



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

RE: RSNROLAND - ROLAND

**MiTek USA, Inc.**

6904 Parke East Blvd.  
Tampa, FL 33610-4115

**Site Information:**

Customer Info: ROSENBOOM CONSTRUCTION Project Name: ROLAND RESIDENCE Model:

Lot/Block: Subdivision:

Address: 2405 SW BRIM ST

City: LAKE CITY

State: FL

**Name Address and License # of Structural Engineer of Record, if there is one, for the building.**

Name: License #:

Address:

City: State:

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

Design Code: FBC2017/TPI2014

Design Program: MiTek 20/20 8.2

Wind Code: ASCE 7-10

Wind Speed: 130 mph

Roof Load: 40.0 psf

Floor Load: N/A psf

This package includes 8 individual, Truss Design Drawings and 0 Additional Drawings.

With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date
1	T22065562	A	12/4/20
2	T22065563	A1	12/4/20
3	T22065564	A2	12/4/20
4	T22065565	A3	12/4/20
5	T22065566	A3ET	12/4/20
6	T22065567	AET	12/4/20
7	T22065568	B	12/4/20
8	T22065569	BET	12/4/20



This item has been electronically signed and sealed by Lee, Julius, PE using a Digital Signature.

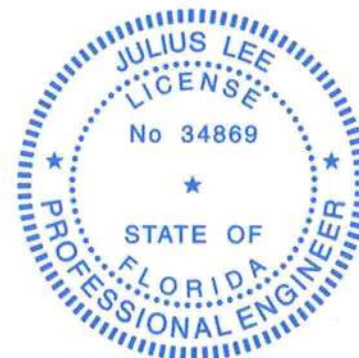
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The truss drawing(s) referenced above have been prepared by  
MiTek USA, Inc. under my direct supervision based on the parameters  
provided by Mayo Truss Company, Inc..

Truss Design Engineer's Name: Lee, Julius

My license renewal date for the state of Florida is February 28, 2021.

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



Julius Lee PE No.34869  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

December 4, 2020

Lee, Julius

1 of 1

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Job	Truss	Truss Type	Qty	Ply	ROLAND	T22065562
RSNROLAND	A	Common	6	1		

SANTA FE TRUSS COMPANY INC, BELL FL

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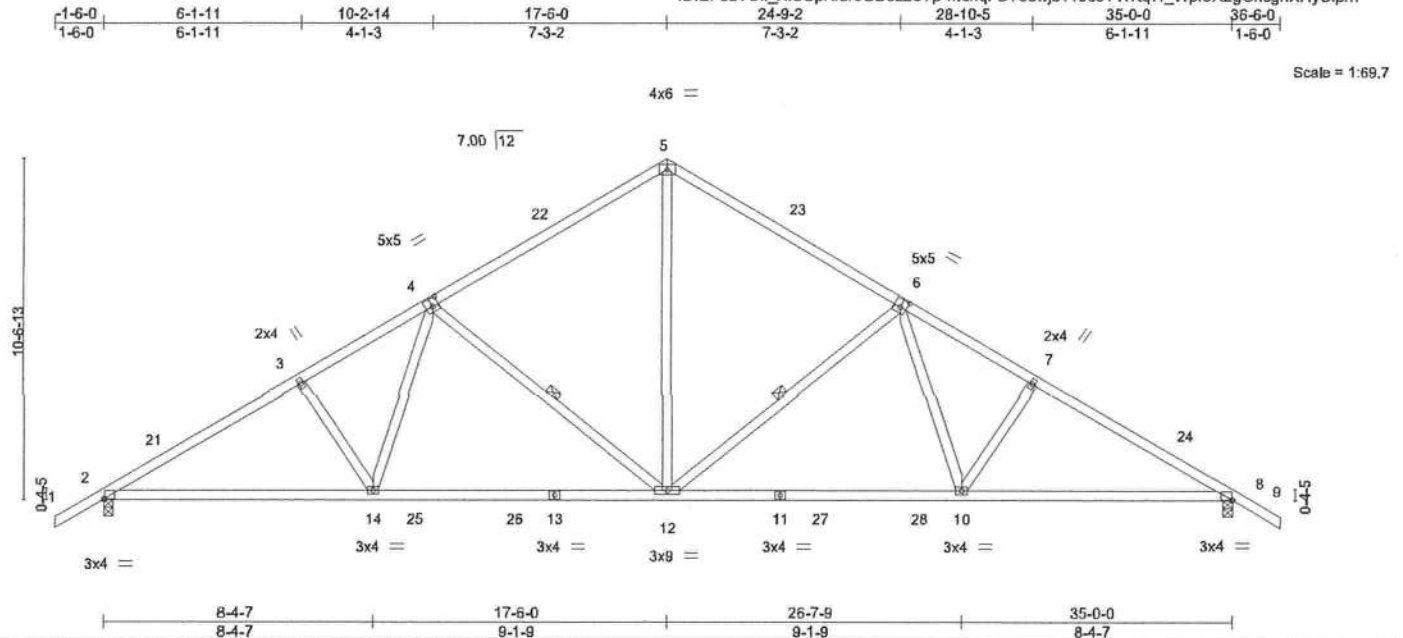


Plate Offsets (X,Y)- [2:0-0-5,0-0-0], [4:0-2-8,0-3-0], [6:0-2-8,0-3-0], [8:0-0-5,0-0-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.57	Vert(LL)	-0.19 10-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.81	Vert(CT)	-0.38 10-12	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.28	Horz(CT)	0.10 8	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-AS	Wind(LL)	0.08 12	>999	240	Weight: 190 lb	FT = 15%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 6-12, 4-12

#### REACTIONS.

(size) 2=0-3-8, 8=0-3-8  
Max Horz 2=222(LC 11)  
Max Uplift 2=-132(LC 12), 8=-132(LC 12)  
Max Grav 2=1490(LC 1), 8=1490(LC 1)

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

TOP CHORD 2-3=-2351/232, 3-4=-2171/252, 4-5=-1525/259, 5-6=-1525/259, 6-7=-2171/252,  
7-8=-2351/232  
BOT CHORD 2-14=-90/2075, 12-14=-41/1808, 10-12=-51/1712, 8-10=-100/1963  
WEBS 5-12=-82/1014, 6-12=-693/160, 6-10=0/479, 7-10=-264/101, 4-12=-693/160, 4-14=0/479,  
3-14=-264/101

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=35ft; eave=5ft; Cat. II; Exp B; Encl. GCpl=0.18; MWFRS (directional) and C-C Exterior(2) -1-6-0 to 2-0-0, Interior(1) 2-0-0 to 17-6-0, Exterior(2) 17-6-0 to 21-0-0, Interior(1) 21-0-0 to 36-6-0 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=132, 8=132.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

This item has been electronically signed and sealed by Lee, Julius, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Julius Lee PE No. 34869  
MiTek USA, Inc. FL Cert 6834  
6904 Parke East Blvd, Tampa FL 33610  
Date:

December 4,2020



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

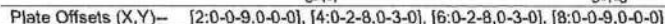
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 33610



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

TOP CHORD	Structural wood sheathing directly applied.
RIGID CEILING	Rigid ceiling directly applied.
WEBS	1 Row at midpt. 6-11, 4-11

(size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=218(LC 11)  
 Max Uplift 2=-133(LC 12), 8=-83(LC 12)  
 Max Grav 2=1492(LC 1), 8=1398(LC 1)

TOP CHORD 2-3=-2355/234, 3-4=-2175/254, 4-5=-1529/260, 5-6=-1528/264, 6-7=-2187/276,  
7-8=-2351/257

BOT CHORD 2-13=-127/2067, 11-13=-77/1800, 9-11=-75/1720, 8-9=-140/1981

WEBS 5-11=-87/1016, 6-11=-700/162, 6-9=-1/492, 7-9=-262/118, 4-11=-693/160, 4-13=0/479,  
3-13=-264/101

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCGLD=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=35ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -1-6-0 to 2-0-0, Interior(1) 2-0-0 to 17-6-0, Exterior(2) 17-6-0 to 21-0-0, Interior(1) 21-0-0 to 35-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Truss 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (j)=lb 2=133.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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Tampa, FL 36610

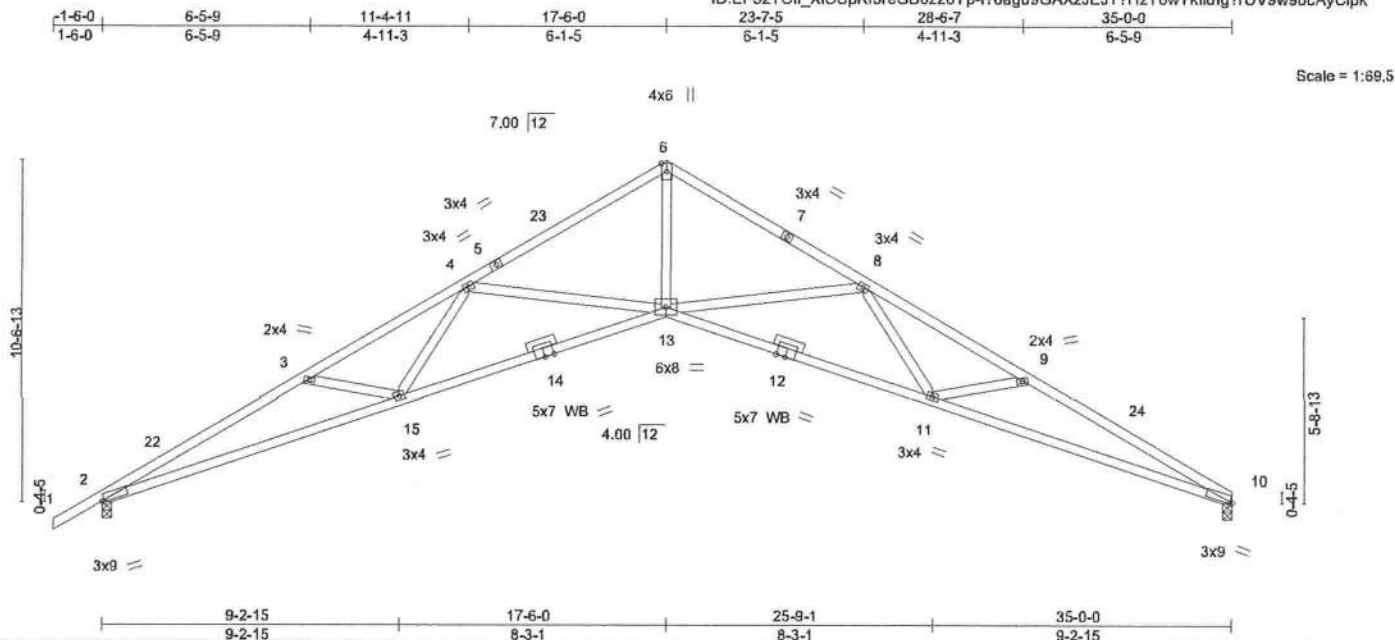


Plate Offsets (X,Y)--		[2:0-0-13,Edge], [10:0-0-13,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		L/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.59	Vert(LL)	-0.54 13-15	>783	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.99	Vert(CT)	-1.13 13-15	>370	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.91 10	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.36 13-15	>999	240	Weight: 166 lb	FT = 15%

<b>LUMBER-</b>			<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2		TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x4 SP No.2 *Except*		BOT CHORD	Rigid ceiling directly applied.
	2-14,10-12: 2x4 SP No.1			
WEBS	2x4 SP No.2			
OTHERS	2x4 SP No.2			

**REACTIONS.** (size) 10=0-3-8, 2=0-3-8  
 Max Horz 2=218(LC 11)  
 Max Uplift 10=-83(LC 12), 2=-133(LC 12)  
 Max Grav 10=1398(LC 1), 2=1492(LC 1)

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

**TOP CHORD** 2-3=-4919/420, 3-4=-4512/326, 4-6=-3288/201, 6-8=-3288/208, 8-9=-4533/348, 9-10=-4590/457

**BOT CHORD** 2-15=-314/4408, 13-15=-150/3847, 11-13=-147/3856, 10-11=-340/4441

**WEBS** 6-13=-62/2860, 8-13=-913/238, 8-11=-1/579, 9-11=-353/192, 4-13=-907/233, 4-13=0/573, 3-15=-355/171

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCFL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=35ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -1-6-0 to 2-0-0, Interior(1) 2-0-0 to 17-6-0, Exterior(2) 17-6-0 to 21-0-0, Interior(1) 21-0-0 to 35-0-0 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Bearing at joint(s) 10, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 2=133.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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6904 Parke East Blvd. Tampa FL 33610  
Date:

December 4, 2020



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6904 Parke East Blvd.  
Tampa, FL 36610



Job	Truss	Truss Type	Qty	Ply	ROLAND	T22065565
RSNROLAND	A3	Scissor	6	1		

SANTA FE TRUSS COMPANY INC, BELL FL

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1-6-0	6-5-9	11-4-11	17-6-0	23-7-5	28-6-7	35-0-0	36-6-0
1-6-0	6-5-9	4-11-3	6-1-5	6-1-5	4-11-3	6-5-9	1-6-0

Scale = 1:70.5

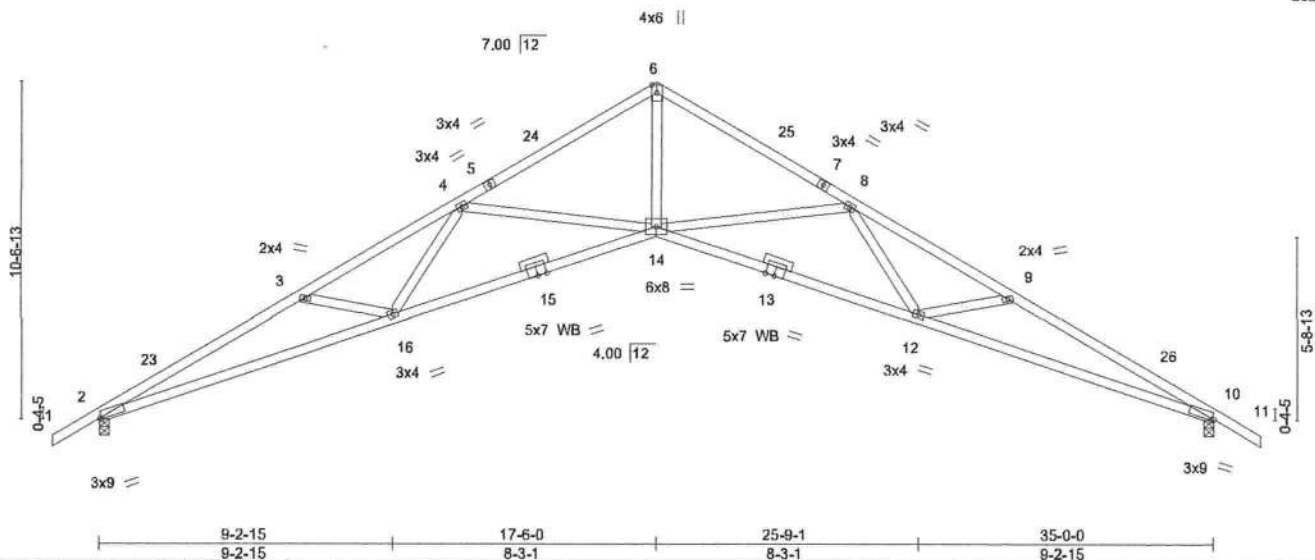


Plate Offsets (X,Y) -		[2:0-0-13,Edge], [10:0-0-13,Edge]							
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.44	in (loc)	l/defl	MT20	GRIP
TCDL	10.0	Lumber DOL	1.25	BC	0.98	Vert(LL)	>843		244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.64	Vert(CT)	>396		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Horz(CT)	n/a		
						Wind(LL)	>999	Weight: 169 lb	FT = 15%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1 "Except"  
14-15,13-14: 2x4 SP No.2  
WEBS 2x4 SP No.2  
OTHERS 2x4 SP No.2

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
Max Horz 2=-222(LC 10)  
Max Uplift 2=-132(LC 12), 10=-132(LC 12)  
Max Grav 2=1490(LC 1), 10=1490(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-4911/370, 3-4=-4504/276, 4-6=-3280/163, 6-8=-3280/154, 8-9=-4504/283,  
9-10=-4911/378  
BOT CHORD 2-16=-231/4400, 14-16=-68/3840, 12-14=-87/3840, 10-12=-253/4400  
WEBS 6-14=-17/2851, 8-14=-906/234, 8-12=0/574, 9-12=-354/173, 4-14=-907/235, 4-16=0/574,  
3-16=-356/174

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=35ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) 1-6-0 to 2-0-0, Interior(1) 2-0-0 to 17-6-0, Exterior(2) 17-6-0 to 21-0-0, Interior(1) 21-0-0 to 36-6-0 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 2, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=132, 10=132.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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Date:

December 4, 2020

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6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	ROLAND	T22065566
RSNROLAND	A3ET	GABLE	1	1		

SANTA FE TRUSS COMPANY INC, BELL FL

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 3 09:56:03 2020 Page 1  
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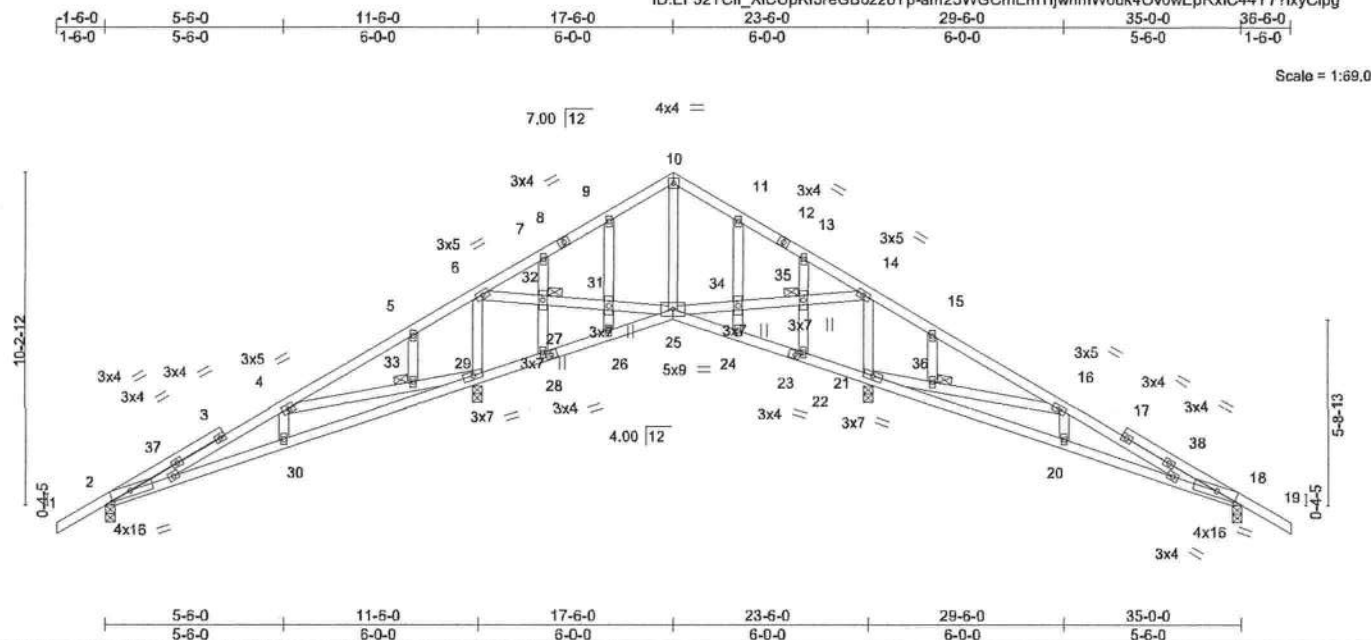


Plate Offsets (X,Y) - [2:0-7-8,0-2-2], [18:0-7-8,0-2-2], [23:0-1-10,0-1-8], [27:0-1-10,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.45	Vert(LL)	-0.03	2-30	>999	360	MT20
TCDL 10.0	Lumber DOL	1.25	BC 0.36	Vert(CT)	-0.07	2-30	>999	240	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.28	Horz(CT)	0.02	18	n/a	n/a	
BCDL 10.0	Code FBC2017/TPI2014		Matrix-S	Wind(LL)	0.03	30	>999	240	Weight: 203 lb FT = 15%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
JOINTS 1 Brace at Jt(s): 32, 33, 35, 36

#### REACTIONS.

All bearings 0-3-8.

(lb) - Max Horz 2=-215(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 21, 29 except 2=-118(LC 12), 18=-118(LC 12)

Max Grav All reactions 250 lb or less at joint(s) except 21=1077(LC 1), 29=1106(LC 17), 2=414(LC 21), 18=414(LC 22)

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

TOP CHORD 2-4=-654/134, 4-5=-227/29, 5-6=0/753, 14-15=0/699, 15-16=-33/663, 16-18=-654/139

BOT CHORD 2-30=-34/602, 29-30=-39/608, 28-29=-707/193, 26-28=-685/195, 25-26=-661/186,

24-25=-642/184, 22-24=-665/191, 21-22=-687/188, 20-21=-47/561, 18-20=-42/555

WEBS 10-25=-261/54, 25-34=0/519, 34-35=0/522, 14-35=0/523, 14-21=-659/47,

21-36=-1100/203, 16-36=-1109/206, 6-32=0/554, 31-32=0/553, 25-31=0/549,

6-29=-685/39, 4-33=-1112/208, 29-33=-1103/204

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=35ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -1-6-0 to 2-0-0, Interior(1) 2-0-0 to 17-6-0, Exterior(2) 17-6-0 to 21-0-0, Interior(1) 21-0-0 to 36-6-0 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) All plates are 2x4 MT20 unless otherwise indicated.

5) Gable studs spaced at 2-0-0 oc.

6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

8) Bearing at joint(s) 2, 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21, 29 except (jt=lb) 2=-118, 18=-118.

10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 21, 29.

This item has been electronically signed and sealed by Lee, Julius, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Julius Lee PE No. 34869  
MiTek USA, Inc. FL Cert 6834  
6904 Parke East Blvd. Tampa FL 33610  
Date:

December 4, 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



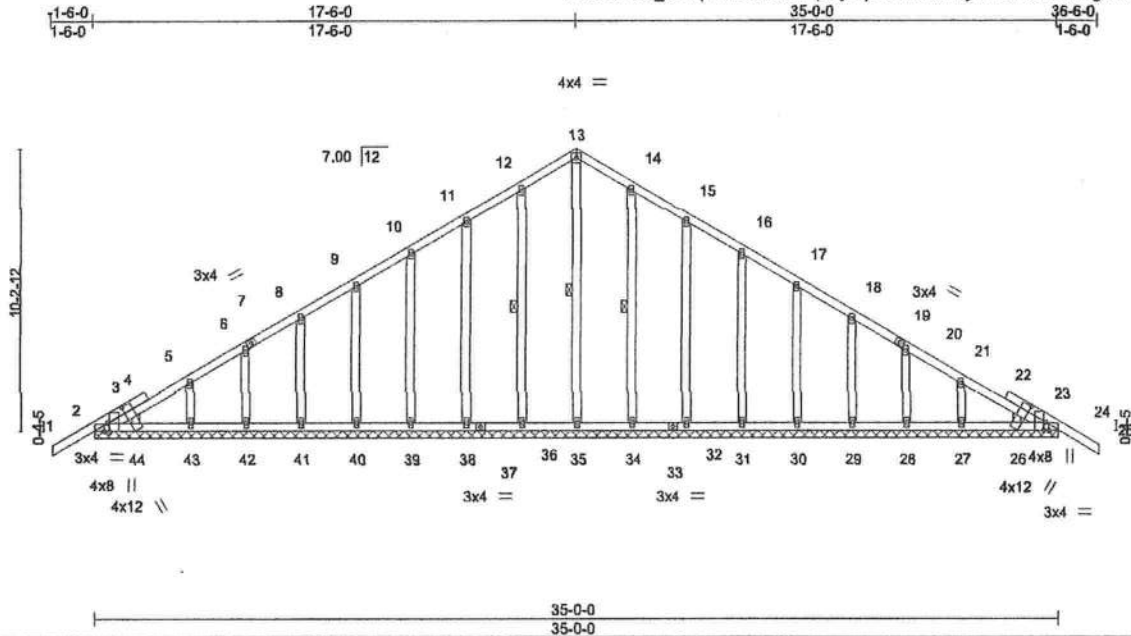
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Tampa, FL 33610



Job RSNROLAND	Truss AET	Truss Type Common Supported Gable	Qty 1	Ply 1	ROLAND	T22065567
Job Reference (optional)						

SANTA FE TRUSS COMPANY INC, BELL FL

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ID:EF32TCII\_XICUpKf5reGB6z2oYp-2ycTjcCP?4ccK4My4W8zdcSGTeEogFsEICIZHOyCipf



Scale = 1:81.3

Plate Offsets (X,Y)- [2:0-3-8,Edge], [2:0-1-9,Edge], [3:0-0-0,0-2-0], [23:0-0-0,0-2-0], [24:0-1-9,Edge], [24:0-3-8,Edge], [26:0-2-14,0-8-12], [44:0-2-14,0-8-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.14	Vert(LL)	-0.01	25	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.04	Vert(CT)	-0.01	25	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.01	24	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-S						
								Weight: 242 lb	FT = 15%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 13-35, 12-36, 14-34

#### REACTIONS.

All bearings 35-0-0.

(lb) - Max Horz 2=-215(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 36, 38, 39, 40, 41, 42, 43, 34, 32, 31, 30, 29, 28, 27, 24

Max Grav All reactions 250 lb or less at joint(s) 2, 35, 36, 38, 39, 40, 41, 42, 43, 44, 34, 32, 31, 30, 29, 28, 27, 26, 24

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

TOP CHORD 12-13=-221/259, 13-14=-221/259

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=35ft; eave=2ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Comer(3) -1-6-0 to 2-0-0, Exterior(2) 2-0-0 to 17-6-0, Comer(3) 17-6-0 to 21-0-0, Exterior(2) 21-0-0 to 36-6-0 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 36, 38, 39, 40, 41, 42, 43, 34, 32, 31, 30, 29, 28, 27, 24.

This item has been electronically signed and sealed by Lee, Julius, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Julius Lee PE No. 34869  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

December 4, 2020

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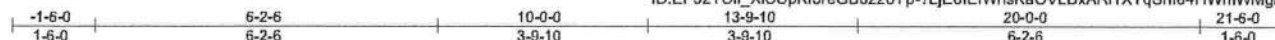
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Job RSNROLAND	Truss B	Truss Type Common	Qty 4	Ply 1	ROLAND	T22065568
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SANTA FE TRUSS COMPANY INC, BELL FL

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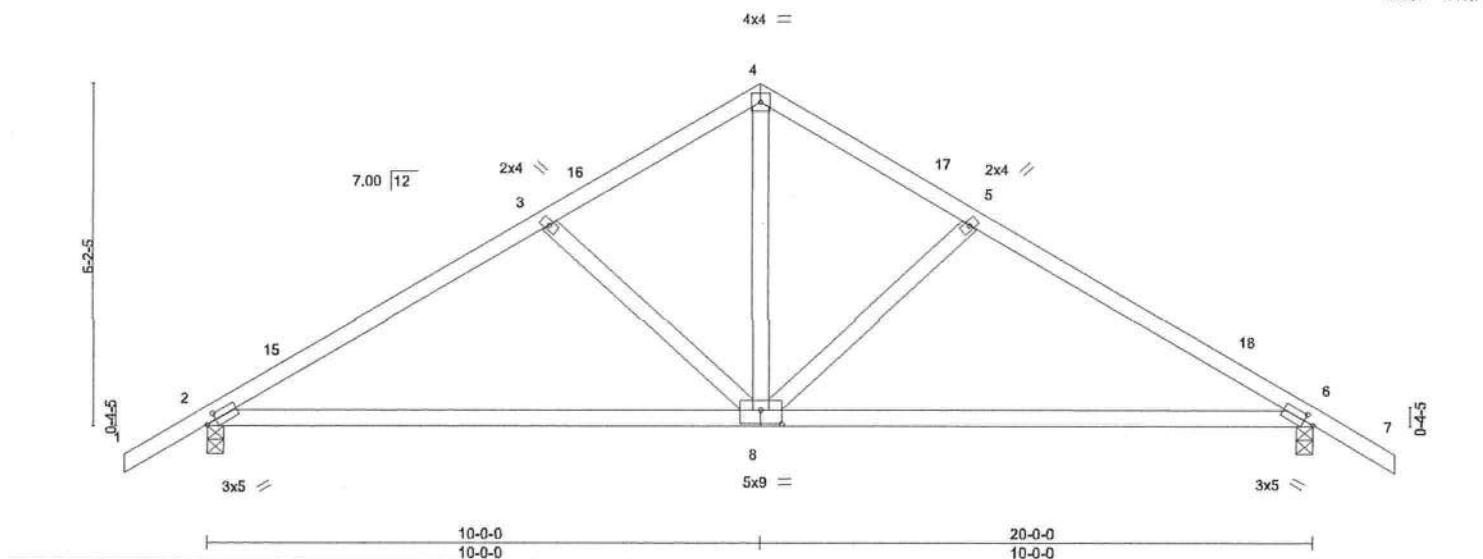


Plate Offsets (X,Y)-- [2:0-2-3,0-1-8], [6:0-2-3,0-1-8], [8:0-4-8,0-3-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.41	Vert(LL)	-0.16	8-14	>999	360	MT20
TCDL 10.0	Lumber DOL	1.25	BC 0.91	Vert(CT)	-0.35	8-14	>694	240	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.39	Horz(CT)	0.03	6	n/a	n/a	
BCDL 10.0	Code FBC2017/TPI2014		Matrix-AS	Wind(LL)	0.30	8-14	>804	240	
								Weight: 93 lb	FT = 15%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 2=0-3-8, 6=0-3-8  
Max Horz 2=-134(LC 10)  
Max Uplift 2=-295(LC 12), 6=-295(LC 12)  
Max Grav 2=890(LC 1), 6=890(LC 1)

#### FORCES.

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

TOP CHORD 2-3=-1150/725, 3-4=-900/689, 4-5=-900/689, 5-6=-1150/725  
BOT CHORD 2-8=-541/950, 6-8=-554/950  
WEBS 4-8=-648/672, 5-8=-338/211, 3-8=-338/211

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 10-0-0, Exterior(2) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 21-6-0 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=295, 6=295.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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MiTek USA, Inc. FL Cert 6834  
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Date:

December 4, 2020

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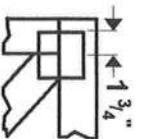
6904 Parke East Blvd.  
Tampa, FL 33610



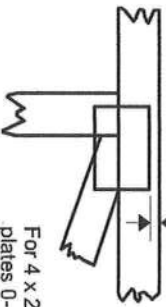
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Tampa, FL 38610

## 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 20/20 software or upon request.

### PLATE SIZE

4 X 4

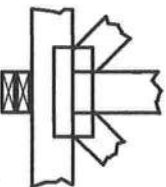
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

### 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/TP11: National Design Specification for Metal

Plate Connected Wood Truss Construction.

DSB-89: Design Standard for Bracing.

BCSI: Building Component Safety Information.

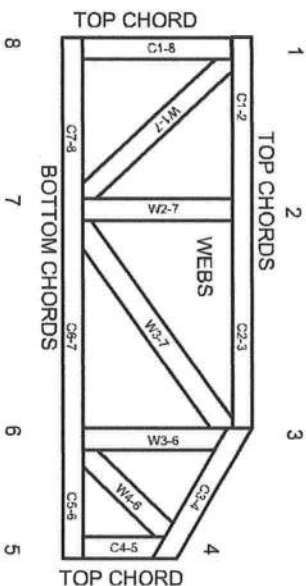
Guide to Good Practice for Handling.

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 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. 5/19/2020



## General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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



