



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

RE: Randy\_Chittum - Randy Chittum

MiTek USA, Inc.  
6904 Parke East Blvd.  
Tampa, FL 33610-4115

**Site Information:**

Customer Info: Randy Chittum Project Name: . Model: .  
Lot/Block: . Subdivision: .  
Address: ., .  
City: Ft White 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: FBC2020/TPI2014 Design Program: MiTek 20/20 8.4  
Wind Code: N/A Wind Speed: 130 mph  
Roof Load: 40.0 psf Floor Load: N/A psf

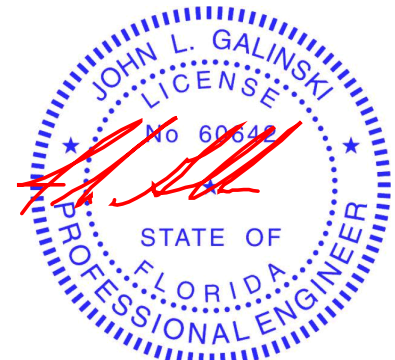
This package includes 8 individual, Truss Design Drawings and 0 Additional Drawings.  
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date
1	T23362187	A1GIR	3/29/21
2	T23362188	A2	3/29/21
3	T23362189	A3	3/29/21
4	T23362190	CJ01	3/29/21
5	T23362191	J1	3/29/21
6	T23362192	J2	3/29/21
7	T23362193	J3	3/29/21
8	T23362194	J4	3/29/21

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: Galinski, John  
My license renewal date for the state of Florida is February 28, 2023.

**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.



John L. Galinski PE No.60642  
MiTek USA, Inc. FL Cert 6634  
18023 Swingley Ridge Road, Chesterfield, MO 63017  
Date:

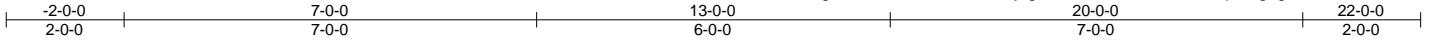
March 29,2021

Job RANDY_CHITTUM	Truss A1GIR	Truss Type Hip Girder	Qty 2	Ply 2	Randy Chittum	T23362187
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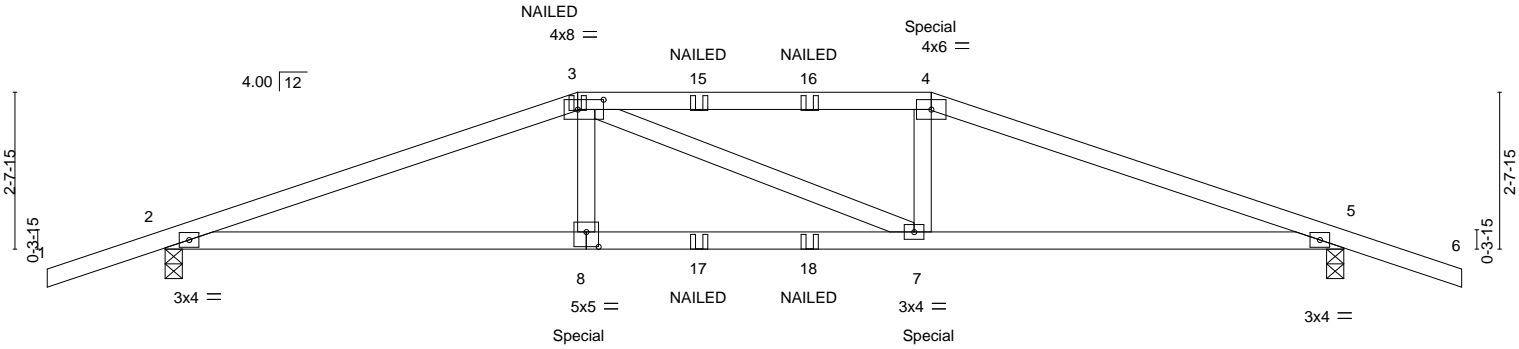
Mayo Truss Company, Inc., Mayo, FL - 32066,

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Mar 26 14:10:10 2021 Page 1

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Scale = 1:39.1



"Special" indicates special hanger(s) or other connection device(s) required at location(s) shown. The design/selection of such special connection device(s) is the responsibility of others. This applies to all applicable truss designs in this job.

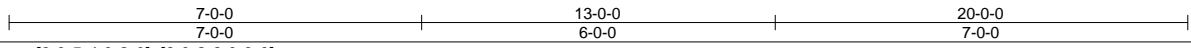


Plate Offsets (X, Y)--	[3:0-5-4,0-2-0], [8:0-2-8,0-3-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.83	Vert(LL)	-0.12	7-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.62	Vert(CT)	-0.23	7-8	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.09	Horz(CT)	0.06	5	n/a		
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-MS						

Weight: 164 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-1-4 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 9-10-2 oc bracing.
WEBS 2x4 SP No.2	

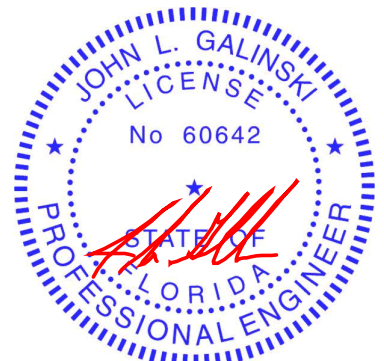
**REACTIONS.** (size) 2=0-3-8, 5=0-3-8  
 Max Horz 2=122(LC 37)  
 Max Uplift 2=-755(LC 12), 5=-731(LC 8)  
 Max Grav 2=2049(LC 45), 5=2019(LC 49)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4968/1796, 3-4=-4658/1682, 4-5=-4885/1720  
 BOT CHORD 2-8=-1680/4708, 7-8=-1694/4761, 5-7=-1541/4552  
 WEBS 3-8=-236/868, 4-7=-174/801

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Open, GCpi=0.00; MWFRS (directional); end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 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=755, 5=731.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 362 lb down and 317 lb up at 13-0-0 on top chord, and 647 lb down and 328 lb up at 7-0-0, and 541 lb down and 233 lb up at 12-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard



John L. Galinski PE No.60642  
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 16023 Swingley Ridge Road, Chesterfield, MO 63017  
 Date:

March 29, 2021

Continued on page 2

**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



Job RANDY_CHITTUM	Truss A1GIR	Truss Type Hip Girder	Qty 2	Ply <b>2</b>	Randy Chittum Job Reference (optional)	T23362187
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Mayo Truss Company, Inc., Mayo, FL - 32066,

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Mar 26 14:10:11 2021 Page 2  
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**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-3=-60, 3-4=-60, 4-6=-60, 9-12=-20

Concentrated Loads (lb)

Vert: 3=-120(B) 4=-155(B) 8=-555(B) 7=-464(B) 15=-120(B) 16=-120(B) 17=-60(B) 18=-60(B)

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

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6904 Parke East Blvd.  
Tampa, FL 36610

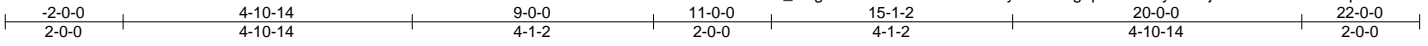
Job RANDY_CHITTUM	Truss A2	Truss Type Hip	Qty 2	Ply 1	Randy Chittum	T23362188
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Mayo Truss Company, Inc., Mayo, FL - 32066,

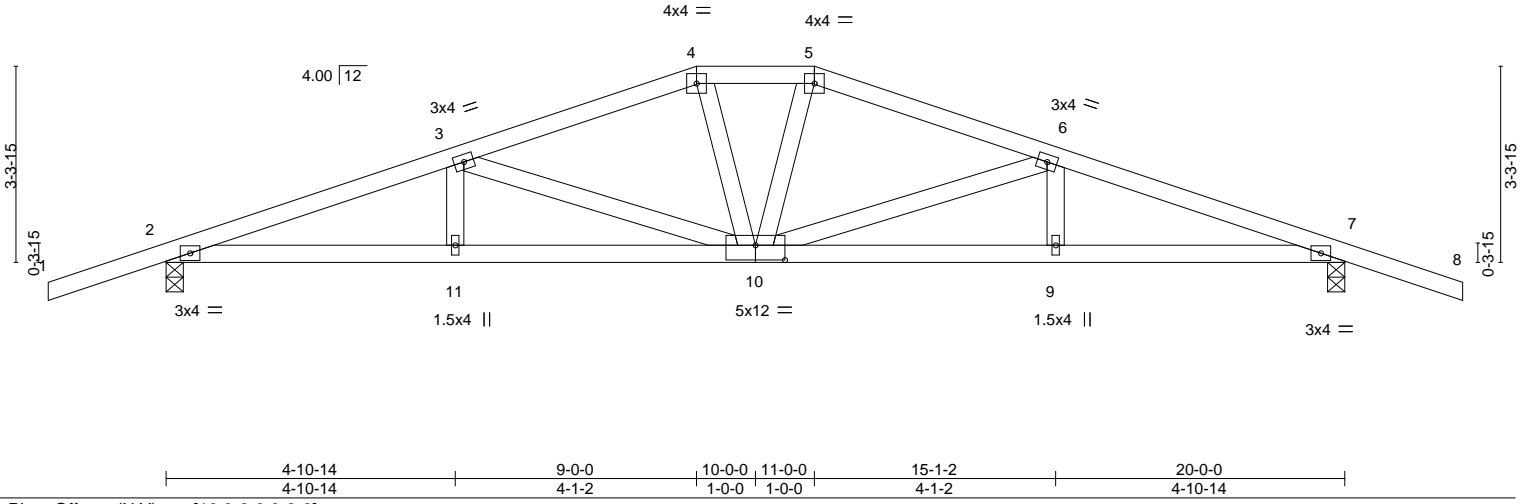
8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Mar 26 14:10:12 2021 Page 1

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Job Reference (optional)



Scale = 1:39.1



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.25	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.25	BC 0.45	Vert(LL) -0.08 10-11 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.32	Vert(CT) -0.17 9-10 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.05 7 n/a n/a		
	Code FBC2020/TPI2014			Weight: 95 lb	FT = 20%

<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	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 7=0-3-8  
 Max Horz 2=-149(LC 5)  
 Max Uplift 2=-282(LC 12), 7=-282(LC 8)  
 Max Grav 2=1052(LC 21), 7=1052(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2085/541, 3-4=-1487/426, 4-5=-1475/437, 5-6=-1487/426, 6-7=-2085/541  
 BOT CHORD 2-11=-429/1992, 10-11=-429/1992, 9-10=-429/1919, 7-9=-429/1919  
 WEBS 3-10=-688/226, 6-10=-690/229, 5-10=-45/292, 4-10=-46/292

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Open, GCpi=0.00; MWFRS (directional) and C-C Corner(3) -2-0-0 to 0-9-12, Exterior(2) 0-9-12 to 9-0-0, Corner(3) 9-0-0 to 14-0-0, Exterior(2) 14-0-0 to 22-0-0 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 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 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=282, 7=282.
  - 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 6634  
 16023 Swingley Ridge Road, Chesterfield, MO 63017  
 Date:

March 29, 2021

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

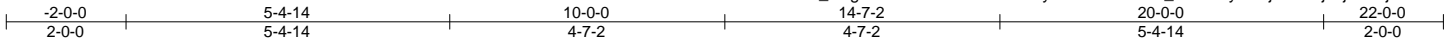
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 36610

Job RANDY_CHITTUM	Truss A3	Truss Type Common	Qty 7	Ply 1	Randy Chittum	T23362189
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Mayo Truss Company, Inc., Mayo, FL - 32066,

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Mar 26 14:10:13 2021 Page 1  
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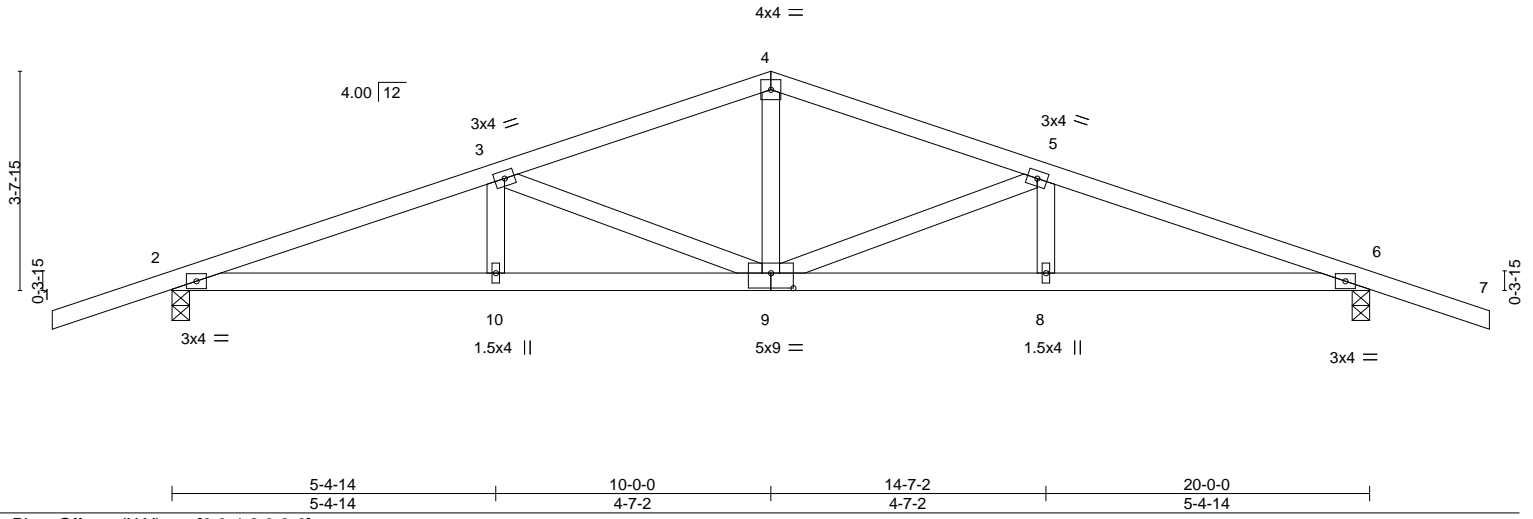


Plate Offsets (X, Y)--	[9:0-4-8,0-3-0]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.25	Vert(LL)	-0.08	9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.46	Vert(CT)	-0.16	8-9	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.30	Horz(CT)	0.05	6	n/a		
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-AS						
								Weight: 91 lb	FT = 20%

<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	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
 Max Horz 2=-162(LC 5)  
 Max Uplift 2=-284(LC 12), 6=-284(LC 8)  
 Max Grav 2=1034(LC 21), 6=1034(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2052/538, 3-4=-1451/419, 4-5=-1451/419, 5-6=-2052/538  
 BOT CHORD 2-10=-421/1914, 9-10=-421/1914, 8-9=-421/1884, 6-8=-421/1884  
 WEBS 4-9=-100/584, 5-9=-727/256, 3-9=-725/254

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Open, GCpi=0.00; MWFRS (directional) and C-C Corner(3) -2-0-0 to 0-9-12, Exterior(2) 0-9-12 to 10-0-0, Corner(3) 10-0-0 to 13-0-0, Exterior(2) 13-0-0 to 22-0-0 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 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=284, 6=284.
  - 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 6634  
 16023 Swingley Ridge Road, Chesterfield, MO 63017  
 Date:

March 29, 2021

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>6904 Parke East Blvd. Tampa, FL 36610</p>
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Job RANDY_CHITTUM	Truss CJ01	Truss Type Diagonal Hip Girder	Qty 4	Ply 1	Randy Chittum	T23362190
					Job Reference (optional)	

Mayo Truss Company, Inc., Mayo, FL - 32066,

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Mar 26 14:10:14 2021 Page 1

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Scale: 1/2"=1'

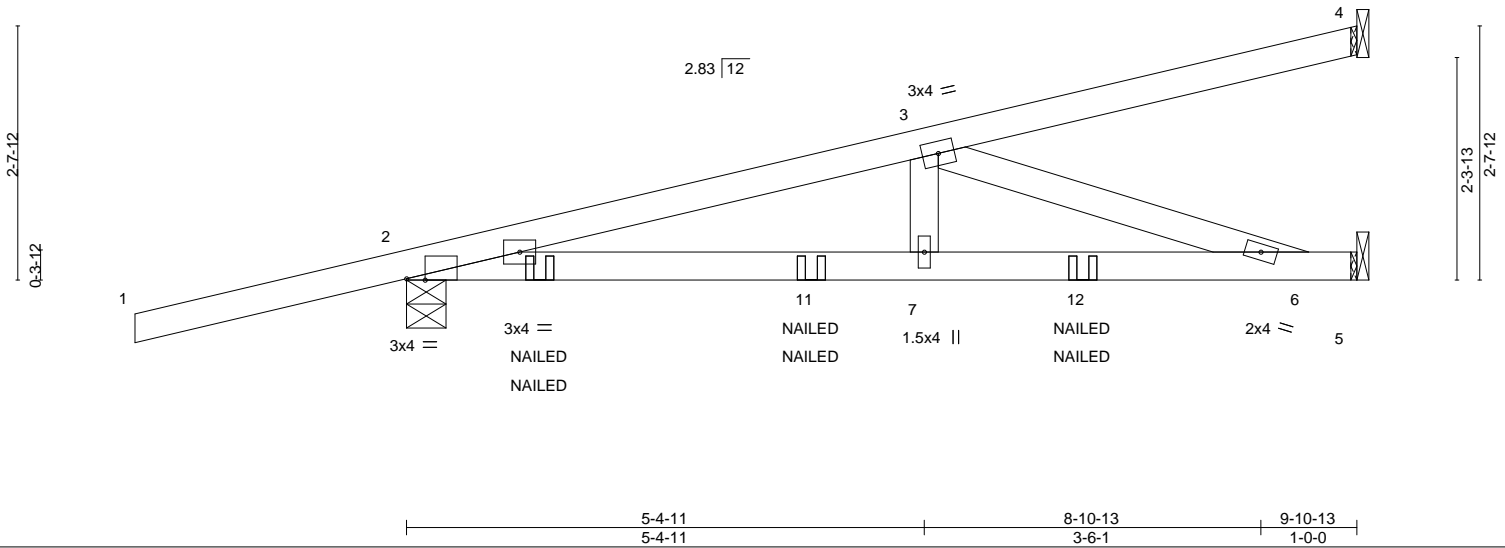


Plate Offsets (X,Y)--	[2:0-2-5,Edge]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.25		TC 0.61	Vert(LL) -0.10	6-7	>999	240		MT20	244/190
TCDL 10.0	Lumber DOL 1.25		BC 0.94	Vert(CT) -0.16	6-7	>718	180			
BCLL 0.0 *	Rep Stress Incr NO		WB 0.40	Horz(CT) 0.02	5	n/a	n/a			
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS						Weight: 42 lb	FT = 20%

**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 or 4-7-5 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-2-1 oc bracing.

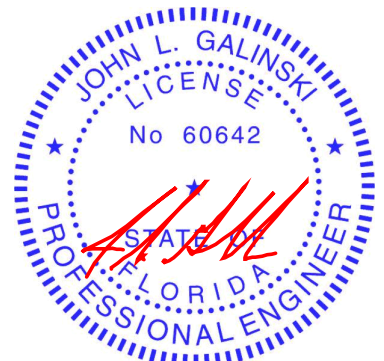
**REACTIONS.** (size) 4=Mechanical, 2=0-4-15, 5=Mechanical  
Max Horz 2=154(LC 39)  
Max Uplift 4=-77(LC 12), 2=-523(LC 12), 5=-243(LC 12)  
Max Grav 4=150(LC 44), 2=886(LC 44), 5=544(LC 44)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1540/731  
BOT CHORD 2-7=-790/1518, 6-7=-790/1518  
WEBS 3-7=-221/482, 3-6=-1596/830

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Open, GCpi=0.00; MWFRS (directional); end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 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) 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) 4 except (jt=lb) 2=523, 5=243.
  - 7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-4=-60, 5-8=-20  
Concentrated Loads (lb)  
Vert: 10=97(F=49, B=49) 11=-63(F=-32, B=-32) 12=-233(F=-117, B=-117)



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Date:

March 29, 2021

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6904 Parke East Blvd.  
Tampa, FL 36610

Job RANDY_CHITTUM	Truss J1	Truss Type Jack-Open	Qty 8	Ply 1	Randy Chittum	T23362191
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Mayo Truss Company, Inc., Mayo, FL - 32066,

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Mar 26 14:10:15 2021 Page 1

ID:r2k\_nCgSdLUQJUBL9TBHkzro9y-1oaVkidhVE7SD9gGD\_BQXOJzYpPachECBnZPabzX1zc

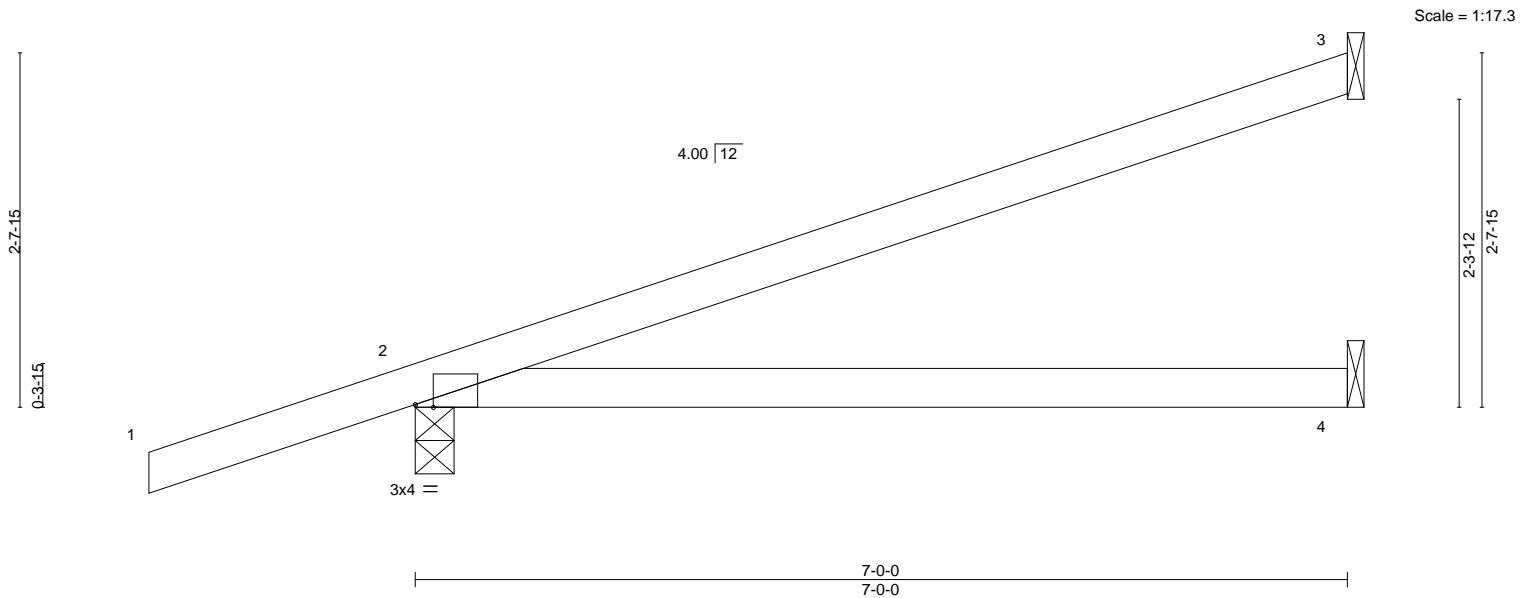


Plate Offsets (X,Y)--	[2:0-1-10,Edge]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.57	Vert(LL)	-0.08 4-7	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.48	Vert(CT)	-0.20 4-7	>422	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00 3	n/a	n/a		
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-AS					Weight: 25 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
 Max Horz 2=156(LC 12)  
 Max Uplift 3=122(LC 12), 2=172(LC 12)  
 Max Grav 3=234(LC 21), 2=499(LC 21), 4=122(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Open, GCpi=0.00; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 0-9-12, Interior(1) 0-9-12 to 6-11-4 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 3=122, 2=172.
- 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.



John L. Galinski PE No.60642  
 MiTek USA, Inc. FL Cert 6634  
 16023 Swingley Ridge Road, Chesterfield, MO 63017  
 Date:

March 29,2021

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**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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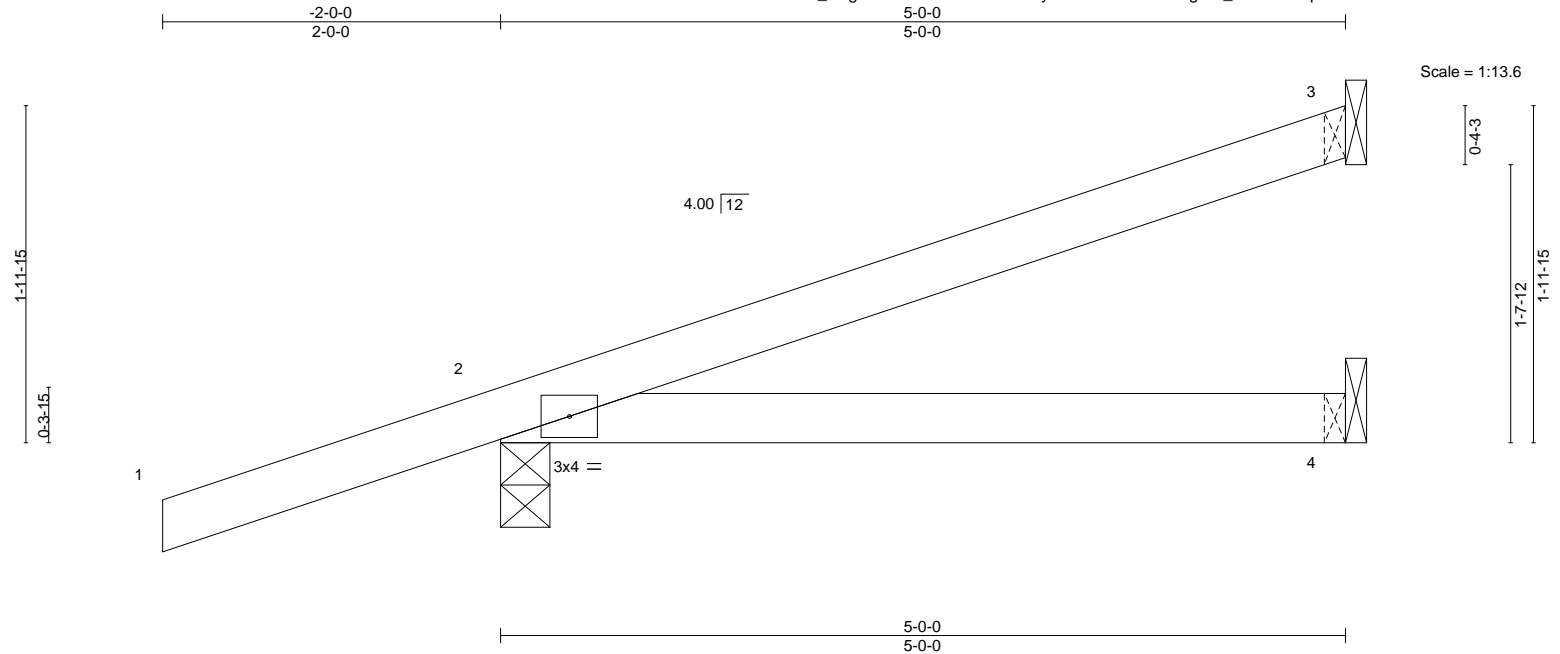
Job RANDY_CHITTUM	Truss J2	Truss Type Jack-Open	Qty 8	Ply 1	Randy Chittum	T23362192
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Mayo Truss Company, Inc., Mayo, FL - 32066,

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Mar 26 14:10:15 2021 Page 1

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Job Reference (optional)



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.25	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.25	BC 0.22	Vert(LL) -0.02 4-7 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.00	Vert(CT) -0.05 4-7 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.00 3 n/a n/a		
	Code FBC2020/TP12014			Weight: 19 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2

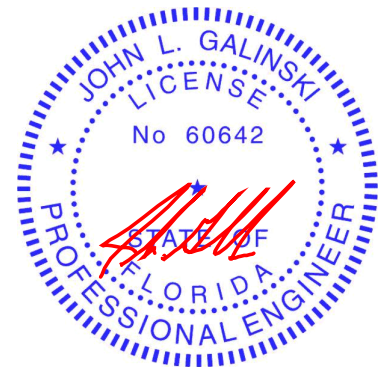
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=121(LC 12)  
Max Uplift 3=-79(LC 12), 2=-155(LC 12)  
Max Grav 3=154(LC 21), 2=415(LC 21), 4=85(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Open, GCpi=0.00; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 0-9-12, Interior(1) 0-9-12 to 4-11-4 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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) 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) 3 except (jt=lb) 2=155.
- 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.



John L. Galinski PE No.60642  
MiTek USA, Inc. FL Cert 6634  
16023 Swingley Ridge Road, Chesterfield, MO 63017  
Date:

March 29, 2021

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**ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



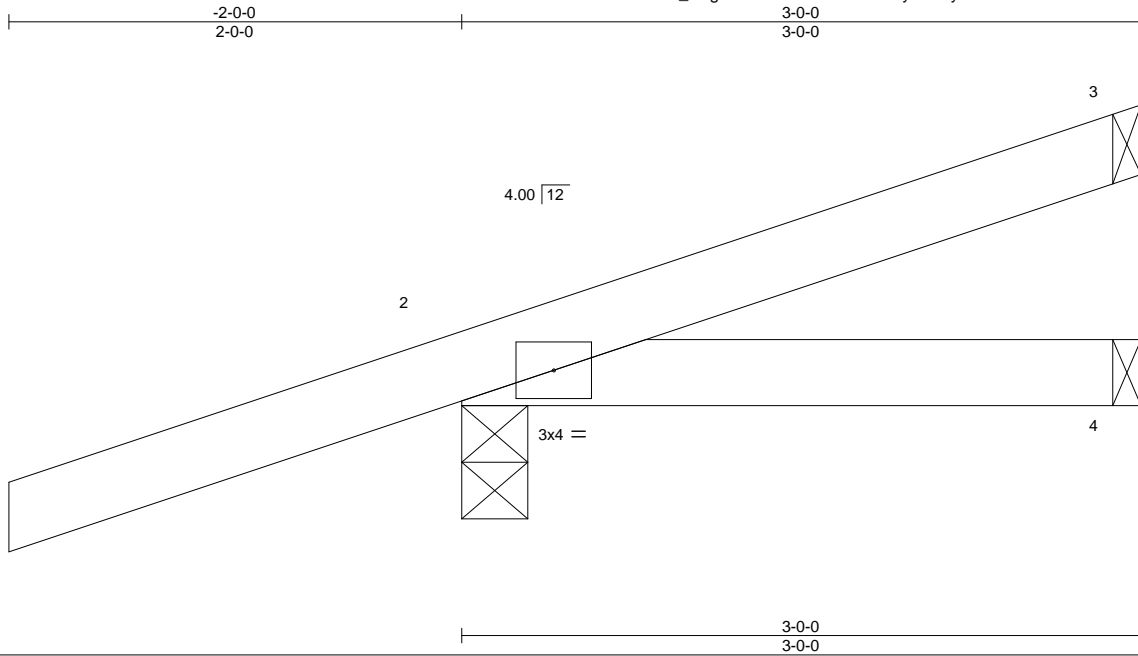
6904 Parke East Blvd.  
Tampa, FL 36610



Job RANDY_CHITTUM	Truss J3	Truss Type Jack-Open	Qty 8	Ply 1	Randy Chittum	T23362193
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Mayo Truss Company, Inc., Mayo, FL - 32066,

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Mar 26 14:10:16 2021 Page 1  
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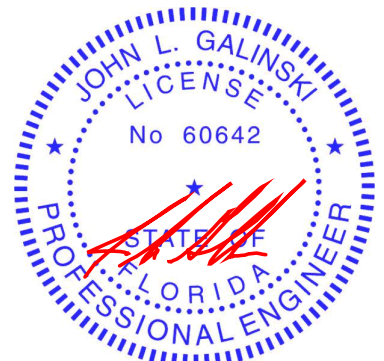
LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.26	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.25	BC 0.06	Vert(LL) -0.00 7 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.00	Vert(CT) -0.00 4-7 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP	Horz(CT) -0.00 3 n/a n/a		
	Code FBC2020/TPJ2014			Weight: 12 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
 Max Horz 2=86(LC 12)  
 Max Uplift 3=-34(LC 12), 2=-145(LC 12)  
 Max Grav 3=71(LC 21), 2=343(LC 21), 4=46(LC 3)

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


- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Open, GCpi=0.00; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 0-9-12, Interior(1) 0-9-12 to 2-11-4 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 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) 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) 3 except (jt=lb) 2=145.



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 MiTek USA, Inc. FL Cert 6634  
 16023 Swingley Ridge Road, Chesterfield, MO 63017  
 Date:

March 29, 2021

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 Tampa, FL 36610

Job RANDY_CHITTUM	Truss J4	Truss Type Jack-Open	Qty 8	Ply 1	Randy Chittum	T23362194
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Mayo Truss Company, Inc.,

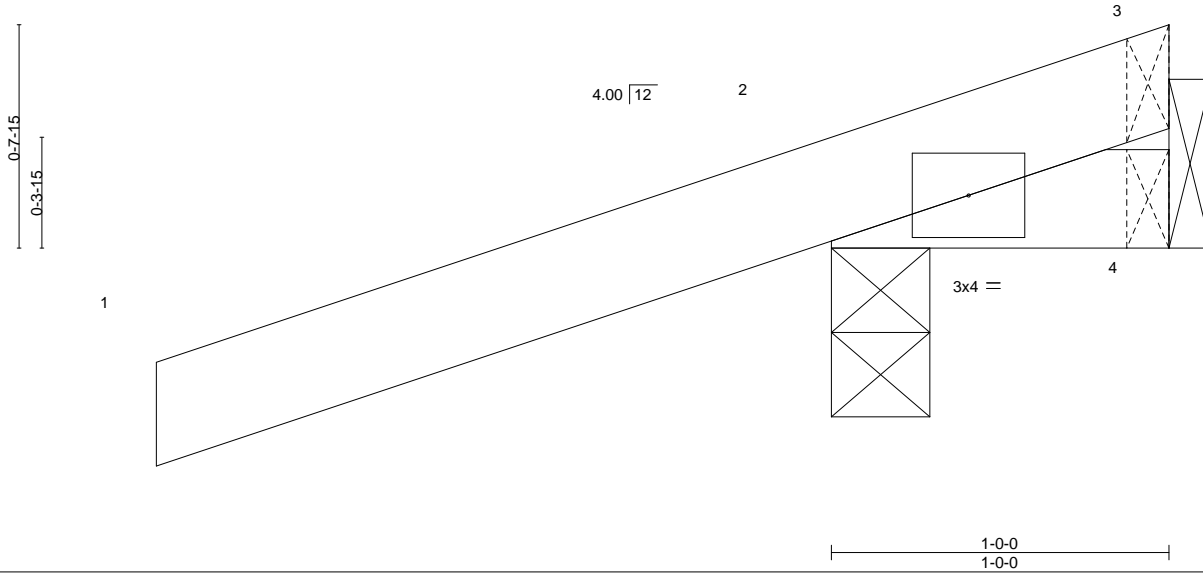
Mayo, FL - 32066,

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Mar 26 14:10:17 2021 Page 1

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Scale = 1:6.8



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 0.26	Vert(LL)	-0.00	5	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.03	Vert(CT)	0.00	5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MP					Weight: 6 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 1-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 4=Mechanical  
Max Horz 2=52(LC 12)  
Max Uplift 2=-184(LC 12), 4=-115(LC 21)  
Max Grav 2=358(LC 21), 4=75(LC 12)

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

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Open, GCpi=0.00; MWFRS (directional) and C-C Exterior(2E) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=184, 4=115.



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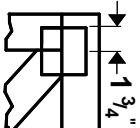
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



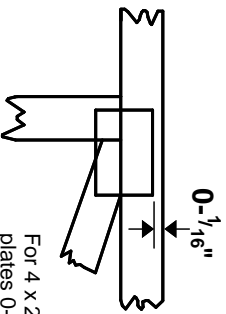
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# Symbols

## 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- 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

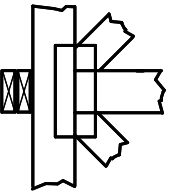
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



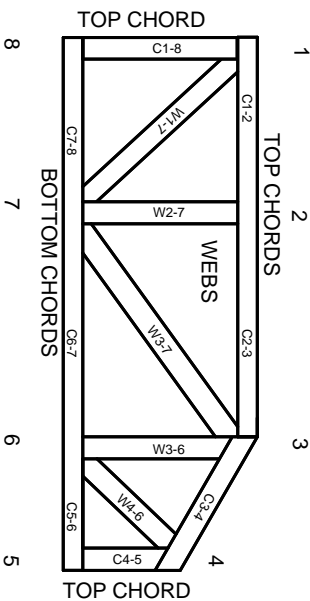
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing, 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/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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# General Safety Notes

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

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



MITek Engineering Reference Sheet: Mill-7473 rev. 5/19/2020