



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

64

RE: 3576025 - TERRANCE JONES | ~~COOLEY WAY CUSTOM~~

220 W.E. Dec Glr.

MiTek USA, Inc.

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Site Information:

Customer Info: Terrance Jones Project Name: 3576025 Model: Custom
Lot/Block: Subdivision: .
Address: 000 Cooley Way, .
City: Columbia County State: FL

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

Name: License #:
Address: State:
City:

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

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.6
Wind Code: ASCE 7-16 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 27 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	No.	Seal#	Truss Name	Date
1	T30949287	T01	6/30/23	23	T30949309	T16	6/30/23
2	T30949288	T01G	6/30/23	24	T30949310	T17	6/30/23
3	T30949289	T02	6/30/23	25	T30949311	T18	6/30/23
4	T30949290	T02G	6/30/23	26	T30949312	T19	6/30/23
5	T30949291	T03	6/30/23	27	T30949313	T19G	6/30/23
6	T30949292	T03G	6/30/23				
7	T30949293	T04	6/30/23				
8	T30949294	T05	6/30/23				
9	T30949295	T05G	6/30/23				
10	T30949296	T06	6/30/23				
11	T30949297	T07	6/30/23				
12	T30949298	T07G	6/30/23				
13	T30949299	T08	6/30/23				
14	T30949300	T09	6/30/23				
15	T30949301	T10	6/30/23				
16	T30949302	T11	6/30/23				
17	T30949303	T11A	6/30/23				
18	T30949304	T11G	6/30/23				
19	T30949305	T12A	6/30/23				
20	T30949306	T13	6/30/23				
21	T30949307	T14	6/30/23				
22	T30949308	T15	6/30/23				



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-Lake City, FL.

Truss Design Engineer's Name: Velez, Joaquin

My license renewal date for the state of Florida is February 28, 2025.

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.



Joaquin Velez PE No. 68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30, 2023

Velez, Joaquin

1 of 1

Page: 1

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.

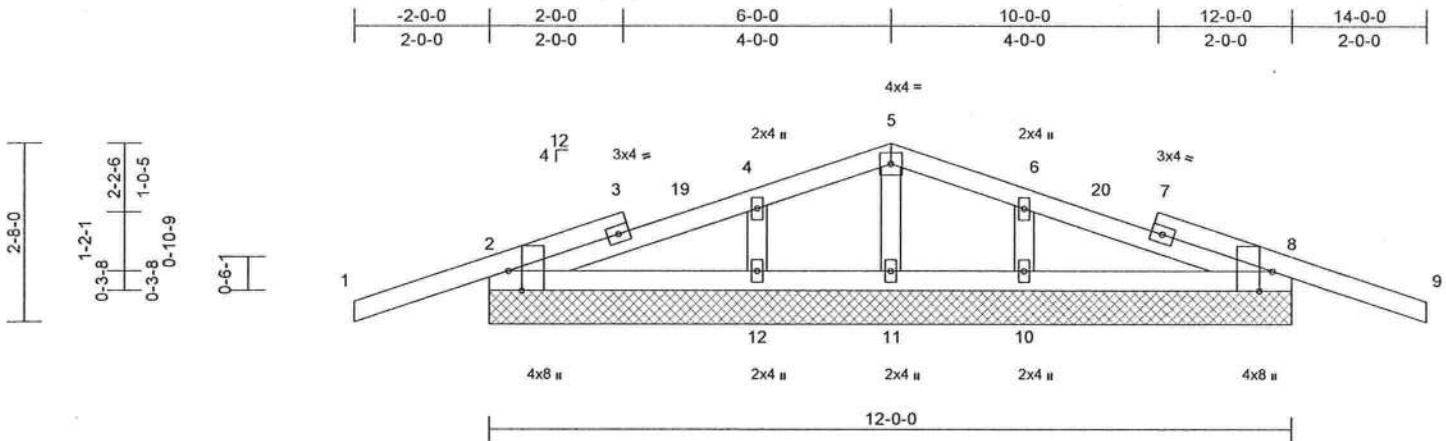


Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T01G	Common Supported Gable	1	1	T30949288
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:20
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Page: 1



Scale = 1:33.1

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.35	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.08	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	8	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							
										Weight: 54 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 6-0-0 oc bracing.

REACTIONS

(size) 2=12-0-0, 8=12-0-0, 10=12-0-0, 11=12-0-0, 12=12-0-0, 13=12-0-0, 16=12-0-0
Max Horiz 2=50 (LC 8), 13=50 (LC 8)
Max Uplift 2=189 (LC 8), 8=196 (LC 9), 10=119 (LC 13), 11=19 (LC 8), 12=118 (LC 12), 13=189 (LC 8), 16=196 (LC 9)
Max Grav 2=289 (LC 23), 8=289 (LC 24), 10=267 (LC 24), 11=94 (LC 1), 12=267 (LC 23), 13=289 (LC 23), 16=289 (LC 24)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/38, 2-4=-219/107, 4-5=-39/88, 5-6=-37/90, 6-8=-218/107, 8-9=0/38
BOT CHORD 2-12=-101/257, 11-12=-19/106, 10-11=-19/106, 8-10=-101/260
WEBS 5-11=-83/69, 4-12=-189/268, 6-10=-189/268

NOTES

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft;
Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -2-0-0 to 1-2-8, Exterior(2N) 1-2-8 to 6-0-0, Corner(3R) 6-0-0 to 9-0-0, Exterior(2N) 9-0-0 to 14-0-0 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 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 189 lb uplift at joint 2, 196 lb uplift at joint 8, 19 lb uplift at joint 11, 118 lb uplift at joint 12, 119 lb uplift at joint 10, 189 lb uplift at joint 2 and 196 lb uplift at joint 8.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

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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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

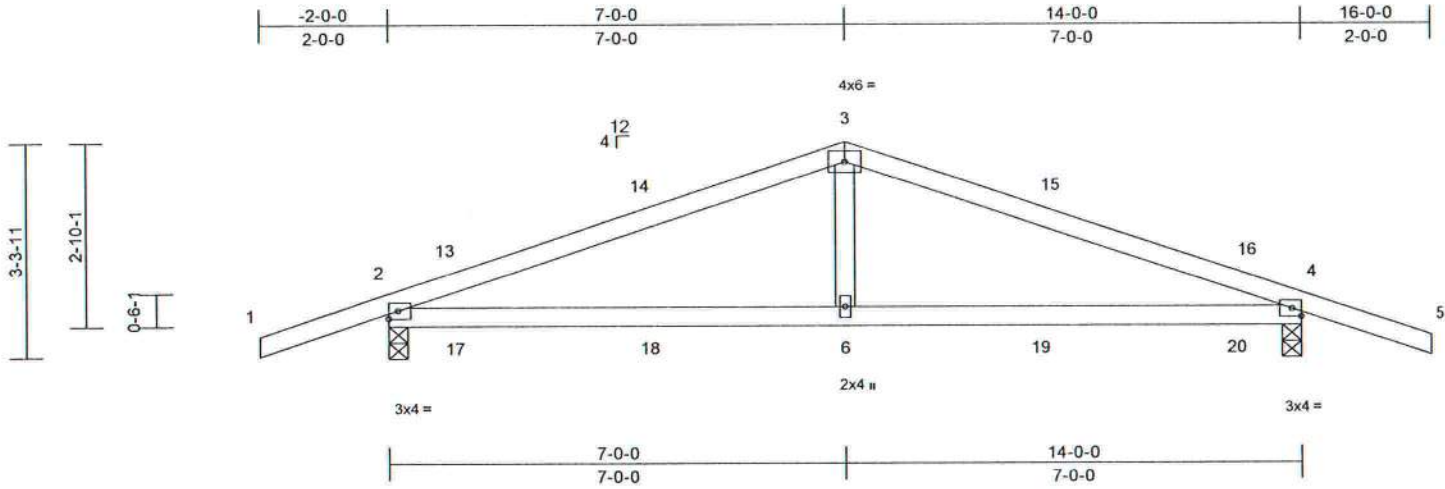
Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T02	Common	3	1	T30949289
					Job Reference (optional)

Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:21

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Scale = 1:34.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.63	Vert(LL)	0.17	6-12	>977	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.53	Vert(CT)	0.15	6-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horz(CT)	-0.02	4	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 53 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-4-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 4-7-13 oc bracing.

REACTIONS (size) 2=0-3-8, 4=0-3-8
Max Horiz 2=-61 (LC 13)
Max Uplift 2=-467 (LC 8), 4=-467 (LC 9)
Max Grav 2=680 (LC 1), 4=680 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/38, 2-3=-929/1434, 3-4=-929/1434, 4-5=0/38

BOT CHORD 2-6=-1239/818, 4-6=-1239/818

WEBS 3-6=-566/297

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior (1) 1-0-0 to 7-0-0, Exterior(2R) 7-0-0 to 10-0-0, Interior (1) 10-0-0 to 16-0-0 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
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 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 467 lb uplift at joint 2 and 467 lb uplift at joint 4.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

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

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MiTek

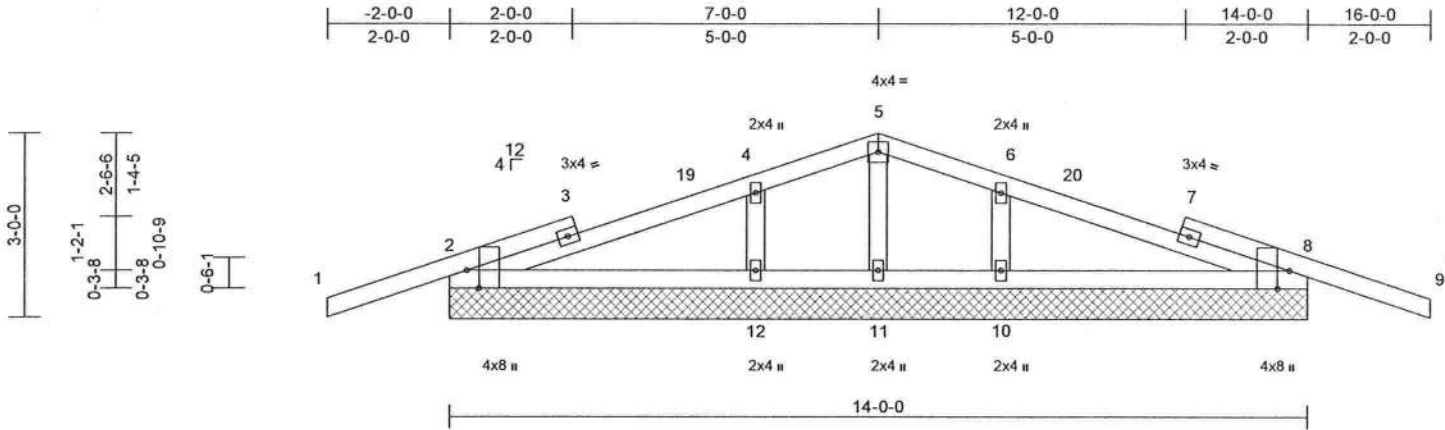
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T02G	Common Supported Gable	1	1	T30949290
Job Reference (optional)					

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.32	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.15	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	8	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							
										Weight: 61 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 10'-0" oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6'-0" oc bracing.

REACTIONS (size)	2=14'-0-0, 8=14'-0-0, 10=14'-0-0, 11=14'-0-0, 12=14'-0-0, 13=14'-0-0, 16=14'-0-0
Max Horiz	2=55 (LC 9), 13=55 (LC 9)
Max Uplift	2=190 (LC 8), 8=198 (LC 9), 10=164 (LC 13), 11=17 (LC 3), 12=164 (LC 12), 13=190 (LC 8), 16=198 (LC 9)
Max Grav	2=305 (LC 23), 8=305 (LC 24), 10=368 (LC 1), 11=31 (LC 13), 12=368 (LC 1), 13=305 (LC 23), 16=305 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/38, 2-4=-221/116, 4-5=-15/71, 5-6=-14/73, 6-8=-220/116, 8-9=0/38
BOT CHORD	2-12=-106/248, 11-12=-49/138, 10-11=-49/138, 8-10=-106/252
WEBS	5-11=-53/18, 4-12=-250/311, 6-10=-250/310

NOTES

- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft;
Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -2-0-0 to 1-2-8, Exterior(2N) 1-2-8 to 7-0-0, Corner(3R) 7-0-0 to 10-0-0, Exterior(2N) 10-0-0 to 16-0-0 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2'-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'-0"-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 190 lb uplift at joint 2, 198 lb uplift at joint 8, 17 lb uplift at joint 11, 164 lb uplift at joint 12, 164 lb uplift at joint 10, 190 lb uplift at joint 2 and 198 lb uplift at joint 8.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

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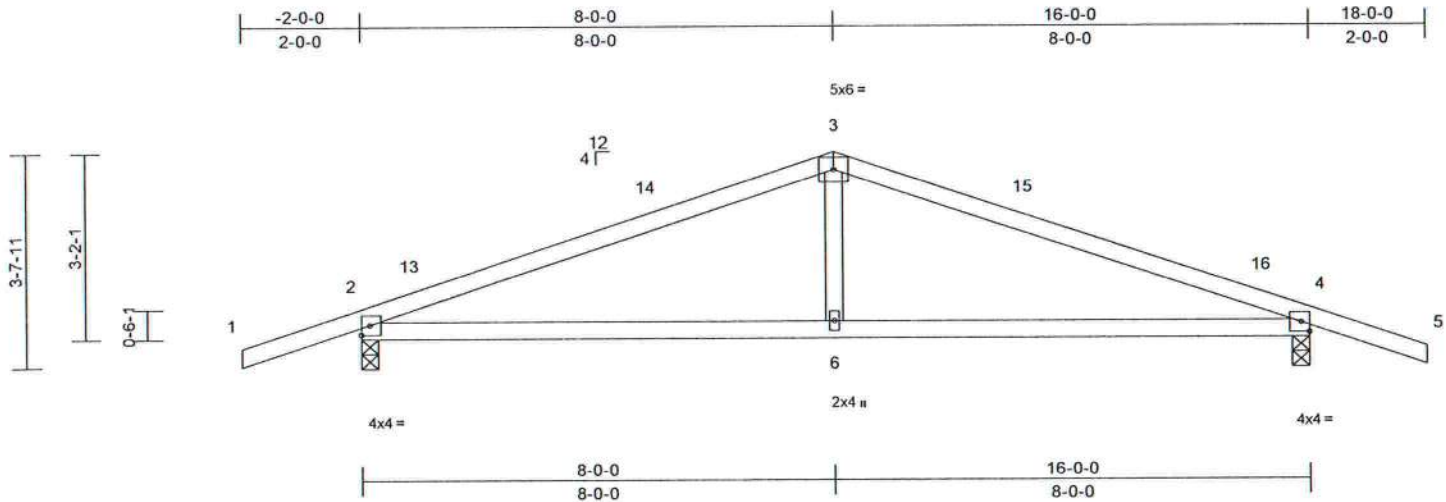
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T03	Common	6	1	T30949291
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

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Page: 1



Scale = 1:37.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.82	Vert(LL)	0.09	6-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.65	Vert(CT)	-0.18	6-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.02	2	n/a	n/a		
BCDL	10.0	Code	FBC2020/TP12014	Matrix-MS							Weight: 59 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 9-7-12 oc bracing.

REACTIONS (size)

2=0-3-8, 4=0-3-8
Max Horiz 2=67 (LC 12)
Max Uplift 2=-339 (LC 8), 4=-339 (LC 9)
Max Grav 2=760 (LC 1), 4=760 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/38, 2-3=-1096/490, 3-4=-1096/490, 4-5=0/38
BOT CHORD	2-6=-340/967, 4-6=-340/967
WEBS	3-6=0/347

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior (1) 1-0-0 to 8-0-0, Exterior(2R) 8-0-0 to 11-0-0, Interior (1) 11-0-0 to 18-0-0 zone; 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 3-06-00 tall by 2-00-00 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 339 lb uplift at joint 2 and 339 lb uplift at joint 4.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

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MITTEK

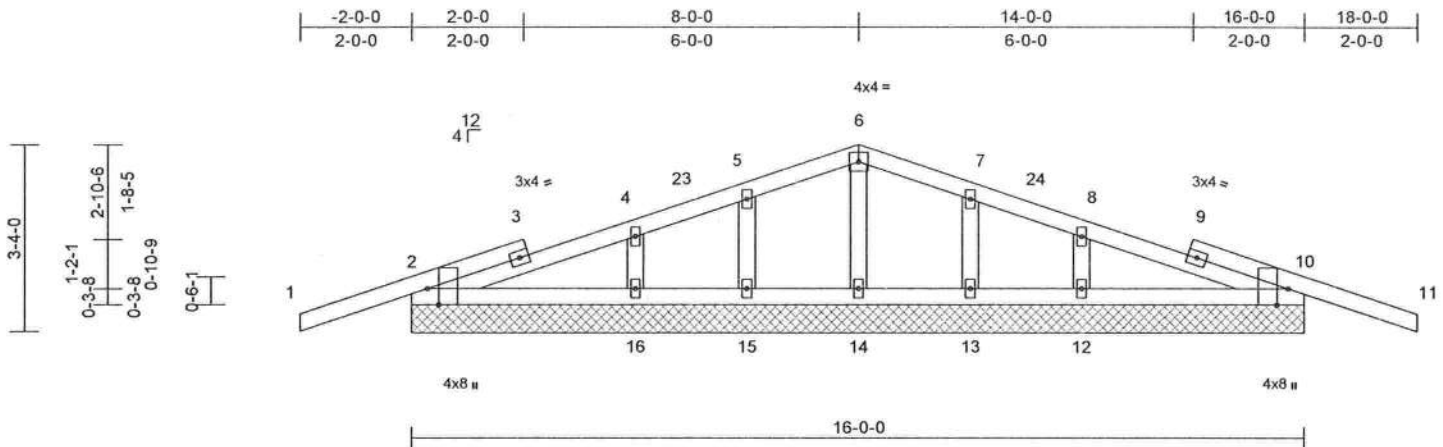
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T03G	Common Supported Gable	1	1	T30949292
Job Reference (optional)					

Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:22
ID:4CpNP8Y8lmNxLUmGxHZxpz1Q9y-RfC?PsB70Hq3NSgPqnL8w3ulTxbGKWrCDoi7J4zJC7f

Page: 1



Scale = 1:39.6

Plate Offsets (X, Y): [2:0-3-8,Edge], [10:0-3-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.29	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.08	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	0.00	20	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS						Weight: 72 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" oc purlins.
BOT CHORD Rigid ceiling directly applied or 6'-0" oc bracing.

REACTIONS (size)
2=16'-0"-0, 10=16'-0"-0, 12=16'-0"-0,
13=16'-0"-0, 14=16'-0"-0, 15=16'-0"-0,
16=16'-0"-0, 17=16'-0"-0, 20=16'-0"-0
Max Horiz 2=61 (LC 12), 17=61 (LC 12)
Max Uplift 2=187 (LC 8), 10=195 (LC 9),
12=113 (LC 13), 13=76 (LC 9),
14=17 (LC 12), 15=77 (LC 8),
16=112 (LC 12), 17=187 (LC 8),
20=195 (LC 9)
Max Grav 2=291 (LC 23), 10=291 (LC 24),
12=256 (LC 1), 13=132 (LC 24),
14=170 (LC 1), 15=132 (LC 23),
16=256 (LC 1), 17=291 (LC 23),
20=291 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/38, 2-4=183/103, 4-5=32/66,
5-6=39/113, 6-7=39/116, 7-8=30/70,
8-10=183/103, 10-11=0/38
BOT CHORD 2-16=97/214, 15-16=16/92, 14-15=16/92,
13-14=16/92, 12-13=16/92, 10-12=97/217
WEBS 6-14=122/57, 5-15=108/148,
4-16=180/188, 7-13=108/148,
8-12=180/188

NOTES

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft;
Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -2-0-0 to 1-2-8, Exterior(2N) 1-2-8 to 8-0-0, Corner(3R) 8-0-0 to 11-0-0, Exterior(2N) 11-0-0 to 18-0-0 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2'-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'-06"-00 tall by 2'-00"-00 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 187 lb uplift at joint 2, 195 lb uplift at joint 10, 17 lb uplift at joint 14, 77 lb uplift at joint 15, 112 lb uplift at joint 16, 76 lb uplift at joint 13, 113 lb uplift at joint 12, 187 lb uplift at joint 2 and 195 lb uplift at joint 10.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

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

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

MiTek

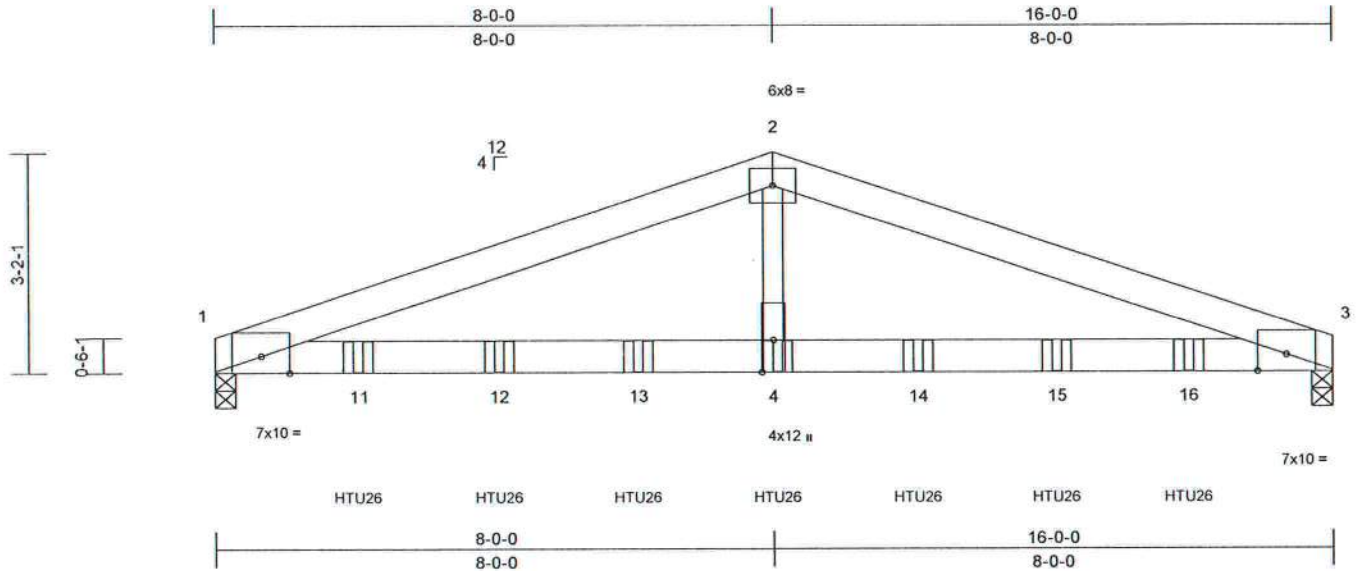
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T04	Common Girder	1	2	T30949293
					Job Reference (optional)

Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:22
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Page: 1



Scale = 1:31.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.46	Vert(LL)	0.17	4-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.83	Vert(CT)	-0.31	4-10	>614	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.60	Horz(CT)	0.05	3	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS								
											Weight: 162 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP M 26
BOT CHORD 2x6 SP M 26
WEBS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-11-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=0-3-8, 3=0-3-8
Max Horiz 1=54 (LC 12)
Max Uplift 1=-1762 (LC 4), 3=-1775 (LC 5)
Max Grav 1=4854 (LC 1), 3=4890 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-10069/3618, 2-3=-10067/3617
BOT CHORD 1-4=-3411/9595, 3-4=-3411/9595
WEBS 2-4=-1847/5305

NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-8-0 oc.
Web 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=4.2psf; BCDL=3.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP M 26 crushing capacity of 805 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1762 lb uplift at joint 1 and 1775 lb uplift at joint 3.
- Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 13-11-4 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-2=-60, 2-3=-60, 5-8=-20
Concentrated Loads (lb)
Vert: 4=-1207 (F), 11=-1212 (F), 12=-1212 (F), 13=-1207 (F), 14=-1207 (F), 15=-1207 (F), 16=-1212 (F)



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

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MiTek

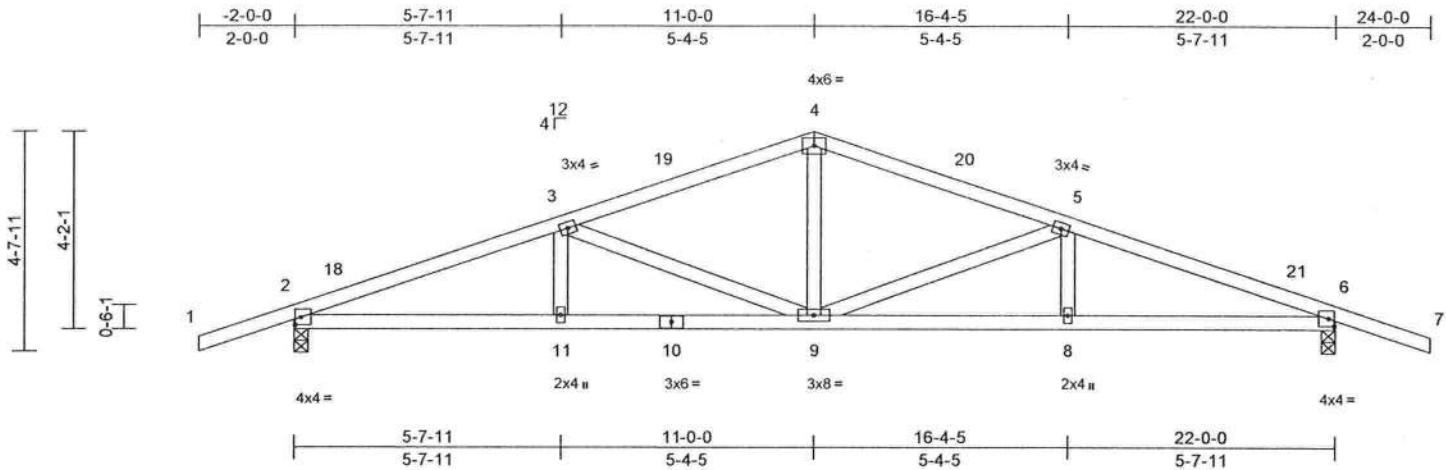
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T05	Common	1	1	T30949294
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:23
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Scale = 1:46.8

Plate Offsets (X, Y): [2:0-1-7,0-2-0], [6:0-1-7,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.48	Vert(LL)	0.10	9-11	>999	240	244/190
TCOL	10.0	Lumber DOL	1.25	BC	0.68	Vert(CT)	-0.21	9-11	>999	180	
BCOL	0.0*	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.06	6	n/a	n/a	
BCOL	10.0	Code	FBC2020/TPI2014	Matrix-MS							
Weight: 101 lb FT = 20%											

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-10-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-3-12 oc bracing.

REACTIONS

(size) 2=0-3-8, 6=0-3-8
Max Horiz 2=-88 (LC 13)
Max Uplift 2=-422 (LC 8), 6=-422 (LC 9)
Max Grav 2=1000 (LC 1), 6=1000 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/38, 2-3=-1901/758, 3-4=-1384/599,
4-5=-1384/599, 5-6=-1901/758, 6-7=0/38
BOT CHORD 2-11=-626/1747, 9-11=-626/1747,
8-9=-642/1747, 6-8=-642/1747
WEBS 3-11=0/182, 3-9=-562/287, 4-9=-154/528,
5-9=-562/288, 5-8=0/182

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCOL=4.2psf; BCOL=3.0psf; h=15ft;
Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior (1) 1-0-0 to 11-0-0, Exterior(2R) 11-0-0 to 14-0-0, Interior (1) 14-0-0 to 24-0-0 zone; 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 3-06-00 tall by 2-00-00 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 422 lb uplift at joint 2 and 422 lb uplift at joint 6.
- LOAD CASE(S) Standard



Joaquin Velez PE, No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023



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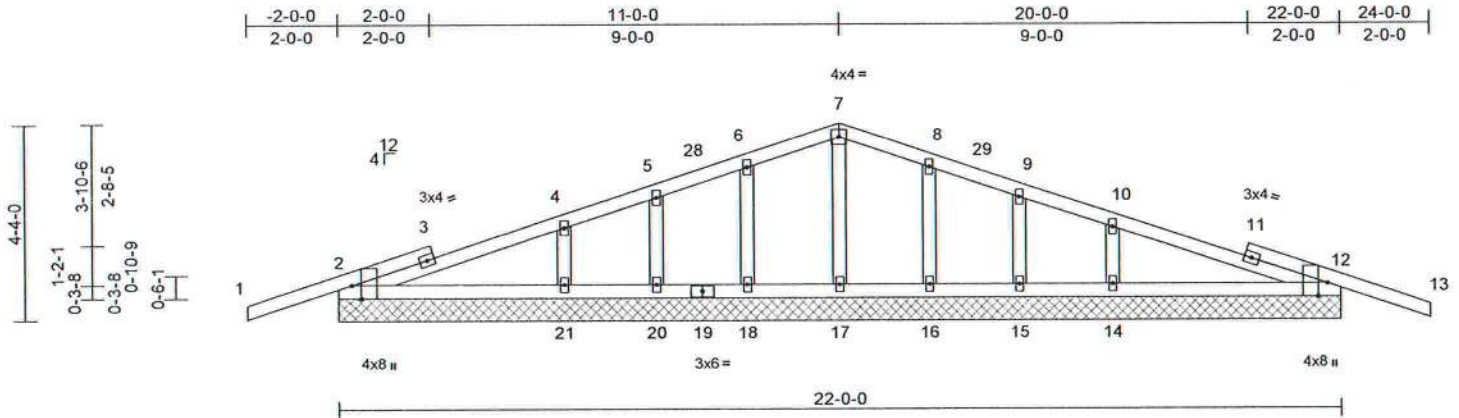
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T05G	Common Supported Gable	1	1	T30949295
Job Reference (optional)					

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:23
ID:CKGyYBxDAG3E0mtWbrW63z1Q89-RfC?PbB70Hq3NSgPqnL8w3ulTXbGKwCDoi7J4zJC7f

Page: 1



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Plate Offsets (X, Y): [2:0-3-8,Edge], [12:0-3-8,Edge]

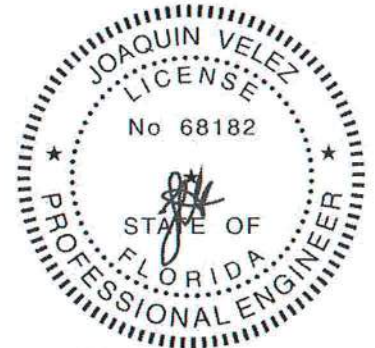
Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.26	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.14	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	12	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							
Weight: 102 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 6-0-0 oc bracing.
REACTIONS (size)	
	2=22-0-0, 12=22-0-0, 14=22-0-0, 15=22-0-0, 16=22-0-0, 17=22-0-0, 18=22-0-0, 20=22-0-0, 21=22-0-0, 22=22-0-0, 25=22-0-0
Max Horiz	2=81 (LC 16), 22=81 (LC 16)
Max Uplift	2=185 (LC 8), 12=195 (LC 9), 14=160 (LC 13), 15=48 (LC 9), 16=89 (LC 13), 17=2 (LC 12), 18=90 (LC 12), 20=48 (LC 8), 21=159 (LC 12), 22=185 (LC 8), 25=195 (LC 9)
Max Grav	2=310 (LC 23), 12=310 (LC 24), 14=356 (LC 24), 15=68 (LC 1), 16=193 (LC 24), 17=155 (LC 1), 18=193 (LC 23), 20=68 (LC 1), 21=356 (LC 23), 22=310 (LC 23), 25=310 (LC 24)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/38, 2-4=-153/104, 4-5=-20/67, 5-6=-16/87, 6-7=-35/128, 7-8=-35/126, 8-9=-17/84, 9-10=-19/56, 10-12=-154/104, 12-13=0/38
BOT CHORD	2-21=-95/178, 20-21=-36/98, 18-20=-36/98, 17-18=-36/98, 16-17=-36/98, 15-16=-36/98, 14-15=-36/98, 12-14=-95/176
WEBS	7-17=-120/25, 6-18=-143/161, 5-20=-64/73, 4-21=-245/190, 8-16=-143/161, 9-15=-64/73, 10-14=-245/190

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -2-0-0 to 1-2-8, Exterior(2N) 1-2-8 to 11-0-0, Corner(3R) 11-0-0 to 14-0-0, Exterior (2N) 14-0-0 to 24-0-0 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 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 185 lb uplift at joint 2, 195 lb uplift at joint 12, 2 lb uplift at joint 17, 90 lb uplift at joint 18, 48 lb uplift at joint 20, 159 lb uplift at joint 21, 89 lb uplift at joint 16, 48 lb uplift at joint 15, 160 lb uplift at joint 14, 185 lb uplift at joint 2 and 195 lb uplift at joint 12.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

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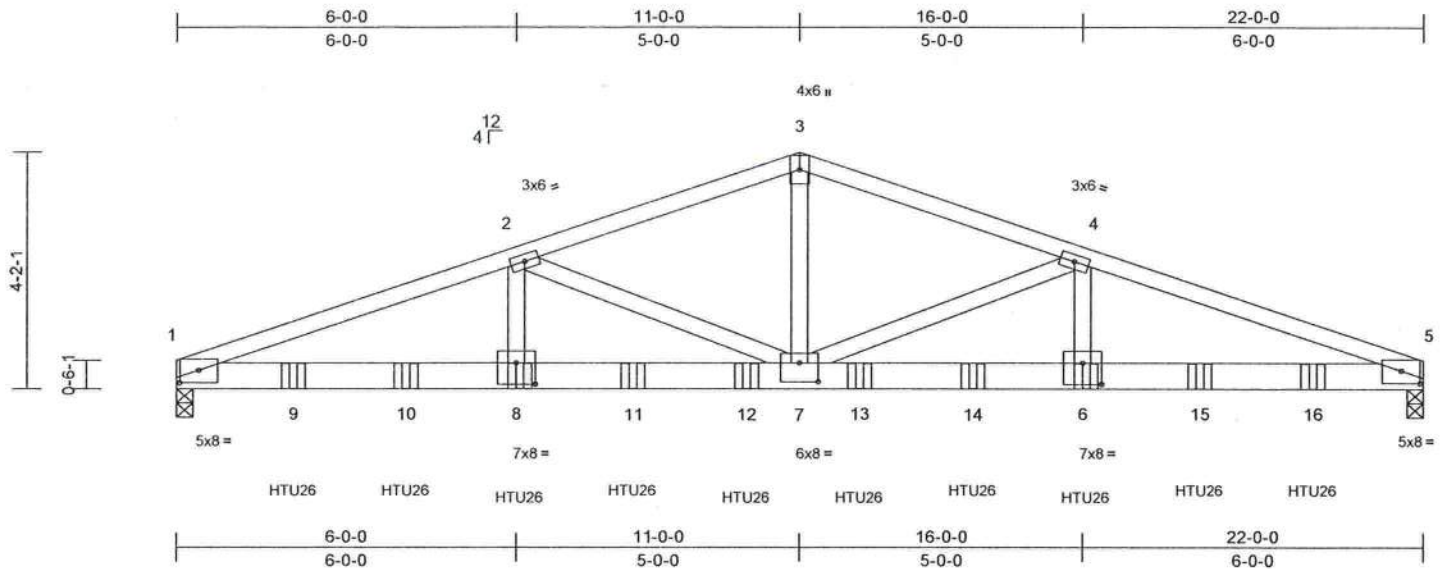
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T06	Common Girder	1	3	T30949296
Job Reference (optional)					

Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:23
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Page: 1



Scale = 1:39.1

Plate Offsets (X, Y): [1:0-4-0,0-2-10], [5:0-4-0,0-2-10], [6:0-4-0,0-4-8], [7:0-4-0,0-4-0], [8:0-4-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	1.00	Vert(LL)	0.20	6-7	>999	240	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.57	Vert(CT)	-0.37	6-7	>710	180	
BCLL	0.0*	Rep Stress Incr	NO	WB	0.89	Horz(CT)	0.08	5	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S							
Weight: 335 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP M 26
WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-6-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=0-3-8, 5=0-3-8
Max Horiz 1=-77 (LC 26)
Max Uplift 1=-2496 (LC 4), 5=-2512 (LC 5)
Max Grav 1=6880 (LC 1), 5=6958 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-16370/5910, 2-3=-11604/4195,
3-4=-11604/4195, 4-5=-16411/5912
BOT CHORD 1-7=-5560/15351, 5-7=-5505/15390
WEBS 3-7=-2492/6985, 4-7=-4826/1830,
4-6=-1180/3469, 2-7=-4784/1828,
2-8=-1179/3439

NOTES

- 3-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: 2x6 - 2 rows staggered at 0-7-0 oc.
Web 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=4.2psf; BCDL=3.0psf; h=15ft;
Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP M 26 crushing capacity of 805 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2496 lb uplift at joint 1 and 2512 lb uplift at joint 5.
- Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 20-0-12 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-5=-60, 1-5=-20
Concentrated Loads (lb)
Vert: 6=-1207 (F), 8=-1207 (F), 9=-1207 (F),
10=-1207 (F), 11=-1207 (F), 12=-1207 (F), 13=-1207 (F), 14=-1207 (F), 15=-1220 (F), 16=-1224 (F)



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd, Chesterfield, MO 63017
Date:

June 30,2023

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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MiTek

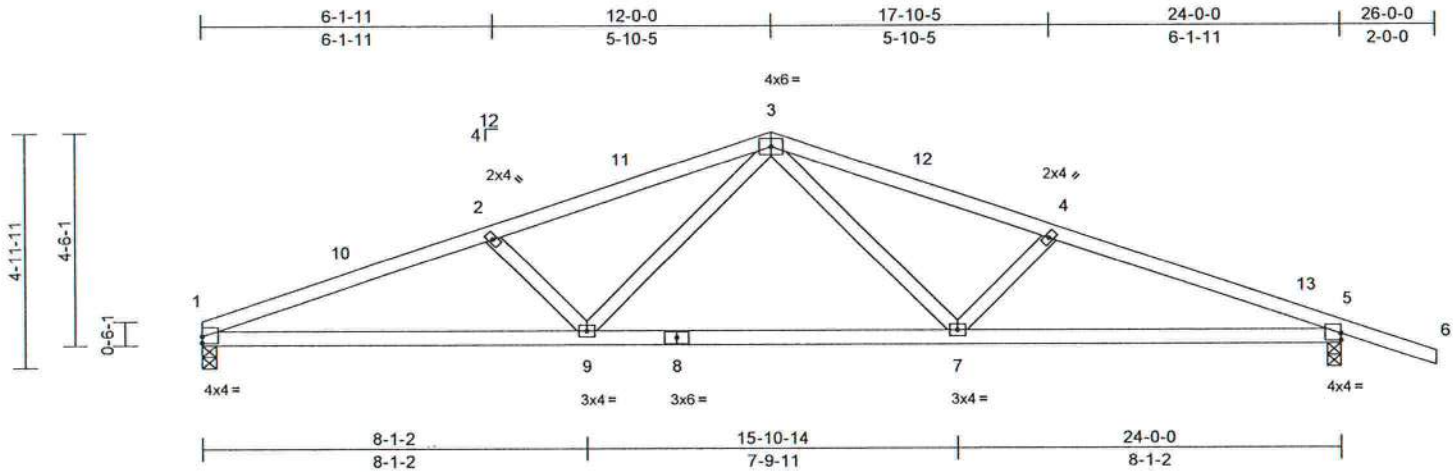
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T07	Common	3	1	T30949297
Job Reference (optional)					

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:24
ID:IULcAvyzR_s8JwB0RELDWhz1Q6r-RIC?PsB70Hq3NSgPqnL8w3uiTXbGKWCDoi7J4zJC7f

Page: 1



Scale = 1:46.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.53	Vert(LL)	-0.13	1-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.80	Vert(CT)	-0.30	1-9	>936	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.07	5	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S							Weight: 102 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-3-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-10-5 oc bracing.

REACTIONS

(size) 1=0-3-8, 5=0-3-8
Max Horiz 1=-104 (LC 17)
Max Uplift 1=-333 (LC 8), 5=-456 (LC 9)
Max Grav 1=943 (LC 1), 5=1083 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-2126/874, 2-3=-1879/789,
3-4=-1851/773, 4-5=-2101/857, 5-6=0/27

BOT CHORD 1-9=-739/1955, 7-9=-438/1332,
5-7=-730/1913

WEBS 2-9=-363/284, 3-9=-220/599, 3-7=-200/563,
4-7=-338/268

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft;
Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 12-0-0, Exterior(2R) 12-0-0 to 15-0-0, Interior (1) 15-0-0 to 26-0-0 zone; 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 3-06-00 tall by 2-00-00 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 333 lb uplift at joint 1 and 456 lb uplift at joint 5.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

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

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MiTek

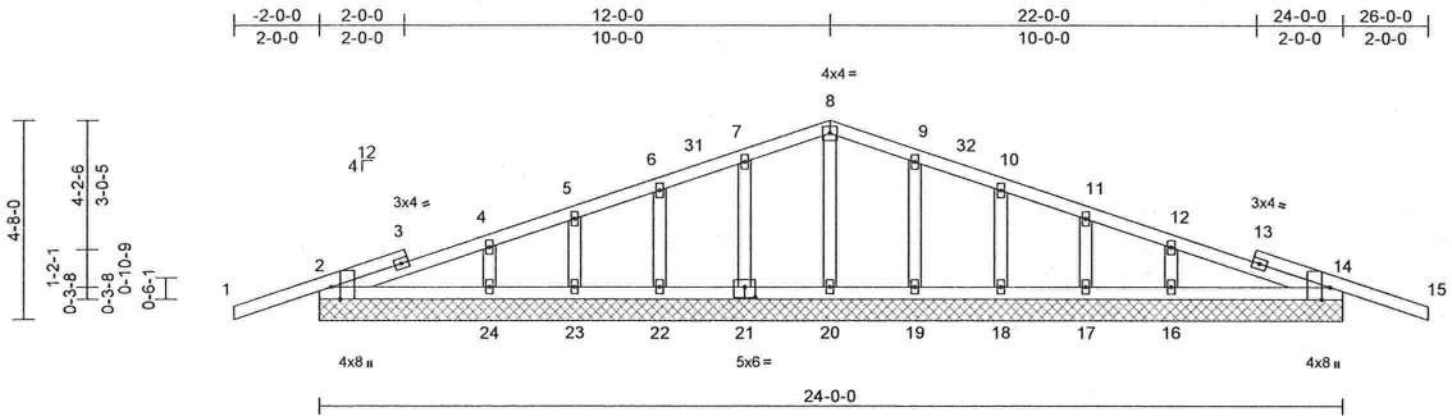
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T07G	Common Supported Gable	1	1	T30949298
Job Reference (optional)					

Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:24
ID:2wNyyZs?m1lVpRQKUBp2bz1Q5g-RIC?Psb70Hq3NSgPqnL8w3uITxbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:52

Plate Offsets (X, Y): [2:0-3-8,Edge], [14:0-3-8,Edge], [21:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.26	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.08	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	28	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							
Weight: 114 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 6-0-0 oc bracing.

REACTIONS (size)
2=24-0-0, 14=24-0-0, 16=24-0-0,
17=24-0-0, 18=24-0-0, 19=24-0-0,
20=24-0-0, 21=24-0-0, 22=24-0-0,
23=24-0-0, 24=24-0-0, 25=24-0-0,
28=24-0-0
Max Horiz 2=88 (LC 13), 25=88 (LC 13)
Max Uplift 2=179 (LC 8), 14=190 (LC 9),
16=113 (LC 13), 17=72 (LC 9),
18=78 (LC 13), 19=79 (LC 9),
21=79 (LC 8), 22=78 (LC 12),
23=72 (LC 8), 24=112 (LC 12),
25=179 (LC 8), 28=190 (LC 9)
Max Grav 2=291 (LC 23), 14=291 (LC 24),
16=258 (LC 24), 17=124 (LC 24),
18=168 (LC 1), 19=167 (LC 24),
20=151 (LC 1), 21=167 (LC 23),
22=168 (LC 1), 23=124 (LC 23),
24=258 (LC 23), 25=291 (LC 23),
28=291 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/38, 2-4=-144/101, 4-5=-42/68,
5-6=-29/85, 6-7=-43/115, 7-8=-57/151,
8-9=-57/146, 9-10=-43/111, 10-11=-29/75,
11-12=-24/42, 12-14=-137/101, 14-15=0/38
BOT CHORD 2-24=-95/163, 23-24=-21/85, 22-23=-21/85,
20-22=-21/85, 19-20=-21/85, 18-19=-21/85,
17-18=-21/85, 16-17=-21/85, 14-16=-95/160

WEBS
8-20=-111/13, 7-21=-128/150,
6-22=-124/101, 5-23=-99/88, 4-24=-182/129,
9-19=-128/150, 10-18=-124/101,
11-17=-99/88, 12-16=-182/130

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BCDL=3.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -2-0-0 to 1-2-8, Exterior(2N) 1-2-8 to 12-0-0, Corner(3R) 12-0-0 to 15-0-0, Exterior (2N) 15-0-0 to 26-0-0 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.
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - 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 3-06-00 tall by 2-00-00 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.

- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 179 lb uplift at joint 2, 190 lb uplift at joint 14, 79 lb uplift at joint 21, 78 lb uplift at joint 22, 72 lb uplift at joint 23, 112 lb uplift at joint 24, 79 lb uplift at joint 19, 78 lb uplift at joint 18, 72 lb uplift at joint 17, 113 lb uplift at joint 16, 179 lb uplift at joint 2 and 190 lb uplift at joint 14.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

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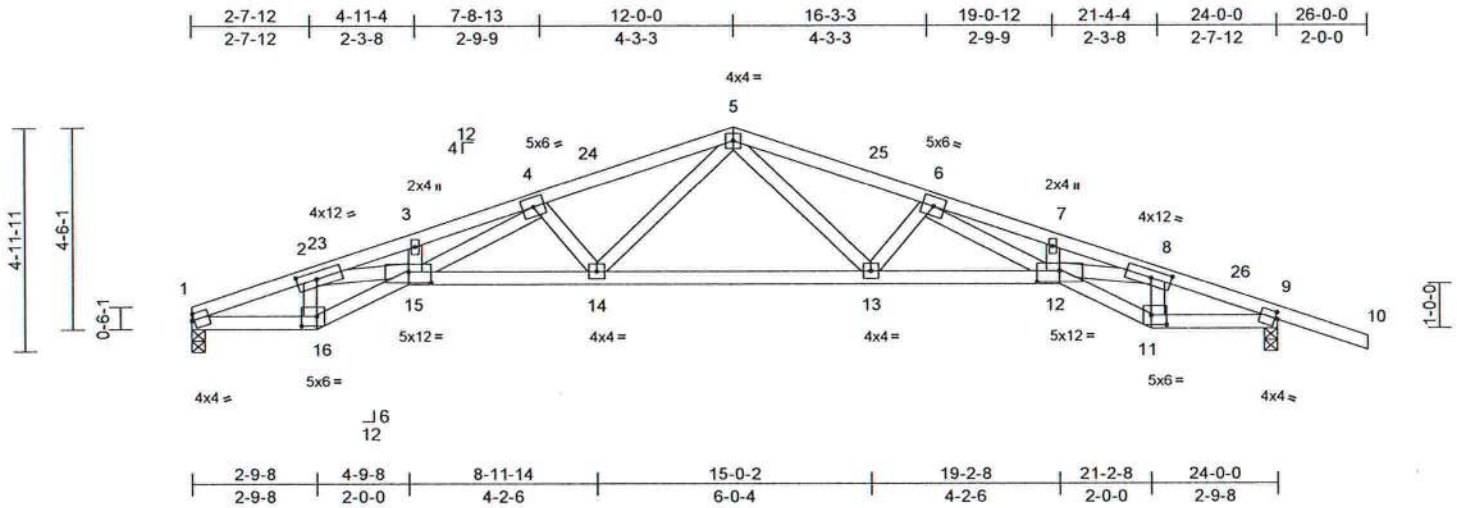
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T08	Roof Special	6	1	T30949299
Job Reference (optional)					

Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:24
ID:n7B9YUdbOuinKtbU9p2zOz1Q3O-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKwCDoi7J4zJC7f

Page: 1



Scale = 1:49.2

Plate Offsets (X, Y): [1:0-0-11,0-1-12], [2:0-5-4,0-2-0], [8:0-5-4,0-2-0], [9:0-0-11,0-1-12], [11:0-4-0,0-2-8], [12:0-6-0,0-3-0], [15:0-6-0,0-3-0], [16:0-4-0,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.56	Vert(LL)	0.29	14-15	>990	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.81	Vert(CT)	-0.60	13-14	>479	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.26	9	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 115 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-3-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-9-8 oc bracing.

REACTIONS (size) 1=0-3-8, 9=0-3-8
Max Horiz 1=-108 (LC 13)
Max Uplift 1=-338 (LC 8), 9=-452 (LC 9)
Max Grav 1=955 (LC 1), 9=1085 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-2168/874, 2-3=-4525/1739,
3-4=-4487/1766, 4-5=-2617/1060,
5-6=-2602/1060, 6-7=-4407/1721,
7-8=-4438/1695, 8-9=-2066/810, 9-10=0/38
BOT CHORD 1-16=-759/2008, 15-16=-789/2101,
14-15=-1024/2870, 13-14=-586/1782,
12-13=-1037/2845, 11-12=-730/1990,
9-11=-704/1903

WEBS 7-12=-30/64, 8-12=-866/2403,
8-11=-927/374, 3-15=-16/54,
2-15=-841/2382, 2-16=-954/387,
5-14=-354/961, 5-13=-348/940,
4-14=-711/357, 4-15=-623/1631,
6-13=-693/352, 6-12=-574/1571

NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft;
Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 12-0-0, Exterior(2R) 12-0-0 to 15-0-0, Interior (1) 15-0-0 to 26-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 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 338 lb uplift at joint 1 and 452 lb uplift at joint 9.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

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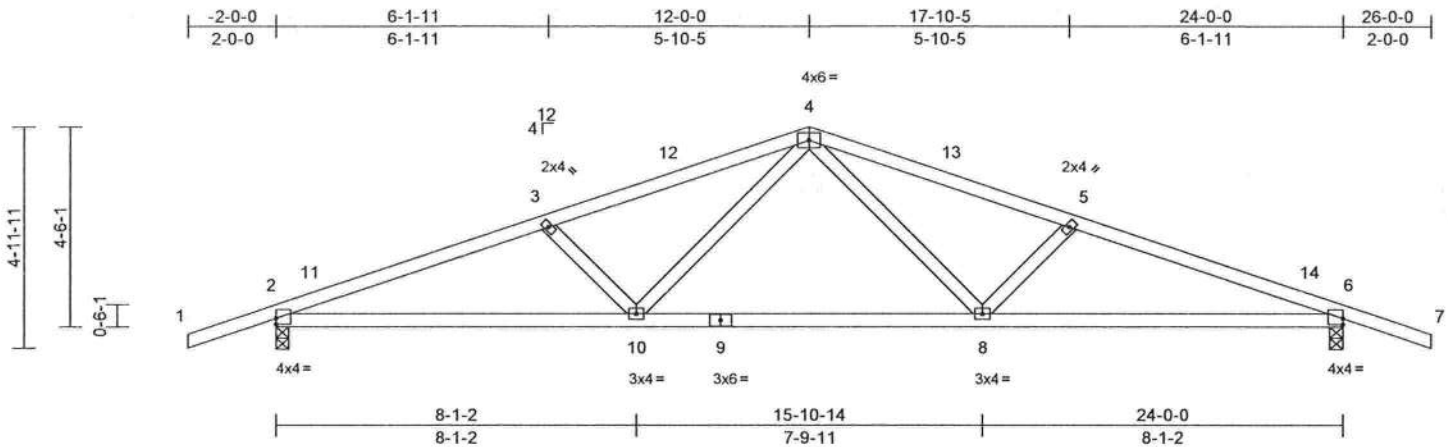
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T09	Common	7	1	T30949300
					Job Reference (optional)

Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

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Page: 1



Scale = 1:49.9

Plate Offsets (X, Y): [2:Edge,0-1-11], [6:Edge,0-1-11]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.41	Vert(LL)	-0.13	6-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.78	Vert(CT)	-0.29	2-10	>996	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.07	6	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S							Weight: 105 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-9-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-0-4 oc bracing.

REACTIONS

(size) 2=0-3-8, 6=0-3-8
Max Horiz 2=-94 (LC 13)
Max Uplift 2=-454 (LC 8), 6=-454 (LC 9)
Max Grav 2=1077 (LC 1), 6=1077 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/27, 2-3=-2085/835, 3-4=-1835/751,
4-5=-1835/751, 5-6=-2085/834, 6-7=0/27
BOT CHORD 2-10=-701/1898, 8-10=-416/1315,
6-8=-709/1898
WEBS 3-10=-338/268, 4-10=-200/564,
4-8=-200/564, 5-8=-338/268

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft;
Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior (1) 1-0-0 to 12-0-0, Exterior(2R) 12-0-0 to 15-0-0, Interior (1) 15-0-0 to 26-0-0 zone; 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 3-06-00 tall by 2-00-00 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 454 lb uplift at joint 2 and 454 lb uplift at joint 6.
- LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023



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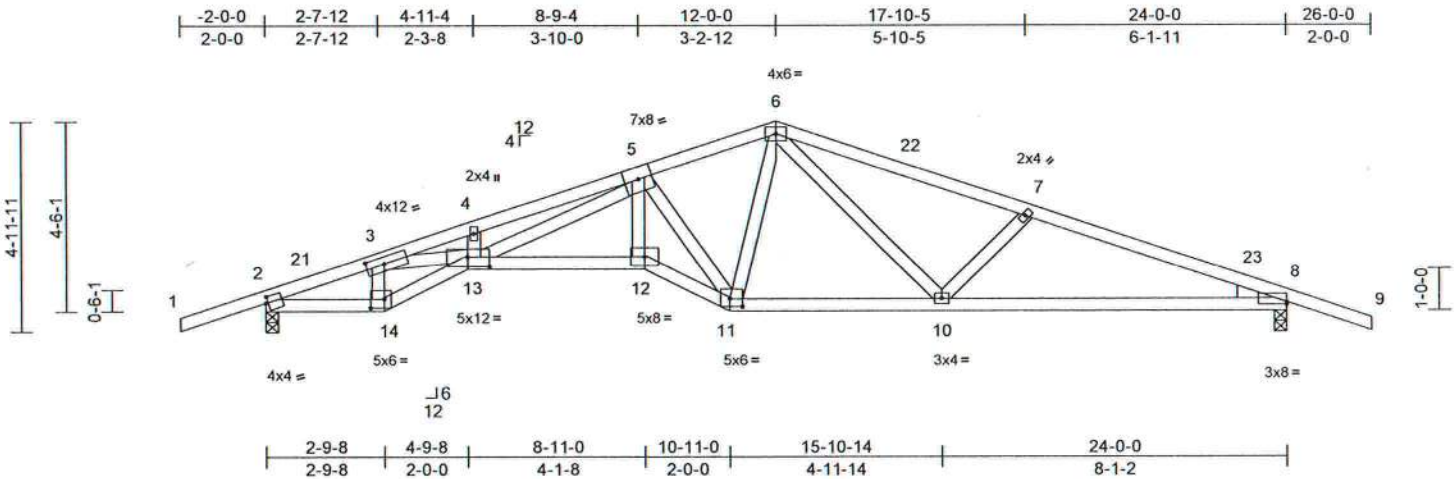
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T10	Roof Special	1	1	T30949301
Job Reference (optional)					

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:25
ID:lbWk6MveJ2tkN?tyyo4Shdz1Pui-RFC?PsB70Hq3NSgPqnl8w3ulTXbGKWCDoi7J4zJC7f

Page: 1



Scale = 1:52.2

Plate Offsets (X, Y): [2:0-0-11,0-1-12], [3:0-5-4,0-2-0], [8:Edge,0-0-11], [11:0-3-8,0-2-4], [13:0-6-0,0-2-12], [14:0-4-0,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.62	Vert(LL)	0.27	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.80	Vert(CT)	-0.54	12-13	>538	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.19	8	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS								
											Weight: 120 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-10 oc bracing.

REACTIONS (size) 2=0-3-8, 8=0-3-8
Max Horiz 2=-94 (LC 13)
Max Uplift 2=-450 (LC 8), 8=-450 (LC 9)
Max Grav 2=1080 (LC 1), 8=1080 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/38, 2-3=-2050/793, 3-4=-4423/1653,
4-5=-4429/1714, 5-6=-1577/700,
6-7=-1852/761, 7-8=-2111/854, 8-9=0/38
BOT CHORD 2-14=-671/1887, 13-14=-695/1972,
12-13=-845/2486, 11-12=-970/2867,
10-11=-431/1357, 8-10=-729/1945
WEBS 3-14=-911/351, 3-13=-860/2407,
4-13=-121/123, 5-13=-739/1932,
5-12=-417/1353, 6-11=-180/452,
6-10=-199/529, 7-10=-372/274,
5-11=-1956/729

- 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 3-06-00 tall by 2-00-00 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 450 lb uplift at joint 2 and 450 lb uplift at joint 8.
- LOAD CASE(S) Standard

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft;
Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior (1) 1-0-0 to 12-0-0, Exterior(2R) 12-0-0 to 15-0-0, Interior (1) 15-0-0 to 26-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

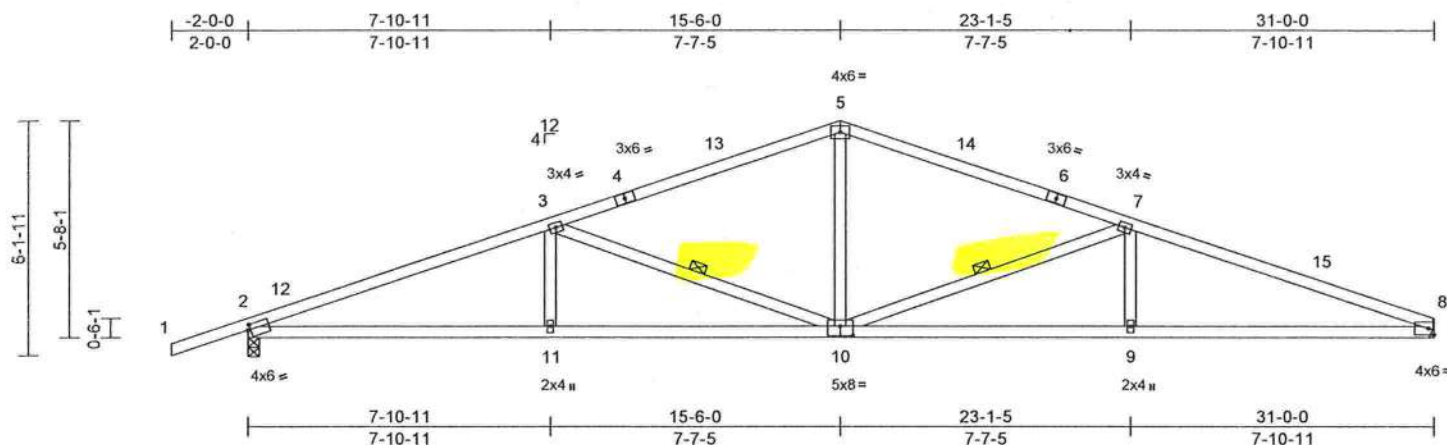
Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T11	Common	8	1	T30949302
					Job Reference (optional)

Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:25

Page: 1

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Scale = 1:58

Plate Offsets (X, Y): [2:0-0-11,0-1-10], [10:0-4-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.92	Vert(LL)	0.18	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.92	Vert(CT)	-0.40	10-11	>928	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.13	8	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S							Weight: 136 lb	FT = 20%

LUMBER	
TOP CHORD	2x4 SP No.2 *Except* 6-8:2x4 SP 2850F
	2.0E or 2x4 SP M 31
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
BRACING	
TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 3-10, 7-10
REACTIONS	
(size)	2=0-3-8, 8= Mechanical
Max Horiz	2=127 (LC 12)
Max Uplift	2=-555 (LC 8), 8=-434 (LC 9)
Max Grav	2=1365 (LC 1), 8=1227 (LC 1)
FORCES	
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/27, 2-3=-2875/1116, 3-5=-1974/829, 5-7=-1976/840, 7-8=-2913/1142
BOT CHORD	2-11=-987/2632, 9-11=-1006/2692, 8-9=-1006/2692
WEBS	3-11=0/332, 3-10=-930/461, 5-10=-256/796, 7-10=-994/496, 7-9=0/337

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -2-0-0 to 1-1-3, Interior (1) 1-1-3 to 15-6-0, Exterior(2R) 15-6-0 to 18-7-3, Interior (1) 18-7-3 to 30-11-4 zone; 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 555 lb uplift at joint 2 and 434 lb uplift at joint 8.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

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MiTek

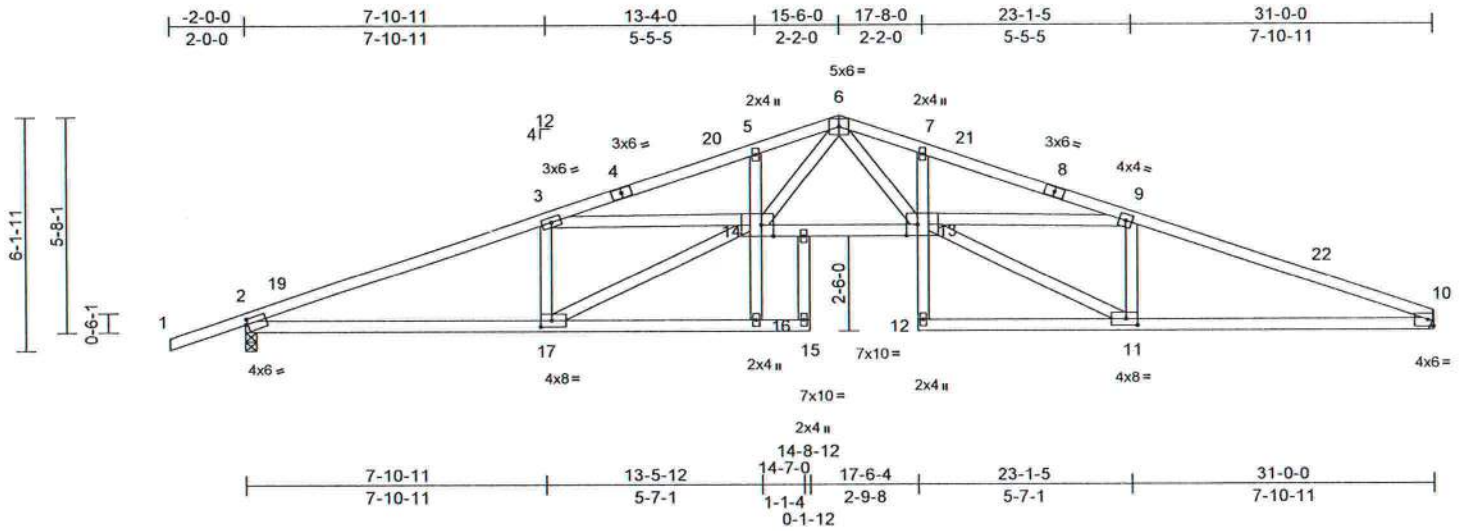
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T11A	Roof Special	1	1	T30949303
Job Reference (optional)					

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:26
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Page: 1



Scale = 1:58

Plate Offsets (X, Y): [2:0-0-11,0-1-10], [11:0-3-8,0-2-0], [13:0-3-8,Edge], [14:0-3-12,Edge], [17:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.56	Vert(LL)	-0.41	15	>895	240	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.93	Vert(CT)	-0.84	15	>438	180	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.36	10	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S							
Weight: 166 lb FT = 20%											

LUMBER	
TOP CHORD	2x4 SP No.2 *Except* 1-4,8-10:2x4 SP 2850F 2.0E or 2x4 SP M 31
BOT CHORD	2x4 SP No.2 *Except* 7-12,5-16:2x4 SP No.3
WEBS	2x4 SP No.3 *Except* 17-14,13-11:2x4 SP No.2
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 2-4-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing. Except: 10-0-0 oc bracing: 14-16
REACTIONS (size) 2=0-3-8, 10= Mechanical	
	Max Horiz 2=127 (LC 16)
	Max Uplift 2=-550 (LC 8), 10=-430 (LC 9)
	Max Grav 2=1380 (LC 1), 10=1240 (LC 1)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/27, 2-3=-2900/1088, 3-5=-4633/1716, 5-6=-4611/1773, 6-7=-4596/1764, 7-9=-4620/1716, 9-10=-2931/1120
BOT CHORD	2-17=-959/2654, 16-17=-23/63, 15-16=0/0, 13-14=-1070/3336, 12-13=0/78, 7-13=-158/140, 11-12=-20/60, 10-11=-983/2708, 14-16=0/144, 5-14=-171/147
WEBS	3-17=-1041/473, 6-14=-645/1712, 6-13=-658/1691, 9-11=-1053/484, 3-14=-495/1680, 14-17=-1030/2850, 9-13=-459/1611, 11-13=-1060/2913

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -2-0-0 to 1-1-3, Interior (1) 1-1-3 to 15-6-0, Exterior(2R) 15-6-0 to 18-7-3, Interior (1) 18-7-3 to 30-11-4 zone;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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 550 lb uplift at joint 2 and 430 lb uplift at joint 10.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

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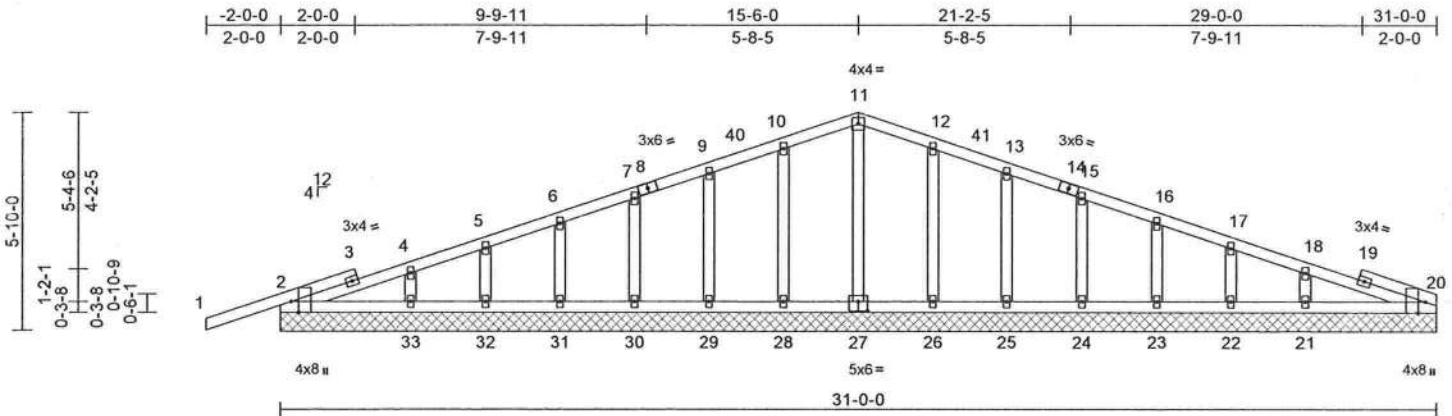
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T11G	Common Supported Gable	1	1	T30949304
Job Reference (optional)					

Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:26
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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.26	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.09	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	20	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							
Weight: 155 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 (size)
2=31-0-0, 20=31-0-0, 21=31-0-0, 22=31-0-0, 23=31-0-0, 24=31-0-0, 25=31-0-0, 26=31-0-0, 27=31-0-0, 28=31-0-0, 29=31-0-0, 30=31-0-0, 31=31-0-0, 32=31-0-0, 33=31-0-0, 34=31-0-0, 37=31-0-0
Max Horiz 2=125 (LC 16), 34=125 (LC 16)
Max Uplift 2=167 (LC 8), 20=29 (LC 9), 21=126 (LC 9), 22=57 (LC 13), 23=80 (LC 9), 24=74 (LC 13), 25=76 (LC 9), 26=75 (LC 13), 28=79 (LC 12), 29=75 (LC 8), 30=76 (LC 8), 31=76 (LC 12), 32=80 (LC 8), 33=89 (LC 12), 34=167 (LC 8), 37=29 (LC 9)
Max Grav 2=283 (LC 1), 20=120 (LC 1), 21=276 (LC 1), 22=119 (LC 24), 23=171 (LC 1), 24=158 (LC 24), 25=159 (LC 1), 26=169 (LC 24), 27=144 (LC 1), 28=169 (LC 23), 29=159 (LC 1), 30=159 (LC 23), 31=164 (LC 1), 32=144 (LC 23), 33=213 (LC 1), 34=283 (LC 1), 37=120 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/38, 2-4=153/102, 4-5=77/60, 5-6=55/78, 6-7=38/97, 7-9=48/116, 9-10=61/143, 10-11=74/173, 11-12=74/165, 12-13=61/130, 13-15=48/98, 15-16=36/67, 16-17=25/36, 17-18=39/14, 18-20=61/27
BOT CHORD 2-33=97/137, 32-33=19/76, 31-32=19/76, 30-31=19/76, 29-30=19/76, 28-29=19/76, 26-28=19/76, 25-26=19/76, 24-25=19/76, 23-24=19/76, 22-23=19/76, 21-22=19/76, 20-21=19/76
WEBS 11-27=104/0, 10-28=129/151, 9-29=119/89, 7-30=120/87, 6-31=122/88, 5-32=111/89, 4-33=154/97, 12-26=129/150, 13-25=119/89, 15-24=119/87, 16-23=125/90, 17-22=99/78, 18-21=184/116

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -2-0-0 to 1-2-8, Exterior(2N) 1-2-8 to 15-6-0, Corner(3R) 15-6-0 to 18-7-3, Exterior (2N) 18-7-3 to 31-0-0 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 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 167 lb uplift at joint 2, 29 lb uplift at joint 20, 79 lb uplift at joint 28, 75 lb uplift at joint 29, 76 lb uplift at joint 30, 76 lb uplift at joint 31, 80 lb uplift at joint 32, 89 lb uplift at joint 33, 78 lb uplift at joint 26, 76 lb uplift at joint 25, 74 lb uplift at joint 24, 80 lb uplift at joint 23, 57 lb uplift at joint 22, 126 lb uplift at joint 21, 167 lb uplift at joint 2 and 29 lb uplift at joint 20.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MITek Inc. DBA MITek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

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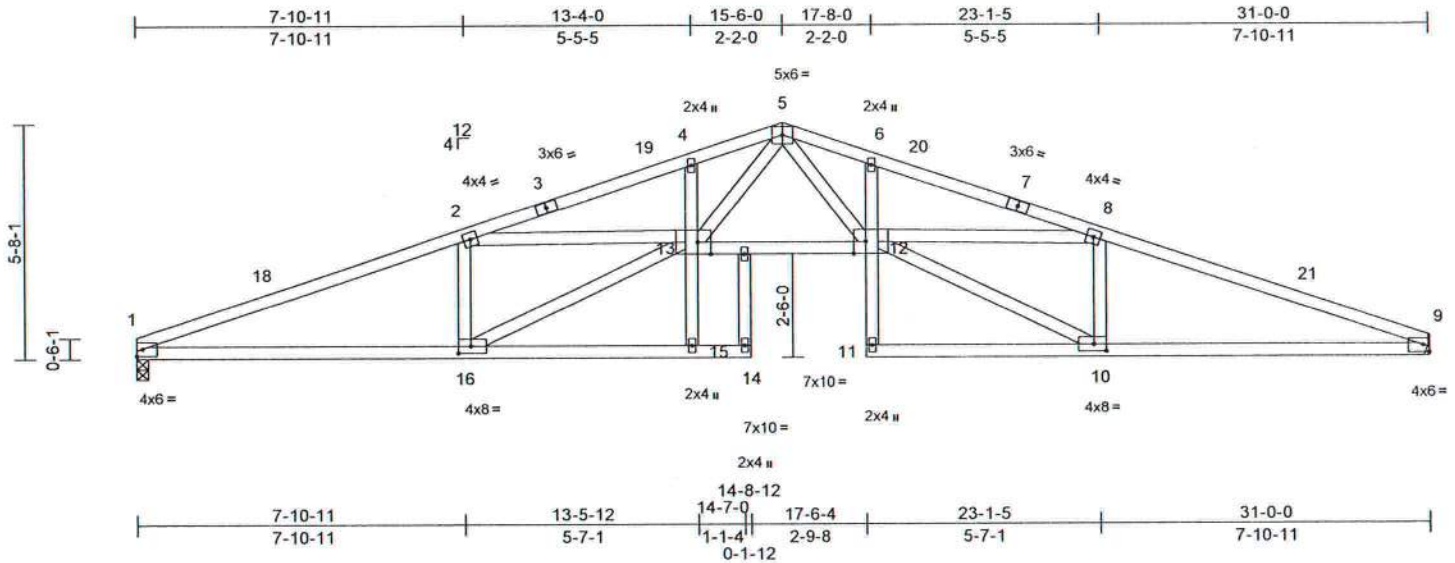
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T12A	Roof Special	1	1	T30949305
Job Reference (optional)					

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:27
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Page: 1



Scale = 1:53.3

Plate Offsets (X, Y): [10:0-3-8,0-2-0], [12:0-3-8,Edge], [13:0-3-12,Edge], [16:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.56	Vert(LL)	-0.42	14	>885	240	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.93	Vert(CT)	-0.85	14	>434	180	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.37	9	n/a	n/a	
BCDL	10.0	Code	FBC2020/TP12014	Matrix-S							
Weight: 163 lb FT = 20%											

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 1-3,7-9:2x4 SP 2850F 2.0E or 2x4 SP M 31
BOT CHORD 2x4 SP No.2 *Except* 6-11,4-15:2x4 SP No.3
WEBS 2x4 SP No.3 *Except* 12-10,13-16:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-4-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except: 10-0-0 oc bracing: 13-15

REACTIONS (size) 1=0-3-8, 9= Mechanical
Max Horiz 1=109 (LC 16)
Max Uplift 1=430 (LC 8), 9=432 (LC 9)
Max Grav 1=1247 (LC 1), 9=1244 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2932/1118, 2-4=-4668/1731, 4-5=-4644/1789, 5-6=-4625/1791, 6-8=-4649/1734, 8-9=-2945/1127
BOT CHORD 1-16=-985/2705, 15-16=-23/63, 14-15=0/0, 12-13=-1083/3361, 11-12=0/78, 6-12=-158/138, 10-11=-20/61, 9-10=-990/2720, 13-15=0/143, 4-13=-159/140
WEBS 2-16=-1058/483, 5-13=-652/1726, 5-12=-664/1695, 8-10=-1059/487, 2-13=-484/1659, 8-12=-475/1626, 10-12=-1067/2926, 13-16=-1058/2907

NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-2-15, Interior (1) 3-2-15 to 15-6-0, Exterior(2R) 15-6-0 to 18-7-3, Interior (1) 18-7-3 to 30-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 6) Bearings are assumed to be: Joint 1 SP No.2 crushing capacity of 565 psi.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 430 lb uplift at joint 1 and 432 lb uplift at joint 9.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
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MiTek

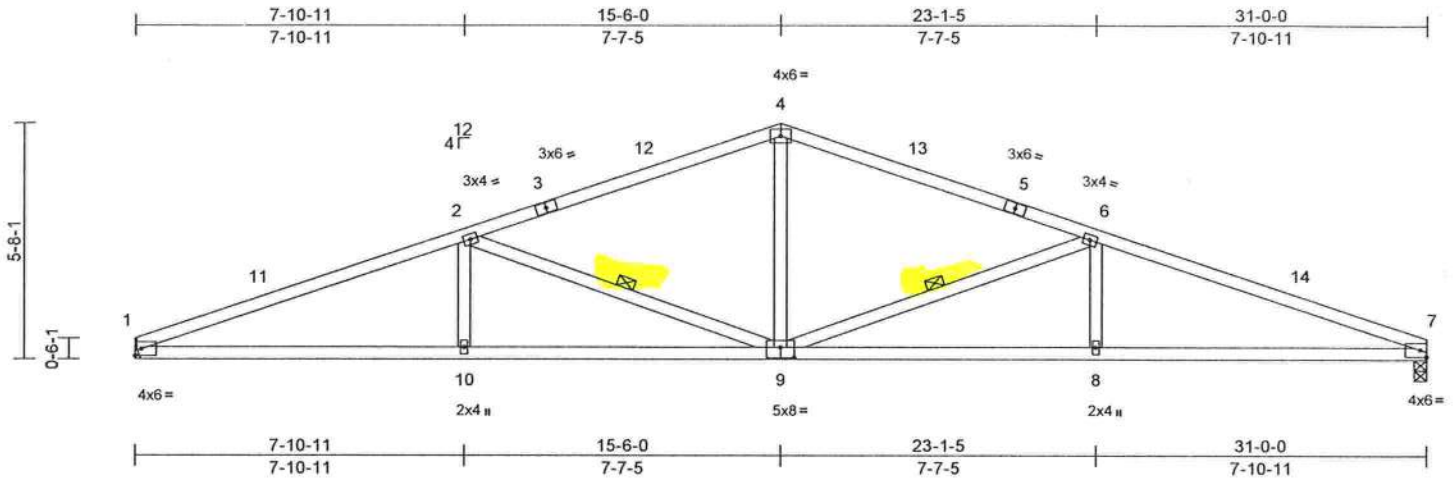
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T13	Common	1	1	T30949306
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:27
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Page: 1



Scale = 1:53.3

Plate Offsets (X, Y): [9:0-4-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.72	Vert(LL)	0.18	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.92	Vert(CT)	-0.38	9-10	>975	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.14	7	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S							Weight: 133 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 3-1,5-7:2x4 SP 2850F
2.0E or 2x4 SP M 31
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or
2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc
bracing.
WEBS 1 Row at midpt 2-9, 6-9

REACTIONS (size) 1= Mechanical, 7=0-3-8
Max Horiz 1=109 (LC 12)
Max Uplift 1=-435 (LC 8), 7=-435 (LC 9)
Max Grav 1=1232 (LC 1), 7=1232 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=-2926/1149, 2-4=-1988/846,
4-6=-1988/846, 6-7=-2908/1142
BOT CHORD 1-10=-1024/2705, 8-10=-1024/2705,
7-8=-1009/2685
WEBS 2-10=0/337, 2-9=-994/495, 4-9=-265/811,
6-9=-975/489, 6-8=0/335

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft;
Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior
zone and C-C Exterior(2E) 0-0-12 to 3-1-15, Interior (1)
3-1-15 to 15-6-0, Exterior(2R) 15-6-0 to 18-7-3, Interior
(1) 18-7-3 to 30-10-4 zone;C-C for members and forces
& MWFRS for reactions shown; Lumber DOL=1.60 plate
grip DOL=1.60
- 3) Building Designer / Project engineer responsible for
verifying applied roof live load shown covers rain loading
requirements specific to the use of this truss component.

- 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
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
 - 6) Bearings are assumed to be: , Joint 7 SP No.2 crushing
capacity of 565 psi.
 - 7) Refer to girder(s) for truss to truss connections.
 - 8) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 435 lb uplift at
joint 1 and 435 lb uplift at joint 7.
- LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK 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
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



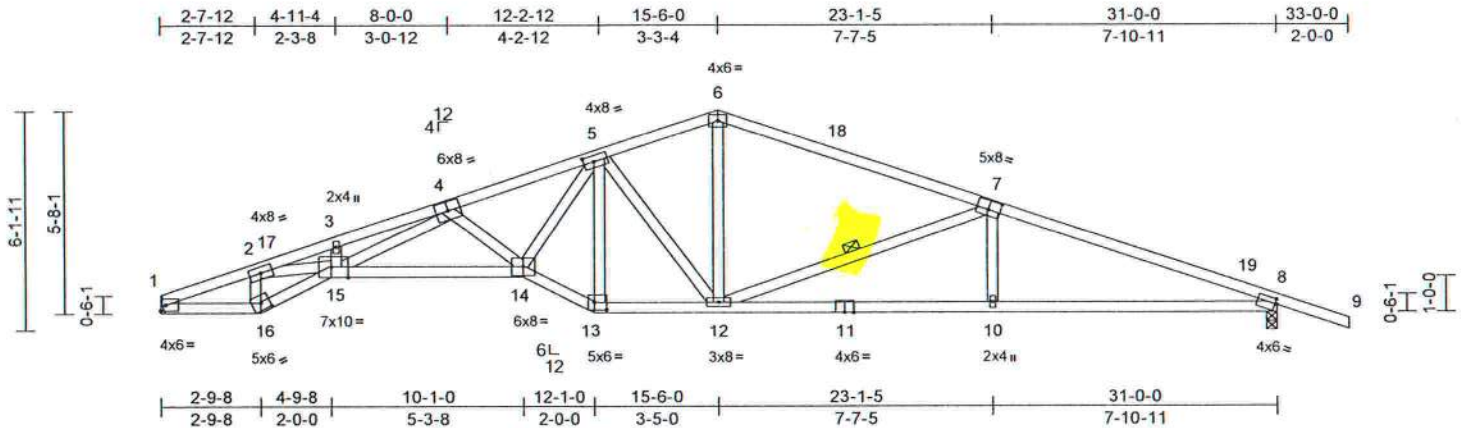
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T14	Roof Special	1	1	T30949307
Job Reference (optional)					

Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

Run: 8 63 S Apr 6 2023 Print: 8 630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:27
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Page: 1



Scale = 1:61.7

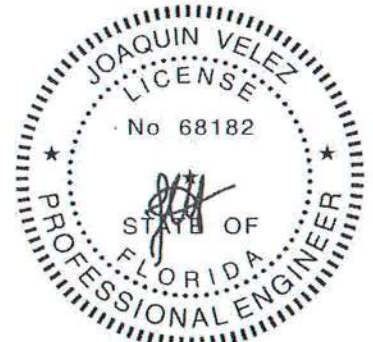
Plate Offsets (X, Y): [5:0-3-6,0-2-0], [7:0-4-0,0-3-0], [8:0-0-11,0-1-10], [13:0-4-0,0-2-8], [15:0-5-12,Edge], [16:0-3-0,0-2-7]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.94	Vert(LL)	0.36	14-15	>999	240	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.90	Vert(CT)	-0.71	14-15	>517	180	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.27	8	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S							
Weight: 155 lb FT = 20%											

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except* 15-14:2x4 SP No.1
WEBS	2x4 SP No.3 *Except* 15-2:2x4 SP No.2
BRACING	
TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied or 5-3-7 oc bracing.
WEBS	1 Row at midpt 7-12
REACTIONS (size) 1= Mechanical, 8=0-3-8	
	Max Horiz 1=-127 (LC 13)
	Max Uplift 1=-434 (LC 8), 8=-555 (LC 9)
	Max Grav 1=1227 (LC 1), 8=1365 (LC 1)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-2953/1165, 2-3=-5930/2254, 3-5=-5872/2270, 5-6=-1906/852, 6-8=-2877/1114, 8-9=0/27
BOT CHORD	1-16=-1021/2702, 15-16=-1054/2808, 14-15=-1418/3894, 13-14=-792/2340, 12-13=-721/2119, 10-12=-962/2630, 8-10=-961/2634
WEBS	2-16=-1099/440, 2-15=-1069/3022, 3-15=0/93, 5-14=-724/2065, 5-13=-1001/353, 5-12=-583/297, 6-12=-316/872, 7-12=-928/460, 7-10=0/341, 4-14=-896/422, 4-15=-728/1974

- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Bearings are assumed to be: Joint 8 SP No.2 crushing capacity of 565 psi.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 434 lb uplift at joint 1 and 555 lb uplift at joint 8.
- LOAD CASE(S) Standard

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-12 to 3-1-15, Interior (1) 3-1-15 to 15-6-0, Exterior(2R) 15-6-0 to 18-7-3, Interior (1) 18-7-3 to 33-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

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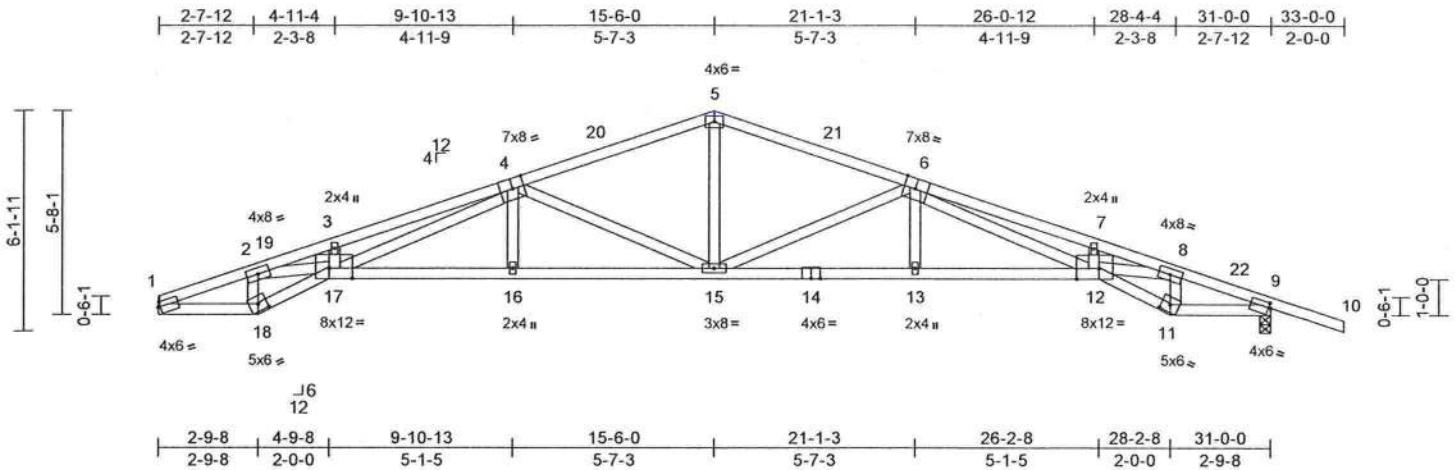
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T15	Roof Special	3	1	T30949308
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:28
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Plate Offsets (X, Y): [1:0-0-11,0-1-10], [4:0-3-12,Edge], [6:0-3-12,Edge], [9:0-0-11,0-1-10], [11:0-3-0,0-2-7], [12:0-7-8,Edge], [17:0-7-8,Edge], [18:0-3-0,0-2-7]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.87	Vert(LL)	0.45	16-17	>825	240	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.99	Vert(CT)	-0.88	15-16	>420	180	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.45	9	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S							
Weight: 155 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 1-4,6-10:2x4 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 12-8,17-2:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 1-10-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS

(size) 1= Mechanical, 9=0-3-8
Max Horiz 1=127 (LC 13)
Max Uplift 1=434 (LC 8), 9=555 (LC 9)
Max Grav 1=1227 (LC 1), 9=1365 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=2950/1161, 2-3=5920/2270,
3-5=5888/2310, 5-7=5707/2216,
7-8=5732/2175, 8-9=2763/1055, 9-10=0/27

BOT CHORD

1-18=1017/2698, 17-18=1049/2800,
16-17=1195/3393, 15-16=1195/3396,
13-15=1196/3358, 12-13=1197/3356,
11-12=942/2584, 9-11=915/2491
6-12=870/2293, 7-12=90/116,
8-12=1112/3048, 8-11=1010/399,
4-17=966/2445, 3-17=72/97,
2-17=1091/3023, 2-18=1079/433,
4-16=0/250, 4-15=1328/581,
5-15=407/1160, 6-15=1287/551,
6-13=0/249

WEBS

NOTES

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft;
Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-12 to 3-1-15, Interior (1) 3-1-15 to 15-6-0, Exterior(2R) 15-6-0 to 18-7-3, Interior (1) 18-7-3 to 33-0-0 zone;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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: , Joint 9 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 434 lb uplift at joint 1 and 555 lb uplift at joint 9.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

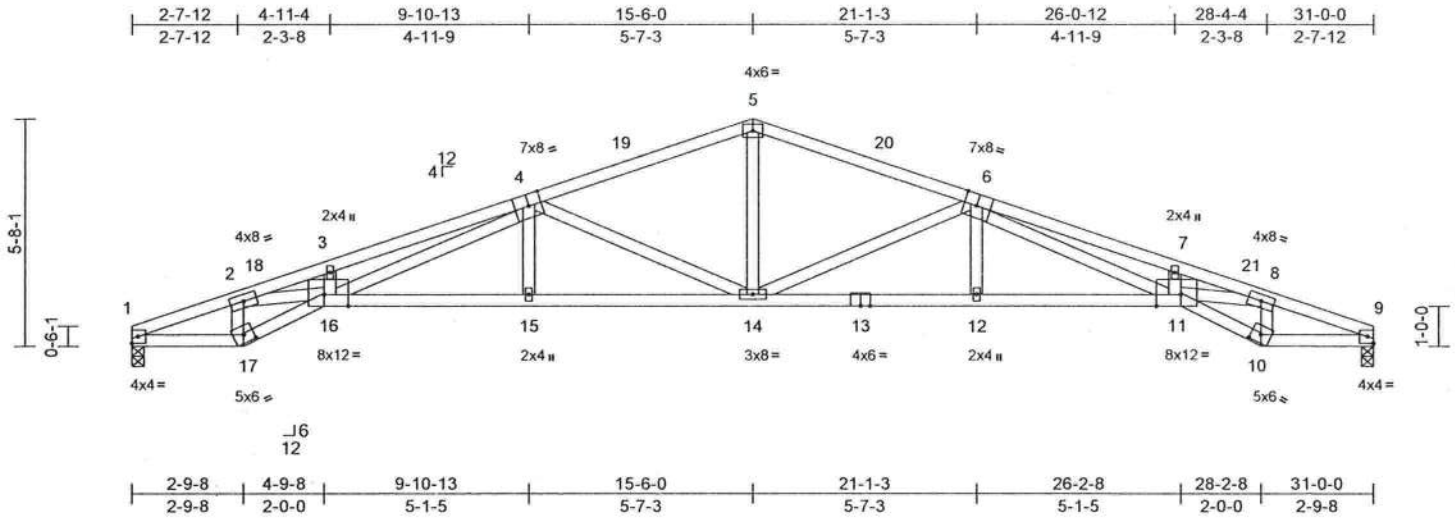
Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T17	Roof Special	1	1	T30949310
Job Reference (optional)					

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:29

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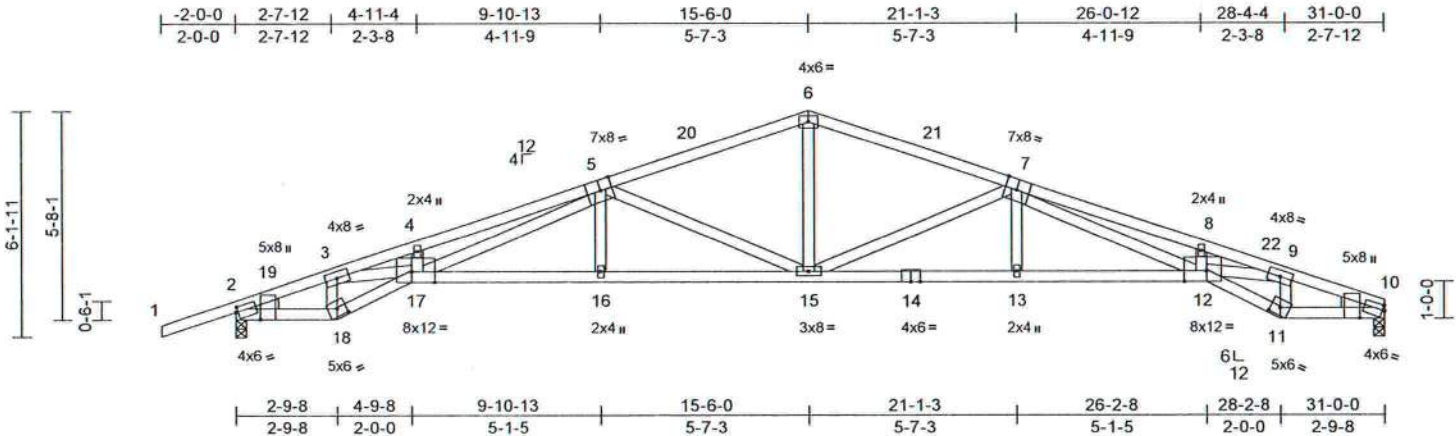


Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T18	Roof Special	2	1	T30949311
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:29
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Page: 1



Scale = 1:60

[2:0-0-11.0-1-10], [2:0-2-6,Edge], [5:0-3-12,Edge], [7:0-3-12,Edge], [10:0-0-11.0-1-10], [10:0-2-6,Edge], [11:0-3-0-2-7], [12:0-7-4,Edge], [17:0-7-4,Edge],
Plate Offsets (X, Y): [18:0-3-0-2-7]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.85	Vert(LL)	-0.43	15	>865	240	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.98	Vert(CT)	-0.86	13-15	>427	180	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.45	10	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S							
Weight: 157 lb FT = 20%											

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 1-5,7-10:2x4 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 12-9,17-3:2x4 SP No.2
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or
1-11-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc
bracing.

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=127 (LC 12)
Max Uplift 2=-554 (LC 8), 10=-432 (LC 9)
Max Grav 2=1362 (LC 1), 10=1224 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=0/27, 2-3=-2755/1052, 3-4=-5714/2195,
4-6=-5689/2236, 6-8=-5791/2300,
8-9=-5821/2259, 9-10=-2872/1131

BOT CHORD 2-18=-937/2483, 17-18=-965/2576,
16-17=-1225/3343, 15-16=-1225/3345,
13-15=-1218/3367, 12-13=-1218/3364,
11-12=-1040/2712, 10-11=-1008/2614

WEBS 7-12=-947/2373, 8-12=-74/101,
9-12=-1113/3010, 9-11=-1044/429,
5-17=-886/2288, 4-17=-91/112,
3-17=-1135/3038, 3-18=-1007/408,
5-16=0/249, 5-15=-1285/560,
6-15=-408/1152, 7-15=-1309/564,
7-13=0/250

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft;
Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior
zone and C-C Exterior(2E) -2-0-0 to 1-1-3, Interior (1)
1-1-3 to 15-6-0, Exterior(2R) 15-6-0 to 18-7-3, Interior
(1) 18-7-3 to 30-10-4 zone; C-C for members and forces
& MWFRS for reactions shown; Lumber DOL=1.60 plate
grip DOL=1.60
- 3) Building Designer / Project engineer responsible for
verifying applied roof live load shown covers rain loading
requirements specific to the use of this truss component.
- 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
3-06-00 tall by 2-00-00 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 554 lb uplift at
joint 2 and 432 lb uplift at joint 10.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

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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

MiTek

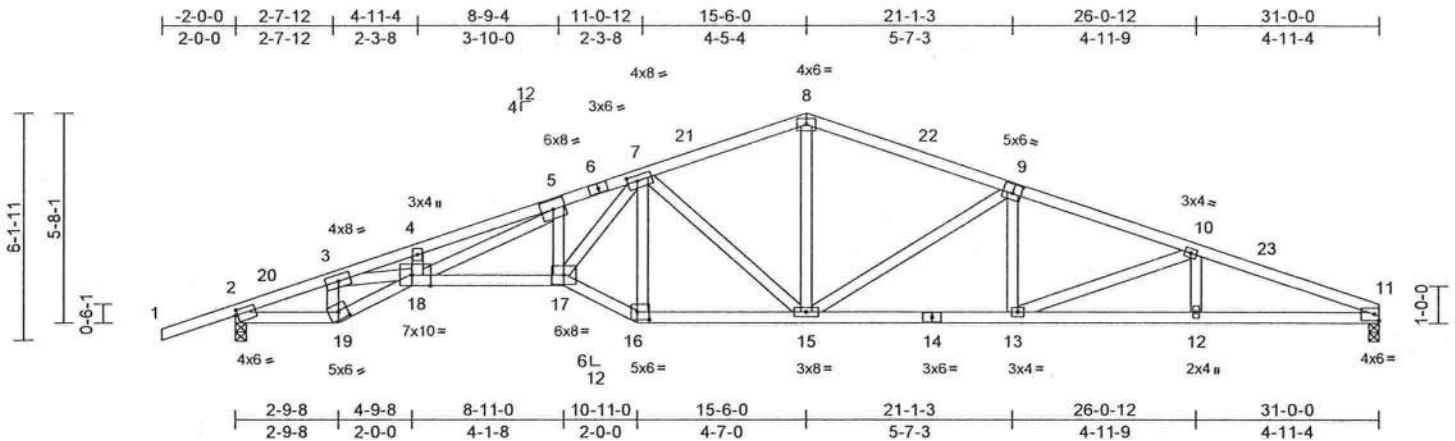
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T19	Roof Special	1	1	T30949312
					Job Reference (optional)

Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:30
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Page: 1



Scale = 1:60

Plate Offsets (X, Y): [2:0-0-11,0-1-10], [7:0-3-2,0-1-12], [9:0-2-12,0-3-0], [16:0-4-0,0-2-8], [18:0-6-0,Edge], [19:0-3-0,0-2-7]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.84	Vert(LL)	0.35	17-18	>999	240	MT20
TCDL	10.0	Lumber DOL	1.25	BC	0.81	Vert(CT)	-0.68	17-18	>538	180	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.27	11	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S							
Weight: 163 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 18-17:2x4 SP No.1
WEBS 2x4 SP No.3 *Except* 18-3:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 1-9-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-5-6 oc bracing.

REACTIONS (size) 2=0-3-8, 11=0-3-8
Max Horiz 2=127 (LC 12)
Max Uplift 2=554 (LC 8), 11=432 (LC 9)
Max Grav 2=1362 (LC 1), 11=1224 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/27, 2-3=-2757/1053, 3-4=-5697/2193,
4-5=-5667/2230, 5-7=-3757/1522,
7-8=-1903/834, 8-10=-2548/1040,
10-11=-2952/1154

BOT CHORD 2-19=-937/2486, 18-19=-965/2576,
17-18=-1315/3585, 16-17=-883/2446,
15-16=-804/2221, 13-15=-860/2381,
12-13=-1029/2719, 11-12=-1029/2719

WEBS 3-19=-1002/406, 3-18=-1133/3018,
4-18=-75/102, 7-17=-847/2274,
7-16=-1021/407, 7-15=-627/312,
8-15=-328/883, 9-15=-742/364,
9-13=-43/314, 10-13=-400/211, 10-12=0/197,
5-17=-641/299, 5-18=-801/2040

NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft;
Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -2-0-0 to 1-1-3, Interior (1) 1-1-3 to 15-6-0, Exterior(2R) 15-6-0 to 18-7-3, Interior (1) 18-7-3 to 30-10-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 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 554 lb uplift at joint 2 and 432 lb uplift at joint 11.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

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 ANSITP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek

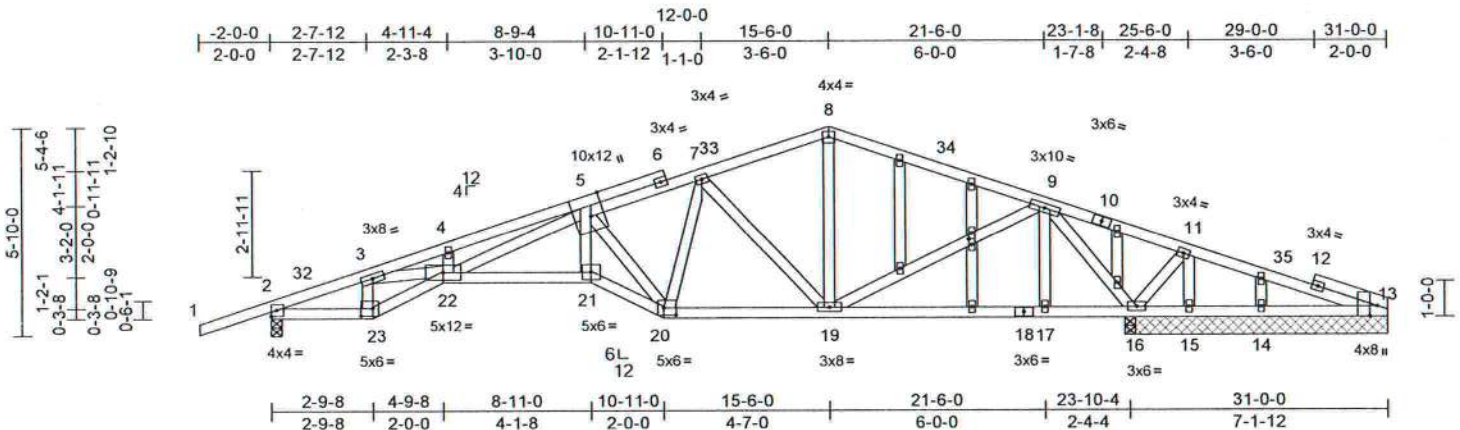
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	TERRANCE JONES COOLEY WAY CUSTOM
3576025	T19G	Roof Special	1	1	T30949313
Job Reference (optional)					

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Thu Jun 29 16:07:30
ID:HKYHNDovM7x19ot97iNYvmz1Oig-RIC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDol7J4zJC7f

Page: 1



Scale = 1:61.8

Plate Offsets (X, Y): [5:0-7-0,Edge], [13:0-3-8,Edge], [20:0-4-0,0-2-8], [23:0-4-0,0-2-8], [28:0-1-15,0-1-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.62	Vert(LL)	0.20	21-22	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.36	21-22	>792	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.13	16	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S							Weight: 181 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 2-9-13 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 5-1-6 oc bracing.
REACTIONS (size)	
	2=0-3-8, 13=7-3-8, 14=7-3-8, 15=7-3-8, 16=7-3-8
Max Horiz	2=121 (LC 16)
Max Uplift	2=427 (LC 8), 13=279 (LC 23), 14=8 (LC 13), 15=62 (LC 1), 16=618 (LC 9)
Max Grav	2=949 (LC 1), 13=111 (LC 12), 14=143 (LC 3), 15=43 (LC 8), 16=1834 (LC 1)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/27, 2-3=-1720/640, 3-4=-3421/1284, 4-5=-3369/1308, 5-7=-1198/533, 7-8=-690/361, 8-9=-721/347, 9-11=-556/1531, 11-13=-503/1360
BOT CHORD	2-23=-607/1535, 22-23=-625/1598, 21-22=-728/2043, 20-21=-817/2297, 19-20=-333/1029, 17-19=-274/179, 16-17=-274/179, 15-16=-1241/509, 14-15=-1241/509, 13-14=-1241/509
WEBS	4-22=0/106, 5-22=-566/1321, 5-21=-338/1062, 8-19=-38/237, 9-19=-340/945, 9-17=0/173, 3-23=-616/273, 3-22=-669/1768, 9-16=-1910/741, 7-20=-156/400, 7-19=-621/306, 5-20=-1615/634, 11-16=-283/206

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -2-0-0 to 1-1-3, Interior (1) 1-1-3 to 15-6-0, Exterior(2R) 15-6-0 to 18-7-3, Interior (1) 18-7-3 to 31-0-0 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 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 279 lb uplift at joint 13, 427 lb uplift at joint 2, 62 lb uplift at joint 15, 8 lb uplift at joint 14 and 618 lb uplift at joint 16.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2023

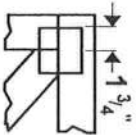
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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

MiTek

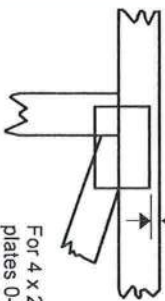
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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

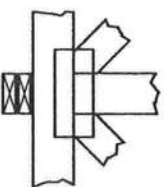
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



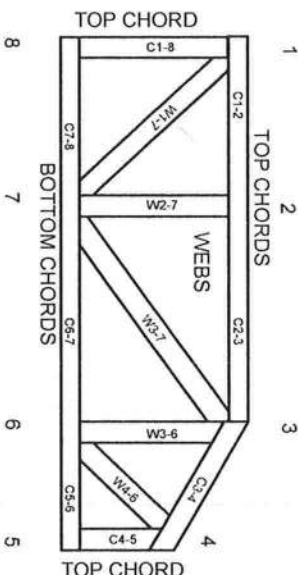
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: 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/CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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MITek Engineering Reference Sheet: Mill-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/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.



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

RE: Details -

MiTek USA, Inc.

6904 Parke East Blvd.
Tampa, FL 33610-4115

Site Information:

Customer Info:

Lot/Block:

Address:

City:

Project Name:

Subdivision:

State:

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: ASCE 7-16

Wind Speed: Varies

Roof Load: Varies

Floor Load: Varies

This package includes 19 individual, MiTek General Details 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	T23949105	MII-T-BRACE 2	5/17/21
2	T23949106	MII-WEBBRACE-2	5/17/21
3	T23949107	MII-SCAB-BRACE	5/17/21
4	T23949108	MII=REP05	5/17/21
5	T23949109	MII-GE-130-D-SP	5/17/21
6	T23949110	MII-GE-130-SP	5/17/21
7	T23949111	LETTER	5/17/21
8	T23949112	MII-GE170-D-SP	5/17/21
9	T23949113	MII-GE-180-D-SP	5/17/21
10	T23949114	MII-PIGGY-7-16	5/17/21
11	T23949115	MII-PIGGY-ALT-7-16	5/17/21
12	T23949116	MII-REP01A1	5/17/21
13	T23949117	MII-T0ENAIL SP	5/17/21
14	T23949118	MII-VALLEY HIGH WIND1	5/17/21
15	T23949119	MII-VALLEY HIGH WIND2	5/17/21
16	T23949120	MII-VALLEY-SP	5/17/21
17	T23949121	MII-VALLEY	5/17/21
18	T23949122	MII-REP13B	5/17/21
19	T23949123	MII-STRGBCK	5/17/21

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: Magid, Michael

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.



Michael S. Magid PE No.53681
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd, Tampa FL 33610
Date:

May 17,2021

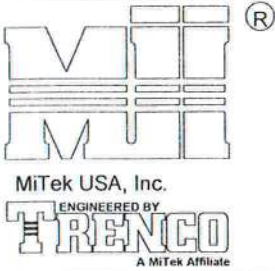
Magid, Michael

1 of 1

AUGUST 1, 2016

T-BRACE / I-BRACE DETAIL WITH 2X BRACE ONLY

MII-T-BRACE 2



MiTek USA, Inc. Page 1 of 1
T23949105

Note: T-Bracing / I-Bracing to be used when continuous lateral bracing is impractical. T-Brace / I-Brace must cover 90% of web length.

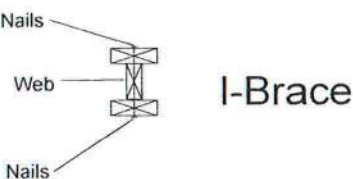
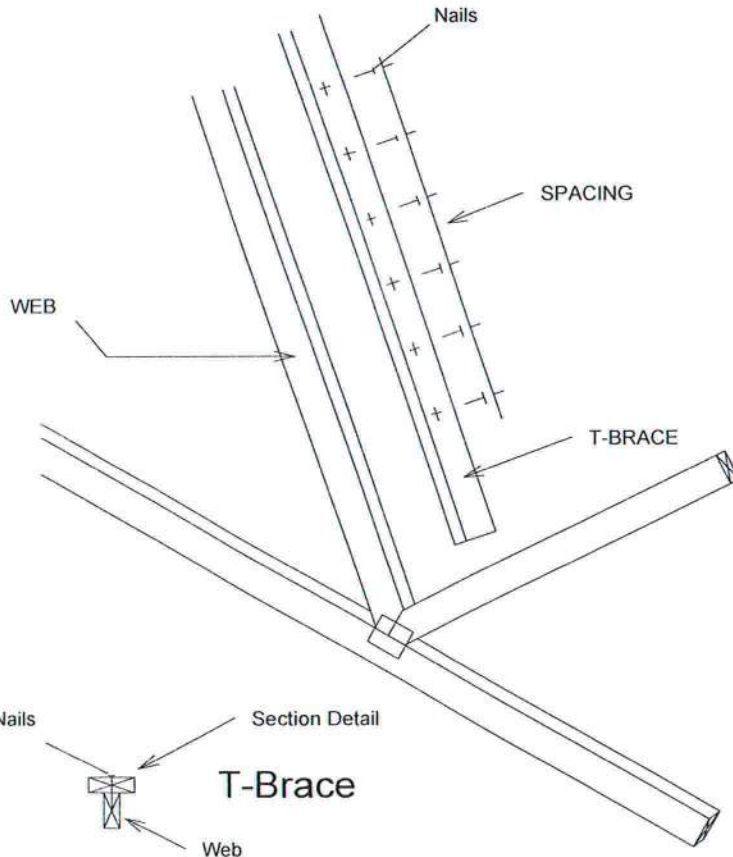
Note: This detail NOT to be used to convert T-Brace / I-Brace webs to continuous lateral braced webs.

Nailing Pattern		
T-Brace size	Nail Size	Nail Spacing
2x4 or 2x6 or 2x8	10d (0.131" X 3")	6" o.c.

Note: Nail along entire length of T-Brace / I-Brace
(On Two-Ply's Nail to Both Plies)

Brace Size for One-Ply Truss		
Specified Continuous Rows of Lateral Bracing		
Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

Brace Size for Two-Ply Truss		
Specified Continuous Rows of Lateral Bracing		
Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace



T-Brace / I-Brace must be same species and grade (or better) as web member.



Michael S. Magid PE No. 53681
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

May 17, 2021

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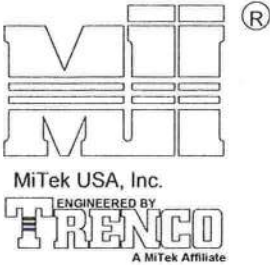
6904 Parke East Blvd.
Tampa, FL 33610

APRIL 9, 2020

WEB BRACING RECOMMENDATIONS

MII-WEBBRACE-2

T23949106



BRACE BAY SIZE ⁸	MAXIMUM TRUSS WEB FORCE (lbs.) ⁷							
	24" O.C. TRUSS SPACING			48" O.C. TRUSS SPACING			72" O.C. TRUSS SPACING	
	BRACING MATERIAL TYPE			BRACING MATERIAL TYPE			BRACING MATERIAL TYPE	
	A	B	C	A	B	C	B	C
10'-0"	1886	1886	2829	-----	-----	-----	-----	-----
12'-0"	1572	1572	2358	3143	3143	4715	4715	7074
14'-0"	1347	1347	2021	-----	-----	-----	-----	-----
16'-0"	1179	1179	1768	2358	2358	3536	-----	-----
18'-0"	1048	1048	1572	-----	-----	-----	3143	4715
20'-0"	943	943	1414	1886	1886	2829	-----	-----

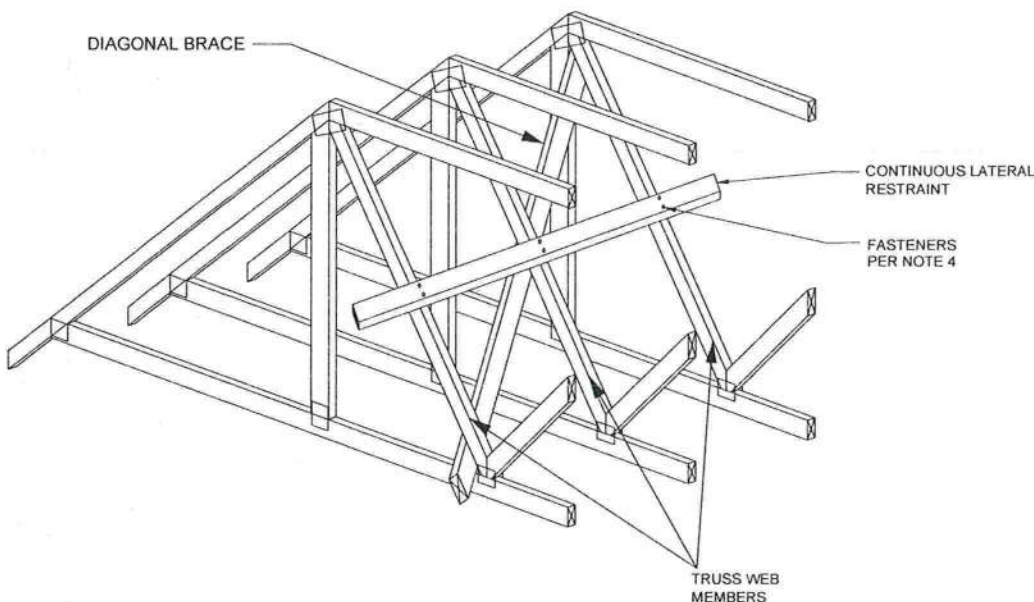
GENERAL NOTES

- DIAGONAL BRACING AND BLOCKING IS REQUIRED TO TRANSFER THE CUMULATIVE LATERAL BRACE FORCE INTO THE ROOF AND/OR CEILING DIAPHRAGM. THE DIAPHRAGM IS AND ANY BLOCKING TO BE DESIGNED BY A QUALIFIED PROFESSIONAL.
- TABULATED VALUES ARE BASED ON LATERAL BRACE CARRYING 2% OF THE WEB FORCE WITH A DOL = 1.15.
- DIAGONAL BRACING MATERIAL MUST BE SAME SIZE AND GRADE OR BETTER, AS THE LATERAL BRACE MATERIAL, AND SHALL BE INSTALLED IN SUCH A MANNER THAT IT INTERSECTS WEB MEMBERS AT APPROX. 45 DEGREES AND SHALL BE NAILED AT EACH END AND EACH INTERMEDIATE TRUSS WITH 2 - (0.131"x 3") FOR 2x3 AND 2x4 BRACES, AND 3 - (0.131"x3") FOR 2x6 BRACES.
- CONNECT LATERAL BRACE TO EACH TRUSS WITH 2 - (0.131"x3") NAILS FOR 2x3 AND 2x4 LATERAL BRACES AND 3 - (0.131"x3") FOR 2x6 LATERAL BRACES.
- LATERAL BRACE SHOULD BE CONTINUOUS AND SHOULD OVERLAP AT LEAST ONE TRUSS SPACE FOR CONTINUITY.
- FOR ADDITIONAL GUIDANCE REGARDING DESIGN AND INSTALLATION OF BRACING, CONSULT DSB-89 TEMPORARY BRACING OF METAL PLATE CONNECTED WOOD TRUSSES AND BCSI 1 GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES, PRODUCED BY STRUCTURAL BUILDING COMPONENT ASSOCIATION. www.sbcindustry.com
- REFER TO SPECIFIC MITek/TRENCO TRUSS DESIGN DRAWING FOR WEB MEMBER FORCE.
- BAY SIZE SHALL BE MEASURED IN BETWEEN THE CENTERS OF PAIRS OF DIAGONALS.

TYPE	BRACING MATERIALS
A	2 X 3 #3, STD, CONST (SPF, DF, HF, OR SP)
B	2 X 4 #3, STD, CONST (SPF, DF, HF, OR SP)
C	2 X 6 #3 OR BETTER (SPF, DF, HF, OR SP)

FOR STABILIZERS:

FOR A SPACING OF 24" O.C. ONLY, MITEK "STABILIZER" TRUSS BRACING SYSTEMS CAN BE SUBSTITUTED FOR TYPE A, B AND C BRACING MATERIAL. DIAGONAL BRACING FOR STABILIZERS ARE TO BE PROVIDED AT BAY SIZE INDICATED ABOVE. WHERE DIAPHRAGM BRACING IS REQUIRED AT PITCH BREAKS, STABILIZERS MAY BE REPLACED WITH WOOD BLOCKING. SEE "STABILIZER" TRUSS BRACING INSTALLATION GUIDE AND PRODUCT SPECIFICATION.



This information is provided to assist in the requirement for permanent bracing of the individual truss web members. Additional bracing may still be required for the stability of the overall roof system. The method shown here is just one method that can be used to provide stability against web buckling. Engineering seal, if any, is supporting the web force chart only.



Michael S. Magid PE No. 53681
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

May 17, 2021

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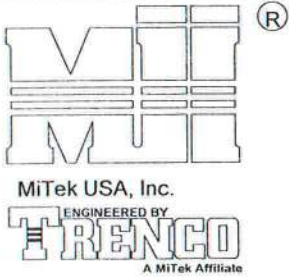
MiTek

6904 Parke East Blvd.
Tampa, FL 36610

AUGUST 1, 2016

SCAB-BRACE DETAIL

MII-SCAB-BRACE



MiTek USA, Inc.

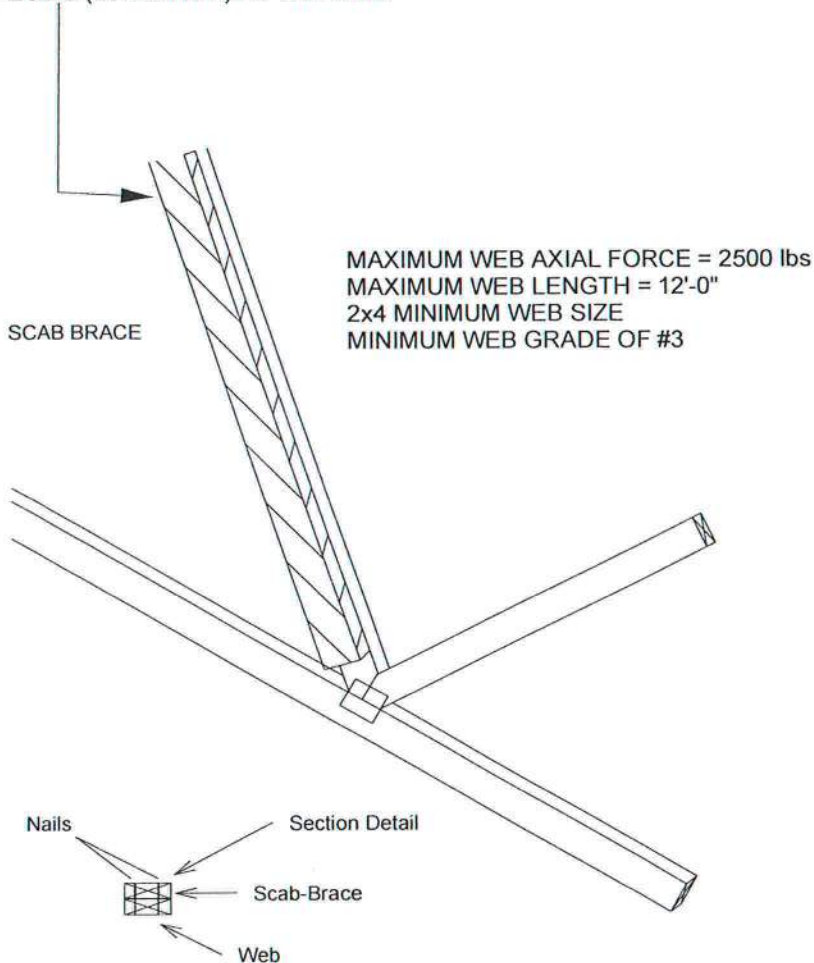
Page 1 of 1

T23949107

Note: Scab-Bracing to be used when continuous lateral bracing at midpoint (or T-Brace) is impractical.
Scab must cover full length of web +/- 6".

*** THIS DETAIL IS NOT APPLICABLE WHEN BRACING IS ***
REQUIRED AT 1/3 POINTS OR I-BRACE IS SPECIFIED.

APPLY 2x _____ SCAB TO ONE FACE OF WEB WITH
2 ROWS OF 10d (0.131" X 3") NAILS SPACED 6" O.C.
SCAB MUST BE THE SAME GRADE, SIZE AND
SPECIES (OR BETTER) AS THE WEB.



Scab-Brace must be same species grade (or better) as web member.



Michael S. Magid PE No.53681
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

May 17, 2021

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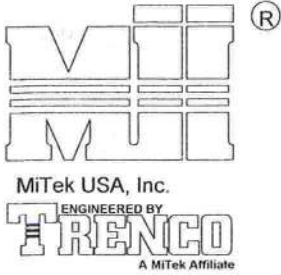


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Tampa, FL 33610

AUGUST 1, 2016

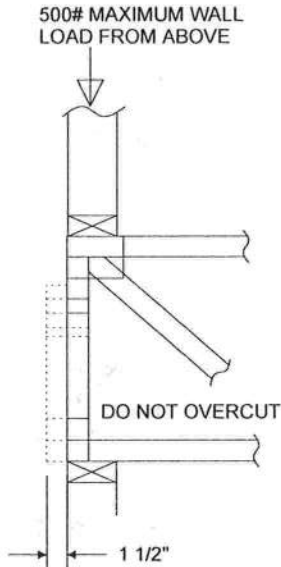
STANDARD REPAIR TO REMOVE END VERTICAL (RIBBON NOTCH VERTICAL)

MII-REP05

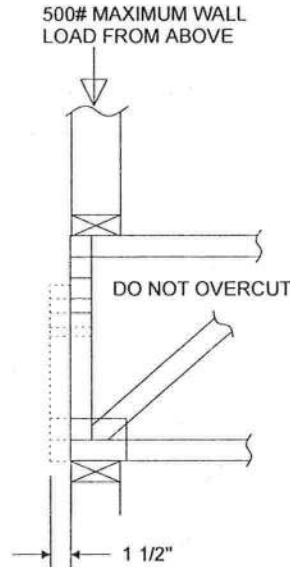


MiTek USA, Inc. Page 1 of 1
T23949108

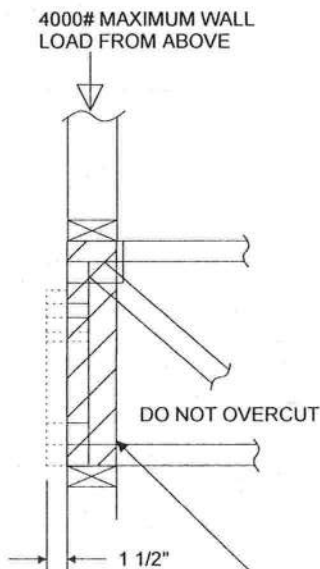
1. THIS IS A SPECIFIC REPAIR DETAIL TO BE USED ONLY FOR ITS ORIGINAL INTENTION. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS WILL BE CAPABLE OF SUPPORTING THE LOADS INDICATED.
2. ALL MEMBERS MUST BE RETURNED TO THEIR ORIGINAL POSITIONS BEFORE APPLYING REPAIR AND HELD IN PLACE DURING APPLICATION OF REPAIR.
3. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID SPLITTING OF THE WOOD.
4. LUMBER MUST BE CUT CLEANLY AND ACCURATELY AND THE REMAINING WOOD MUST BE UNDAMAGED.
5. THIS REPAIR IS TO BE USED FOR SINGLE PLY TRUSSES IN THE 4X ORIENTATION ONLY.
6. CONNECTOR PLATES MUST BE FULLY IMBEDDED AND UNDISTURBED.



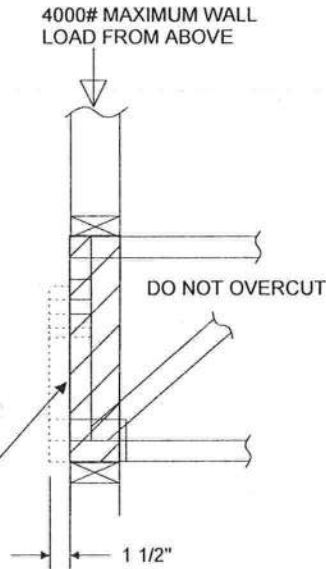
REFER TO INDIVIDUAL TRUSS DESIGN FOR PLATE SIZES AND LUMBER GRADES



TRUSSES BUILT WITH 4x2 MEMBERS



REFER TO INDIVIDUAL TRUSS DESIGN FOR PLATE SIZES AND LUMBER GRADES



TRUSSES BUILT WITH 4x2 MEMBERS

ATTACH 2x4 SQUASH BLOCK (CUT TO FIT TIGHTLY) TO BOTH SIDES OF THE TRUSS AS SHOWN WITH 10d (0.131" X 3") NAILS SPACED 3" O.C.



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May 17, 2021

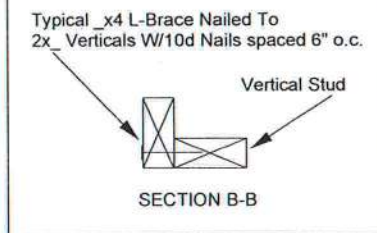
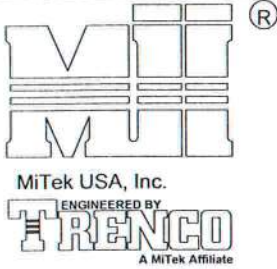
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

APRIL 12, 2019

Standard Gable End Detail

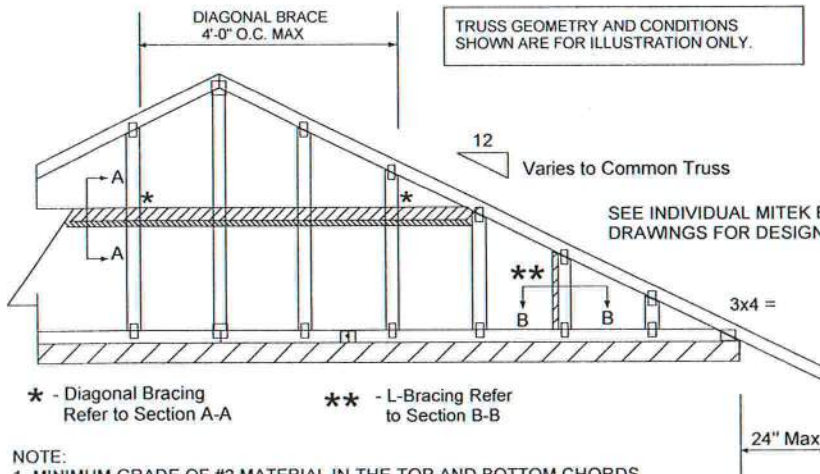
MII-GE130-D-SP



T23949109

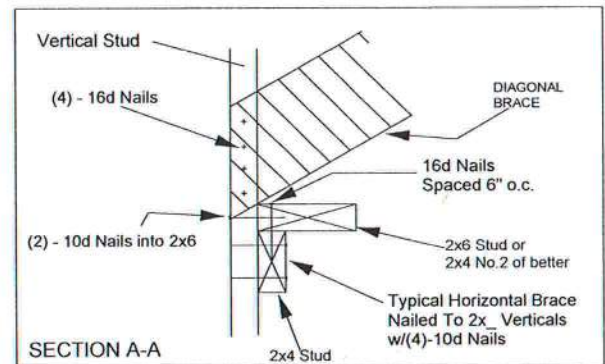
MiTek USA, Inc.

Page 1 of 2



NOTE:

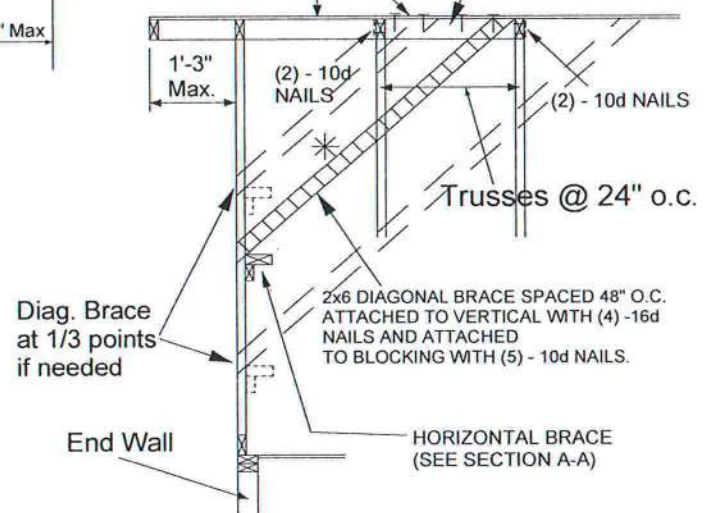
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES: 1x4 SRB OR 2x4 STUD OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.
11. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")



PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.

(4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SPF BLOCK

Roof Sheathing



Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
			Maximum Stud Length			
2x4 SP No. 3 / Stud	12" O.C.	3-9-13	4-1-1	5-9-6	7-1-3	11-5-7
2x4 SP No. 3 / Stud	16" O.C.	3-5-4	3-6-8	5-0-2	6-10-8	10-3-13
2x4 SP No. 3 / Stud	24" O.C.	2-9-11	2-10-11	4-1-1	5-7-6	8-5-1

- * Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of diagonal brace with 10d nails 8" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length.

MAX MEAN ROOF HEIGHT = 30 FEET
CATEGORY II BUILDING
EXPOSURE D
ASCE 7-98, ASCE 7-02, ASCE 7-05 130 MPH
ASCE 7-10, ASCE 7-16 160 MPH
DURATION OF LOAD INCREASE: 1.00

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.
CONNECTION OF BRACING IS BASED ON MWFRS.

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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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

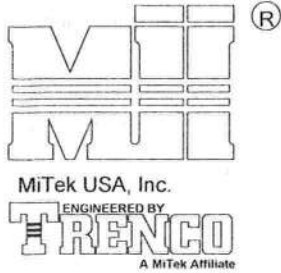


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MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

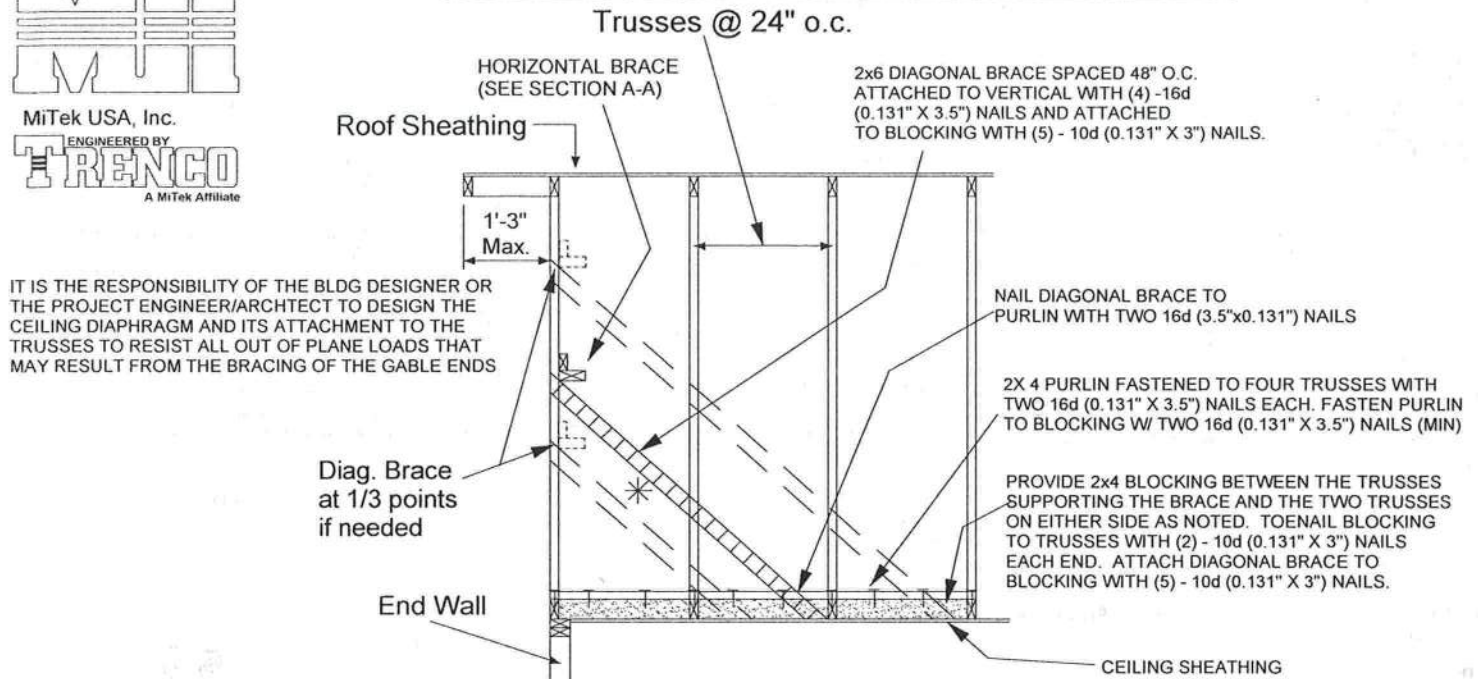
May 17, 2021



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Tampa, FL 33610



ALTERNATE DIAGONAL BRACING TO THE BOTTOM CHORD



BRACING REQUIREMENTS FOR STRUCTURAL GABLE TRUSSES

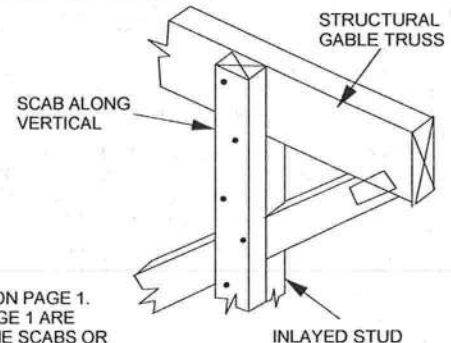
STRUCTURAL GABLE TRUSSES MAY BE BRACED AS NOTED:

METHOD 1: ATTACH A MATCHING GABLE TRUSS TO THE INSIDE FACE OF THE STRUCTURAL GABLE AND FASTEN PER THE FOLLOWING NAILING SCHEDULE.

METHOD 2: ATTACH 2X SCABS TO THE FACE OF EACH VERTICAL MEMBER ON THE STRUCTURAL GABLE PER THE FOLLOWING NAILING SCHEDULE. SCABS ARE TO BE OF THE SAME SIZE, GRADE AND SPECIES AS THE TRUSS VERTICALS

NAILING SCHEDULE:

- FOR WIND SPEEDS 120 MPH (ASCE 7-98, 02, 05), 150 MPH (ASCE 7-10, 16) OR LESS, NAIL ALL MEMBERS WITH ONE ROW OF 10d (0.131" X 3") NAILS SPACED 6" O.C.
- FOR WIND SPEEDS 120-150 MPH (ASCE 7-98, 02, 05), 150-190 MPH (ASCE 7-10, 16) NAIL ALL MEMBERS WITH TWO ROWS OF 10d (0.131" X 3") NAILS SPACED 6" O.C. (2X 4 STUDS MINIMUM)



MAXIMUM STUD LENGTHS ARE LISTED ON PAGE 1. ALL BRACING METHODS SHOWN ON PAGE 1 ARE VALID AND ARE TO BE FASTENED TO THE SCABS OR VERTICAL STUDS OF THE STANDARD GABLE TRUSS ON THE INTERIOR SIDE OF THE STRUCTURE.

STRUCTURAL GABLE TRUSS

AN ADEQUATE DIAPHRAGM OR OTHER METHOD OF BRACING MUST BE PRESENT TO PROVIDE FULL LATERAL SUPPORT OF THE BOTTOM CHORD TO RESIST ALL OUT OF PLANE LOADS. THE BRACING SHOWN IN THIS DETAIL IS FOR THE VERTICAL/STUDS ONLY.

NOTE: THIS DETAIL IS TO BE USED ONLY FOR STRUCTURAL GABLES WITH INLAYED STUDS. TRUSSES WITHOUT INLAYED STUDS ARE NOT ADDRESSED HERE.

STANDARD GABLE TRUSS

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Tampa, FL 36610

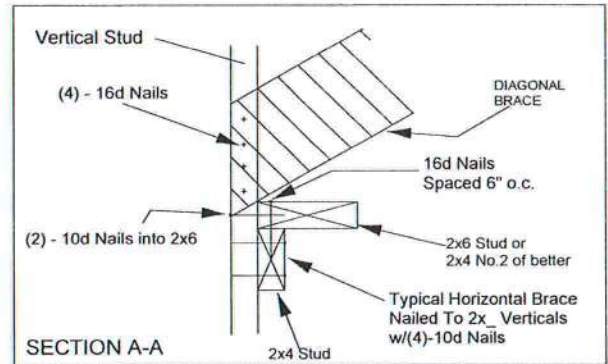
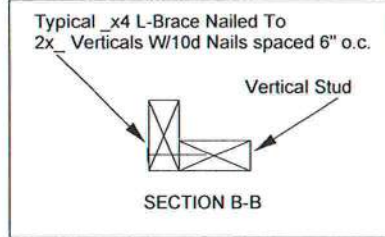
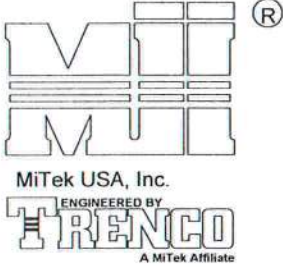
APRIL 12, 2019

Standard Gable End Detail

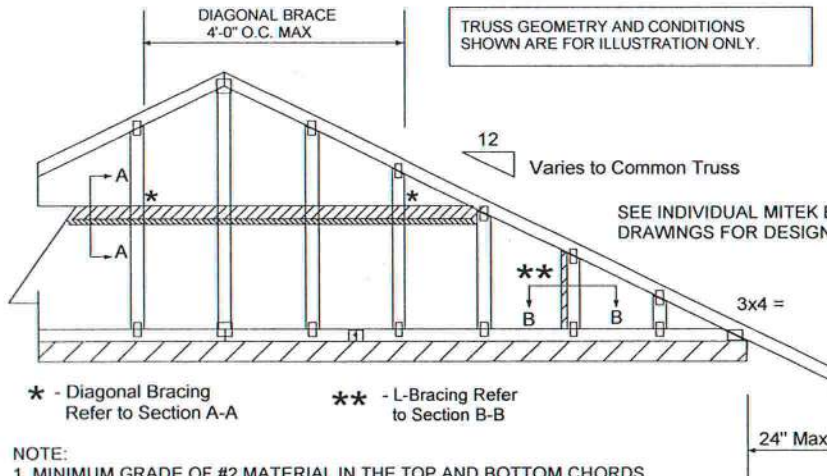
MII-GE130-SP

T23949110 MiTek USA, Inc.

Page 1 of 2



TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

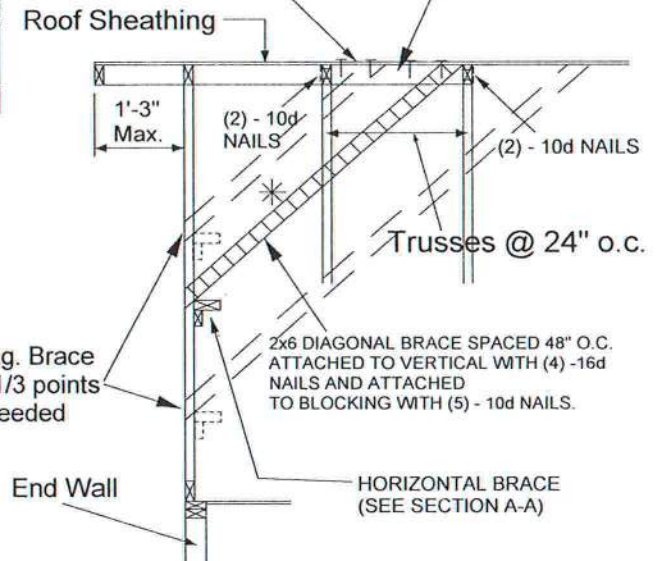


NOTE:

1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES: 1x4 SRB OR 2x4 STUD OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.
11. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.

(4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SPF BLOCK



Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length				
2x4 SP No. 3 / Stud	12" O.C.	4-0-7	4-5-6	6-3-8	8-0-15	12-1-6
2x4 SP No. 3 / Stud	16" O.C.	3-8-0	3-10-4	5-5-6	7-4-1	11-0-1
2x4 SP No. 3 / Stud	24" O.C.	3-0-10	3-1-12	4-5-6	6-1-5	9-1-15

- * Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of diagonal brace with 10d nails 8" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length.

MAX MEAN ROOF HEIGHT = 30 FEET
CATEGORY II BUILDING
EXPOSURE B or C
ASCE 7-98, ASCE 7-02, ASCE 7-05 130 MPH
ASCE 7-10, ASCE 7-16 160 MPH
DURATION OF LOAD INCREASE: 1.60

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING
CONNECTION OF BRACING IS BASED ON MWFRS.

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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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

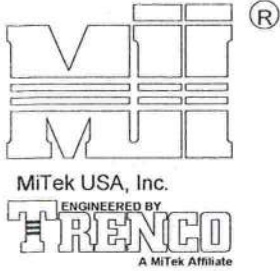


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Date:

May 17, 2021



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Tampa, FL 33610



ALTERNATE DIAGONAL BRACING TO THE BOTTOM CHORD

Trusses @ 24" o.c.

HORIZONTAL BRACE
(SEE SECTION A-A)

Roof Sheathing

2x6 DIAGONAL BRACE SPACED 48" O.C.
ATTACHED TO VERTICAL WITH (4) - 16d
(0.131" X 3.5") NAILS AND ATTACHED
TO BLOCKING WITH (5) - 10d (0.131" X 3") NAILS.1'-3"
Max.NAIL DIAGONAL BRACE TO
PURLIN WITH TWO 16d (3.5"x0.131") NAILS

IT IS THE RESPONSIBILITY OF THE BLDG DESIGNER OR
THE PROJECT ENGINEER/ARCHITECT TO DESIGN THE
CEILING DIAPHRAGM AND ITS ATTACHMENT TO THE
TRUSSES TO RESIST ALL OUT OF PLANE LOADS THAT
MAY RESULT FROM THE BRACING OF THE GABLE ENDS

Diag. Brace
at 1/3 points
if needed2X 4 PURLIN FASTENED TO FOUR TRUSSES WITH
TWO 16d (0.131" X 3.5") NAILS EACH. FASTEN PURLIN
TO BLOCKING W TWO 16d (0.131" X 3.5") NAILS (MIN)

PROVIDE 2x4 BLOCKING BETWEEN THE TRUSSES
SUPPORTING THE BRACE AND THE TWO TRUSSES
ON EITHER SIDE AS NOTED. TOENAIL BLOCKING
TO TRUSSES WITH (2) - 10d (0.131" X 3") NAILS
EACH END. ATTACH DIAGONAL BRACE TO
BLOCKING WITH (5) - 10d (0.131" X 3") NAILS.

End Wall

CEILING SHEATHING

BRACING REQUIREMENTS FOR STRUCTURAL GABLE TRUSSES

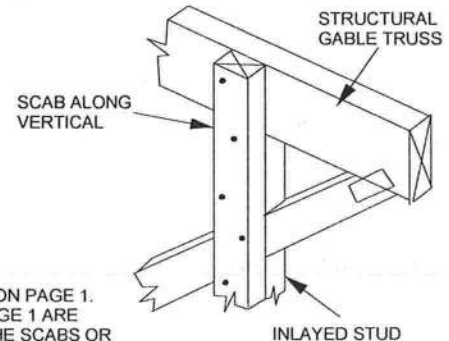
STRUCTURAL GABLE TRUSSES MAY BE BRACED AS NOTED:

METHOD 1 : ATTACH A MATCHING GABLE TRUSS TO THE INSIDE
FACE OF THE STRUCTURAL GABLE AND FASTEN PER THE
FOLLOWING NAILING SCHEDULE.

METHOD 2 : ATTACH 2X SCABS TO THE FACE OF EACH VERTICAL
MEMBER ON THE STRUCTURAL GABLE PER THE FOLLOWING
NAILING SCHEDULE. SCABS ARE TO BE OF THE SAME SIZE, GRADE
AND SPECIES AS THE TRUSS VERTICALS

NAILING SCHEDULE:

- FOR WIND SPEEDS 120 MPH (ASCE 7-98, 02, 05), 150 MPH (ASCE 7-10, 16) OR LESS, NAIL ALL MEMBERS WITH ONE ROW OF 10d (0.131" X 3") NAILS SPACED 6" O.C.
- FOR WIND SPEEDS 120-150 MPH (ASCE 7-98, 02, 05), 150-190 MPH (ASCE 7-10, 16) NAIL ALL MEMBERS WITH TWO ROWS OF 10d (0.131" X 3") NAILS SPACED 6" O.C. (2X 4 STUDS MINIMUM)



MAXIMUM STUD LENGTHS ARE LISTED ON PAGE 1.
ALL BRACING METHODS SHOWN ON PAGE 1 ARE
VALID AND ARE TO BE FASTENED TO THE SCABS OR
VERTICAL STUDS OF THE STANDARD GABLE TRUSS
ON THE INTERIOR SIDE OF THE STRUCTURE.

AN ADEQUATE DIAPHRAGM OR OTHER METHOD OF BRACING MUST
BE PRESENT TO PROVIDE FULL LATERAL SUPPORT OF THE BOTTOM
CHORD TO RESIST ALL OUT OF PLANE LOADS. THE BRACING SHOWN
IN THIS DETAIL IS FOR THE VERTICAL/STUDS ONLY.

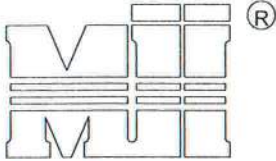
STRUCTURAL
GABLE TRUSS

NOTE : THIS DETAIL IS TO BE USED ONLY FOR
STRUCTURAL GABLES WITH INLAYED
STUDS. TRUSSES WITHOUT INLAYED
STUDS ARE NOT ADDRESSED HERE.

STANDARD
GABLE TRUSS

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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Tampa, FL 36610



MiTek USA, Inc.

MiTek USA, Inc.
6904 Parke East Blvd.
Tampa, FL 33610-4115
T23949111

May 17, 2021

TO WHOM IT MAY CONCERN:

RE: MiTek 20/20 drawings showing continuous lateral bracing
or "T" bracing on interior webs and chords.

Truss design drawings designed using MiTek 20/20 software show the bracing to be located on a side of the member needing to be braced. The actual side of the member where the brace is to be located does not change the design. If the brace cannot physically be placed on the side of the member as the drawings show, then place the brace on the member at the same location except attach it to the opposite edge.

If we can be of any further assistance in this matter, please feel free to contact our office.

Sincerely,

Michael Magid, PE



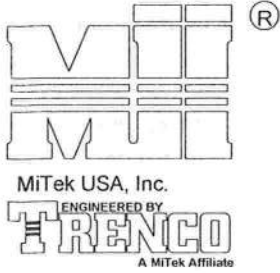
Michael S. Magid PE No. 53681
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

May 17, 2021

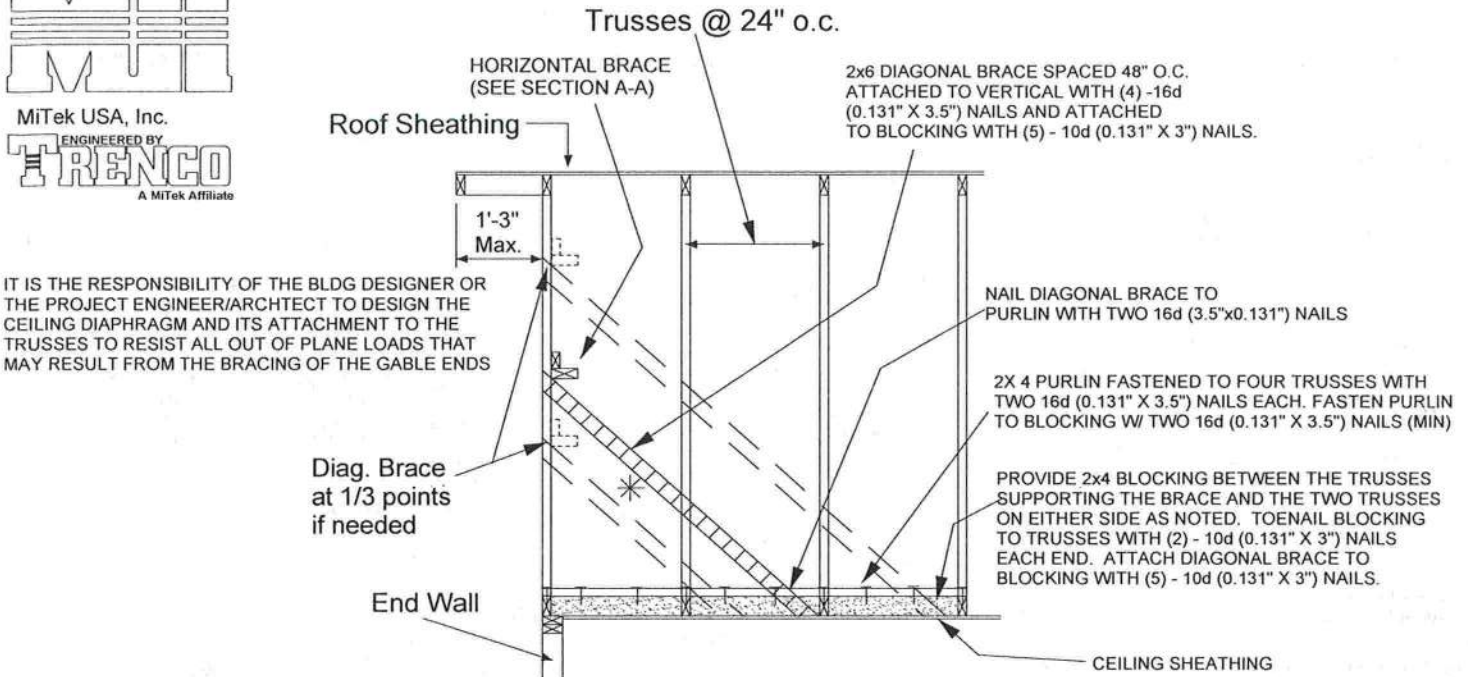
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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.
Tampa, FL 33610



ALTERNATE DIAGONAL BRACING TO THE BOTTOM CHORD



BRACING REQUIREMENTS FOR STRUCTURAL GABLE TRUSSES

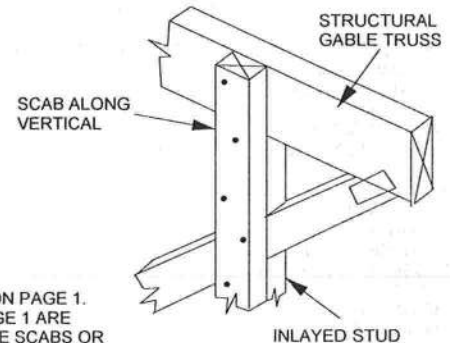
STRUCTURAL GABLE TRUSSES MAY BE BRACED AS NOTED:

METHOD 1 : ATTACH A MATCHING GABLE TRUSS TO THE INSIDE FACE OF THE STRUCTURAL GABLE AND FASTEN PER THE FOLLOWING NAILING SCHEDULE.

METHOD 2 : ATTACH 2X SCABS TO THE FACE OF EACH VERTICAL MEMBER ON THE STRUCTURAL GABLE PER THE FOLLOWING NAILING SCHEDULE. SCABS ARE TO BE OF THE SAME SIZE, GRADE AND SPECIES AS THE TRUSS VERTICALS

NAILING SCHEDULE:

- FOR WIND SPEEDS 120 MPH (ASCE 7-98, 02, 05), 150 MPH (ASCE 7-10, 16) OR LESS, NAIL ALL MEMBERS WITH ONE ROW OF 10d (0.131" X 3") NAILS SPACED 6" O.C.
- FOR WIND SPEEDS 120-150 MPH (ASCE 7-98, 02, 05), 150-190 MPH (ASCE 7-10, 16) NAIL ALL MEMBERS WITH TWO ROWS OF 10d (0.131" X 3") NAILS SPACED 6" O.C. (2X 4 STUDS MINIMUM)



MAXIMUM STUD LENGTHS ARE LISTED ON PAGE 1. ALL BRACING METHODS SHOWN ON PAGE 1 ARE VALID AND ARE TO BE FASTENED TO THE SCABS OR VERTICAL STUDS OF THE STANDARD GABLE TRUSS ON THE INTERIOR SIDE OF THE STRUCTURE.

AN ADEQUATE DIAPHRAGM OR OTHER METHOD OF BRACING MUST BE PRESENT TO PROVIDE FULL LATERAL SUPPORT OF THE BOTTOM CHORD TO RESIST ALL OUT OF PLANE LOADS. THE BRACING SHOWN IN THIS DETAIL IS FOR THE VERTICAL/STUDS ONLY.

STRUCTURAL GABLE TRUSS

NOTE : THIS DETAIL IS TO BE USED ONLY FOR STRUCTURAL GABLES WITH INLAVED STUDS. TRUSSES WITHOUT INLAVED STUDS ARE NOT ADDRESSED HERE.

STANDARD GABLE TRUSS

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK 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



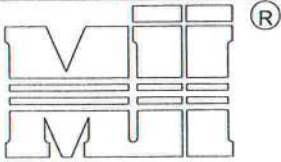
6904 Parke East Blvd.
Tampa, FL 36610

APRIL 12, 2019

Standard Gable End Detail

MII-GE170-D-SP

T23949112 MiTek USA, Inc. Page 1 of 2



Typical 2x4 L-Brace Nailed To
2x4 Verticals W/10d Nails spaced 6" o.c.

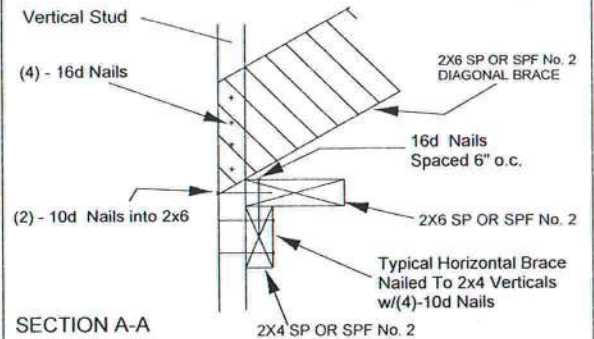
Vertical Stud

SECTION B-B

TRUSS GEOMETRY AND CONDITIONS
SHOWN ARE FOR ILLUSTRATION ONLY.

12
Varies to Common Truss

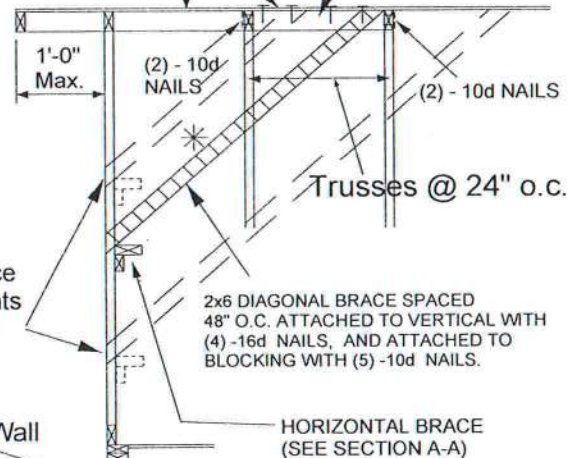
SEE INDIVIDUAL MITEK ENGINEERING
DRAWINGS FOR DESIGN CRITERIA



PROVIDE 2x4 BLOCKING BETWEEN THE FIRST
TWO TRUSSES AS NOTED. TOENAIL BLOCKING
TO TRUSSES WITH (2) - 10d NAILS AT EACH END.
ATTACH DIAGONAL BRACE TO BLOCKING WITH
(5) - 10d NAILS.

(4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD
SHEATHING TO 2x4 STD SPF BLOCK

Roof Sheathing



Diag. Brace
at 1/3 points
if needed

End Wall

NOTE:

1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH, SPF or SP No.3 OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 AND A 2x4 AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST GABLE STUD. ATTACH TO VERTICAL GABLE STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.
11. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length			
2x4 SP No. 3 / Stud	12" O.C.	3-9-7	5-8-8	6-11-1	11-4-4
2x4 SP No. 3 / Stud	16" O.C.	3-4-12	4-11-15	6-9-8	10-2-3
2x4 SP No. 3 / Stud	24" O.C.	2-9-4	4-0-7	5-6-8	8-3-13
2x4 SP No. 2	12" O.C.	3-11-13	5-8-8	6-11-1	11-11-7
2x4 SP No. 2	16" O.C.	3-7-7	4-11-5	6-11-1	10-10-5
2x4 SP No. 2	24" O.C.	3-1-15	4-0-7	6-3-14	9-5-14

- * Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of diagonal brace with 10d nails 6" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length. T or I braces must be 2x4 SPF No. 2 or SP No. 2.

MAX MEAN ROOF HEIGHT = 30 FEET
EXPOSURE D
ASCE 7-10, ASCE 7-16 170 MPH
DURATION OF LOAD INCREASE : 1.60

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.
CONNECTION OF BRACING IS BASED ON MWERS.



Michael S. Magid PE No.53681
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

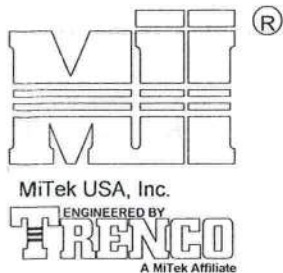
May 17, 2021

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



ALTERNATE DIAGONAL BRACING TO THE BOTTOM CHORD

Trusses @ 24" o.c.

HORIZONTAL BRACE
(SEE SECTION A-A)

Roof Sheathing

2x6 DIAGONAL BRACE SPACED 48" O.C.
ATTACHED TO VERTICAL WITH (4) - 16d
(0.131" X 3.5") NAILS AND ATTACHED
TO BLOCKING WITH (5) - 10d (0.131" X 3") NAILS.1'-0"
Max.NAIL DIAGONAL BRACE TO
PURLIN WITH TWO 16d (3.5"x0.131") NAILS

IT IS THE RESPONSIBILITY OF THE BLDG DESIGNER OR
THE PROJECT ENGINEER/ARCHITECT TO DESIGN THE
CEILING DIAPHRAGM AND ITS ATTACHMENT TO THE
TRUSSES TO RESIST ALL OUT OF PLANE LOADS THAT
MAY RESULT FROM THE BRACING OF THE GABLE ENDS

Diag. Brace
at 1/3 points
if needed2X 4 PURLIN FASTENED TO FOUR TRUSSES WITH
TWO 16d (0.131" X 3.5") NAILS EACH. FASTEN PURLIN
TO BLOCKING W/ TWO 16d (0.131" X 3.5") NAILS (MIN)

PROVIDE 2x4 BLOCKING BETWEEN THE TRUSSES
SUPPORTING THE BRACE AND THE TWO TRUSSES
ON EITHER SIDE AS NOTED. TOENAIL BLOCKING
TO TRUSSES WITH (2) - 10d (0.131" X 3") NAILS
EACH END. ATTACH DIAGONAL BRACE TO
BLOCKING WITH (5) - 10d (0.131" X 3") NAILS.

End Wall

CEILING SHEATHING

BRACING REQUIREMENTS FOR STRUCTURAL GABLE TRUSSES

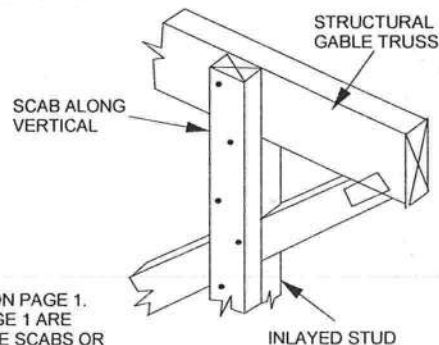
STRUCTURAL GABLE TRUSSES MAY BE BRACED AS NOTED:

METHOD 1: ATTACH A MATCHING GABLE TRUSS TO THE INSIDE
FACE OF THE STRUCTURAL GABLE AND FASTEN PER THE
FOLLOWING NAILING SCHEDULE.

METHOD 2: ATTACH 2X SCABS TO THE FACE OF EACH VERTICAL
MEMBER ON THE STRUCTURAL GABLE PER THE FOLLOWING
NAILING SCHEDULE. SCABS ARE TO BE OF THE SAME SIZE, GRADE
AND SPECIES AS THE TRUSS VERTICALS

NAILING SCHEDULE:

- FOR WIND SPEEDS 120 MPH (ASCE 7-98, 02, 05), 150 MPH (ASCE 7-10, 16) OR LESS, NAIL ALL
MEMBERS WITH ONE ROW OF 10d (0.131" X 3") NAILS SPACED 6" O.C.
- FOR WIND SPEEDS 120-150 MPH (ASCE 7-98, 02, 05), 150-190 MPH (ASCE 7-10, 16) NAIL ALL
MEMBERS WITH TWO ROWS OF 10d (0.131" X 3") NAILS SPACED 6" O.C. (2X 4 STUDS MINIMUM)



MAXIMUM STUD LENGTHS ARE LISTED ON PAGE 1.
ALL BRACING METHODS SHOWN ON PAGE 1 ARE
VALID AND ARE TO BE FASTENED TO THE SCABS OR
VERTICAL STUDS OF THE STANDARD GABLE TRUSS
ON THE INTERIOR SIDE OF THE STRUCTURE.

STRUCTURAL
GABLE TRUSS

AN ADEQUATE DIAPHRAGM OR OTHER METHOD OF BRACING MUST
BE PRESENT TO PROVIDE FULL LATERAL SUPPORT OF THE BOTTOM
CHORD TO RESIST ALL OUT OF PLANE LOADS. THE BRACING SHOWN
IN THIS DETAIL IS FOR THE VERTICAL/STUDS ONLY.

NOTE: THIS DETAIL IS TO BE USED ONLY FOR
STRUCTURAL GABLES WITH INLAVED
STUDS. TRUSSES WITHOUT INLAVED
STUDS ARE NOT ADDRESSED HERE.

STANDARD
GABLE TRUSS

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fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component**
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MII
MiTek

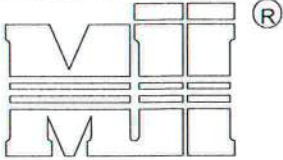
6904 Parke East Blvd.
Tampa, FL 36610

APRIL 12, 2019

Standard Gable End Detail

MII-GE180-D-SP

T23949113 MiTek USA, Inc. Page 1 of 2



MiTek USA, Inc.

ENGINEERED BY
TRENCOA MiTek Affiliate
DIAGONAL BRACE
4'-0" O.C. MAXTypical 2x4 L-Brace Nailed To
2x4 Verticals w/10d Nails spaced 6" o.c.

Vertical Stud

SECTION B-B

TRUSS GEOMETRY AND CONDITIONS
SHOWN ARE FOR ILLUSTRATION ONLY.12
Varies to Common TrussSEE INDIVIDUAL MITEK ENGINEERING
DRAWINGS FOR DESIGN CRITERIA* - Diagonal Bracing
Refer to Section A-A** - L-Bracing Refer
to Section B-B

NOTE:

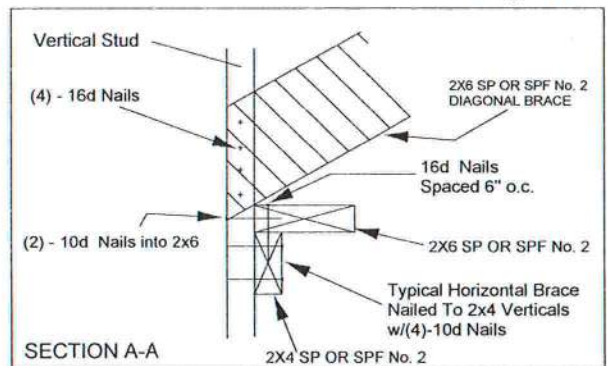
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH, SPF or SP No.3 OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 AND A 2x4 AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST GABLE STUD. ATTACH TO VERTICAL GABLE STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.
11. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
Maximum Stud Length					
2x4 SP No. 3 / Stud	12" O.C.	3-7-12	5-4-11	6-2-1	10-11-3
2x4 SP No. 3 / Stud	16" O.C.	3-2-8	4-8-1	6-2-1	9-7-7
2x4 SP No. 3 / Stud	24" O.C.	2-7-7	3-9-12	5-2-13	7-10-4
2x4 SP No. 2	12" O.C.	3-10-0	5-4-11	6-2-1	11-6-1
2x4 SP No. 2	16" O.C.	3-5-13	4-8-1	6-2-1	10-5-7
2x4 SP No. 2	24" O.C.	3-0-8	3-9-12	6-1-1	9-1-9

- * Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of diagonal brace with 10d nails 6in o.c., with 3in minimum end distance. Brace must cover 90% of diagonal length. T or I braces must be 2x4 SPF No. 2 or SP No. 2.

MAX MEAN ROOF HEIGHT = 30 FEET
EXPOSURE DASCE 7-10, ASCE 7-16 180 MPH
DURATION OF LOAD INCREASE - 1.60STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.
CONNECTION OF BRACING IS BASED ON MWPRS.

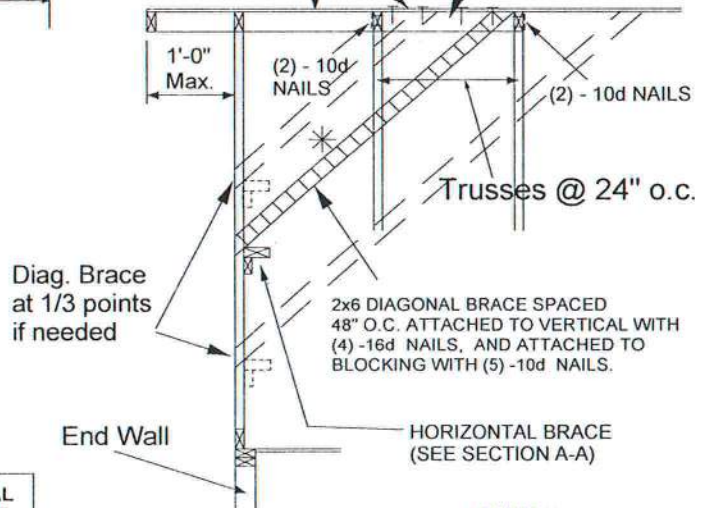
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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



PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.

(4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SPF BLOCK

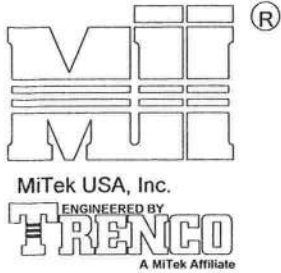
Roof Sheathing



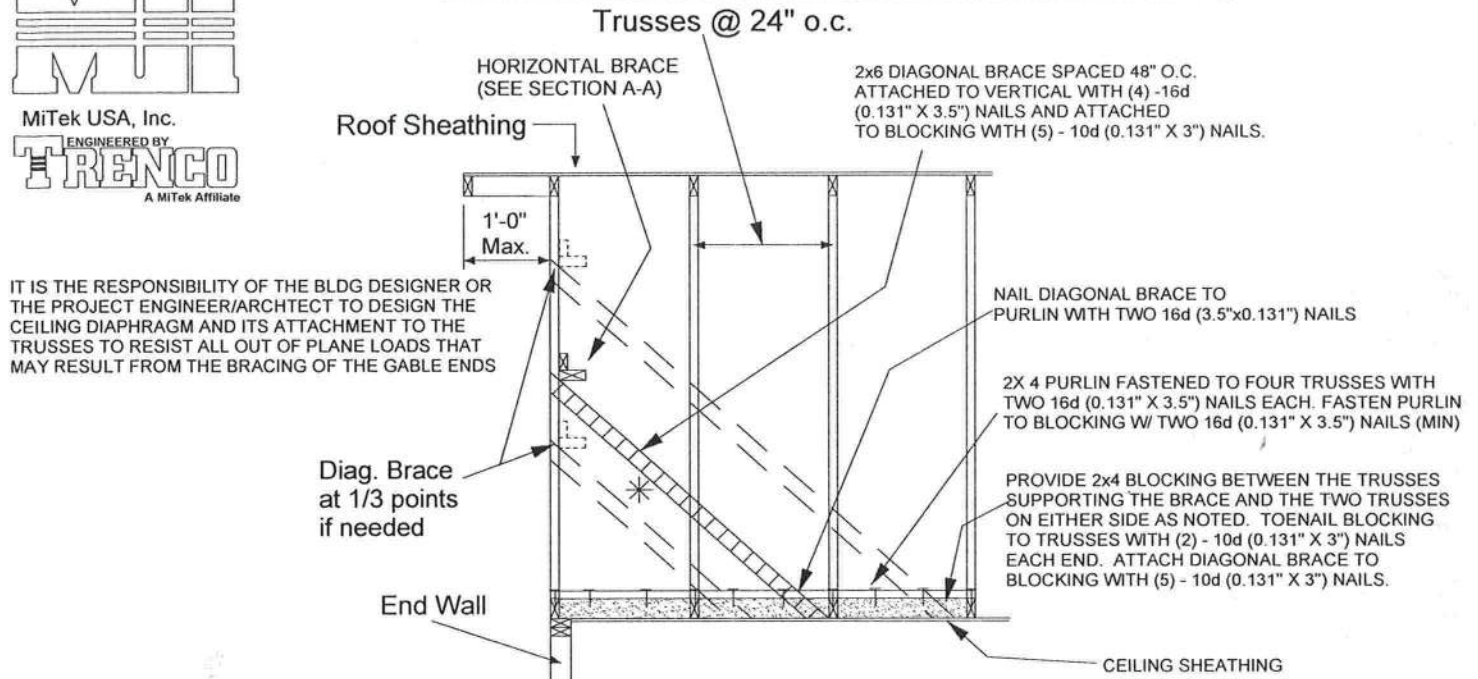
Michael S. Magid PE No.53681
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

May 17, 2021

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Tampa, FL 36610



ALTERNATE DIAGONAL BRACING TO THE BOTTOM CHORD



BRACING REQUIREMENTS FOR STRUCTURAL GABLE TRUSSES

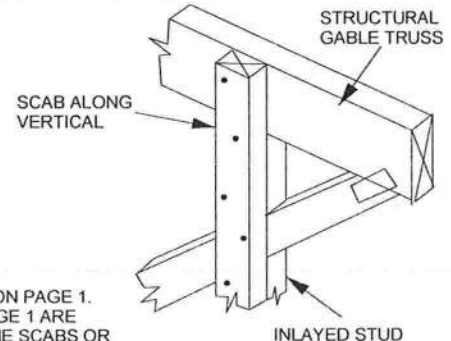
STRUCTURAL GABLE TRUSSES MAY BE BRACED AS NOTED:

METHOD 1: ATTACH A MATCHING GABLE TRUSS TO THE INSIDE FACE OF THE STRUCTURAL GABLE AND FASTEN PER THE FOLLOWING NAILING SCHEDULE.

METHOD 2: ATTACH 2X SCABS TO THE FACE OF EACH VERTICAL MEMBER ON THE STRUCTURAL GABLE PER THE FOLLOWING NAILING SCHEDULE. SCABS ARE TO BE OF THE SAME SIZE, GRADE AND SPECIES AS THE TRUSS VERTICALS

NAILING SCHEDULE:

- FOR WIND SPEEDS 120 MPH (ASCE 7-98, 02, 05), 150 MPH (ASCE 7-10, 16) OR LESS, NAIL ALL MEMBERS WITH ONE ROW OF 10d (0.131" X 3") NAILS SPACED 6" O.C.
- FOR WIND SPEEDS 120-150 MPH (ASCE 7-98, 02, 05), 150-190 MPH (ASCE 7-10, 16) NAIL ALL MEMBERS WITH TWO ROWS OF 10d (0.131" X 3") NAILS SPACED 6" O.C. (2X 4 STUDS MINIMUM)



MAXIMUM STUD LENGTHS ARE LISTED ON PAGE 1. ALL BRACING METHODS SHOWN ON PAGE 1 ARE VALID AND ARE TO BE FASTENED TO THE SCABS OR VERTICAL STUDS OF THE STANDARD GABLE TRUSS ON THE INTERIOR SIDE OF THE STRUCTURE.

STRUCTURAL GABLE TRUSS

AN ADEQUATE DIAPHRAGM OR OTHER METHOD OF BRACING MUST BE PRESENT TO PROVIDE FULL LATERAL SUPPORT OF THE BOTTOM CHORD TO RESIST ALL OUT OF PLANE LOADS. THE BRACING SHOWN IN THIS DETAIL IS FOR THE VERTICAL STUDS ONLY.

NOTE: THIS DETAIL IS TO BE USED ONLY FOR STRUCTURAL GABLES WITH INLAYS STUDS. TRUSSES WITHOUT INLAYS STUDS ARE NOT ADDRESSED HERE.

STANDARD GABLE TRUSS

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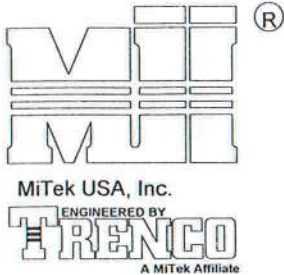
MiTek

6904 Parke East Blvd.
Tampa, FL 36610

January 8, 2019

STANDARD PIGGYBACK TRUSS CONNECTION DETAIL

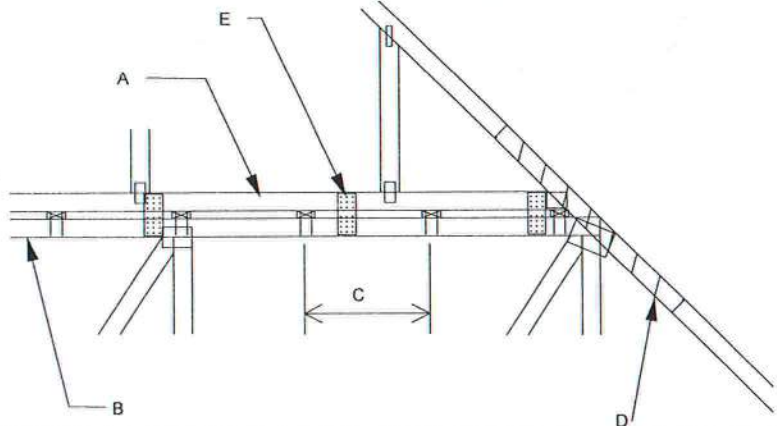
MII-PIGGY-7-16



T23949114 MiTek USA, Inc. Page 1 of 1

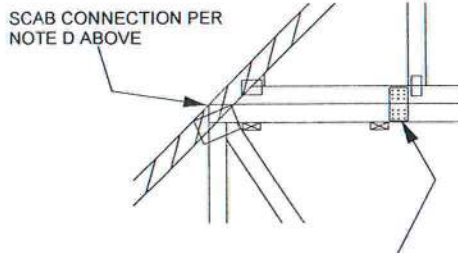
MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E
 MAX MEAN ROOF HEIGHT = 30 FEET
 MAX TRUSS SPACING = 24" O.C.
 CATEGORY II BUILDING
 EXPOSURE B or C
 ENCLOSED BUILDING
 LOADING = 5 PSF TCDL
 ASCE 7-10, ASCE 7-16
 DURATION OF LOAD INCREASE : 1.60
 DETAIL IS NOT APPLICABLE FOR TRUSSES
 TRANSFERRING DRAG LOADS (SHEAR TRUSSES).
 ADDITIONAL CONSIDERATIONS BY BUILDING
 ENGINEER/DESIGNER ARE REQUIRED.

- A - PIGGYBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLINE WITH (2) (0.131" X 3.5") TOE-NAILED.
- B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT TO BASE TRUSS WITH (2) (0.131" X 3.5") NAILS EACH.
- D - 2 X 4'-0" SCAB, SIZE TO MATCH TOP CHORD OF PIGGYBACK TRUSS, MIN GRADE #2, ATTACHED TO ONE FACE, CENTERED ON INTERSECTION, WITH (2) ROWS OF (0.131" X 3") NAILS @ 4" O.C. SCAB MAY BE OMITTED PROVIDED THE TOP CHORD SHEATHING IS CONTINUOUS OVER INTERSECTION AT LEAST 1 FT. IN BOTH DIRECTIONS AND:
1. WIND SPEED OF 115 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR
 2. WIND SPEED OF 116 MPH TO 180 MPH WITH A MAXIMUM PIGGYBACK SPAN OF 12 ft.
- E - FOR WIND SPEEDS BETWEEN 116 AND 180 MPH, ATTACH MITEK NP37 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 72" O.C. W/ (4) (0.131" X 1.5") NAILS PER MEMBER. STAGGER NAILS FROM OPPOSING FACES. ENSURE 0.5" NAIL EDGE DISTANCE. (MIN. 2 PAIRS OF PLATES REQ. REGARDLESS OF SPAN)



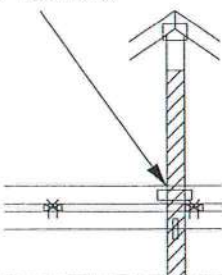
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH Nail-On PLATES AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING.



FOR ALL WIND SPEEDS, ATTACH MITEK NP37 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O.C. W/ (4) (0.131" X 1.5") PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" NAIL EDGE DISTANCE.

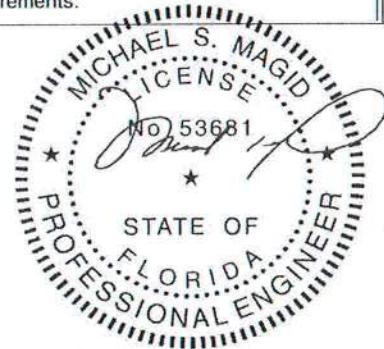
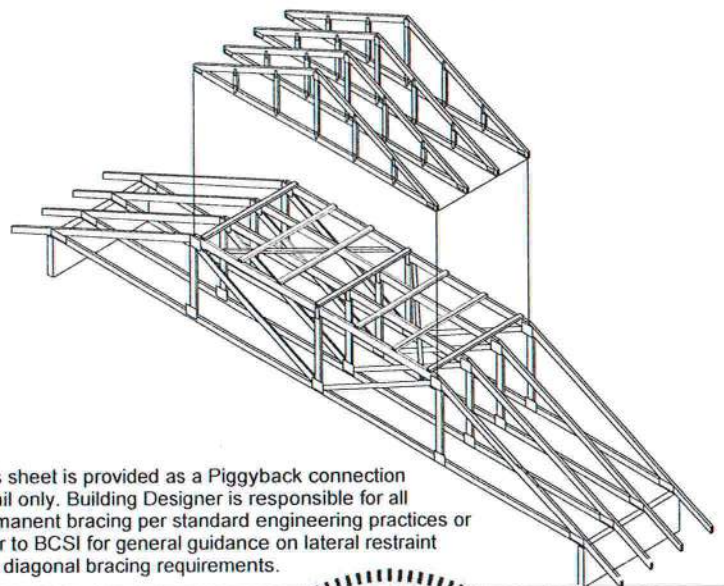
VERTICAL WEB TO EXTEND THROUGH BOTTOM CHORD OF PIGGYBACK



FOR LARGE CONCENTRATED LOADS APPLIED TO CAP TRUSS REQUIRING A VERTICAL WEB:

- 1) VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS MUST MATCH IN SIZE, GRADE, AND MUST LINE UP AS SHOWN IN DETAIL.
- 2) ATTACH 2 x 4'-0" SCAB TO EACH FACE OF TRUSS ASSEMBLY WITH 2 ROWS OF 10d (0.131" X 3") NAILS SPACED 4" O.C. FROM EACH FACE. (SIZE AND GRADE TO MATCH VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS.) (MINIMUM 2X4)
- 3) THIS CONNECTION IS ONLY VALID FOR A MAXIMUM CONCENTRATED LOAD OF 4000 LBS (@1.15). REVIEW BY A QUALIFIED ENGINEER IS REQUIRED FOR LOADS GREATER THAN 4000 LBS.
- 4) FOR PIGGYBACK TRUSSES CARRYING GIRDER LOADS, NUMBER OF PLYS OF PIGGYBACK TRUSS TO MATCH BASE TRUSS.
- 5) CONCENTRATED LOAD MUST BE APPLIED TO BOTH THE PIGGYBACK AND THE BASE TRUSS DESIGN.

This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.



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 Date:

May 17, 2021

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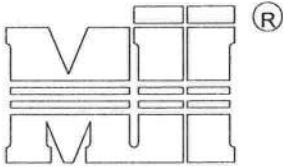
MiTek
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 Tampa, FL 36610

JANUARY 8, 2019

STANDARD PIGGYBACK TRUSS CONNECTION DETAIL

MII-PIGGY-ALT
7-16

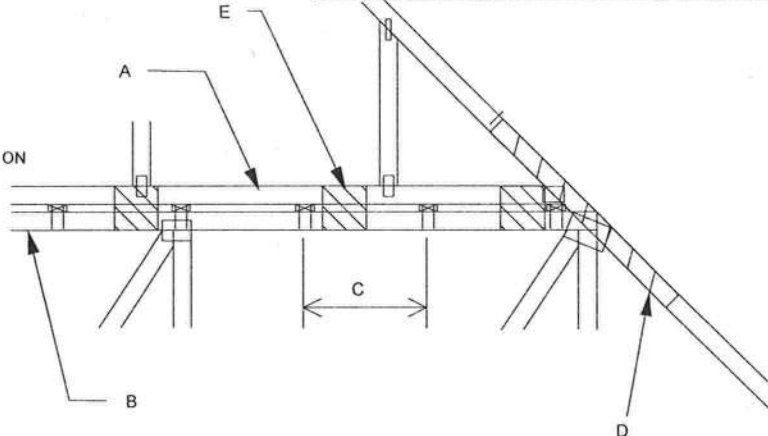
T23949115 MiTek USA, Inc. Page 1 of 1



MiTek USA, Inc.



- A - PIGGYBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) (0.131" X 3.5") TOE-NAILED.
- B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT TO BASE TRUSS WITH (2) (0.131" X 3.5") NAILS EACH.
- D - 2 X 4'-0" SCAB, SIZE TO MATCH TOP CHORD OF PIGGYBACK TRUSS, MIN GRADE #2, ATTACHED TO ONE FACE, CENTERED ON INTERSECTION, WITH (2) ROWS OF (0.131" X 3") NAILS @ 4" O.C. SCAB MAY BE OMITTED PROVIDED THE TOP CHORD SHEATHING IS CONTINUOUS OVER INTERSECTION AT LEAST 1 FT. IN BOTH DIRECTIONS AND:
1. WIND SPEED OF 115 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR
 2. WIND SPEED OF 116 MPH TO 180 MPH WITH A MAXIMUM PIGGYBACK SPAN OF 12 ft.
- E - FOR WIND SPEED IN THE RANGE 116 MPH - 180 MPH ADD 9" x 9" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 48" O.C. OR LESS. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)



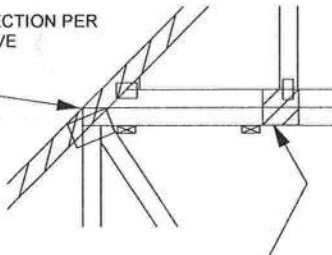
MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E
MAX MEAN ROOF HEIGHT = 30 FEET
MAX TRUSS SPACING = 24" O.C.
CATEGORY II BUILDING
EXPOSURE B or C
ENCLOSED BUILDING
LOADING = 5 PSF TCDL MINIMUM
ASCE 7-10, ASCE 7-16
DURATION OF LOAD INCREASE : 1.60

DETAIL IS NOT APPLICABLE FOR TRUSSES TRANSFERRING DRAG LOADS (SHEAR TRUSSES). ADDITIONAL CONSIDERATIONS BY BUILDING ENGINEER/DESIGNER ARE REQUIRED.

WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

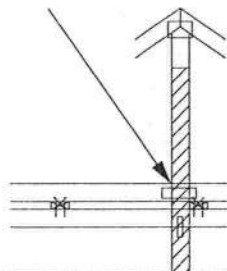
REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH PLYWOOD GUSSETS AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING.

SCAB CONNECTION PER NOTE D ABOVE



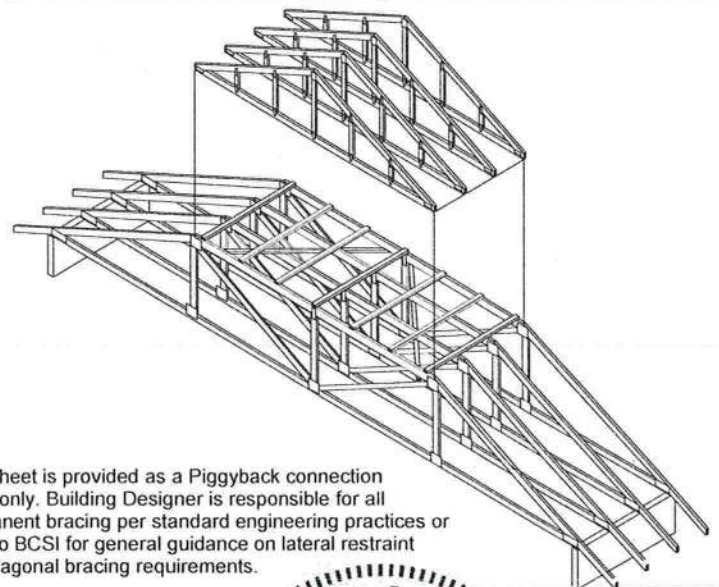
7" x 7" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 24" O.C. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)

VERTICAL WEB TO EXTEND THROUGH BOTTOM CHORD OF PIGGYBACK



FOR LARGE CONCENTRATED LOADS APPLIED TO CAP TRUSS REQUIRING A VERTICAL WEB:

- 1) VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS MUST MATCH IN SIZE, GRADE, AND MUST LINE UP AS SHOWN IN DETAIL.
- 2) ATTACH 2 x 4'-0" SCAB TO EACH FACE OF TRUSS ASSEMBLY WITH 2 ROWS OF 10d (0.131" X 3") NAILS SPACED 4" O.C. FROM EACH FACE. (SIZE AND GRADE TO MATCH VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS.) (MINIMUM 2X4)
- 3) THIS CONNECTION IS ONLY VALID FOR A MAXIMUM CONCENTRATED LOAD OF 4000 LBS (@1.15). REVIEW BY A QUALIFIED ENGINEER IS REQUIRED FOR LOADS GREATER THAN 4000 LBS.
- 4) FOR PIGGYBACK TRUSSES CARRYING GIRDER LOADS, NUMBER OF PLYS OF PIGGYBACK TRUSS TO MATCH BASE TRUSS.
- 5) CONCENTRATED LOAD MUST BE APPLIED TO BOTH THE PIGGYBACK AND THE BASE TRUSS DESIGN.



This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.



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May 17, 2021

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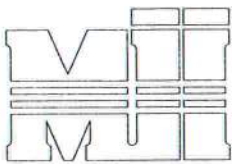
6904 Parke East Blvd.
Tampa, FL 36610

AUGUST 1, 2016

STANDARD REPAIR DETAIL FOR BROKEN CHORDS, WEBS
AND DAMAGED OR MISSING CHORD SPLICE PLATES

MII-REP01A1

T23949116 MiTek USA, Inc. Page 1 of 1



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TOTAL NUMBER OF NAILS EACH SIDE OF BREAK *		X INCHES	MAXIMUM FORCE (lbs) 15% LOAD DURATION							
			SP		DF		SPF		HF	
2x4	2x6		2x4	2x6	2x4	2x6	2x4	2x6	2x4	2x6
20	30	24"	1706	2559	1561	2342	1320	1980	1352	2028
26	39	30"	2194	3291	2007	3011	1697	2546	1738	2608
32	48	36"	2681	4022	2454	3681	2074	3111	2125	3187
38	57	42"	3169	4754	2900	4350	2451	3677	2511	3767
44	66	48"	3657	5485	3346	5019	2829	4243	2898	4347

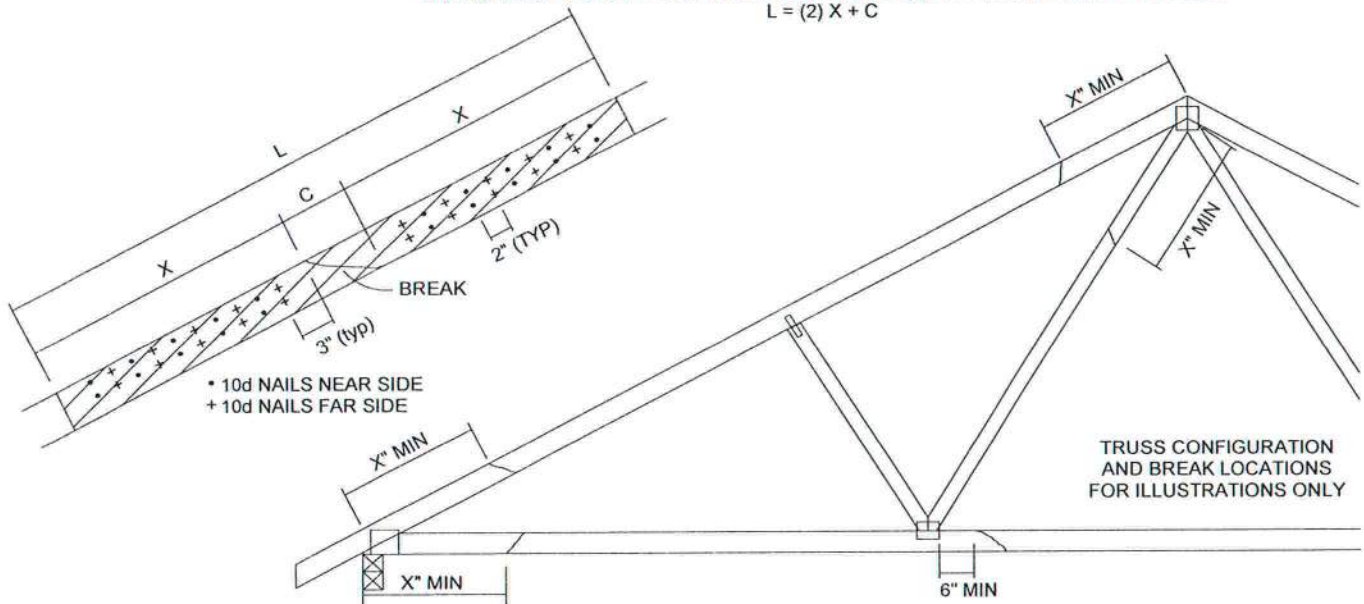
* DIVIDE EQUALLY FRONT AND BACK

ATTACH 2x SCAB OF THE SAME SIZE AND GRADE AS THE BROKEN MEMBER TO EACH
FACE OF THE TRUSS (CENTER ON BREAK OR SPLICE) WITH 10d (0.131" X 3") NAILS
(TWO ROWS FOR 2x4, THREE ROWS FOR 2x6) SPACED 4" O.C. AS SHOWN.

STAGGER NAIL SPACING FROM FRONT FACE AND BACK FACE FOR A NET 0-2-0 O.C.
SPACING IN THE MAIN MEMBER. USE A MIN. 0-3-0 MEMBER END DISTANCE.

THE LENGTH OF THE BREAK (C) SHALL NOT EXCEED 12". (C=PLATE LENGTH FOR SPLICE REPAIRS)
THE MINIMUM OVERALL SCAB LENGTH REQUIRED (L) IS CALCULATED AS FOLLOWS:

$$L = (2) X + C$$



THE LOCATION OF THE BREAK MUST BE GREATER THAN OR EQUAL TO THE REQUIRED X DIMENSION FROM ANY
PERIMETER BREAK OR HEEL JOINT AND A MINIMUM OF 6" FROM ANY INTERIOR JOINT (SEE SKETCH ABOVE)

DO NOT USE REPAIR FOR JOINT SPLICES

NOTES:

1. THIS REPAIR DETAIL IS TO BE USED ONLY FOR THE APPLICATION SHOWN. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS WILL BE CAPABLE OF SUPPORTING THE LOADS INDICATED.
2. ALL MEMBERS MUST BE RETURNED TO THEIR ORIGINAL POSITIONS BEFORE APPLYING REPAIR AND HELD IN PLACE DURING APPLICATION OF REPAIR.
3. THE END DISTANCE, EDGE DISTANCE AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
4. WHEN NAILING THE SCABS, THE USE OF A BACKUP WEIGHT IS RECOMMENDED TO AVOID LOOSENING OF THE CONNECTOR PLATES AT THE JOINTS OR SPLICES.
5. THIS REPAIR IS TO BE USED FOR SINGLE PLY TRUSSES IN THE 2x ORIENTATION ONLY.
6. THIS REPAIR IS LIMITED TO TRUSSES WITH NO MORE THAN THREE BROKEN MEMBERS.



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May 17, 2021

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MAY 7, 2019

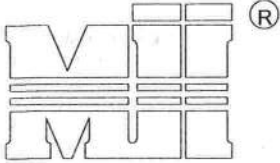
LATERAL TOE-NAIL DETAIL

MII-TOENAIL_SP

MiTek USA, Inc.

Page 1 of 1

T23949117



MiTek USA, Inc.



NOTES:

- TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF 45 DEGREES WITH THE MEMBER AND MUST HAVE FULL WOOD SUPPORT. (NAIL MUST BE DRIVEN THROUGH AND EXIT AT THE BACK CORNER OF THE MEMBER END AS SHOWN.)
- THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
- ALLOWABLE VALUE SHALL BE THE LESSER VALUE OF THE TWO SPECIES FOR MEMBERS OF DIFFERENT SPECIES.

THIS DETAIL APPLICABLE TO THE
THREE END DETAILS SHOWN BELOW

VIEWS SHOWN ARE FOR
ILLUSTRATION PURPOSES ONLY

TOE-NAIL SINGLE SHEAR VALUES PER NDS 2018 (lb/nail)						
	DIAM.	SP	DF	HF	SPF	SPF-S
3.5" LONG	.131	88.0	80.6	69.9	68.4	59.7
	.135	93.5	85.6	74.2	72.6	63.4
	.162	108.8	99.6	86.4	84.5	73.8
3.25" LONG	.128	74.2	67.9	58.9	57.6	50.3
	.131	75.9	69.5	60.3	59.0	51.1
	.148	81.4	74.5	64.6	63.2	52.5

VALUES SHOWN ARE CAPACITY PER TOE-NAIL.
APPLICABLE DURATION OF LOAD INCREASES MAY BE APPLIED.

EXAMPLE:

(3) - 16d (0.162" X 3.5") NAILS WITH SPF SPECIES BOTTOM CHORD

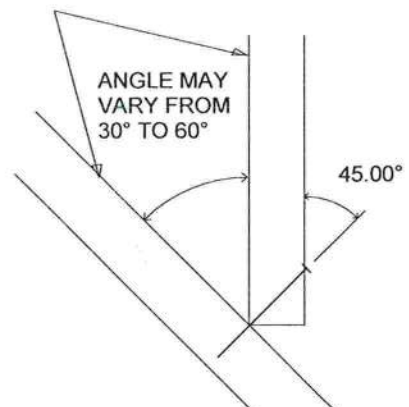
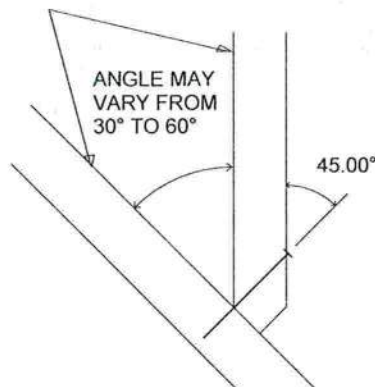
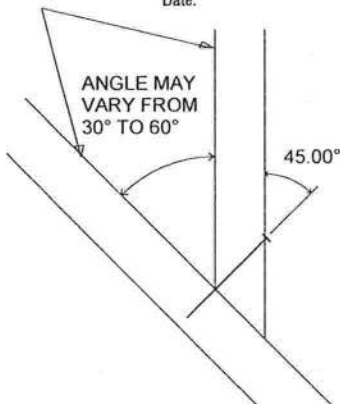
For load duration increase of 1.15:

3 (nails) X 84.5 (lb/nail) X 1.15 (DOL) = 291.5 lb Maximum Capacity



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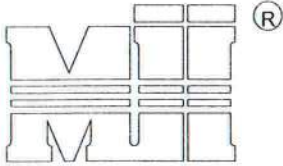
MiTek

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Tampa, FL 33610

APRIL 12, 2019

TRUSSED VALLEY SET DETAIL

MII-VALLEY HIGH WIND1



MiTek USA, Inc.

ENGINEERED BY
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Page 1 of 1
T23949118

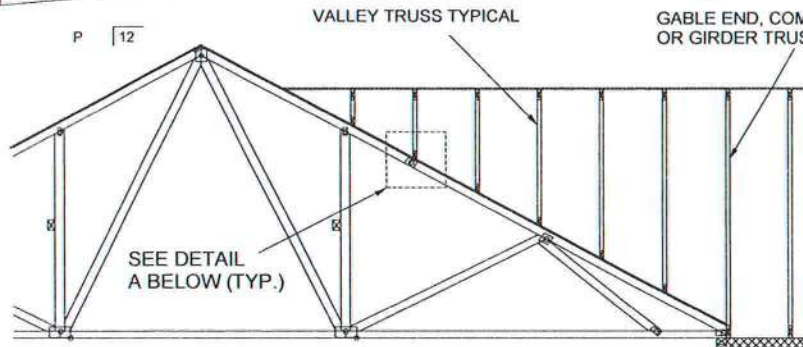
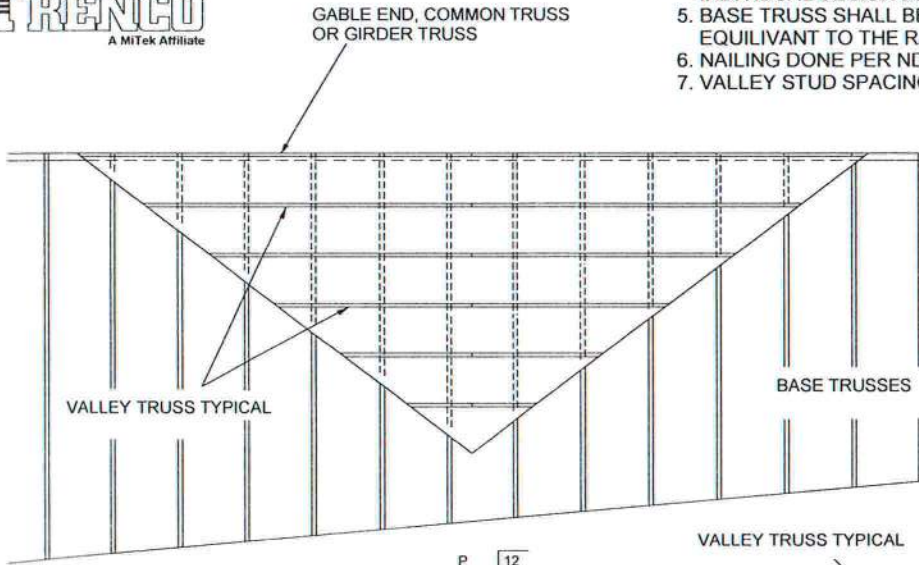
GENERAL SPECIFICATIONS

1. NAIL SIZE 10d (0.131" X 3")
2. WOOD SCREW = 3" WS3 USP OR EQUIVALENT
DO NOT USE DRYWALL OR DECKING TYPE SCREW
3. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
4. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
5. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING EQUIVANT TO THE RAKE DIMENSION OF THE VALLEY TRUSS SPACING.
6. NAILING DONE PER NDS - 01
7. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.

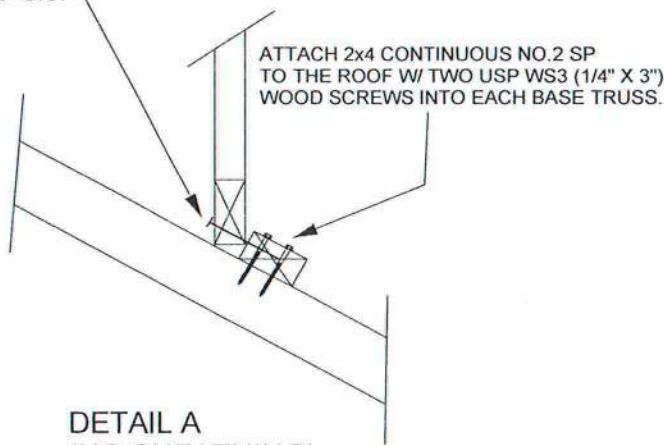


May 17, 2021

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MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:



SECURE VALLEY TRUSS
W/ ONE ROW OF 10d
NAILS 6" O.C.



DETAIL A
(NO SHEATHING)
N.T.S.

WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH
WIND DESIGN PER ASCE 7-10, ASCE 7-16 160 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
ROOF PITCH = MINIMUM 3/12 MAXIMUM 6/12
CATEGORY II BUILDING
EXPOSURE C
WIND DURATION OF LOAD INCREASE : 1.60
MAX TOP CHORD TOTAL LOAD = 50 PSF
MAX SPACING = 24" O.C. (BASE AND VALLEY)
MINIMUM REDUCED DEAD LOAD OF 6 PSF
ON THE TRUSSES

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

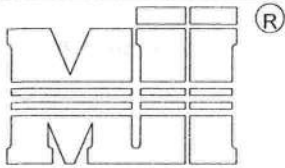


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Tampa, FL 33610

APRIL 12, 2019

TRUSSED VALLEY SET DETAIL

MII-VALLEY HIGH WIND2



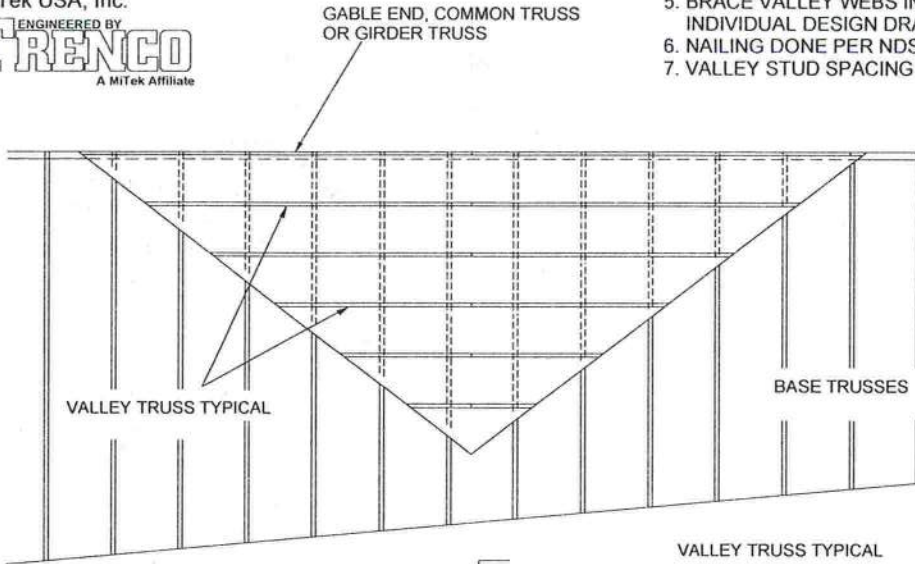
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GENERAL SPECIFICATIONS

MiTek USA, Inc.

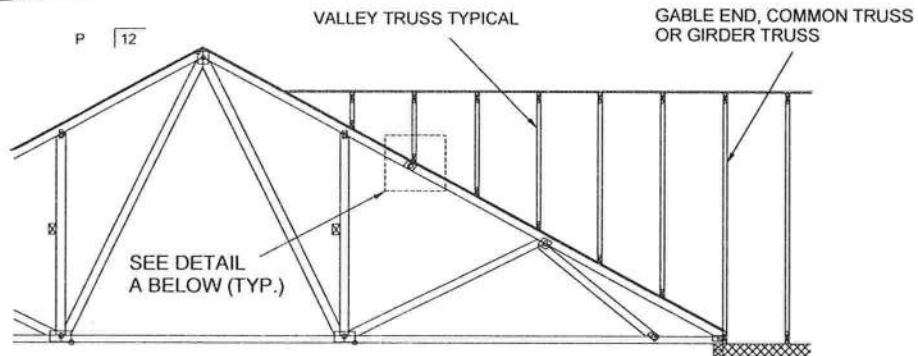
Page 1 of 1
123949119

1. NAIL SIZE 10d (0.131" X 3")
2. WOOD SCREW = 4.5" WS45 USP OR EQUIVANT
3. INSTALL SHEATHING TO TOP CHORD OF BASE TRUSSES.
4. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE TO BASE TRUSSES AS PER DETAIL A
5. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
6. NAILING DONE PER NDS-01
7. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.

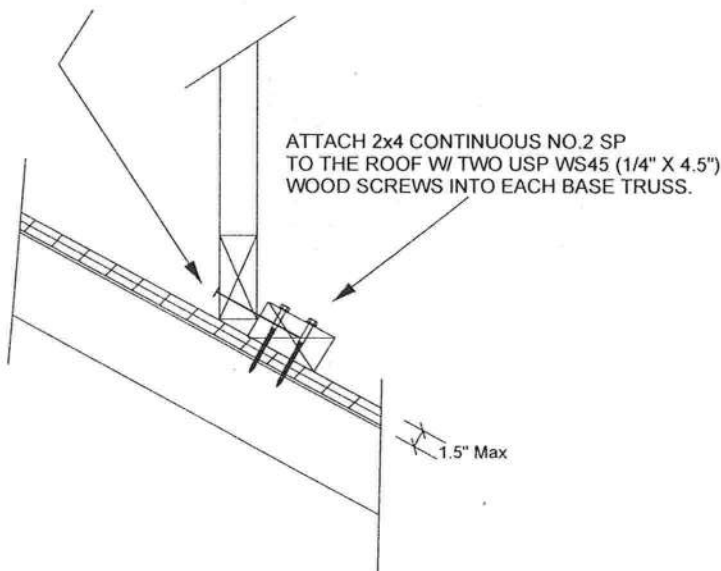


May 17, 2021

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6904 Parke East Blvd. Tampa FL 33610
Date:



SECURE VALLEY TRUSS
W/ ONE ROW OF 10d
NAILS 6" O.C.



WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH
WIND DESIGN PER ASCE 7-10, ASCE 7-16 160 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
ROOF PITCH = MINIMUM 3/12 MAXIMUM 6/12
CATEGORY II BUILDING
EXPOSURE C
WIND DURATION OF LOAD INCREASE : 1.60
MAX TOP CHORD TOTAL LOAD = 50 PSF
MAX SPACING = 24" O.C. (BASE AND VALLEY)
MINIMUM REDUCED DEAD LOAD OF 6 PSF
ON THE TRUSSES

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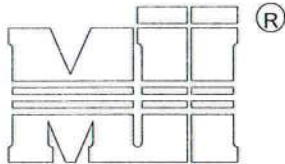


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APRIL 12, 2019

TRUSSED VALLEY SET DETAIL

MII-VALLEY SP



MiTek USA, Inc.

ENGINEERED BY
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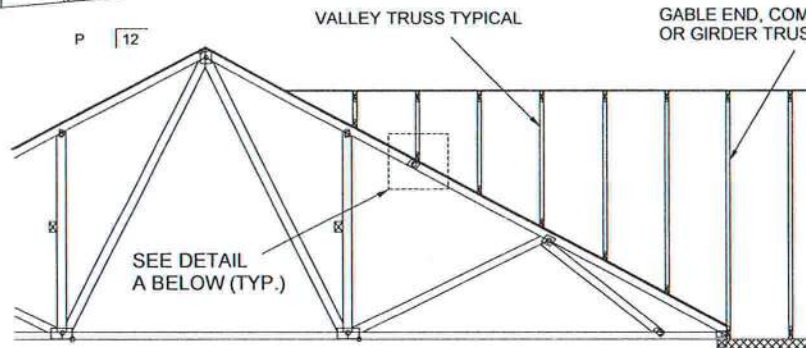
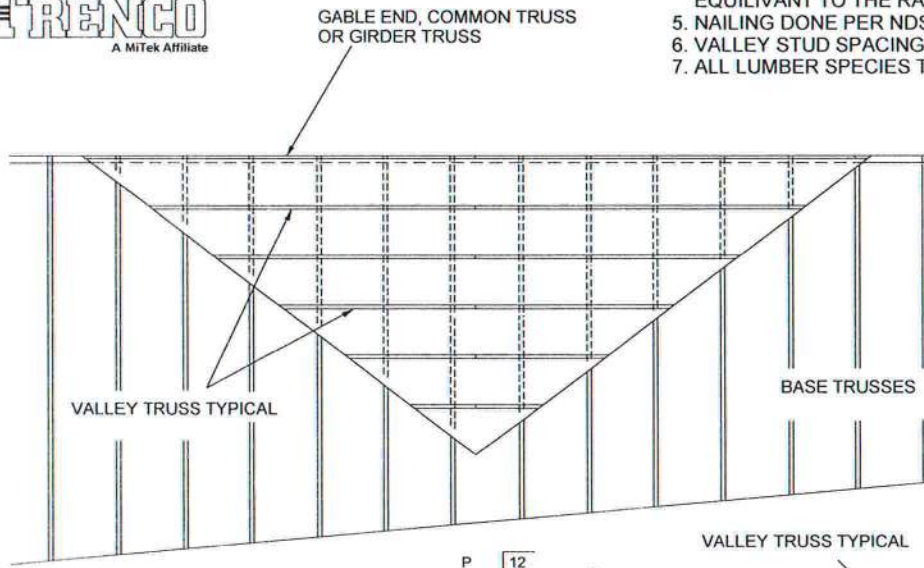
Page 1 of 1
T23949120

GENERAL SPECIFICATIONS

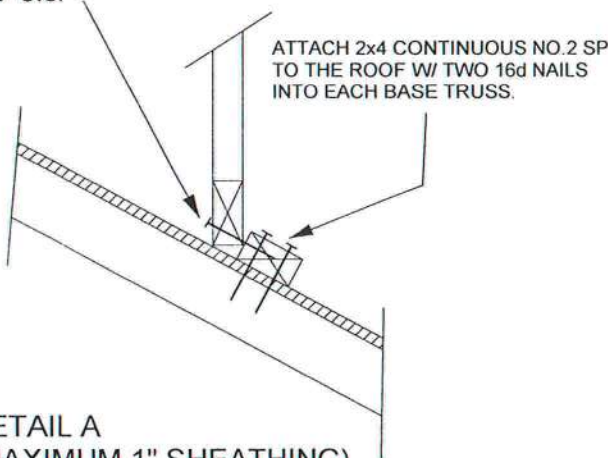
1. NAIL SIZE 16d (0.131" X 3.5")
2. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
3. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
4. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING EQUIVARIANT TO THE RAKE DIMENSION OF THE VALLEY TRUSS SPACING.
5. NAILING DONE PER NDS - 01
6. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.
7. ALL LUMBER SPECIES TO BE SP.



Michael S. Magid PE No. 53681
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Date:



SECURE VALLEY TRUSS
W/ ONE ROW OF 16d
NAILS 6" O.C.



ATTACH 2x4 CONTINUOUS NO.2 SP
TO THE ROOF W/ TWO 16d NAILS
INTO EACH BASE TRUSS.

DETAIL A
(MAXIMUM 1" SHEATHING)
N.T.S.

WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 120 MPH
WIND DESIGN PER ASCE 7-10, ASCE 7-16 150 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
ROOF PITCH = MINIMUM 3/12 MAXIMUM 10/12
CATEGORY II BUILDING
EXPOSURE C OR B
WIND DURATION OF LOAD INCREASE : 1.60
MAX TOP CHORD TOTAL LOAD = 60 PSF
MAX SPACING = 24" O.C. (BASE AND VALLEY)
MINIMUM REDUCED DEAD LOAD OF 4.2 PSF
ON THE TRUSSES

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK 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

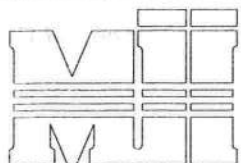


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APRIL 12, 2019

TRUSSED VALLEY SET DETAIL
(HIGH WIND VELOCITY)

MII-VALLEY



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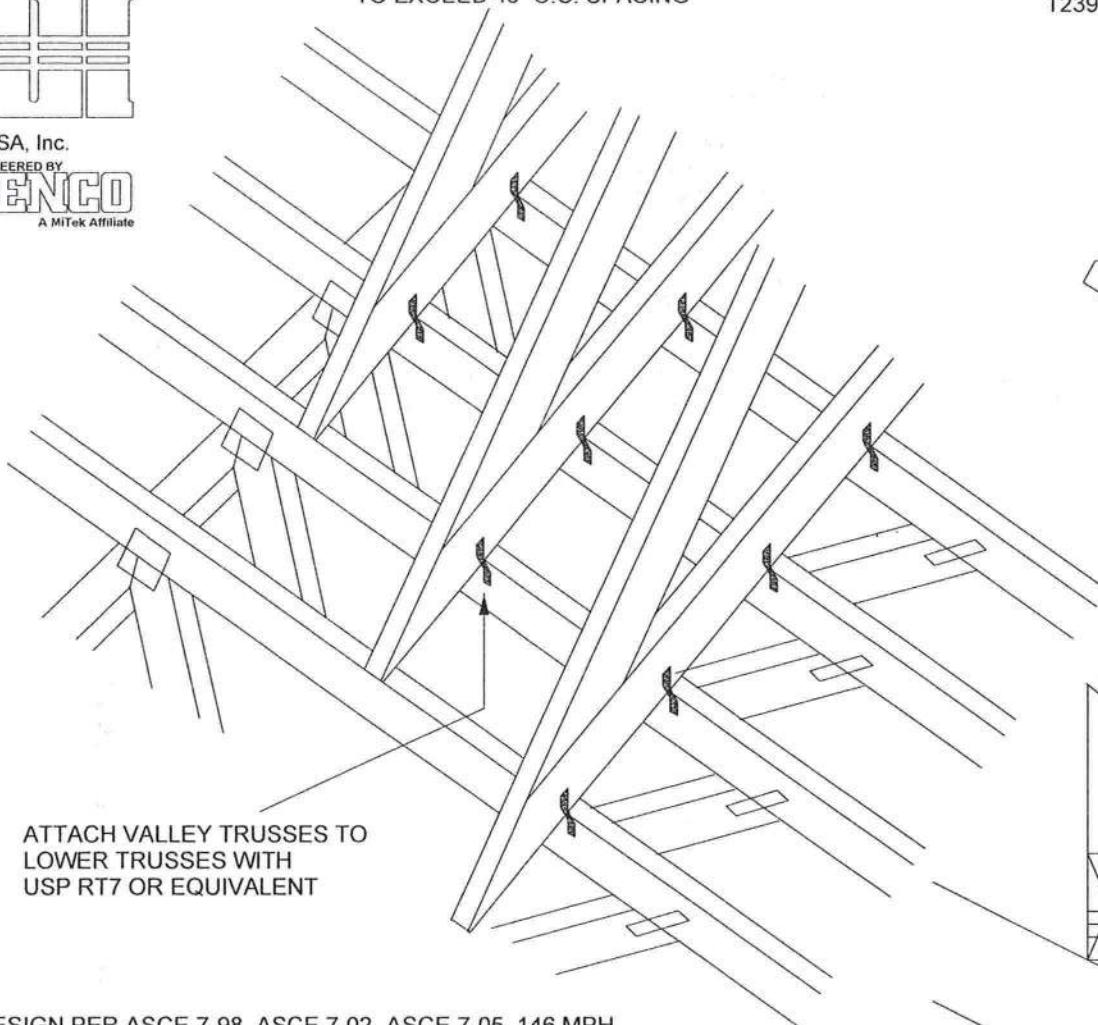
ENGINEERED BY
TRENCO
A MiTek Affiliate

®

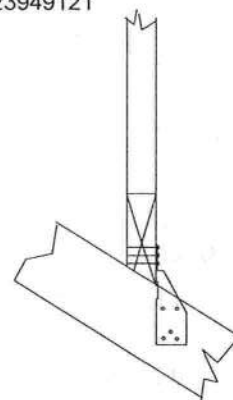
NOTE: VALLEY STUD SPACING NOT
TO EXCEED 48" O.C. SPACING

MiTek USA, Inc.
T23949121

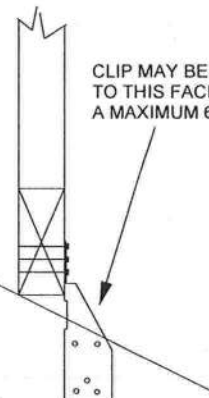
Page 1 of 1



ATTACH VALLEY TRUSSES TO
LOWER TRUSSES WITH
USP RT7 OR EQUIVALENT



FOR BEVELED BOTTOM
CHORD, CLIP MAY BE
APPLIED TO EITHER FACE



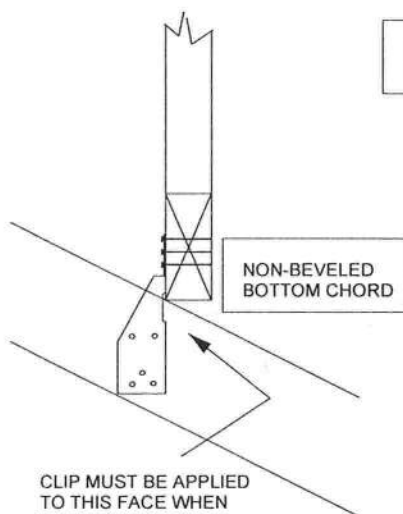
CLIP MAY BE APPLIED
TO THIS FACE UP TO
A MAXIMUM 6/12 PITCH

WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH
WIND DESIGN PER ASCE 7-10, ASCE 7-16 160 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
CATEGORY II BUILDING
EXPOSURE B or C
WIND DURATION OF LOAD INCREASE : 1.6
MAX TOP CHORD TOTAL LOAD = 50 PSF
MAX SPACING = 24" O.C. (BASE AND VALLEY)

SUPPORTING TRUSSES DIRECTLY UNDER
VALLEY TRUSSES MUST BE DESIGNED
WITH A MAXIMUM UNBRACED LENGTH OF
2'-10" ON AFFECTED TOP CHORDS.

NOTES:

- SHEATHING APPLIED AFTER
INSTALLATION OF VALLEY TRUSSES
- THIS DETAIL IS NOT APPLICABLE FOR
SPF-S SPECIES LUMBER.



NON-BEVELED
BOTTOM CHORD

NON-BEVELED
BOTTOM CHORD

CLIP MUST BE APPLIED
TO THIS FACE WHEN
PITCH EXCEEDS 6/12.
(MAXIMUM 12/12 PITCH)



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Date:

May 17, 2021

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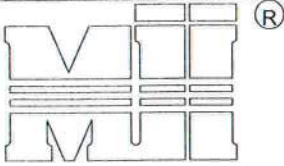


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Tampa, FL 33610

OCTOBER 5, 2016

REPLACE BROKEN OVERHANG

MII-REP13B



MiTek USA, Inc.

TRENCO
 A MiTek Affiliate

TRUSS CRITERIA:

LOADING: 40-10-0-10
 DURATION FACTOR: 1.15
 SPACING: 24" O.C.
 TOP CHORD: 2x4 OR 2x6
 PITCH: 4/12 - 12/12
 HEEL HEIGHT: STANDARD HEEL UP TO 12" ENERGY HEEL
 END BEARING CONDITION

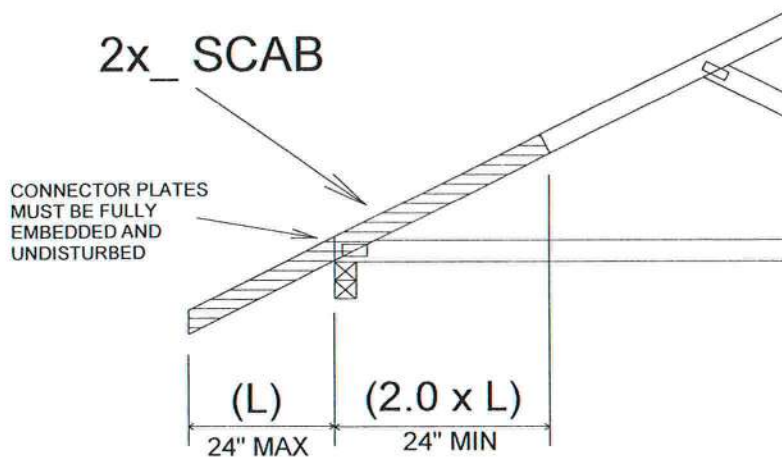
MiTek USA, Inc.

Page 1 of 1

T23949122

NOTES:

1. ATTACH 2x SCAB (MINIMUM NO.2 GRADE SPF, HF, SP, DF) TO ONE FACE OF TRUSS WITH TWO ROWS OF 10d (0.131" X 3") SPACED 6" O.C.
2. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
3. WHEN NAILING THE SCABS, THE USE OF A BACKUP WEIGHT IS RECOMMENDED TO AVOID LOOSENING OF THE CONNECTOR PLATES AT THE JOINTS OR SPLICES.



IMPORTANT

This detail to be used only with trusses (spans less than 40') spaced 24" o.c. maximum and having pitches between 4/12 and 12/12 and total top chord loads not exceeding 50 psf.
 Trusses not fitting these criteria should be examined individually.

REFER TO INDIVIDUAL TRUSS DESIGN
 FOR PLATE SIZES AND LUMBER GRADES



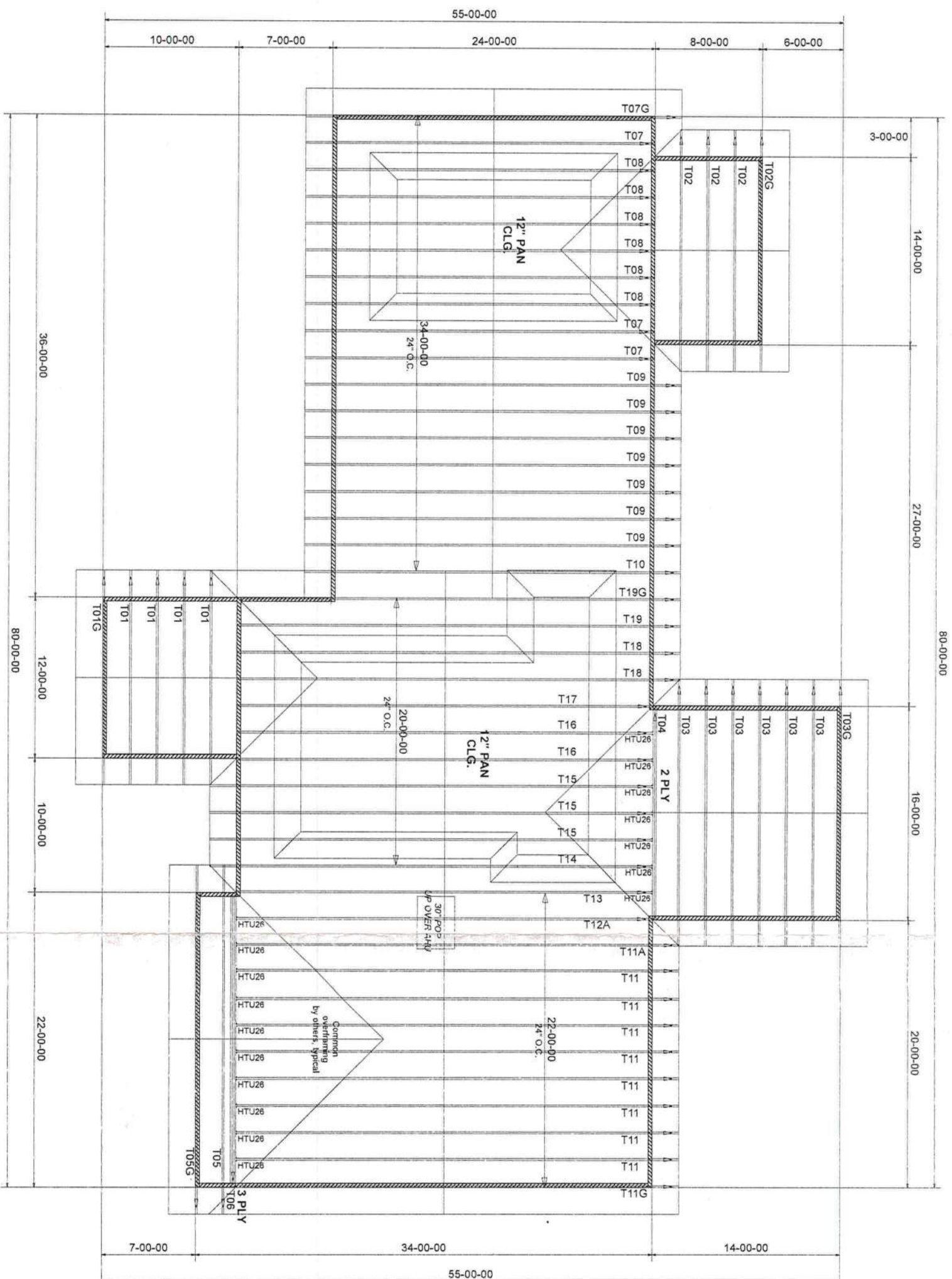
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 MiTek USA, Inc. FL Cert 6634
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 Date:

May 17, 2021

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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MiTek

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 Tampa, FL 33610



4/12 PITCH
2X6 HEELS
24" OVERHANG
TOTAL ROOF AREA 3560.72 SQFT
10' PLATE (OR AS IN FIELD)

Truss Connector Total List		
Manuf	Product	Qty
Simpson	HTU26	17

HATCH LEGEND	
	SEE PLAN
	10' PLATE (OR AS IN FIELD)

General Notes:
- For ANSITR 12002 all "Truss to Wall" connections are the responsibility of the Building Designer, not the Truss Manufacturer.
- Use Manufacturer's specifications for all hanger connections unless noted otherwise.
- Trusses are to be 24" o.c. U.N.O.
- All hangers are to be Simpson or equivalent U.N.O.
- Use 100 x 1 1/2" Nails in hanger connections to single ply girders.
- Trusses are not designed to support brick U.N.O.
- Dimensions are feet/inches. Sixteenths.

Notes:
No back charges will be accepted by Builders FirstSource unless approved in writing first.
ACQ lumber is conservative to truss plates. Any ACQ lumber that comes in contact with truss plates (i.e. scaled on tails) must have an approved barrier applied first.
Refer to BCSI-B1 Summary Sheet/Code for handling, installing and bracing of Metal Plate Connected Wood Truss prior to and during truss installation.
It is the responsibility of the Contractor to ensure the proper orientation of the truss placement plans as to the construction documents and field conditions of the structure orientation. If a reversed or flipped layout is required, it will be supplied at no extra cost by Builders FirstSource.

It is the responsibility of the Contractor to make sure the placement of trusses are adjusted for plumbing drops, can lights, ect., so the trusses do not interfere with these type of items.
All common framed roof or floor systems must be designed as to NOT impose any loads on the floor trusses below. The floor trusses have not been designed to carry any additional loads from above.
This truss placement plan was not created by an engineer, but rather by the Builders FirstSource staff and is solely to be used as an installation guide and does not require a seal. Complete truss engineering and analysis can be found on the truss design drawings which may be created by the truss design engineer.

Gable end trusses require continuous bottom chord bearing. Refer to local codes for wall framing requirements.
Although all attempts have been made to do so, trusses may not be designed symmetrically. Please refer to the individual truss drawings and truss placement plans for proper orientation and placement.



Tallahassee
PHONE: 850-576-5177
Lake City
PHONE: 386-382-3545
Jacksonville
PHONE: 904-772-6100
WWW.BLD.R.COM

Builder:
Terrance Jones
Legal Address:
Cooley Way, Lake City FL

Model:
M. Roberts Custom

Date: 6-29-23
Drawn By: BPC
Original Ref #:
Floor 1 Job #: 3576025
Floor 2 Job #:

MITEK PRODUCT APPROVAL #'S FL2197-R6

