ENGINEERING BY TRENCO
A MiTek Affiliate

RE: J0720-3079
Lot 41 Oak Haven

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: Project Name: J0720-3079
Lot/Block: Model:
Address: Subdivision:
City: State:

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.3
Wind Code: N/A Wind Speed: 120 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 29 individual, dated Truss Design Drawings and 1 Additional Drawings.

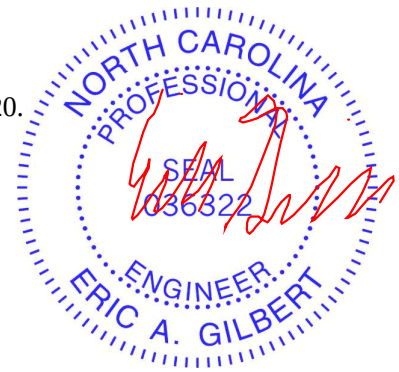
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E14597575	A1	7/9/2020	21	E14597595	C3	7/9/2020
2	E14597576	A1GE	7/9/2020	22	E14597596	C4	7/9/2020
3	E14597577	A2	7/9/2020	23	E14597597	D1GE	7/9/2020
4	E14597578	A3	7/9/2020	24	E14597598	VC1	7/9/2020
5	E14597579	A4	7/9/2020	25	E14597599	VC2	7/9/2020
6	E14597580	A5	7/9/2020	26	E14597600	VC3	7/9/2020
7	E14597581	A6	7/9/2020	27	E14597601	VC4	7/9/2020
8	E14597582	A7	7/9/2020	28	E14597602	VC5	7/9/2020
9	E14597583	A8	7/9/2020	29	E14597603	Z1	7/9/2020
10	E14597584	A9	7/9/2020				
11	E14597585	A10	7/9/2020				
12	E14597586	A11	7/9/2020				
13	E14597587	B1	7/9/2020				
14	E14597588	B1GE	7/9/2020				
15	E14597589	B2	7/9/2020				
16	E14597590	B3	7/9/2020				
17	E14597591	B3GE	7/9/2020				
18	E14597592	C1	7/9/2020				
19	E14597593	C1GE	7/9/2020				
20	E14597594	C2	7/9/2020				

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

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2020.

North Carolina COA: C-0844



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

July 09, 2020

Gilbert, Eric

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven	E14597575
J0720-3079	A1	ROOF SPECIAL	3	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:08:33 2020 Page 1
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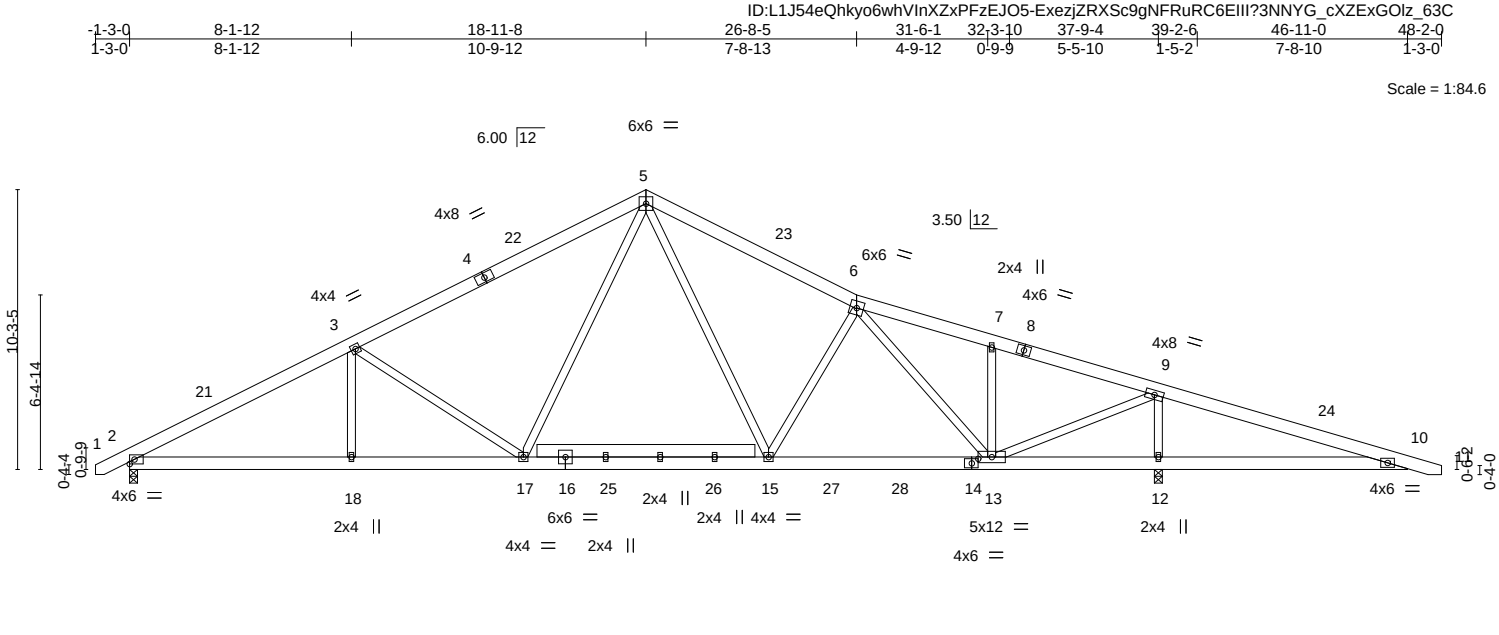

Plate Offsets (X,Y)-- [14:0-2-13,0-2-0]

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	0.49	Vert(LL)	-0.16	15-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.25	15-17	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.05	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	17	>999	240	Weight: 341 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
19-20: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-6-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=-113(LC 10)
Max Uplift 2=-30(LC 12), 12=-222(LC 9)
Max Grav 2=1649(LC 2), 12=2660(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2784/445, 3-5=-2186/411, 5-6=-2062/365, 6-7=-1397/80, 7-9=-1456/33, 9-10=-744/1312
BOT CHORD 2-18=-281/2465, 17-18=-281/2465, 15-17=-8/1531, 13-15=-53/1905, 12-13=-1184/764, 10-12=-1184/764
WEBS 3-18=0/294, 9-13=-601/2669, 9-12=-2296/686, 3-17=-736/302, 5-17=-89/834, 5-15=-7/698, 6-13=-917/329

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 47-11-1 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 2 and 222 lb uplift at joint 12.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

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

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven
J0720-3079	A1GE	ROOF SPECIAL	1	1	E14597576
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:08:38 2020 Page 1
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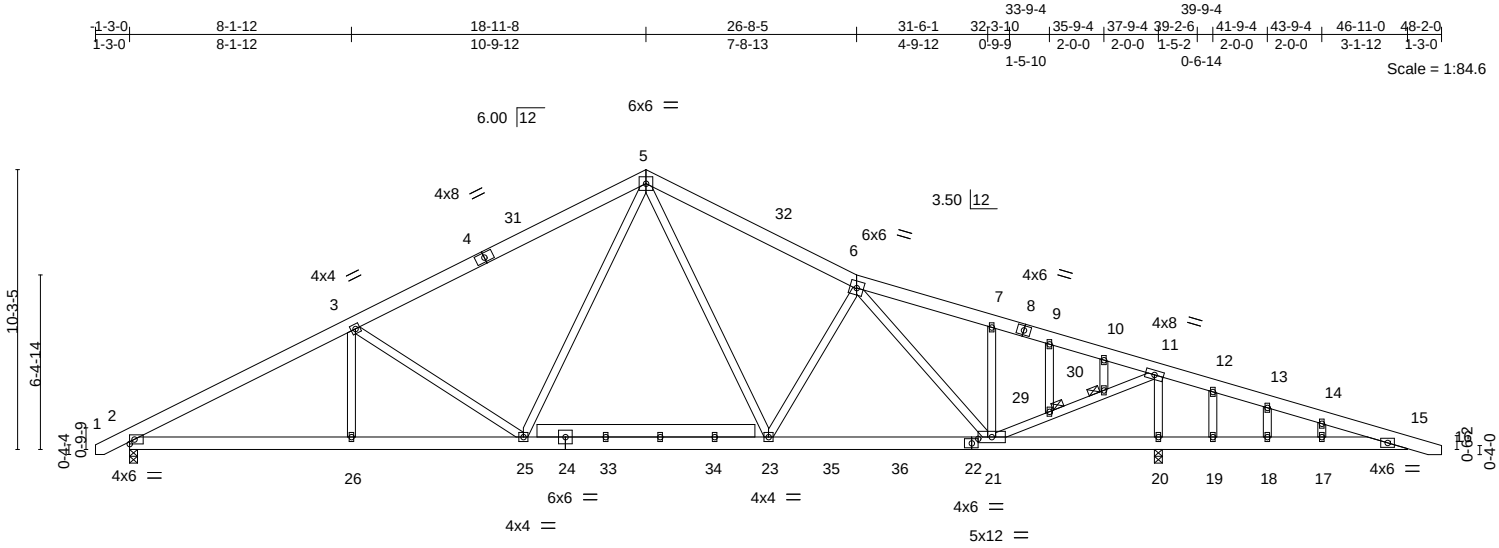

Plate Offsets (X,Y)-- [22:0-2-13,0-2-0]

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	0.48	Vert(LL)	-0.16	23-25	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.25	23-25	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.05	20	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	25	>999	240	Weight: 352 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
27-28: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 29, 30

REACTIONS. (size) 2=0-3-8, 20=0-3-8
Max Horz 2=-173(LC 17)
Max Uplift 2=-224(LC 12), 20=-508(LC 9)
Max Grav 2=1649(LC 2), 20=2660(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2784/362, 3-5=-2186/308, 5-6=-2062/283, 6-7=-1357/190, 7-9=-1347/154, 9-10=-1407/147, 10-11=-1410/139, 11-12=-575/1291, 12-13=-582/1277, 13-14=-595/1244, 14-15=-617/1228
BOT CHORD 2-26=-390/2420, 25-26=-390/2420, 23-25=-78/1518, 21-23=-95/1877, 20-21=-1177/630, 19-20=-1177/630, 18-19=-1177/630, 17-18=-1177/630, 15-17=-1177/630
WEBS 3-26=0/294, 11-20=-2235/439, 3-25=-736/326, 5-25=-106/825, 5-23=-81/687, 7-21=-313/163, 6-21=-905/168, 21-29=-276/2690, 29-30=-274/2639, 11-30=-277/2676

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 47-11-1 zone; cantilever right exposed ;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) 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 224 lb uplift at joint 2 and 508 lb uplift at joint 20.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

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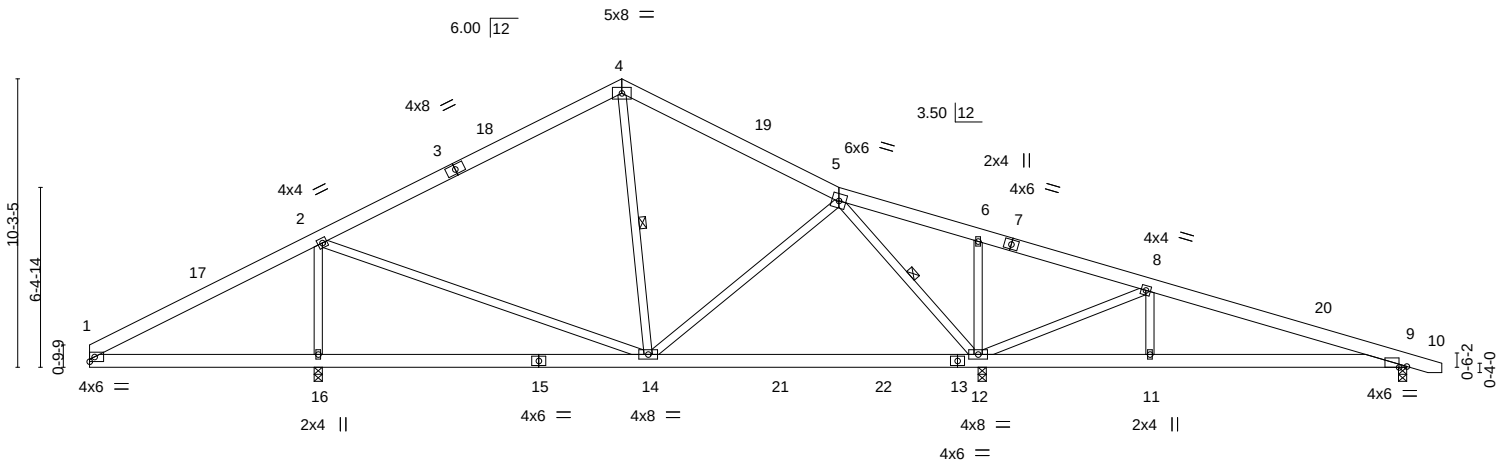
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven	E14597577
J0720-3079	A2	ROOF SPECIAL	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:08:40 2020 Page 1
ID:L1J54eQhkyo6whVInXZxPFzEJO5-XHZdByWwom2gjKTEMAlt4m4AuCmbPBuZBq788rz_635

9-7-14	10-1-7	18-11-8	26-8-5	32-11-5	37-9-4	39-2-6	46-11-0	48-2-0
9-7-14	0-5-9	8-10-1	7-8-13	6-3-1	4-9-15	1-5-2	7-8-10	1-3-0

Scale = 1:82.1



8-0-0	19-10-12	31-9-9	37-9-4	46-11-0
8-0-0	11-10-12	11-10-12	5-11-11	9-1-12

Plate Offsets (X,Y)-- [9:0-3-5,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	0.52	Vert(LL)	-0.19	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.27	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	9-11	>999	240	Weight: 313 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-12, 4-14

REACTIONS. (size) 16=0-3-8, 12=0-3-8, 9=0-3-8
Max Horz 16=-113(LC 8)
Max Uplift 16=-34(LC 12), 12=-177(LC 9), 9=-171(LC 9)
Max Grav 16=1706(LC 2), 12=1938(LC 2), 9=508(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-301/623, 2-4=-612/130, 4-5=-575/128, 5-6=-189/613, 6-8=-246/613, 8-9=-509/263
BOT CHORD 1-16=-437/318, 14-16=-437/339, 12-14=0/284, 11-12=-170/420, 9-11=-170/420
WEBS 2-16=-1352/525, 2-14=-134/925, 5-14=0/335, 8-12=-1015/597, 8-11=-148/297, 6-12=-297/137, 5-12=-1131/292

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 47-11-1 zone; cantilever left exposed ; porch 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 34 lb uplift at joint 16, 177 lb uplift at joint 12 and 171 lb uplift at joint 9.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven	E14597578
J0720-3079	A3	ROOF SPECIAL GIRDER	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:08:43 2020 Page 1
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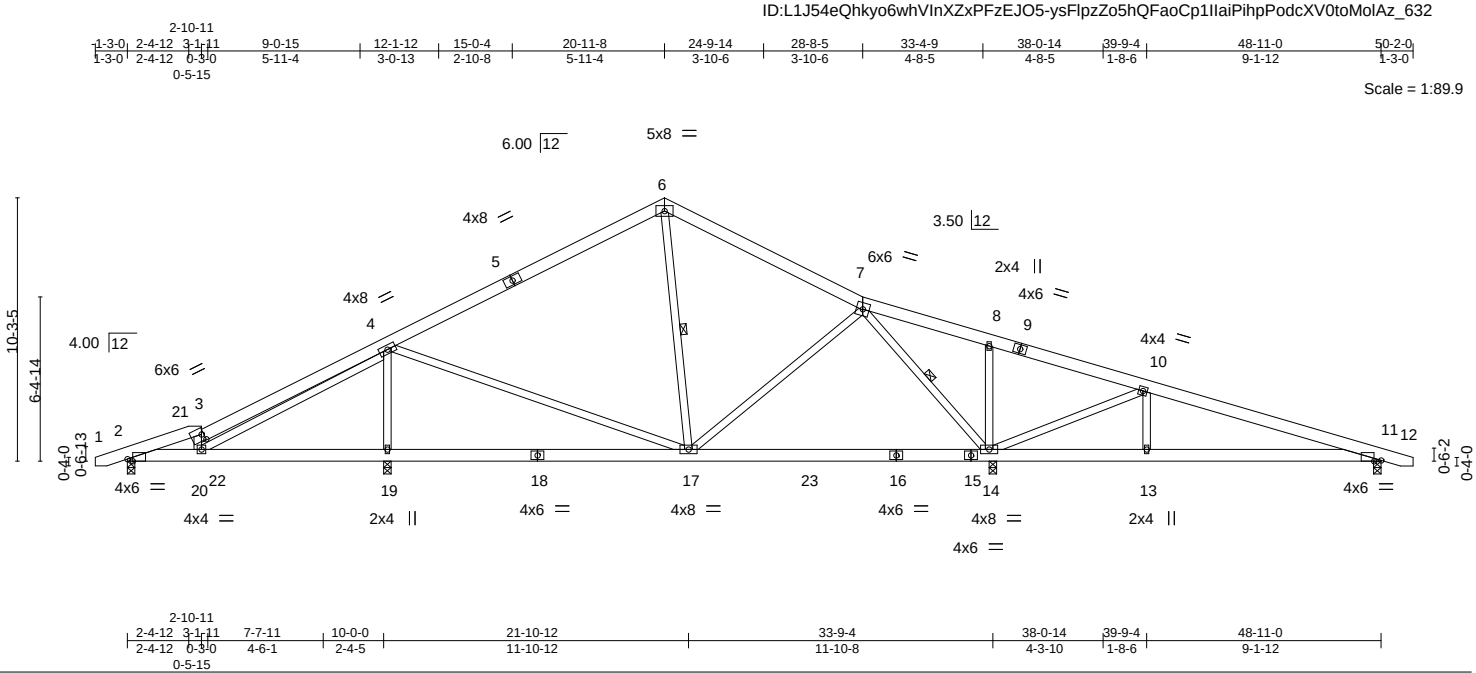

Plate Offsets (X,Y)-- [2:0-2-8,Edge], [3:0-1-0,0-3-0], [11:0-3-5,Edge]

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	0.54	Vert(LL)	-0.18	14-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.26	14-17	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.77	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	11-13	>999	240	Weight: 339 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 7-14, 6-17

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=-103(LC 30)
Max Uplift All uplift 100 lb or less at joint(s) 2, 19 except 14=-160(LC 26), 11=-169(LC 26)
Max Grav All reactions 250 lb or less at joint(s) except 2=349(LC 1), 14=1979(LC 2), 19=1522(LC 2), 11=513(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-431/96, 3-4=-497/146, 4-6=-708/98, 6-7=-652/77, 7-8=-64/586, 8-10=-112/587, 10-11=-522/189
BOT CHORD 2-20=-31/403, 14-17=0/361, 13-14=-120/433, 11-13=-120/433
WEBS 4-17=0/648, 7-17=0/358, 7-14=-1188/47, 10-14=-1019/360, 10-13=-87/299, 3-20=-276/80, 4-19=-1167/196, 8-14=-299/99, 4-20=-211/637

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19 except (jt=lb) 14=160, 11=169.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 35 lb down and 26 lb up at 2-4-12 on top chord, and 13 lb down and 29 lb up at 2-4-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) 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: 1-3=-60, 3-6=-60, 6-7=-60, 7-12=-60, 2-11=-20
Concentrated Loads (lb)
Vert: 22=-2(F)

July 8,2020

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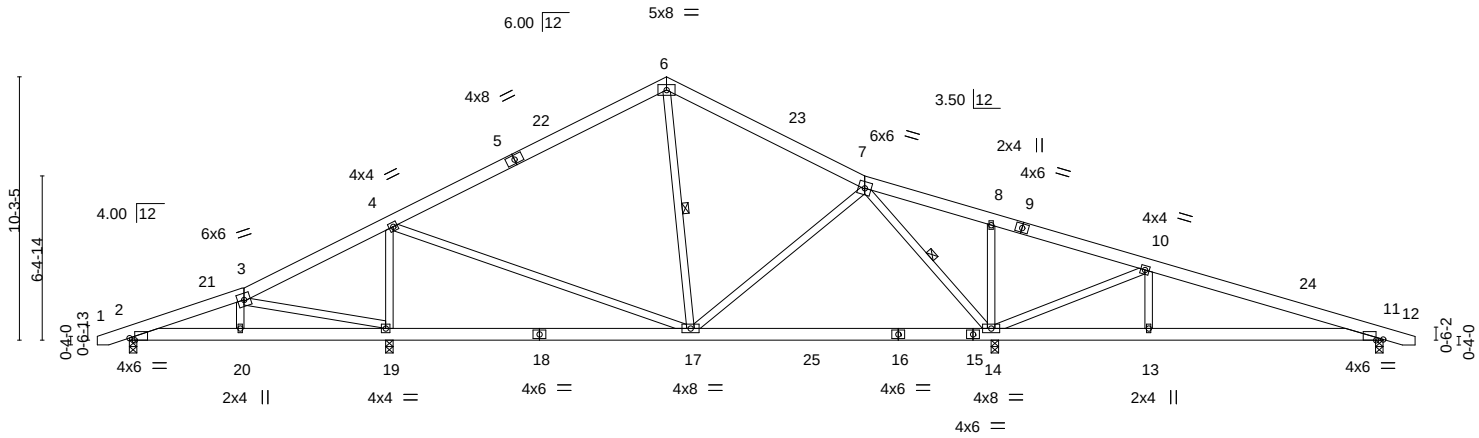
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven	E14597579
J0720-3079	A4	ROOF SPECIAL	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:08:46 2020 Page 1
ID:L1J54eQhkyo6whVInXZxPFzEJO5-MRxuR?bhOcoqRFwNiQrHK1KDLcpypuESZmaSLVz_63?

-1-3-0	4-4-12	4-5-11	12-1-12	12-8-9	20-11-8	28-8-5	34-11-5	39-9-4	41-2-6	48-11-0	50-2-0
1-3-0	4-4-12	0-0-15	7-8-1	0-6-13	8-2-15	7-8-13	6-3-1	4-9-15	1-5-2	7-8-10	1-3-0

Scale = 1:89.9



4-4-12	4-5-11	10-0-0	21-10-12	33-9-4	39-9-4	48-11-0
4-4-12	0-0-15	5-6-5	11-10-12	11-10-8	6-0-0	9-1-12

Plate Offsets (X,Y)-- [2:0-2-8,Edge], [11:0-3-5,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	0.46	Vert(LL)	-0.18	14-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.25	14-17	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.07	11-13	>999	240	Weight: 336 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 17-19.
WEBS 1 Row at midpt 7-14, 6-17

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=-103(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 19 except 2=-118(LC 8), 14=-162(LC 9), 11=-169(LC 9)
Max Grav All reactions 250 lb or less at joint(s) except 2=399(LC 2), 19=1446(LC 2), 14=1996(LC 2), 11=516(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-476/211, 4-6=-728/181, 6-7=-678/175, 7-8=-172/574, 8-10=-230/576, 10-11=-530/278
BOT CHORD 2-20=-136/430, 19-20=-127/418, 14-17=0/377, 13-14=-188/441, 11-13=-188/441
WEBS 3-19=-437/301, 4-17=-4/572, 7-17=0/365, 10-14=-1019/599, 10-13=-149/299, 4-19=-1020/376, 8-14=-299/139, 7-14=-1212/330

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-5 to 3-4-8, Interior(1) 3-4-8 to 20-11-8, Exterior(2R) 20-11-8 to 25-4-5, Interior(1) 25-4-5 to 49-11-1 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19 except (jt=lb) 2=118, 14=162, 11=169.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

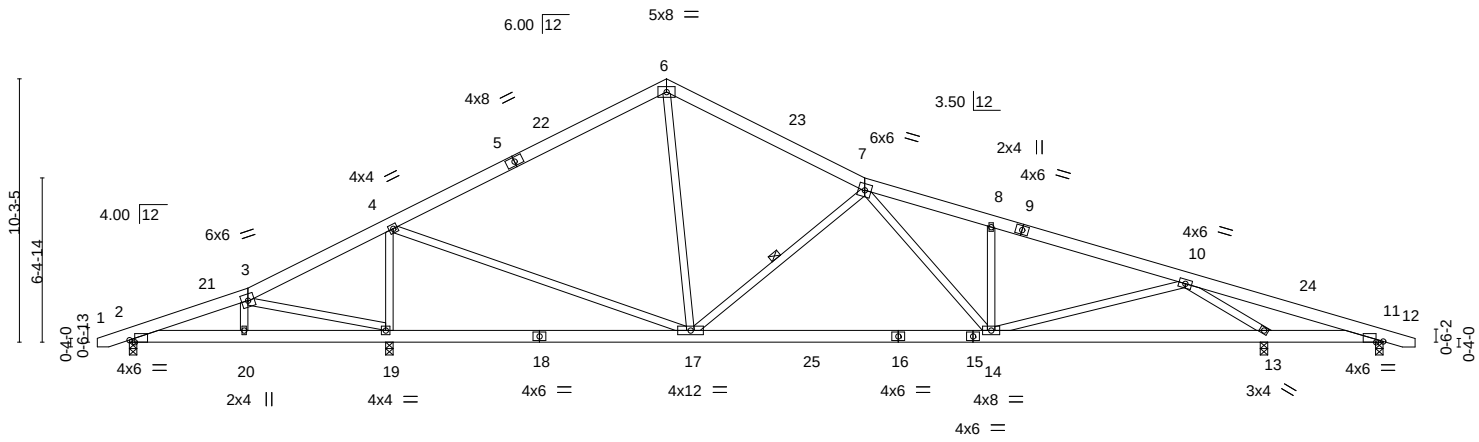
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven	E14597580
J0720-3079	A5	ROOF SPECIAL	3	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:08:48 2020 Page 1
ID:L1J54eQhkyo6whVInXZxPFzEJO5-Ip2eshdxvD2YhZ4mqrulPSQZoQT5HpGl043ZPNz_62z

-1-3-0	4-7-8	12-1-12	12-9-8	20-11-8	28-8-5	33-7-8	41-2-6	44-3-4	48-11-0	50-2-0
1-3-0	4-7-8	7-6-4	0-7-12	8-2-0	7-8-13	4-11-3	7-6-14	3-0-14	4-7-12	1-3-0

Scale = 1:89.9



4-7-8	10-0-0	21-10-12	33-7-8	44-3-4	48-11-0
4-7-8	5-4-8	11-10-12	11-8-12	10-7-12	4-7-12

Plate Offsets (X,Y)-- [2:0-2-8,Edge], [11:0-3-5,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	0.46	Vert(LL)	-0.22	14-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.35	14-17	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.03	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	14-17	>999	240	Weight: 340 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 7-17

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=-103(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 19, 13 except 2=-132(LC 8), 11=-111(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 11 except 2=328(LC 25), 19=2188(LC 2), 13=1908(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-254/165, 3-4=-130/458, 4-6=-1338/328, 6-7=-1356/335, 7-8=-2490/492, 8-10=-2515/427, 10-11=-163/754
BOT CHORD 17-19=-319/208, 14-17=-211/1934, 13-14=-323/1585, 11-13=-666/195
WEBS 3-19=-378/288, 4-17=-185/1492, 7-17=-1056/326, 4-19=-1739/523, 8-14=-356/174, 7-14=-67/677, 10-14=0/823, 10-13=-2725/623, 6-17=-2/703

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-5 to 3-4-8, Interior(1) 3-4-8 to 20-11-8, Exterior(2R) 20-11-8 to 25-4-5, Interior(1) 25-4-5 to 49-11-1 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 13 except (jt=lb) 2=132, 11=111.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

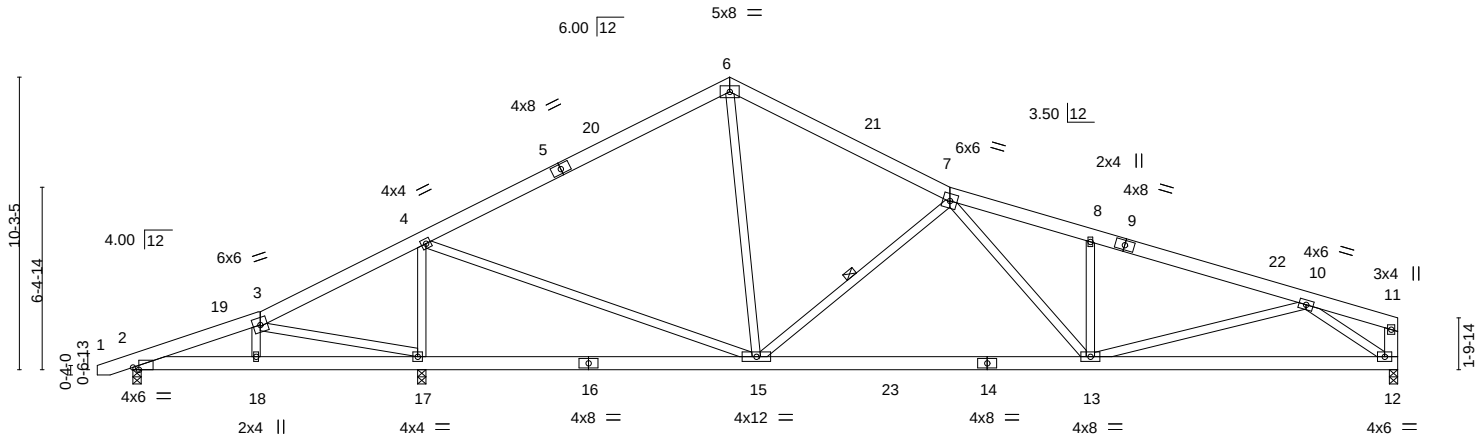
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven
J0720-3079	A6	ROOF SPECIAL	1	1	E14597581
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:08:51 2020 Page 1
ID:L1J54eQhkyo6whVInXZxPFzEJO5-jOknUjfpC8Q6Y0pLV_RS05131dUrUD1Bi2ID0iz_62w

-1-3-0	4-4-12	4-5-11	12-1-12	12-8-9	20-11-8	28-8-5	33-7-8	36-4-14	41-2-6	44-5-0
1-3-0	4-4-12	0-0-15	7-8-1	0-6-13	8-2-15	7-8-13	4-11-3	2-9-6	4-9-8	3-2-10

Scale = 1:80.9



4-4-12	4-5-11	10-0-0	21-10-12	33-7-8	44-5-0
4-4-12	0-0-15	5-6-5	11-10-12	11-8-12	10-9-8

Plate Offsets (X,Y)-- [2:0-2-8,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	0.46	Vert(LL)	-0.22	13-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.34	13-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.04	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	13-15	>999	240	Weight: 317 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2 *Except* 11-12: 2x6 SP No.1

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-7-12 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 7-15

REACTIONS. (size) 2=0-3-8, 17=0-3-8, 12=0-3-8
Max Horz 2=130(LC 12)
Max Uplift 2=-124(LC 8), 17=-23(LC 9), 12=-38(LC 13)
Max Grav 2=332(LC 25), 17=2189(LC 2), 12=1440(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-278/148, 3-4=-159/427, 4-6=-1365/319, 6-7=-1385/325, 7-8=-2600/487, 8-10=-2616/417
BOT CHORD 15-17=-292/167, 13-15=-262/1992, 12-13=-341/1710
WEBS 3-17=-392/291, 4-15=-198/1489, 7-15=-1097/322, 4-17=-1738/538, 8-13=-389/189, 7-13=-75/744, 6-15=0/727, 10-13=0/784, 10-12=-1957/465

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-5 to 3-4-8, Interior(1) 3-4-8 to 20-11-8, Exterior(2R) 20-11-8 to 25-4-5, Interior(1) 25-4-5 to 44-2-4 zone; porch 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) 17, 12 except (jt=lb) 2=124.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

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

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven
J0720-3079	A7	ROOF SPECIAL GIRDER	1	1	E14597582
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:08:53 2020 Page 1
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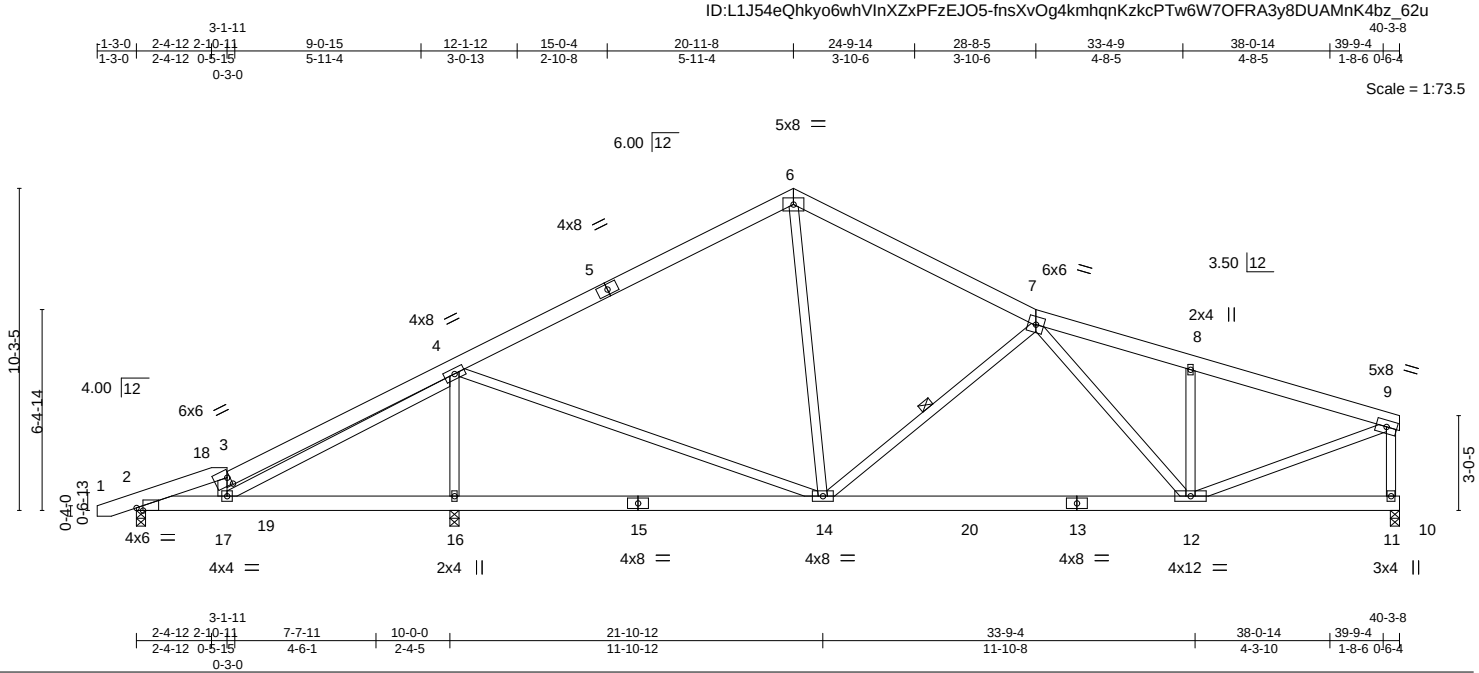


Plate Offsets (X,Y)-- [2:0-2-8,Edge], [3:0-1-0,0-3-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.20	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.31	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.50	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	16-17	>999	240	Weight: 295 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-10-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 7-14

REACTIONS. (size) 2=0-3-8, 16=0-3-8, 11=0-3-8
Max Horz 2=152(LC 8)
Max Uplift 2=-90(LC 4), 16=-60(LC 8), 11=-26(LC 30)
Max Grav 2=327(LC 21), 16=1976(LC 2), 11=1281(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-342/89, 3-4=-409/138, 4-6=-1159/98, 6-7=-1158/78, 7-8=-1633/86, 8-9=-1640/39, 9-11=-1216/51
BOT CHORD 2-17=-87/300, 12-14=-11/1454
WEBS 4-14=0/1207, 7-14=-667/139, 9-12=0/1625, 3-17=-263/77, 4-16=-1598/181, 8-12=-363/128, 4-17=-209/616, 6-14=0/547

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 16, 11.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 35 lb down and 26 lb up at 2-4-12 on top chord, and 13 lb down and 29 lb up at 2-4-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) 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: 1-3=-60, 3-6=-60, 6-7=-60, 7-9=-60, 2-10=-20
Concentrated Loads (lb)
Vert: 19=-2(B)

July 8,2020

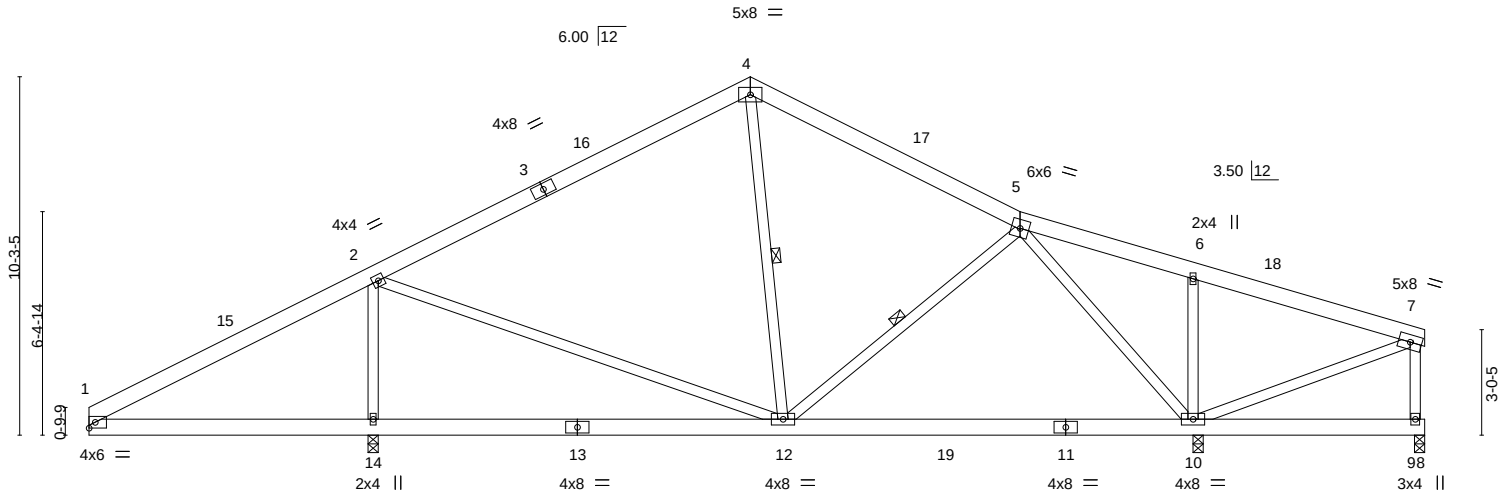
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven	
J0720-3079	A8	ROOF SPECIAL	1	1	Job Reference (optional)	E14597583

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:08:55 2020 Page 1
ID:L1J54eQhkyo6whVInXZxPFzEJO5-bAzIK4iKGNxY0e66kpWOBxCk5Fu4QyvndgGR9Tz_62s

9-7-14	10-1-7	18-11-8	26-8-5	32-11-5	37-9-4	38-3-8
9-7-14	0-5-9	8-10-1	7-8-13	6-3-1	4-9-15	0-6-4

Scale = 1:66.1



8-0-0	19-10-12	31-9-9	37-9-4	38-3-8
8-0-0	11-10-12	11-10-13	5-11-11	0-6-4

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	0.52	Vert(LL)	-0.18	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.25	10-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.88	Horz(CT)	-0.00	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.01	12	>999	240	Weight: 269 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-12, 4-12

REACTIONS. (size) 14=0-3-8, 10=0-3-8, 9=0-3-8
Max Horz 14=146(LC 12)
Max Uplift 14=-25(LC 12), 10=-34(LC 13), 9=-16(LC 9)
Max Grav 14=1776(LC 19), 10=1505(LC 2), 9=124(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-111/633, 2-4=-681/228, 4-5=-630/236
BOT CHORD 1-14=-448/149, 12-14=-443/63, 10-12=-73/392
WEBS 2-14=-1423/439, 2-12=-49/987, 6-10=-393/192, 5-10=-864/210

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 38-0-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 10, 9.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

July 8,2020

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

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven	E14597584
J0720-3079	A9	ROOF SPECIAL	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:08:57 2020 Page 1
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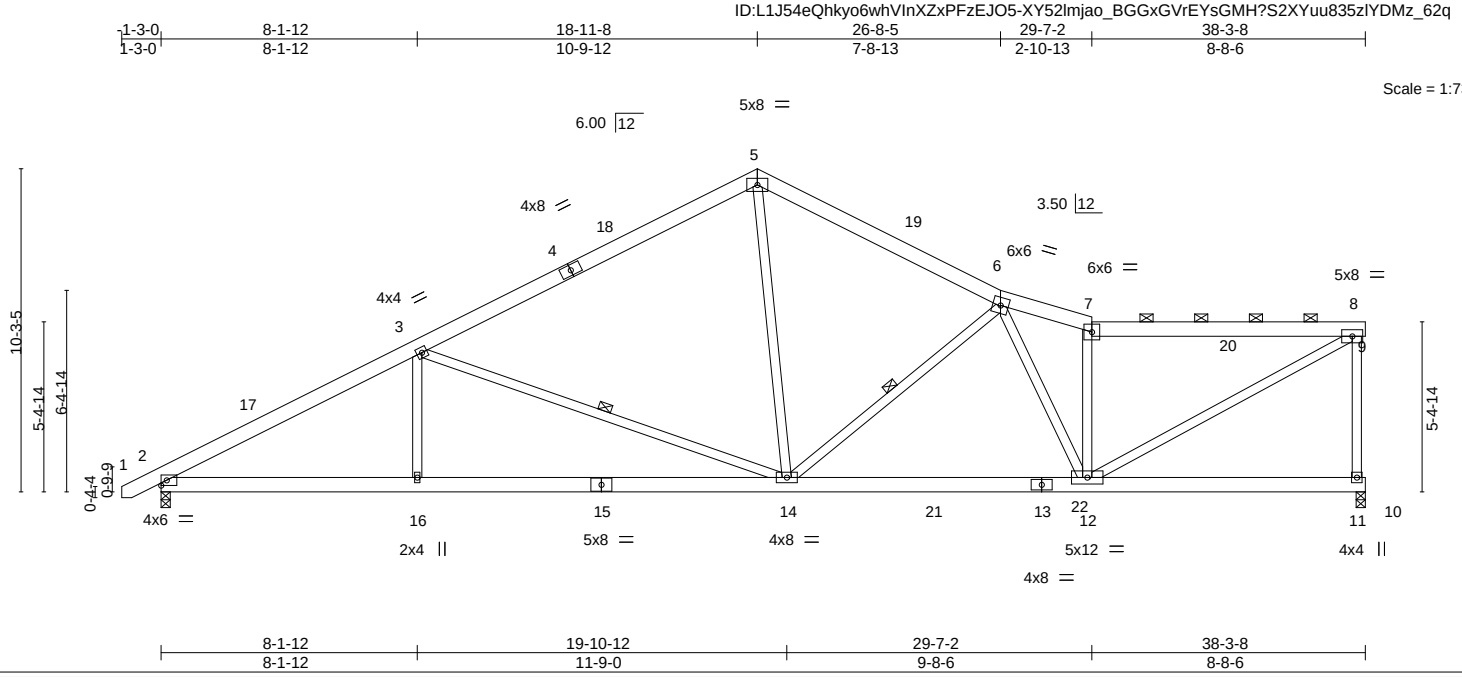

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.16	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.34	14-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.07	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.07	14-16	>999	240	Weight: 278 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-15 oc purlins, except end verticals, and 2-0-0 oc purlins (4-6-12 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-14, 6-14

REACTIONS. (size) 11=0-3-8, 2=0-3-8
Max Horz 2=192(LC 12)
Max Uplift 11=-19(LC 13), 2=-16(LC 12)
Max Grav 11=1683(LC 2), 2=1700(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2935/505, 3-5=-1946/434, 5-6=-2026/458, 6-7=-2407/443, 7-8=-2305/406, 8-11=-1544/342
BOT CHORD 2-16=-562/2548, 14-16=-562/2548, 12-14=-425/2251
WEBS 3-16=0/433, 3-14=-1002/303, 6-14=-699/201, 7-12=-985/286, 8-12=-458/2618, 5-14=-103/1221

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 38-3-8 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) 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) 11, 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

July 8,2020

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

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven
J0720-3079	A10	ROOF SPECIAL	1	1	E14597585
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:08:34 2020 Page 1
ID:L1J54eQhkyo6whVInXZxPFzEJO5-i7CMwvS9CwHX?P04?veTqVq9ingb?VchougqwBz_63B

1-3-0 | 8-1-12 | 18-11-8 | 25-4-10 | 31-7-9 | 38-3-8
1-3-0 | 8-1-12 | 10-9-12 | 6-5-2 | 6-2-15 | 6-7-15

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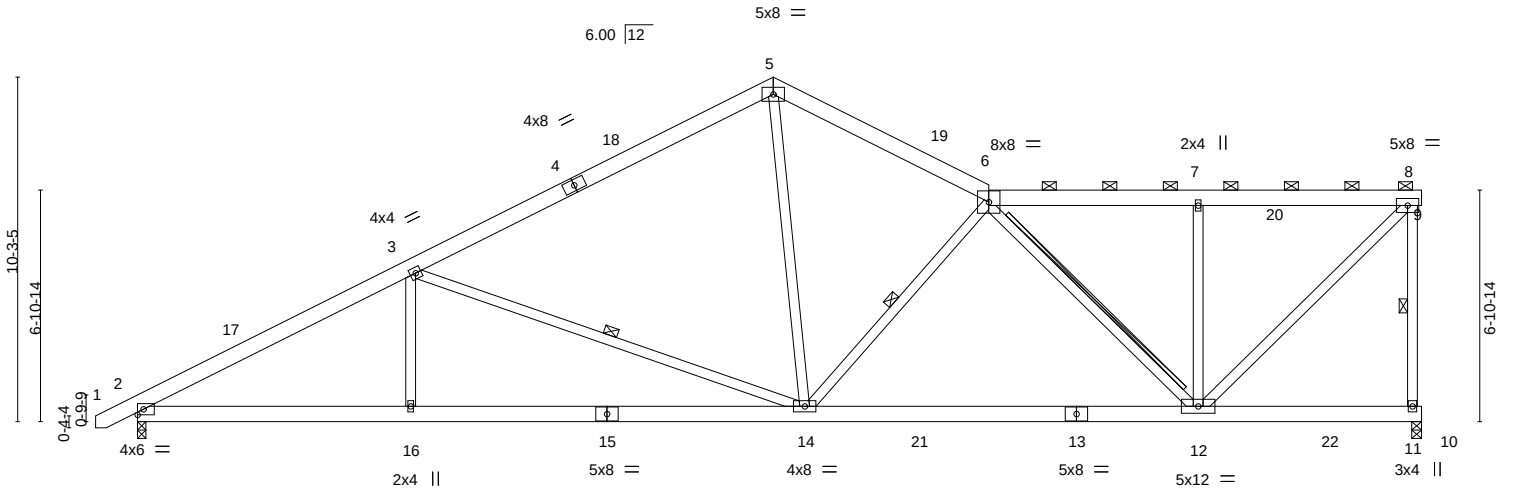

8-1-12 | 19-10-12 | 25-4-10 | 31-7-9 | 38-3-8
8-1-12 | 11-9-0 | 5-5-14 | 6-2-15 | 6-7-15

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	0.50	Vert(LL)	-0.26	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.40	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.07	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.06	14-16	>999	240	Weight: 283 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-4-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 8-11, 3-14, 6-14 T-Brace: 2x4 SPF No.2 - 6-12 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) 11=0-3-8, 2=0-3-0
Max Horz 2=218(LC 12)
Max Uplift 11=-25(LC 13), 2=-12(LC 12)
Max Grav 11=1791(LC 2), 2=1721(LC 2)

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

TOP CHORD	2-3=-2973/306, 3-5=-2006/289, 5-6=-2089/308, 6-7=-1530/167, 7-8=-1528/166, 8-11=-1673/228
BOT CHORD	2-16=-417/2580, 14-16=-417/2580, 12-14=-293/2202
WEBS	3-16=0/419, 3-14=-981/220, 6-14=-634/149, 6-12=-973/186, 7-12=-453/155, 8-12=-232/2159, 5-14=-36/1327

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 38-3-8 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) 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 25 lb uplift at joint 11 and 12 lb uplift at joint 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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.

July 8,2020

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

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven	E14597586
J0720-3079	A11	ROOF SPECIAL	2	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:08:36 2020 Page 1
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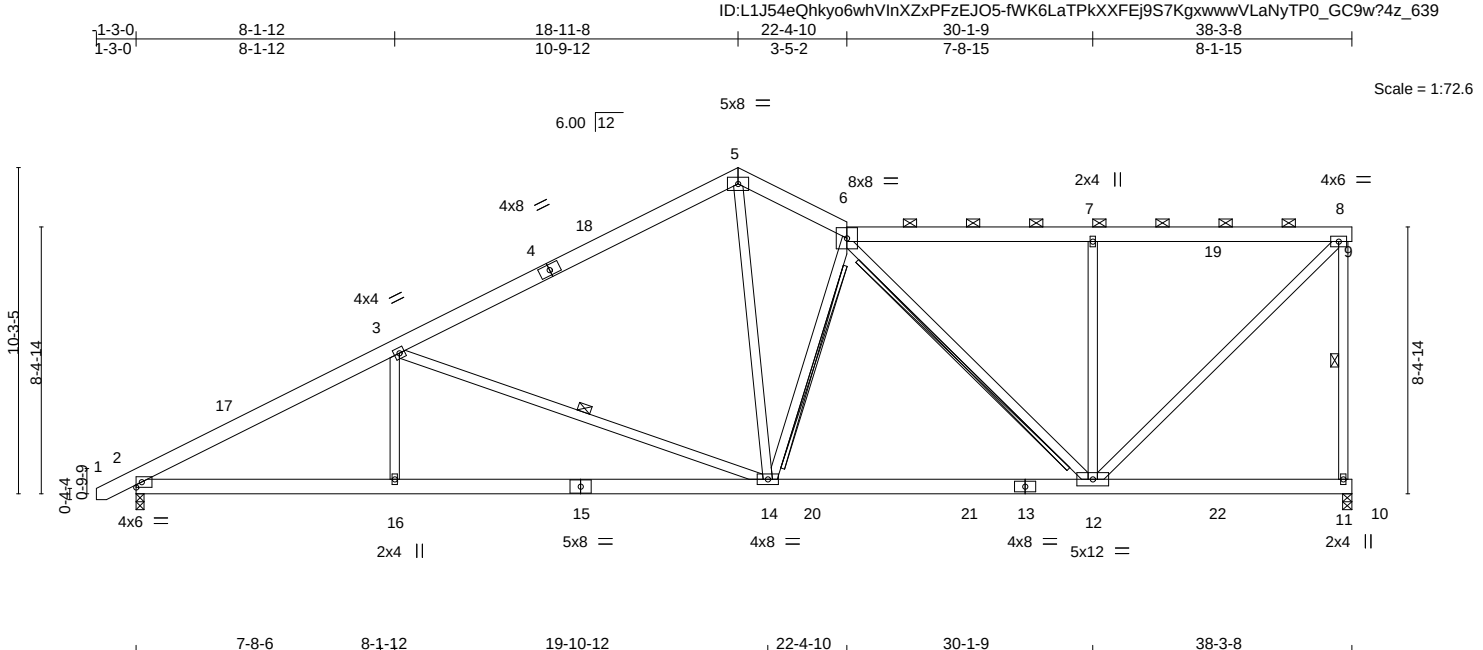

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.18	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.31	14-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.07	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	14-16	>999	240	Weight: 293 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-3 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 8-11, 3-14
T-Brace: 2x4 SPF No.2 - 6-12, 6-14
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. (size) 11=0-3-8, 2=0-3-0
Max Horz 2=245(LC 12)
Max Uplift 11=-33(LC 13), 2=-7(LC 12)
Max Grav 11=1830(LC 2), 2=1735(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3008/279, 3-5=-2027/252, 5-6=-2077/302, 6-7=-1473/179, 7-8=-1471/177
BOT CHORD 2-16=-446/2607, 14-16=-446/2607, 12-14=-274/2007
WEBS 8-11=-1641/252, 3-14=-991/216, 6-12=-774/140, 7-12=-580/196, 8-12=-251/2088, 3-16=0/431, 6-14=-624/116, 5-14=-45/1405

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2E) 18-11-8 to 22-4-10, Interior(1) 22-4-10 to 38-3-8 zone; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 33 lb uplift at joint 11 and 7 lb uplift at joint 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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.

July 8,2020

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

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven
J0720-3079	B1	COMMON	2	1	E14597587
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:08:58 2020 Page 1
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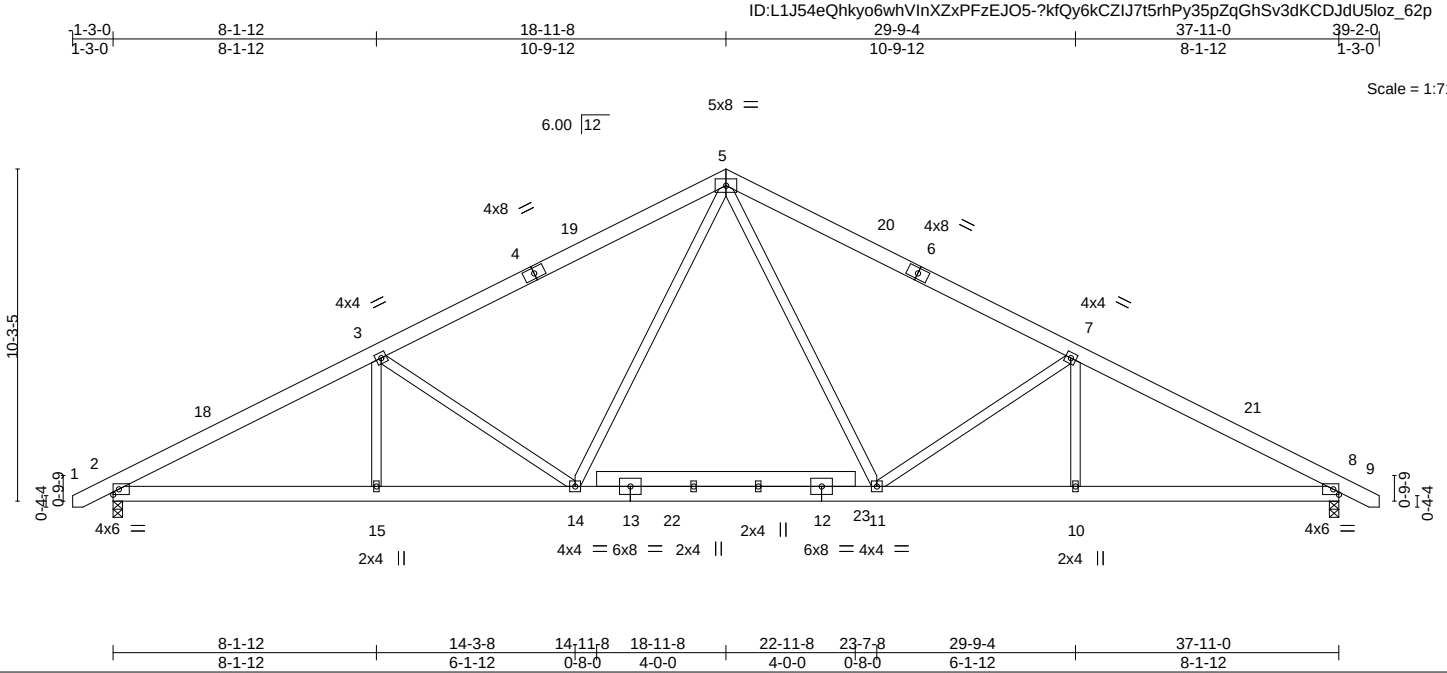

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.19	11-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.31	11-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.08	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	14	>999	240	Weight: 278 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
16-17: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-111(LC 10)
Max Uplift 2=-22(LC 12), 8=-22(LC 13)
Max Grav 2=1736(LC 2), 8=1736(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2958/352, 3-5=-2392/360, 5-7=-2392/360, 7-8=-2958/352
BOT CHORD 2-15=-228/2600, 14-15=-228/2600, 11-14=-36/1677, 10-11=-220/2551, 8-10=-220/2551
WEBS 7-10=0/280, 3-15=0/280, 3-14=-720/217, 5-14=-35/861, 5-11=-35/861, 7-11=-720/217

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 39-0-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

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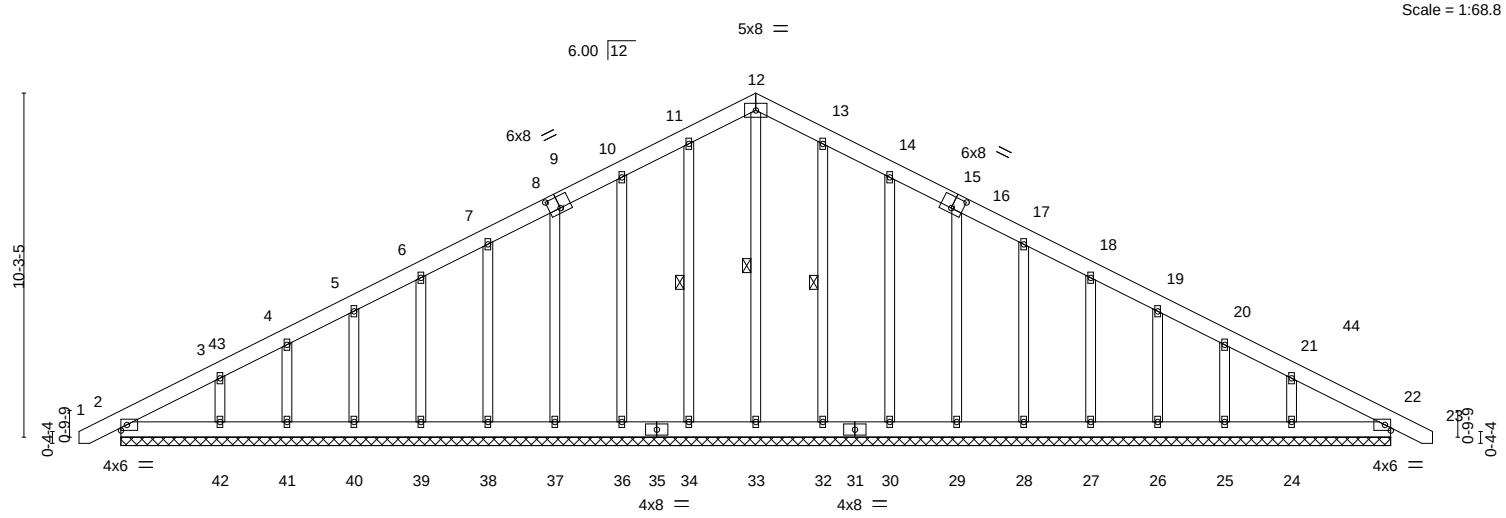
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven
J0720-3079	B1GE	GABLE	1	1	E14597588
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:09:01 2020 Page 1
ID:L1J54eQhkyo6whVInXZxPFzEJO5-QJLZb7n5rDhikZaG44doQCSu?f2Hqr7f0bjlM7z_62m

1-3-0 | 18-11-8 | 37-11-0 | 39-2-0
1-3-0 | 18-11-8 | 18-11-8 | 1-3-0

Scale = 1:68.8



14-3-8 | 14-11-8 | 22-11-8 | 23-7-8 | 37-11-0
14-3-8 | 0-8-0 | 8-0-0 | 0-8-0 | 14-3-8

Plate Offsets (X,Y)-- [8:0-1-15,0-0-0], [9:0-4-0,0-4-4], [9:0-0-0,0-2-12], [15:0-4-0,0-4-4], [15:0-0-0,0-2-12], [16:0-1-15,0-0-0]

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	0.04	Vert(LL)	0.00	22	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	22	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	22	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 325 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 12-33, 11-34, 13-32

REACTIONS. All bearings 37-11-0.
(lb) - Max Horz 2=173(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2, 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25, 24
Max Grav All reactions 250 lb or less at joint(s) 2, 22, 33, 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25, 24

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 10-11=-103/268, 11-12=-115/302, 12-13=-115/302, 13-14=-103/268

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-1-2 to 3-3-11, Exterior(2N) 3-3-11 to 18-11-8, Corner(3R) 18-11-8 to 23-4-5, Exterior(2N) 23-4-5 to 39-0-2 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) 2, 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25, 24.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven
J0720-3079	B2	COMMON	8	1	E14597589
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:09:02 2020 Page 1
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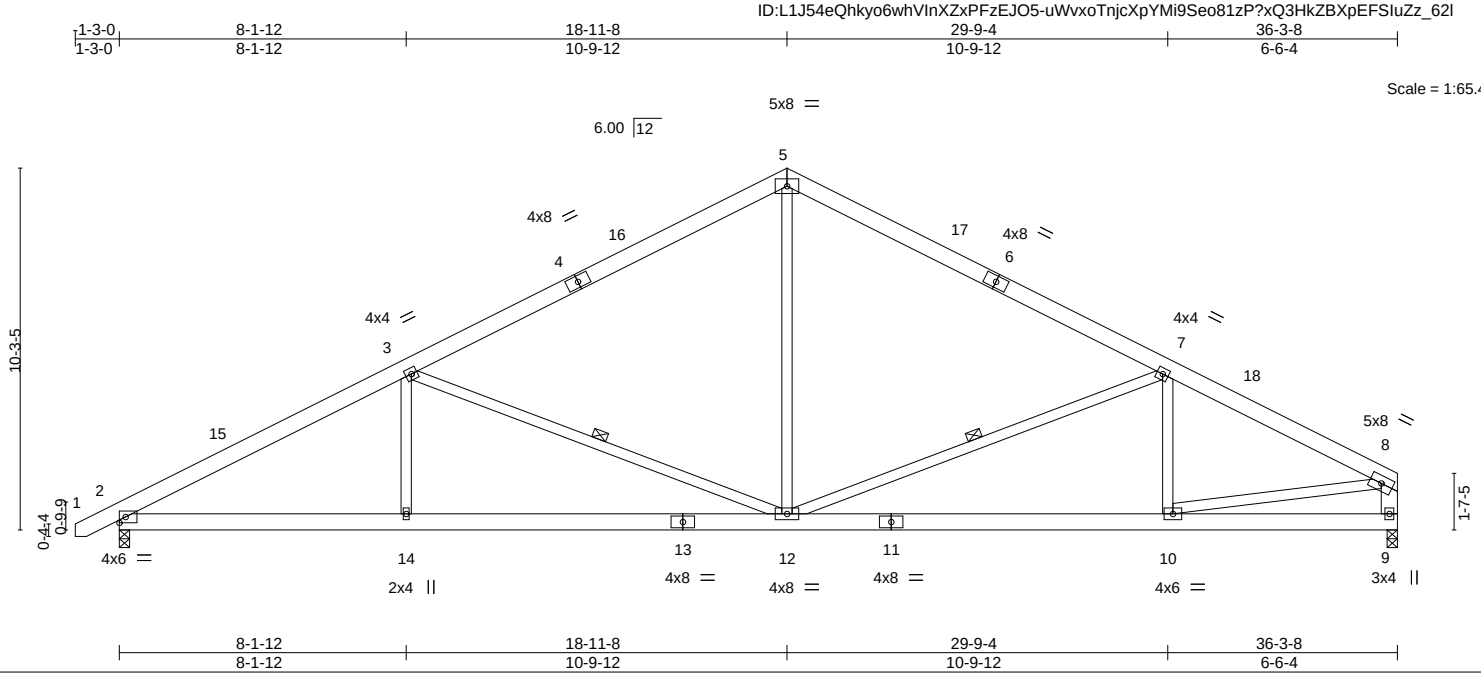


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.08	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.20	10-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	12-14	>999	240	Weight: 254 lb	FT = 20%

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 or 4-8-6 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 3-12, 7-12

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=127(LC 12)
Max Uplift 2=-25(LC 12), 9=-4(LC 13)
Max Grav 2=1512(LC 1), 9=1435(LC 1)

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

TOP CHORD	2-3=-2573/324, 3-5=-1688/312, 5-7=-1686/316, 7-8=-2102/294, 8-9=-1370/211
BOT CHORD	2-14=-258/2180, 12-14=-258/2180, 10-12=-203/1830
WEBS	3-14=0/394, 3-12=-913/216, 5-12=-7/832, 7-12=-586/173, 8-10=-197/1719

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 36-0-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

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

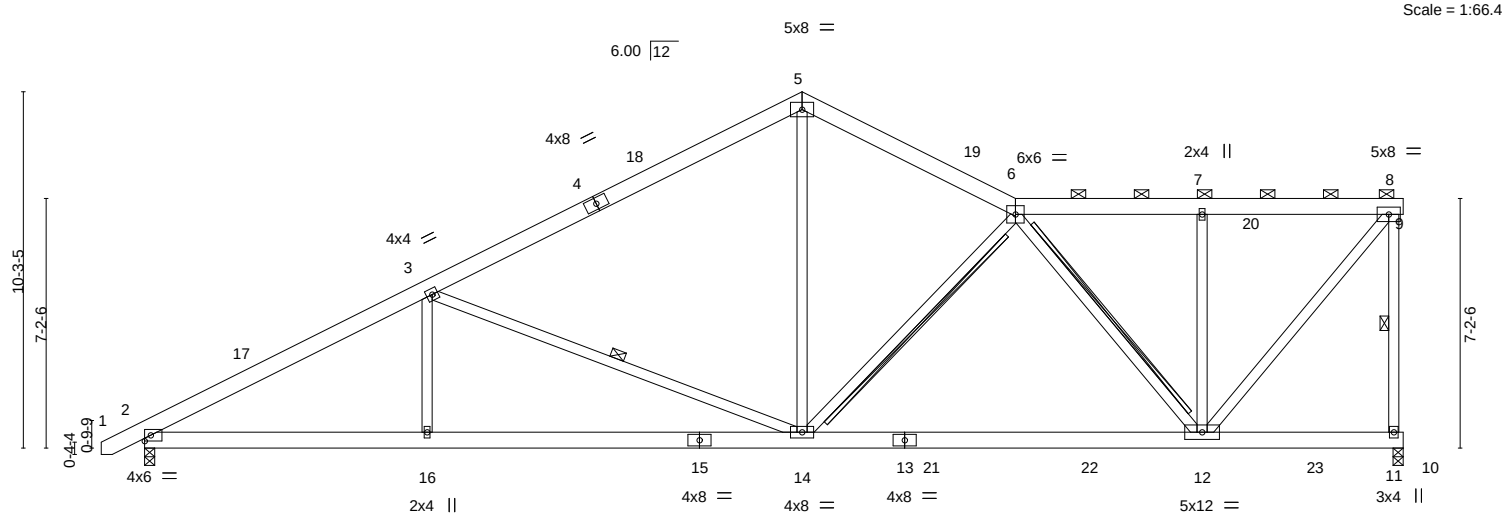
Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven	E14597590
J0720-3079	B3	ROOF SPECIAL	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:09:04 2020 Page 1
ID:L1J54eQhkyo6whVInXZxPFzEJO5-qu0hD9pz883Gb0IrmCAV2q4IStwR15x5iZxPzSz_62j

1-3-0	8-1-12	18-11-8	25-1-5	30-5-15	36-3-8
1-3-0	8-1-12	10-9-12	6-1-13	5-4-9	5-9-9

Scale = 1:66.4



8-1-12	18-11-8	25-1-5	30-5-15	36-3-8
8-1-12	10-9-12	6-1-13	5-4-9	5-9-9

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	0.48	Vert(LL)	-0.23	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.37	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.06	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.05	14-16	>999	240	Weight: 273 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-6-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 8-11, 3-14 T-Brace: 2x4 SPF No.2 - 6-14, 6-12 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) 11=0-3-8, 2=0-3-8
Max Horz 2=224(LC 12)
Max Uplift 11=-21(LC 13), 2=-14(LC 12)
Max Grav 11=1699(LC 2), 2=1632(LC 2)

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

TOP CHORD	2-3=-2773/286, 3-5=-1867/266, 5-6=-1790/284, 6-7=-1227/135, 7-8=-1227/135, 8-11=-1612/217
BOT CHORD	2-16=-408/2408, 14-16=-408/2408, 12-14=-253/1813
WEBS	3-16=0/390, 3-14=-935/225, 5-14=-15/1116, 6-14=-432/107, 6-12=-937/192, 7-12=-374/135, 8-12=-210/1927

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 18-11-8, Exterior(2R) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 36-3-8 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) 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) 11, 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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.

July 8,2020

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

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven	E14597591
J0720-3079	B3GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:09:06 2020 Page 1
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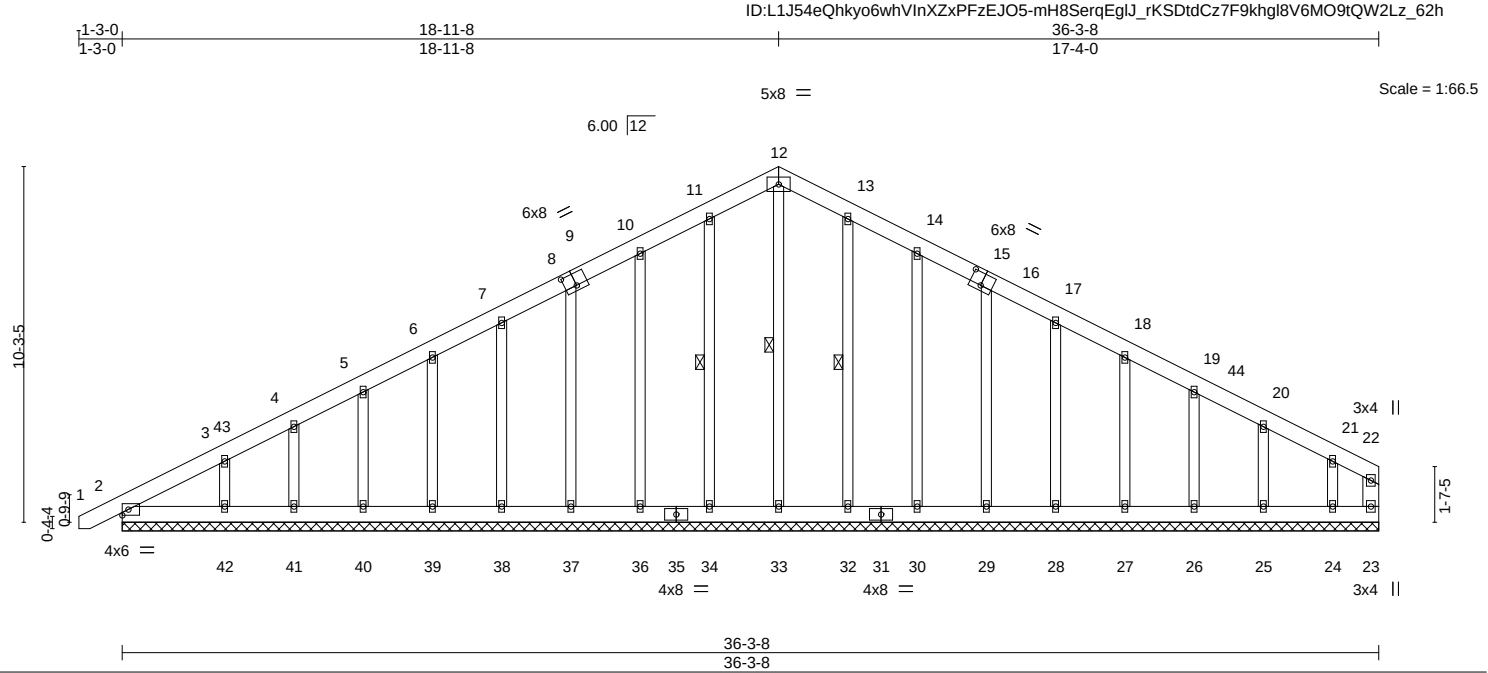


Plate Offsets (X,Y)-- [8:0-1-15,0-0-0], [9:0-4-0,0-4-4], [9:0-0-0,0-2-12], [15:0-4-0,0-4-4], [15:0-0-0,0-2-12], [16:0-1-15,0-0-0]

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	0.05	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	23	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 316 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 12-33, 11-34, 13-32

REACTIONS. All bearings 36-3-8.
(lb) - Max Horz 2=205(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2, 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25 except 24=-169(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 23, 33, 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25, 24

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 10-11=-107/295, 11-12=-118/327, 12-13=-118/327, 13-14=-107/295

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-1-2 to 3-3-11, Exterior(2N) 3-3-11 to 18-11-8, Corner(3R) 18-11-8 to 23-4-5, Exterior(2N) 23-4-5 to 36-0-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable 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) 2, 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25 except (jt=lb) 24=169.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

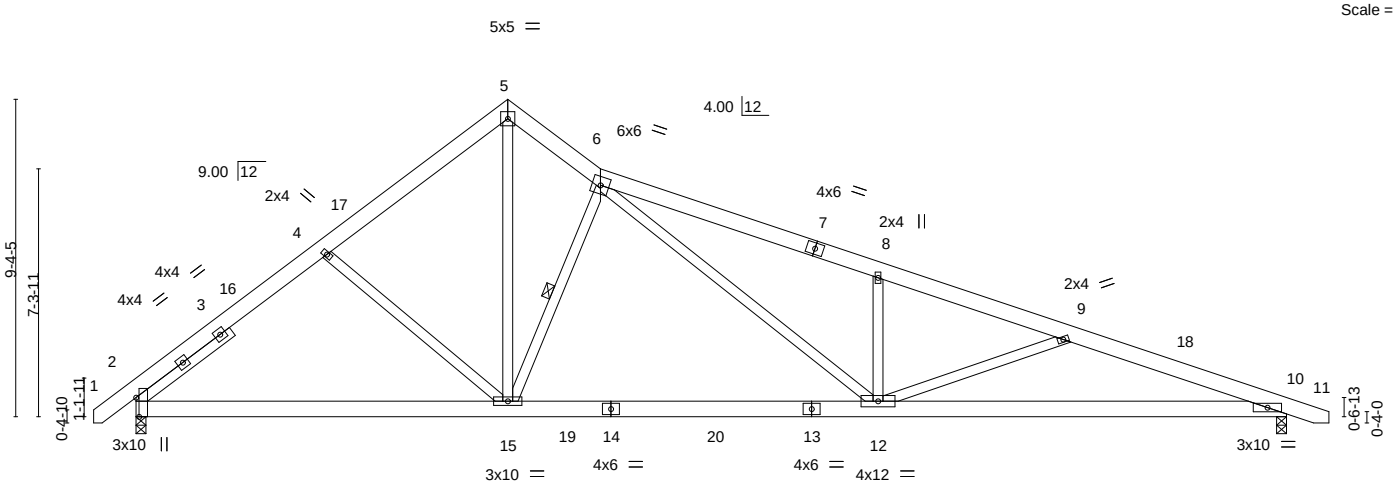
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven	E14597592
J0720-3079	C1	ROOF SPECIAL	6	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:09:08 2020 Page 1
ID:L1J54eQhkyo6whVInXZxPFzEJO5-jgGC3XsUCNai4dcc?2FRDgF?9UG1zwxhdBvd6Dz_62f

1-3-0	5-7-8	10-11-8	13-8-5	21-10-8	27-4-0	33-11-0	35-2-0
1-3-0	5-7-8	5-4-0	2-8-13	8-2-3	5-5-8	6-7-0	1-3-0

Scale = 1:67.9



10-11-8	21-10-8	33-11-0
10-11-8	10-11-0	12-0-8

Plate Offsets (X,Y)-- [2:0-6-13,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	0.37	Vert(LL)	-0.24	12-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.37	12-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.09	12	>999	240	Weight: 245 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -x 3-6-1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-15

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=-194(LC 10)
Max Uplift 10=-59(LC 9)
Max Grav 2=1586(LC 19), 10=1552(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1957/411, 4-5=-1746/401, 5-6=-1721/454, 6-8=-3240/658, 8-9=-3211/552, 9-10=-3552/685
BOT CHORD 2-15=-216/1543, 12-15=-186/1873, 10-12=-569/3314
WEBS 5-15=-364/1777, 6-15=-1318/378, 6-12=-255/1517, 8-12=-464/237, 9-12=-411/205

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-1-8 to 3-3-5, Interior(1) 3-3-5 to 10-11-8, Exterior(2E) 10-11-8 to 13-8-5, Interior(1) 13-8-5 to 34-11-5 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

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

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven	E14597593
J0720-3079	C1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:09:09 2020 Page 1
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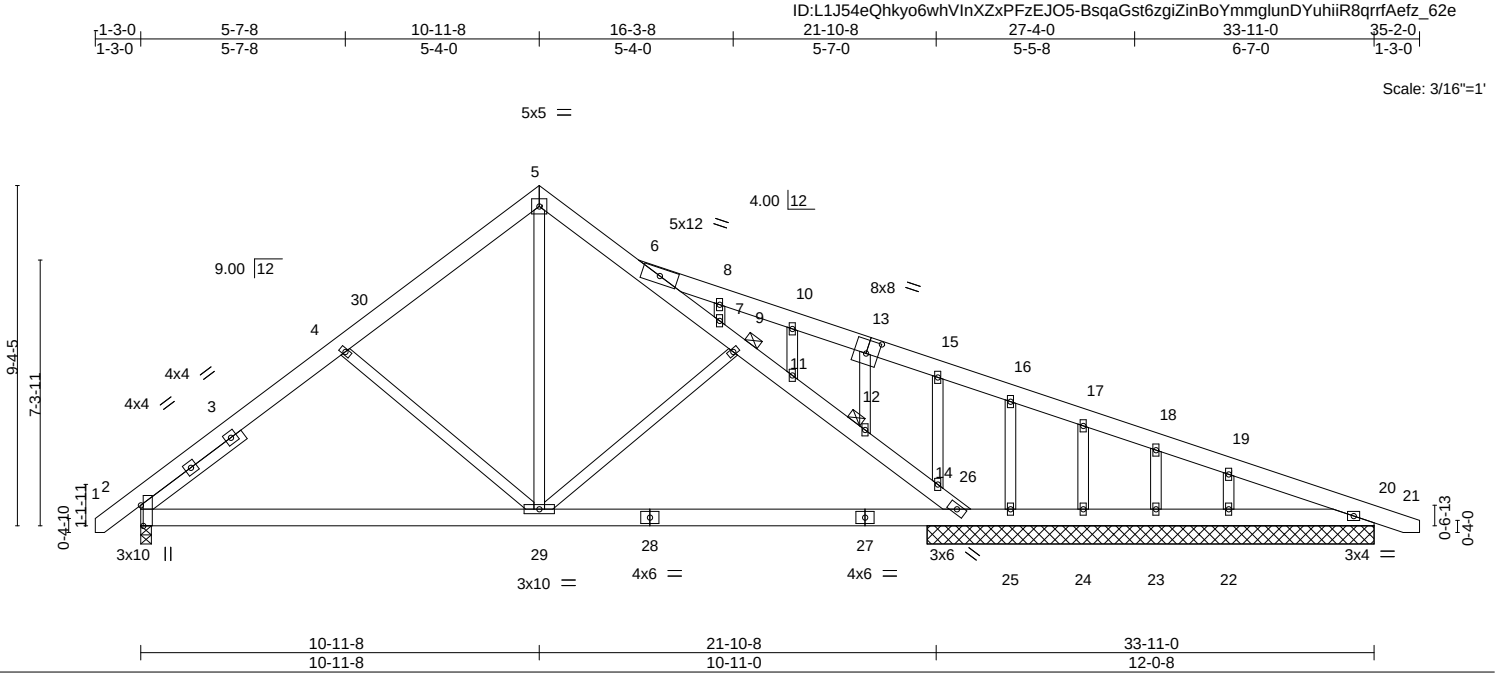

Plate Offsets (X,Y)-- [2:0-6-13,Edge], [13:0-4-0,0-4-8]

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	0.14	Vert(LL)	-0.07	2-29	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.14	2-29	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.02	26	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	2-29	>999	240	Weight: 264 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -x 3-6-1

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 2-29,26-29.
JOINTS	1 Brace at Jt(s): 9, 12

REACTIONS. All bearings 12-3-8 except (jt=length) 2=0-3-8.
(lb) - Max Horz 2=-264(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 20, 22, 23, 24 except 26=-104(LC 13), 2=-118(LC 12), 25=-369(LC 3)
Max Grav All reactions 250 lb or less at joint(s) 20, 23, 24 except 26=1365(LC 1), 2=947(LC 1), 22=311(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1061/155, 4-5=-824/155, 5-6=-724/173, 6-7=-838/95, 7-9=-959/125, 9-11=-1019/160, 11-12=-1093/203, 12-14=-1092/211, 14-26=-1220/268
BOT CHORD 2-29=-154/835, 26-29=-25/786
WEBS 4-29=-276/244, 5-29=-62/589, 9-29=-285/193

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-1-8 to 3-3-5, Interior(1) 3-3-5 to 10-11-8, Exterior(2E) 10-11-8 to 13-7-0, Interior(1) 13-7-0 to 34-11-5 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 22, 23, 24 except (jt=lb) 26=104, 2=118, 25=369.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

July 8,2020

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

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven	E14597594
J0720-3079	C2	ROOF SPECIAL	3	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:09:10 2020 Page 1
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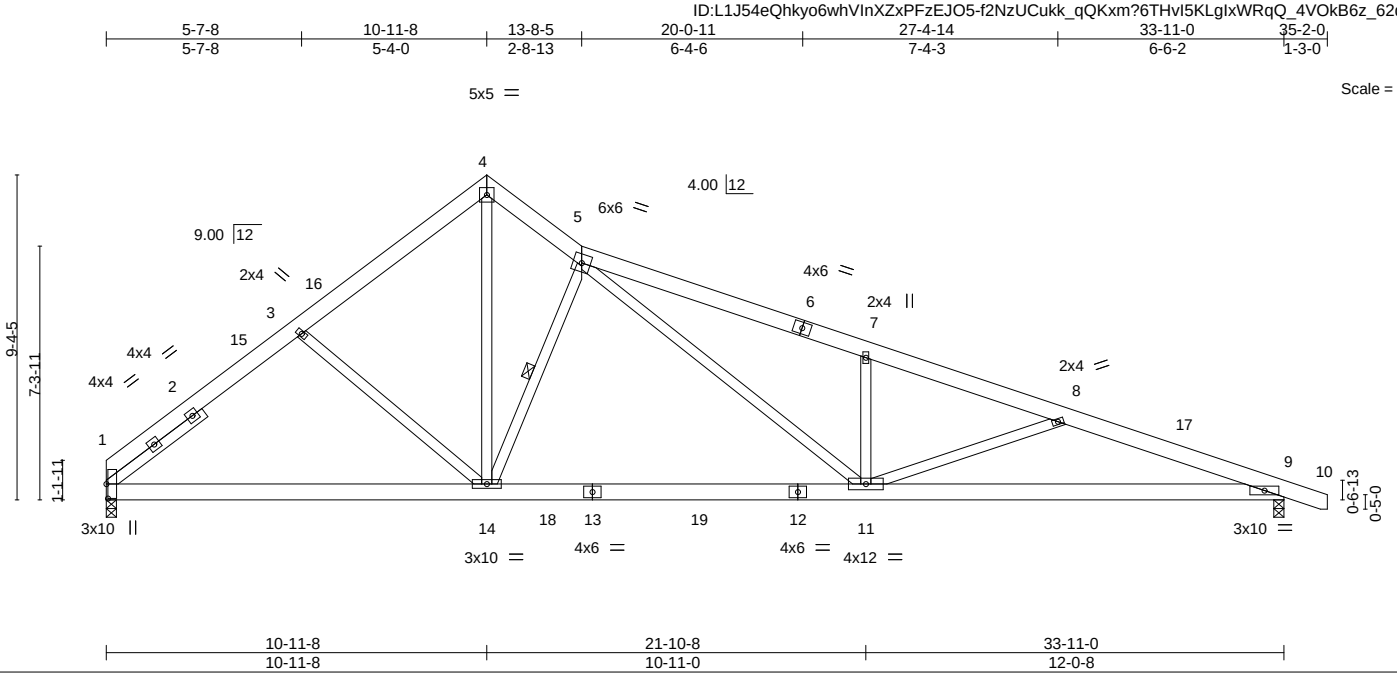

Plate Offsets (X,Y)-- [1:0-5-0,0-0-9]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.24	11-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.37	11-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.09	11	>999	240	Weight: 241 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -x 3-6-1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-14

REACTIONS. (size) 1=0-3-8, 9=0-3-8
Max Horz 1=-193(LC 8)
Max Uplift 9=-63(LC 9)
Max Grav 1=1523(LC 19), 9=1559(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1961/413, 3-4=-1749/402, 4-5=-1725/455, 5-7=-3242/658, 7-8=-3213/552, 8-9=-3554/683
BOT CHORD 1-14=-216/1548, 11-14=-183/1877, 9-11=-565/3315
WEBS 4-14=-365/1781, 5-14=-1318/378, 5-11=-255/1516, 7-11=-467/239, 8-11=-410/205

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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 10-11-8, Exterior(2E) 10-11-8 to 13-8-5, Interior(1) 13-8-5 to 35-0-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

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

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven	E14597595
J0720-3079	C3	ROOF SPECIAL	2	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:09:12 2020 Page 1
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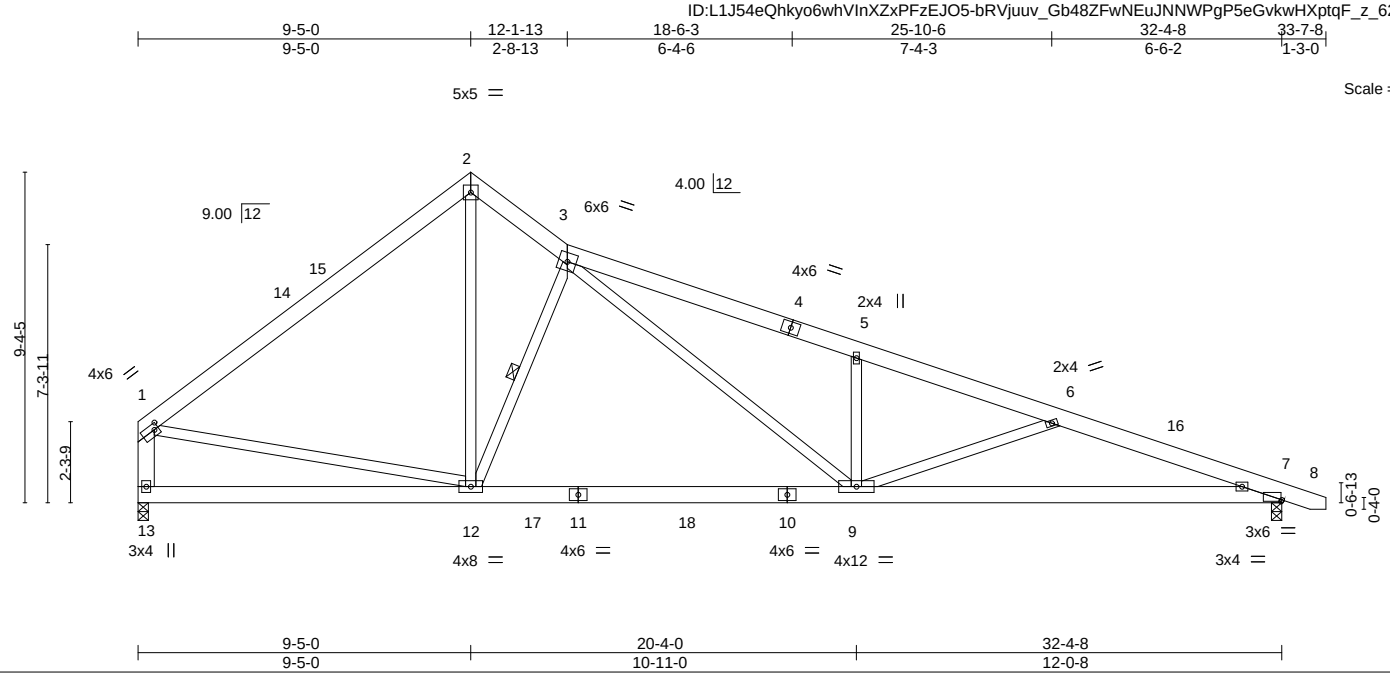

Plate Offsets (X,Y)-- [1:0-1-8,0-2-0], [7:0-0-4,0-0-8]

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	0.42	Vert(LL)	-0.22	9-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.35	9-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	9	>999	240	Weight: 235 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
1-13: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-12

REACTIONS. (size) 13=0-3-8, 7=0-3-8
Max Horz 13=-191(LC 8)
Max Uplift 7=-61(LC 9)
Max Grav 13=1437(LC 19), 7=1473(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1585/311, 2-3=-1456/396, 3-5=-3007/612, 5-6=-2978/505, 6-7=-3329/641, 1-13=-1310/292
BOT CHORD 12-13=-81/326, 9-12=-142/1635, 7-9=-528/3104
WEBS 2-12=-177/1399, 3-12=-1221/321, 3-9=-255/1533, 5-9=-467/240, 6-9=-420/207, 1-12=0/1009

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 9-5-0, Exterior(2E) 9-5-0 to 12-1-13, Interior(1) 12-1-13 to 33-4-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

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

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven
J0720-3079	C4	ROOF SPECIAL	1	1	E14597596
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:09:13 2020 Page 1
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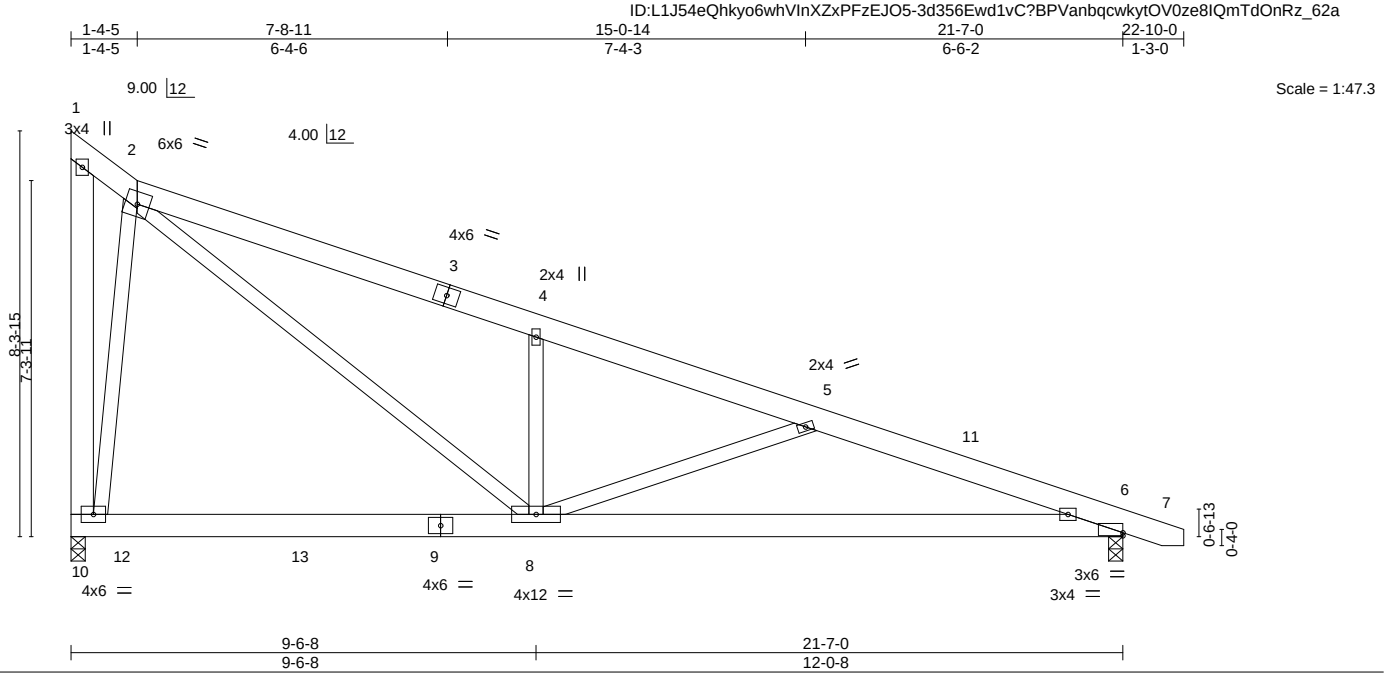

Plate Offsets (X,Y)-- [6:Edge,0-0-12]

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	0.27	Vert(LL)	-0.12	6-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.27	6-8	>931	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	6-8	>999	240	Weight: 165 lb	FT = 20%

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

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

REACTIONS. (size) 10=0-3-8, 6=0-3-8
Max Horz 10=-218(LC 13)
Max Uplift 10=-78(LC 13), 6=-44(LC 9)
Max Grav 10=996(LC 2), 6=975(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1485/188, 4-5=-1459/83, 5-6=-1872/239
BOT CHORD 8-10=-48/265, 6-8=-158/1735
WEBS 4-8=-459/235, 5-8=-479/231, 2-10=-869/283, 2-8=-258/1539

NOTES-
1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-2-12 to 1-4-7, Interior(1) 1-4-7 to 22-7-5 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 6.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

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

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven
J0720-3079	D1GE	COMMON SUPPORTED GAB	1	1	E14597597
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:09:14 2020 Page 1
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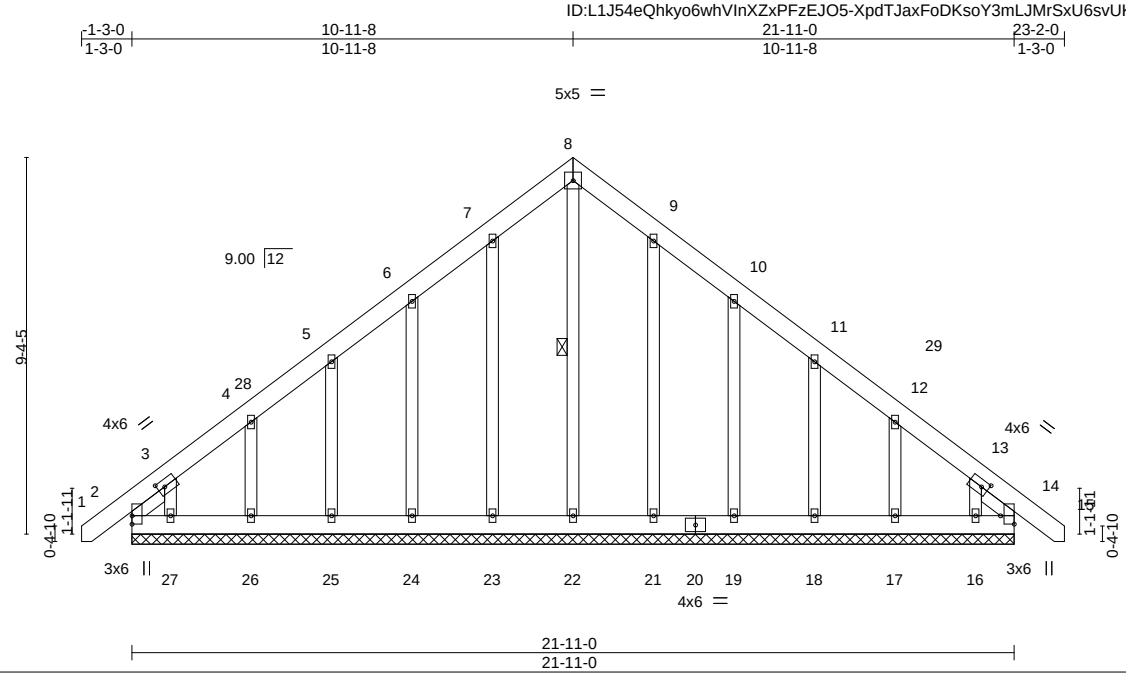

Plate Offsets (X,Y)-- [3:0-2-1,0-2-0], [13:0-2-1,0-2-0], [14:Edge,0-4-2]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	-0.00	14	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	14	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 198 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -x 1-0-15, Right 2x4 SP No.2 -x 1-0-15

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 8-22

REACTIONS. All bearings 21-11-0.
(lb) - Max Horz 2=-231(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 23, 24, 25, 26, 21, 19, 18, 17, 14 except 2=-118(LC 8), 27=-174(LC 12), 16=-154(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 22, 23, 24, 25, 26, 27, 21, 19, 18, 17, 16, 14

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-318/207, 13-14=-261/123

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-1-8 to 3-3-5, Exterior(2N) 3-3-5 to 10-11-8, Corner(3R) 10-11-8 to 15-4-5, Exterior(2N) 15-4-5 to 23-0-8 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) 23, 24, 25, 26, 21, 19, 18, 17, 14 except (jt=lb) 2=118, 27=174, 16=154.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

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

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven
J0720-3079	VC1	GABLE	1	1	E14597598
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:09:15 2020 Page 1
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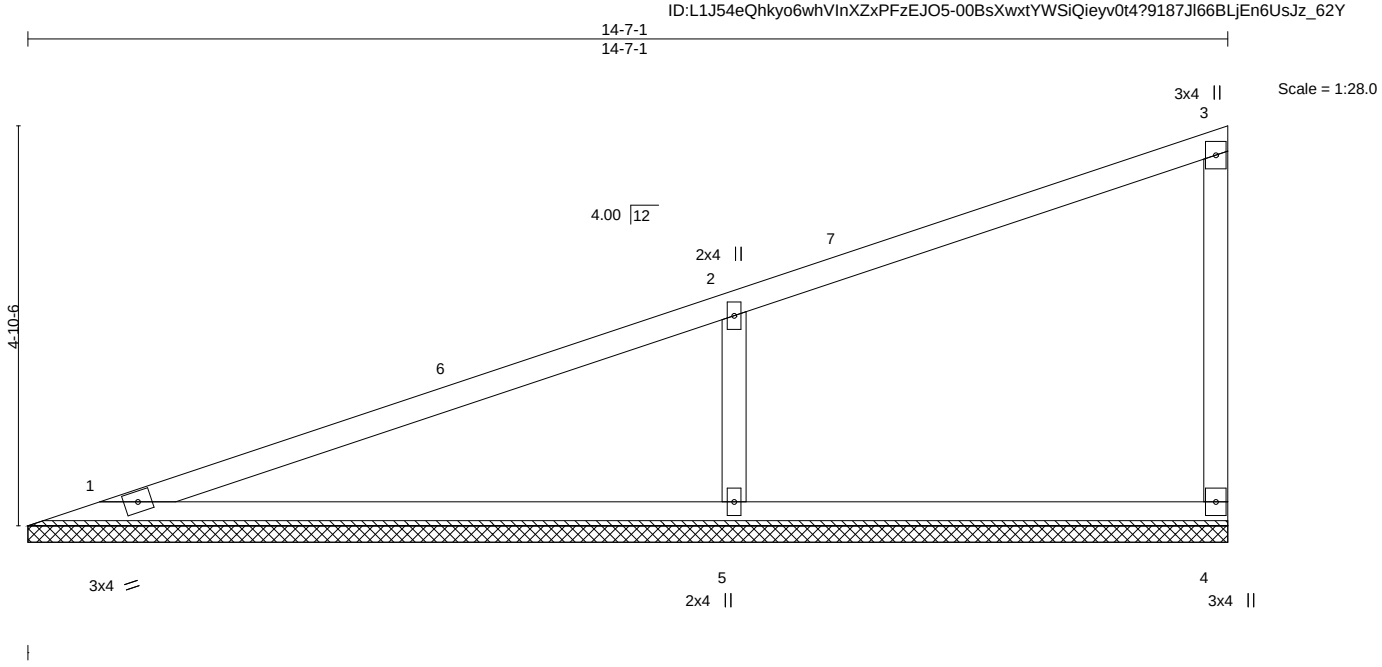

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 53 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=14-7-1, 4=14-7-1, 5=14-7-1
Max Horz 1=125(LC 8)
Max Uplift 4=-14(LC 8), 5=-58(LC 8)
Max Grav 1=249(LC 1), 4=157(LC 1), 5=678(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-496/277

NOTES-

1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-10-13 to 5-3-9, Interior(1) 5-3-9 to 14-5-5 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

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

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven
J0720-3079	VC2	GABLE	1	1	E14597599
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:09:16 2020 Page 1
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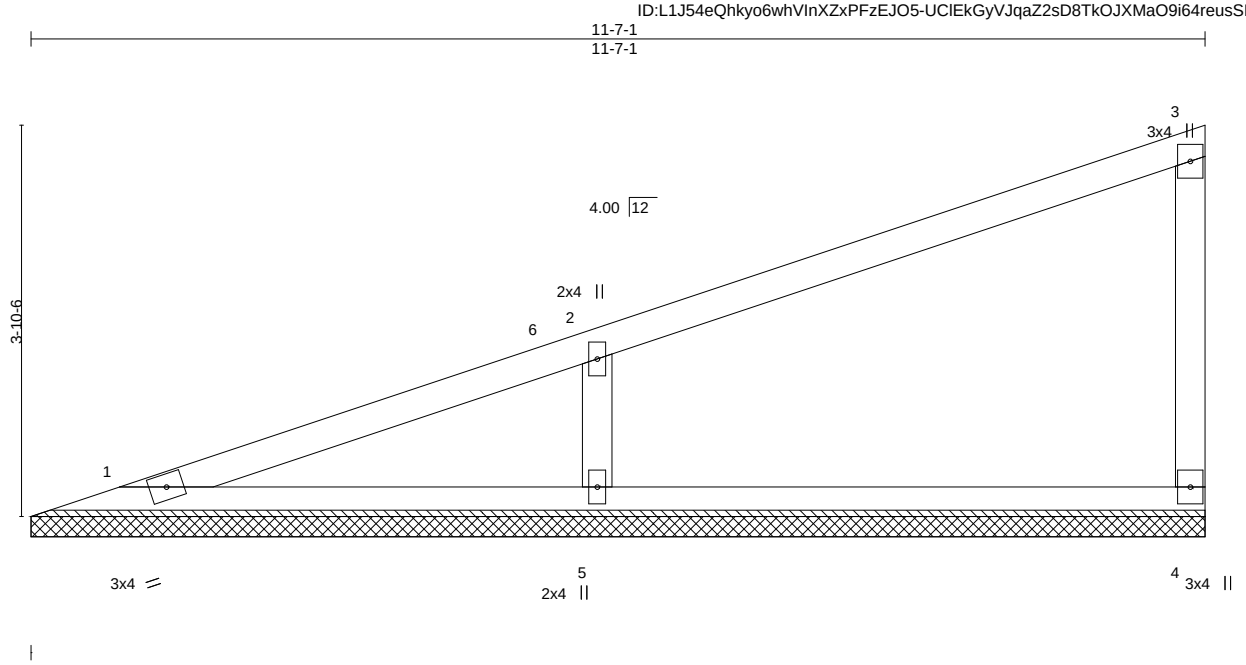

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 41 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=11-7-1, 4=11-7-1, 5=11-7-1
Max Horz 1=98(LC 8)
Max Uplift 4=-17(LC 8), 5=-43(LC 8)
Max Grav 1=139(LC 1), 4=195(LC 1), 5=510(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-379/319

NOTES-

1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-10-13 to 5-7-1, Interior(1) 5-7-1 to 11-5-5 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

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

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven
J0720-3079	VC3	GABLE	1	1	E14597600
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:09:17 2020 Page 1
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8-7-1

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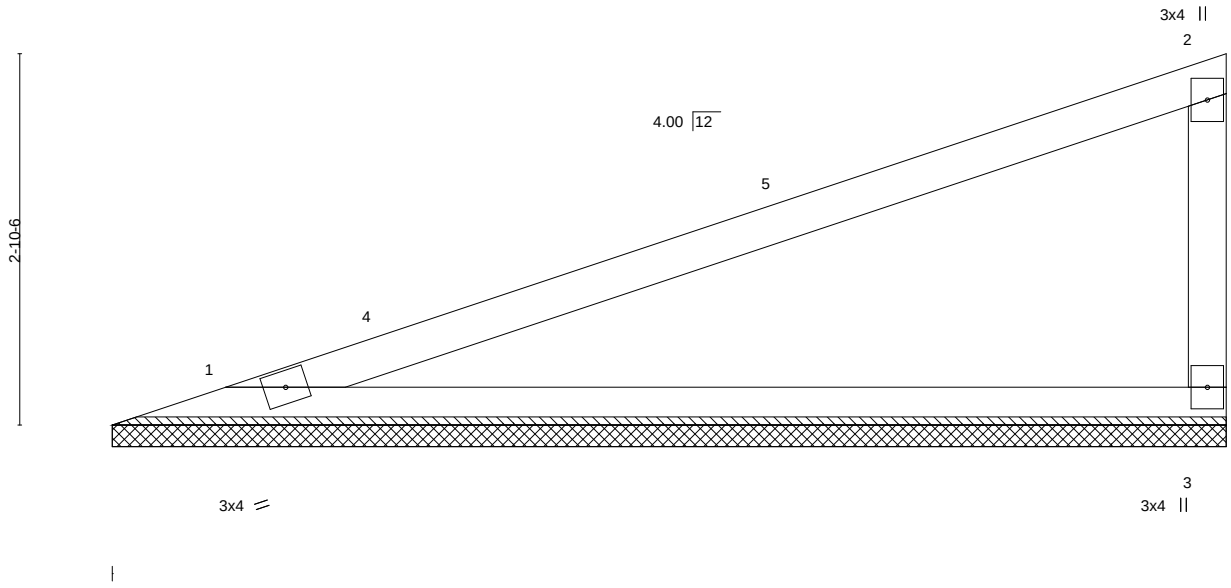

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 28 lb	FT = 20%

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

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

REACTIONS. (size) 1=8-7-1, 3=8-7-1
Max Horz 1=70(LC 8)
Max Uplift 1=-3(LC 8), 3=-26(LC 8)
Max Grav 1=302(LC 1), 3=302(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-226/252

NOTES-
1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-10-13 to 5-3-9, Interior(1) 5-3-9 to 8-5-5 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

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

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven
J0720-3079	VC4	VALLEY	1	1	E14597601
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:09:17 2020 Page 1
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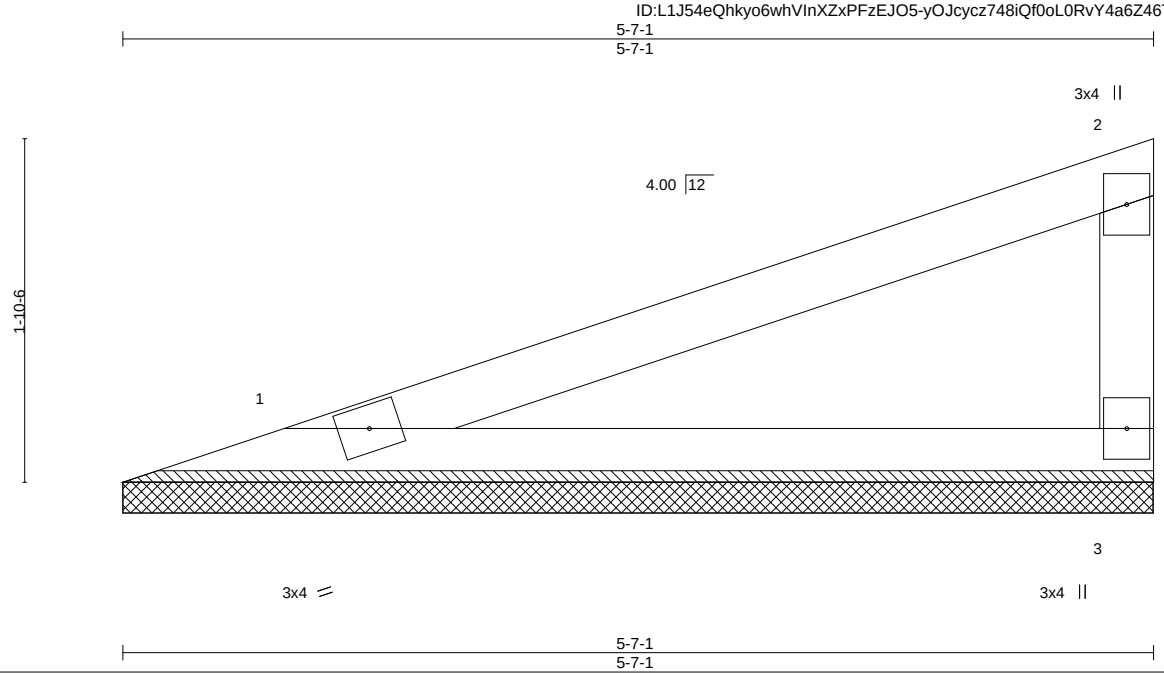

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LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-7-1 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-7-1, 3=5-7-1
Max Horz 1=42(LC 8)
Max Uplift 1=-2(LC 8), 3=-16(LC 8)
Max Grav 1=182(LC 1), 3=182(LC 1)

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

NOTES-

1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
5) Non Standard bearing condition. Review required.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

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

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven
J0720-3079	VC5	VALLEY	1	1	E14597602
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:09:18 2020 Page 1
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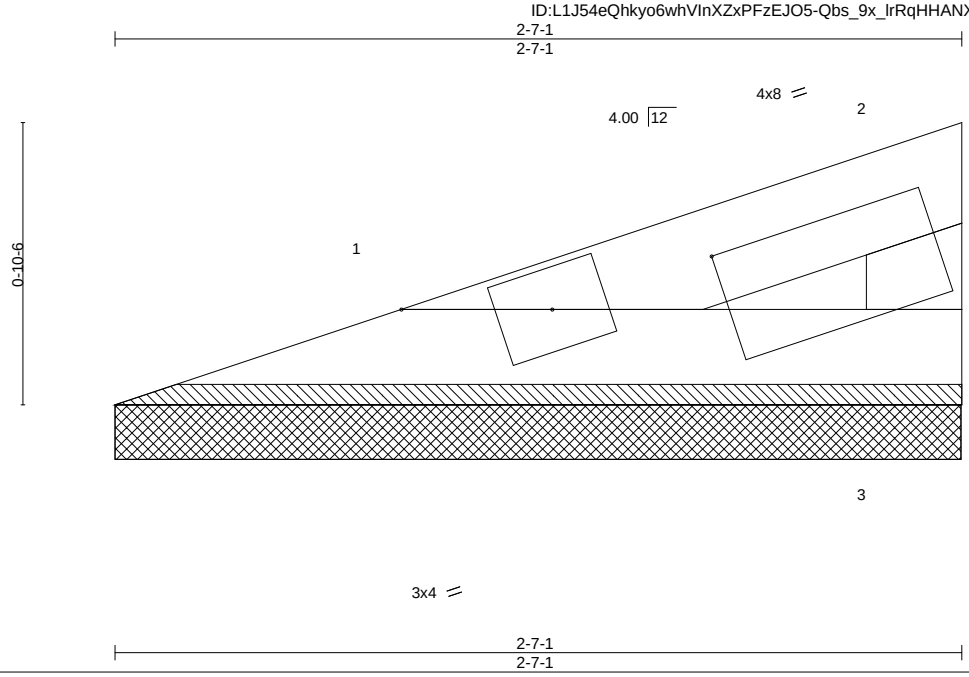

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Plate Offsets (X,Y)-- [2:0-1-14,0-0-0], [2:0-11-7,0-1-12], [3:0-1-11,0-0-9]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	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		n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 7 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-7-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-7-1, 3=2-7-1
Max Horz 1=14(LC 8)
Max Uplift 1=-1(LC 8), 3=-5(LC 8)
Max Grav 1=62(LC 1), 3=62(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
5) Non Standard bearing condition. Review required.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

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

Job	Truss	Truss Type	Qty	Ply	Lot 41 Oak Haven	E14597603
J0720-3079	Z1	DIAGONAL HIP GIRDER	2	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Wed Jul 8 14:09:19 2020 Page 1
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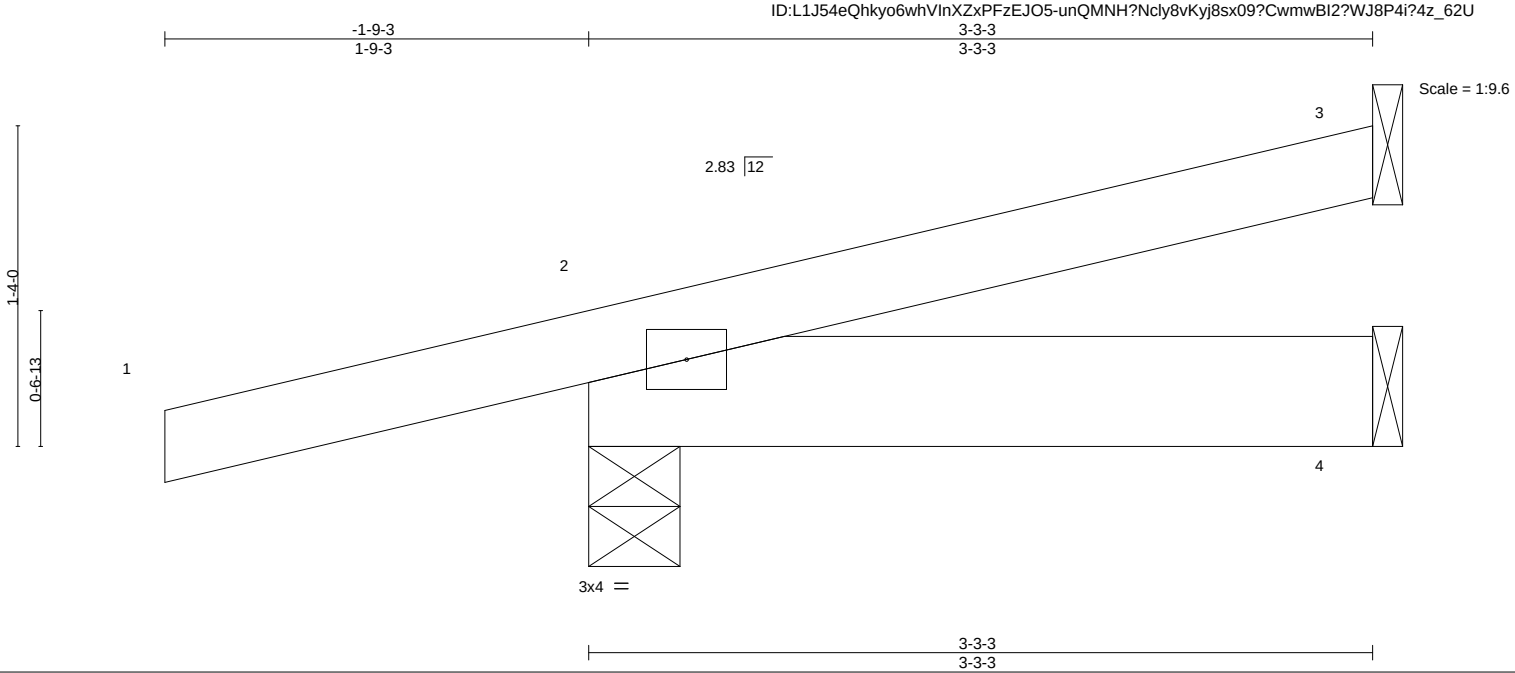


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.00	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.00	2-4	>999	240	Weight: 15 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-4-9, 4=Mechanical
Max Horz 2=36(LC 8)
Max Uplift 3=-21(LC 12), 2=-106(LC 8), 4=-11(LC 8)
Max Grav 3=52(LC 1), 2=276(LC 1), 4=60(LC 3)

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

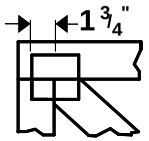
NOTES-
1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) 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) 3, 4 except (jt=lb) 2=106.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 8,2020

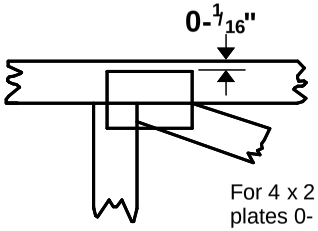
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

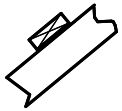
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

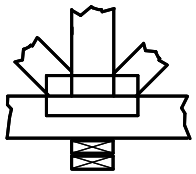
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

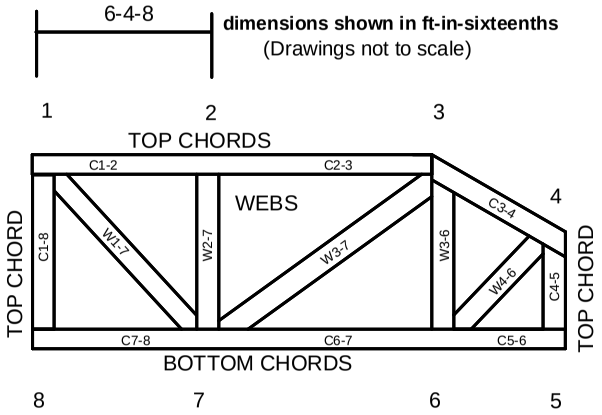


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & 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-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

MiTek

ENGINEERING BY TRENCO
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MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

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.