

RE: J0320-1197  
 Lot 15 Blackberry Manor

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Customer: Project Name: J0320-1197  
 Lot/Block: Model:  
 Address: Subdivision:  
 City: State:

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.1  
 Wind Code: ASCE 7-10 Wind Speed: 130 mph  
 Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 19 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	E13912794	a1	4/7/2020
2	E13912795	a1ge	4/7/2020
3	E13912796	a2	4/7/2020
4	E13912797	a3	4/7/2020
5	E13912798	a3ge	4/7/2020
6	E13912799	b1	4/7/2020
7	E13912800	b1sg	4/7/2020
8	E13912801	b2	4/7/2020
9	E13912802	b3	4/7/2020
10	E13912803	b4	4/7/2020
11	E13912804	b5	4/7/2020
12	E13912805	b6	4/7/2020
13	E13912806	c1ge	4/7/2020
14	E13912807	m1	4/7/2020
15	E13912808	m1ge	4/7/2020
16	E13912809	m2	4/7/2020
17	E13912810	m2ge	4/7/2020
18	E13912811	pb	4/7/2020
19	E13912812	pbge	4/7/2020

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville. Truss Design Engineer's Name: Gilbert, Eric My license renewal date for the state of North Carolina is December 31, 2020. North Carolina COA: C-0844



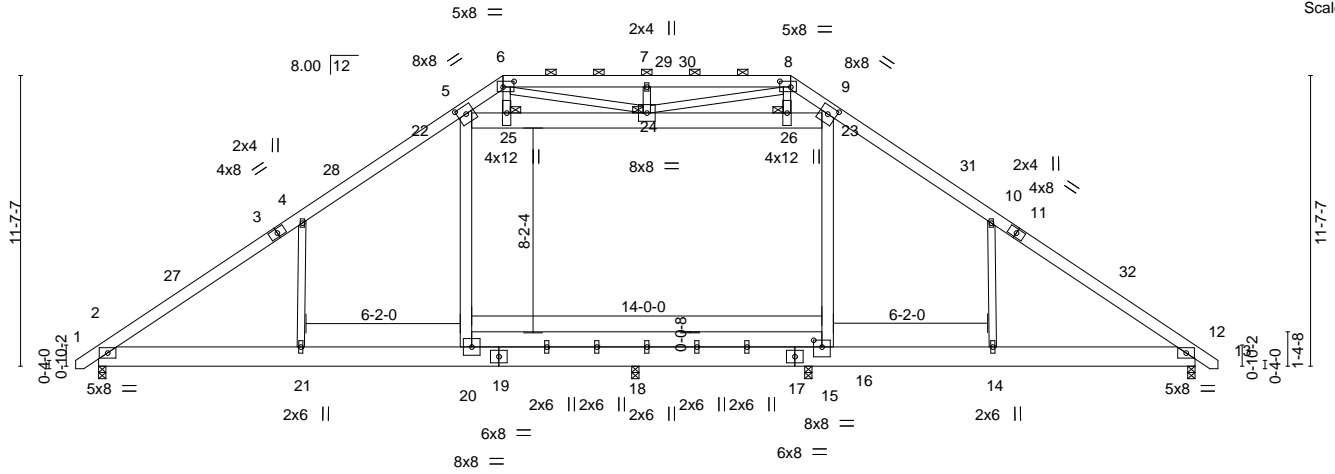
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes),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

Job J0320-1197	Truss A1	Truss Type ATTIC	Qty 10	Ply 1	Lot 15 Blackberry Manor	E13912794
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MITek Industries, Inc. Thu Jan 2 07:31:37 2020 Page 1  
ID:KHiM10Q\_9dy0362zkkFfqAjzV8-2cUa6B8d1Ow8SNITPzsp0q6l\_7y0p0LiC7foJWzzT74

-0-11-0	8-3-8	14-8-4	16-2-0	21-11-0	27-8-0	29-1-12	35-6-8	43-10-0	44-9-0
0-11-0	8-3-8	6-4-12	1-5-12	5-9-0	5-9-0	1-5-12	6-4-12	8-3-8	0-11-0



8-2-12	14-8-4	21-5-8	28-6-4	29-1-12	35-7-4	43-10-0
8-2-12	6-5-8	6-9-4	7-0-12	0-7-8	6-5-8	8-2-12

Plate Offsets (X,Y)-- [5:0-4-0,0-3-12], [6:0-5-4,0-2-12], [8:0-5-4,0-2-12], [9:0-4-0,0-3-12], [15:0-4-0,0-3-4], [22:0-2-0,0-3-0], [23:0-2-0,0-3-0]

<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 0.37	Vert(LL)	-0.31	20-21	>818	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.84	Vert(CT)	-0.56	20-21	>454		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.65	Horz(CT)	0.05	12	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.25	21	>999		
								Weight: 462 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-2-0 oc purlins, except
BOT CHORD 2x10 SP No.1 *Except* 15-20: 2x8 SP No.1	2-0-0 oc purlins (6-0-0 max.): 6-8.
WEBS 2x4 SP No.3 *Except* 5-20,9-15: 2x6 SP No.1, 22-23: 2x8 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-1-14 oc bracing: 2-21 8-6-8 oc bracing: 20-21.
	JOINTS 1 Brace at Jt(s): 24, 25, 26

**REACTIONS.** All bearings 0-3-8.  
(lb) - Max Horz 2=272(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 2 except 16=356(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) except 2=2229(LC 20), 12=2093(LC 20), 18=1038(LC 18), 16=678(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-2880/257, 4-5=-2819/467, 5-6=-1834/368, 6-7=-1283/215, 7-8=-1283/215,  
8-9=-1520/356, 9-10=-2854/494, 10-12=-3028/293  
BOT CHORD 2-21=-69/2413, 20-21=-72/2417, 18-20=-85/2463, 16-18=-85/2463, 15-16=-85/2463,  
14-15=-72/2397, 12-14=-68/2395  
WEBS 20-22=-91/889, 5-22=0/419, 15-23=-157/926, 9-23=-221/482, 22-25=-858/241,  
24-25=-794/234, 24-26=-1174/247, 23-26=-1227/252, 6-24=-956/181, 7-24=-324/196,  
8-24=-567/355, 6-25=-170/952, 8-26=-150/809, 4-21=-414/295, 10-14=-388/291

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) 0-9-1 to 3-7-12, Interior(1) 3-7-12 to 16-2-0, Exterior(2) 16-2-0 to 33-10-11, Interior(1) 33-10-11 to 44-7-1 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - Ceiling dead load (10.0 psf) on member(s). 22-25, 24-25, 24-26, 23-26; Wall dead load (5.0psf) on member(s).20-22, 15-23
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-20, 16-18, 15-16
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 16=356.
  - 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.
  - Attic room checked for L/360 deflection.



January 2, 2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road  
Edenton, NC 27932

Job J0320-1197	Truss A1GE	Truss Type GABLE	Qty 1	Ply 1	Lot 15 Blackberry Manor	E13912795
Comtech, Inc., Fayetteville, NC 28309					Job Reference (optional)	

8.130 s Mar 11 2018 MITek Industries, Inc. Thu Jan 2 07:31:39 2020 Page 1  
 ID:KHiM10Q\_9dy0362zXkFfQyJzV8-?cKXsAtY?AsihSsXOVh5FCywgPpHx4?gR8vOPzzT?2

0-11-0	14-8-4	16-2-0	21-11-0	27-8-0	29-1-12	43-10-0	44-9-0
0-11-0	14-8-4	1-5-12	5-9-0	5-9-0	1-5-12	14-8-4	0-11-0

Scale = 1:91.5

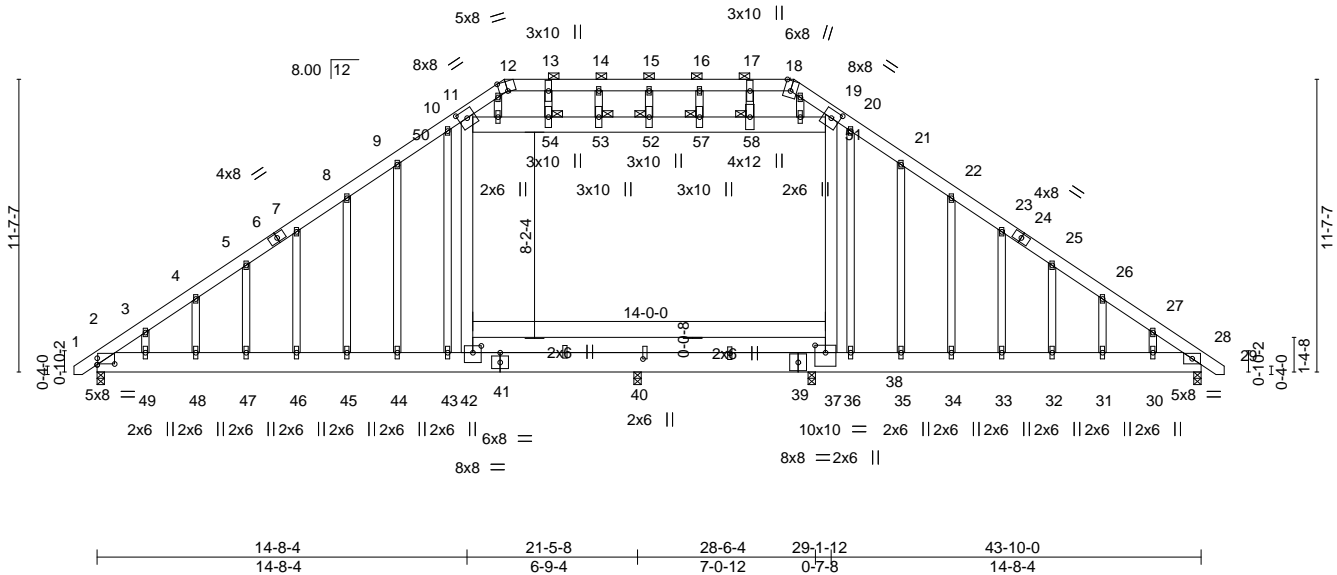


Plate Offsets (X,Y)--	[2:0-8-5,0-0-6], [2:0-3-2,0-0-0], [11:0-4-0,0-3-12], [12:0-4-0,Edge], [18:0-4-13,Edge], [19:0-4-0,0-3-12], [37:0-5-0,0-3-8], [41:0-0-0,5-11-0], [41:0-0-0-5-11-0], [41:0-3-0,5-8-0], [41:0-0-0,5-11-0], [41:0-0-0,5-11-0], [42:0-4-0,0-3-4], [50:0-2-0,0-3-0], [51:0-2-0,0-3-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.47	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.75	Vert(LL) -0.31 45-46 >813 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.64	Vert(CT) -0.56 45-46 >457 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.05 28 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.35 46 >725 240		
				Weight: 539 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-4-13 oc purlins, except
BOT CHORD 2x10 SP No.1 *Except* 37-42: 2x8 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1 *Except* 50-51: 2x8 SP No.1	JOINTS 1 Brace at Jt(s): 52, 53, 54, 57, 58
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 0-3-8.  
 (lb) - Max Horz 2=339(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) except 2=313(LC 12), 28=251(LC 12), 38=470(LC 8)  
 Max Grav All reactions 250 lb or less at joint(s) except 2=2227(LC 20), 28=2094(LC 20), 40=1052(LC 18), 38=670(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2951/295, 3-4=-2795/346, 4-5=-2771/409, 5-7=-2763/474, 7-8=-2746/538, 8-9=-2729/603, 9-10=-2751/674, 10-11=-2678/679, 11-12=-1479/421, 12-13=-1364/388, 13-14=-1364/388, 14-15=-1364/388, 15-16=-1364/388, 16-17=-1364/388, 17-18=-1364/388, 18-19=-1483/427, 19-20=-2738/671, 20-21=-2825/672, 21-22=-2823/603, 22-23=-2851/537, 23-25=-2882/473, 25-26=-2903/409, 26-27=-2947/346, 27-28=-3124/315  
 BOT CHORD 2-49=-212/2425, 48-49=-212/2425, 47-48=-212/2425, 46-47=-212/2425, 45-46=-212/2425, 44-45=-212/2425, 43-44=-212/2425, 42-43=-212/2425, 40-42=-231/2490, 38-40=-231/2490, 37-38=-231/2490, 36-37=-212/2425, 35-36=-212/2425, 34-35=-212/2425, 33-34=-212/2425, 32-33=-212/2425, 31-32=-212/2425, 30-31=-212/2425, 28-30=-212/2425  
 WEBS 42-50=-240/964, 11-50=-88/835, 37-51=-380/1058, 19-51=-243/908, 50-54=-1210/348, 53-54=-1210/348, 52-53=-1210/348, 52-57=-1210/348, 57-58=-1210/348, 51-58=-1210/348, 14-53=-332/136, 13-54=-123/546, 16-57=-359/142, 17-58=-137/620

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(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.



Job	Truss	Truss Type	Qty	Ply	Lot 15 Blackberry Manor	E13912795
J0320-1197	A1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MITek Industries, Inc. Thu Jan 2 07:31:39 2020 Page 2  
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**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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Ceiling dead load (10.0 psf) on member(s). 50-54, 53-54, 52-53, 52-57, 57-58, 51-58; Wall dead load (5.0psf) on member(s).42-50, 37-51
- 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, 37-38
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 313 lb uplift at joint 2, 251 lb uplift at joint 28 and 470 lb uplift at joint 38.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) Attic room checked for L/360 deflection.

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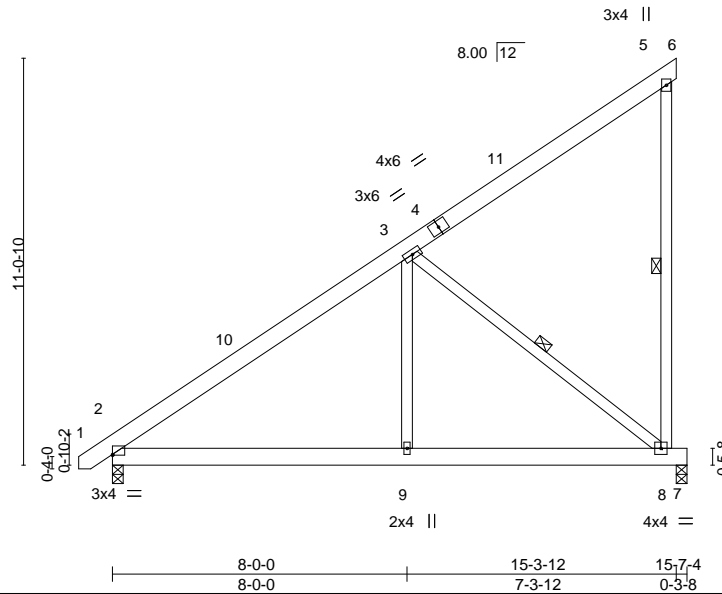
818 Soundside Road  
 Edenton, NC 27932

Job J0320-1197	Truss A2	Truss Type MONOPITCH	Qty 2	Ply 1	Lot 15 Blackberry Manor	E13912796
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MITek Industries, Inc. Thu Jan 2 07:31:40 2020 Page 1

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 0-11-0 8-0-0 15-3-12 15-7-4  
 0-11-0 8-0-0 7-3-12 0-3-8



Scale = 1:62.6

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

<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 0.26	Vert(LL)	-0.03	8-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	-0.07	8-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.32	Horz(CT)	0.01	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.02	8-9	>999	240		
									Weight: 118 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3

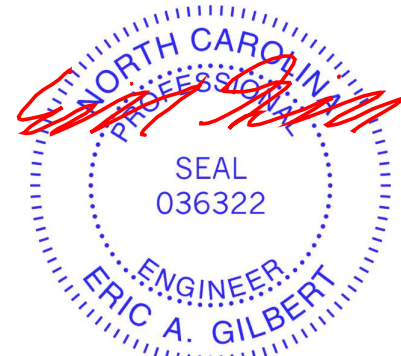
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-8, 3-8

**REACTIONS.** (lb/size) 2=668/0-3-8, 7=592/0-3-8  
 Max Horz 2=347(LC 12)  
 Max Uplift 7=-178(LC 12)  
 Max Grav 2=668(LC 1), 7=639(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-748/0  
 BOT CHORD 2-9=-225/618, 8-9=-225/618  
 WEBS 3-9=0/397, 3-8=-787/285

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 15-3-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 178 lb uplift at joint 7.
- 5) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



January 2, 2020

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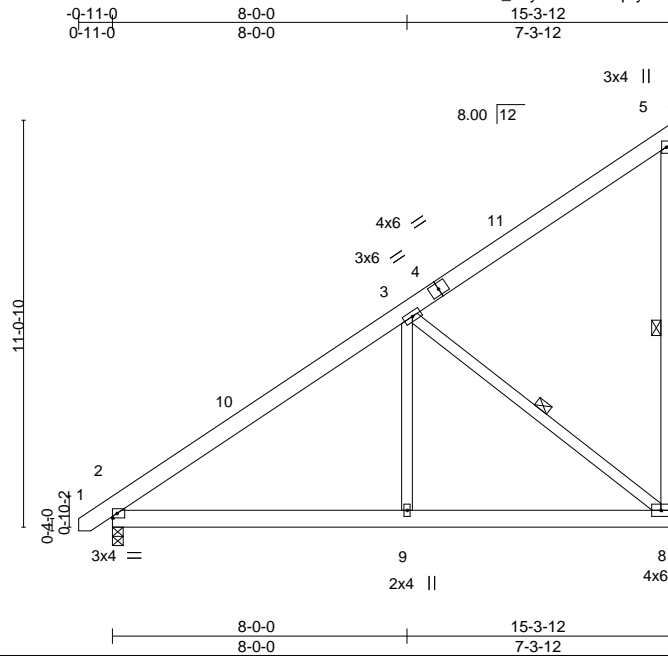


818 Soundside Road  
 Edenton, NC 27932

Job J0320-1197	Truss A3	Truss Type MONOPITCH	Qty 7	Ply 1	Lot 15 Blackberry Manor	E13912797
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MITek Industries, Inc. Thu Jan 2 07:31:41 2020 Page 1  
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Scale = 1:62.6

<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 0.26	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.20	Vert(LL) -0.02 2-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.30	Vert(CT) -0.05 2-9 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.02 2-9 >999 240	Weight: 117 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.3

**REACTIONS.** (lb/size) 8=605/Mechanical, 2=651/0-3-8  
Max Horz 2=347(LC 12)  
Max Uplift 8=-185(LC 12)  
Max Grav 8=654(LC 19), 2=651(LC 1)

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

TOP CHORD 2-3=-708/0  
BOT CHORD 2-9=-210/581, 8-9=-210/581  
WEBS 3-9=0/360, 3-8=-742/268

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 15-3-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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 185 lb uplift at joint 8.
- 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



January 2, 2020

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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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road  
Edenton, NC 27932

Job J0320-1197	Truss A3GE	Truss Type HALF HIP SUPPORTED	Qty 1	Ply 1	Lot 15 Blackberry Manor	E13912798
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MITek Industries, Inc. Thu Jan 2 07:31:42 2020 Page 1

ID:KHiM10Q\_9dy0362zxkFfqAyJzV8-PaIT9uCmrvYQZ8BQCWS\_juqEo8szUO3RMONZ\_kzzT??

-0-11-0 15-0-11 16-2-12  
0-11-0 14-1-11 1-2-1

Scale = 1:60.6

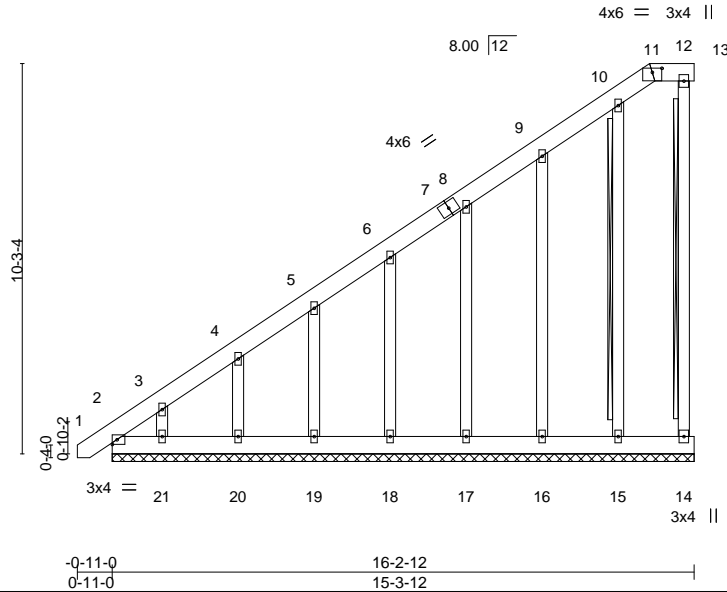


Plate Offsets (X,Y)-- [11:0-3-0,0-1-5]

<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 0.05	Vert(LL)	-0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.17	Horz(CT)	-0.01	13	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 145 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 11-13.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS T-Brace: 2x4 SPF No.2 - 12-14, 10-15  
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

**REACTIONS.** All bearings 15-3-12.  
(lb) - Max Horz 2=466(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 13, 14, 2, 15, 16, 17, 18, 19, 20 except 21=-181(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 13, 14, 17, 18, 19, 20, 21 except 2=360(LC 12), 15=252(LC 19), 16=277(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-583/474, 3-4=-457/369, 4-5=-377/304, 5-6=-303/246

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=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 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - Bearing at joint(s) 13 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) 13, 14, 2, 15, 16, 17, 18, 19, 20 except (jt=lb) 21=181.
  - 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.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



January 2, 2020

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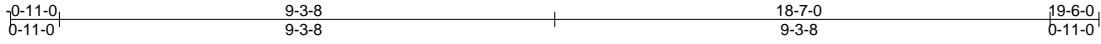


818 Soundside Road  
Edenton, NC 27932

Job J0320-1197	Truss B1	Truss Type COMMON	Qty 5	Ply 1	Lot 15 Blackberry Manor	E13912799
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MITek Industries, Inc. Thu Jan 2 07:31:42 2020 Page 1  
ID:KHiM10Q\_9dy0362zxkFfqAyJzV8-PalT9uCmrwYQZ8BQCWS\_juq858oUUO6RMONZ\_kzzT??



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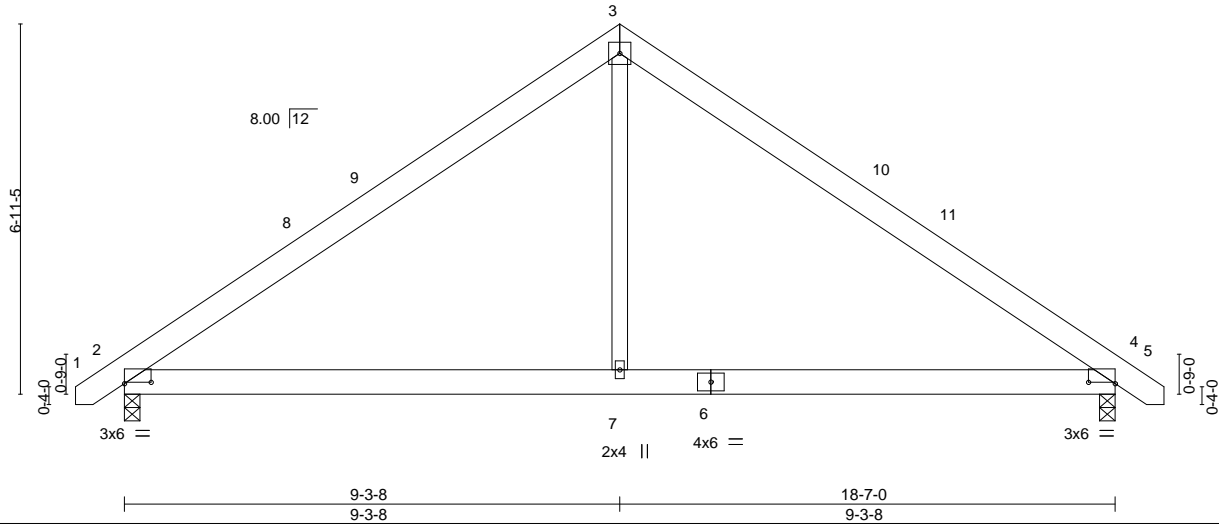


Plate Offsets (X,Y)-- [2:0-6-0,0-0-5], [4:0-6-0,0-0-5]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.41	Vert(LL) -0.04	4-7	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.31	Vert(CT) -0.09	4-7	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.17	Horz(CT) 0.01	4	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL) 0.04	2-7	>999	240		
	Code IRC2015/TP12014						Weight: 110 lb	FT = 20%

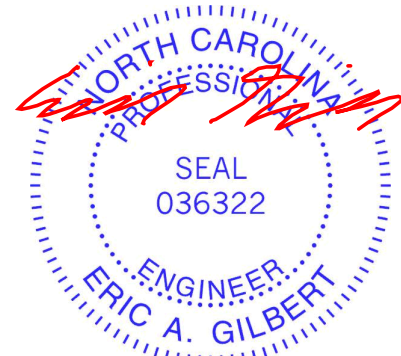
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3

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

**REACTIONS.** (lb/size) 4=786/0-3-8, 2=786/0-3-8  
 Max Horz 2=-161(LC 10)  
 Max Uplift 4=-50(LC 13), 2=-50(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-890/199, 3-4=-890/199  
 BOT CHORD 2-7=0/605, 4-7=0/605  
 WEBS 3-7=0/448

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 9-3-8, Exterior(2) 9-3-8 to 13-8-5 zone; C-C for members and 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 with a clearance greater than 6-0-0 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) 4, 2.



January 2, 2020

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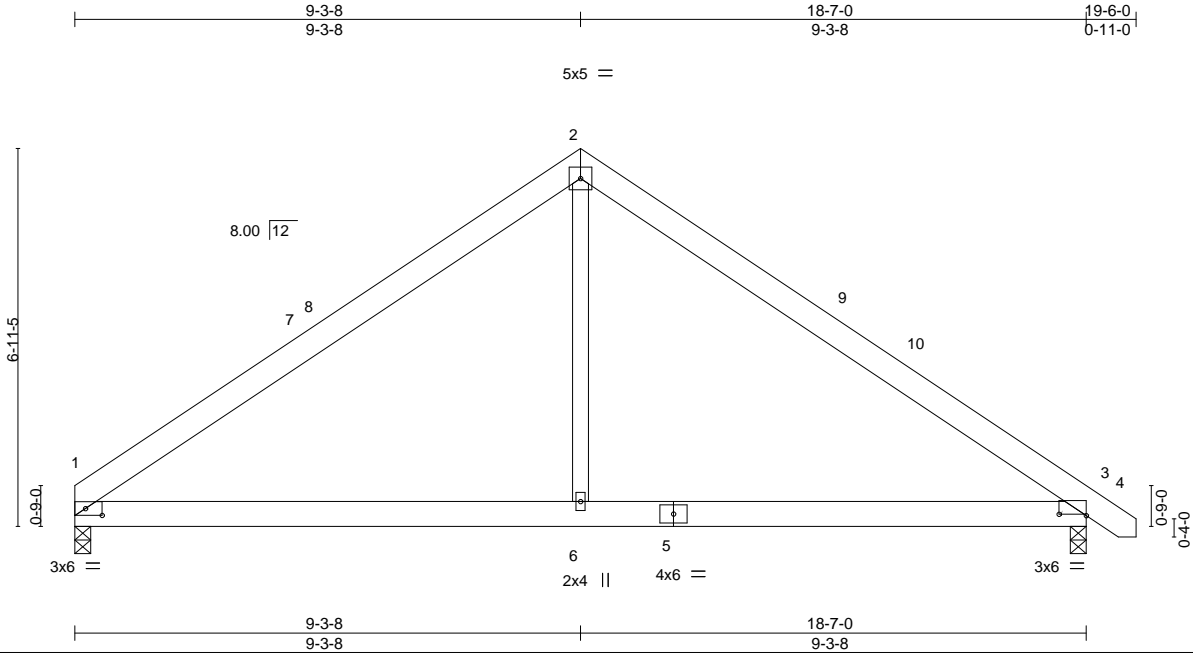




Job J0320-1197	Truss B2	Truss Type COMMON	Qty 4	Ply 1	Lot 15 Blackberry Manor	E13912801
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MITek Industries, Inc. Thu Jan 2 07:31:44 2020 Page 1  
ID:KhiM10Q\_9dy0362zxfFqAyJzV8-LyPDaaE0NYo8oSLpJxUSoJvUBxUwylakpisg2czzT\_z



Scale = 1:42.3

Plate Offsets (X,Y)-- [1:0-3-11,0-1-8], [3:0-6-0,0-0-5]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.44	Vert(LL)	-0.04	1-6	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.31	Vert(CT)	-0.09	1-6	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.17	Horz(CT)	0.01	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.04	3-6	>999		
	Code IRC2015/TPI2014						Weight: 108 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3

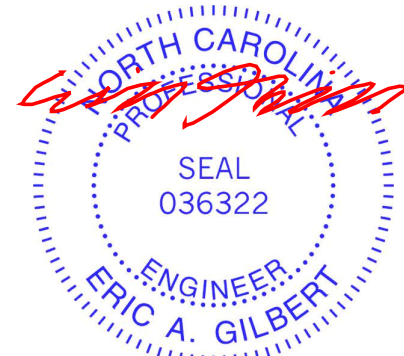
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 1=730/0-3-8, 3=787/0-3-8  
 Max Horz 1=-159(LC 8)  
 Max Uplift 1=-38(LC 12), 3=-50(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-889/199, 2-3=-892/199  
 BOT CHORD 1-6=0/607, 3-6=0/607  
 WEBS 2-6=0/450

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 9-3-8, Exterior(2) 9-3-8 to 13-8-5 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



January 2, 2020

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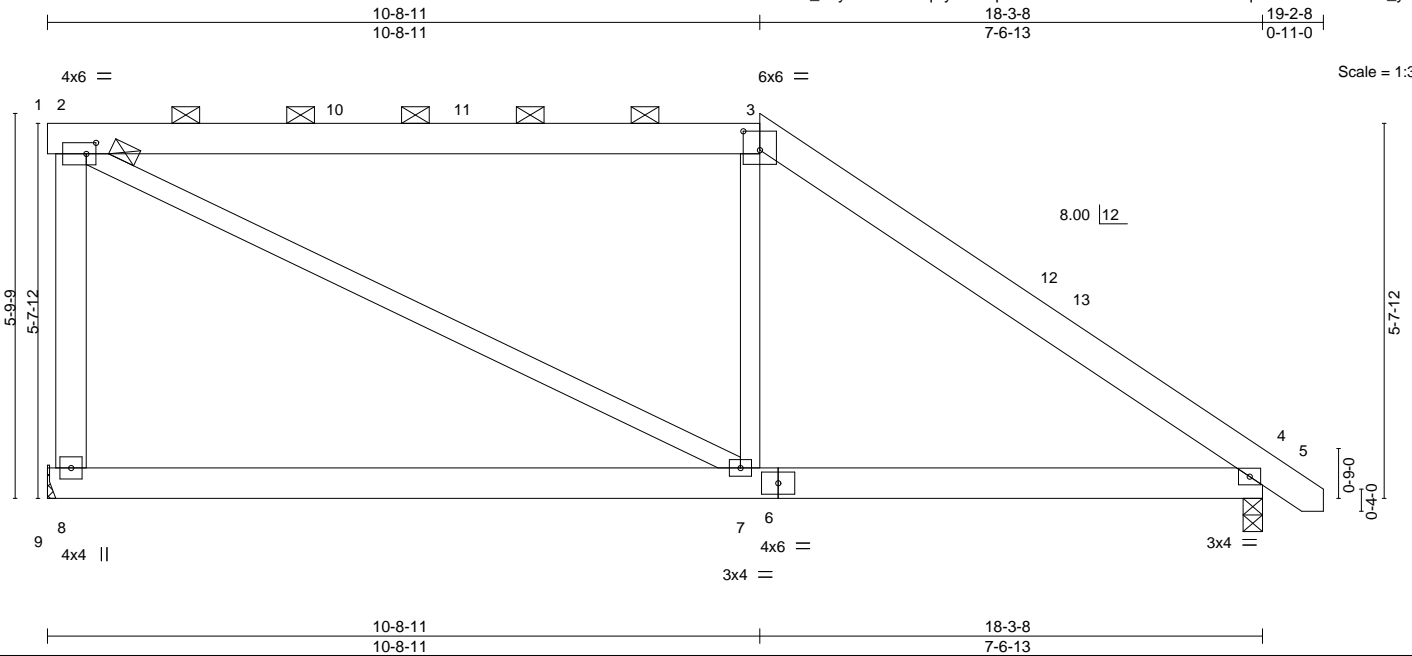


818 Soundside Road  
 Edenton, NC 27932

Job J0320-1197	Truss B3	Truss Type ROOF SPECIAL	Qty 1	Ply 1	Lot 15 Blackberry Manor	E13912802
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MITek Industries, Inc. Thu Jan 2 07:31:45 2020 Page 1  
ID:KHiM10Q\_9dy0362zxFqAyJzV8-p9ZbowEe8rw?Qcv?tf0hLWSeWlqehhYt2MbDaZzzT\_y



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.50	Vert(LL) -0.06	7-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.28	Vert(CT) -0.12	7-8	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.45	Horz(CT) 0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.02	4-7	>999	240		
							Weight: 126 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, and 2-0-0 oc purlins (6-0-0 max.): 1-3.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1 *Except* 2-7: 2x4 SP No.2, 3-7: 2x4 SP No.3	

**REACTIONS.** (lb/size) 8=739/Mechanical, 4=767/0-3-8  
 Max Horz 8=-176(LC 13)  
 Max Uplift 8=-87(LC 8), 4=-28(LC 13)  
 Max Grav 8=739(LC 1), 4=767(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-8=-630/280, 2-3=-665/208, 3-4=-929/153  
 BOT CHORD 4-7=0/665  
 WEBS 2-7=-199/627

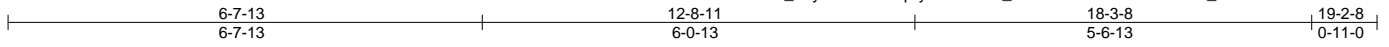
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 10-8-11, Exterior(2) 10-8-11 to 15-1-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 8, 4.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



January 2, 2020

Job J0320-1197	Truss B4	Truss Type ROOF SPECIAL	Qty 1	Ply 1	Lot 15 Blackberry Manor	E13912803
Comtech, Inc., Fayetteville, NC 28309					Job Reference (optional)	

8.130 s Mar 11 2018 MITek Industries, Inc. Thu Jan 2 07:31:46 2020 Page 1  
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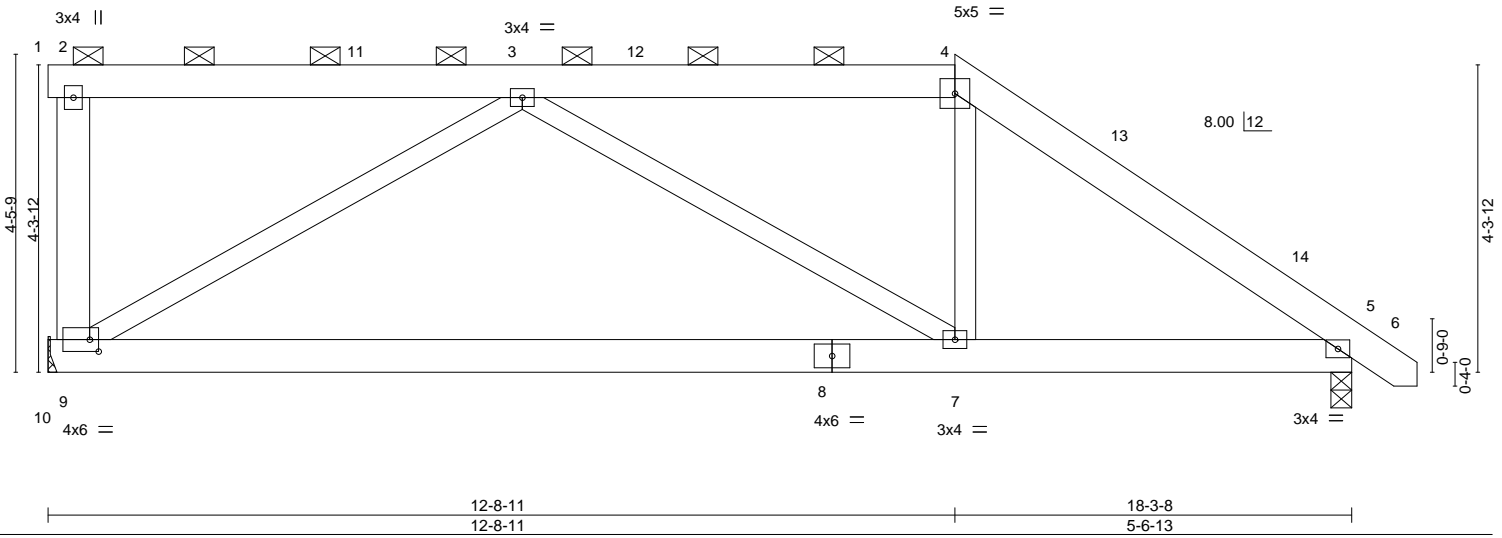


Plate Offsets (X,Y)-- [9:0-1-8,0-2-0]

<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 0.31	Vert(LL)	-0.13	7-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.39	Vert(CT)	-0.26	7-9	>836		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.80	Horz(CT)	0.01	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.01	5-7	>999		
								Weight: 125 lb	FT = 20%

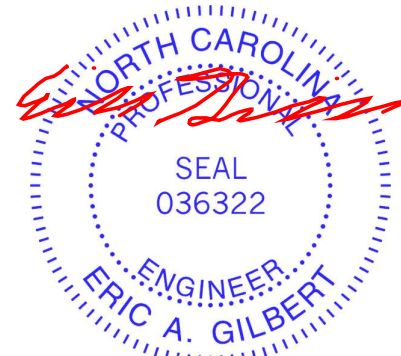
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3 \*Except\*  
 2-9: 2x6 SP No.1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-4.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 9=739/Mechanical, 5=767/0-3-8  
 Max Horz 9=-133(LC 13)  
 Max Uplift 9=-86(LC 8), 5=-26(LC 8)  
 Max Grav 9=739(LC 1), 5=767(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-758/200, 4-5=-1038/167  
 BOT CHORD 7-9=-87/754, 5-7=-20/765  
 WEBS 3-9=-782/328, 4-7=0/364

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) 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 12-8-11, Exterior(2) 12-8-11 to 17-1-8 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 5.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



January 2, 2020

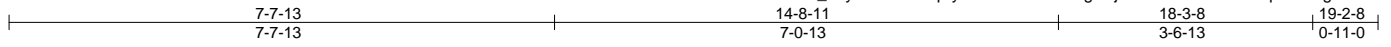
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**  
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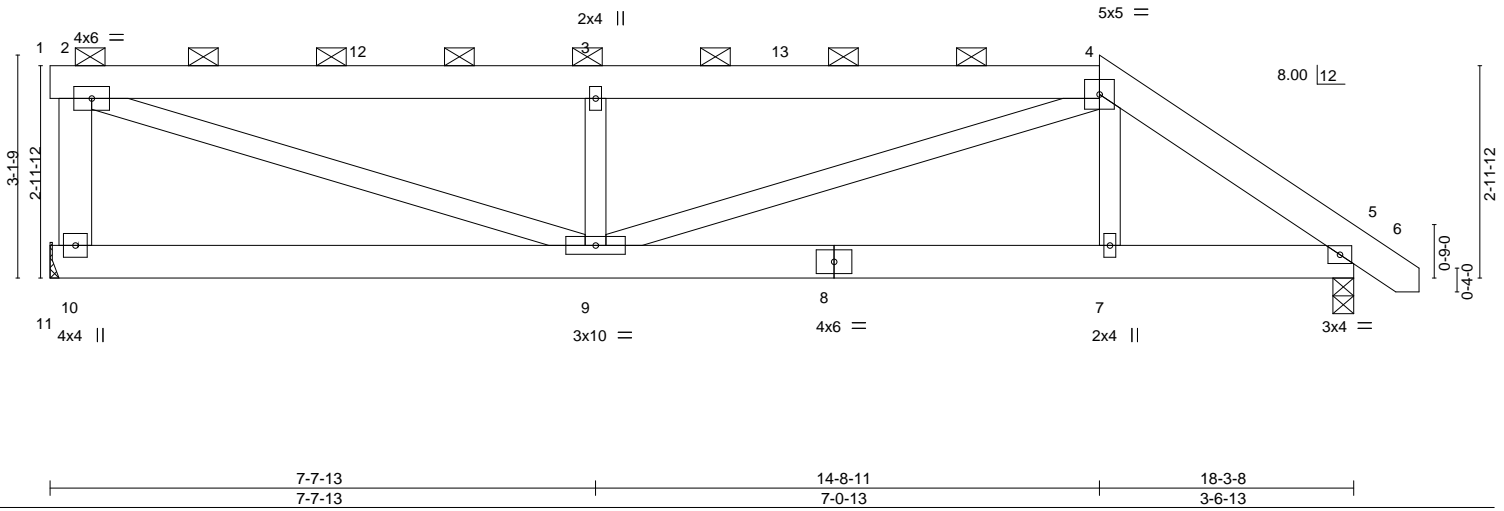
818 Soundside Road  
 Edenton, NC 27932

Job J0320-1197	Truss B5	Truss Type ROOF SPECIAL	Qty 1	Ply 1	Lot 15 Blackberry Manor	E13912804
Comtech, Inc., Fayetteville, NC 28309					Job Reference (optional)	

8.130 s Mar 11 2018 MITek Industries, Inc. Thu Jan 2 07:31:47 2020 Page 1  
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Scale = 1:32.3



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.19	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.17	Vert(LL) -0.04 9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.51	Vert(CT) -0.08 7-9 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 5 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.03 9 >999 240	Weight: 123 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, and 2-0-0 oc purlins (6-0-0 max.): 1-4.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 2-10: 2x6 SP No.1	

**REACTIONS.** (lb/size) 10=739/Mechanical, 5=767/0-3-8  
Max Horz 10=-89(LC 13)  
Max Uplift 10=-86(LC 8), 5=-46(LC 8)  
Max Grav 10=739(LC 1), 5=767(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-10=-641/231, 2-3=-1308/325, 3-4=-1310/327, 4-5=-1089/243  
BOT CHORD 7-9=-117/824, 5-7=-114/832  
WEBS 2-9=-310/1232, 3-9=-462/237, 4-9=-99/554, 4-7=0/250

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=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 14-8-11, Exterior(2) 14-8-11 to 19-0-9 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 5.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



January 2, 2020

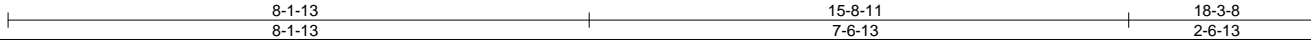
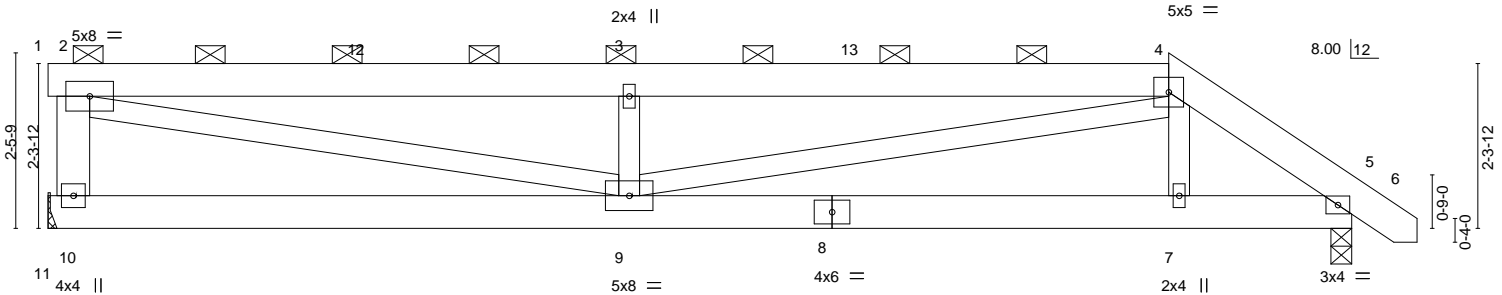
Job J0320-1197	Truss B6	Truss Type ROOF SPECIAL	Qty 1	Ply 1	Lot 15 Blackberry Manor	E13912805
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MITek Industries, Inc. Thu Jan 2 07:31:48 2020 Page 1  
ID:KhiM10Q\_9dy0362zrkFfqAyJzV8-DkfkQxHXRmlaH3eaYnZOz94CnYtNu?TKkQtBNzzT\_v



Scale = 1:32.3



LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.27	Vert(LL) -0.07	9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.21	Vert(CT) -0.14	7-9	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.63	Horz(CT) 0.01	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.06	9	>999	240	Weight: 120 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, and 2-0-0 oc purlins (5-6-1 max.): 1-4.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 2-10: 2x6 SP No.1	

**REACTIONS.** (lb/size) 10=739/Mechanical, 5=767/0-3-8  
Max Horz 10=-67(LC 13)  
Max Uplift 10=-86(LC 8), 5=-56(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-10=-620/227, 2-3=-1757/417, 3-4=-1757/417, 4-5=-1200/255  
BOT CHORD 9-10=-28/286, 7-9=-154/931, 5-7=-149/945  
WEBS 2-9=-364/1512, 3-9=-454/242, 4-9=-180/850, 4-7=0/293

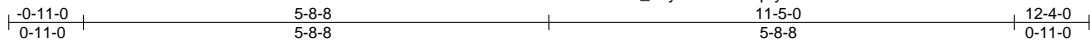
- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 15-8-11, Exterior(2) 15-8-11 to 19-0-9 zone; C-C for members and forces & MWFRS for reactions shown; 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 with a clearance greater than 6-0-0 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) 10, 5.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



January 2, 2020

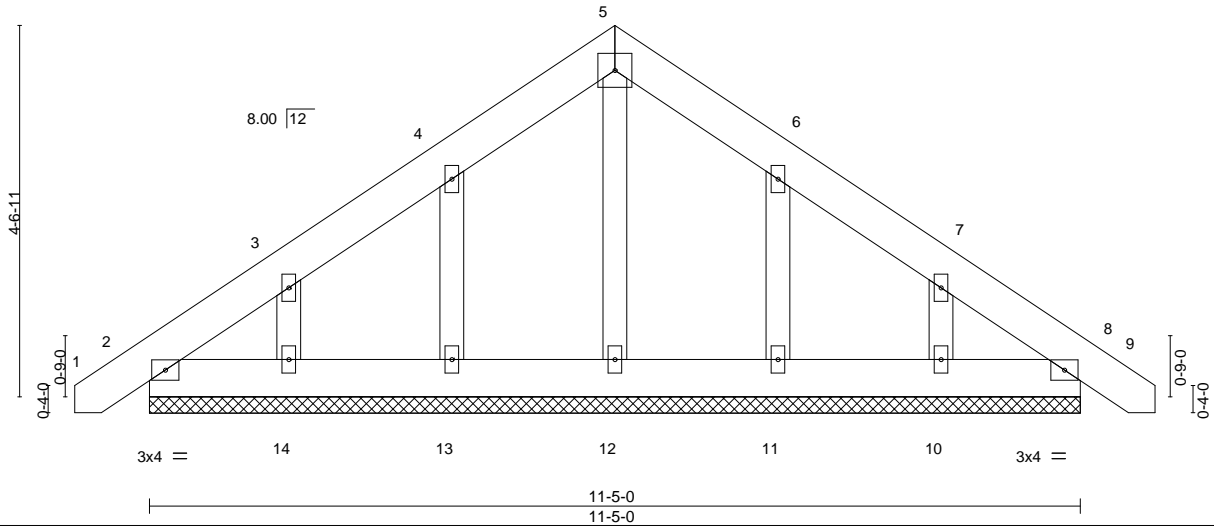
Job J0320-1197	Truss C1GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 15 Blackberry Manor	E13912806
Comtech, Inc., Fayetteville, NC 28309					Job Reference (optional)	

8.130 s Mar 11 2018 MITek Industries, Inc. Thu Jan 2 07:31:49 2020 Page 1  
ID:KHiM10Q\_9dy0362zxkFfqAyJzV8-hwD6dHH9C4QRvDDn6V4dVMcQUyFIdbyTz\_ZRjqzzT\_u



5x5 =

Scale = 1:28.3



<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 0.02	Vert(LL)	-0.00	8	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	0.00	8	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	8	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S						Weight: 80 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.3

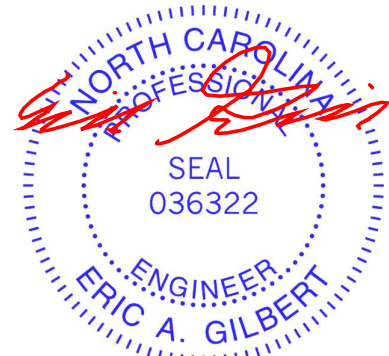
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 11-5-0.  
 (lb) - Max Horz 2=129(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 11, 10 except 14=101(LC 12)  
 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 (3-second gust) Vasd=103mph; TC DL=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 with a clearance greater than 6-0-0 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, 13, 11, 10 except (jt=lb) 14=101.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8.



January 2, 2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road  
 Edenton, NC 27932

Job J0320-1197	Truss M1	Truss Type MONOPITCH	Qty 6	Ply 1	Lot 15 Blackberry Manor	E13912807
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MITek Industries, Inc. Thu Jan 2 07:31:49 2020 Page 1

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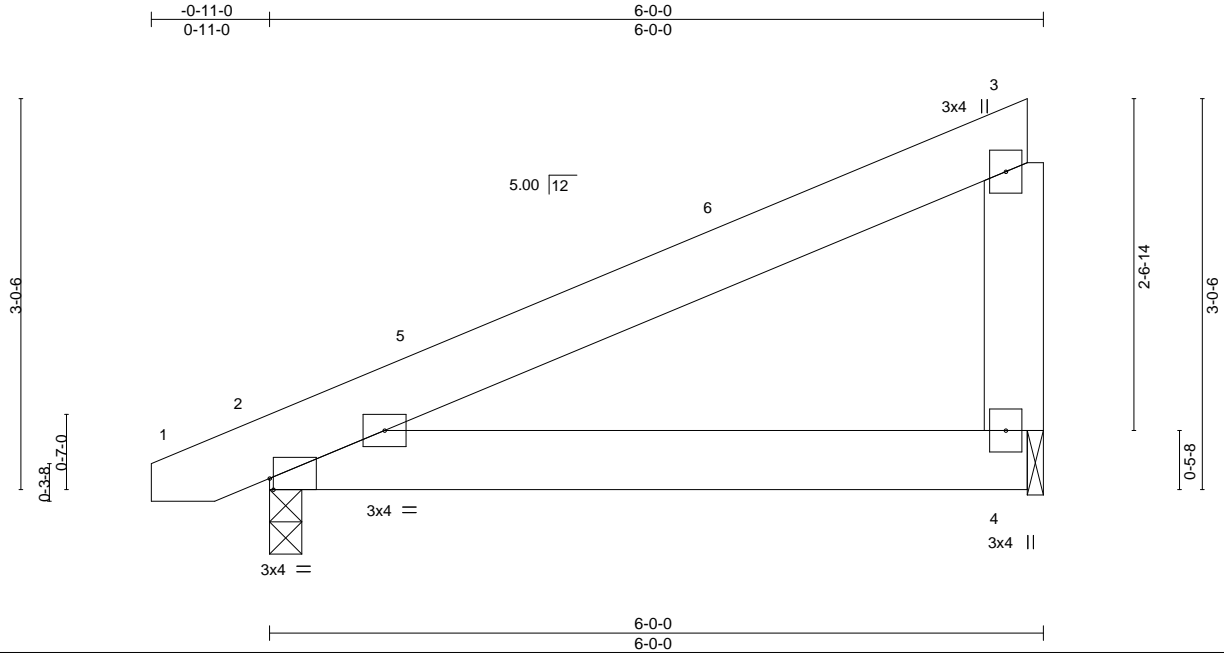


Plate Offsets (X,Y)--		[2:0-0-6,Edge]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.19
TCDL 10.0	Lumber DOL	1.15	BC 0.12
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P
<b>DEFL.</b>	in (loc)	l/defl	L/d
Vert(LL)	-0.01	2-4	>999
Vert(CT)	-0.03	2-4	>999
Horz(CT)	0.00	n/a	n/a
Wind(LL)	0.03	2-4	>999
<b>PLATES</b>	<b>GRIP</b>		
MT20	244/190		
Weight: 36 lb	FT = 20%		

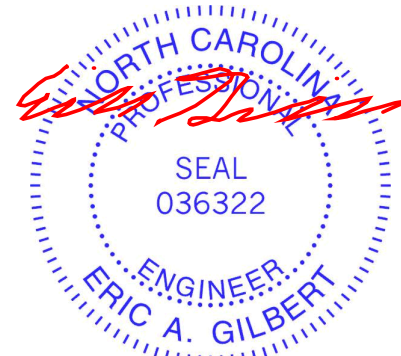
<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x6 SP No.1		

**REACTIONS.** (lb/size) 2=277/0-3-0, 4=222/0-1-8  
 Max Horz 2=86(LC 12)  
 Max Uplift 2=-72(LC 8), 4=-74(LC 8)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-1 to 3-8-12, Interior(1) 3-8-12 to 5-9-4 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 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.



January 2, 2020

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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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



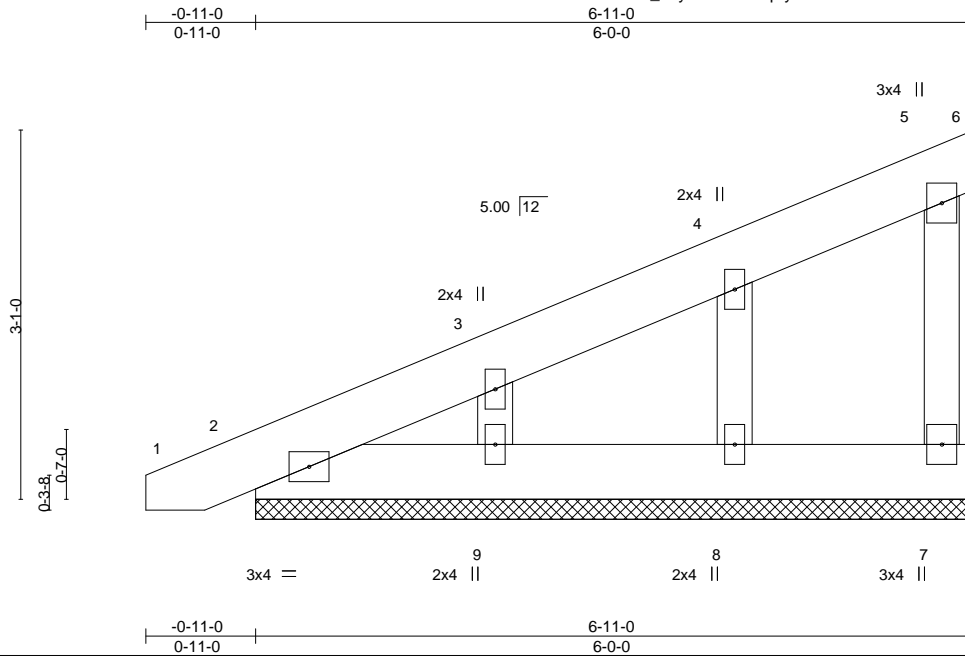
818 Soundside Road  
 Edenton, NC 27932



Job J0320-1197	Truss M1GE	Truss Type MONOPITCH SUPPORTED	Qty 1	Ply 1	Lot 15 Blackberry Manor	E13912808
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MITek Industries, Inc. Thu Jan 2 07:31:50 2020 Page 1  
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Scale = 1:19.2

<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 0.02	Vert(LL)	-0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	6	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P					Weight: 38 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

**BRACING-**

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

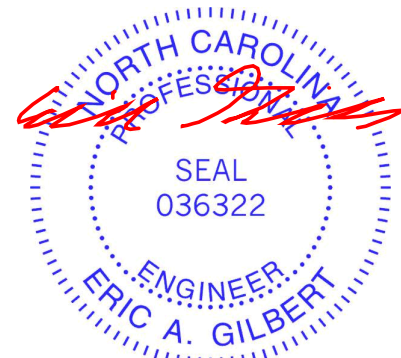
**REACTIONS.**

All bearings 6-0-0.  
(lb) - Max Horz 2=129(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 6, 7, 2, 8, 9  
Max Grav All reactions 250 lb or less at joint(s) 6, 7, 2, 8, 9

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 7, 2, 8, 9.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



January 2, 2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

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818 Soundside Road  
Edenton, NC 27932

Job J0320-1197	Truss M2	Truss Type MONOPITCH	Qty 3	Ply 1	Lot 15 Blackberry Manor	E13912809
Comtech, Inc., Fayetteville, NC 28309					Job Reference (optional)	

8.130 s Mar 11 2018 MITek Industries, Inc. Thu Jan 2 07:31:51 2020 Page 1  
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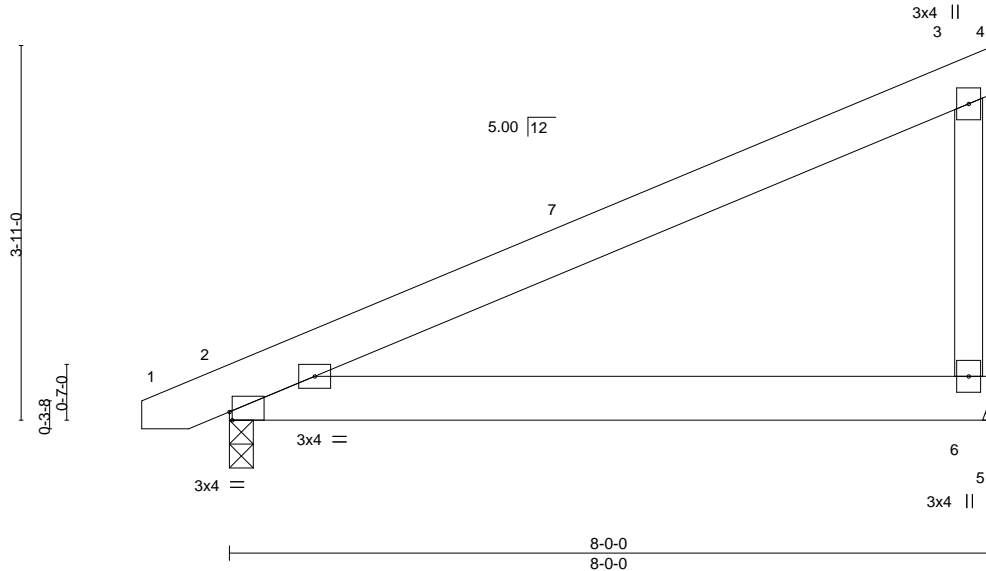


Plate Offsets (X,Y)--	[2:0-0-6,Edge]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.37	Vert(LL) -0.05	2-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.24	Vert(CT) -0.09	2-6	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00		n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.10	2-6	>923	240	Weight: 46 lb	FT = 20%

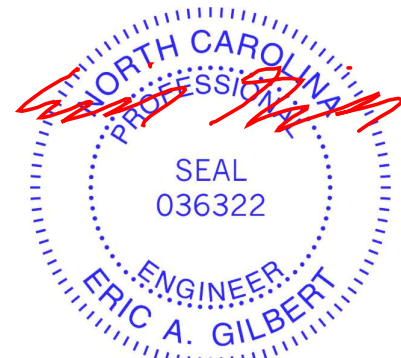
LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) 6=313/Mechanical, 2=354/0-3-0  
 Max Horz 2=116(LC 12)  
 Max Uplift 6=-99(LC 8), 2=-89(LC 8)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-1 to 3-8-12, Interior(1) 3-8-12 to 8-0-0 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.
- 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



January 2, 2020

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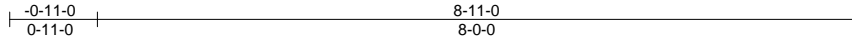
818 Soundside Road  
 Edenton, NC 27932

Job J0320-1197	Truss M2GE	Truss Type MONOPITCH SUPPORTED	Qty 1	Ply 1	Lot 15 Blackberry Manor	E13912810
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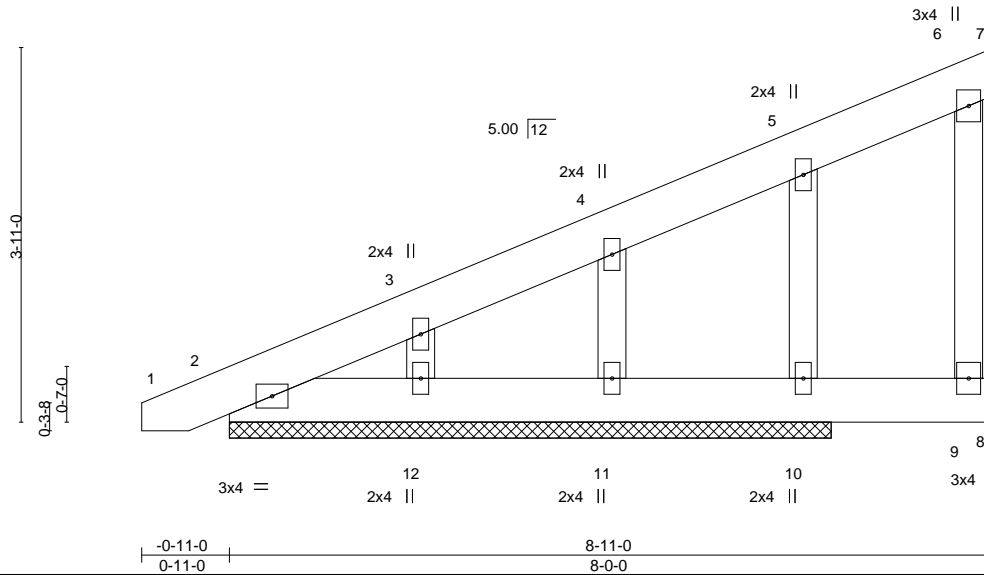
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8.130 s Mar 11 2018 MITek Industries, Inc. Thu Jan 2 07:31:52 2020 Page 1

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Scale: 1/2"=1'



<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 0.05	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.05	Vert(LL) 0.00 6-7 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Vert(CT) -0.00 6-7 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) -0.00 10 n/a n/a		
	Code IRC2015/TPI2014			Weight: 52 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 10-0-0 oc bracing: 8-9.

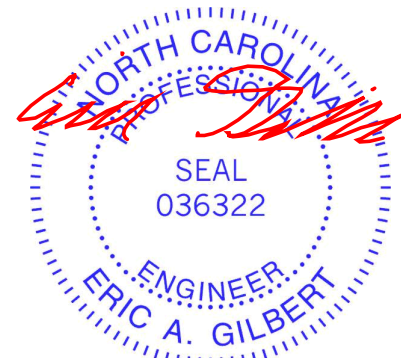
**REACTIONS.**

All bearings 6-3-8.  
 (lb) - Max Horz 2=167(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 11, 12 except 10=118(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 11, 12 except 10=294(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable studs spaced at 2-0-0 oc.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 11, 12 except (jt=lb) 10=118.
- 7) Non Standard bearing condition. Review required.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



January 2, 2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

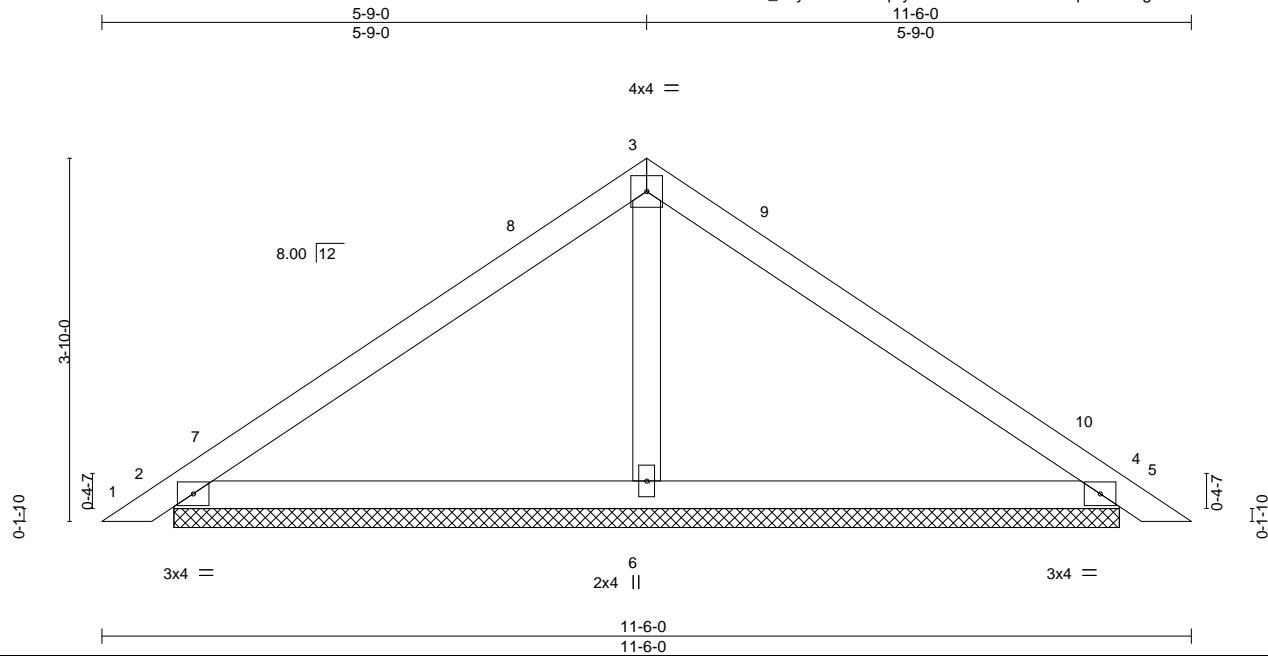


818 Soundside Road  
 Edenton, NC 27932

Job J0320-1197	Truss PB	Truss Type Piggyback	Qty 10	Ply 1	Lot 15 Blackberry Manor	E13912811
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MITek Industries, Inc. Thu Jan 2 07:31:53 2020 Page 1  
ID:KHiM10Q\_9dy0362zxkFfqAyJzV8-ahSdTfKfFJxsNqXYLK9ZgCn3vZb0ZOR3ucXesbzzT\_q



Scale = 1:24.3

<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 0.25	Vert(LL)	0.01	5	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	0.02	5	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S						Weight: 40 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.3

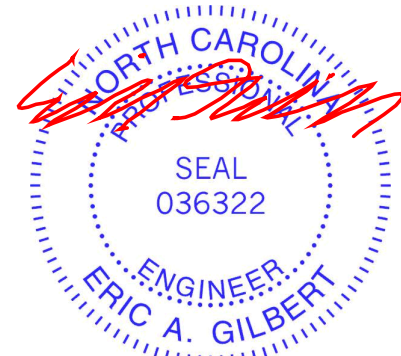
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6'-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=230/9-11-12, 4=230/9-11-12, 6=397/9-11-12  
Max Horz 2=-88(LC 10)  
Max Uplift 2=-32(LC 12), 4=-40(LC 13)

**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 (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-2 to 4-7-15, Interior(1) 4-7-15 to 5-9-0, Exterior(2) 5-9-0 to 10-1-13 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 with a clearance greater than 6'-0-0 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, 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



January 2, 2020

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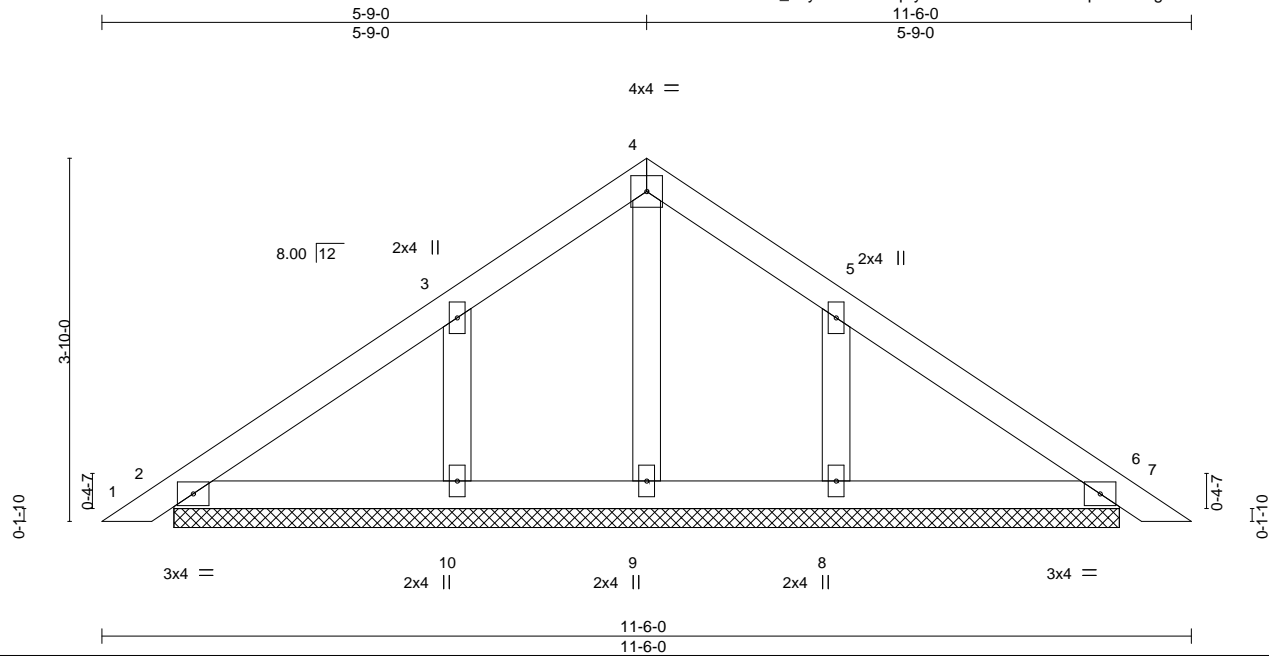


818 Soundside Road  
Edenton, NC 27932

Job J0320-1197	Truss PBGE	Truss Type GABLE	Qty 1	Ply 1	Lot 15 Blackberry Manor	E13912812
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MITek Industries, Inc. Thu Jan 2 07:31:53 2020 Page 1  
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Scale = 1:24.3

LOADING (psf)	SPACING-	CSL.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) 0.00	7	n/r	120		MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.05	Vert(CT) 0.00	7	n/r	120			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.00	6	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S							
								Weight: 45 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.3

**BRACING-**

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

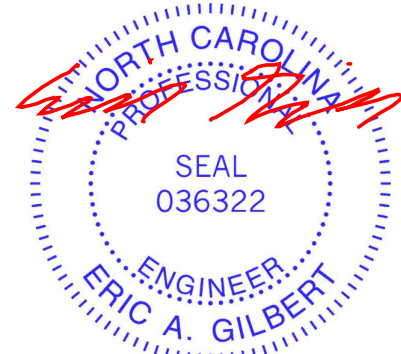
**REACTIONS.**

All bearings 9-11-12.  
(lb) - Max Horz 2=110(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=137(LC 12), 8=137(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=277(LC 19), 8=276(LC 20)

**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 (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(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.
- 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 with a clearance greater than 6-0-0 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, 6 except (jt=lb) 10=137, 8=137.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



January 2, 2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

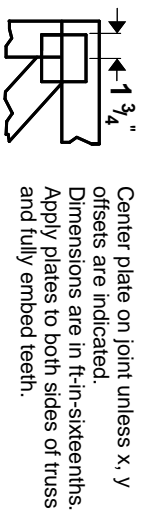
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



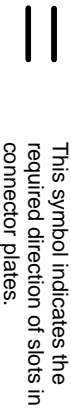
818 Soundside Road  
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# Symbols

## PLATE LOCATION AND ORIENTATION



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



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

## PLATE SIZE

4 X 4

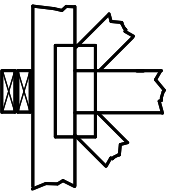
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING

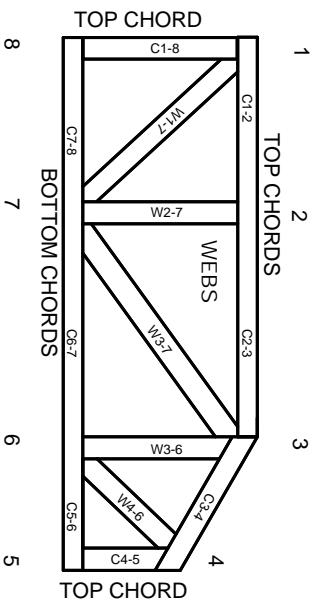


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988  
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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MITek Engineering Reference Sheet: MII-7473 rev. 10/03/2015



# General Safety Notes

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

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