



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

RE: 1667769 - IC Const. - Soride Res.

MiTek USA, Inc.

6904 Parke East Blvd.
Tampa, FL 33610-4115

Site Information:

Customer Info: IC Construction Project Name: Soride Res. Model: Custom
Lot/Block: n/a Subdivision: n/a
Address: 401 SW Breckenridge Lane, n/a
City: Columbia Cty State: FL

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

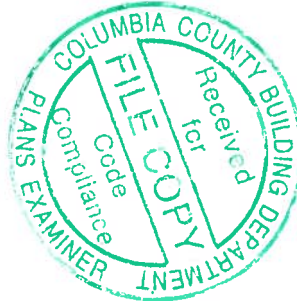
Name: License #:
Address:
City: State:

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: 37.0 psf Floor Load: N/A psf

This package includes 6 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	T16952592	PB01	5/3/19
2	T16952593	PB01G	5/3/19
3	T16952594	T01	5/3/19
4	T16952595	T01G	5/3/19
5	T16952596	T02	5/3/19
6	T16952597	T03	5/3/19

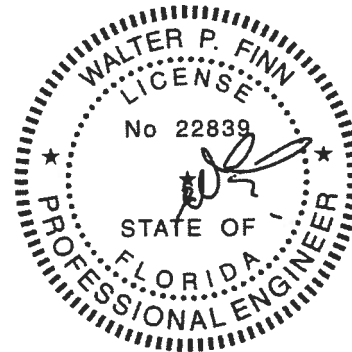


The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource-Jacksonville.

Truss Design Engineer's Name: Finn, Walter

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. Any project specific information included is for MiTek's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek 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.



Walter P. Finn PE No.22839
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

May 3, 2019

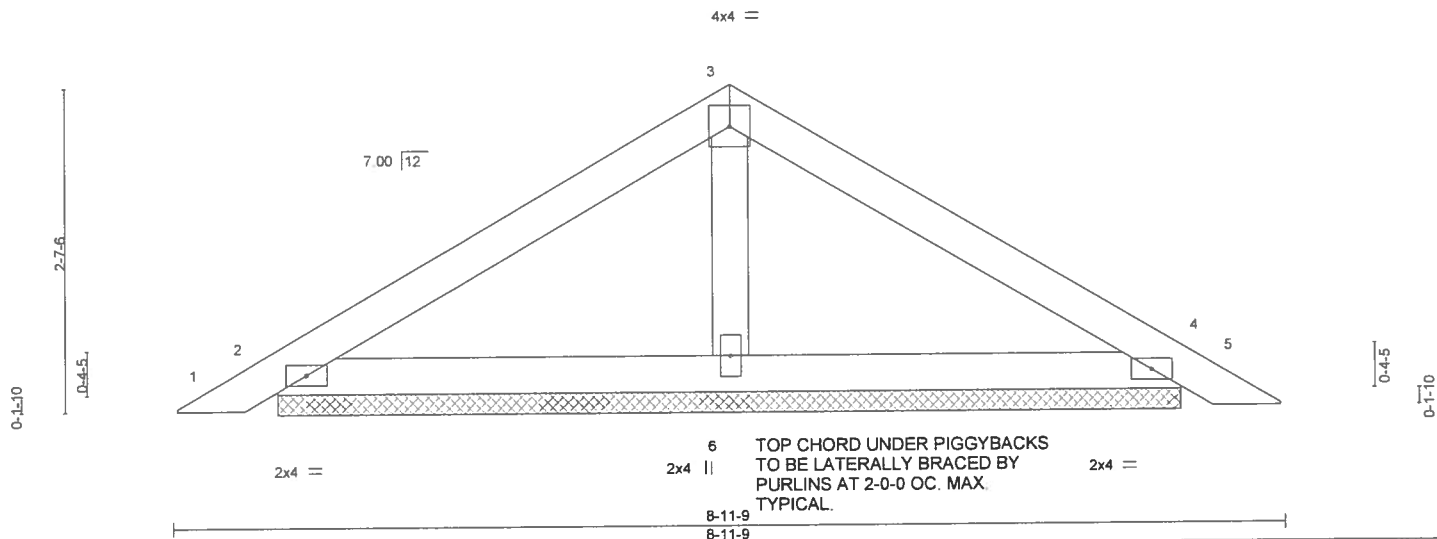
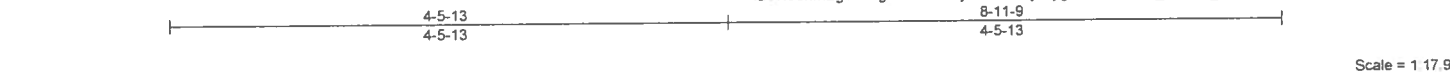
Finn, Walter

1 of 1

Job	Truss	Truss Type	Qty	Ply	IC Const. - Soride Res	T16952592
1667769	PB01	Piggyback	26	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244

8.240 s Dec 6 2018 MiTek Industries, Inc Thu May 2 17 05 19 2019 Page 1
ID 1193xm2goKr9gN4c4w?HljzmdHx-Yj8kygXIYWE0k1T_BvhAJ_Zfhvyl?vNcFBV1WWzKTrU



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)	0.00	5	n/r	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.13	Vert(CT)	0.01	5	n/r		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Code FBC2017/TPI2014	Matrix-S					Weight 29 lb	FT = 20%

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

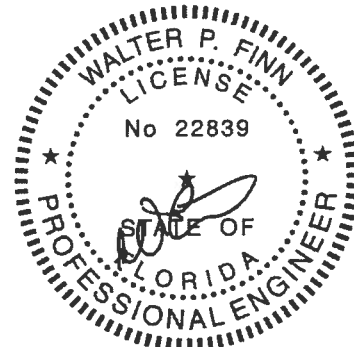
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=158/7-3-4, 4=158/7-3-4, 6=280/7-3-4
Max Horz 2=-76(LC 10)
Max Uplift 2=-79(LC 12), 4=-89(LC 13), 6=-77(LC 12)
Max Grav 2=158(LC 1), 4=161(LC 20), 6=280(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10: Vult=130mph (3-second gust) Vasd=101mph, TCDL=4.2psf, BCDL=3.0psf, h=18ft, Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



Walter P. Finn PE No.22839
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

May 3, 2019

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

MiTek

6904 Parke East Blvd
Tampa FL 33610

8.240 s Dec 6 2018 MiTek Industries, Inc Thu May 2 17:05:20 2019 Page 1
ID: 1193xm2gqKr9qN4c4w?HljzmdHx-0vi7A0YNJqMiMB2BldCPsB5qHJI2kMImUrEa2yzKTrT

Technical drawing of a roof truss (Dachstuhl) showing the internal structure. The drawing includes dimensions and labels for various components:

- Dimensions:**
 - Overall width: $7.00 \sqrt{12}$
 - Height from base to ridge: $2.3.5$
 - Base width (left side): $0.4.5$
 - Base width (right side): $0.4.5$
 - Overall length: $7.9.11$
 - Length of central section: $7.9.11$
- Labels and Components:**
 - 1:** Left gable end.
 - 2:** Left rafter.
 - 3:** Ridge beam.
 - 4:** Right rafter.
 - 5:** Right gable end.
 - 6:** Central support beam.
 - 7:** Left support beam.
 - 8:** Right support beam.
 - 9:** Left support beam (cross-section).
 - 10:** Right support beam (cross-section).
 - 11:** Central support beam (cross-section).
 - 12:** Ridge beam (cross-section).
- Structural Details:**
 - The roof is supported by a central ridge beam (3) and two side support beams (7, 8).
 - The rafters (2, 4) are supported by the ridge beam and the side support beams.
 - The base of the truss is shown with a cross-hatched pattern, indicating a foundation or floor structure.

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

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.

(lb/size) 2=149/6-1-6, 4=149/6-1-6, 6=213/6-1-6
 Max Horz 2=65(LC 10)
 Max Uplift 2=80(LC 12), 4=88(LC 13), 6=44(LC 12)
 Max Grav 2=149(LC 1), 4=149(LC 20), 6=213(LC 1)

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf, h=18ft, Cat. II; Exp C, Encl., Gcpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2'-0" o.c.
- 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" tall by 2'-0" wide will fit between the bottom chord and any other members.
- 8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



Walter P. Finn PE No.22839
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

May 3, 2019

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.



6904 Parke East Blvd
Tampa, FL 36610

6904 Parke East Blvd
Tampa, FL 36610

Job 1667769	Truss T01G	Truss Type GABLE	Qty 2	Ply 1	IC Const - Soride Res T16952595
----------------	---------------	---------------------	----------	----------	------------------------------------

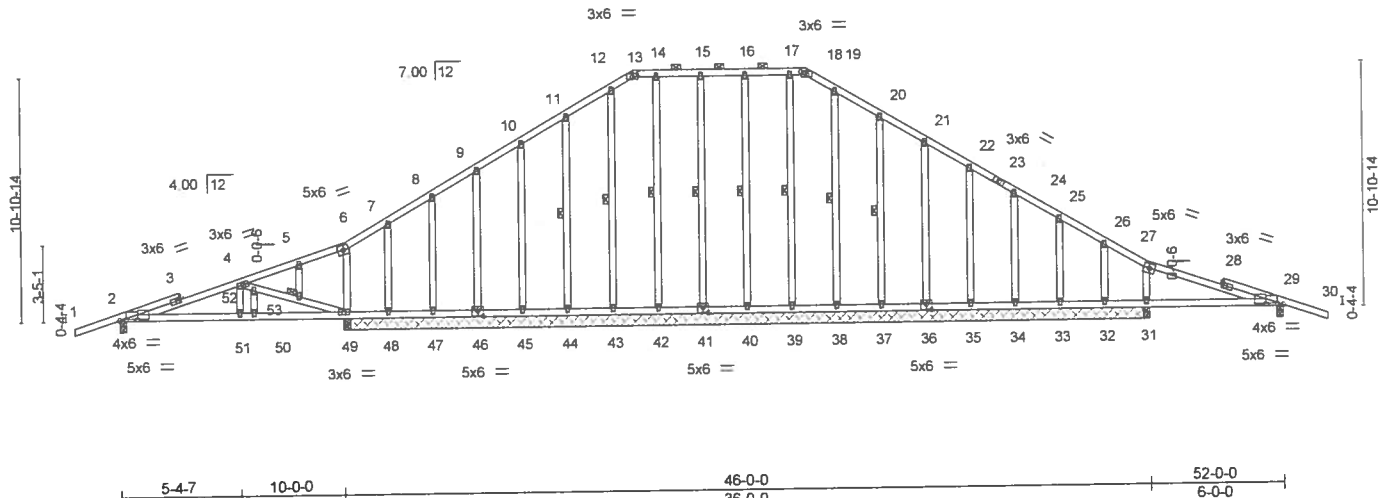
Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Dec 6 2018 MiTek Industries, Inc. Thu May 2 17:05:25 2019 Page 1

ID 1193xm2goKr9gN4c4w?HjzmdHx-NiV0DkcV8M?ASyW8XAnaZEpeqKyQPZVd7yLjAzKTr0

2-0-0 5-4-7 22-11-7 30-9-2 46-0-0 52-0-0 54-0-0
2-0-0 5-4-7 17-7-0 7-9-11 15-2-14 6-0-0 2-0-0

Scale = 1.99.2



5-4-7										4-7-9										30-0-0										Plate Offsets (X,Y)– [2-0-3-5,0-0-10], [2-0-9-5,0-0-7], [13-0-3-0,0-1-12], [18-0-3-0,0-1-12], [29-0-3-5,0-0-10], [29-0-9-5,0-0-7], [36-0-3-0,0-3-0], [41-0-3-0,0-3-0], [46-0-3-0,0-3-0]									
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	0.35	Vert(LL)	0.06	29-31	>999	240		MT20		244/190																									
TCDL	7.0	Lumber DOL 1.25		BC	0.27	Vert(CT)	-0.07	29-31	>999	180																													
BCLL	0.0	Rep Stress Incr YES		WB	0.30	Horz(CT)	0.02	29	n/a	n/a																													
BCDL	10.0	Code FBC2017/TPI2014		Matrix-S								Weight: 381 lb		FT = 20%																									

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 13-18.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
8-9-15 oc bracing: 2-51
8-10-3 oc bracing: 50-51
9-0-4 oc bracing: 49-50.
WEBS 1 Row at midpt 15-41, 20-37, 19-38, 17-39, 16-40, 11-44, 12-43, 14-42
JOINTS 1 Brace at Jt(s): 53

REACTIONS. All bearings 36-0-0 except (jt=length) 2-0-3-8, 29-0-3-8.
(lb) - Max Horz 49=245(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 41, 32, 36, 38, 39, 40, 48, 45, 43, 42 except 2=420(LC 8), 29=301(LC 9), 33=107(LC 13), 34=101(LC 13), 35=102(LC 13), 37=118(LC 13), 47=105(LC 12), 46=101(LC 12), 44=116(LC 12), 49=361(LC 8), 31=251(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 41, 32, 33, 34, 35, 36, 37, 38, 39, 40, 48, 47, 46, 45, 44, 43, 42 except 2=463(LC 23), 29=319(LC 24), 49=462(LC 23), 49=457(LC 1), 31=357(LC 24), 31=344(LC 1)

FORCES. (lb) - Max Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=595/515, 11-12=149/256, 27-29=268/215
BOT CHORD 2-51=417/537, 50-51=417/537, 49-50=417/537, 48-49=215/346, 47-48=215/346, 46-47=215/346, 45-46=215/346, 44-45=215/346, 43-44=215/346, 42-43=215/346, 41-42=215/346, 40-41=215/346, 39-40=215/346, 38-39=215/346, 37-38=215/346, 36-37=215/346, 35-36=215/346, 34-35=215/346, 33-34=215/346, 32-33=215/346, 31-32=215/346, 29-31=213/343
WEBS 4-52=656/794, 52-53=639/779, 49-53=654/793

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=18ft, Cat. II; Exp C; Encl. GCPi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) 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
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide occurs between the bottom chord and any other members.



Walter P. Finn PE No.22839
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

May 3, 2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-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.

MiTek

6904 Parke East Blvd.
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	IC Const. - Soride Res.	T16952595
1667769	T01G	GABLE	2	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244

8.240 s Dec 6 2018 MiTek Industries, Inc. Thu May 2 17 05 25 2019 Page 2
ID 1f93xm2goKr9gN4c4w?HijzmdHx-NiV0DkcV8M?ASyw8XAnaZEpeqKyQPZVd7yLjAzKTrO

NOTES-

- 9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 41, 32, 36, 38, 39, 40, 48, 45, 43, 42 except (it=lb)
2=420, 29=301, 33=107, 34=101, 35=102, 37=118, 47=105, 46=101, 44=116, 49=361, 31=251.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-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.

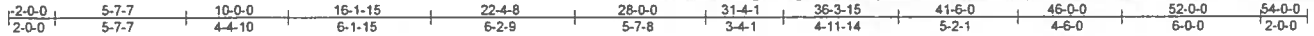


6904 Parke East Blvd
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	IC Const - Soride Res	T16952596
1667769	T02	Piggyback Base	2	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8 240 s Dec 6 2018 MiTek Industries, Inc. Thu May 2 17 05:27 2019 Page 1
ID: 1193xm2goKr9gN4c4w7HjzmdHx-JGdmeQdmgzFtG4Xfbq2efuyQ7dplMQo5RRSo2zKTrM



Scale 1/8"=1'

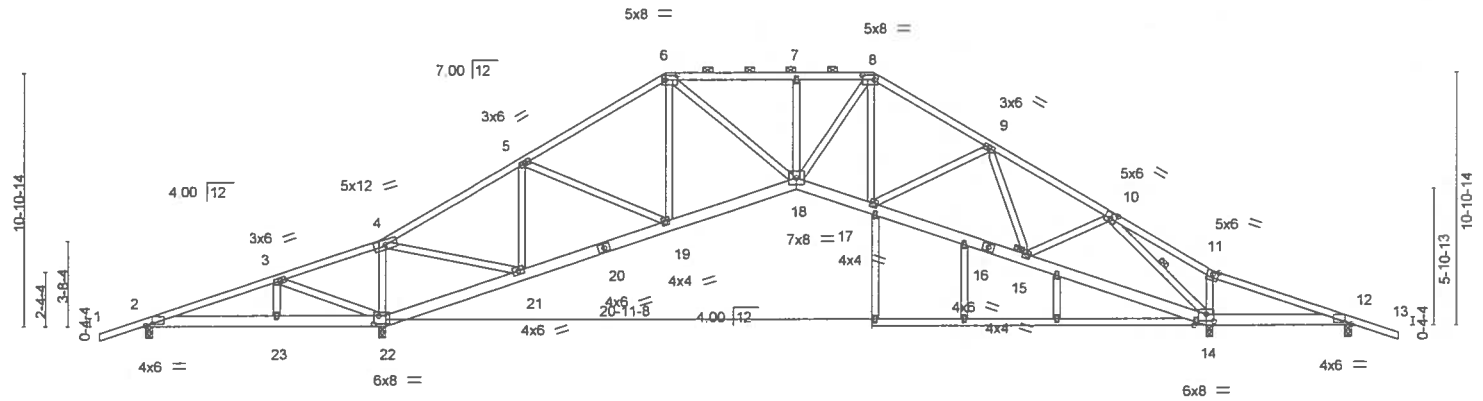


Plate Offsets (X,Y)	5-7-7	10-1-12	10-3-8	16-1-15	22-4-8	28-0-0	31-3-0	31-4-1	37-11-8	45-8-8	45-10-4	52-0-0
	5-7-7	4-6-5	0-11-2	5-10-7	6-2-9	5-7-8	3-3-0	0-1-1	6-7-7	7-9-0	0-11-2	6-1-12

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 0.47	Vert(LL) -0.13	18	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25		BC 0.34	Vert(CT) -0.23	18	>999	180		
BCLL 0.0	Rep Stress Incr YES		WB 0.73	Horz(CT) 0.18	14	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS					Weight: 367 lb	FT = 20%

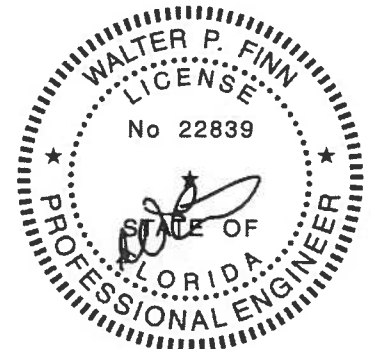
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-1-9 oc purlins, except
BOT CHORD 2x6 SP No.2 *Except*	2-0-0 oc purlins (3-9-0 max.): 6-8.
14-24: 2x4 SP No.2	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 10-14
	JOINTS 1 Brace at Jt(s): 15

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=236(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) except 2=372(LC 8), 14=606(LC 13), 12=287(LC 9), 22=765(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 2, 12 except 14=1738(LC 1), 22=2152(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=194/828, 3-4=552/1268, 4-5=757/279, 5-6=1400/563, 6-7=1890/717, 7-8=1890/717, 8-9=1808/703, 9-10=1683/688, 10-11=221/912, 11-12=279/809
BOT CHORD 2-23=649/265, 22-23=649/265, 21-22=1384/809, 19-21=209/833, 18-19=165/1188, 17-18=135/1576, 15-17=329/1616, 14-15=224/933, 12-14=728/357
WEBS 3-22=592/732, 4-22=1403/652, 4-21=712/1929, 5-21=927/436, 5-19=166/591, 6-19=276/152, 6-18=220/1003, 7-18=279/223, 8-18=274/697, 8-17=205/285, 9-17=228/304, 9-15=377/134, 10-15=54/598, 10-14=2388/881

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=4.2psf; BCDL=3.0psf; h=18ft, Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) 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
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 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.
- 7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 372 lb uplift at joint 2, 606 lb uplift at joint 14, 287 lb uplift at joint 12 and 765 lb uplift at joint 22.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Walter P. Finn PE No.22839
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

May 3,2019

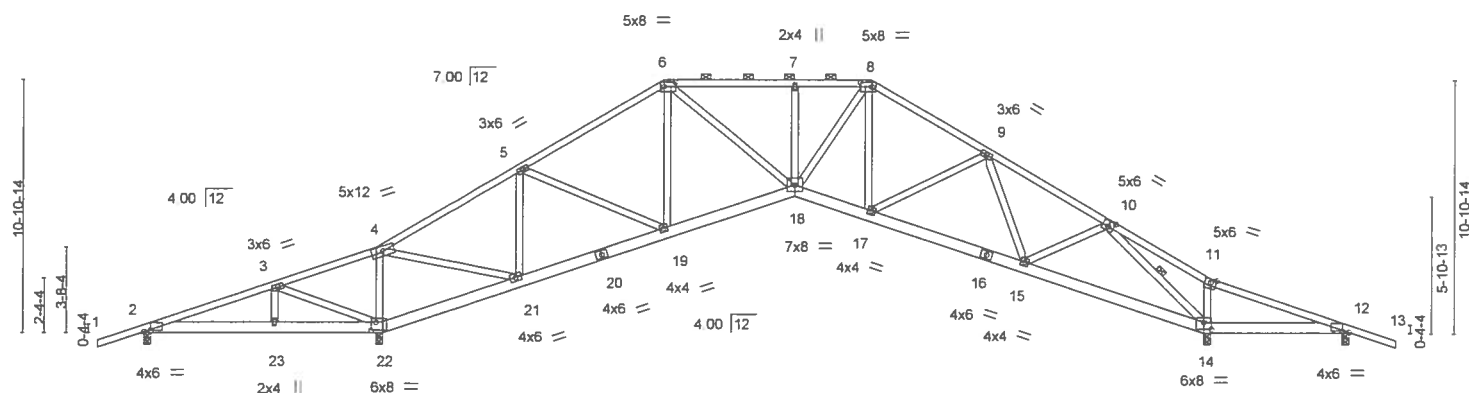
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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 ANSITP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

MiTek

6904 Parke East Blvd.
Tampa, FL 33610

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Dec 6 2018 MITek Industries, Inc. Thu May 2 17 05 29 2019 Page 1
 ID 1193xm2goKr9gN4c4w?HtjzmdHx-FeIW25f0BbVbxZEvm0sWj4zlwXKmLGv4YlwYszzKTrK
 2-0-0 | 5-7-7 | 10-0-0 | 16-1-15 | 22-4-8 | 28-0-0 | 31-4-1 | 36-3-5 | 41-6-0 | 46-0-0 | 52-0-0 | 54-0-0
 2-0-0 | 5-7-7 | 4-4-10 | 6-1-15 | 6-2-9 | 5-7-8 | 3-4-1 | 4-11-4 | 5-2-11 | 4-6-0 | 6-0-0 | 2-0-0
 Scale 1/8"=1'



	5-7-7	10-1-12	10-3-8	16-1-15	22-4-8	28-0-0	31-4-1	37-11-8	45-8-8	45-10-4	52-0-0
Plate Offsets (X-Y)	5-7-7	4-6-5	0-1-12	5-10-7	6-2-9	5-7-8	3-4-1	6-7-7	7-9-0	0-1-12	6-1-12

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 0.47	Vert(LL) -0.13 18	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.31	Vert(CT) -0.23 18	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.73	Horz(CT) 0.18 14	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014	Matrix-MS				Weight: 331 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-1-11 oc purlins, except 2-0-0 oc purlins (3-9-0 max.): 6-8.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 10-14

REACTIONS.

(lb) - Max Horiz 2=236(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) except 2=372(LC 8), 12=287(LC 9), 22=765(LC 12), 14=606(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 2, 12 except 22=2152(LC 1), 14=1738(LC 1)

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

TOP CHORD 2-3=194/828, 3-4=552/1268, 4-5=757/279, 5-6=1400/563, 6-7=1890/717,
7-8=1890/717, 8-9=1808/704, 9-10=1682/688, 10-11=221/913, 11-12=279/809
BOT CHORD 2-23=649/265, 22-23=649/265, 21-22=1384/1009, 19-21=209/834, 18-19=165/188,
17-18=135/1576, 15-17=328/1618, 14-15=225/934, 12-14=728/357
WEBS 3-22=592/732, 2-22=1403/652, 4-21=712/1929, 5-21=927/436, 5-19=166/591,
6-19=276/152, 6-18=220/1003, 7-18=279/224, 8-18=274/698, 8-17=207/288,
9-17=228/304, 9-15=378/133, 10-15=54/596, 10-14=2389/862

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10, Vult=130mph (3-second gust) Vasd=101mph; TCDF=4.2psf, BCDF=3.0psf, h=18ft, Cat. II; Exp C; Encl., GCPI=0.18, MWFRS (envelope) gable end zone and C-C Exterior(2) 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
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 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.
- 6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 372 lb uplift at joint 2, 287 lb uplift at joint 12, 765 lb uplift at joint 22 and 606 lb uplift at joint 14.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Walter P. Finn PE No.22839
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

May 3, 2019



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

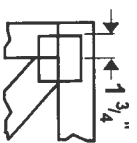
Design valid for use only with MITeK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



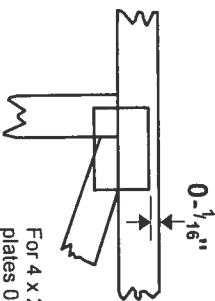
6904 Parke East Blvd
Tampa, FL 36610

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

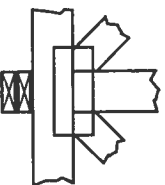
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



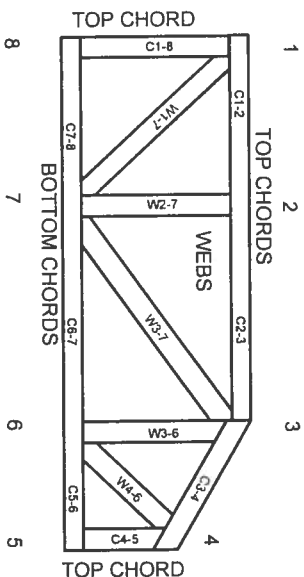
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/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.

© 2012 MITek® All Rights Reserved



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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See CCSI.
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.