

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J1123-6330  
Kelly Residence

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

Pages or sheets covered by this seal: I62040804 thru I62040826

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

North Carolina COA: C-0844



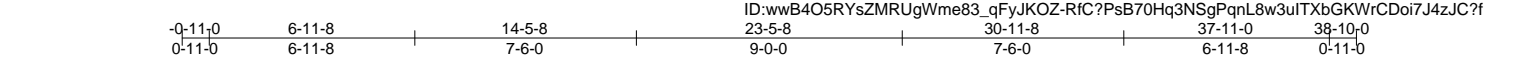
November 16, 2023

Gilbert, Eric

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

Job	Truss	Truss Type	Qty	Ply	Kelly Residence	162040804
J1123-6330	A1	PIGGYBACK BASE	10	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:03 2023 Page 1



Scale = 1:78.0

Plate Offsets (X,Y)--	[2:0-2-13,0-0-3], [6:0-6-0,0-2-12], [7:0-6-0,0-2-12], [11:0-2-14,0-0-3]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.48	Vert(LL)	-0.22	16	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.44	16	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.56	Horz(CT)	0.56	11	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S	Wind(LL)	0.13	16	>999	240	Weight: 300 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 4-7-1 oc purlins, except
BOT CHORD 2x6 SP No.1	2-0-0 oc purlins (4-11-5 max.): 6-7.
WEBS 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
SLIDER Left 2x6 SP No.1 4-8-0, Right 2x6 SP No.1 4-8-0	

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8  
 Max Horz 2=309(LC 9)  
 Max Uplift 2=-63(LC 12), 11=-63(LC 13)  
 Max Grav 2=1565(LC 1), 11=1565(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-3611/677, 4-6=-3152/505, 6-7=-3862/458, 7-9=-3152/494, 9-11=-3611/655  
 BOT CHORD 2-19=-424/2823, 17-19=-434/2863, 16-17=-189/2637, 15-16=0/2637, 13-15=-399/2820,  
 11-13=-390/2778  
 WEBS 4-17=-539/363, 6-17=-78/402, 6-16=0/1906, 7-16=-144/1906, 7-15=-79/403,  
 9-15=-541/383

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-10-7 to 3-6-6, Interior(1) 3-6-6 to 14-5-8, Exterior(2) 14-5-8 to 20-8-3, Interior(1) 20-8-3 to 23-5-8, Exterior(2) 23-5-8 to 29-8-3, Interior(1) 29-8-3 to 38-9-7 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.
  - 6) Bearing at joint(s) 2, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 11.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (<a href="http://www.tpinst.org">www.tpinst.org</a>) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (<a href="http://www.sbcacomponents.com">www.sbcacomponents.com</a>)</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Scale = 1:79.4

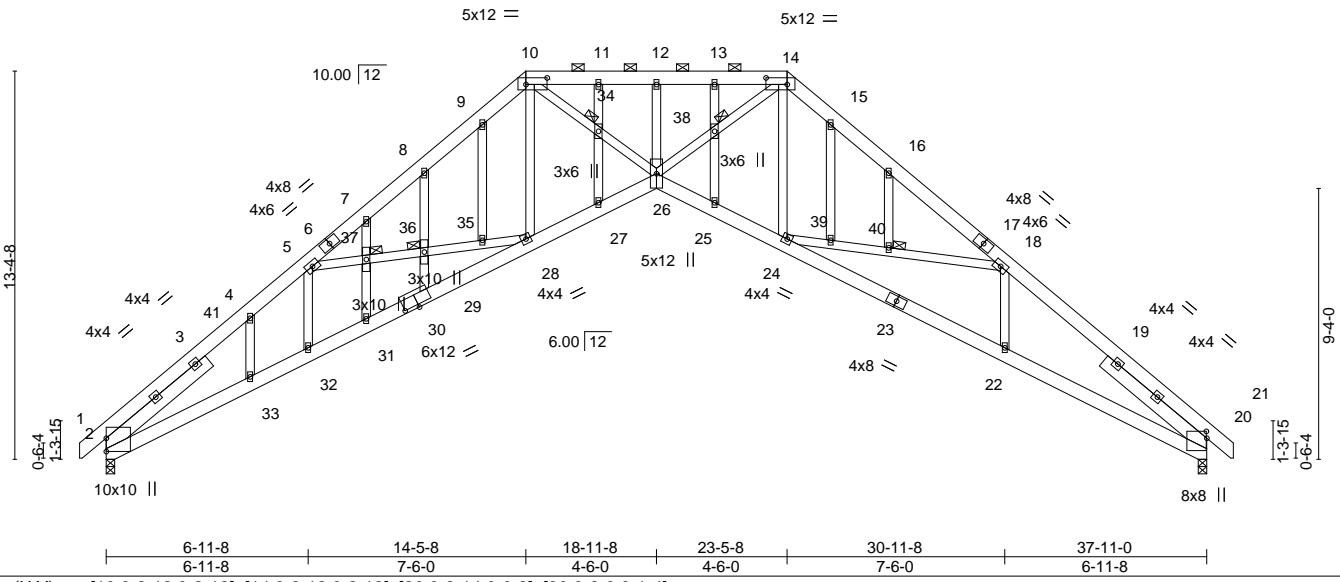


Plate Offsets (X,Y)--	[10:0-8-12,0-2-12], [14:0-8-12,0-2-12], [20:0-2-14,0-0-3], [30:0-6-0,0-1-4]
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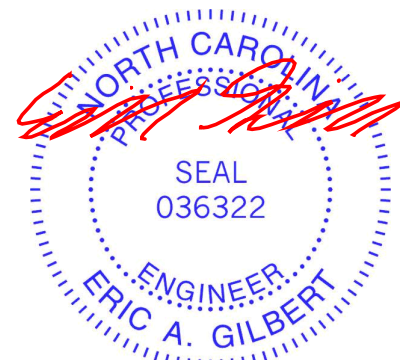
LOADING (psf)	SPACING-	CS.I.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.57	Vert(LL) -0.23	26	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.60	Horz(CT) -0.45	26	>991	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.58	Horz(LL) 0.58	20	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.20	29	>999	240		
							Weight: 346 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 4-6-1 oc purlins, except 2-0-0 oc purlins (4-11-2 max.): 10-14.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 8-0-10 oc bracing.
WEBS 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 34, 36, 37, 38, 40
OTHERS 2x4 SP No.2	
SLIDER Left 2x6 SP No.1 4-8-0, Right 2x6 SP No.1 4-8-0	

**REACTIONS.** (size) 2=0-3-8, 20=0-3-8  
 Max Horz 2=386(LC 5)  
 Max Uplift 2=-420(LC 8), 20=-288(LC 9)  
 Max Grav 2=1933(LC 1), 20=1609(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-4=-4411/996, 4-5=-3832/1005, 5-7=-3403/449, 7-8=-3330/477, 8-9=-3311/551, 9-10=-3243/601, 10-11=-4144/627, 11-12=-4140/627, 12-13=-4139/625, 13-14=-4143/625, 14-15=-3101/367, 15-16=-3219/348, 16-18=-3304/325, 18-20=-3719/427  
**BOT CHORD** 2-33=-905/3310, 32-33=-946/3268, 31-32=-889/3277, 29-31=-902/3299, 28-29=-925/3358, 27-28=-571/2808, 26-27=-580/2866, 25-26=-282/2824, 24-25=-256/2754, 22-24=-211/2902, 20-22=-204/2859  
**WEBS** 5-37=-514/619, 36-37=-517/624, 35-36=-512/621, 28-35=-512/618, 10-28=-312/529, 10-34=-197/1958, 26-34=-205/2042, 26-38=-575/2175, 14-38=-542/2036, 14-24=-172/347, 24-39=-470/590, 39-40=-469/592, 18-40=-472/593, 4-33=-22/293

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 2, 20 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=420, 20=288.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 453 lb down and 242 lb up at Continuation of top chord. The design/selection of such connection device(s) is the responsibility of others.



November 16, 2023

Job	Truss	Truss Type	Qty	Ply	Kelly Residence	I62040805
J1123-6330	A1SG	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:05 2023 Page 2

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**NOTES-**

13) 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: 1-10=-60, 10-14=-60, 14-21=-60, 2-26=-20, 20-26=-20

Concentrated Loads (lb)

Vert: 41=-413(F)

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

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Kelly Residence	162040806
J1123-6330	B1	Attic	7	1		

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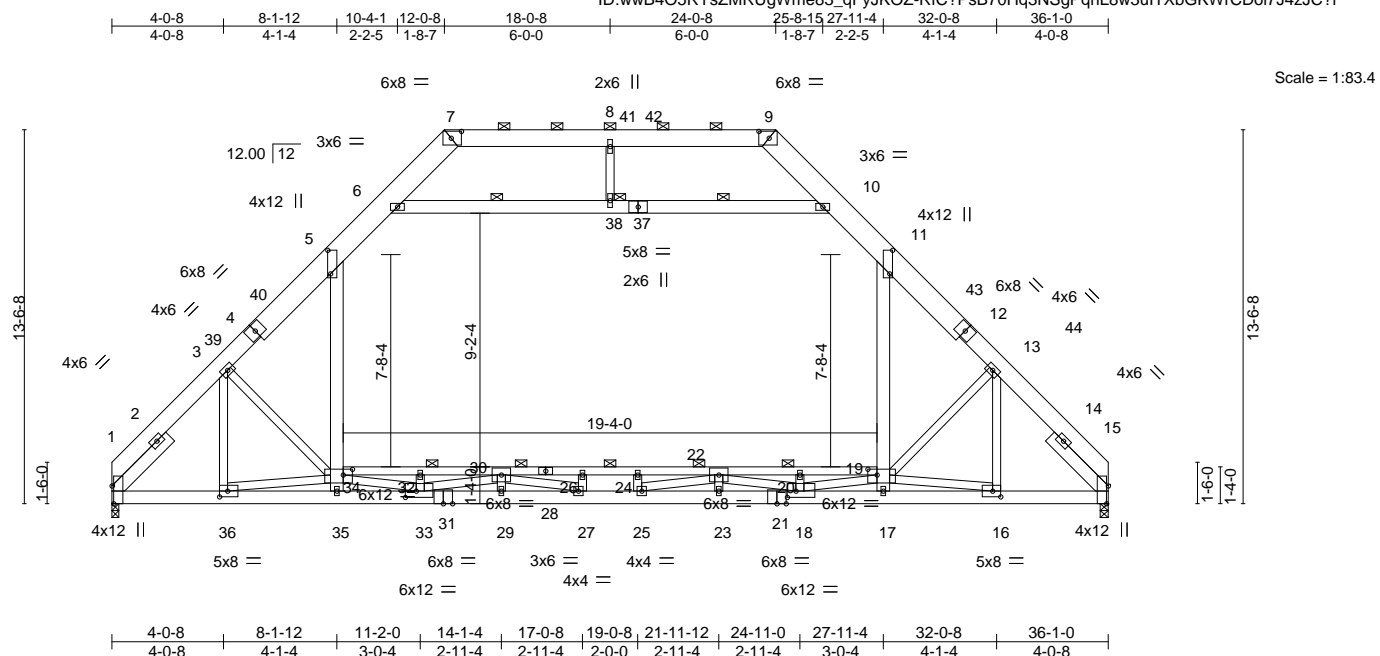


Plate Offsets (X,Y)-- [1:0-7-12,Edge], [5:0-10-4,0-1-4], [7:0-4-7,0-3-0], [9:0-4-7,0-3-0], [11:0-10-4,0-1-4], [15:0-7-12,Edge], [16:0-3-8,0-2-8], [18:0-3-12,0-2-12], [19:0-4-0,0-2-8], [33:0-4-12,0-2-12], [34:0-4-0,0-2-8], [36:0-3-8,0-2-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.44	Vert(LL)	-0.27 25-27	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.98	Vert(CT)	-0.50 25-27	>868	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.88	Horz(CT)	0.05 15	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.07 33-35	>999	240		
								Weight: 437 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x8 SP No.1 *Except* 4-7,9-12: 2x10 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 4-6-5 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD 2x6 SP 2400F 2.0E *Except* 28-34,19-28: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 3-5-0 oc bracing: 19-34
WEBS 2x4 SP No.2 *Except* 5-35,11-17,10-37,6-37: 2x6 SP No.1	WEBS 1 Row at midpt 6-38, 10-38
SLIDER Left 2x6 SP No.1 2-10-10, Right 2x6 SP No.1 2-10-10	JOINTS 1 Brace at Jt(s): 38

**REACTIONS.** (size) 1=0-3-0, 15=0-3-8  
 Max Horz 1=-312(LC 8)  
 Max Grav 1=2507(LC 2), 15=2507(LC 2)

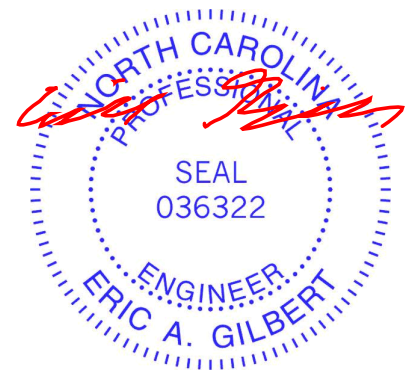
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-3=-3031/0, 3-5=-3336/0, 5-6=-2093/112, 6-7=-716/319, 7-8=-436/317, 8-9=-436/317, 9-10=-716/319, 10-11=-2093/112, 11-13=-3336/0, 13-15=-3031/0

BOT CHORD 1-36=0/2071, 35-36=-960/720, 33-35=-1235/632, 29-33=0/4025, 27-29=0/4025, 25-27=0/4939, 23-25=0/3970, 18-23=0/3970, 17-18=-1084/632, 16-17=-802/720, 15-16=0/1889, 32-34=-412/667, 30-32=-412/667, 26-30=-2844/0, 24-26=-2844/0, 22-24=-2844/0, 20-22=-499/711, 19-20=-499/711

WEBS 34-35=0/485, 5-34=0/1854, 17-19=0/485, 11-19=0/1854, 6-38=-2286/0, 10-38=-2285/0, 26-27=-286/0, 24-25=-286/0, 32-33=-404/0, 18-20=-404/0, 3-36=-737/0, 34-36=0/2597, 3-34=-46/538, 13-16=-752/7, 16-19=0/2668, 13-19=-60/540, 33-34=0/3105, 30-33=-2221/0, 27-30=-71/1151, 18-19=0/3105, 18-22=-2221/0, 22-25=-94/1168

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 12-3-7, Exterior(2) 12-3-7 to 18-6-1, Interior(1) 18-6-1 to 23-9-9, Exterior(2) 23-9-9 to 30-0-4, Interior(1) 30-0-4 to 36-1-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Ceiling dead load (10.0 psf) on member(s). 5-6, 10-11, 6-38, 10-38; Wall dead load (5.0psf) on member(s). 5-34, 11-19
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 32-34, 30-32, 26-30, 24-26, 22-24, 20-22, 19-20
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.



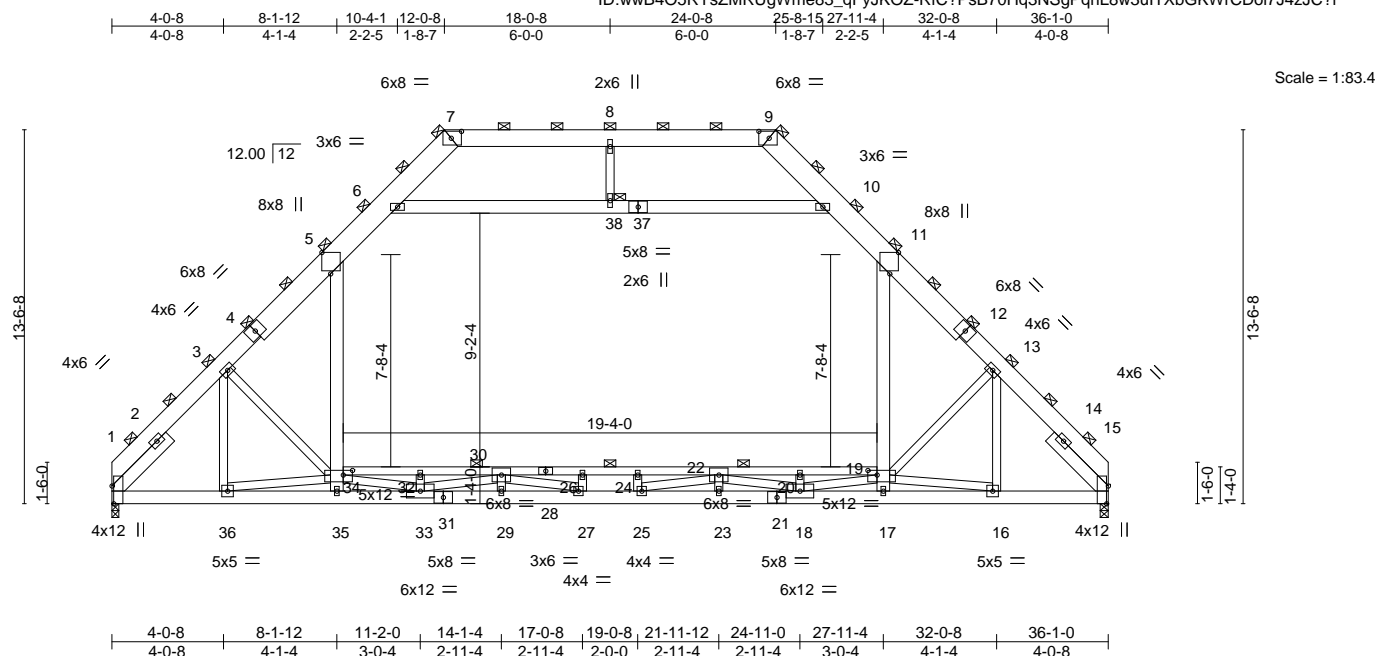
Job	Truss	Truss Type	Qty	Ply	Kelly Residence
J1123-6330	B1-GR	ATTIC	2	3	

162040807

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:13 2023 Page 1

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Scale = 1:83.4

Plate Offsets (X,Y)--	[1:0-7-12,Edge], [5:0-9-5,Edge], [7:0-4-7,0-3-0], [9:0-4-7,0-3-0], [11:0-9-5,Edge], [15:0-7-12,Edge], [19:0-4-0,0-2-0], [34:0-4-0,0-2-0]
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LOADING (psf)	SPACING-	CS.I.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.39	Vert(LL) -0.22	25-27	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.39	Vert(CT) -0.42	25-27	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.73	Horz(CT) 0.04	15	n/a	n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-S	Wind(LL) 0.06	33-35	>999	240		
							Weight: 1312 lb	FT = 20%

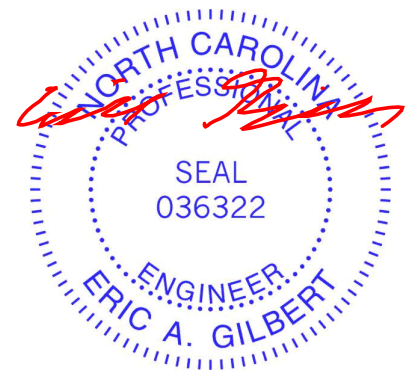
LUMBER-	BRACING-
TOP CHORD 2x8 SP No.1 *Except* 4-7,9-12: 2x10 SP 2400F 2.0E	TOP CHORD 2-0-0 oc purlins (6-0-0 max.) (Switched from sheeted: Spacing > 2-8-0).
BOT CHORD 2x6 SP 2400F 2.0E *Except* 28-34,19-28: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 6-0-0 oc bracing: 19-34
WEBS 2x4 SP No.2 *Except* 5-35,11-17,10-37,6-37: 2x6 SP No.1	JOINTS 1 Brace at Jt(s): 7, 9, 38
SLIDER Left 2x6 SP No.1 2-10-10, Right 2x6 SP No.1 2-10-10	

<b>REACTIONS.</b>	(size) 1=0-3-0, 15=0-3-8 Max Horz 1=-780(LC 6) Max Grav 1=6268(LC 2), 15=6268(LC 2)
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<b>FORCES.</b> (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-7578/0, 3-5=-8340/0, 5-6=-5232/0, 6-7=-1790/547, 7-8=-1090/578, 8-9=-1090/578, 9-10=-1790/544, 10-11=-5232/0, 11-13=-8340/0, 13-15=-7578/0
BOT CHORD 1-36=0/5179, 35-36=-2399/1800, 33-35=-3088/1580, 29-33=0/10062, 27-29=0/10062, 25-27=0/12348, 23-25=0/9925, 18-23=0/9925, 17-18=-2709/1580, 16-17=-2004/1800, 15-16=0/4723, 32-34=-1031/1667, 30-32=-1031/1667, 26-30=-7109/0, 24-26=-7109/0, 22-24=-7109/0, 20-22=-1249/1777, 19-20=-1249/1777
WEBS 34-35=0/1213, 5-34=0/4635, 17-19=0/1213, 11-19=0/4635, 6-38=-5715/0, 10-38=-5714/0, 8-38=0/527, 26-27=-714/0, 24-25=-714/0, 32-33=-1011/0, 18-20=-1011/0, 3-36=-1842/0, 34-36=0/6492, 3-34=-116/1344, 13-16=-1879/17, 16-19=0/6671, 13-19=-149/1349, 33-34=0/7763, 30-33=-5552/0, 27-30=-177/2878, 18-19=0/7763, 18-22=-5552/0, 22-25=-235/2921

- NOTES-**
- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

Roofing dead load (10.0 psf) on member(s). 5-6, 10-11, 6-38, 10-38; Wall dead load (5.0psf) on member(s). 5-34, 11-19



November 16, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
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Job	Truss	Truss Type	Qty	Ply	Kelly Residence	I62040807
J1123-6330	B1-GR	ATTIC	2	3	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:13 2023 Page 2  
 ID:wwB4O5RYsZMRUGWme83\_qFyJKOZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

**NOTES-**

- 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 32-34, 30-32, 26-30, 24-26, 22-24, 20-22, 19-20
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Attic room checked for L/360 deflection.

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

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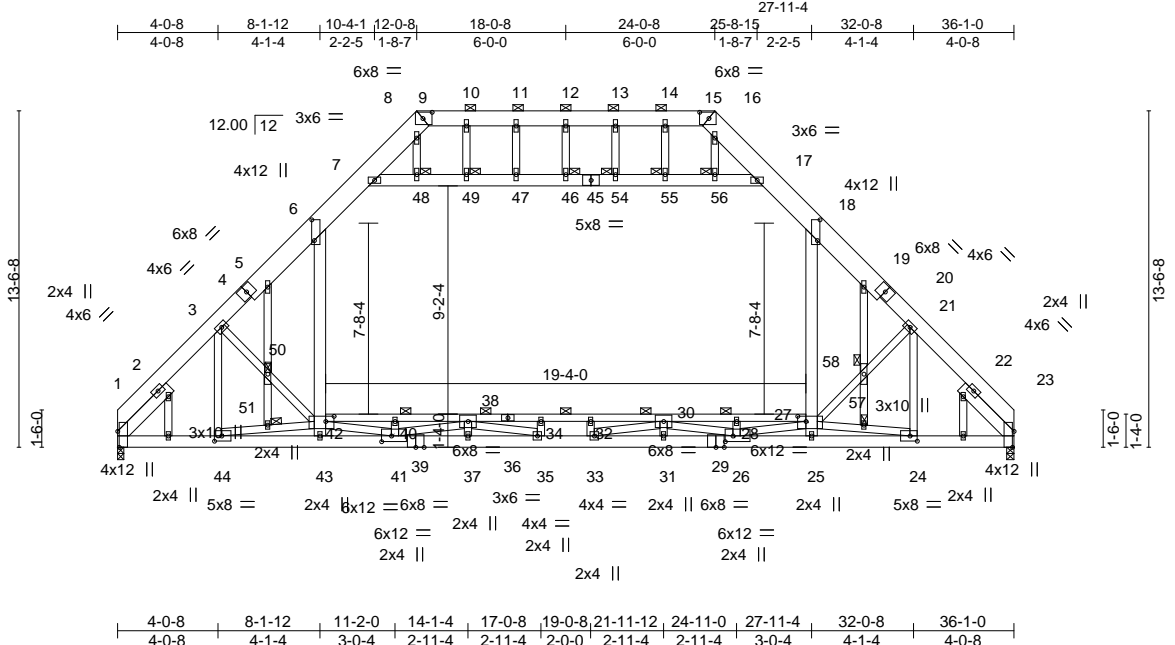


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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:11 2023 Page 1

ID:wwB4O5RyZMRUgWme83\_qFyJKOZ-RfC?PsB70Hq3NSgPqnLw8uITXbGKwRCDoi7J4zJC?f



Scale = 1:92.8

Plate Offsets (X,Y)--	[1:0-7-12,Edge], [6:0-10-0,0-1-4], [9:0-4-7,0-3-0], [15:0-4-7,0-3-0], [18:0-10-0,0-1-4], [23:0-7-12,Edge], [24:0-3-8,0-2-8], [26:0-3-12,0-2-12], [27:0-4-0,0-2-8], [41:0-4-12,0-2-12], [42:0-4-0,0-2-8], [44:0-3-8,0-2-8]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.36	Vert(LL)	-0.27	33-35	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 1.00	Vert(CT)	-0.50	33-35	>863		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.88	Horz(CT)	0.05	23	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.08	41-43	>999		
								Weight: 475 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x8 SP No.1 *Except* 4-9,15-20: 2x10 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 4-7-7 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 9-15.
BOT CHORD 2x6 SP 2400F 2.0E *Except* 36-42,27-36: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 3-5-0 oc bracing: 27-42
WEBS 2x4 SP No.2 *Except* 6-43,18-25,17-45,7-45: 2x6 SP No.1	JOINTS 1 Brace at Jt(s): 46, 48, 49, 50, 51, 54, 55, 56, 57, 58
OTHERS 2x4 SP No.2	
SLIDER Left 2x6 SP No.1 2-10-10, Right 2x6 SP No.1 2-10-10	

**REACTIONS.** (size) 1=0-3-0, 23=0-3-8  
 Max Horz 1=390(LC 8)  
 Max Grav 1=2507(LC 2), 23=2507(LC 2)

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

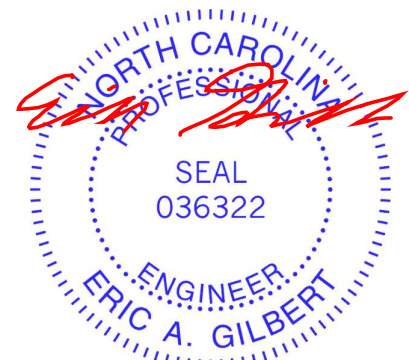
**TOP CHORD** 1-3=-3024/0, 3-5=-3323/0, 5-6=-3276/0, 6-7=-2099/176, 7-8=-896/389, 8-9=-599/362, 9-10=-507/364, 10-11=-507/364, 11-12=-507/364, 12-13=-507/364, 13-14=-507/364, 14-15=-507/364, 15-16=-599/360, 16-17=-896/388, 17-18=-2099/176, 18-19=-3276/0, 19-21=-3323/0, 21-23=-3024/0

**BOT CHORD** 1-44=-29/2071, 43-44=-1137/758, 41-43=-1336/685, 37-41=0/4077, 35-37=0/4077, 33-35=0/4972, 31-33=0/4004, 26-31=0/4004, 25-26=-1130/617, 24-25=-863/715, 23-24=0/1882, 40-42=-513/664, 38-40=-513/664, 34-38=-2869/0, 32-34=-2869/0, 30-32=-2869/0, 28-30=-621/772, 27-28=-621/772

**WEBS** 42-43=0/500, 6-42=0/1848, 25-27=0/500, 18-27=0/1848, 7-48=-2270/0, 48-49=-2251/0, 47-49=-2251/0, 46-47=-2251/0, 46-54=-2251/0, 54-55=-2251/0, 55-56=-2251/0, 17-56=-2270/0, 34-35=-286/0, 32-33=-286/0, 40-41=-404/0, 26-28=-404/0, 3-44=-806/17, 44-51=0/2578, 42-51=0/2552, 3-50=-110/704, 42-50=-105/598, 21-24=-827/45, 27-57=-50/2640, 24-57=-55/2667, 27-58=-121/606, 21-58=-128/713, 41-42=0/3085, 38-41=-2225/0, 35-38=-129/1185, 26-27=0/3085, 26-30=-2225/0, 30-33=-157/1206, 8-48=-46/369, 16-56=-47/369

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vas=103mph; TCGL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x6 MT20 unless otherwise indicated.
- On Gable Studs spaced at 2-0-0 oc.



November 16, 2023

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Job	Truss	Truss Type	Qty	Ply	Kelly Residence	I62040808
J1123-6330	B1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:11 2023 Page 2  
 ID:wwB4O5RYsZMRUgWme83\_qFyJKOZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

**NOTES-**

- 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) Ceiling dead load (10.0 psf) on member(s). 6-7, 17-18, 7-48, 48-49, 47-49, 46-47, 46-54, 54-55, 55-56, 17-56; Wall dead load (5.0psf) on member(s).6-42, 18-27
- 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 40-42, 38-40, 34-38, 32-34, 30-32, 28-30, 27-28
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Attic room checked for L/360 deflection.

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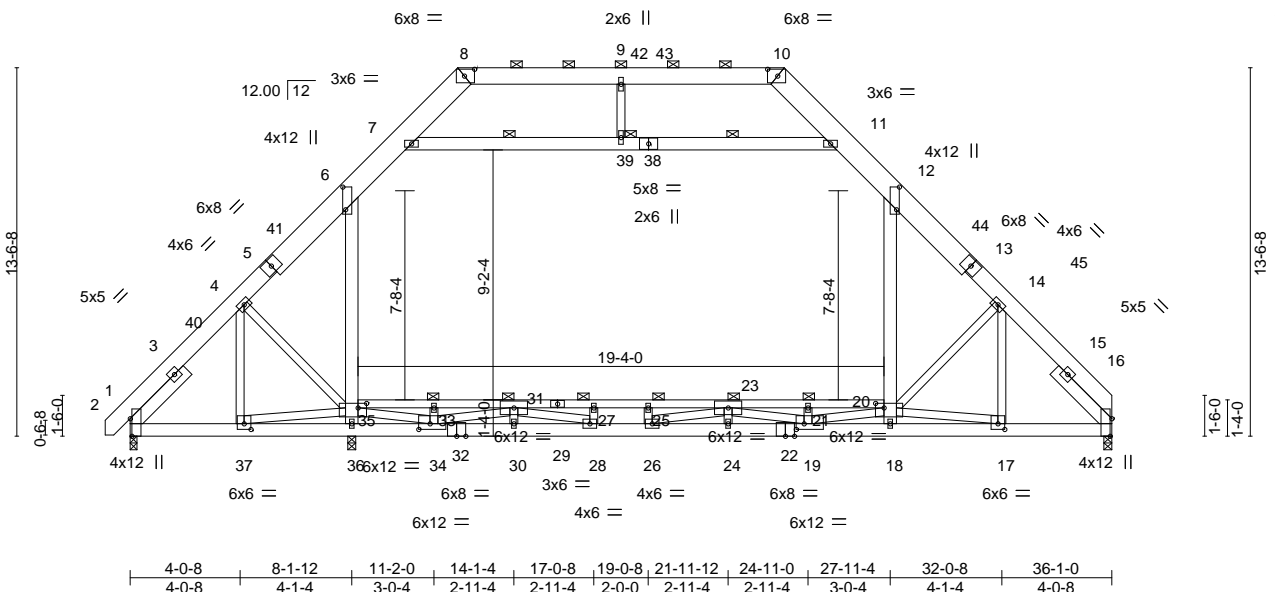


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Job	Truss	Truss Type	Qty	Ply	Kelly Residence	162040809
J1123-6330	B2	ATTIC	6	1		

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ID:wwB4O5RysZMRUgWme83\_qFyJKOZ-RfC?PsB70Hq3NSgPqL8w3uITXbGKWRcDoi7J4zJC?f  
 0-11-0 4-0-8 8-1-12 10-4-1 12-0-8 18-0-8 24-0-8 25-8-15 27-11-4 32-0-8 36-1-0  
 0-11-0 4-0-8 4-1-4 2-2-5 1-8-7 6-0-0 6-0-0 1-8-7 2-2-5 4-1-4 36-1-0



Scale = 1:84.7

Plate Offsets (X,Y)-- [2:0-7-12,Edge], [6:0-10-0,0-1-4], [8:0-4-7,0-3-0], [10:0-4-7,0-3-0], [12:0-10-0,0-1-4], [16:0-7-12,Edge], [17:0-3-0,0-2-8], [19:0-3-8,0-2-8], [20:0-3-12,0-2-0], [34:0-5-0,0-2-8], [35:0-3-12,0-2-0], [37:0-3-0,0-2-8]

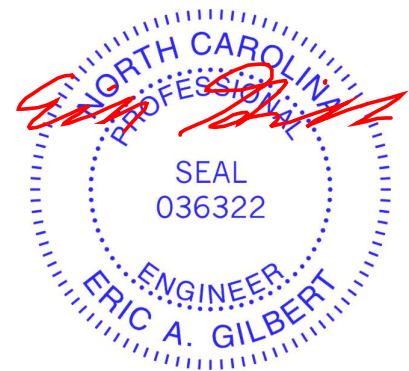
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.44	Vert(LL)	-0.27	23-25	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.98	Vert(CT)	-0.50	23-25	>676		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.96	Horz(CT)	0.04	16	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.04	19	>999		
								Weight: 441 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x8 SP No.1 *Except* 5-8,10-13: 2x10 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 4-9-11 oc purlins, except
BOT CHORD 2x6 SP 2400F 2.0E *Except* 29-35,20-29: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
WEBS 2x4 SP No.2 *Except* 6-36,12-18,11-38,7-38: 2x6 SP No.1	WEBS 1 Row at midpt 7-39, 11-39
SLIDER Left 2x6 SP No.1 2-10-10, Right 2x6 SP No.1 2-10-10	JOINTS 1 Brace at Jt(s): 39

**REACTIONS.** (size) 2=0-3-0, 16=0-3-8, 36=0-3-8  
 Max Horz 2=-313(LC 8)  
 Max Uplift 36=-274(LC 9)  
 Max Grav 2=2080(LC 21), 16=2392(LC 21), 36=843(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2484/118, 4-6=-3028/0, 6-7=-1914/142, 7-8=-791/305, 8-9=-531/312, 9-10=-531/312, 10-11=-746/317, 11-12=-1876/129, 12-14=-2983/0, 14-16=-2885/0  
 BOT CHORD 2-37=0/1463, 36-37=-2108/0, 34-36=-2340/0, 30-34=0/3277, 28-30=0/3277, 26-28=0/4715, 24-26=0/4250, 19-24=0/4250, 18-19=-361/833, 17-18=-292/900, 16-17=0/1784, 33-35=0/1078, 31-33=0/1078, 27-31=-2895/0, 25-27=-2895/0, 23-25=-2895/0, 21-23=-659/23, 20-21=-659/23  
 WEBS 35-36=-400/409, 6-35=0/1475, 18-20=0/400, 12-20=0/1641, 7-39=-1986/0, 11-39=-1985/0, 27-28=-313/0, 25-26=-256/0, 33-34=-416/0, 19-21=-390/0, 4-37=-959/0, 35-37=0/3406, 4-35=0/694, 14-17=-465/0, 17-20=0/1607, 14-20=-156/292, 34-35=0/3365, 31-34=-2560/0, 28-31=0/1513, 19-20=0/2794, 19-23=-1932/0, 23-26=0/489

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 12-3-7, Exterior(2) 12-3-7 to 18-6-1, Interior(1) 18-6-1 to 23-9-9, Exterior(2) 23-9-9 to 30-0-4, Interior(1) 30-0-4 to 36-1-0 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 7) Ceiling dead load (10.0 psf) on member(s). 6-7, 11-12, 7-39, 11-39; Wall dead load (5.0psf) on member(s). 6-35, 12-20
  - 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 33-35, 31-33, 27-31, 25-27,



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 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Kelly Residence	I62040809
J1123-6330	B2	ATTIC	6	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:15 2023 Page 2  
 ID:wwB4O5RYsZMRUGWme83\_qFyJKOZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

**NOTES-**

- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 36=274.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Attic room checked for L/360 deflection.

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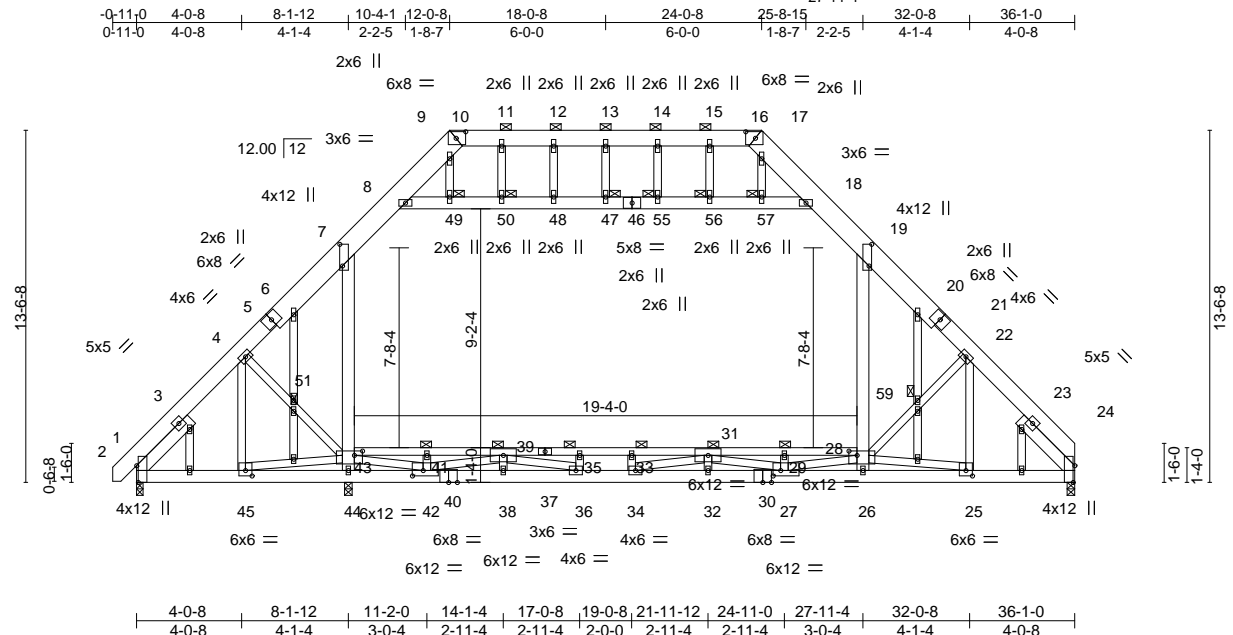


Plate Offsets (X,Y)-- [2:0-7-12,Edge], [7:0-10-0-0-1-4], [10:0-4-7-0-3-0], [16:0-4-7-0-3-0], [19:0-10-0-0-1-4], [24:0-7-12,Edge], [25:0-3-0-0-2-8], [27:0-3-8-0-2-8], [28:0-3-12-0-2-0], [42:0-5-0-0-2-8], [43:0-3-12-0-2-0], [45:0-3-0-0-2-8]

LOADING (psf)	SPACING-	CS.I.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.34	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.97	Vert(LL) -0.26 31-33 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.95	Vert(CT) -0.49 31-33 >682 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.04 24 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.06 27 >999 240	Weight: 479 lb	FT = 20%

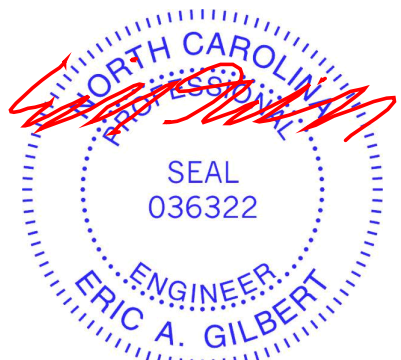
**LUMBER-**  
 TOP CHORD 2x8 SP No.1 \*Except\*  
 5-10,16-21: 2x10 SP 2400F 2.0E  
 BOT CHORD 2x6 SP 2400F 2.0E \*Except\*  
 37-43,28-37: 2x4 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 7-44,19-26,18-46,8-46: 2x6 SP No.1  
 OTHERS 2x4 SP No.2  
 SLIDER Left 2x6 SP No.1 2-10-10, Right 2x6 SP No.1 2-10-10

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-10-1 oc purlins, except  
 2-0-0 oc purlins (6-0-0 max.): 10-16.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:  
 3-4-0 oc bracing: 28-43  
 JOINTS 1 Brace at Jt(s): 47, 49, 50, 51, 55, 56, 57, 59

**REACTIONS.** (size) 2=0-3-0, 24=0-3-8, 44=0-3-8  
 Max Horz 2=-391(LC 8)  
 Max Uplift 2=-42(LC 8), 44=-354(LC 9)  
 Max Grav 2=2039(LC 21), 24=2356(LC 2), 44=905(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2436/132, 4-6=-2917/0, 6-7=-2964/0, 7-8=-1922/190, 8-9=-971/330,  
 9-10=-678/360, 10-11=-605/393, 11-12=-605/393, 12-13=-605/393, 13-14=-605/393,  
 14-15=-605/393, 15-16=-605/393, 16-17=-663/380, 17-18=-905/388, 18-19=-1875/193,  
 19-20=-2944/0, 20-22=-2957/0, 22-24=-2851/0  
 BOT CHORD 2-45=0/1445, 44-45=-2105/0, 42-44=-2331/0, 38-42=0/3271, 36-38=0/3271,  
 34-36=0/4698, 32-34=0/4220, 27-32=0/4220, 26-27=-393/786, 25-26=-323/856,  
 24-25=0/1775, 41-43=0/1071, 39-41=0/1071, 35-39=-2876/0, 33-35=-2876/0,  
 31-33=-2876/0, 29-31=-643/114, 28-29=-643/114  
 WEBS 43-44=-448/490, 7-43=0/1562, 26-28=0/406, 19-28=0/1690, 8-49=-2018/0,  
 49-50=-1994/0, 48-50=-1994/0, 47-48=-1994/0, 47-55=-1994/0, 55-56=-1994/0,  
 56-57=-1994/0, 18-57=-2008/0, 35-36=-313/0, 33-34=-257/0, 41-42=-416/0,  
 27-29=-390/0, 4-45=-951/0, 43-45=0/3383, 4-51=0/841, 43-51=0/722, 22-25=-479/0,  
 25-28=0/1638, 28-59=-143/351, 22-59=-139/425, 42-43=0/3359, 39-42=-2551/0,  
 36-39=0/1501, 27-28=0/2799, 27-31=-1939/0, 31-34=0/503, 9-49=-22/385,  
 17-57=-21/276

**NOTES-**  
 1) Unbalanced roof live loads have been considered for this design.  
 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.  
 4) Provide adequate drainage to prevent water ponding.  
 5) All plate edges MT20 unless otherwise indicated.



November 16, 2023

Job	Truss	Truss Type	Qty	Ply	Kelly Residence	I62040810
J1123-6330	B2GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:19 2023 Page 2  
 ID:wwB4O5RYsZMRUgWme83\_qFyJKOZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

**NOTES-**

- 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) Ceiling dead load (10.0 psf) on member(s). 7-8, 18-19, 8-49, 49-50, 48-50, 47-48, 47-55, 55-56, 56-57, 18-57; Wall dead load (5.0psf) on member(s).7-43, 19-28
- 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 41-43, 39-41, 35-39, 33-35, 31-33, 29-31, 28-29
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 44=354.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Attic room checked for L/360 deflection.

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute ([www.tpinst.org](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))



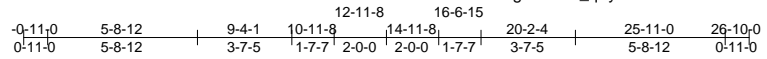
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Kelly Residence	162040811
J1123-6330	C1	ATTIC	15	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:20 2023 Page 1

ID:wwB4O5RYsZMRUGWme83\_qFyJKOZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRcDoi7J4zJC?f



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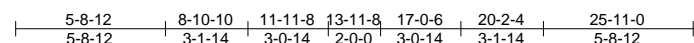
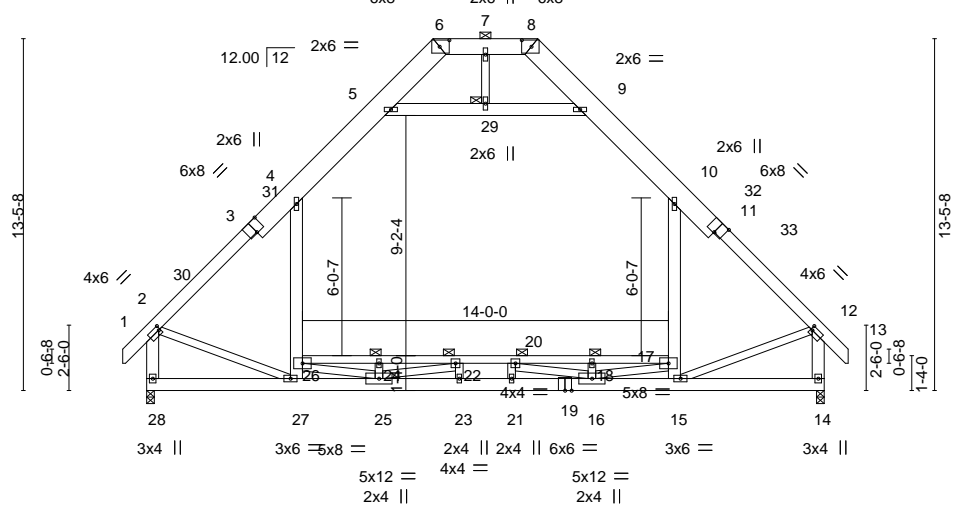


Plate Offsets (X,Y)--	[2:0-0-12,0-2-0], [3:0-4-0,Edge], [6:0-4-7,0-3-0], [8:0-4-7,0-3-0], [11:0-4-0,Edge], [12:0-0-12,0-2-0]
-----------------------	--

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 0.59	Vert(LL)	-0.18 21-23	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.70	Vert(CT)	-0.34 21-23	>899	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.60	Horz(CT)	0.03 14	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.10 27	>999	240	Weight: 304 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x10 SP No.1 *Except* 6-8: 2x8 SP No.1, 1-3,11-13: 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-10-1 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 6-8.
BOT CHORD 2x6 SP No.1 *Except* 17-26: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 3-7-0 oc bracing: 17-26
WEBS 2x4 SP No.2 *Except* 4-27,5-9,10-15,2-28,12-14: 2x6 SP No.1	JOINTS 1 Brace at Jt(s): 29

REACTIONS.	(size)	28=0-3-8, 14=0-3-8
Max Horz	28=-284(LC 10)	
Max Grav	28=1856(LC 20), 14=1856(LC 21)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-4=-1798/0, 4-5=-1189/174, 5-6=-122/275, 6-7=0/497, 7-8=0/497, 8-9=-122/275, 9-10=-1190/174, 10-12=-1798/0, 2-28=-1849/0, 12-14=-1850/0
BOT CHORD	27-28=-286/438, 25-27=-139/1252, 23-25=0/3879, 21-23=0/3879, 16-21=0/3879, 15-16=0/1049, 24-26=-1787/0, 22-24=-1787/0, 20-22=-2858/0, 18-20=-1787/0, 17-18=-1787/0
WEBS	4-26=0/821, 5-29=-1566/168, 9-29=-1566/168, 10-17=0/821, 2-27=0/1109, 12-15=0/1112, 25-26=0/2129, 24-25=-410/0, 22-25=-1170/5, 16-20=-1159/0, 16-18=-410/0, 16-17=0/2129

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-6 to 3-6-7, Interior(1) 3-6-7 to 11-2-7, Exterior(2) 11-2-7 to 20-11-4, Interior(1) 20-11-4 to 26-9-6 zone:C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Ceiling dead load (10.0 psf) on member(s). 4-5, 9-10, 5-29, 9-29; Wall dead load (5.0psf) on member(s).4-26, 10-17
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 24-26, 22-24, 20-22, 18-20, 17-18
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.



November 16, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



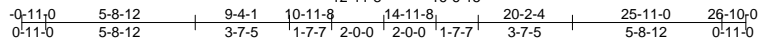


Job	Truss	Truss Type	Qty	Ply	Kelly Residence	I62040812
J1123-6330	C1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:23 2023 Page 1

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Scale = 1:88.3

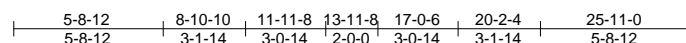
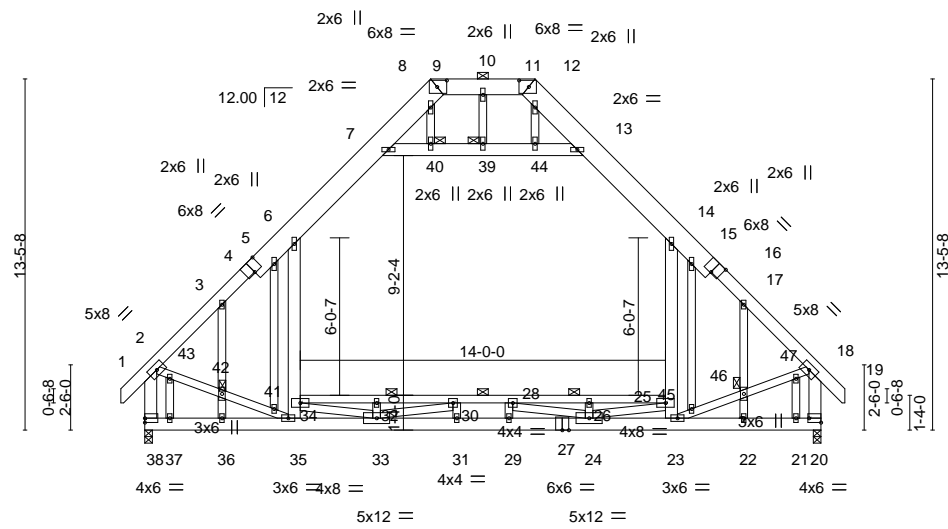


Plate Offsets (X,Y)-- [4:0-4-0,Edge], [9:0-4-7,0-3-0], [11:0-4-7,0-3-0], [16:0-4-0,Edge], [20:Edge,0-2-0]

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 29-31	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.93	Horz(CT)	-0.31 29-31	>995	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.54	Wind(LL)	0.11 35	>999	240		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 343 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x10 SP No.1 *Except* 9-11: 2x8 SP No.1, 1-4,16-19: 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-3-4 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 9-11.
BOT CHORD 2x6 SP No.1 *Except* 25-34: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 3-9-0 oc bracing: 25-34
WEBS 2x4 SP No.2 *Except* 6-35,7-13,14-23,2-38,18-20: 2x6 SP No.1	JOINTS 1 Brace at Jt(s): 39, 40, 42, 46
OTHERS 2x4 SP No.2	

REACTIONS.
(size) 38=0-3-8, 20=0-3-8 Max Horz 38=-355(LC 10) Max Grav 38=1856(LC 2), 20=1856(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1668/0, 3-5=-1806/0, 5-6=-1746/13, 6-7=-1176/203, 8-9=-40/290, 9-10=0/392, 10-11=0/392, 11-12=-40/290, 13-14=-1178/203, 14-15=-1749/12, 15-17=-1807/0, 17-18=-1668/0, 2-38=-1638/0, 18-20=-1640/0
BOT CHORD 37-38=-371/534, 36-37=-371/534, 35-36=-371/534, 33-35=-242/1223, 31-33=0/3639, 29-31=0/3639, 24-29=0/3639, 23-24=0/970, 32-34=-1515/0, 30-32=-1515/0, 28-30=-2613/0, 26-28=-1533/0, 25-26=-1533/0
WEBS 34-35=-66/278, 6-34=0/1031, 7-40=-1477/222, 39-40=-1462/222, 39-44=-1462/222, 13-44=-1479/222, 23-25=-75/278, 14-25=0/1031, 2-43=0/1109, 42-43=0/1106, 41-42=0/1128, 35-41=0/1118, 23-45=0/1121, 45-46=0/1133, 46-47=0/1110, 18-47=0/1114, 33-34=0/1919, 32-33=-416/0, 30-33=-1231/40, 24-28=-1218/25, 24-26=-416/0, 24-25=0/1919, 3-42=-439/106, 36-42=-423/59, 17-46=-436/104, 22-46=-418/59

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Ceiling dead load (10.0 psf) on member(s). 6-7, 13-14, 7-40, 39-40, 39-44, 13-44; Wall dead load (5.0psf) on member(s). 6-34, 14-25



November 16, 2023

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
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ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Kelly Residence	I62040812
J1123-6330	C1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:23 2023 Page 2  
 ID:wwB4O5RYsZMRUgWme83\_qFyJKOZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

**NOTES-**

- 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 32-34, 30-32, 28-30, 26-28, 25-26
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Attic room checked for L/360 deflection.

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute ([www.tpinst.org](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))



818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Kelly Residence	I62040813
J1123-6330	D1	SCISSORS	5	1		

Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:24 2023 Page 1  
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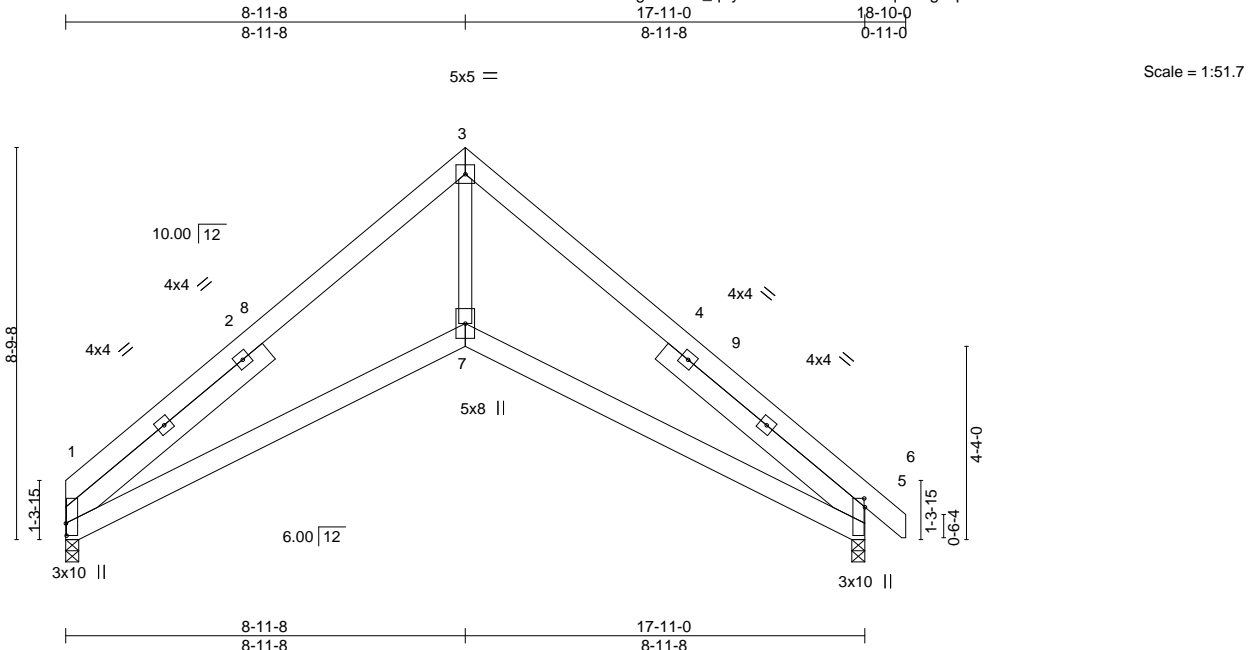


Plate Offsets (X,Y)-- [1:0-3-5,0-0-3], [5:0-2-5,0-0-3]

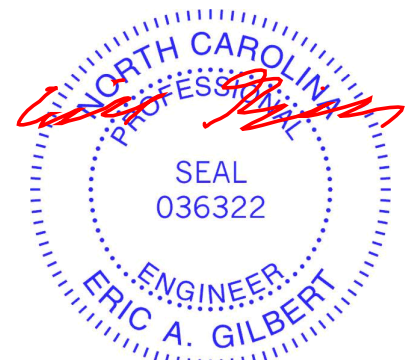
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.28	Vert(LL)	-0.06	1-7	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.27	Vert(CT)	-0.12	1-7	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.25	Horz(CT)	0.06	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	-0.04	7	>999		
	Code IRC2015/TPI2014						Weight: 139 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	
SLIDER Left 2x6 SP No.1 5-11-10, Right 2x6 SP No.1 5-11-10	

**REACTIONS.** (size) 1=0-3-8, 5=0-3-8  
 Max Horz 1=200(LC 9)  
 Max Uplift 1=-25(LC 12), 5=-41(LC 13)  
 Max Grav 1=698(LC 1), 5=767(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-1288/117, 3-5=-1295/112  
 BOT CHORD 1-7=-14/1034, 5-7=-3/1029  
 WEBS 3-7=0/1069

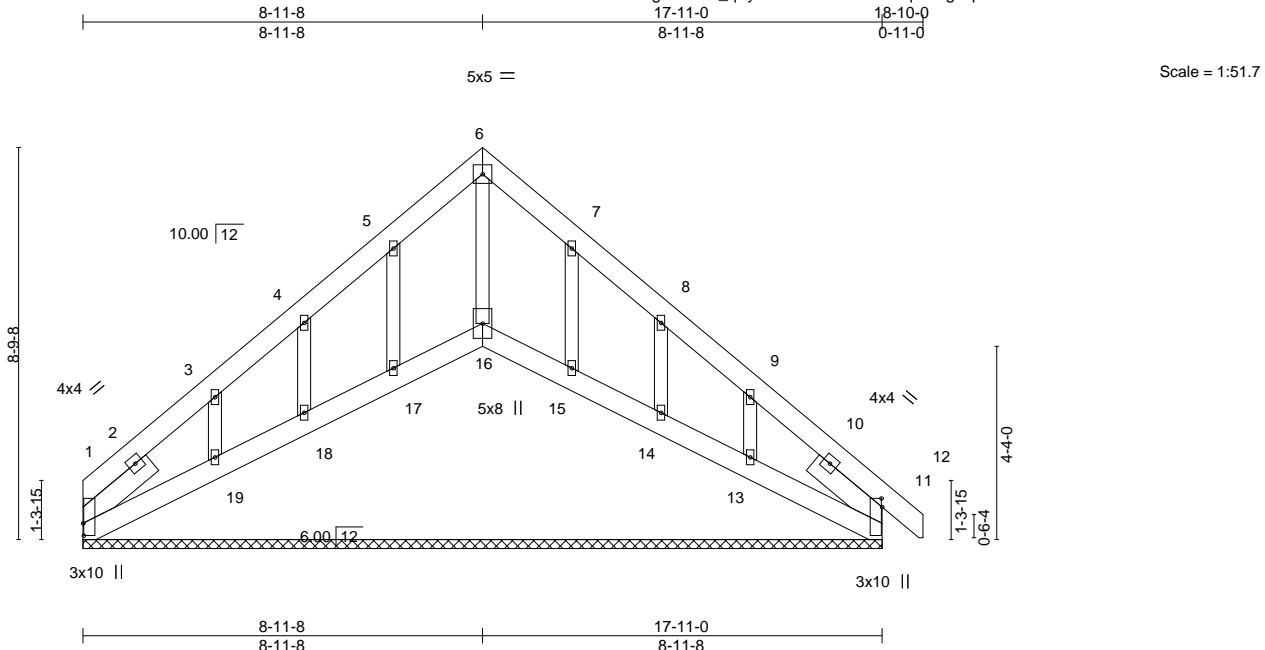
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-7 to 4-7-4, Interior(1) 4-7-4 to 8-11-8, Exterior(2) 8-11-8 to 13-4-5, Interior(1) 13-4-5 to 18-9-7 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 1, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.



November 16, 2023

Job	Truss	Truss Type	Qty	Ply	Kelly Residence	I62040814
J1123-6330	D1GE	GABLE	1	1		

Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:25 2023 Page 1  
 ID:wwB4O5RYsZMRUgWme83\_qFyJKOZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	-0.00	11	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	11	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	11	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 141 lb	FT = 20%

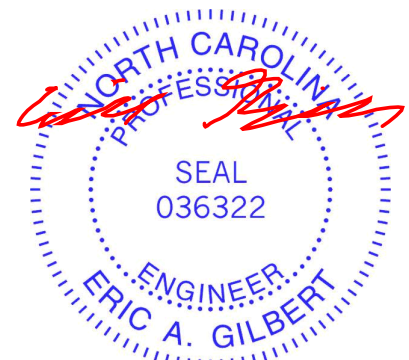
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.2  
 SLIDER Left 2x6 SP No.1 2-0-12, Right 2x6 SP No.1 2-0-12

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

**REACTIONS.** All bearings 17-11-0.  
 (lb) - Max Horz 1=249(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 16, 11, 17, 18, 15, 14 except 1=-177(LC 8), 19=-246(LC 12), 13=-216(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 11, 17, 18, 15, 14 except 1=252(LC 11), 16=432(LC 13), 19=302(LC 19), 13=260(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 5-6=-280/291, 6-7=-280/291  
 WEBS 6-16=-281/215, 3-19=-241/252

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 11, 17, 18, 15, 14 except (jt=lb) 1=177, 19=246, 13=216.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 16, 17, 18, 19, 15, 14, 13.



November 16, 2023

Job	Truss	Truss Type	Qty	Ply	Kelly Residence	I62040815
J1123-6330	M1	JACK-CLOSED GIRDER	1	1		

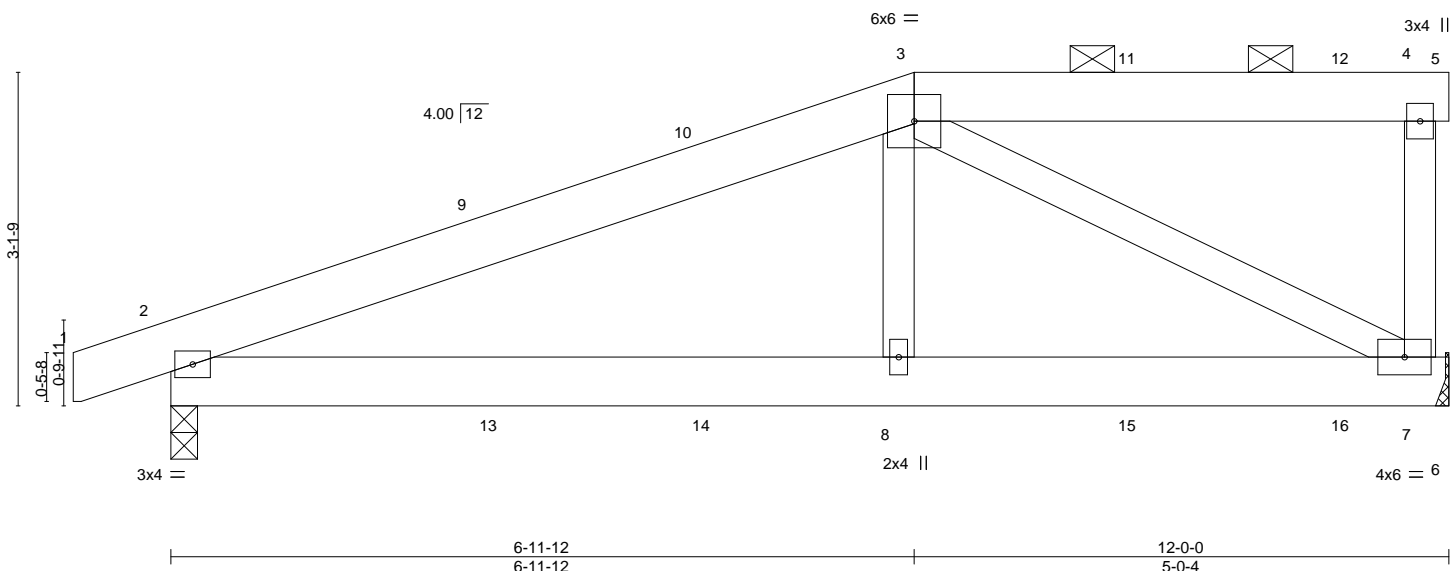
Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:26 2023 Page 1

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Scale = 1:21.6



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.24	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.20	Vert(LL) 0.03 2-8 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.32	Vert(CT) -0.04 2-8 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.01 7 n/a n/a		
	Code IRC2015/TPI2014			Weight: 74 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 7=Mechanical, 2=0-3-0  
 Max Horz 2=86(LC 8)  
 Max Uplift 7=-280(LC 4), 2=-247(LC 4)  
 Max Grav 7=471(LC 1), 2=529(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-678/314  
 BOT CHORD 2-8=-324/564, 7-8=-318/556  
 WEBS 3-8=-108/277, 3-7=-618/353

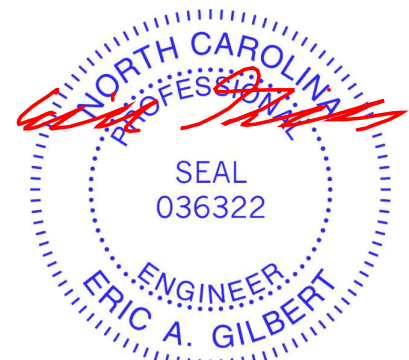
- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Provide adequate drainage to prevent water ponding.
  - 3) This truss has been designed for a 10.0 psf 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) Refer to girder(s) for truss to truss connections.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=280, 2=247.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 18 lb down and 30 lb up at 3-0-12, 18 lb down and 28 lb up at 5-0-12, 62 lb down and 49 lb up at 6-11-12, and 62 lb down and 49 lb up at 9-0-12, and 61 lb down and 48 lb up at 11-0-12 on top chord, and 9 lb down and 30 lb up at 3-0-12, 8 lb down and 30 lb up at 5-0-12, 9 lb down and 34 lb up at 7-0-12, and 9 lb down and 34 lb up at 9-0-12, and 9 lb down and 34 lb up at 11-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 9) 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, 3-4=-60, 4-5=-20, 2-6=-20

Concentrated Loads (lb)  
 Vert: 8=1(B) 13=-3(B) 14=-1(B) 15=1(B) 16=1(B)



November 16, 2023

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 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Kelly Residence	I62040816
J1123-6330	M2	MONOPITCH	9	1		

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:27 2023 Page 1  
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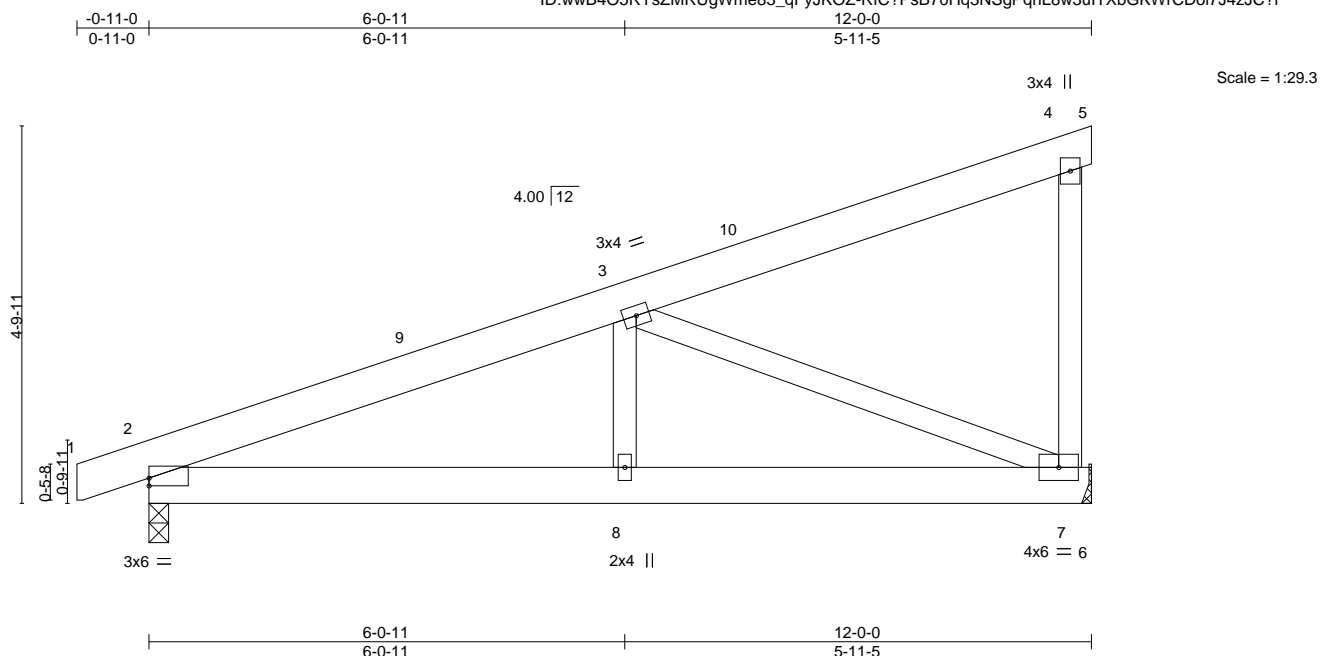


Plate Offsets (X,Y)--	[2:0-0-0,0-1-3]
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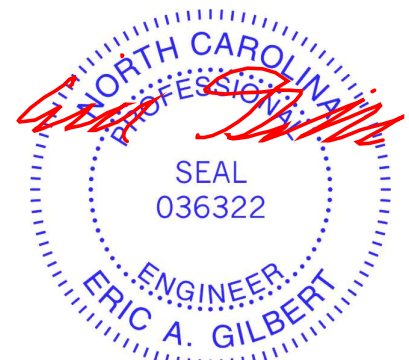
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.31	Vert(LL) 0.03	2-8	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.39	Vert(CT) -0.03	2-8	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.45	Horz(CT) 0.01	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 77 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 8-11-11 oc bracing.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 7=Mechanical, 2=0-3-0  
 Max Horz 2=140(LC 12)  
 Max Uplift 7=-204(LC 8), 2=-191(LC 8)  
 Max Grav 7=473(LC 1), 2=527(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-775/640  
 BOT CHORD 2-8=-734/667, 7-8=-734/667  
 WEBS 3-8=-333/268, 3-7=-710/780

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-9 to 3-6-4, Interior(1) 3-6-4 to 12-0-0 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=204, 2=191.



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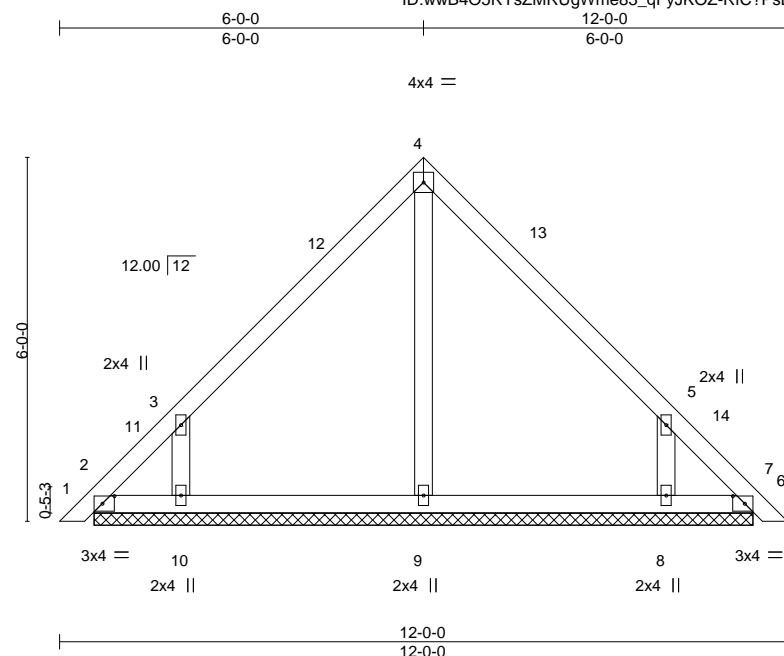


Job	Truss	Truss Type	Qty	Ply	Kelly Residence	I62040817
J1123-6330	PB1	PIGGYBACK	13	1	Job Reference (optional)	

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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:28 2023 Page 1

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Scale = 1:38.0

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	-0.00	6	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	-0.00	6	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 53 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	

**REACTIONS.** All bearings 10-10-6.  
 (lb) - Max Horz 2=139(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=165(LC 12), 8=164(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=337(LC 19), 8=336(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-10=368/313, 5-8=368/313

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCdL=6.0psf; BCdL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-8 to 4-7-4, Interior(1) 4-7-4 to 6-0-0, Exterior(2) 6-0-0 to 10-4-13, Interior(1) 10-4-13 to 11-9-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=) 10=165, 8=164.
  - 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



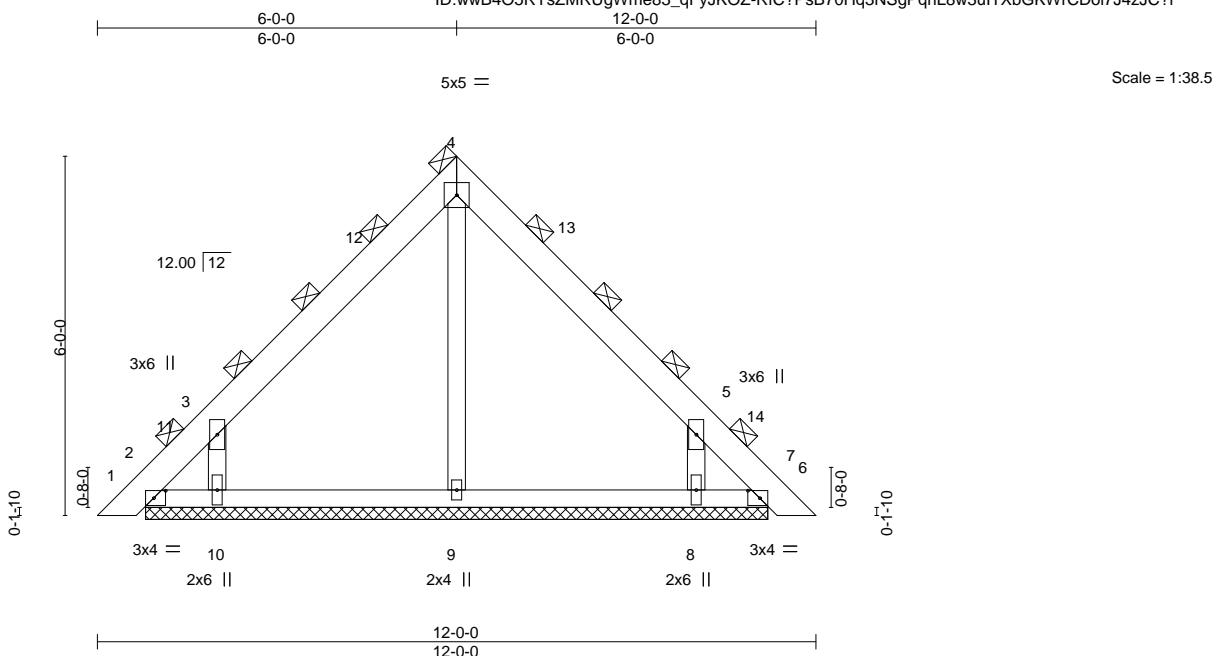
November 16, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

Job J1123-6330	Truss PB1A	Truss Type PIGGYBACK	Qty 2	Ply 1	Kelly Residence Job Reference (optional)	I62040818
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Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:29 2023 Page 1  
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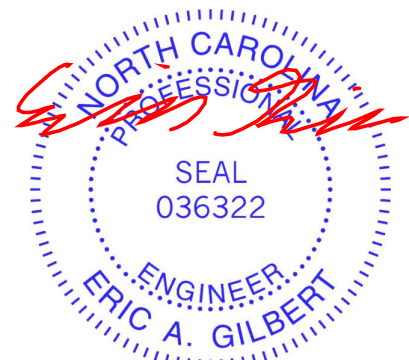
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	0.00	6	n/r	120	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	0.00	6	n/r	120	Weight: 66 lb FT = 20%		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.14	Horz(CT)	0.00	6	n/a	n/a			
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S									

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.1	TOP CHORD	2-0-0 oc purlins (6-0-0 max.)
BOT CHORD	2x4 SP No.1		(Switched from sheeted: Spacing > 2-8-0).
OTHERS	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 10-4-11.  
 (lb) - Max Horz 2=340(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) except 2=-210(LC 10), 6=-132(LC 11), 10=-426(LC 12), 8=-418(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 6 except 2=319(LC 9), 9=524(LC 3), 10=842(LC 19), 8=831(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-421/318, 3-4=-448/331, 4-5=-418/336, 5-6=-350/248  
 WEBS 4-9=-297/0, 3-10=-886/753, 5-8=-888/754

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-14 to 4-8-11, Interior(1) 4-8-11 to 6-0-0, Exterior(2) 6-0-0 to 10-4-13, Interior(1) 10-4-13 to 11-8-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 210 lb uplift at joint 2, 132 lb uplift at joint 6, 426 lb uplift at joint 10 and 418 lb uplift at joint 8.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 16, 2023

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Job	Truss	Truss Type	Qty	Ply	Kelly Residence	I62040819
J1123-6330	PB1GE	GABLE	2	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:31 2023 Page 1  
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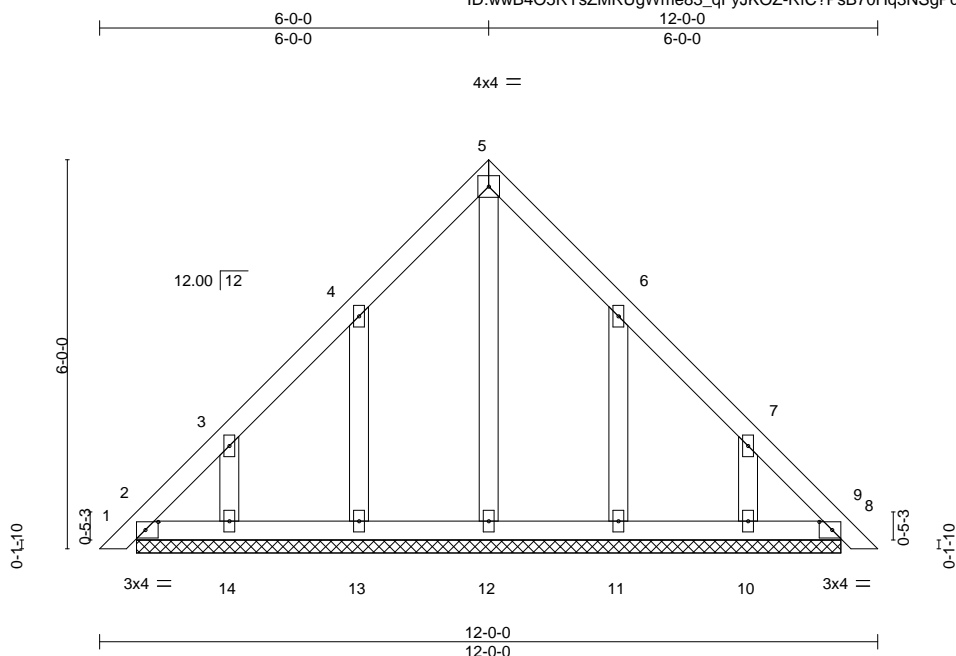


Plate Offsets (X,Y)-- [2:0-2-6,0-1-8], [8:0-2-6,0-1-8]

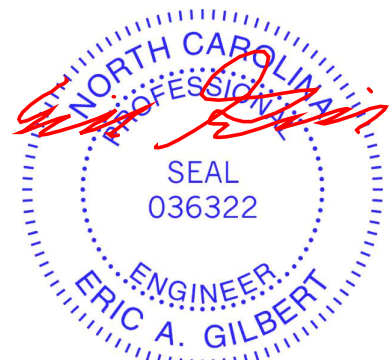
LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.04	Vert(LL)	0.00	8	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	0.00	8	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 63 lb	FT = 20%
	Code IRC2015/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	

**REACTIONS.** All bearings 10-10-6.  
 (lb) - Max Horz 2=174(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8 except 13=148(LC 12), 14=139(LC 12), 11=147(LC 13), 10=138(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8 except (jt=lb) 13=148, 14=139, 11=147, 10=138.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



November 16, 2023

Job	Truss	Truss Type	Qty	Ply	Kelly Residence	I62040820
J1123-6330	PB2	PIGGYBACK	10	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:31 2023 Page 1  
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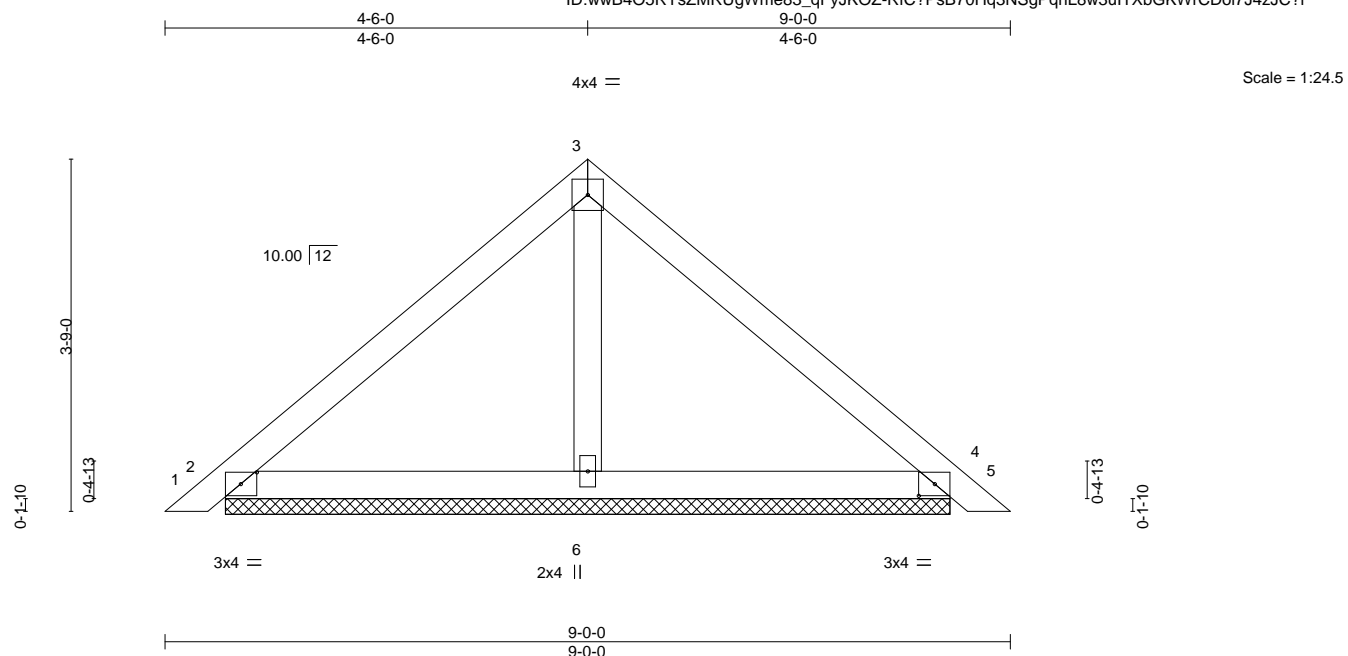


Plate Offsets (X,Y)-- [2:0-2-1,0-1-8], [4:0-2-1,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.23	Vert(LL)	0.01	5	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(CT)	0.01	5	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 33 lb	FT = 20%
	Code IRC2015/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	

**REACTIONS.** (size) 2=7-8-9, 4=7-8-9, 6=7-8-9  
 Max Horz 2=-85(LC 10)  
 Max Uplift 2=-34(LC 12), 4=-41(LC 13)  
 Max Grav 2=205(LC 1), 4=205(LC 1), 6=257(LC 1)

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

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



November 16, 2023

Job J1123-6330	Truss PB2GE	Truss Type GABLE	Qty 1	Ply 1	Kelly Residence Job Reference (optional)	I62040821
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Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:32 2023 Page 1  
 ID:wwB4O5RYsZMRUGWme83\_qFyJKOZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

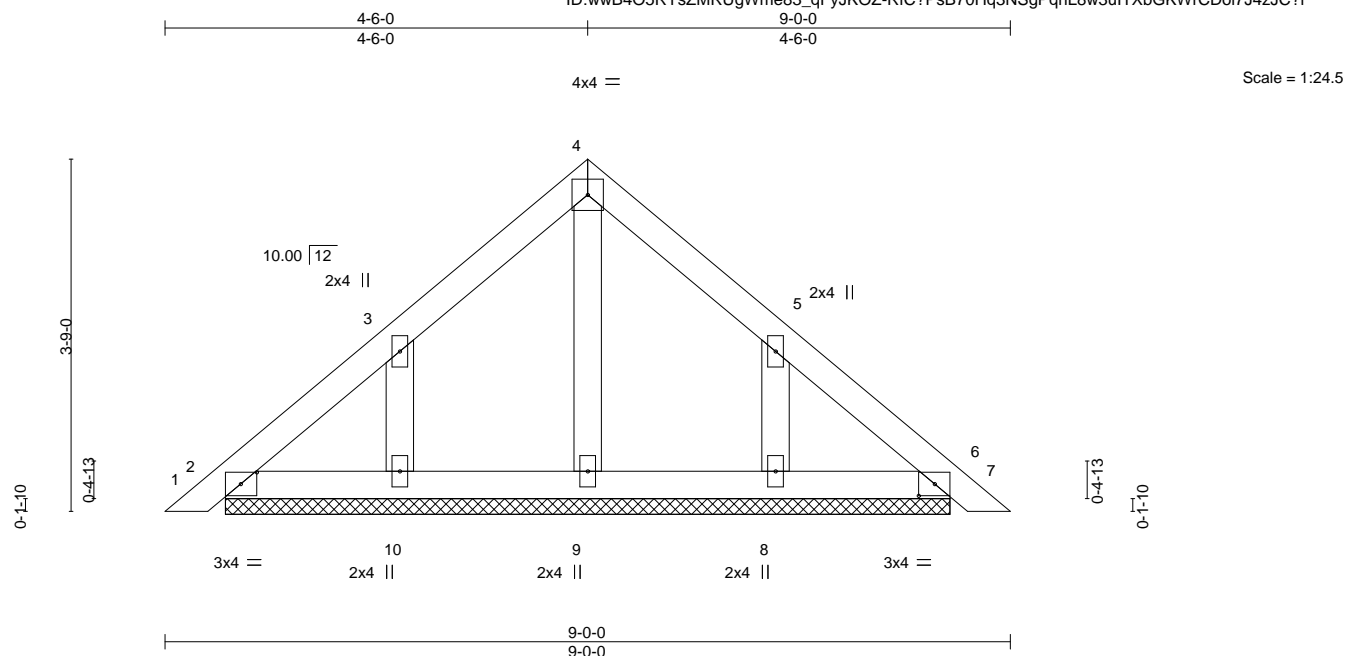


Plate Offsets (X,Y)-- [2:0-2-1,0-1-8], [6:0-2-1,0-1-8]

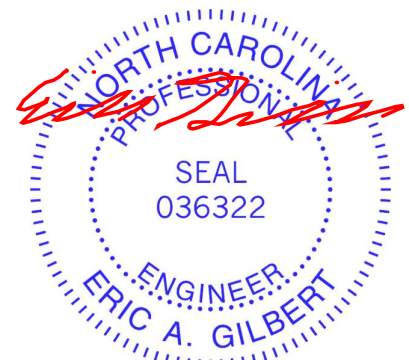
LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.05	Vert(LL)	0.00	6	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	0.00	6	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 37 lb	FT = 20%
	Code IRC2015/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	

**REACTIONS.** All bearings 7-8-9.  
 (lb) - Max Horz 2=107(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2 except 10=135(LC 12), 8=134(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) Gable studs spaced at 2-0-0 oc.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (it=lb) 10=135, 8=134.
  - 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



November 16, 2023

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 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Kelly Residence	I62040822
J1123-6330	PB3	Piggyback	16	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:33 2023 Page 1  
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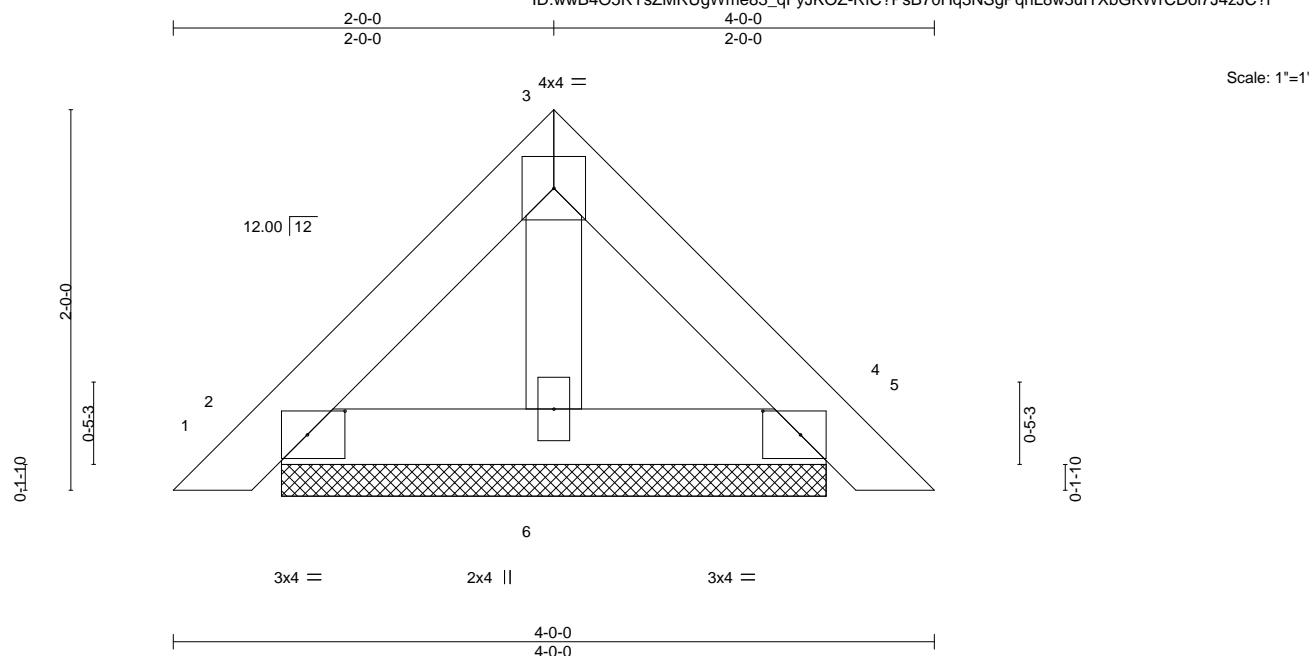


Plate Offsets (X,Y)-- [2:0-2-6,0-1-8], [4:0-2-6,0-1-8]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.03	Vert(LL)	0.00	4	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	0.00	4	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 14 lb	FT = 20%
	Code IRC2015/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	

**REACTIONS.** (size) 2=2-10-6, 4=2-10-6, 6=2-10-6  
 Max Horz 2=-54(LC 10)  
 Max Uplift 2=-32(LC 12), 4=-37(LC 13)  
 Max Grav 2=94(LC 1), 4=94(LC 1), 6=88(LC 3)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
  - 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



November 16, 2023



Job	Truss	Truss Type	Qty	Ply	Kelly Residence	I62040823
J1123-6330	X1	JACK-OPEN	3	1	Job Reference (optional)	

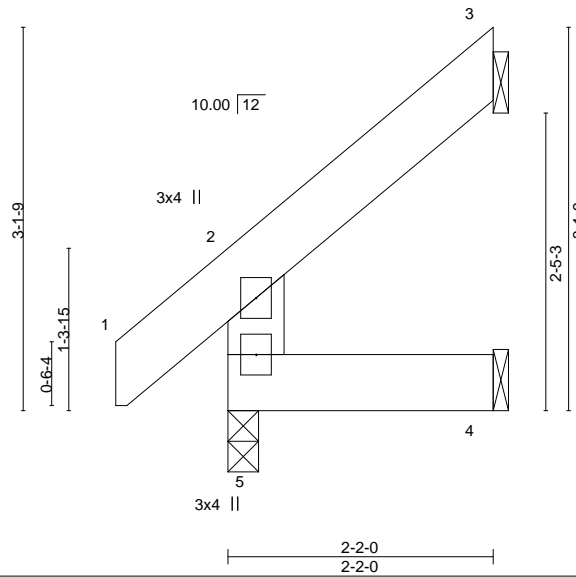
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:34 2023 Page 1

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Scale = 1:18.8



<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.05	Vert(LL) 0.00 5 >999 240	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00 5 >999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00 3 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R		Weight: 17 lb FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x6 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) 5=0-3-0, 3=Mechanical, 4=Mechanical  
Max Horz 5=75(LC 12)  
Max Uplift 3=-48(LC 12), 4=-24(LC 9)  
Max Grav 5=160(LC 1), 3=52(LC 19), 4=34(LC 3)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; porch left 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 connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.



November 16, 2023

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Kelly Residence	I62040824
J1123-6330	X2	JACK-OPEN	1	1		

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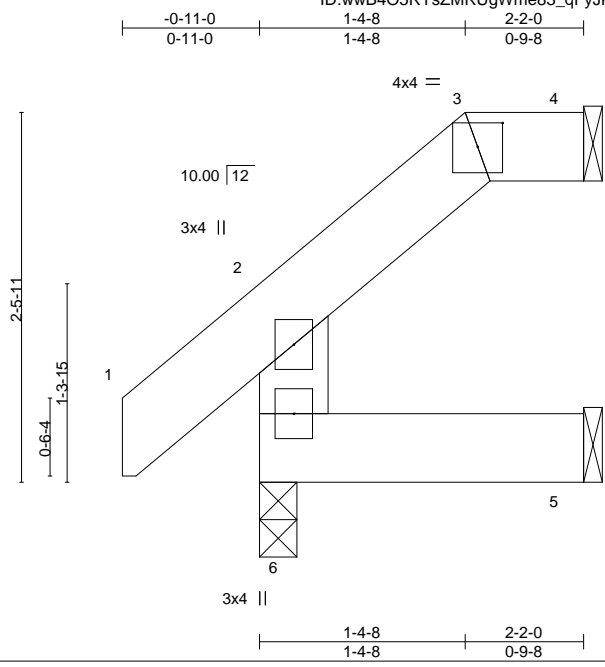


Plate Offsets (X,Y)-- [3:0-2-0,0-1-15]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	0.00	6	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	6	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-R					Weight: 16 lb	FT = 20%

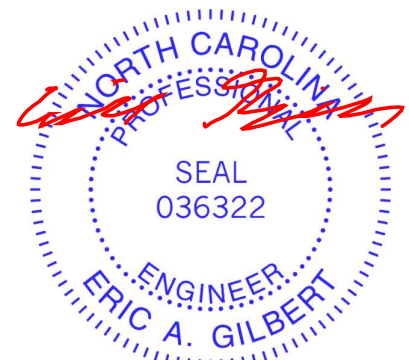
**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x6 SP No.1

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 6=0-3-0, 4=Mechanical, 5=Mechanical  
Max Horz 6=57(LC 12)  
Max Uplift 6=-4(LC 9), 4=-26(LC 9), 5=-20(LC 9)  
Max Grav 6=160(LC 1), 4=40(LC 1), 5=34(LC 3)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4, 5.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 16, 2023

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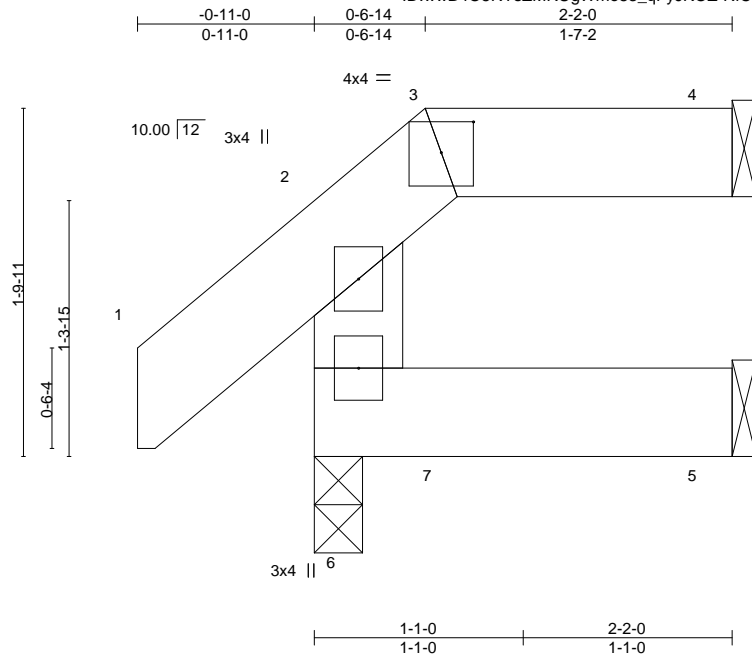


Job	Truss	Truss Type	Qty	Ply	Kelly Residence	I62040825
J1123-6330	X3	JACK-OPEN GIRDER	1	1		

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Scale: 1"=1'

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	0.00	6	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	6	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	4	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R					Weight: 16 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

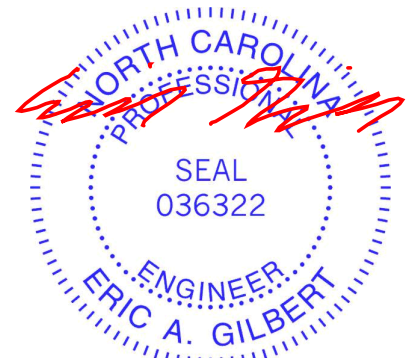
**REACTIONS.** (size) 6=0-3-0, 4=Mechanical, 5=Mechanical  
 Max Horz 6=35(LC 8)  
 Max Uplift 6=-44(LC 5), 4=-26(LC 5), 5=-18(LC 5)  
 Max Grav 6=181(LC 1), 4=54(LC 20), 5=40(LC 3)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4, 5.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 32 lb down and 46 lb up at 0-7-14 on top chord, and 26 lb down and 29 lb up at 0-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-60, 2-3=-60, 3-4=-60, 5-6=-20  
 Concentrated Loads (lb)  
 Vert: 3=-14(F) 7=-13(F)



November 16, 2023

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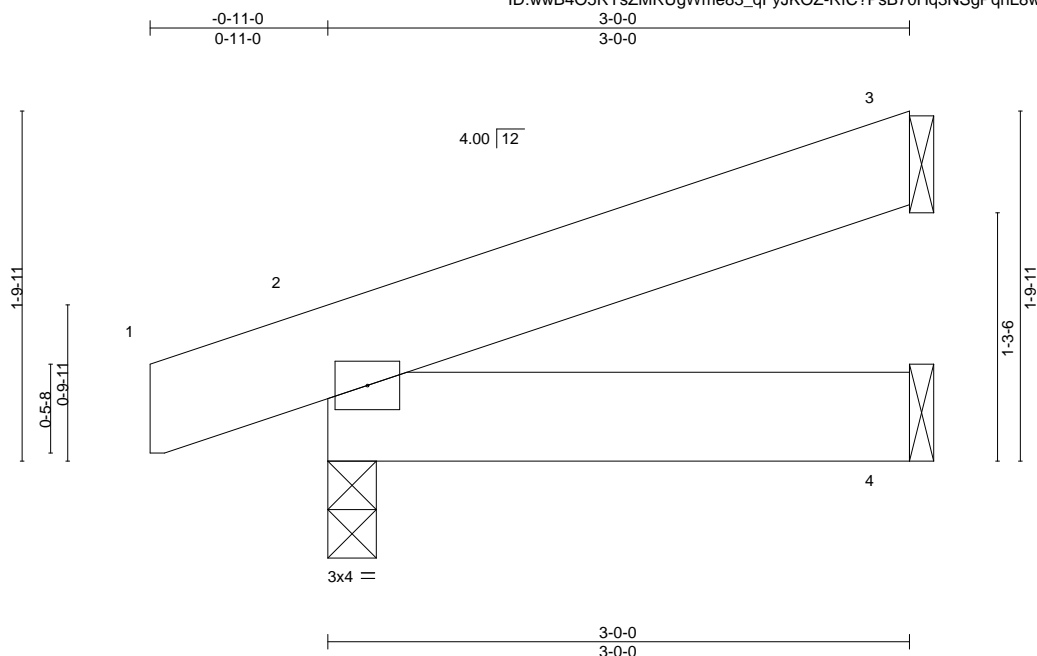
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Kelly Residence	I62040826
J1123-6330	Y1	JACK-OPEN	1	1		

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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Nov 15 11:35:37 2023 Page 1

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Scale: 1"=1'

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 0.12	Vert(LL)	-0.00	2	>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	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P	Wind(LL)	0.00	2-4	>999	240	Weight: 17 lb	FT = 20%

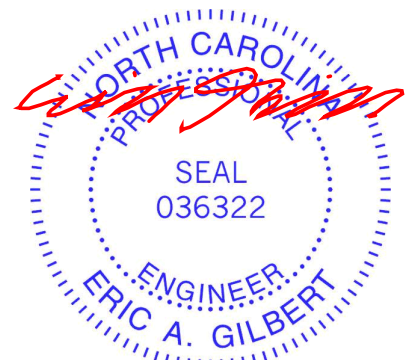
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1

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

**REACTIONS.** (size) 3=Mechanical, 2=0-3-0, 4=Mechanical  
 Max Horz 2=42(LC 12)  
 Max Uplift 3=-36(LC 12), 2=-76(LC 8), 4=-14(LC 8)  
 Max Grav 3=74(LC 1), 2=184(LC 1), 4=56(LC 3)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; porch left 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, 2, 4.



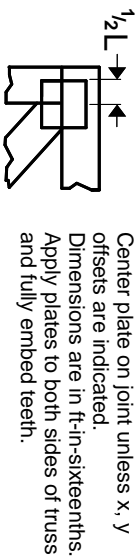
November 16, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

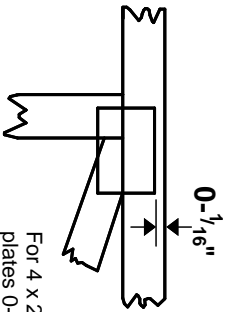
ENGINEERING BY  
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# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

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

## PLATE SIZE

4 X 4

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

## LATERAL BRACING LOCATION



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

## BEARING

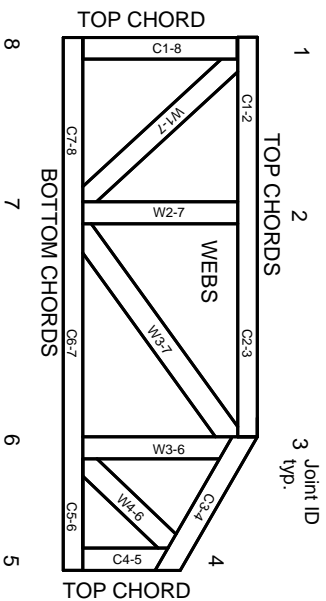


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-22: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System



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

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

# Product Code Approvals

ICC-ES Reports:

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

# Design General Notes

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

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

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# General Safety Notes

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

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

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