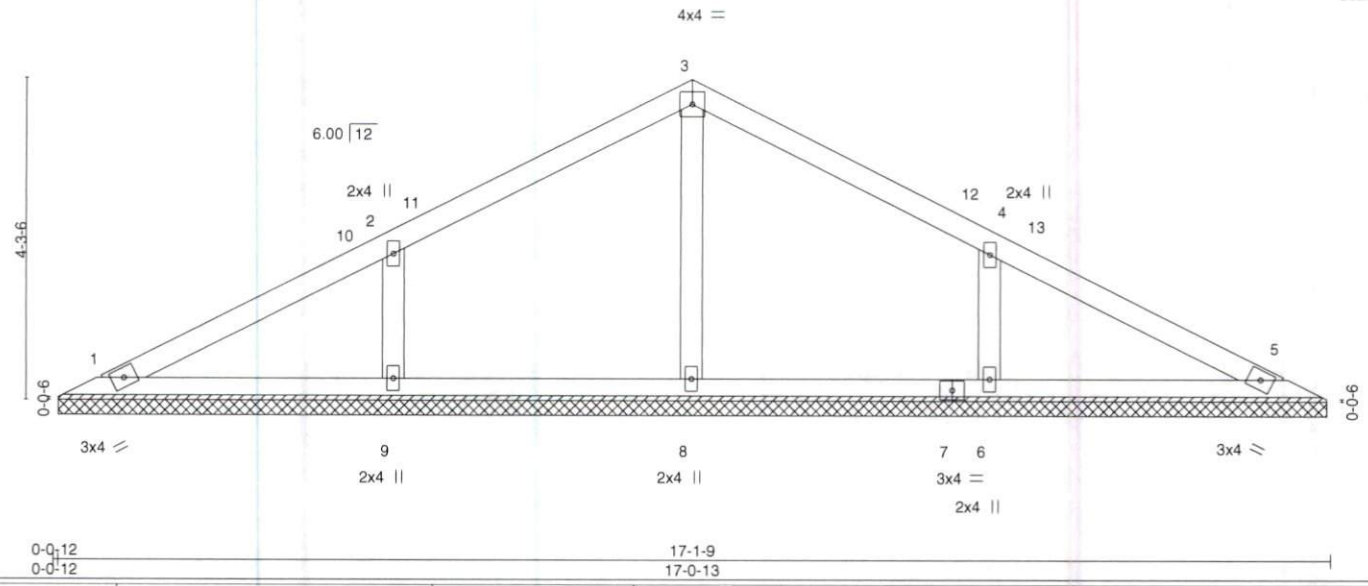
8-6-12 / 8-6-12 | 17-1-9 / 8-6-12

Scale = 1:30.9



0-0-12 / 0-0-12 | 17-1-9 / 17-0-13

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 62 lb	FT = 25%

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

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

REACTIONS. All bearings 17-0-1.
(lb) - Max Horz 1=-52(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 9, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=257(LC 1), 9=377(LC 25), 6=377(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-282/258, 4-6=-282/258

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) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 8-6-12, Exterior(2R) 8-6-12 to 12-11-9, Interior(1) 12-11-9 to 16-5-11 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, 5, 9, 6.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472722
J0425-1814	V4	Valley	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:55 2025 Page 1
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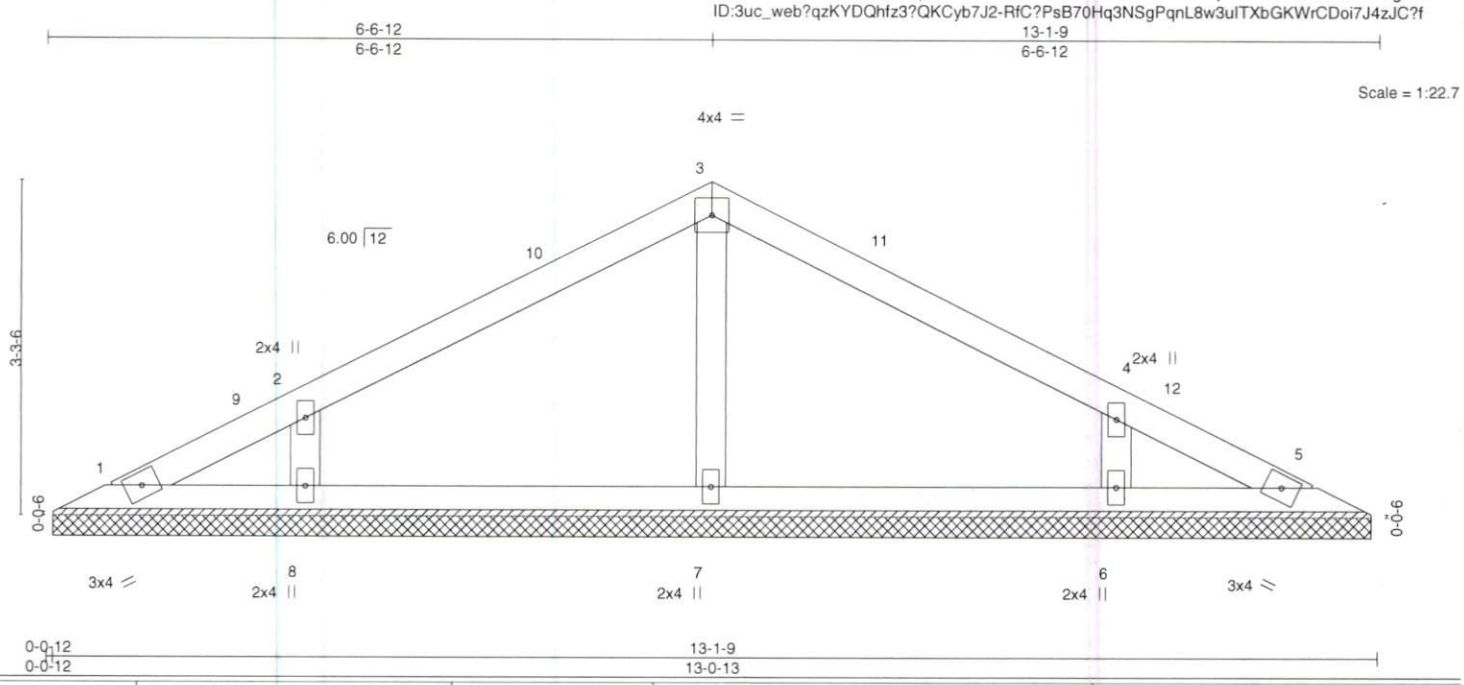

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 45 lb	FT = 25%

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

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

REACTIONS. All bearings 13-0-1.
(lb) - Max Horz 1=-39(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=286(LC 1), 8=297(LC 25), 6=297(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-233/269, 4-6=-233/269

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) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 6-6-12, Exterior(2R) 6-6-12 to 10-11-9, Interior(1) 10-11-9 to 12-5-11 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, 8, 6.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.
J0425-1814	V5	Valley	1	1	I72472723
					Job Reference (optional)

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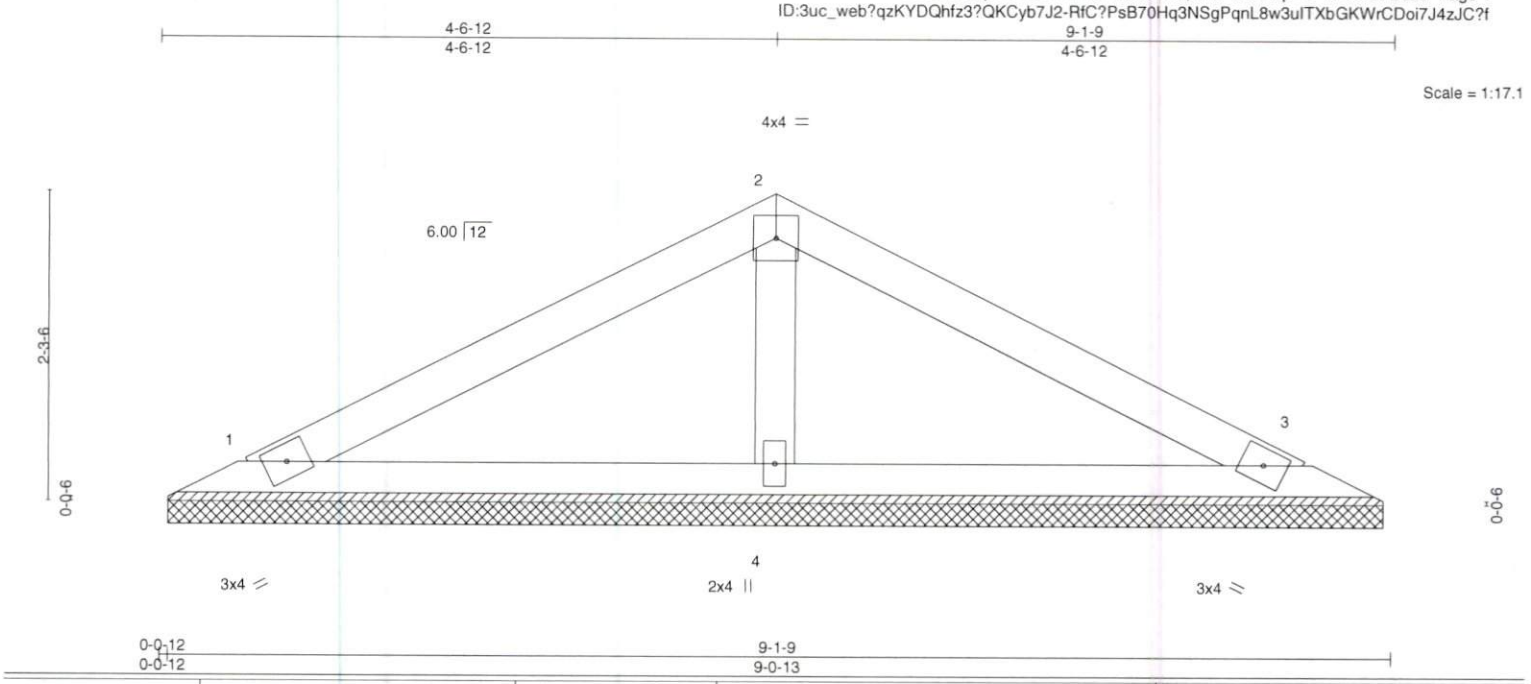


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 29 lb	FT = 25%

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

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

REACTIONS. (size) 1=9-0-1, 3=9-0-1, 4=9-0-1
Max Horz 1=-26(LC 8)
Max Uplift 1=-19(LC 12), 3=-24(LC 13)
Max Grav 1=145(LC 25), 3=145(LC 26), 4=339(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 7-16; 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) zone; cantilever left and right exposed ;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.

April 2,2025

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

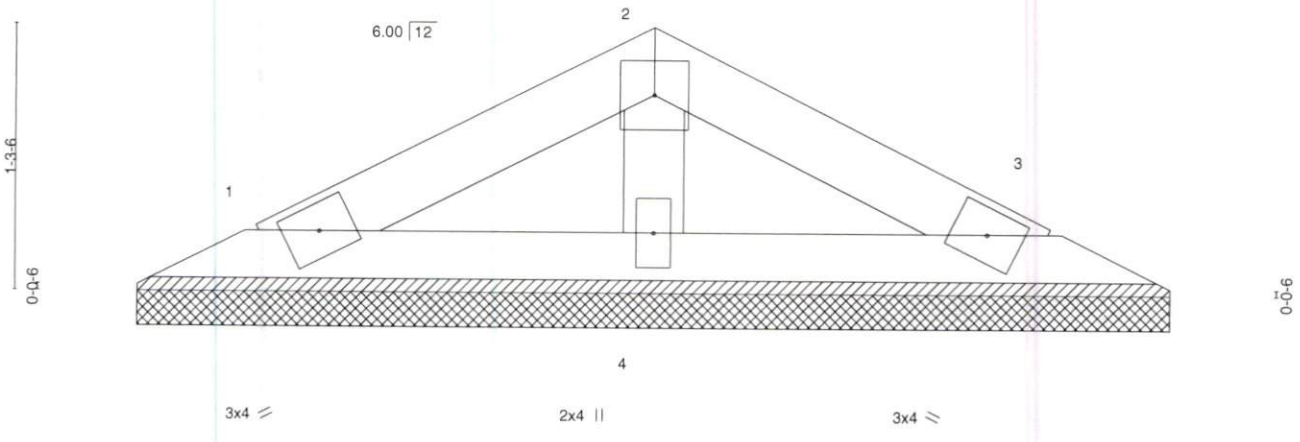
Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472724
J0425-1814	V6	Valley	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:56 2025 Page 1
ID:3uc_web?qzKYDQhfz3?QKCyb7J2-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

2-6-12 / 2-6-12 — 5-1-9 / 2-6-12

Scale = 1:11.2



0-0-12 / 0-0-12 — 5-1-9 / 5-0-13

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)	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	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-P							Weight: 15 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-0-1, 3=5-0-1, 4=5-0-1
Max Horz 1=-13(LC 8)
Max Uplift 1=-12(LC 12), 3=-15(LC 13)
Max Grav 1=78(LC 1), 3=78(LC 1), 4=150(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 7-16; 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) zone; cantilever left and right exposed ;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.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472725
J0425-1814	VA1	Valley	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:56 2025 Page 1
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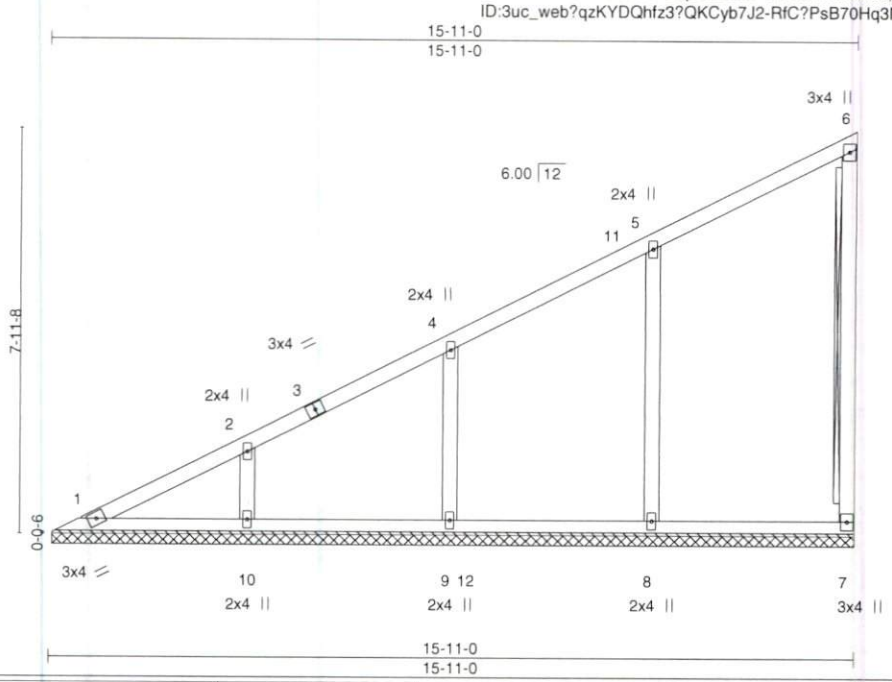


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 75 lb	FT = 25%

LUMBER-

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

BRACING-

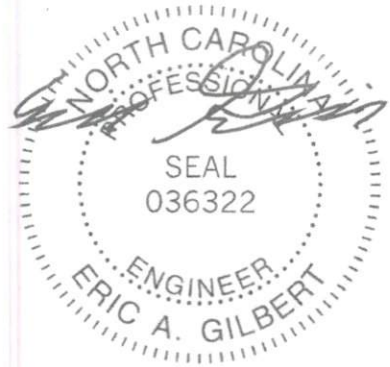
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	T-Brace: 2x4 SPF No.2 - 6-7 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance.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

REACTIONS. All bearings 15-10-4.
(lb) - Max Horz 1=247(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 7, 8, 9, 10
Max Grav All reactions 250 lb or less at joint(s) 7, 1 except 8=517(LC 19), 9=392(LC 19), 10=350(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-400/164, 2-4=-294/121
WEBS 5-8=-259/235

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) and C-C Exterior(2E) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 15-9-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 8, 9, 10.
6) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



April 2,2025

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TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.
J0425-1814	VA2	Valley	1	1	I72472726
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:57 2025 Page 1
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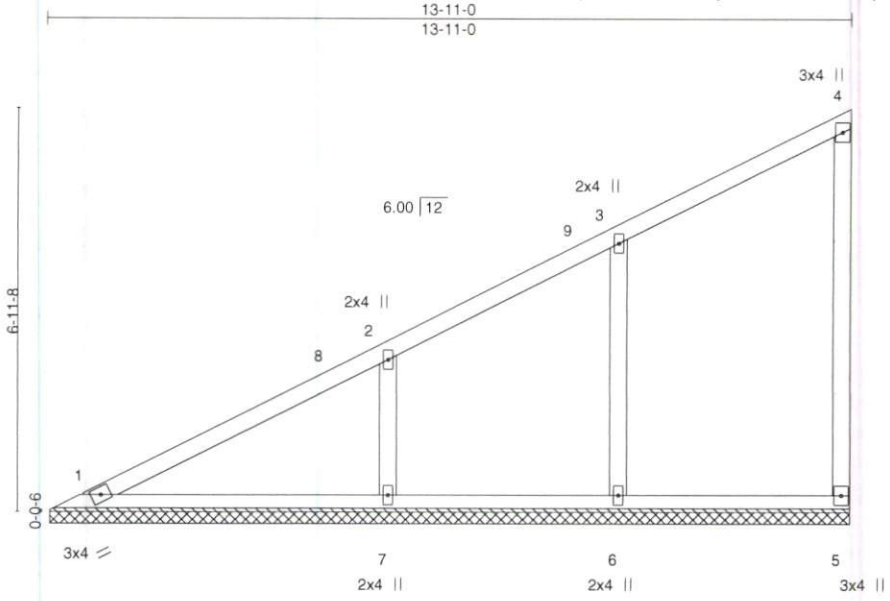

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 62 lb	FT = 25%

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, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 13-10-4.
(lb) - Max Horz 1=214(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 5, 6, 7
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=405(LC 19), 7=471(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-338/151
WEBS 2-7=-317/294

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) and C-C Exterior(2E) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 13-9-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6, 7.

April 2,2025

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	VA3	Valley	1	1	Job Reference (optional)	I72472727

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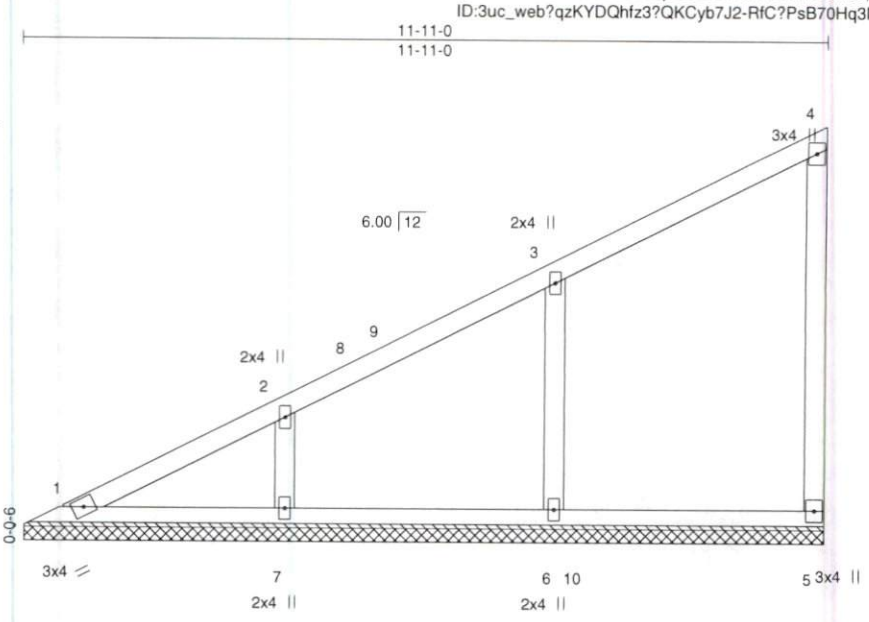

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 51 lb	FT = 25%

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, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 11-10-4.
(lb) - Max Horz 1=182(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 5, 6, 7
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=439(LC 19), 7=338(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-310/140
WEBS 3-6=-260/283

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) and C-C Exterior(2E) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 11-9-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6, 7.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	VA4	Valley	1	1	Job Reference (optional)	I72472728

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:58 2025 Page 1
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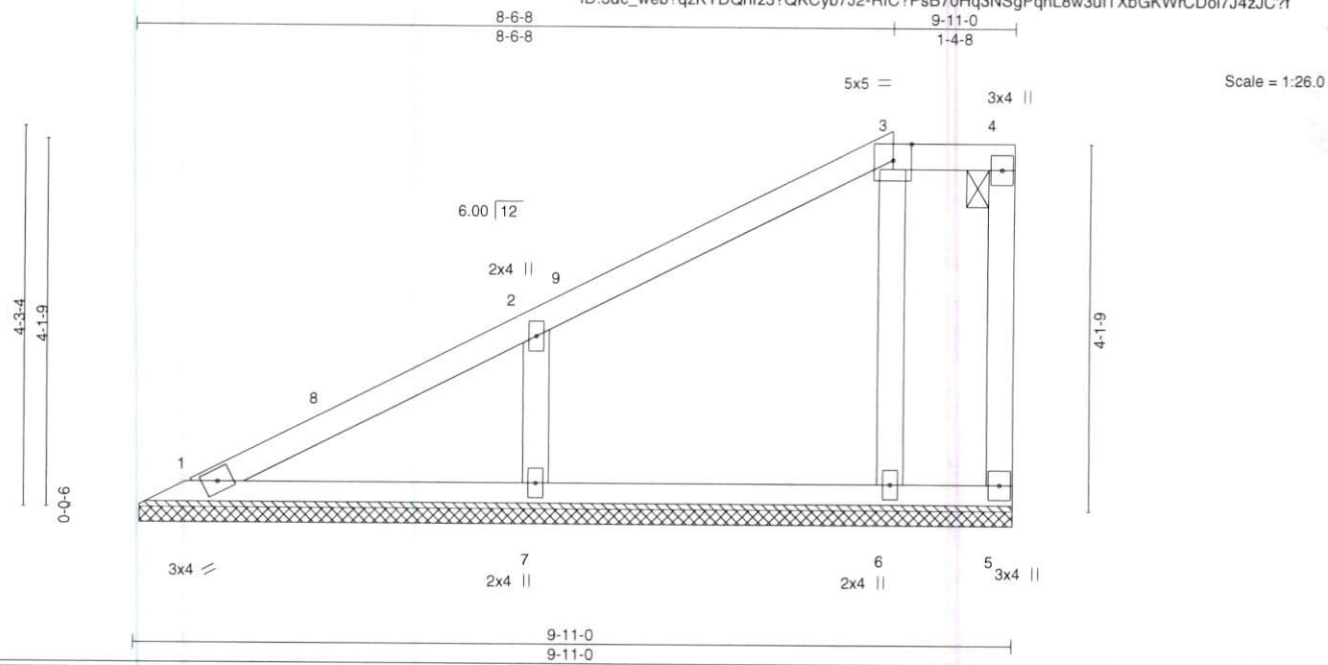


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 43 lb	FT = 25%

LUMBER-

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

BRACING-

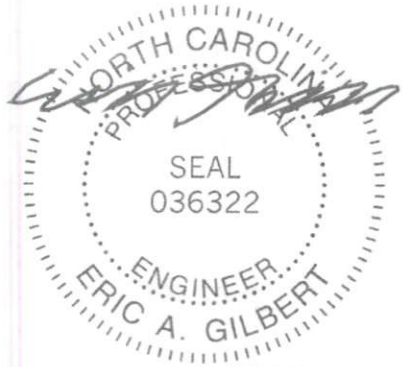
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 9-10-4.
(lb) - Max Horz 1=126(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 5, 6, 7
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 7=377(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-7=-279/319

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) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 8-6-8, Exterior(2E) 8-6-8 to 9-9-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) Gable requires continuous bottom chord bearing.
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, 6, 7.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 2,2025

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TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.
J0425-1814	VA5	Valley	1	1	I72472729
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:58 2025 Page 1
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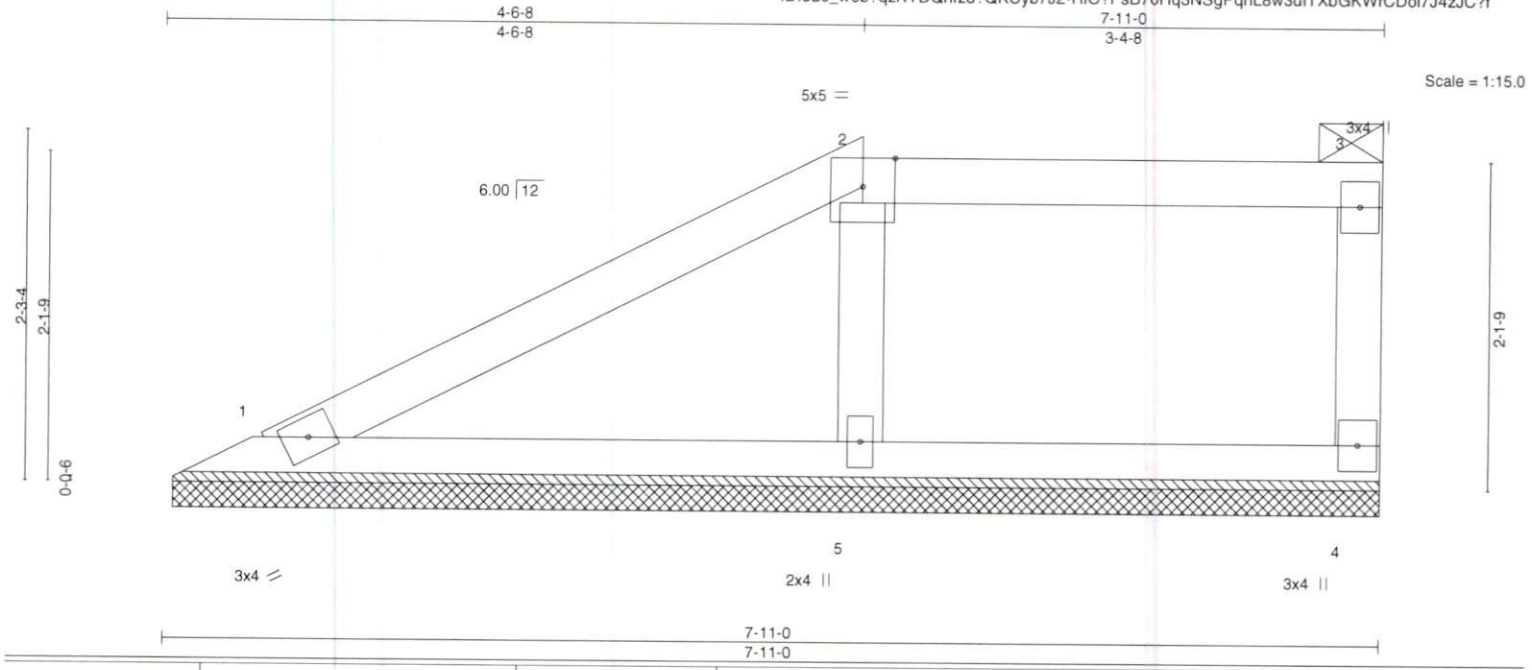

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 28 lb	FT = 25%

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 7-11-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 2-3.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=7-10-4, 4=7-10-4, 5=7-10-4
Max Horz 1=61(LC 12)
Max Uplift 1=-7(LC 12), 4=-20(LC 8), 5=-15(LC 12)
Max Grav 1=147(LC 1), 4=119(LC 1), 5=303(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 7-16; 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) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) Gable requires continuous bottom chord bearing.
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) 1, 4, 5.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 2,2025

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	VB1	Valley	1	1	Job Reference (optional)	I72472730

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:58 2025 Page 1
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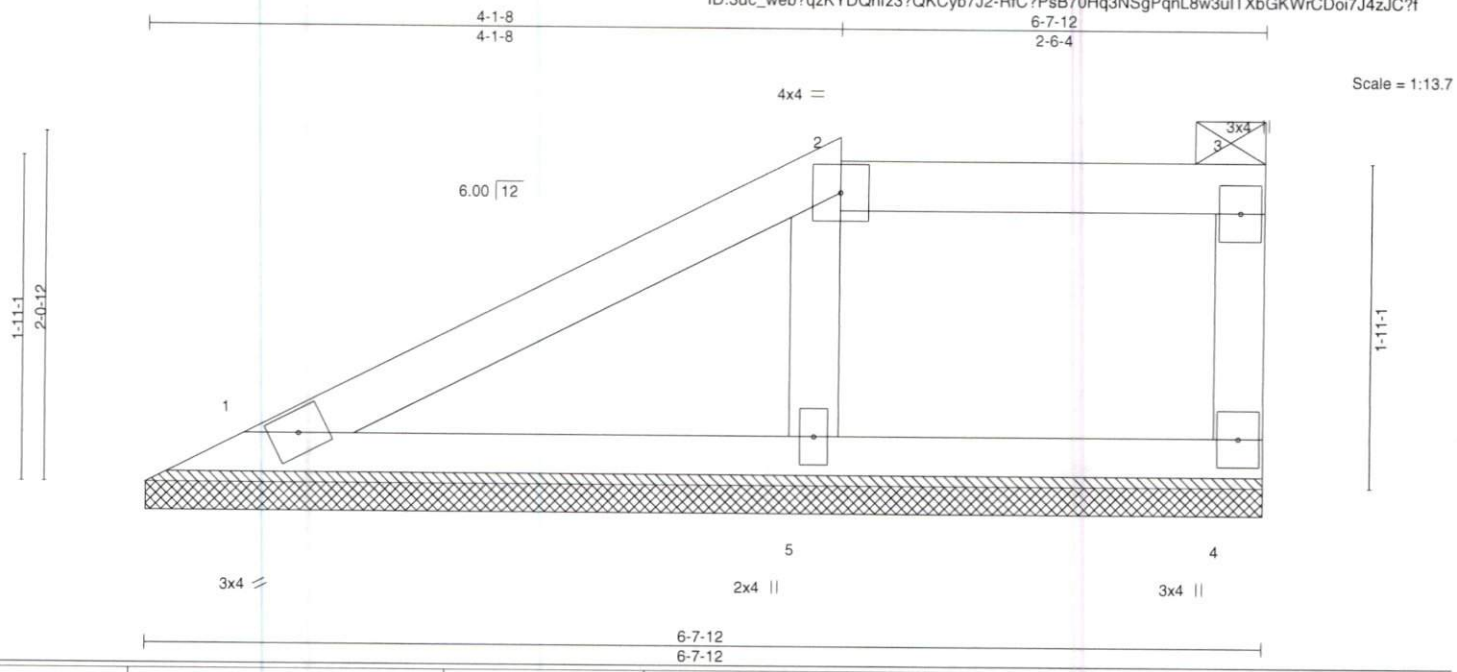

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-P							Weight: 24 lb	FT = 25%

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 6-7-12 oc purlins, except end verticals, and 2-0-0 oc purlins: 2-3.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 1=6-7-12, 4=6-7-12, 5=6-7-12
Max Horz 1=54(LC 12)
Max Uplift 1=-5(LC 12), 4=-15(LC 8), 5=-17(LC 12)
Max Grav 1=124(LC 1), 4=87(LC 1), 5=259(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 7-16; 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) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) Gable requires continuous bottom chord bearing.
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) 1, 4, 5.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472731
J0425-1814	VB2	Valley	1	1	Job Reference (optional)	

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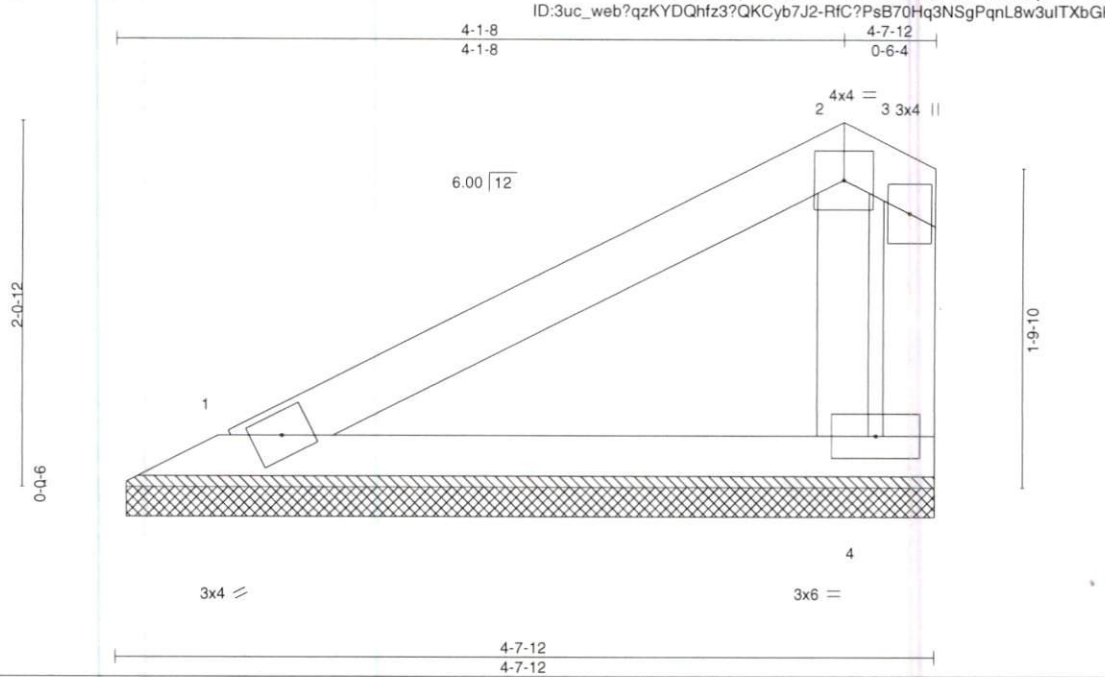

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-P							Weight: 18 lb	FT = 25%

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 4-7-12 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-7-0, 4=4-7-0
Max Horz 1=53(LC 12)
Max Uplift 1=-4(LC 12), 4=-27(LC 12)
Max Grav 1=146(LC 1), 4=158(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 7-16; 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) zone; cantilever left and right exposed ;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, 4.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.
J0425-1814	VB3	Valley	1	1	I72472732
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:02:59 2025 Page 1
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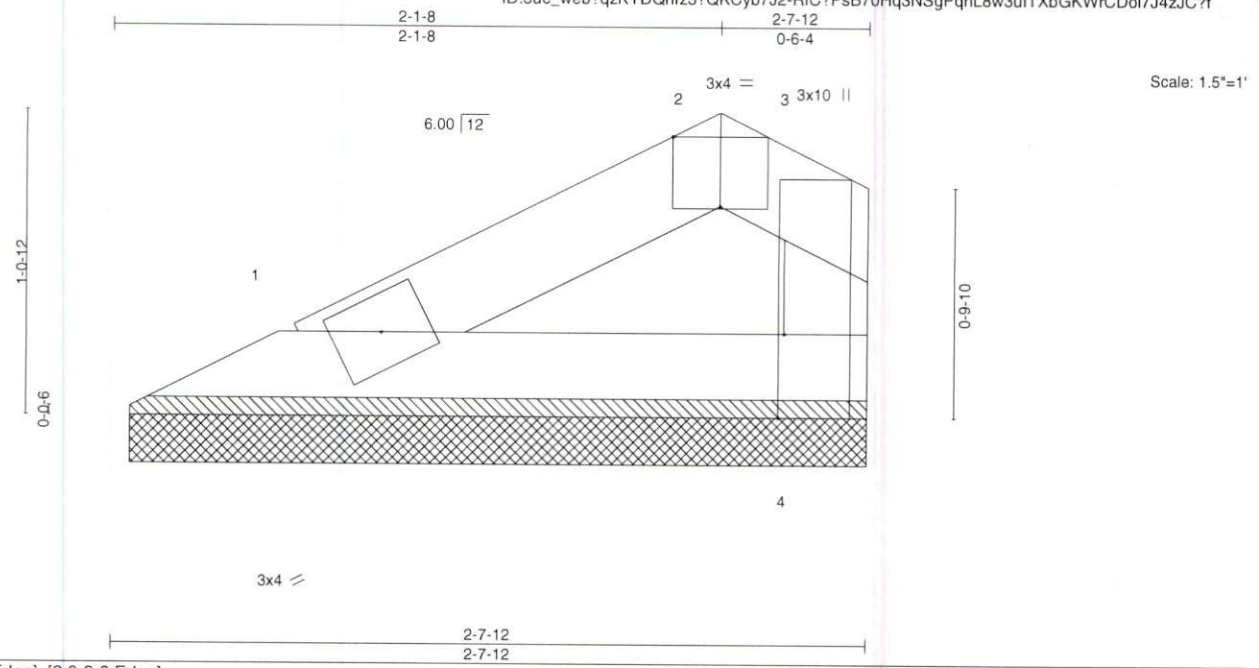

Scale: 1.5"=1'

Plate Offsets (X,Y)-- [2:0-2-0,Edge], [3:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-R							Weight: 8 lb	FT = 25%

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 2-7-12 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-7-0, 4=2-7-0
Max Horz 1=21(LC 12)
Max Uplift 1=-4(LC 12), 4=-8(LC 12)
Max Grav 1=74(LC 1), 4=74(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 7-16; 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) zone; cantilever left and right exposed ;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, 4.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472733
J0425-1814	W1	Jack-Open Girder	2	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:03:00 2025 Page 1
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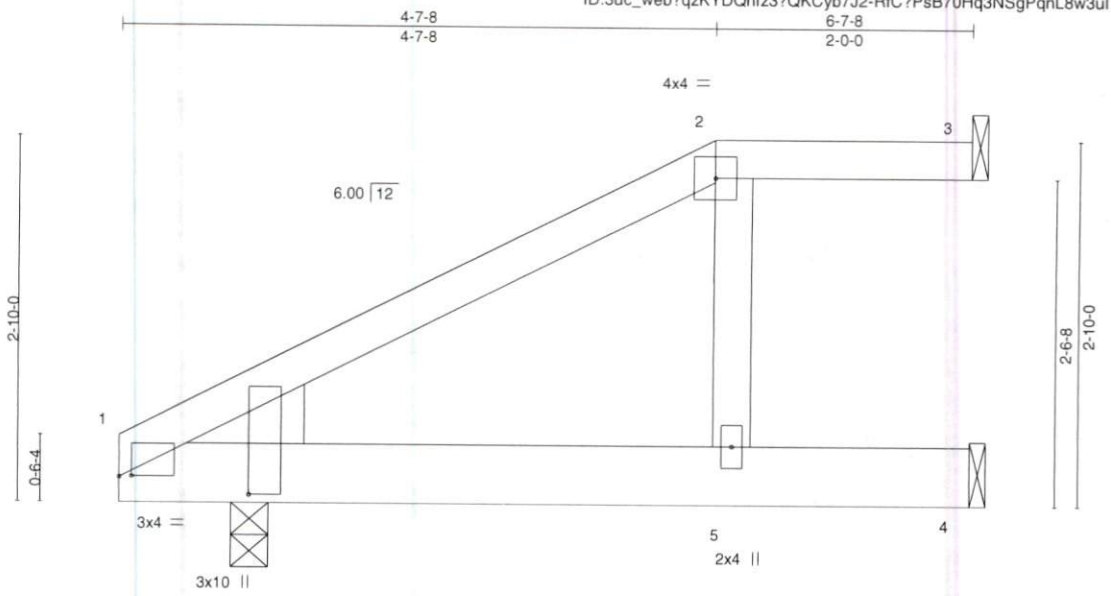

Plate Offsets (X,Y)-- [1:0-1-3,0-0-1], [1:0-1-9,1-0-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.04	5-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.08	5-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.05	3	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-MP		Wind(LL)	0.04	5-10	>999	240	Weight: 32 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins: 2-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 1=0-3-8
Max Horz 1=76(LC 8)
Max Uplift 3=-20(LC 4), 4=-71(LC 8), 1=-39(LC 8)
Max Grav 3=58(LC 1), 4=321(LC 1), 1=376(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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) 3, 4, 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 52 lb down and 57 lb up at 4-7-8 on top chord, and 198 lb down and 74 lb up at 4-7-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 4-6=-20
Concentrated Loads (lb)
Vert: 2=-33(B) 5=-198(B)

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.
J0425-1814	W2	Jack-Open Girder	2	1	I72472734
					Job Reference (optional)

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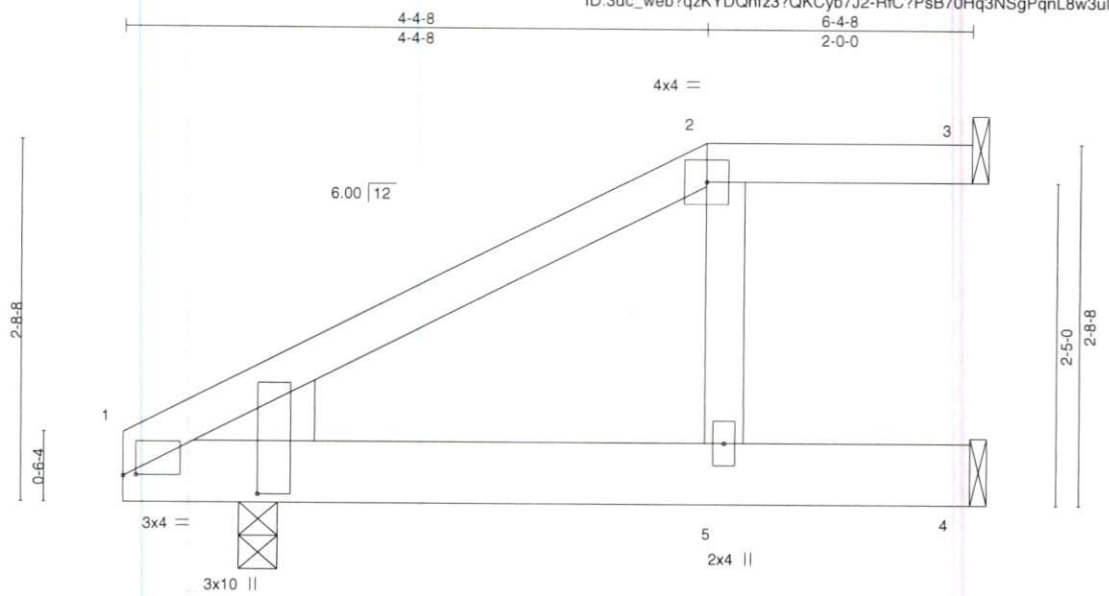

Plate Offsets (X,Y)-- [1:0-1-3,0-0-1], [1:0-1-9,1-0-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.03	5-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.06	5-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.05	3	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-MP		Wind(LL)	0.04	5-10	>999	240	Weight: 30 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins: 2-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 1=0-3-8
Max Horz 1=72(LC 8)
Max Uplift 3=-20(LC 4), 4=-64(LC 8), 1=-38(LC 8)
Max Grav 3=58(LC 1), 4=291(LC 1), 1=362(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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) 3, 4, 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 45 lb down and 53 lb up at 4-4-8 on top chord, and 180 lb down and 72 lb up at 4-4-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 4-6=-20
Concentrated Loads (lb)
Vert: 2=-26(F) 5=-180(F)

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	X1	Jack-Open	30	1	Job Reference (optional)	I72472735

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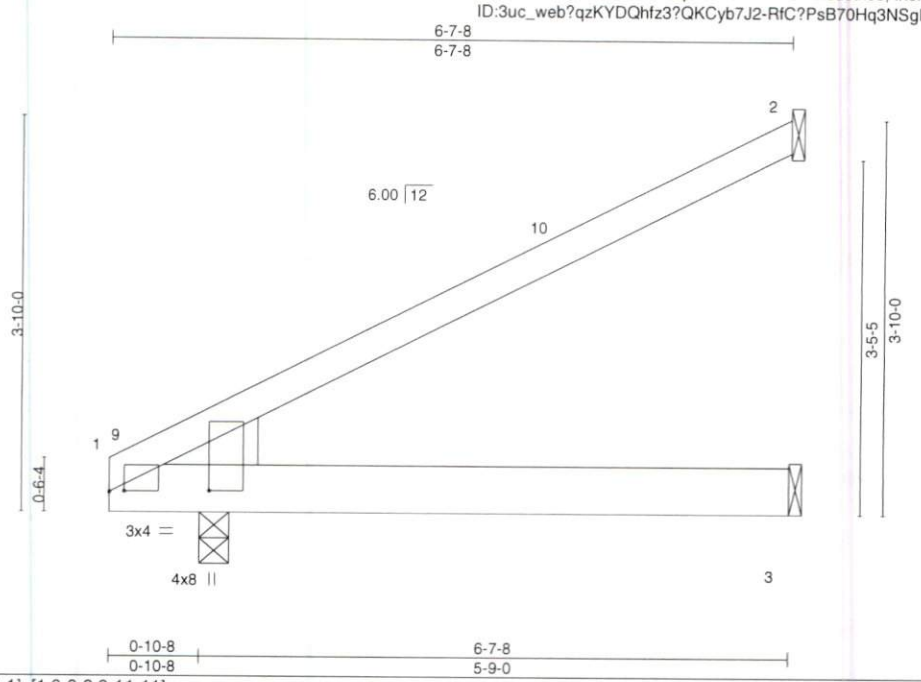

Plate Offsets (X,Y)-- [1:0-1-12,0-0-1], [1:0-0-3,0-11-11]

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	0.26	Vert(LL)	-0.02	3-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.03	3-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	2	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.03	3-8	>999	240	Weight: 29 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=Mechanical, 3=Mechanical, 1=0-3-8
Max Horz 1=107(LC 12)
Max Uplift 2=-62(LC 12)
Max Grav 2=132(LC 1), 3=117(LC 3), 1=303(LC 1)

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

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) and C-C Exterior(2E) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 6-6-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) 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) 2.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	X2	Jack-Open	7	1	Job Reference (optional)	I72472736

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:03:01 2025 Page 1
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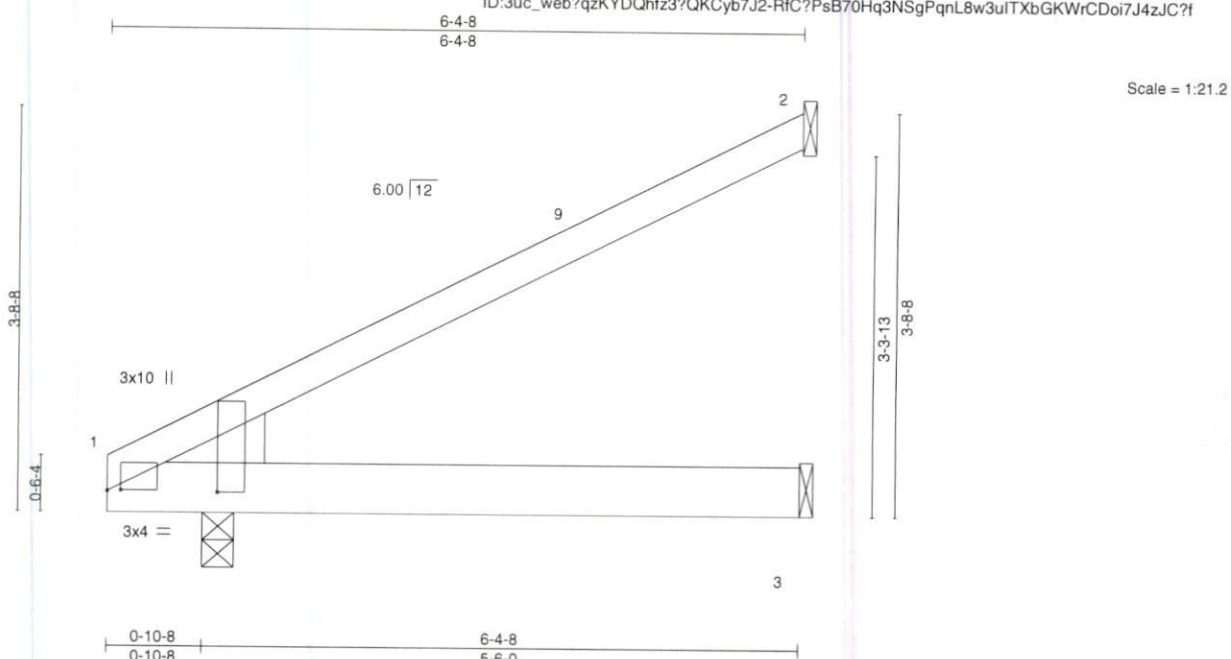

Plate Offsets (X,Y)-- [1:0-1-8,0-0-1], [1:0-0-1,1-0-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.01	3-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.03	3-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.03	3-8	>999	240	Weight: 28 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=Mechanical, 3=Mechanical, 1=0-3-8
Max Horz 1=103(LC 12)
Max Uplift 2=-59(LC 12)
Max Grav 2=126(LC 1), 3=111(LC 3), 1=293(LC 1)

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

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) and C-C Exterior(2E) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 6-3-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) 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) 2.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.
J0425-1814	X3	Jack-Open	5	1	I72472737
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:03:02 2025 Page 1
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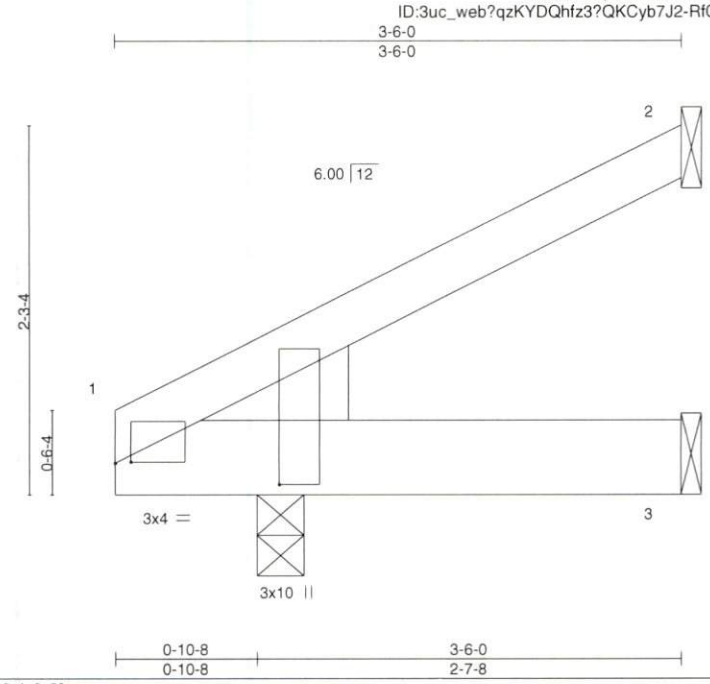

Plate Offsets (X,Y)-- [1:0-1-3,0-0-1], [1:0-1-9,1-0-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-MP		Wind(LL)	-0.00	4	>999	240	Weight: 16 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-6-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=Mechanical, 3=Mechanical, 1=0-3-8
Max Horz 1=56(LC 12)
Max Uplift 2=-26(LC 12), 3=-5(LC 12)
Max Grav 2=52(LC 1), 3=48(LC 3), 1=184(LC 1)

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

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) and C-C Exterior(2E) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) 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) 2, 3.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	Y1	Jack-Open	2	1		I72472738
					Job Reference (optional)	

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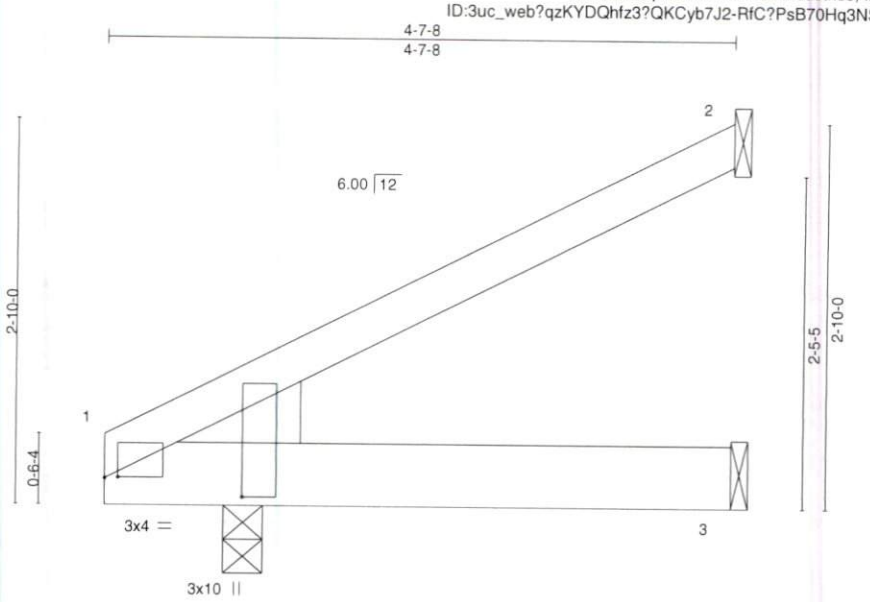

Plate Offsets (X,Y)-- [1:0-1-3,0-0-1], [1:0-1-9,1-0-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	3-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.01	3-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.01	3-8	>999	240	Weight: 21 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=Mechanical, 3=Mechanical, 1=0-3-8
Max Horz 1=74(LC 12)
Max Uplift 2=-39(LC 12), 3=-1(LC 12)
Max Grav 2=81(LC 1), 3=74(LC 3), 1=226(LC 1)

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

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) and C-C Exterior(2E) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) 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) 2, 3.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

April 2,2025

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472739
J0425-1814	Y1A	Jack-Open	4	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:03:02 2025 Page 1

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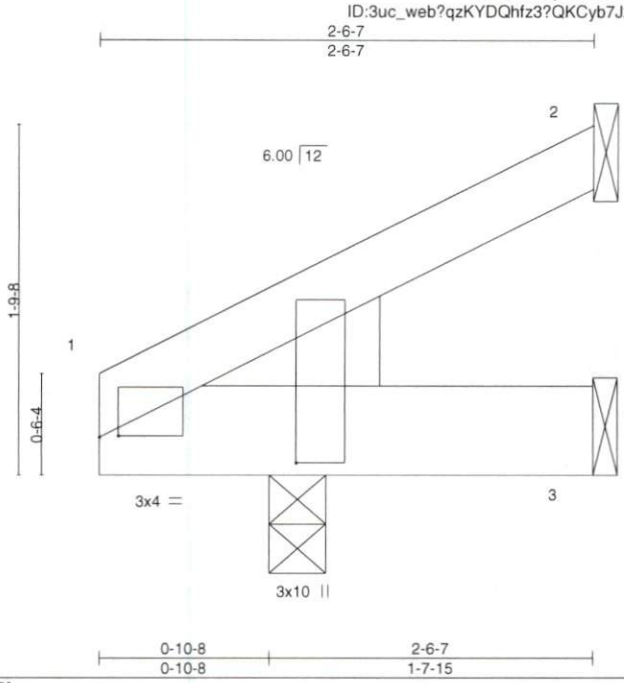

Plate Offsets (X,Y)-- [1:0-1-3,0-0-1], [1:0-1-9,1-0-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	-0.00	4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-MP		Wind(LL)	0.00	8	>999	240	Weight: 13 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-6-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=Mechanical, 3=Mechanical, 1=0-3-8
Max Horz 1=40(LC 12)
Max Uplift 2=-16(LC 12), 3=-7(LC 12)
Max Grav 2=27(LC 1), 3=24(LC 3), 1=153(LC 1)

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

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) and C-C Exterior(2E) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) 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) 2, 3.

April 2,2025

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TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	Y2	Jack-Open	2	1	Job Reference (optional)	I72472740

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:03:03 2025 Page 1
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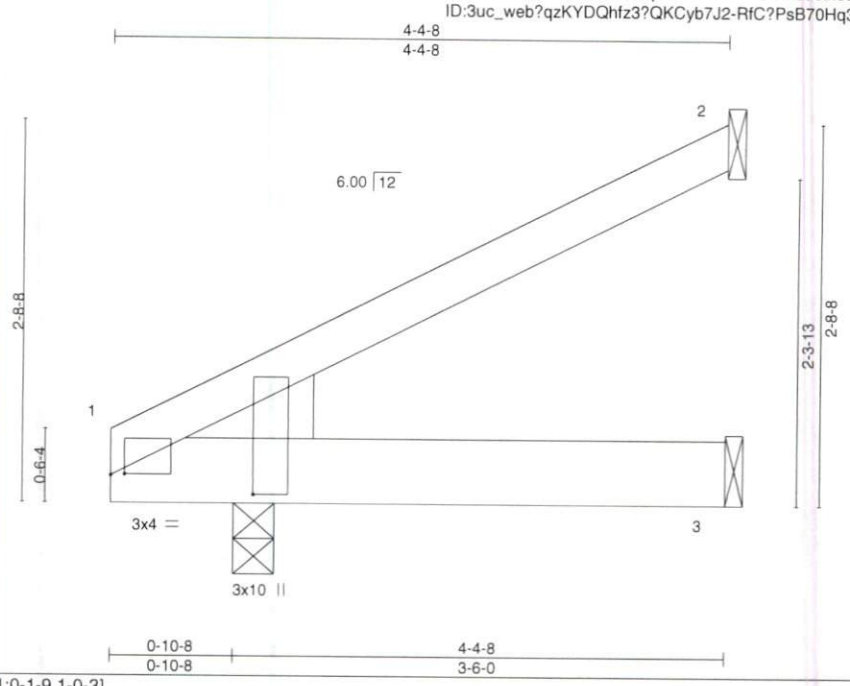

Plate Offsets (X,Y)-- [1:0-1-3,0-0-1], [1:0-1-9,1-0-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.00	3-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.01	3-8	>999	240	Weight: 20 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=Mechanical, 3=Mechanical, 1=0-3-8
Max Horz 1=70(LC 12)
Max Uplift 2=-36(LC 12), 3=-2(LC 12)
Max Grav 2=75(LC 1), 3=68(LC 3), 1=216(LC 1)

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

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) and C-C Exterior(2E) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) 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) 2, 3.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

April 2,2025

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	Y2A	Jack-Open	4	1	Job Reference (optional)	I72472741

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:03:03 2025 Page 1
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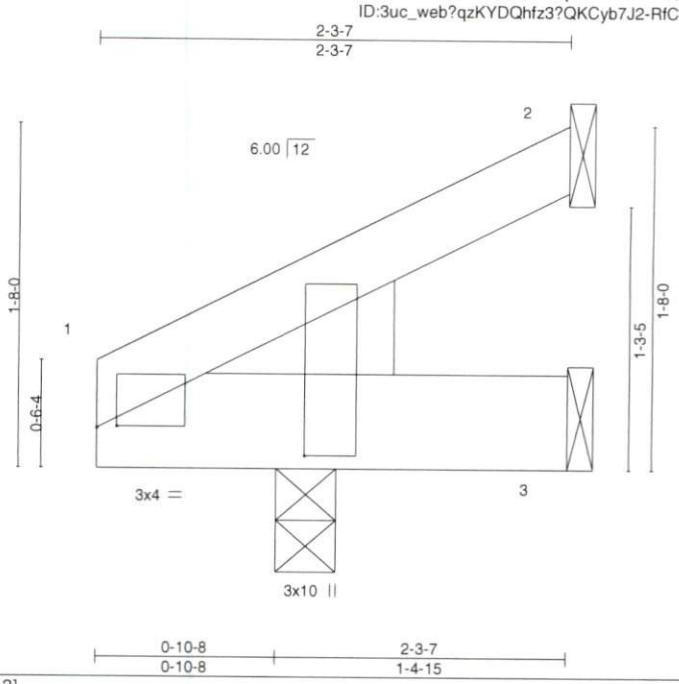

Plate Offsets (X,Y)-- [1:0-1-3,0-0-1], [1:0-1-9,1-0-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	-0.00	4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	1	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-MP		Wind(LL)	0.00	8	>999	240	Weight: 12 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-3-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=Mechanical, 3=Mechanical, 1=0-3-8
Max Horz 1=36(LC 12)
Max Uplift 2=-14(LC 12), 3=-8(LC 12)
Max Grav 2=20(LC 1), 3=17(LC 3), 1=147(LC 1)

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

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) and C-C Exterior(2E) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) 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) 2, 3.

April 2,2025

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	
J0425-1814	Y3	Jack-Open	4	1	Job Reference (optional)	I72472742

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:03:04 2025 Page 1
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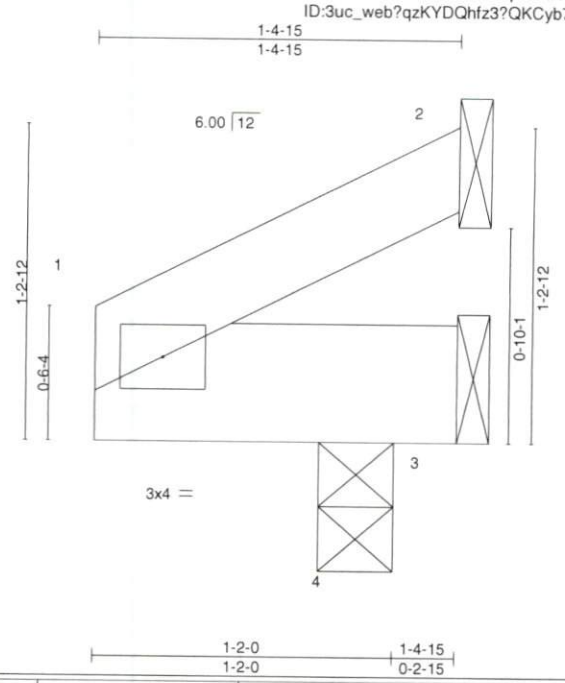

Scale = 1:9.0

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	0.01	Vert(LL)	0.00	4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-MP		Wind(LL)	-0.00	4	>999	240	Weight: 6 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-4-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=Mechanical, 3=Mechanical, 4=0-3-8
Max Horz 4=23(LC 12)
Max Uplift 2=-12(LC 12), 3=-110(LC 1), 4=-9(LC 8)
Max Grav 2=15(LC 1), 3=6(LC 8), 4=207(LC 1)

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

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) and C-C Exterior(2E) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) 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) 2, 4 except (jt=lb) 3=110.

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472743
J0425-1814	Z1	Diagonal Hip Girder	2	1	Job Reference (optional)	

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8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:03:04 2025 Page 1
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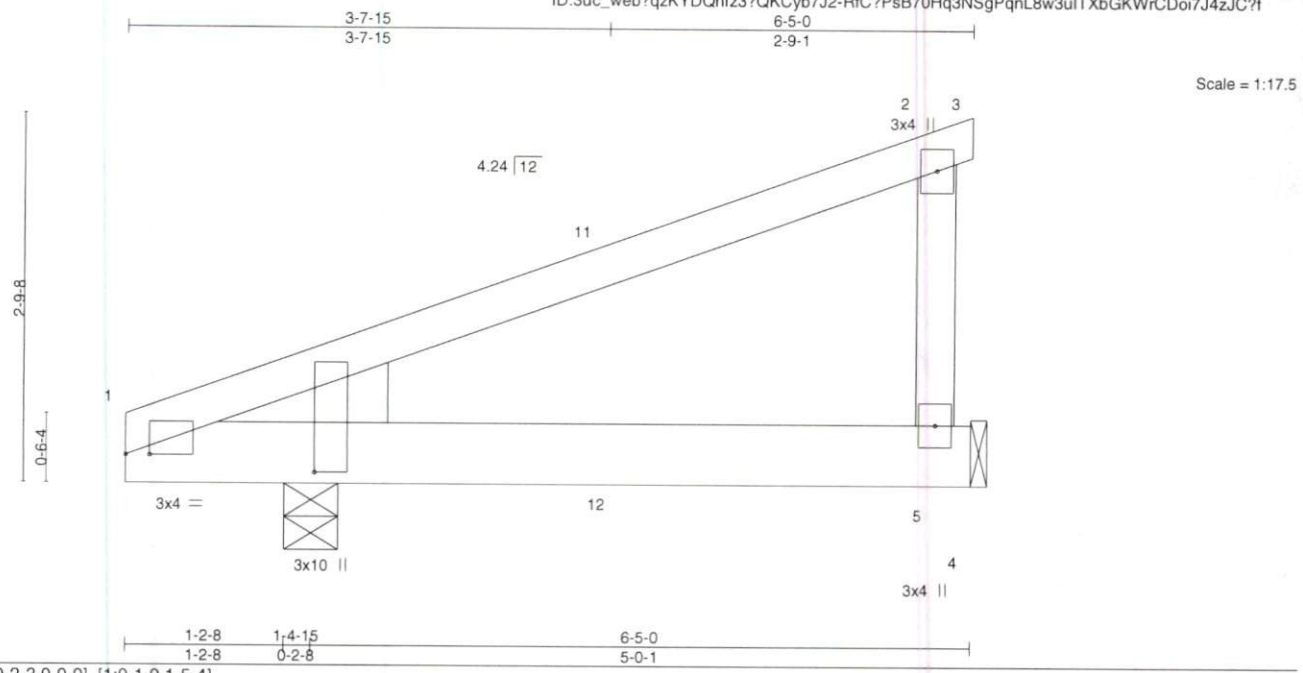

Plate Offsets (X,Y)-- [1:0-2-3,0-0-0], [1:0-1-9,1-5-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.01	5-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.02	5-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	1	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-MP		Wind(LL)	0.01	5-10	>999	240	Weight: 31 lb	FT = 25%

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

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

REACTIONS. (size) 5=Mechanical, 1=0-4-15
Max Horz 1=73(LC 21)
Max Uplift 5=-55(LC 4), 1=-29(LC 4)
Max Grav 5=201(LC 1), 1=310(LC 1)

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

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); cantilever left and right exposed ; 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) 5, 1.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 14 lb down and 21 lb up at 3-8-2, and 14 lb down and 21 lb up at 3-8-2 on top chord, and 4 lb down and 15 lb up at 3-8-2, and 4 lb down and 15 lb up at 3-8-2 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472744
J0425-1814	Z2	Diagonal Hip Girder	2	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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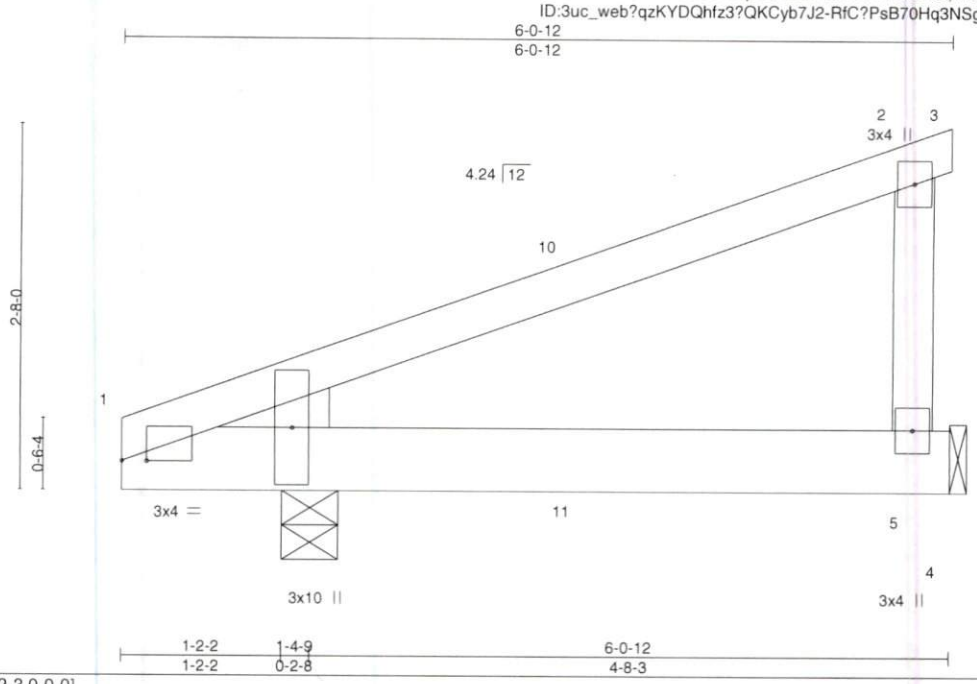


Plate Offsets (X,Y)-- [1:0-2-3,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.01	6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	0.01	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	1	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-MP							Weight: 28 lb	FT = 25%

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

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

REACTIONS. (size) 5=Mechanical, 1=0-4-15
Max Horz 1=69(LC 4)
Max Uplift 5=-48(LC 4), 1=-29(LC 4)
Max Grav 5=172(LC 1), 1=306(LC 1)

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

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); cantilever left and right exposed ; 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) 5, 1.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 13 lb down and 18 lb up at 3-3-14, and 13 lb down and 18 lb up at 3-3-14 on top chord, and 2 lb down and 13 lb up at 3-3-14, and 2 lb down and 13 lb up at 3-3-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-20, 4-6=-20
Concentrated Loads (lb)
Vert: 11=-4(F=-2, B=-2)

April 2,2025

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

Job	Truss	Truss Type	Qty	Ply	143 Knight Rd.	I72472745
J0425-1814	Z3	Diagonal Hip Girder	2	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Apr 2 13:03:05 2025 Page 1
ID:3uc_web?qzKYDQhfz3?QKCyb7J2-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

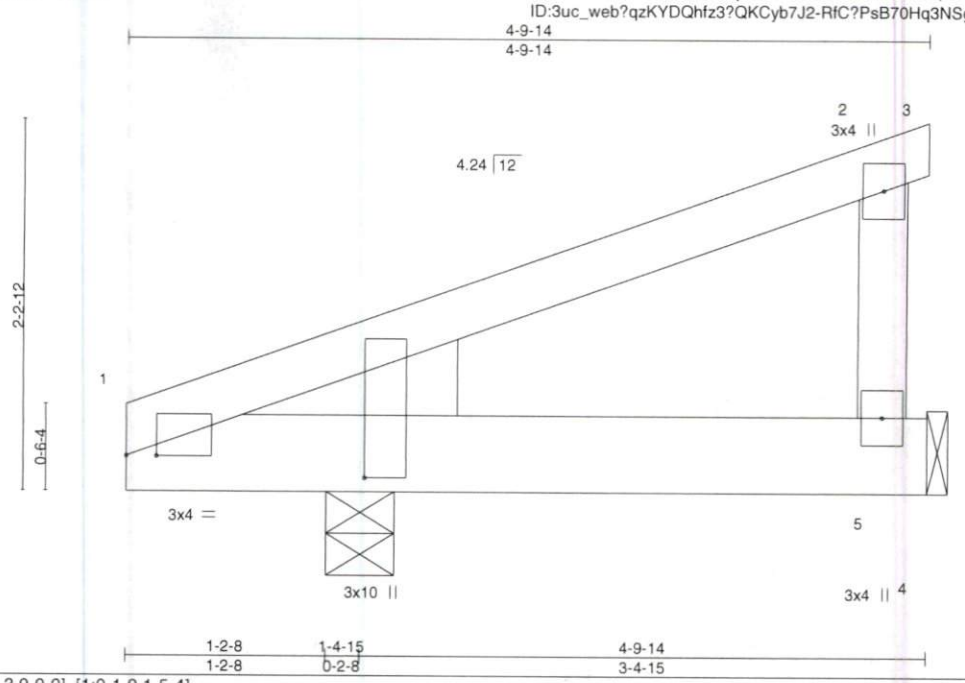


Plate Offsets (X,Y)-- [1:0-2-3,0-0-0], [1:0-1-9,1-5-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	0.00	6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	1	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-MP							Weight: 24 lb	FT = 25%

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

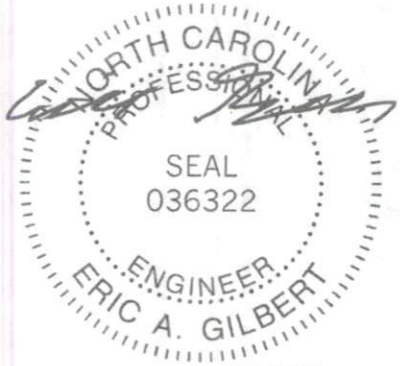
BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 1=0-4-15
Max Horz 1=55(LC 4)
Max Uplift 5=-60(LC 4), 1=-111(LC 4)
Max Grav 5=92(LC 38), 1=177(LC 38)

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

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); cantilever left and right exposed ; 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) 5 except (jt=lb) 1=111.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 49 lb down and 16 lb up at 2-1-0, and 49 lb down and 16 lb up at 2-1-0 on top chord, and 139 lb up at 2-1-0, and 139 lb up at 2-1-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-20, 4-6=-20
Concentrated Loads (lb)
Vert: 10=160(F=80, B=80)



April 2,2025

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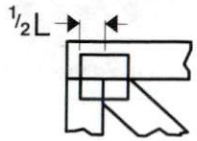
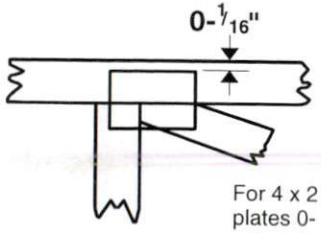
Symbols

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.

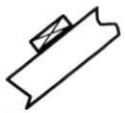
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

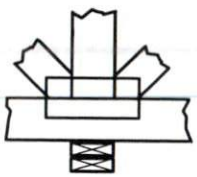
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

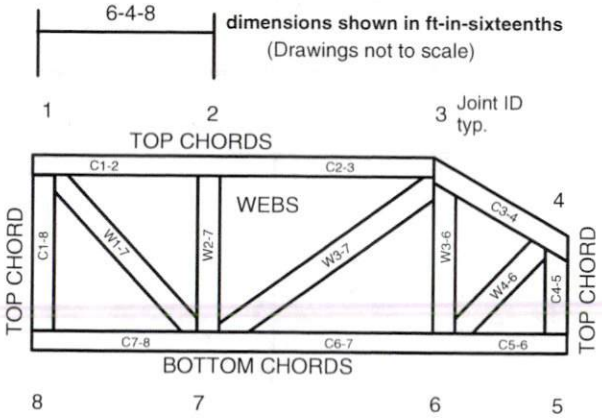


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.

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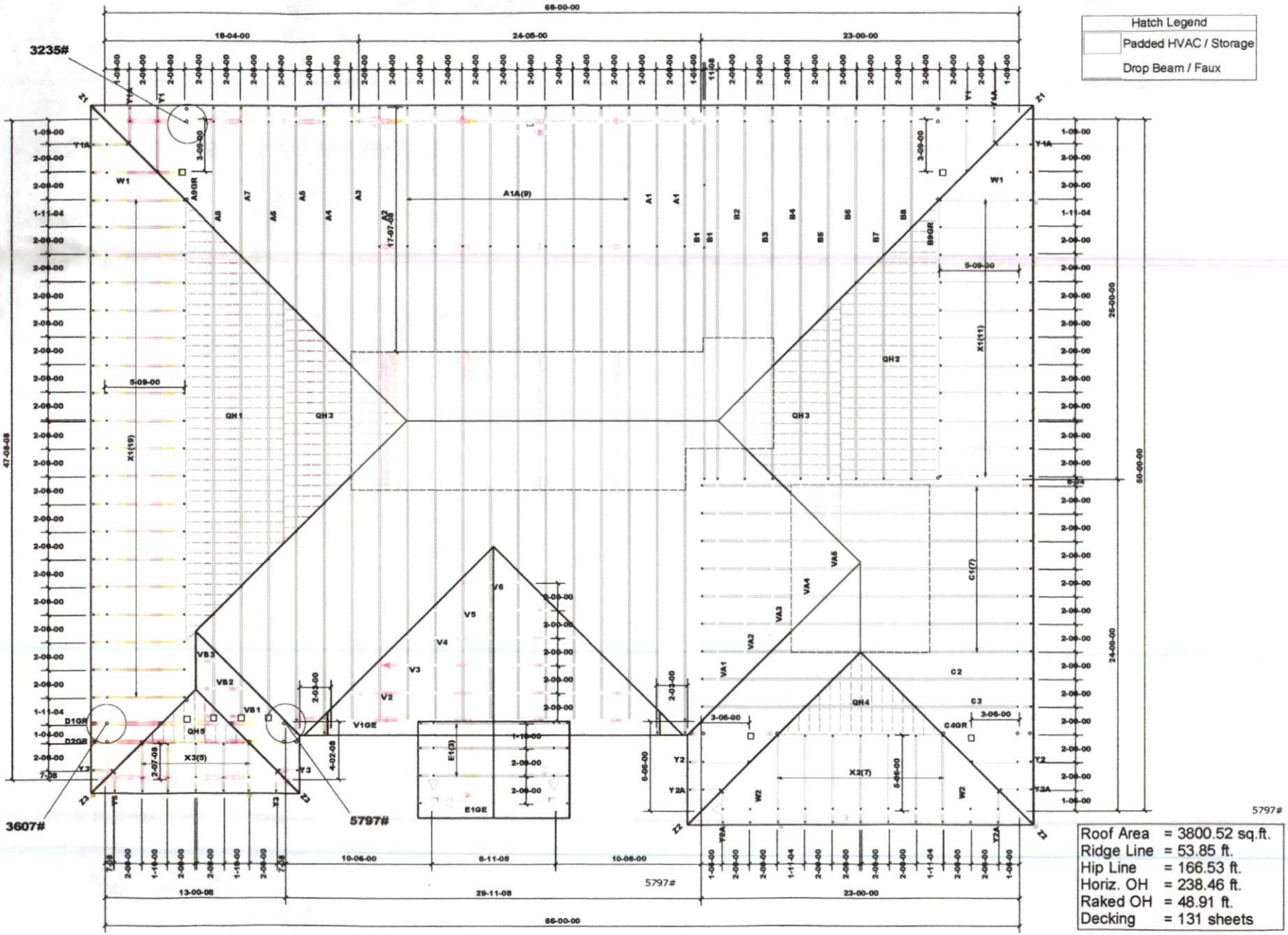
⚠ General Safety Notes

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/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.



Hatch Legend
Padded HVAC / Storage
Drop Beam / Faux

Roof Area	= 3800.52 sq.ft.
Ridge Line	= 53.85 ft.
Hip Line	= 166.53 ft.
Horiz. OH	= 238.46 ft.
Raked OH	= 48.91 ft.
Decking	= 131 sheets

GARAGE DOOR HEADER					
PlotID	Length	Product	Plies	Net Qty	Fab Type
GDH	23-00-00	1-3/4"x 14" LVL Kerto-S	2	2	FF

☐	HUS26	USP	3	NA	16d/3-1/2"	16d/3-1/2"
☐	THD26-2	USP	1	NA	16d/3-1/2"	10d/3"

Truss Placement Plan
SCALE: NTS

= Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do NOT Erect Truss Backwards

COMTECH
ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park
Fayetteville, N.C. 28309
Phone: (910) 864-8787
Fax: (910) 864-4444

LOAD CHART FOR JACK STUDS

1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

BUILDER	Jay Norris	CITY / CO.	Sanford / Lee				
JOB NAME	143 Knight Rd.	ADDRESS	143 Knight Rd.				
PLAN	Plan	MODEL	Roof				
SEAL DATE	Seal Date	DATE REV.	04/01/25				
QUOTE #	Quote #	DRAWN BY	Sales Area				
JOB #	J0425-1814	SALES REP.	Bob Lewis				