

**Trenco**

818 Soundside Rd  
Edenton, NC 27932

Re: B0318-0845  
Engage A

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: E11515451 thru E11515464

My license renewal date for the state of North Carolina is December 31, 2018.

North Carolina COA: C-0844



March 5, 2018

Lassiter, Frank

**IMPORTANT NOTE:** Truss Engineer's responsibility is solely for design of individual trusses based upon design parameters shown on referenced truss drawings. Parameters have not been verified as appropriate for any use. Any location identification specified is for file reference only and has not been used in preparing design. Suitability of truss designs for any particular building is the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

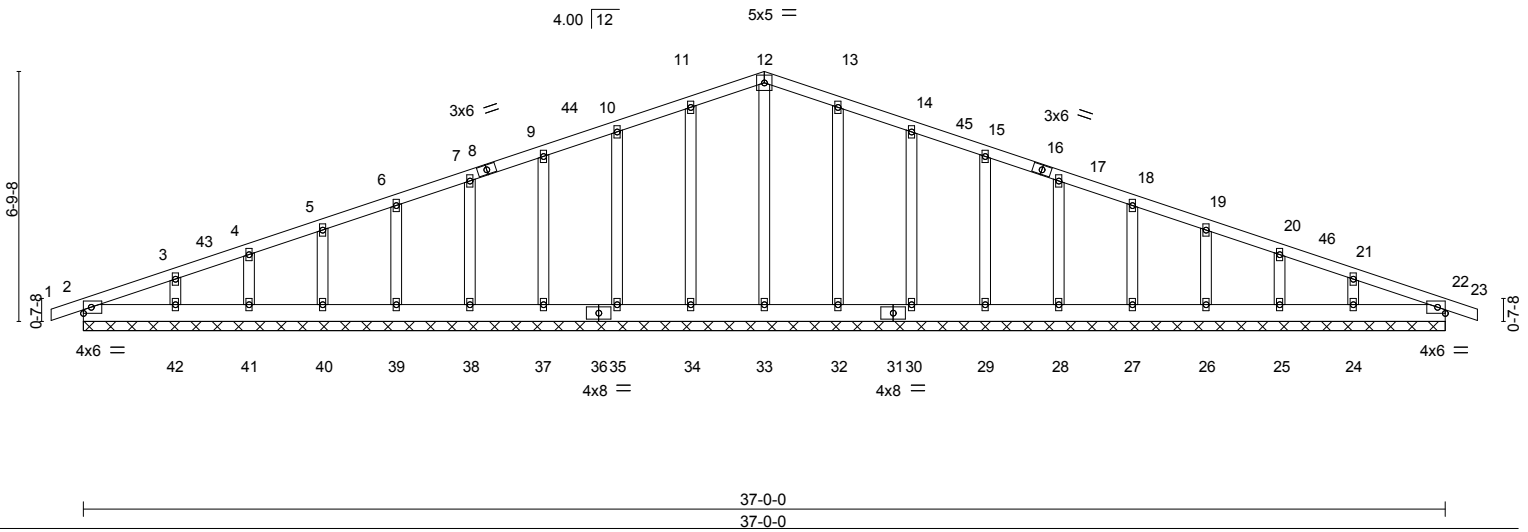
Job B0318-0845	Truss A1	Truss Type Common Supported Gable	Qty 1	Ply 1	Engage A	E11515451
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Sep 15 2017 MiTek Industries, Inc. Mon Mar 5 12:26:53 2018 Page 1  
ID:qBVty8JxTR2c0jvIHgLvLzeJa3-h9pbt2IE?l49WLgOBriJ8aNyGLszYEPDDLuiozdzaG

0-10-8 18-6-0 37-0-0 37-10-8  
0-10-8 18-6-0 18-6-0 0-10-8

Scale = 1:62.6



LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) -0.00	22	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(TL) 0.00	22	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(TL) 0.00	22	n/a	n/a		
BCDL 10.0	Code IRC2009/TPI2007	Matrix-S					Weight: 230 lb	FT = 20%

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

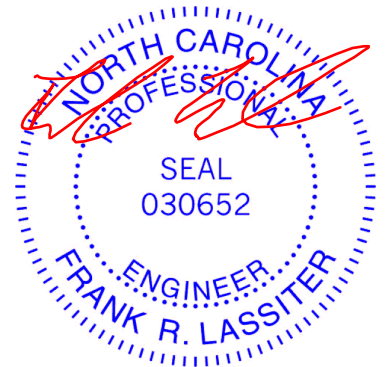
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6'-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.

**REACTIONS.** All bearings 37-0-0.  
(lb) - Max Horz 2=116(LC 5)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 34, 35, 37, 38, 39, 40, 41, 32, 30, 29, 28, 27, 26, 25, 24, 22 except 42=101(LC 5)  
Max Grav All reactions 250 lb or less at joint(s) 2, 33, 34, 35, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25, 24, 22

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 10-11=-28/252, 11-12=-30/294, 12-13=-30/294, 13-14=-28/252

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 18-6-0, Corner(3) 18-6-0 to 22-10-13 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 20.0psf 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, 34, 35, 37, 38, 39, 40, 41, 32, 30, 29, 28, 27, 26, 25, 24, 22 except (jt=lb) 42=101.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 22.



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**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 B0318-0845	Truss A2	Truss Type Common	Qty 7	Ply 1	Engage A	E11515452
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Sep 15 2017 MiTek Industries, Inc. Mon Mar 5 12:26:54 2018 Page 1

ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-9MNz4Omsm3C08VFbkZD\_sM7RVgYTiwUYRt4REEzdzaF

-0-10-8	9-8-11	18-6-0	27-3-5	37-0-0	37-10-8
0-10-8	9-8-11	8-9-5	8-9-5	9-8-11	0-10-8

Scale: 3/16"=1'

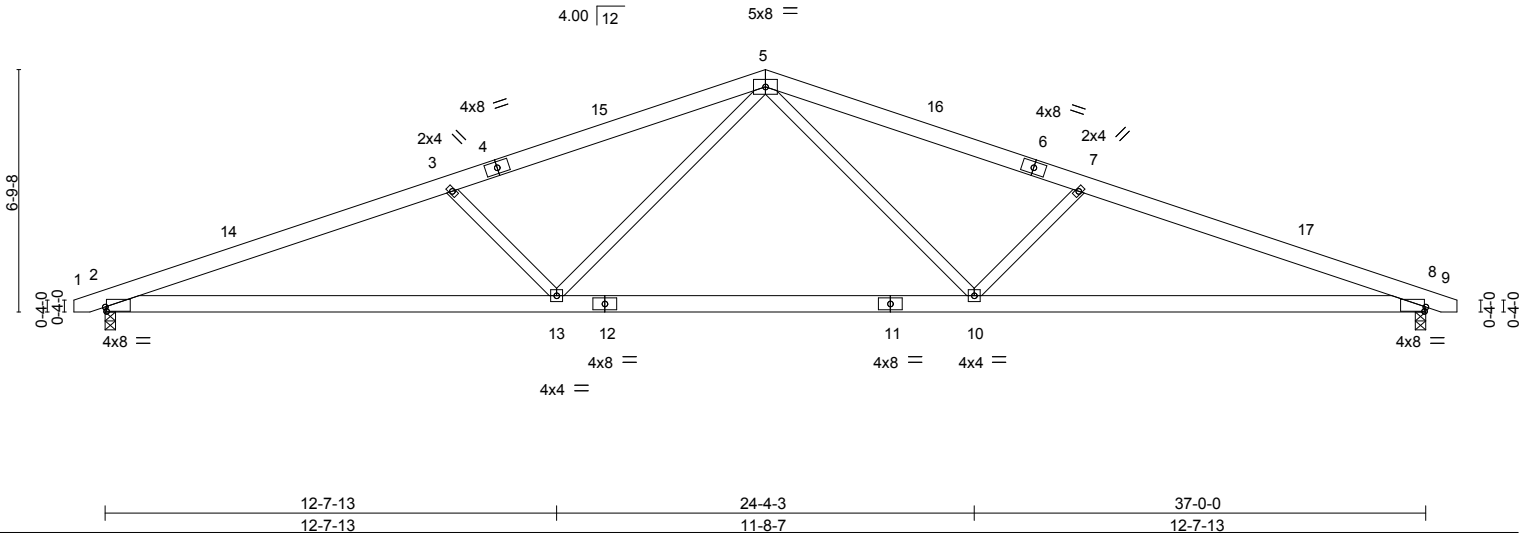


Plate Offsets (X,Y)--	[2:0-0-7,0-1-7], [8:0-0-7,0-1-7]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.46	Vert(LL) -0.19 8-10 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.64	Vert(TL) -0.56 8-10 >788 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.40	Horz(TL) 0.12 8 n/a n/a		
BCDL 10.0	Code IRC2009/TP12007	Matrix-S	Wind(LL) 0.14 13 >999 240	Weight: 220 lb	FT = 20%

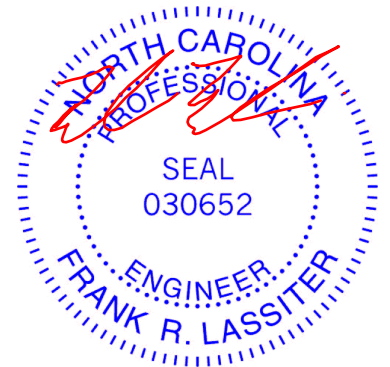
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-7-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 8-2-4 oc bracing.

**REACTIONS.** (lb/size) 2=1516/0-3-8, 8=1516/0-3-8  
 Max Horz 2=-93(LC 8)  
 Max Uplift 2=-262(LC 5), 8=-262(LC 6)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3440/1063, 3-5=-3033/943, 5-7=-3033/943, 7-8=-3440/1062  
 BOT CHORD 2-13=-910/3186, 10-13=-511/2147, 8-10=-911/3186  
 WEBS 5-10=-192/971, 7-10=-611/395, 5-13=-192/971, 3-13=-611/395

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-7-13 to 3-9-0, Interior(1) 3-9-0 to 18-6-0, Exterior(2) 18-6-0 to 22-10-13 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 20.0psf 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) except (jt=lb) 2=262, 8=262.



March 5, 2018

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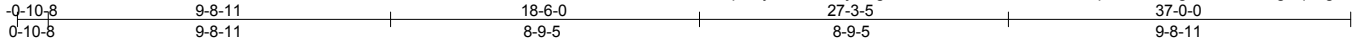
818 Soundside Road  
 Edenton, NC 27932

Job B0318-0845	Truss A5-P	Truss Type COMMON	Qty 1	Ply 1	Engage A	E11515453
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Comtech, Inc., Fayetteville, NC 28309

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ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-dYxLknUXMKtlfplGkDOZgWG4uxRJzigXq?ngzdzaE



Scale = 1:65.5

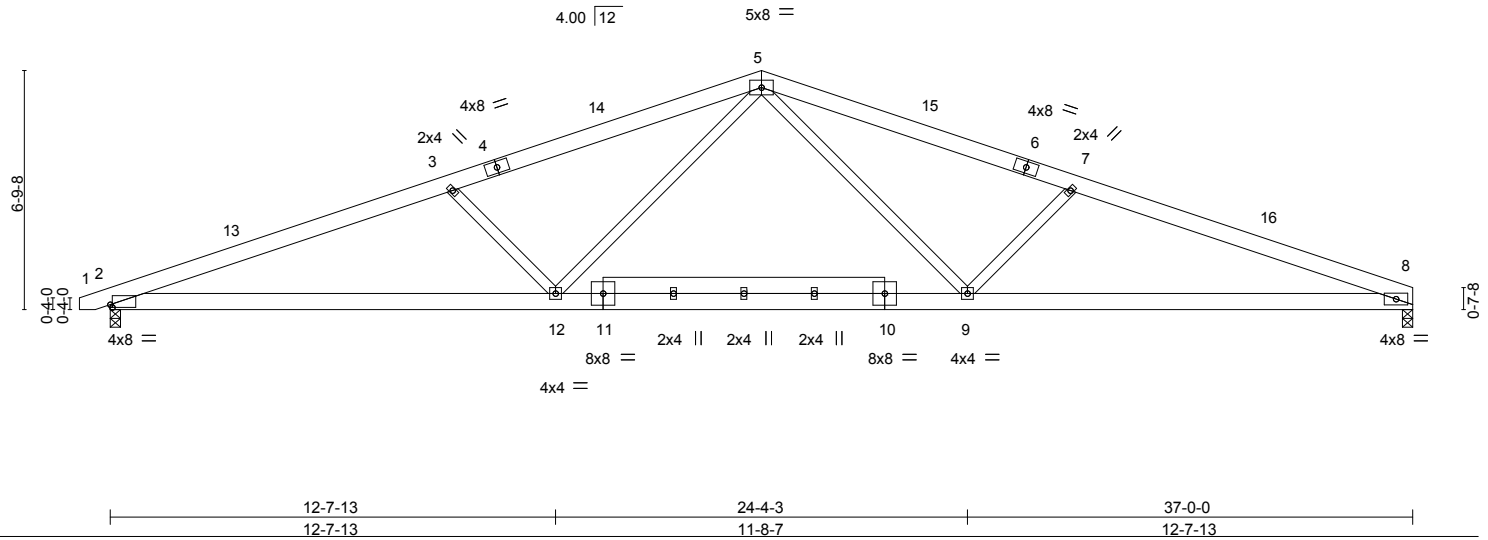


Plate Offsets (X,Y)-- [2:0-0-11,0-0-15]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-1-8	<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 0.84	Vert(LL)	-0.61	9-12	>716	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.62	Vert(TL)	-0.87	9-12	>506		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.64	Horz(TL)	0.13	8	n/a		
BCDL 10.0	Code IRC2009/TPI2007		Matrix-S	Wind(LL)	0.14	9-12	>999		
								Weight: 236 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP 2400F 2.0E  
 WEBS 2x4 SP No.3 \*Except\*  
 10-11: 2x6 SP No.1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-8-6 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=1984/0-3-8, 8=1933/0-3-8  
 Max Horz 2=100(LC 7)  
 Max Uplift 2=-278(LC 5), 8=-236(LC 6)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4872/1133, 3-5=-4441/1003, 5-7=-4443/1021, 7-8=-4877/1155  
 BOT CHORD 2-12=-976/4506, 9-12=-550/3089, 8-9=-976/4513  
 WEBS 5-9=-206/1549, 7-9=-604/426, 5-12=-205/1546, 3-12=-595/419

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-7-13 to 3-9-0, Interior(1) 3-9-0 to 18-6-0, Exterior(2) 18-6-0 to 22-10-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas with a clearance greater than 4-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=278, 8=236.



March 5, 2018

Job B0318-0845	Truss A6-P	Truss Type Common	Qty 1	Ply 1	Engage A	E11515454
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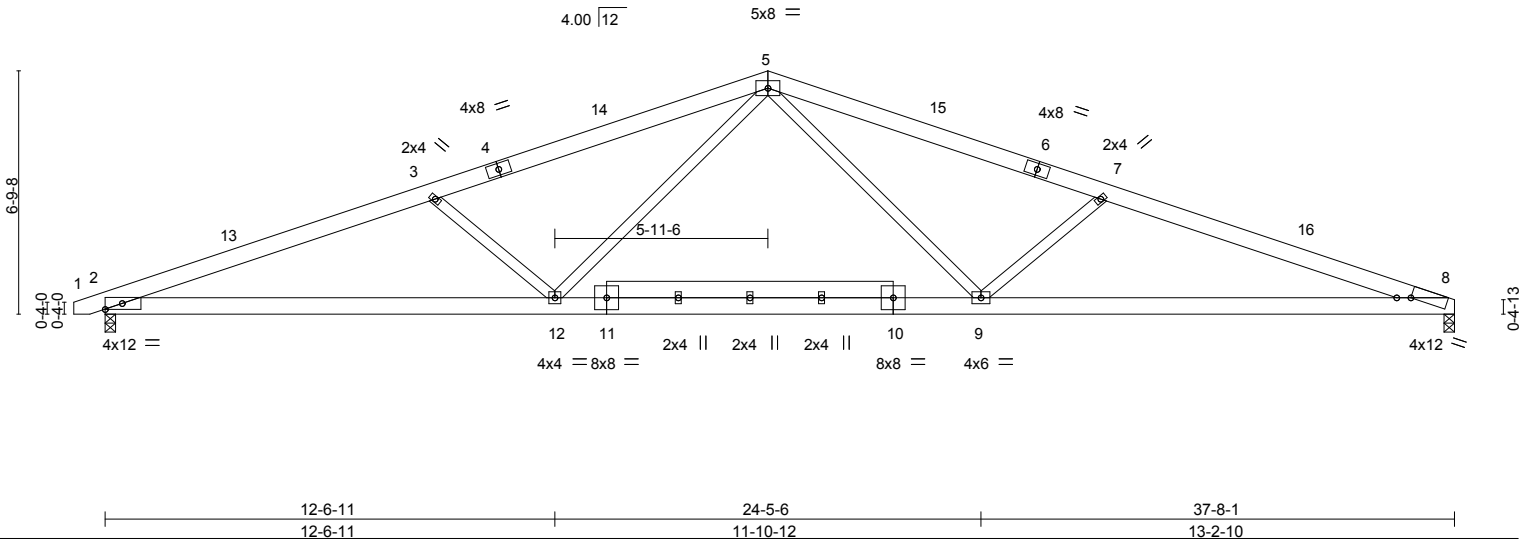
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0-10-8	9-2-9	18-6-0	27-9-8	37-8-1
0-10-8	9-2-9	9-3-8	9-3-8	9-10-9

Scale: 3/16"=1'



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.83	Vert(LL) -0.67 9-12 >672 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.65	Vert(TL) -0.95 9-12 >472 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.69	Horz(TL) 0.14 8 n/a n/a		
BCDL 10.0	Code IRC2009/TP12007	Matrix-S	Wind(LL) 0.15 9-12 >999 240		
				Weight: 239 lb	FT = 20%

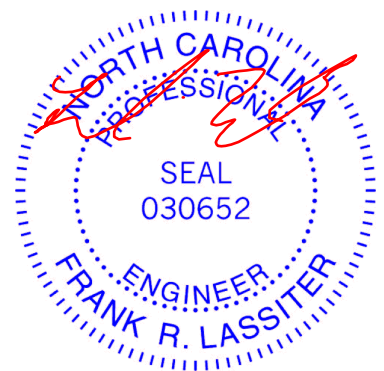
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP 2400F 2.0E  
 WEBS 2x4 SP No.3 \*Except\*  
 10-11: 2x6 SP No.1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-7-6 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 9-11-9 oc bracing.

**REACTIONS.** (lb/size) 2=2026/0-3-8, 8=1960/0-3-8  
 Max Horz 2=100(LC 7)  
 Max Uplift 2=-281(LC 5), 8=-243(LC 6)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-5036/1180, 3-5=-4561/1012, 5-7=-4674/1050, 7-8=-5238/1251  
 BOT CHORD 2-12=-1028/4665, 9-12=-578/3205, 8-9=-1081/4893  
 WEBS 3-12=-615/435, 5-12=-181/1527, 5-9=-213/1668, 7-9=-763/484

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-7-13 to 3-9-0, Interior(1) 3-9-0 to 18-6-0, Exterior(2) 18-6-0 to 22-10-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas with a clearance greater than 4-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=281, 8=243.



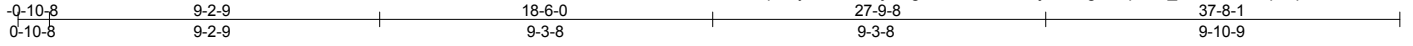
March 5, 2018

Job B0318-0845	Truss A7	Truss Type Common	Qty 1	Ply 1	Engage A	E11515455
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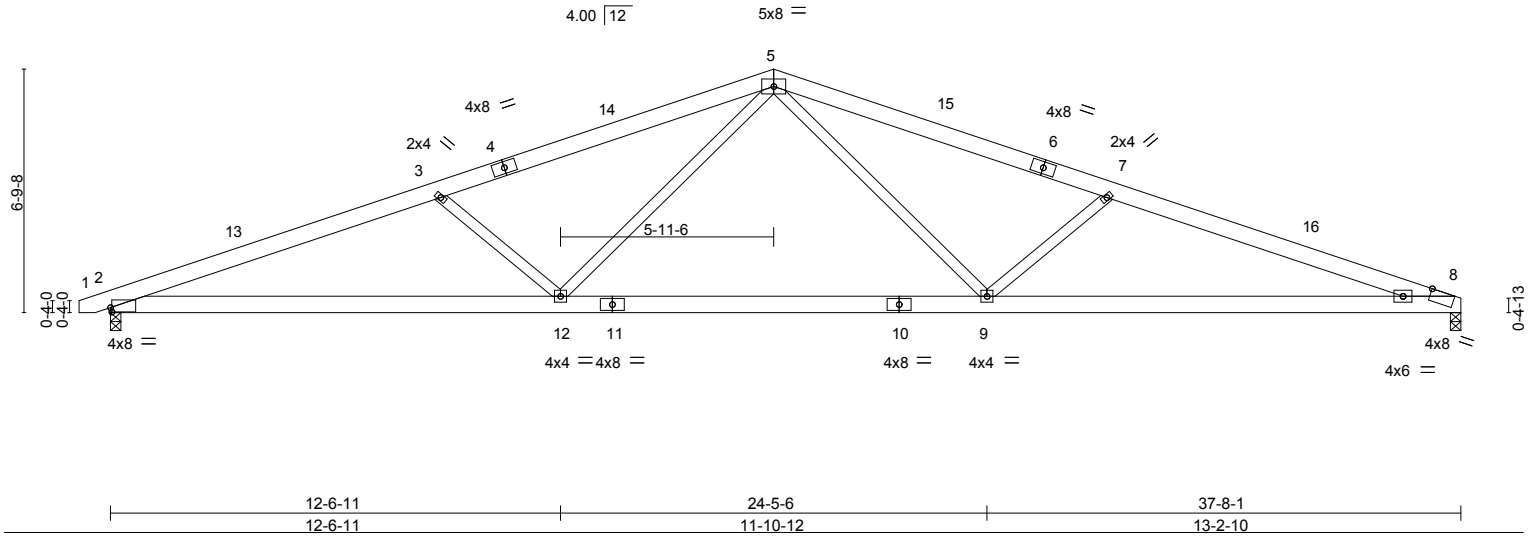
Comtech, Inc., Fayetteville, NC 28309

8.130 s Sep 15 2017 MiTek Industries, Inc. Mon Mar 5 12:26:56 2018 Page 1

ID:qBVty8JxTR2c0jvHgLuvLzeJa3-5kVjV4o6IgSkNpOzs\_FSxnCmtTCpAqRrvBZYJ6zdzaD



Scale: 3/16"=1'



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.53	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.71	Vert(LL) -0.23 8-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.44	Vert(TL) -0.67 8-9 >666 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(TL) 0.13 8 n/a n/a		
	Code IRC2009/TP12007		Wind(LL) 0.15 9-12 >999 240	Weight: 221 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-4-7 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 7-8-9 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=1543/0-3-8, 8=1495/0-3-8  
 Max Horz 2=94(LC 7)  
 Max Uplift 2=-265(LC 5), 8=-228(LC 6)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3562/1111, 3-5=-3105/952, 5-7=-3199/989, 7-8=-3721/1178  
 BOT CHORD 2-12=-968/3304, 9-12=-544/2231, 8-9=-1018/3480  
 WEBS 3-12=-634/410, 5-12=-170/936, 5-9=-200/1051, 7-9=-739/455

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-7-13 to 3-9-0, Interior(1) 3-9-0 to 18-6-0, Exterior(2) 18-6-0 to 22-10-13 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 20.0psf 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) except (jt=lb) 2=265, 8=228.



March 5, 2018

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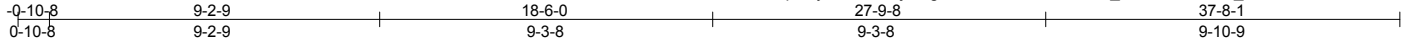
818 Soundside Road  
 Edenton, NC 27932

Job B0318-0845	Truss A7-P	Truss Type Common	Qty 4	Ply 1	Engage A	E11515456
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Comtech, Inc., Fayetteville, NC 28309

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Scale: 3/16"=1'

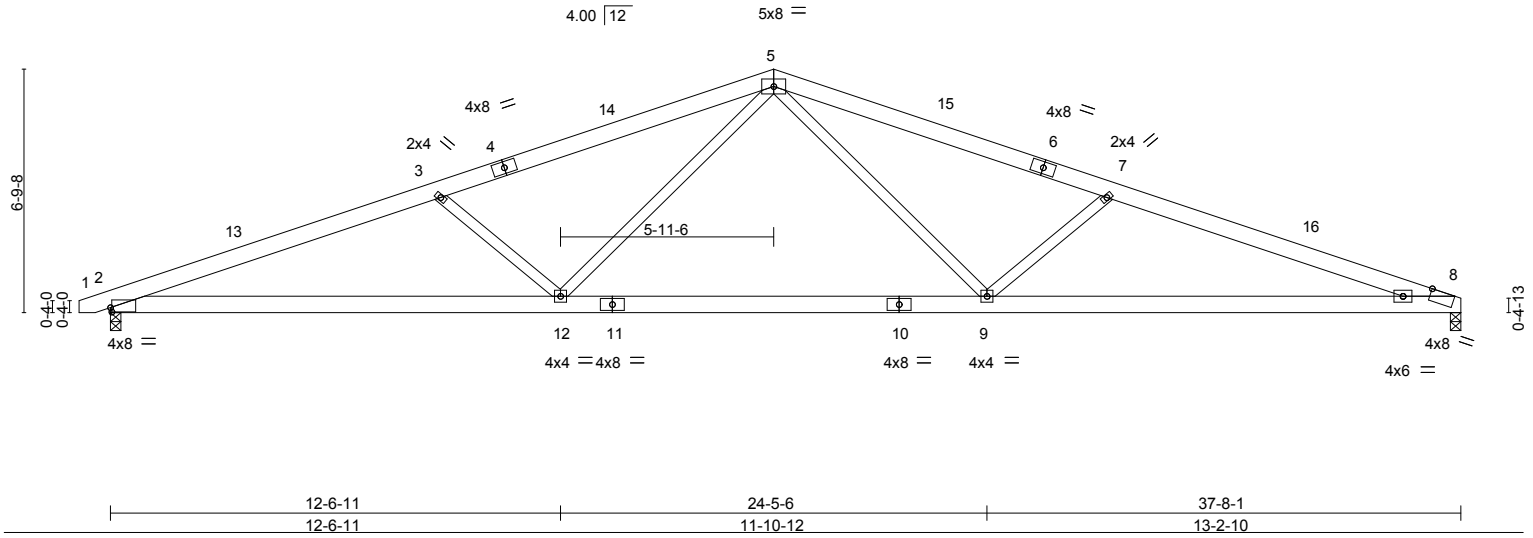


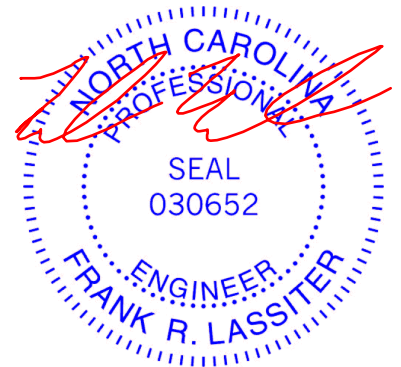
Plate Offsets (X,Y)-- [2:0-0-7,0-1-7], [8:0-8-8,Edge]						
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl L/d
TCLL 20.0	Plate Grip DOL	1.15	TC 0.53	Vert(LL) -0.23	8-9	>999 360
TCDL 10.0	Lumber DOL	1.15	BC 0.71	Vert(TL) -0.67	8-9	>666 240
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.44	Horz(TL) 0.13	8	n/a n/a
BCDL 10.0	Code IRC2009/TP12007		Matrix-S	Wind(LL) 0.15	9-12	>999 240
						<b>PLATES</b> MT20
						<b>GRIP</b> 244/190
						Weight: 221 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-4-7 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 7-8-9 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=1543/0-3-8, 8=1495/0-3-8  
 Max Horz 2=94(LC 7)  
 Max Uplift 2=-265(LC 5), 8=-228(LC 6)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3562/1111, 3-5=-3105/952, 5-7=-3199/989, 7-8=-3721/1178  
 BOT CHORD 2-12=-968/3304, 9-12=-544/2231, 8-9=-1018/3480  
 WEBS 3-12=-634/410, 5-12=-170/936, 5-9=-200/1051, 7-9=-739/455

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-7-13 to 3-9-0, Interior(1) 3-9-0 to 18-6-0, Exterior(2) 18-6-0 to 22-10-13 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 20.0psf 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) except (jt=lb) 2=265, 8=228.



March 5, 2018

**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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



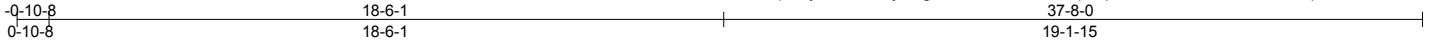
818 Soundside Road  
 Edenton, NC 27932



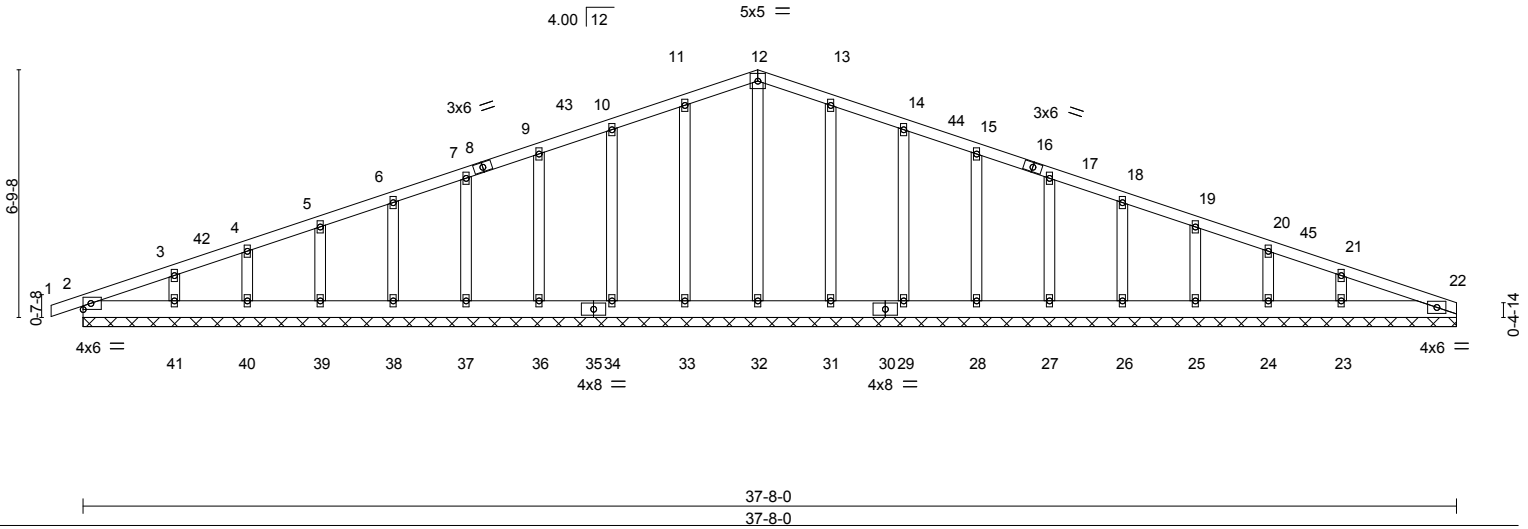
Job B0318-0845	Truss A8	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Engage A	E11515457
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Sep 15 2017 MiTek Industries, Inc. Mon Mar 5 12:26:58 2018 Page 1  
ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-27dUwlpNqHiSc6YMzPHw0C1DOH2repP8MV2fO?zdzaB



Scale = 1:63.2



<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 0.08	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(TL)	0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(TL)	0.00	22	n/a	n/a		
BCDL 10.0	Code IRC2009/TPI2007		Matrix-S						Weight: 231 lb	FT = 20%

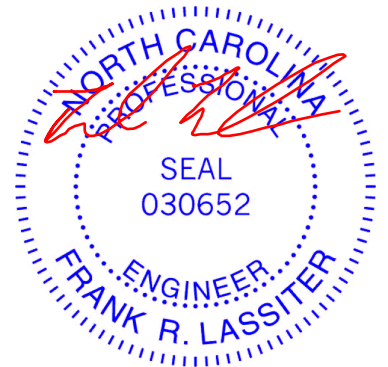
**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x6 SP No.1  
OTHERS 2x4 SP No.3

**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 37-8-0.  
(b) - Max Horz 2=95(LC 7)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 33, 34, 36, 37, 38, 39, 40, 41, 31, 29, 28, 27, 26, 25, 24, 23  
Max Grav All reactions 250 lb or less at joint(s) 2, 32, 33, 34, 36, 37, 38, 39, 40, 41, 31, 29, 28, 27, 26, 25, 24, 22 except 23=259(LC 12)

**FORCES.** (b) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 10-11=-27/253, 11-12=-29/295, 12-13=-29/295, 13-14=-27/253  
WEBS 21-23=-180/287

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 18-6-1, Corner(3) 18-6-1 to 22-10-13 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 20.0psf 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, 33, 34, 36, 37, 38, 39, 40, 41, 31, 29, 28, 27, 26, 25, 24, 23.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 22.



March 5, 2018

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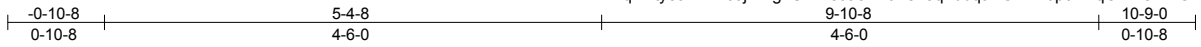


Job B0318-0845	Truss B1	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Engage A	E11515458
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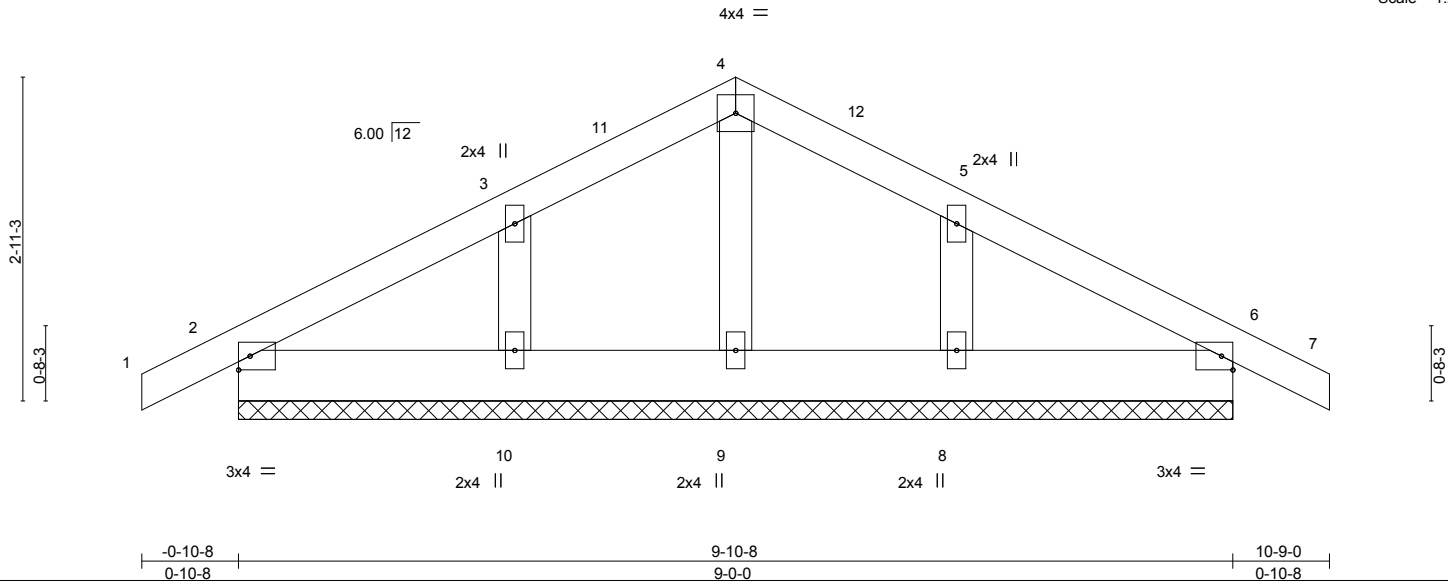
Comtech, Inc., Fayetteville, NC 28309

8.130 s Sep 15 2017 MiTek Industries, Inc. Mon Mar 5 12:26:59 2018 Page 1

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Scale = 1:20.9



<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 0.11	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(LL) 0.00 6 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.11	Vert(TL) 0.00 6 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(TL) 0.00 6 n/a n/a	Weight: 46 lb	FT = 20%
	Code IRC2009/TPI2007				

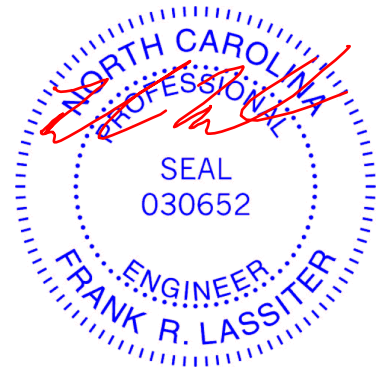
**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x6 SP No.1  
OTHERS 2x4 SP No.3

**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 9-0-0.  
(b) - Max Horz 2=50(LC 7)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=-124(LC 7), 8=-122(LC 8)  
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.  
WEBS 3-10=-154/366, 5-8=-154/365

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 4-6-0, Corner(3) 4-6-0 to 9-0-0 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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, 6 except (jt=lb) 10=124, 8=122.
  - 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 5, 2018

**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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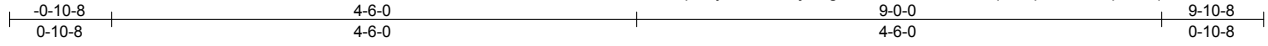


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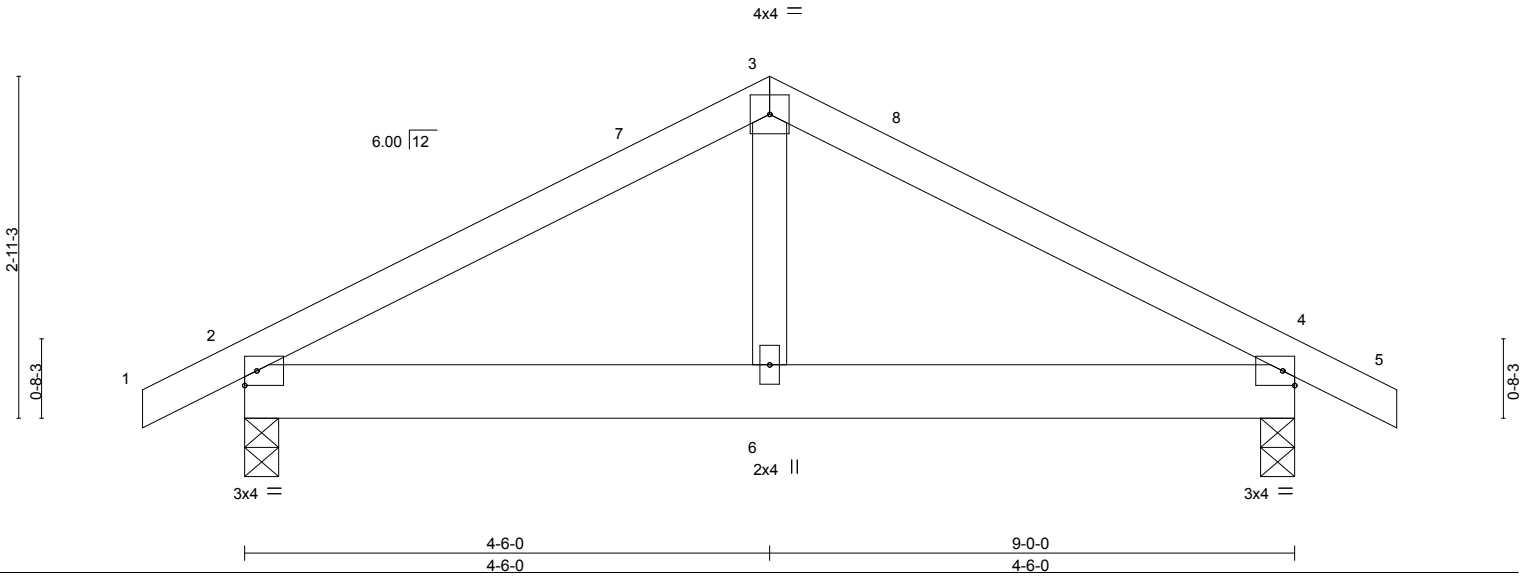
Job B0318-0845	Truss B2	Truss Type COMMON	Qty 1	Ply 1	Engage A	E11515459
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8.130 s Sep 15 2017 MiTek Industries, Inc. Mon Mar 5 12:26:59 2018 Page 1  
ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-WJBS75q?bbqJEG7YX6p9ZPqLthLvNGIib9oCwRzdzaA



Scale = 1:19.7



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.29	Vert(LL) -0.00	2-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.24	Vert(TL) -0.01	2-6	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(TL) 0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2009/TPI2007	Matrix-S	Wind(LL) 0.00	6	>999	240	Weight: 43 lb	FT = 20%

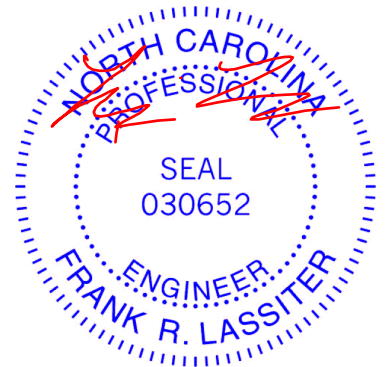
**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3

**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) 2=410/0-3-8, 4=410/0-3-8  
 Max Horz 2=43(LC 7)  
 Max Uplift 2=-97(LC 7), 4=-97(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-412/188, 3-4=-412/188  
 BOT CHORD 2-6=-41/296, 4-6=-41/296

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 4-6-0, Exterior(2) 4-6-0 to 8-10-4 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 20.0psf 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.



March 5, 2018

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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.

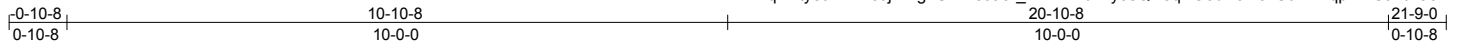


818 Soundside Road  
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Job B0318-0845	Truss G1	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Engage A	E11515460
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8.130 s Sep 15 2017 MiTek Industries, Inc. Mon Mar 5 12:27:00 2018 Page 1  
ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-\_VkELRrdLv9sQik5qKO5dNaH5kS6kHRqpXmSuzdza9



Scale = 1:34.9

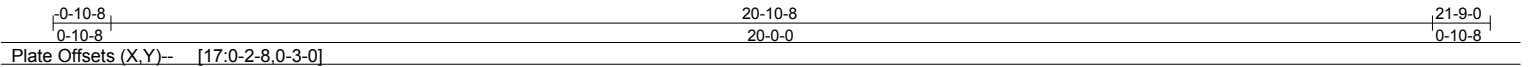
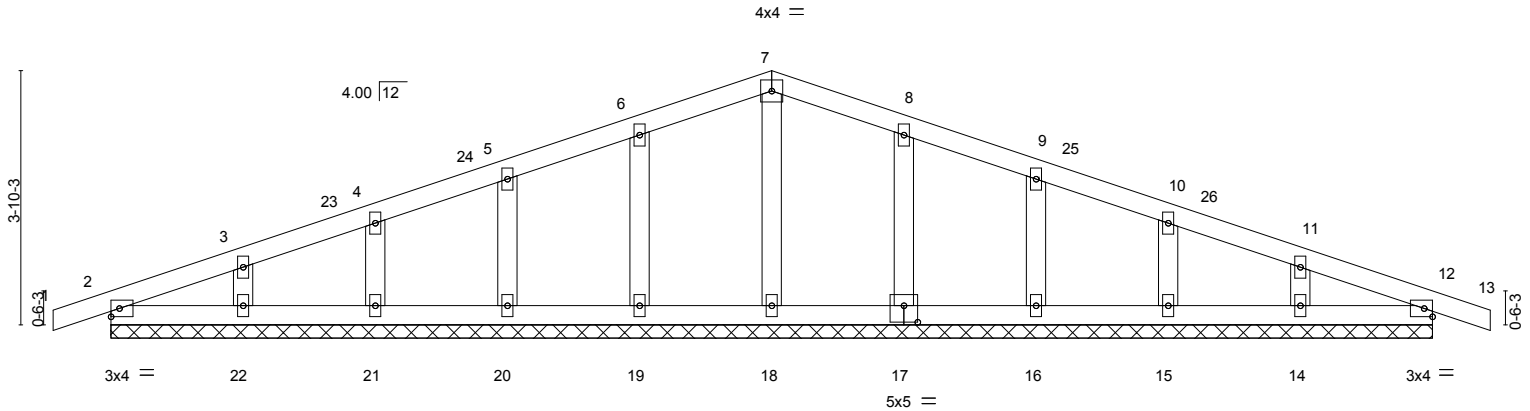


Plate Offsets (X,Y)-- [17:0-2-8,0-3-0]

<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 0.06	Vert(LL)	-0.00	12	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(TL)	-0.00	12	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(TL)	0.00	12	n/a		
BCDL 10.0	Code	IRC2009/TPI2007	Matrix-S						
								Weight: 88 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 20-0-0.  
(lb) - Max Horz 2=67(LC 5)  
Max Uplift All uplift 100 lb or less at joint(s) 12, 19, 20, 21, 22, 17, 16, 15, 14, 2  
Max Grav All reactions 250 lb or less at joint(s) 12, 18, 19, 20, 21, 22, 17, 16, 15, 14, 2

**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 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 10-0-0, Corner(3) 10-0-0 to 14-4-13 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 20.0psf 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) 12, 19, 20, 21, 22, 17, 16, 15, 14, 2.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 5, 2018

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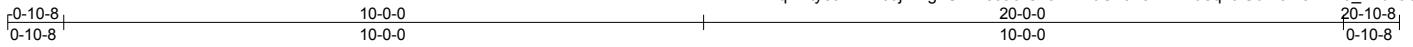


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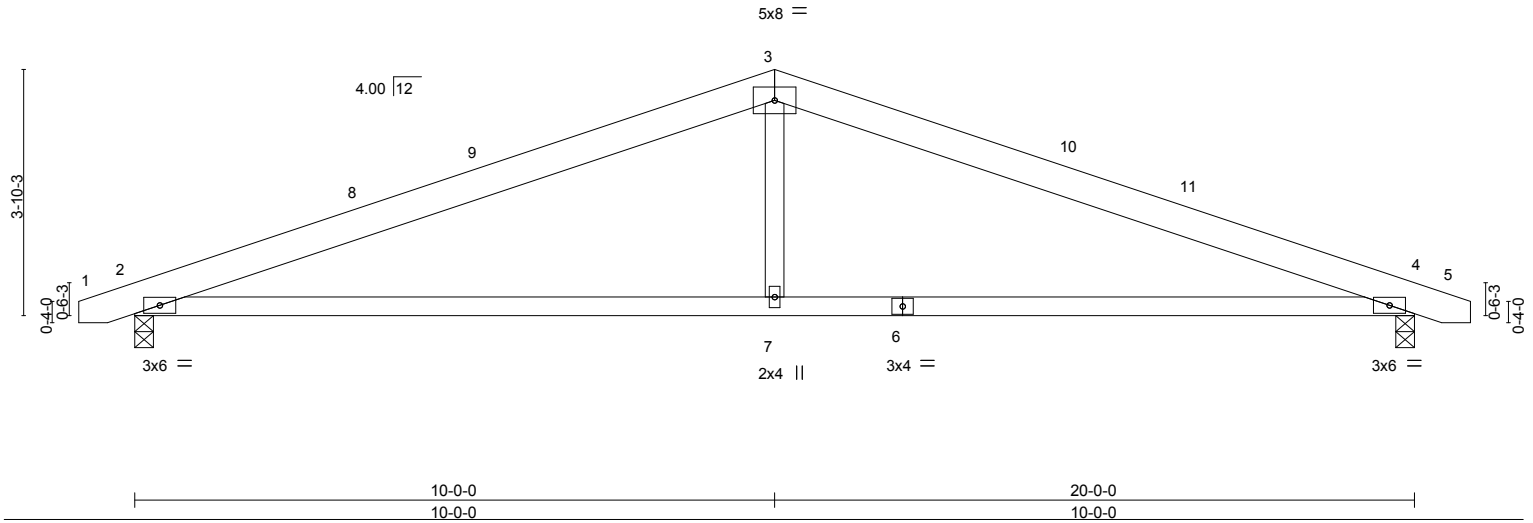
Job B0318-0845	Truss G2	Truss Type Common	Qty 5	Ply 1	Engage A	E11515461
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Sep 15 2017 MiTek Industries, Inc. Mon Mar 5 12:27:01 2018 Page 1  
ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-SilcYnrF6C40TaHxfXrdeqvcfUuvr9ma2THJ\_Kzdza8



Scale = 1:36.0



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.59	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.78	Vert(LL) -0.17 4-7 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.17	Vert(TL) -0.48 4-7 >491 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(TL) 0.05 4 n/a n/a	Weight: 88 lb	FT = 20%
	Code IRC2009/TPI2007		Wind(LL) 0.07 2-7 >999 240		

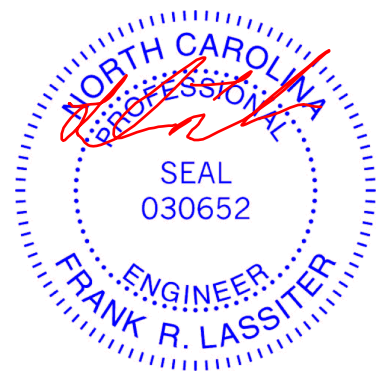
**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.3

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

**REACTIONS.** (lb/size) 4=836/0-3-8, 2=836/0-3-8  
Max Horz 2=54(LC 7)  
Max Uplift 4=-159(LC 6), 2=-159(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1438/475, 3-4=-1438/475  
BOT CHORD 2-7=-331/1294, 4-7=-331/1294  
WEBS 3-7=0/455

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-7-13 to 3-9-0, Interior(1) 3-9-0 to 10-0-0, Exterior(2) 10-0-0 to 14-4-13 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 20.0psf 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) except (jt=lb) 4=159, 2=159.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 5, 2018

Job B0318-0845	Truss MP1	Truss Type GABLE	Qty 2	Ply 1	Engage A	E11515462
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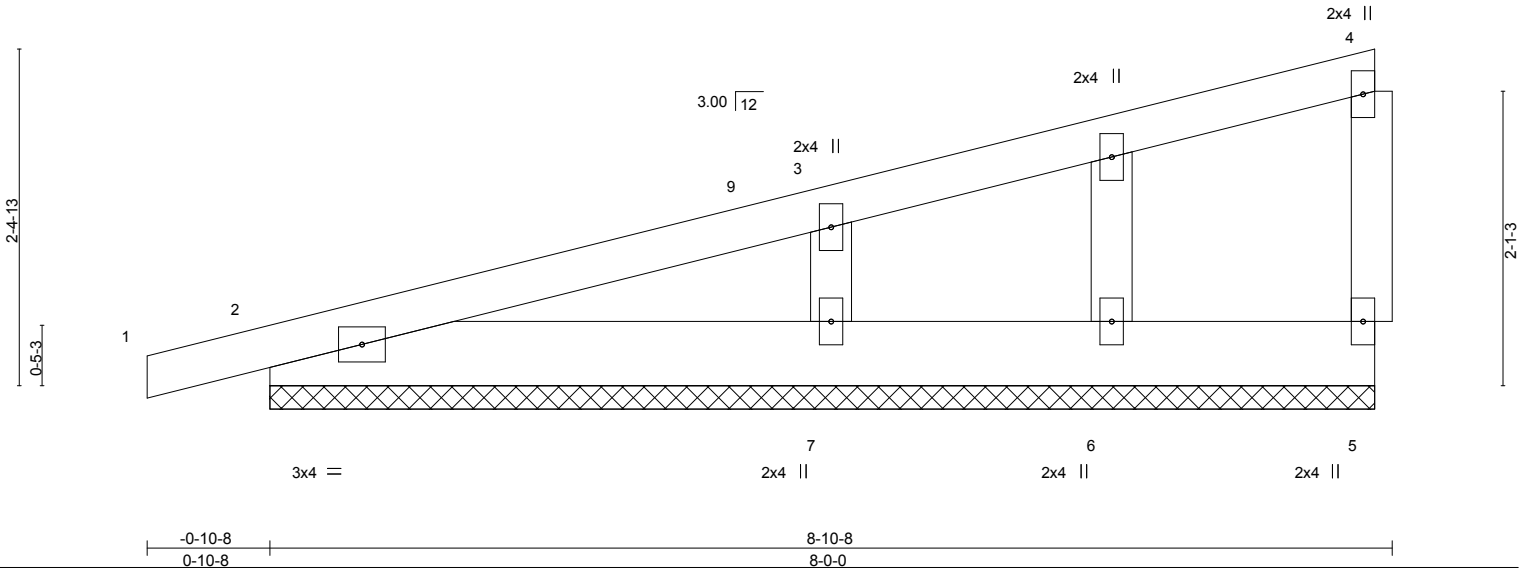
Comtech, Inc., Fayetteville, NC 28309

8.130 s Sep 15 2017 MiTek Industries, Inc. Mon Mar 5 12:27:01 2018 Page 1

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Scale = 1:16.4



<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 0.18	Vert(LL)	0.00	1	n/r	120	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(TL)	0.00	1	n/r	120	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(TL)	-0.00	5	n/a	n/a	
BCDL 10.0	Code IRC2009/TPI2007		Matrix-P						
								Weight: 37 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 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	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 7-10-8.  
 (lb) - Max Horz 2=88(LC 5)  
 Max Uplift All uplift 100 lb or less at joint(s) 5, 2, 7  
 Max Grav All reactions 250 lb or less at joint(s) 5, 2, 6 except 7=367(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-7=-285/452

- NOTES-**
- 1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 7-10-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) Gable 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 20.0psf 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) 5, 2, 7.
  - 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 5, 2018

Job B0318-0845	Truss MP2	Truss Type Monopitch	Qty 4	Ply 1	Engage A	E11515463
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Scale = 1:16.9

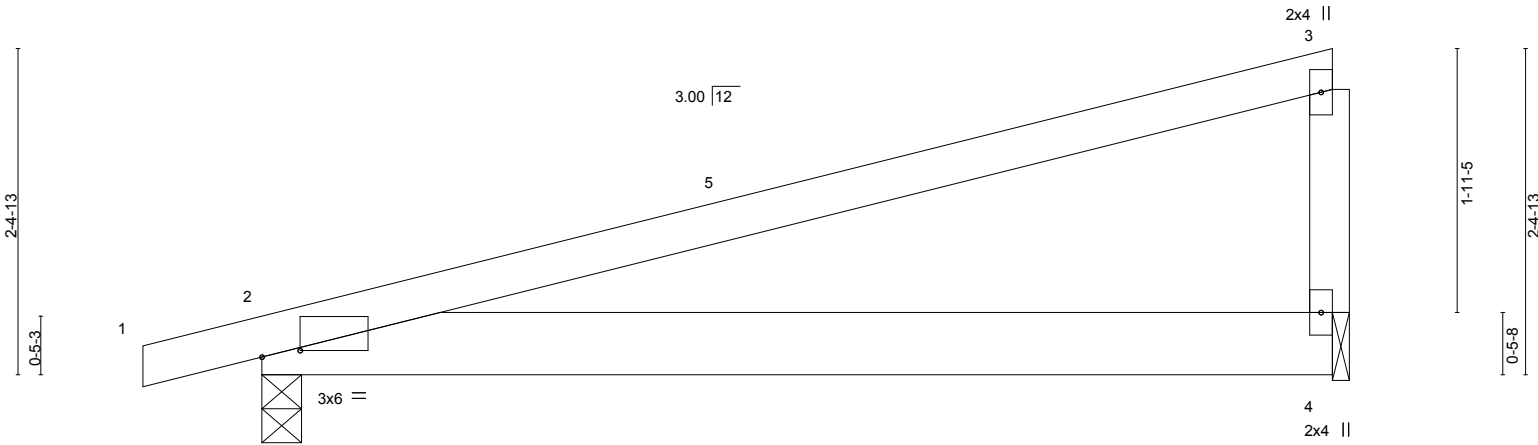


Plate Offsets (X,Y)-- [2:0-3-6,0-0-9]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.88	Vert(LL) -0.05	2-4	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.30	Vert(TL) -0.12	2-4	>775	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(TL) 0.00	4	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Wind(LL) 0.12	2-4	>743	240		
	Code IRC2009/TPI2007						Weight: 34 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

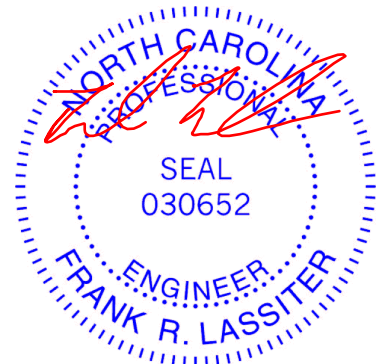
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=374/0-3-8, 4=303/0-1-8  
 Max Horz 2=88(LC 5)  
 Max Uplift 2=-218(LC 5), 4=-181(LC 5)

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

**NOTES-**

- 1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 7-10-1 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 20.0psf 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) except (jt=lb) 2=218, 4=181.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 5, 2018

**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.

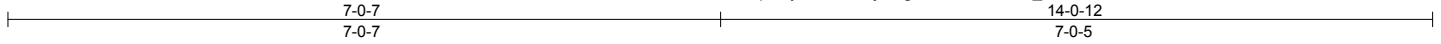


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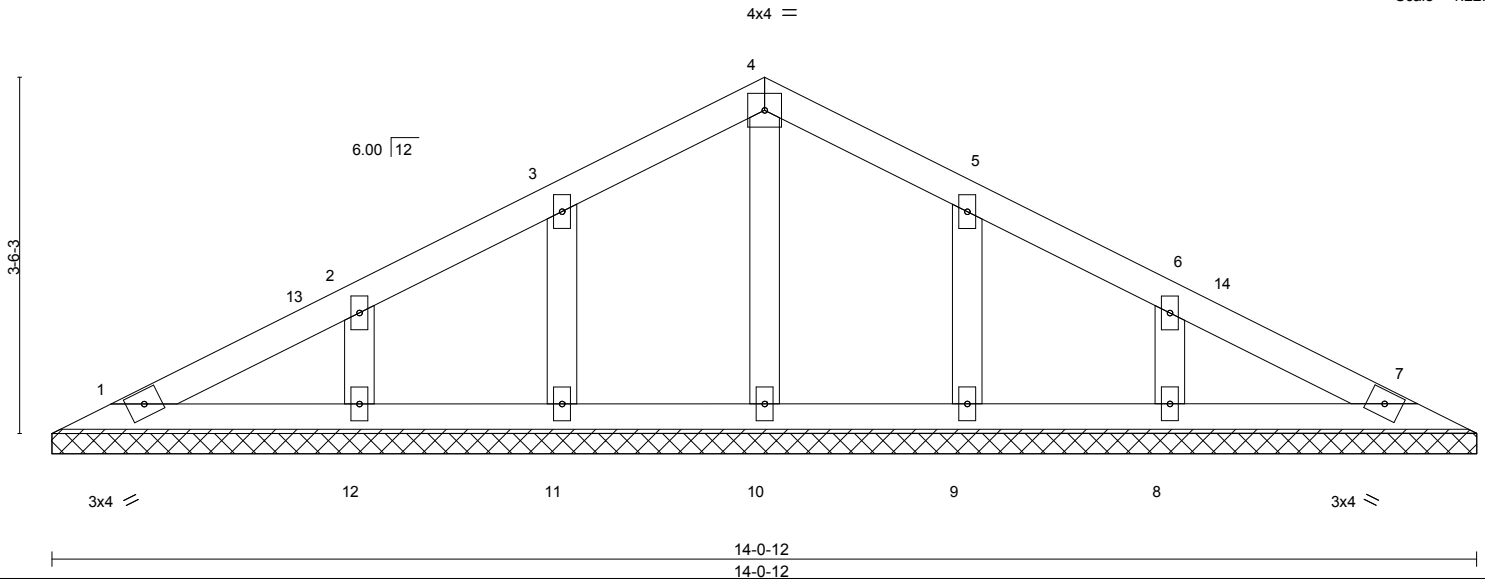
Job B0318-0845	Truss V1	Truss Type GABLE	Qty 1	Ply 1	Engage A	E11515464
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8.130 s Sep 15 2017 MiTek Industries, Inc. Mon Mar 5 12:27:02 2018 Page 1  
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Scale = 1:22.7



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
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 0.03	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Vert(TL) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(TL) 0.00 7 n/a n/a	Weight: 55 lb	FT = 20%
	Code IRC2009/TPI2007				

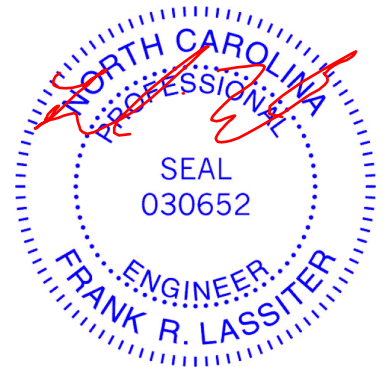
**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.3

**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 14-0-12.  
(lb) - Max Horz 1=57(LC 6)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 11, 9 except 12=-117(LC 7), 8=-117(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 12, 9, 8

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) 0-7-7 to 5-0-7, Interior(1) 5-0-7 to 7-0-7, Exterior(2) 7-0-7 to 11-5-3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are 2x4 MT20 unless otherwise indicated.
  - 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 20.0psf 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, 7, 11, 9 except (jt=lb) 12=117, 8=117.



March 5, 2018

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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.

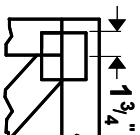


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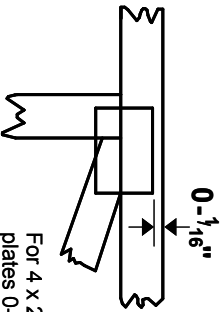


# Symbols

## 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 2020 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



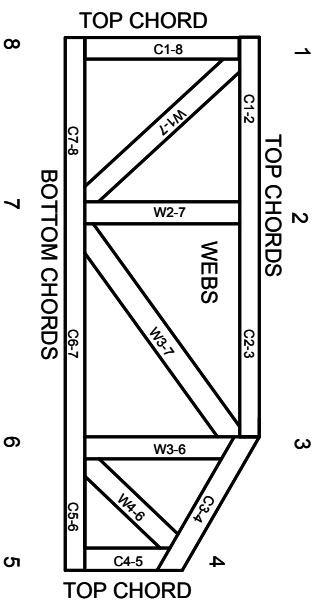
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP11: 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

6-4-8 dimensions shown in ft.-in.-sixteenths (Drawings not to scale)



**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/TP1 section 6.3. These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: Mill-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/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.