

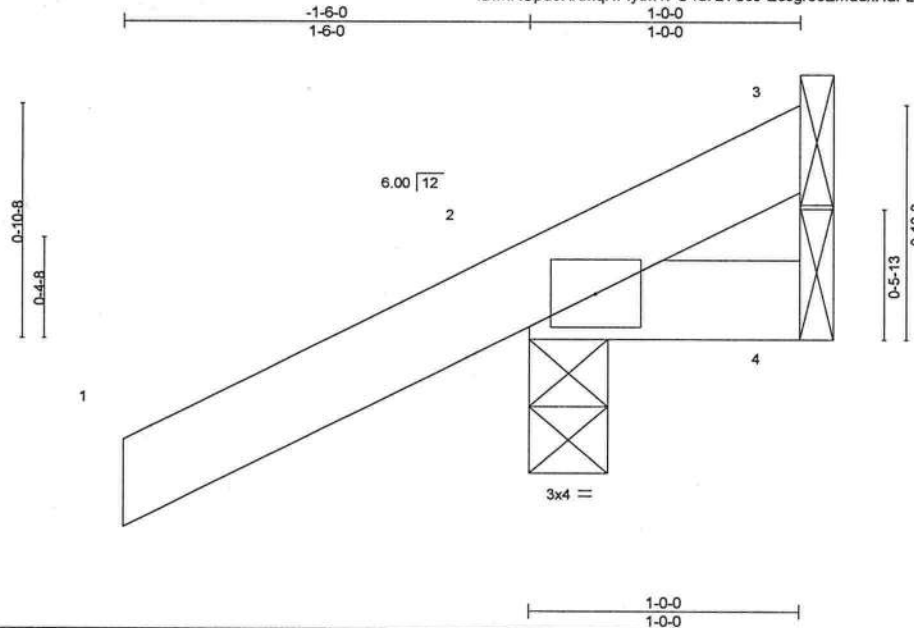
Job 3163304	Truss CJ01	Truss Type Jack-Open	Qty 8	Ply 1	GIEBEIG - LOT 8 CW	T27693417
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Builders FirstSource (Lake City, FL),

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 11 14:41:43 2022 Page 1

ID:MRUpuoKKMqHFLytM1PC4d7zYSsJ-Ecsgr9sEmddxHuFLMXSx89YZ016JFluKrqy2m1zHY66



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.14	Vert(LL)	0.00	7	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.03	Vert(CT)	0.00	7	>999	180	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a	n/a	
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MP						
								Weight: 6 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

#### REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=39(LC 12)  
Max Uplift 3=6(LC 1), 2=-67(LC 12), 4=-19(LC 1)  
Max Grav 3=7(LC 16), 2=179(LC 1), 4=18(LC 16)

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

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

May 12, 2022

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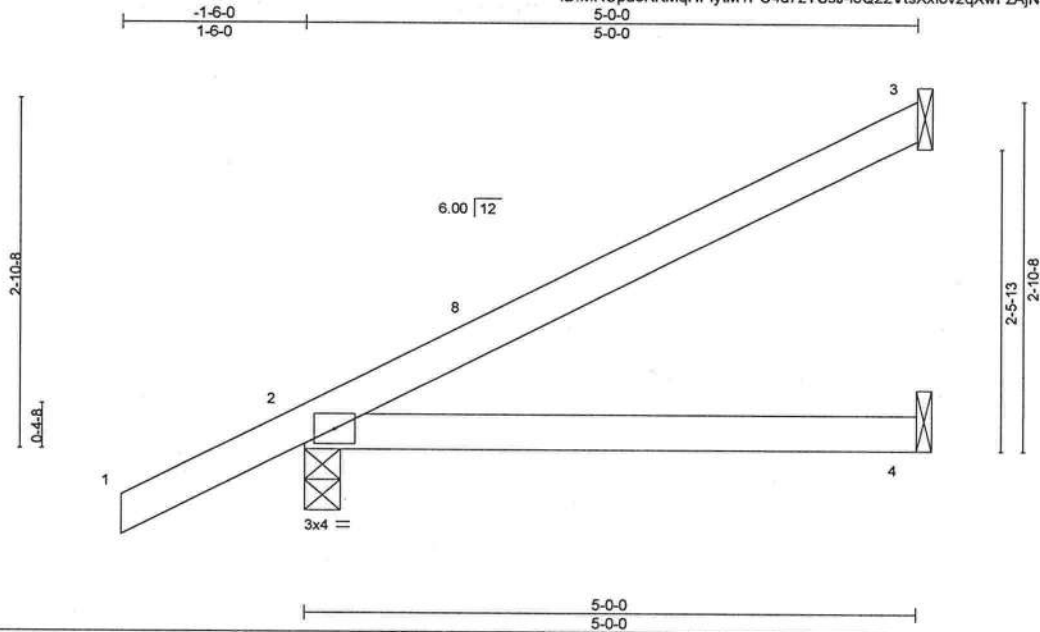
Job 3163304	Truss CJ05	Truss Type Jack-Open	Qty 8	Ply 1	GIEBEIG - LOT 8 CW	T27693419
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Builders FirstSource (Lake City, FL),

Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 11 14:41:44 2022 Page 1

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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.28	Vert(LL) 0.03	4-7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.24	Vert(CT) -0.05	4-7	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MP						
							Weight: 18 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=107(LC 12)  
Max Uplift 3=67(LC 12), 2=65(LC 12)  
Max Grav 3=113(LC 1), 2=276(LC 1), 4=88(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 4-11-4 zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

May 12, 2022

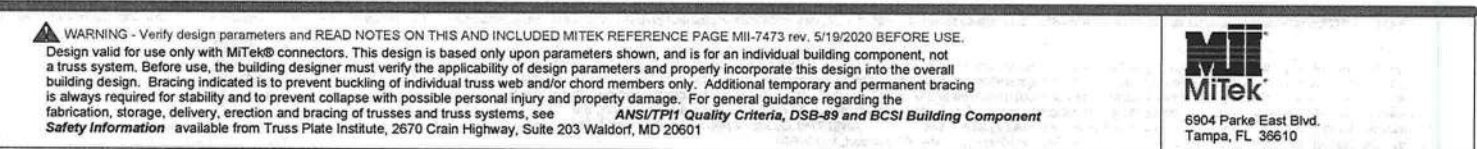
**WARNING -** Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.  
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8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 11 14:41:46 2022 Page 1  
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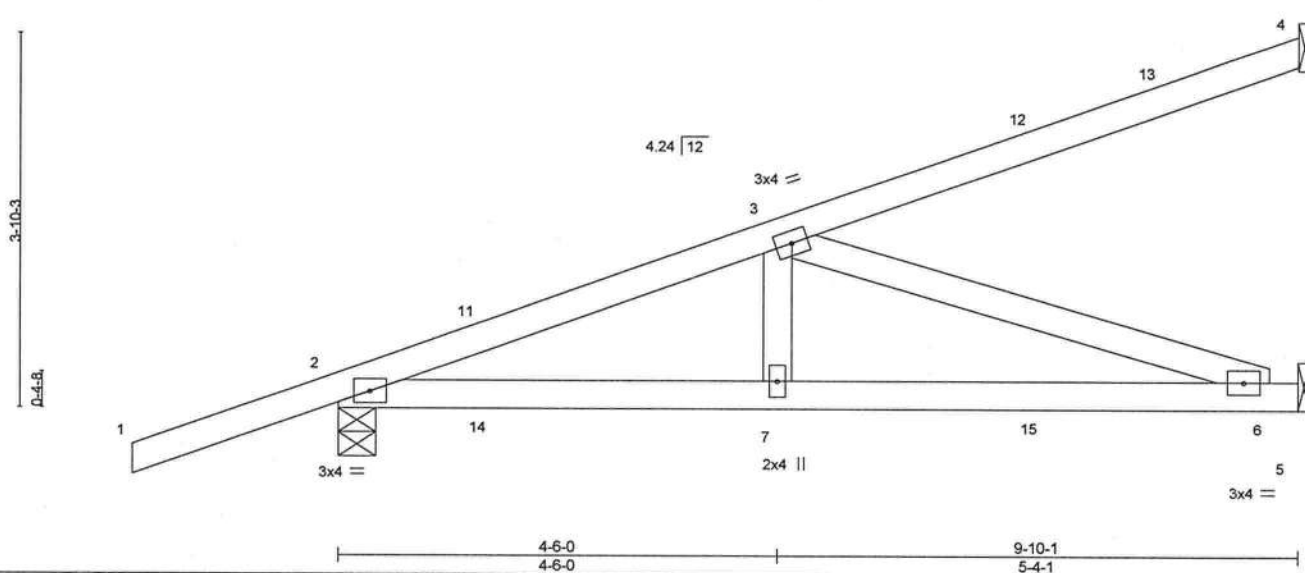
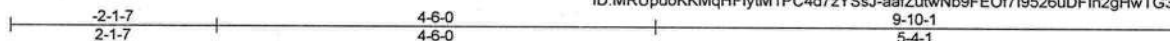


Job 3163304	Truss HJ10	Truss Type Diagonal Hip Girder	Qty 3	Ply 1	GIEBEIG - LOT 8 CW	T27693423
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 11 14:41:48 2022 Page 1

ID:MRUpuoKKMqHFlytM1PC4d7zYsSJaafZutwNb9FE0i7I9526uDFIn2gHwTG3?6goSFzHY61



LOADING (psf)	SPACING-		CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25		TC 0.58	Vert(LL) 0.06	6-7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25		BC 0.62	Vert(CT) -0.12	6-7	>992	180		
BCLL 0.0 *	Rep Stress Incr NO		WB 0.44	Horz(CT) 0.01	5	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS						
								Weight: 43 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 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 9-2-14 oc bracing.

**REACTIONS.** (size) 4=Mechanical, 2=0-4-9, 5=Mechanical  
Max Horz 2=149(LC 22)  
Max Uplift 4=-77(LC 4), 2=-298(LC 4), 5=-142(LC 4)  
Max Grav 4=149(LC 1), 2=527(LC 1), 5=299(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-799/340  
BOT CHORD 2-7=-395/729, 6-7=-395/729  
WEBS 3-7=-60/281, 3-6=-768/416

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=298, 5=142.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 59 lb down and 73 lb up at 1-6-1, 59 lb down and 73 lb up at 1-6-1, 22 lb down and 38 lb up at 4-4-0, 22 lb down and 38 lb up at 4-4-0, and 43 lb down and 78 lb up at 7-1-15, and 43 lb down and 78 lb up at 7-1-15 on top chord, and 41 lb down and 43 lb up at 1-6-1, 41 lb down and 43 lb up at 1-6-1, 19 lb down and 24 lb up at 4-4-0, 19 lb down and 24 lb up at 4-4-0, and 64 lb down at 7-1-15, and 64 lb down at 7-1-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-4=-54, 5-8=-20  
Concentrated Loads (lb)  
Vert: 7=-6(F=-3, B=-3) 12=-73(F=-36, B=-36) 15=-59(F=-29, B=-29)



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

May 12,2022

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6904 Parke East Blvd.  
Tampa, FL 36610



Job 3163304	Truss T01	Truss Type Common	Qty 10	Ply 1	GIEBEIG - LOT 8 CW	T27693425
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 11 14:41:50 2022 Page 1

ID:MRUpuoKKMqHFlytM1PC4d7zYSSJ-XynJJZyd7nVydZHHGW4azeLgMrGkOPMMSQ9vW7zHY6?

Job Reference (optional)

-1-6-0 1-6-0	5-3-14 5-3-14	10-10-0 5-6-2	16-4-2 5-6-2	21-8-0 5-3-14	23-2-0 1-6-0
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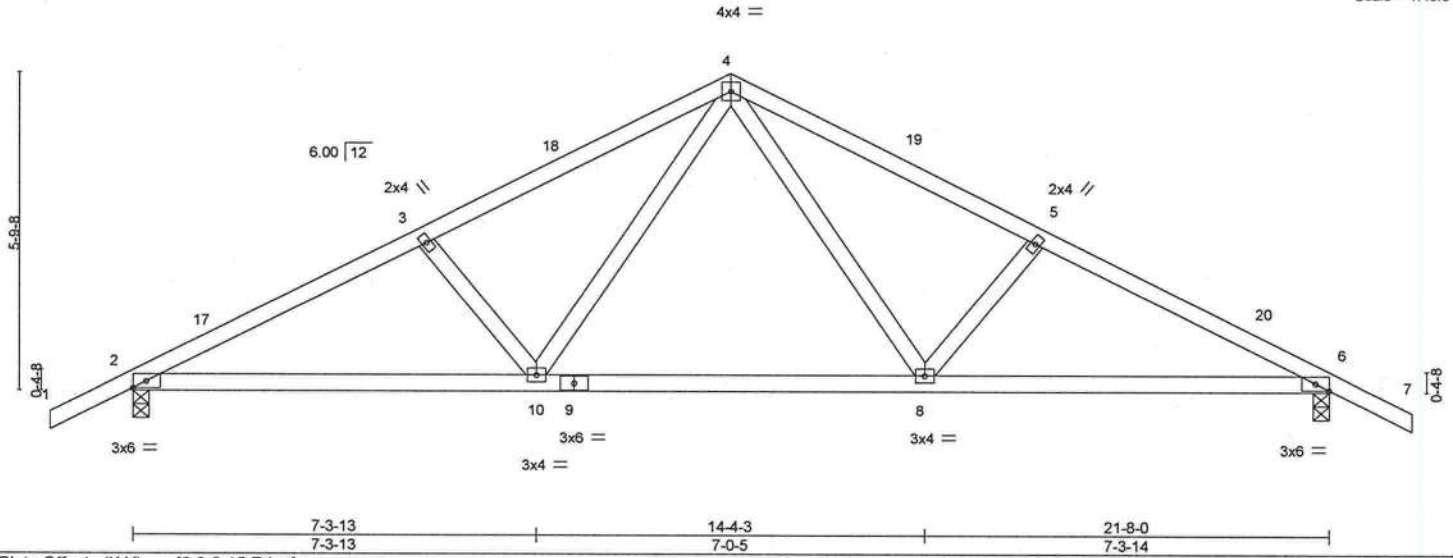


Plate Offsets (X, Y)-- [6:0-2-15, Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.45	Vert(LL)	-0.19	8-10	>999	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 1.00	Vert(CT)	-0.38	8-10	>686		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.27	Horz(CT)	0.05	6	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS						
	Code FBC2020/TP1014						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 4-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 9-3-2 oc bracing.

#### REACTIONS.

(size) 2=0-3-8, 6=0-3-8  
Max Horz 2=92(LC 13)  
Max Uplift 2=256(LC 12), 6=256(LC 13)  
Max Grav 2=1093(LC 1), 6=1093(LC 1)

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

TOP CHORD 2-3=-1891/520, 3-4=-1724/510, 4-5=-1724/510, 5-6=-1891/520  
BOT CHORD 2-10=-393/1643, 8-10=-193/1099, 6-8=-393/1643  
WEBS 4-8=-193/717, 5-8=-277/176, 4-10=-193/717, 3-10=-277/176

#### 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 10-10-0, Exterior(2R) 10-10-0 to 13-10-0, Interior(1) 13-10-0 to 23-2-0 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=256, 6=256.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-4=-54, 4-7=-54, 10-11=-20, 8-10=-80(F=-60), 8-14=-20



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

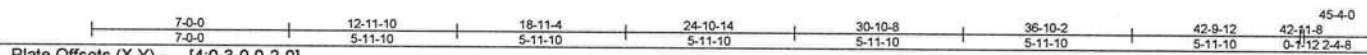
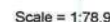
May 12, 2022

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**MiTek**

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8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 11 14:42:00 2022 Page 1  
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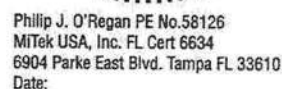
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3

BRACING- TOP CHORD	Structural wood sheathing directly applied or 3-0-3 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 11-15

REACTIONS. (size) 2=0-3.8, 15=0-3.8  
Max Horz 2=143(LC 27)  
Max Uplift 2=-904(LC 8), 15=-1041(LC 5)  
Max Grav 2=3250(LC 1), 15=3957(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=6693/1859, 3-4=6553/1823, 4-5=5948/1683, 5-6=10423/2787, 6-8=10423/2787,  
 8-9=8435/2232, 9-11=8435/2232  
 BOT CHORD 2-23=1735/5940, 22-23=2449/9024, 20-22=2449/9024, 19-20=2738/10290,  
 17-19=2738/10290, 16-17=1322/5005, 15-16=1322/5005  
 WEBS 4-23=583/2462, 5-23=3628/952, 5-22=0/502, 5-20=404/1657, 6-20=626/326,  
 8-19=0/515, 8-17=2151/624, 9-17=636/330, 11-17=1055/3976, 11-16=0/480,  
 11-15=5846/1545, 12-15=571/284

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) 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.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDEL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCPI=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)  
 2=904. 15=1041

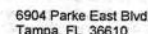


May 12, 2022

Continued on page 2

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Job 3163304	Truss T03	Truss Type Half Hip	Qty 1	Ply 1	GIEBEIG - LOT 8 CW	T27693428
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 11 14:42:02 2022 Page 1

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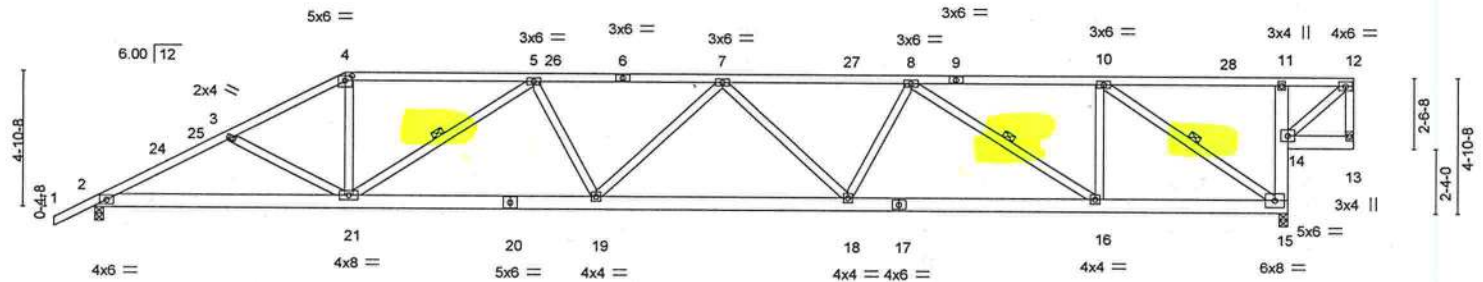


Plate Offsets (X,Y) -	9-0-0 9-0-0	18-0-11 9-0-11	27-1-5 9-0-11	36-2-0 9-0-11	42-11-8 6-9-8	45-4-0 2-4-8
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.68	Vert(LL)	-0.30 18-19	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.68	Vert(CT)	-0.57 18-19	>897	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.81	Horz(CT)	0.14 15	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS						
								Weight: 280 lb	FT = 20%

#### LUMBER-

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

#### REACTIONS.

(size) 2=0-3-8, 15=0-3-8  
Max Horz 2=178(LC 12)  
Max Uplift 2=409(LC 12), 15=470(LC 9)  
Max Grav 2=1658(LC 1), 15=1767(LC 1)

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

TOP CHORD 2-3=-3108/764, 3-4=-2869/688, 4-5=-2550/650, 5-7=-3639/924, 7-8=-3452/886,  
8-10=-1967/516  
BOT CHORD 2-21=-785/2753, 19-21=-918/3510, 18-19=-993/3727, 16-18=-861/3220, 15-16=-516/1967,  
14-15=-360/133, 11-14=-278/132  
WEBS 3-21=-266/160, 4-21=-186/986, 5-21=-1230/389, 5-19=-30/368, 7-18=-387/231,  
8-18=-121/543, 8-16=-1503/414, 10-16=-174/985, 10-15=-2377/616

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 3-0-6, Interior(1) 3-0-6 to 9-0-0, Exterior(2R) 9-0-0 to 15-4-15, Interior(1) 15-4-15 to 45-2-4 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.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=409, 15=470.



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

May 12, 2022

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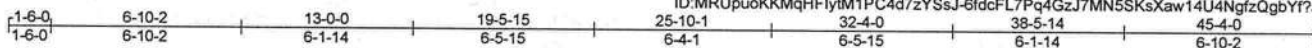
6904 Parke East Blvd.  
Tampa, FL 33610

Job 3163304	Truss T05	Truss Type Hip	Qty 1	Ply 1	GIEBEIG - LOT 8 CW	T27693430
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 11 14:42:04 2022 Page 1

ID:MRUpuoKKMqHFLytM1PC4d7zYSsJ6fcdFL7Pq4GzJ7MN5SKsXaw14U4NgfzQgbYf7JzHY5n



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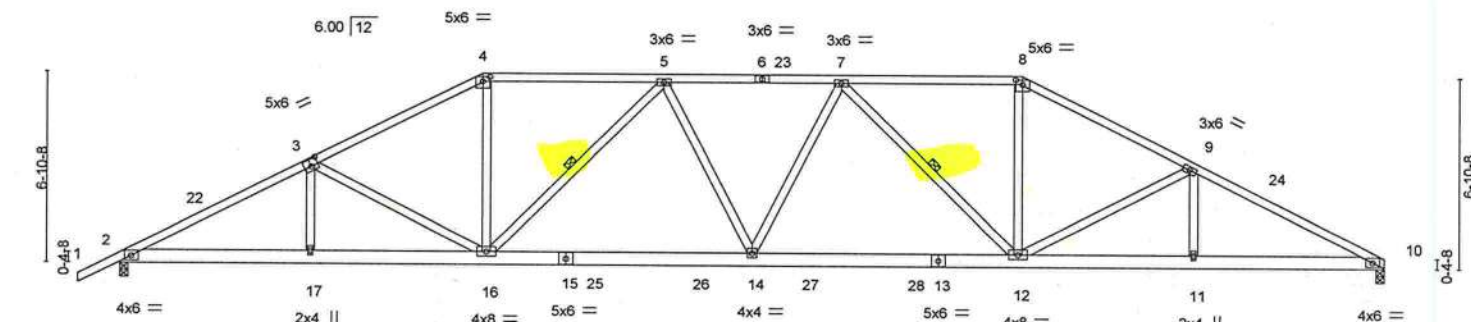


Plate Offsets (X,Y) -		[3:0-3-0,0-3-0], [4:0-3-0,0-2-0], [8:0-3-0,0-2-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.63
TCDL 7.0	Lumber DOL	1.25	BC 0.78
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.58
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-MS
		DEFL.	in (loc) l/defl L/d
		Vert(LL)	-0.33 12-14 >999 240
		Vert(CT)	-0.57 12-14 >961 180
		Horz(CT)	0.16 10 n/a n/a
		PLATES	GRIP
		MT20	244/190
		Weight: 275 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 9-0-0 oc bracing.  
WEBS 1 Row at midpt 5-16, 7-12

#### REACTIONS.

(size) 10=0-3-8, 2=0-3-8  
Max Horz 2=119(LC 12)  
Max Uplift 10=362(LC 13), 2=395(LC 12)  
Max Grav 10=1846(LC 2), 2=1915(LC 2)

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

TOP CHORD 2-3=3654/705, 3-4=3088/599, 4-5=2725/577, 5-7=3327/654, 7-8=2727/579,  
8-9=3091/602, 9-10=3667/715  
BOT CHORD 2-17=656/3223, 16-17=656/3226, 14-16=544/3222, 12-14=520/3223, 11-12=568/3235,  
10-11=568/3235  
WEBS 3-17=0/263, 3-16=601/237, 4-16=136/1100, 5-16=795/241, 5-14=63/311,  
7-14=62/310, 7-12=794/240, 8-12=142/1103, 9-12=610/245, 9-11=0/266

#### 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 3-0-6, Interior(1) 3-0-6 to 13-0-0, Exterior(2R) 13-0-0 to 19-5-15, Interior(1) 19-5-15 to 32-4-0, Exterior(2R) 32-4-0 to 38-5-14, Interior(1) 38-5-14 to 45-4-0 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.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=362, 2=395.



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

May 12,2022

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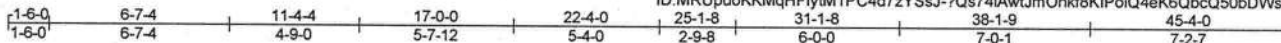


Job 3163304	Truss T07	Truss Type Roof Special	Qty 1	Ply 1	GIEBEIG - LOT 8 CW	T27693432
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 11 14:42:08 2022 Page 1

ID:MRUpuoKKMqHfYtM1PC4d7zYSsJ-?Qs74iAwTJmOnkf8KIPoiQ4eK6QbcQ50bDWs85zHY5j



Scale = 1:81.5

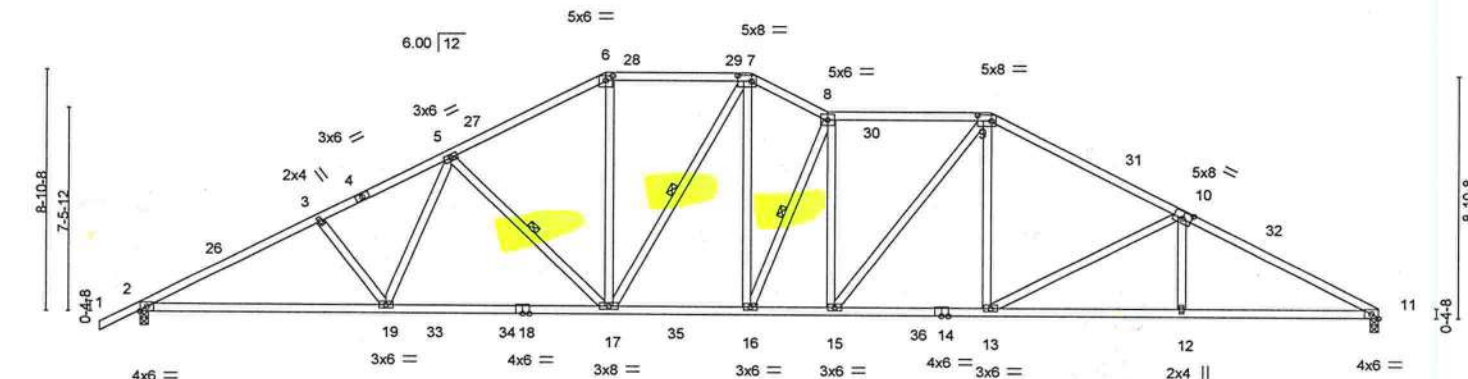


Plate Offsets (X,Y)--	[6:0-3-0,0-2-0], [7:0-6-0,0-2-8], [9:0-6-0,0-2-8], [10:0-4-0,0-3-0]
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LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.93	Vert(LL) -0.32	13-15	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.96	Vert(CT) -0.55	17-19	>993	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.83	Horz(CT) 0.19	11	n/a	n/a		
BCDL 10.0	Code FBC2020/TP12014	Matrix-MS						

Weight: 270 lb FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
2-18: 2x4 SP M 31  
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 5-17, 7-17, 8-16

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8  
Max Horz 2=149(LC 12)  
Max Uplift 2=342(LC 12), 11=360(LC 13)  
Max Grav 2=1923(LC 2), 11=1845(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=3559/735, 3-5=3399/732, 5-6=2674/659, 6-7=2353/633, 7-8=2781/716,  
8-9=2924/729, 9-10=2944/680, 10-11=3588/751  
BOT CHORD 2-19=611/3135, 17-19=525/2780, 16-17=416/2486, 15-16=527/2929, 13-15=437/2575,  
12-13=603/3166, 11-12=604/3159  
WEBS 3-19=278/170, 5-19=96/579, 5-17=626/249, 6-17=140/933, 7-17=394/136,  
7-16=291/1274, 8-16=1228/335, 8-15=308/134, 9-15=139/560, 9-13=75/576,  
10-13=681/262, 10-12=0/293

- 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=20ft; Cat. II; Excl. B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 3-0-6, Interior(1) 3-0-6 to 17-0-0, Exterior(2R) 17-0-0 to 21-6-6, Interior(1) 21-6-6 to 22-4-0, Exterior(2E) 22-4-0 to 25-1-8, Interior(1) 25-1-8 to 31-1-8, Exterior(2R) 31-1-8 to 35-7-14, Interior(1) 35-7-14 to 45-4-0 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.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=342, 11=360.



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

May 12, 2022

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 8 CW	T27693433
3163304	T08	Hip Girder	1	2	Job Reference (optional)	

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 11 14:42:13 2022 Page 2

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#### NOTES-

- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 128 lb down and 90 lb up at 7-0-0, 110 lb down and 90 lb up at 9-0-12, 97 lb down and 77 lb up at 11-0-12, 97 lb down and 77 lb up at 13-0-12, 97 lb down and 77 lb up at 15-0-12, 97 lb down and 77 lb up at 17-0-12, 97 lb down and 74 lb up at 19-0-12, 97 lb down and 74 lb up at 20-3-4, 97 lb down and 77 lb up at 22-3-4, 97 lb down and 77 lb up at 24-3-4, 97 lb down and 77 lb up at 26-3-4, 110 lb down and 90 lb up at 28-3-4, and 110 lb down and 90 lb up at 30-3-4, and 230 lb down and 173 lb up at 32-4-0 on top chord, and 335 lb down and 174 lb up at 7-0-0, 86 lb down at 9-0-12, 78 lb down and 32 lb up at 13-0-12, 78 lb down and 32 lb up at 15-0-12, 78 lb down and 32 lb up at 17-0-12, 78 lb down and 32 lb up at 19-0-12, 78 lb down and 32 lb up at 20-3-4, 78 lb down and 32 lb up at 22-3-4, 78 lb down and 32 lb up at 24-3-4, 78 lb down and 32 lb up at 26-5-12, 86 lb down at 28-3-4, and 86 lb down at 30-3-4, and 335 lb down and 174 lb up at 32-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

#### LOAD CASE(S) Standard

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

##### Uniform Loads (plf)

Vert: 1-4=-54, 4-11=-54, 11-14=-54, 2-21=-20, 17-20=-20, 13-16=-20

##### Concentrated Loads (lb)

Vert: 4=-110(F) 8=-97(F) 11=-182(F) 6=-97(F) 10=-97(F) 17=-77(F) 15=-335(F) 28=-110(F) 29=-97(F) 30=-97(F) 31=-97(F) 33=-97(F) 34=-97(F) 35=-97(F) 36=-110(F) 37=-110(F) 38=-335(F) 39=-64(F) 40=-77(F) 41=-77(F) 42=-77(F) 43=-77(F) 44=-77(F) 45=-77(F) 46=-77(F) 47=-64(F) 48=-64(F)

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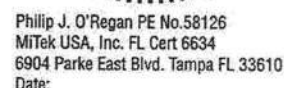
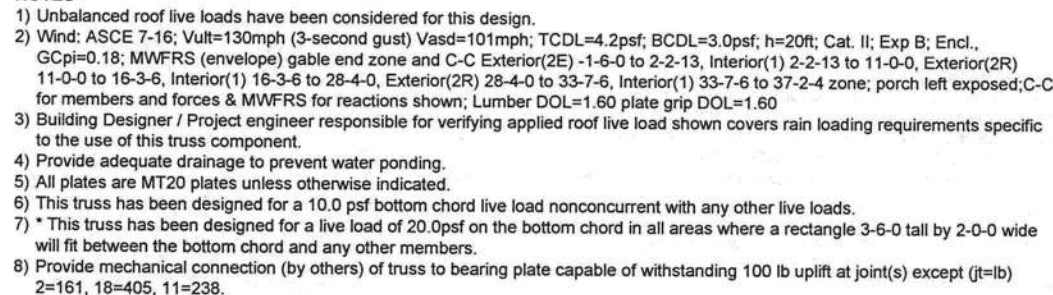
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



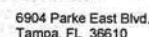
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Tampa, FL 36610



8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 11 14:42:16 2022 Page 1  
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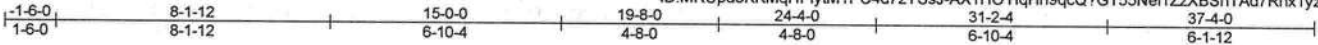


Job 3163304	Truss T12	Truss Type Hip	Qty 1	Ply 1	GIEBEIG - LOT 8 CW	T27693437
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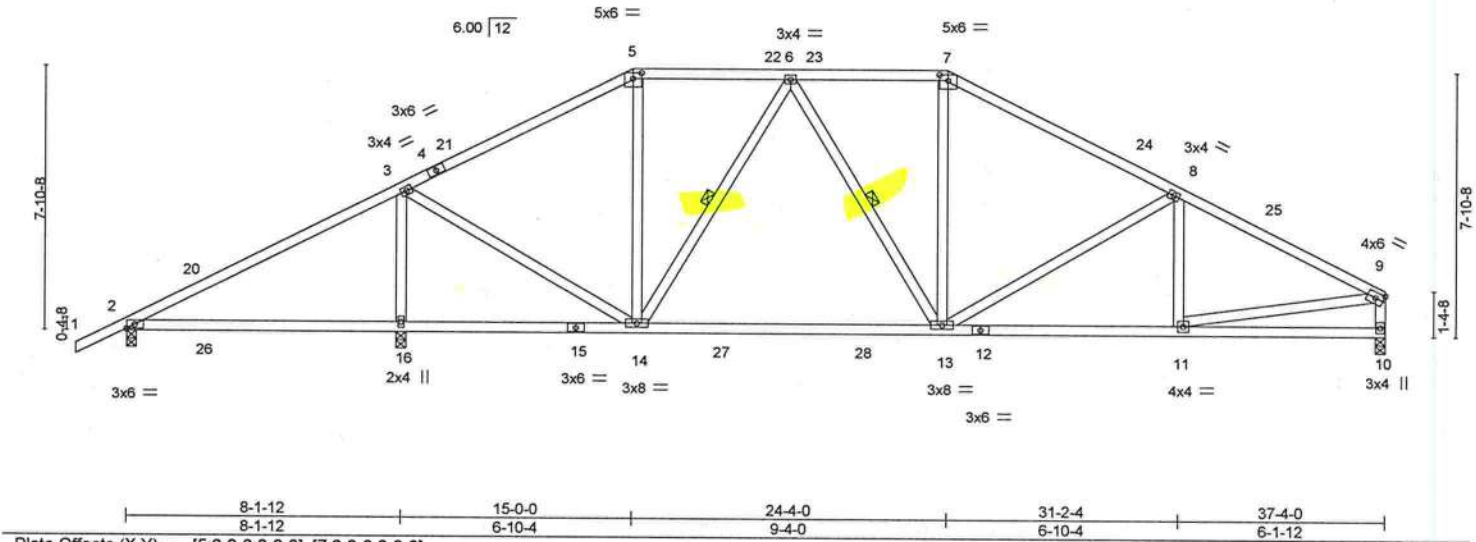
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 11 14:42:19 2022 Page 1

ID:MRUpuoKKMqHFIyIM1PC4d7zYSsJ-AX1HO1qHh9qcQ?GT55Nel1ZzXBShTAd7RhX1yzHY5Y



Scale = 1:66.0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.71	Vert(LL)	0.26 16-19 >383	MT20		244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.88	Vert(CT)	0.21 16-19 >468				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.03 10 n/a				
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							
								Weight: 210 lb FT = 20%			

#### LUMBER-

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

#### REACTIONS.

(size) 2=0-3-8, 16=0-3-8, 10=0-3-8  
Max Horz 2=155(LC 12)  
Max Uplift 2=86(LC 9), 16=324(LC 12), 10=242(LC 13)  
Max Grav 2=322(LC 23), 16=1646(LC 2), 10=1140(LC 2)

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

TOP CHORD 3-5=-954/255, 5-6=-782/257, 6-7=-1118/322, 7-8=-1319/317, 8-9=-1588/348, 9-10=-1039/256  
BOT CHORD 13-14=-132/1013, 11-13=-257/1376  
WEBS 3-16=-1354/347, 3-14=-102/1020, 6-14=-501/160, 6-13=-63/251, 7-13=-31/334, 8-13=-330/184, 9-11=-229/1281

#### 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-2-13, Interior(1) 2-2-13 to 15-0-0, Exterior(2R) 15-0-0 to 20-3-6, Interior(1) 20-3-6 to 24-4-0, Exterior(2R) 24-4-0 to 29-7-6, Interior(1) 29-7-6 to 37-2-4 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 16=324, 10=242.



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

May 12, 2022

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**MiTek**  
6904 Parke East Blvd.  
Tampa, FL 36610



Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 8 CW	T27693439
3163304	T14	Roof Special	1	1		

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

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 11 14:42:22 2022 Page 1  
ID:MRUpuoKKMqHFLyM1PC4d7zYSsJ-b6jP1VKiacXPTukr8Ef4GNf85Ujuoc3pPvceHzHY5V

1-6-0	6-2-2	12-8-14	19-0-0	20-4-0	25-3-14	30-4-0	36-4-0	40-6-8	45-4-0
1-6-0	6-2-2	6-6-12	6-3-2	1-4-0	4-11-14	5-0-3	6-0-0	4-2-8	4-9-8

Scale = 1:80.4

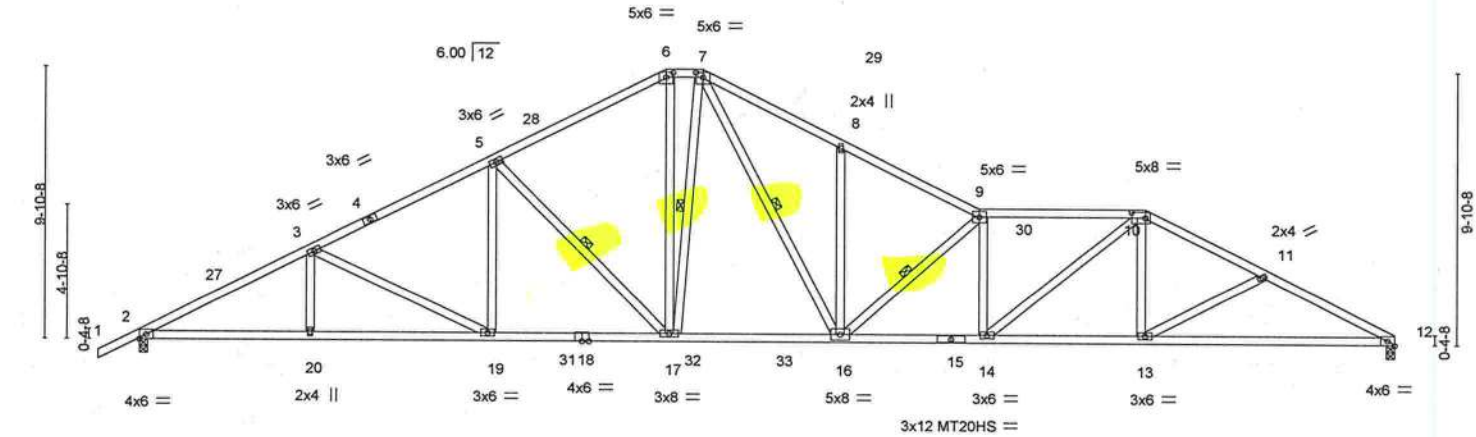


Plate Offsets (X,Y)	[6:0-3-0,0-2-0], [7:0-3-0,0-2-0], [10:0-6-0,0-2-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.46	Vert(LL)	-0.35 16-17	>999	240	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.45	Vert(CT)	-0.60 16-17	>914	180	MT20HS	187/143
BCLL 0.0	Lumber DOL 1.25	WB 0.64	Horz(CT)	0.16 12	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS						
	Code FBC2020/TPI2014						Weight: 275 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except*	TOP CHORD Structural wood sheathing directly applied or 2-9-12 oc purlins.
9-10: 2x4 SP M 31	BOT CHORD Rigid ceiling directly applied or 9-0-15 oc bracing.
BOT CHORD 2x4 SP M 31	WEBS 1 Row at midpt 5-17, 7-17, 7-16, 9-16
WEBS 2x4 SP No.3	

<b>REACTIONS.</b>	(size) 12=0-3-8, 2=0-3-8
	Max Horz 2=164(LC 12)
	Max Uplift 12=371(LC 13), 2=357(LC 12)
	Max Grav 12=1825(LC 2), 2=1911(LC 2)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-3612/672, 3-5=-3073/634, 5-6=-2485/585, 6-7=-2173/569, 7-8=-3364/817, 8-9=-3345/734, 9-10=-4029/874, 10-11=-3329/708, 11-12=-3544/766
BOT CHORD	2-20=-625/3183, 19-20=-625/3183, 17-19=-443/2694, 16-17=-301/2184, 14-16=-746/4051, 13-14=-522/2947, 12-13=-634/3151
WEBS	3-19=-551/207, 5-19=-49/498, 5-17=-761/274, 6-17=-184/902, 7-17=-334/163, 7-16=-470/1671, 8-16=-315/198, 9-16=-1484/380, 9-14=-698/199, 10-14=-276/1373, 10-13=-30/407, 11-13=-277/163

- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 3-0-6, Interior(1) 3-0-6 to 19-0-0, Exterior(2E) 19-0-0 to 20-4-0, Exterior(2R) 20-4-0 to 24-10-6, Interior(1) 24-10-6 to 36-4-0, Exterior(2R) 36-4-0 to 40-8-7, Interior(1) 40-8-7 to 45-4-0 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.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=371, 2=357.



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

May 12,2022

**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 33610

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 8 CW	T27693441
3163304	T16	Roof Special	1	1		

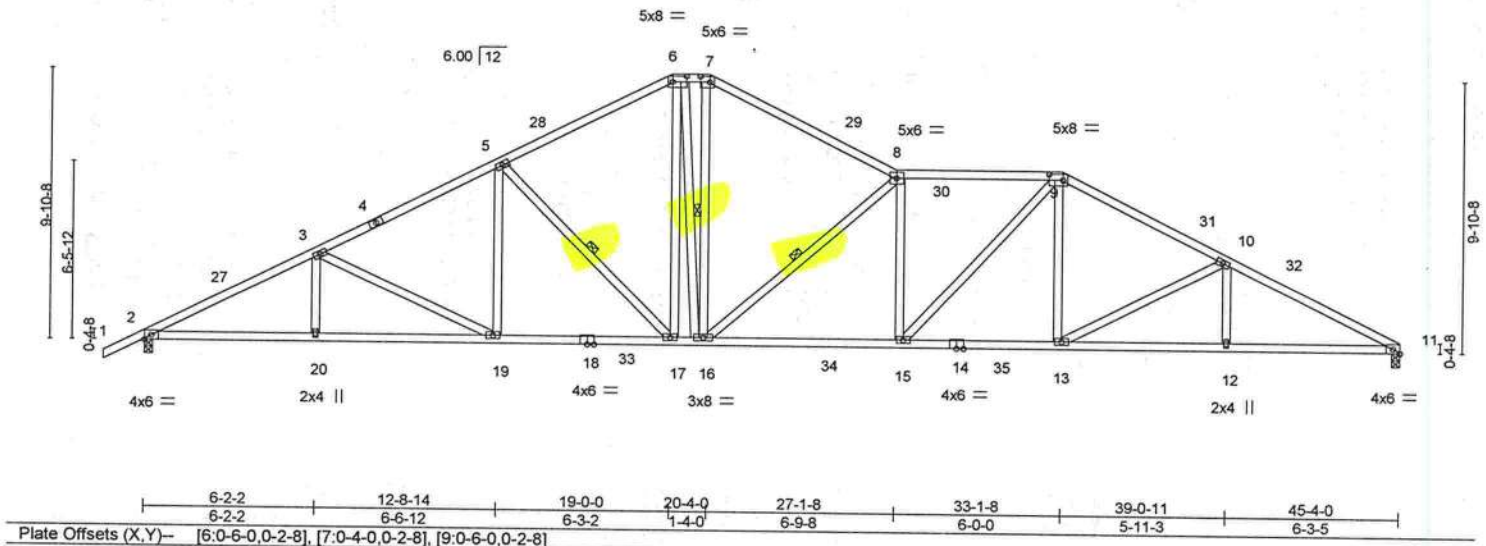
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed May 11 14:42:25 2022 Page 1

ID:MRUpuoKKMqHFlytM1PC4d7zYSsJ-7hOYfXNatXv\_KLSQpMCnu0HY1yCs58OWWM8GeczhY5S

1-6-0	6-2-2	12-8-14	19-0-0	20-4-0	27-1-8	33-1-8	39-0-11	45-4-0
1-6-0	6-2-2	6-6-12	6-3-2	1-4-0	6-9-8	6-0-0	5-11-3	6-3-5

Scale = 1:80.4



<b>LOADING</b> (psf)	<b>SPACING</b>	<b>CSI</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.93	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 1.00	Vert(LL) -0.37 15-16 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.70	Vert(CT) -0.65 15-16 >840 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.22 11 n/a n/a		
	Code FBC2020/TP12014			Weight: 280 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD
BOT CHORD 2x4 SP No.2	BOT CHORD
WEBS 2x4 SP No.3	WEBS
	Structural wood sheathing directly applied.
	Rigid ceiling directly applied or 1-4-12 oc bracing.
	1 Row at midpt 5-17, 6-16, 8-16

<b>REACTIONS.</b>	(size) 11=0-3-8, 2=0-3-8
	Max Horz 2=164(LC 16)
	Max Uplift 11=371(LC 13), 2=357(LC 12)
	Max Grav 11=1848(LC 2), 2=1912(LC 2)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=3612/679, 3-5=3080/641, 5-6=2479/593, 6-7=2205/579, 7-8=2516/606, 8-9=3320/750, 9-10=3102/676, 10-11=3629/732
BOT CHORD	2-20=625/3183, 19-20=625/3183, 17-19=451/2701, 16-17=306/2161, 15-16=576/3328, 13-15=454/2727, 12-13=593/3199, 11-12=593/3199
WEBS	3-19=545/207, 5-19=50/513, 5-17=779/275, 6-17=167/622, 6-16=166/484, 7-16=182/874, 8-16=1522/409, 8-15=431/166, 9-15=172/862, 9-13=67/489, 10-13=556/218

- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 3-0-6, Interior(1) 3-0-6 to 19-0-0, Exterior(2E) 19-0-0 to 20-4-0, Exterior(2R) 20-4-0 to 24-10-6, Interior(1) 24-10-6 to 33-1-8, Exterior(2R) 33-1-8 to 37-7-14, Interior(1) 37-7-14 to 45-4-0 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.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 3x6 MT20 unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=371, 2=357.



Philip J. O'Regan PE No.58126  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

May 12,2022

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Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



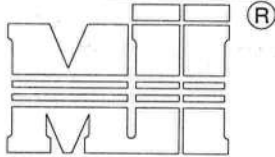
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AUGUST 1, 2016

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

MII-T-BRACE 2



MiTek USA, Inc. Page 1 of 1

MiTek USA, Inc.  
ENGINEERED BY  
**TRENCO**  
A MiTek Affiliate

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

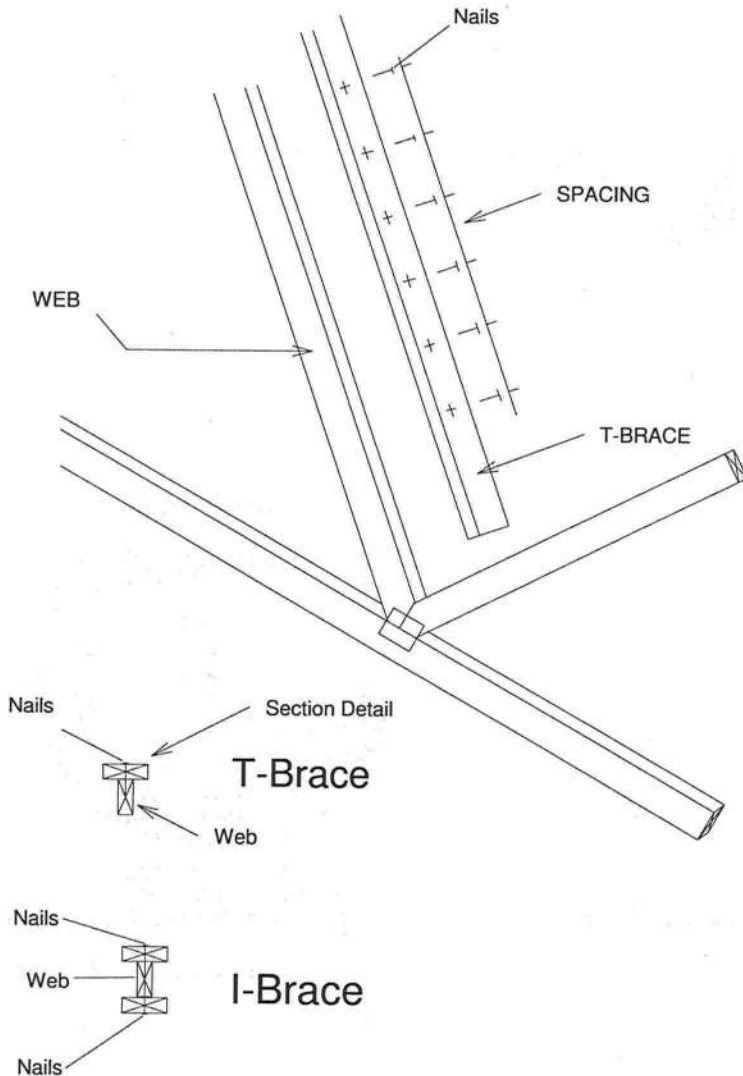
Note: This detail NOT to be used to convert T-Brace / I-Brace webs to continuous lateral braced webs.

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.



Thomas A. Albani PE No. 39380  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

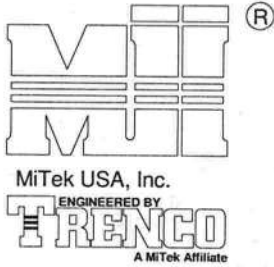
February 12, 2018

AUGUST 1, 2016

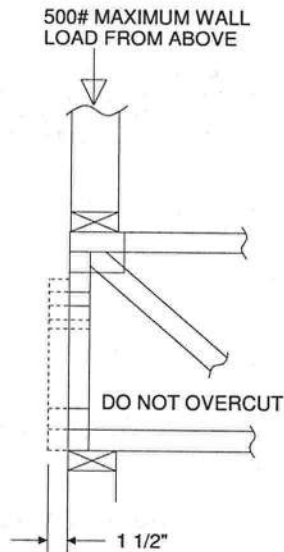
# STANDARD REPAIR TO REMOVE END VERTICAL (RIBBON NOTCH VERTICAL)

MII-REP05

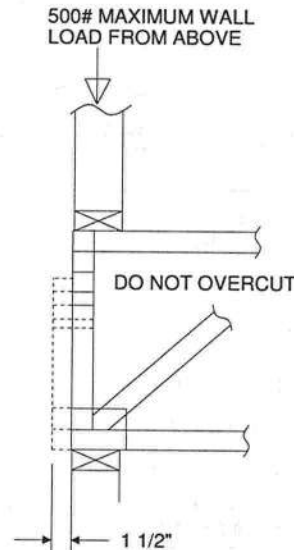
MiTek USA, Inc. Page 1 of 1



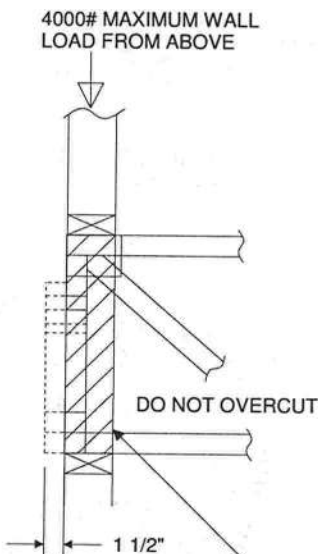
1. THIS IS A SPECIFIC REPAIR DETAIL TO BE USED ONLY FOR ITS ORIGINAL INTENTION. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS 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.



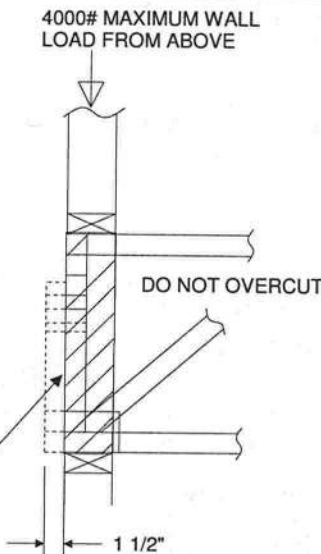
REFER TO INDIVIDUAL TRUSS DESIGN FOR PLATE SIZES AND LUMBER GRADES



TRUSSES BUILT WITH 4x2 MEMBERS



REFER TO INDIVIDUAL TRUSS DESIGN FOR PLATE SIZES AND LUMBER GRADES



TRUSSES BUILT WITH 4x2 MEMBERS

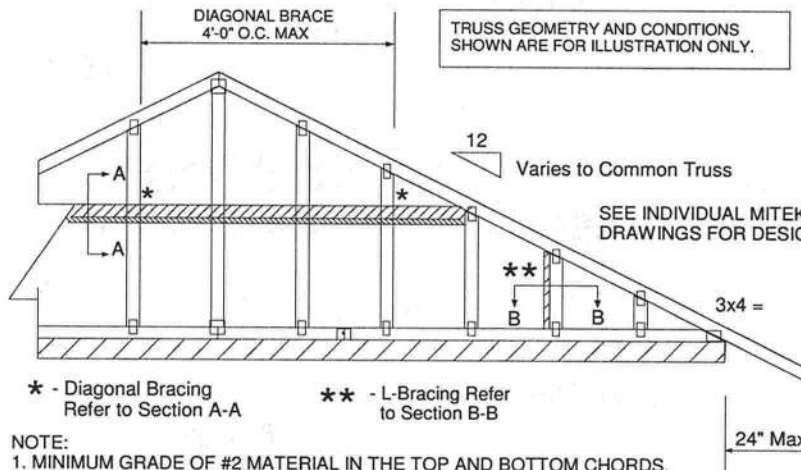
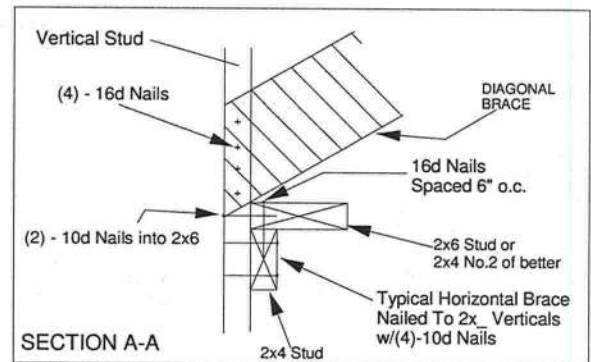
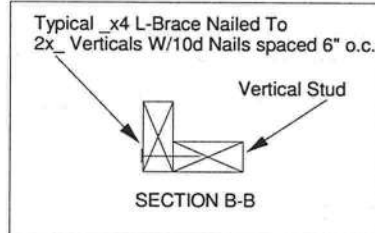
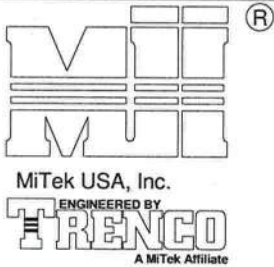
ATTACH 2x4 SQUASH BLOCK (CUT TO FIT TIGHTLY) TO BOTH SIDES OF THE TRUSS AS SHOWN WITH 10d (0.131" X 3") NAILS SPACED 3" O.C.



Thomas A. Albani PE No.39380  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

February 12, 2018

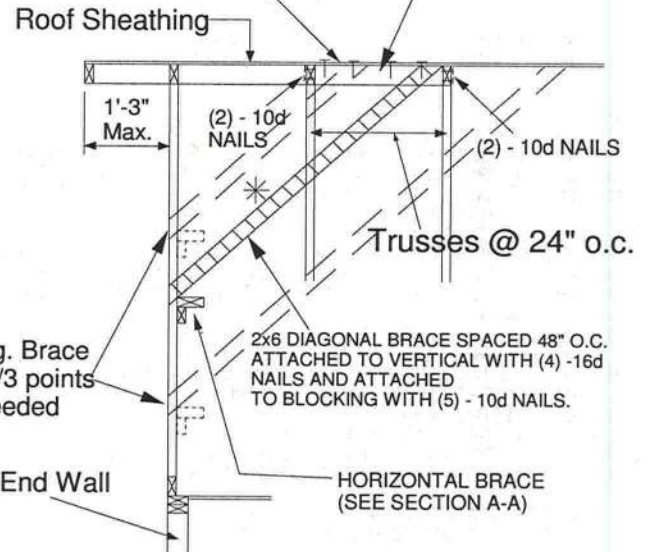




- NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
  2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
  3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING 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 7-10 160 MPH  
DURATION OF LOAD INCREASE : 1.60

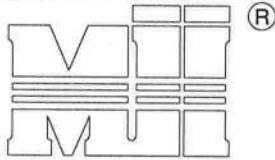
STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.  
CONNECTION OF BRACING IS BASED ON MWFRS.



Thomas A. Albani PE No. 39380  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

February 12, 2018

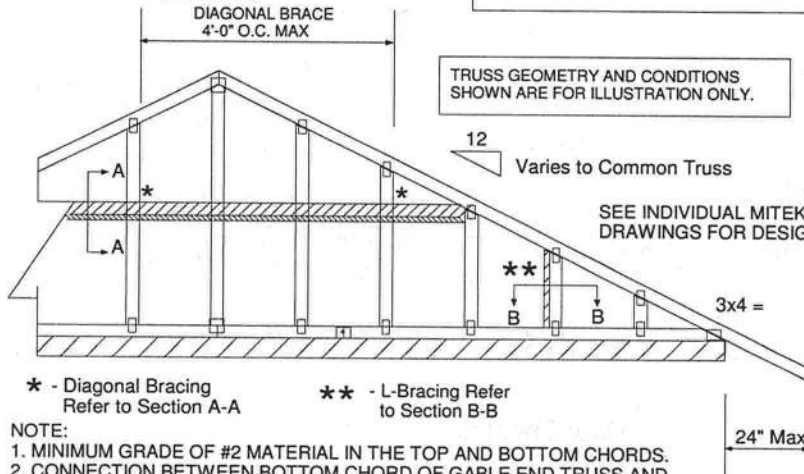




MiTek USA, Inc.

ENGINEERED BY  
**TRENCO**

A MiTek Affiliate

\* - 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")

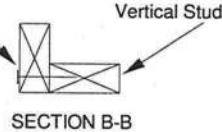
Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
Maximum Stud Length					
2x4 SP No. 3 / Stud	12" O.C.	3-9-7	5-8-8	6-11-1	11-4-4
2x4 SP No. 3 / Stud	16" O.C.	3-4-12	4-11-15	6-9-8	10-2-3
2x4 SP No. 3 / Stud	24" O.C.	2-9-4	4-0-7	5-6-8	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 7-10 170 MPH  
DURATION OF LOAD INCREASE : 1.60

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

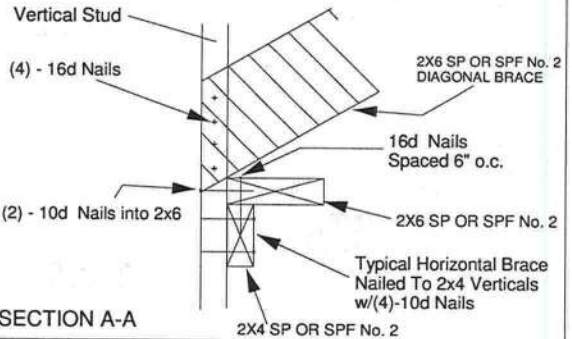
Typical 2x4 L-Brace Nailed To  
2x4 Verticals W/10d Nails spaced 6" o.c.



TRUSS GEOMETRY AND CONDITIONS  
SHOWN ARE FOR ILLUSTRATION ONLY.

Varies to Common Truss

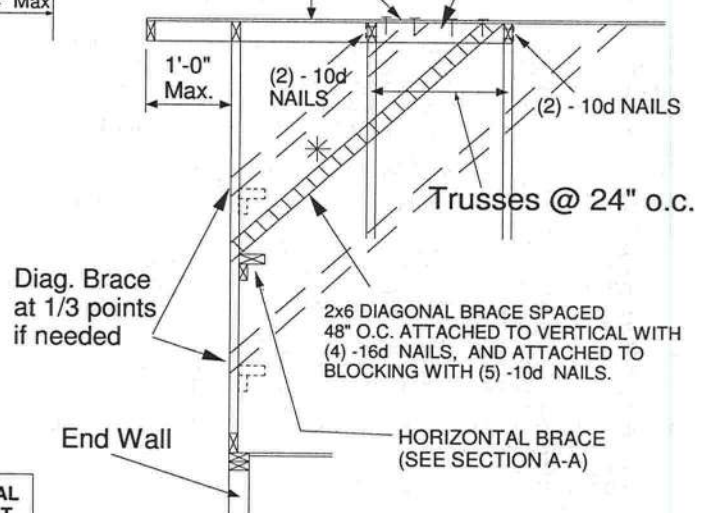
SEE INDIVIDUAL MITEK ENGINEERING  
DRAWINGS FOR DESIGN CRITERIA



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

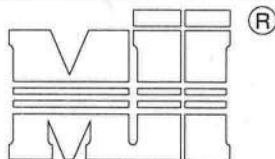
Roof Sheathing



Thomas A. Albani PE No.39380  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

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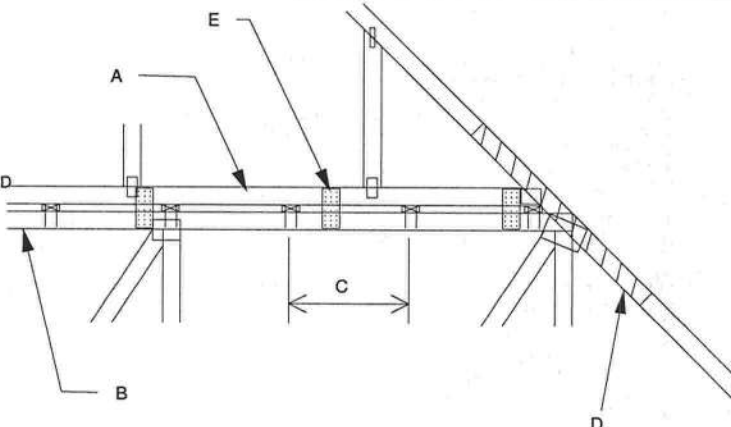
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MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E  
 MAX MEAN ROOF HEIGHT = 30 FEET  
 MAX TRUSS SPACING = 24" O.C.  
 CATEGORY II BUILDING  
 EXPOSURE B or C  
 ASCE 7-10  
 DURATION OF LOAD INCREASE : 1.60

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

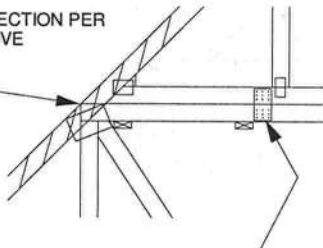
- A - PIGGYBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) (0.131" X 3.5") TOE-NAILED.
- B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. 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 160 MPH WITH A MAXIMUM PIGGYBACK SPAN OF 12 ft.
- E - FOR WIND SPEEDS BETWEEN 126 AND 160 MPH, ATTACH MITEK 3X8 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" EDGE DISTANCE. (MIN. 2 PAIRS OF PLATES REQ. REGARDLESS OF SPAN)



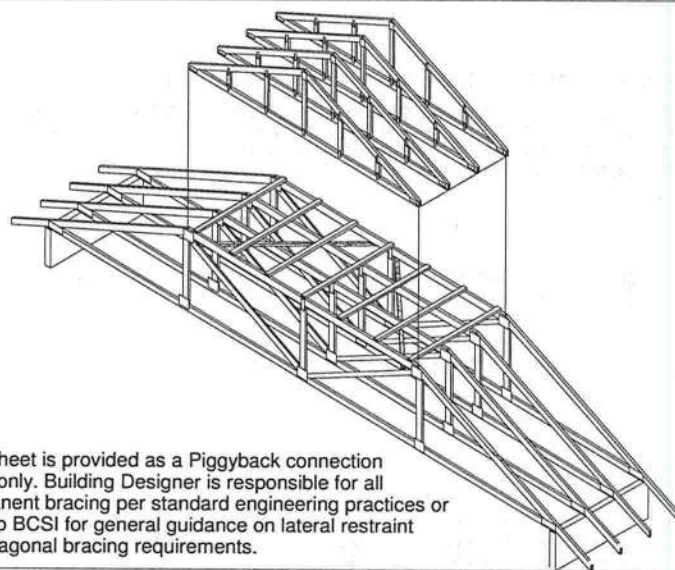
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

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.

SCAB CONNECTION PER  
NOTE D ABOVE

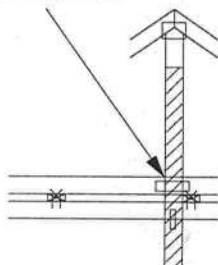


FOR ALL WIND SPEEDS, ATTACH MITEK 3X6 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O.C. W/ (4) (0.131" X 1.5") PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" EDGE DISTANCE.



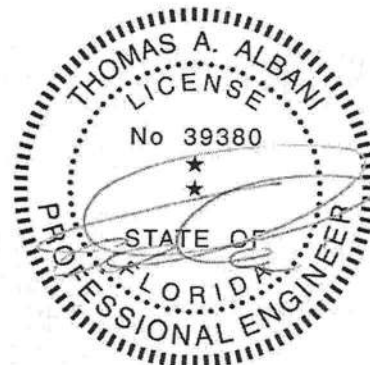
This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.

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.



Thomas A. Albani PE No.39380  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

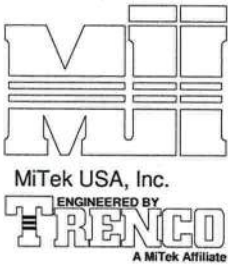
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AUGUST 1, 2016

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

MII-REP01A1

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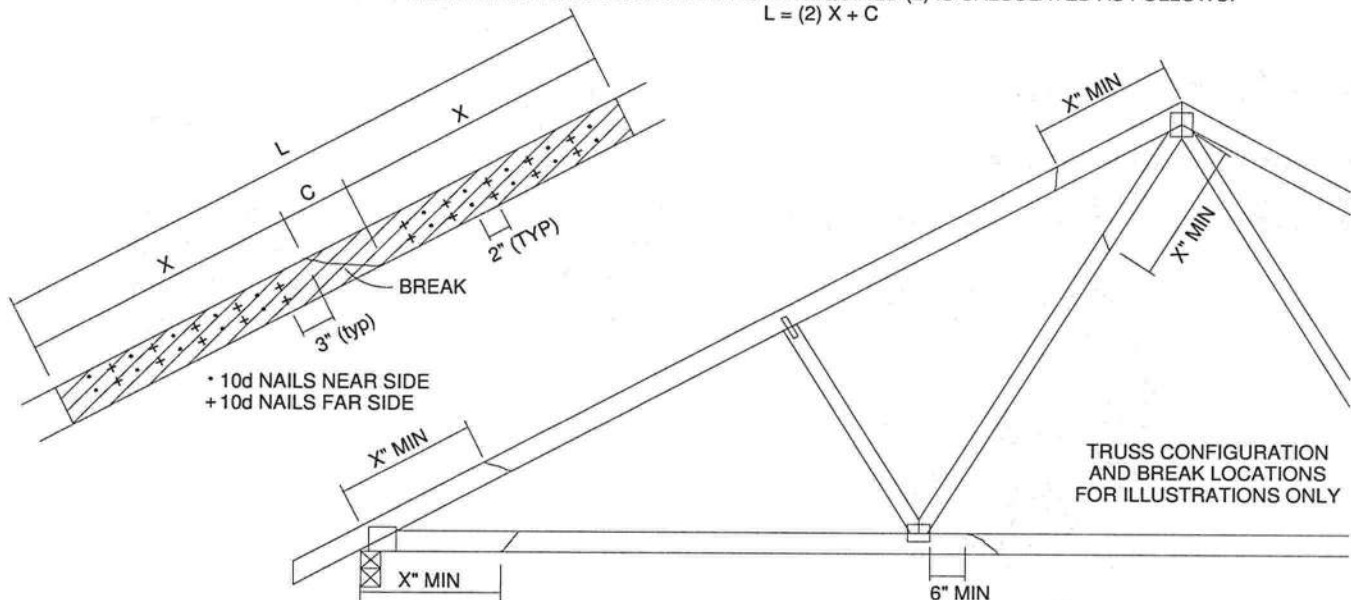
TOTAL NUMBER OF NAILS EACH SIDE OF BREAK *		X INCHES	MAXIMUM FORCE (lbs) 15% LOAD DURATION							
			SP		DF		SPF		HF	
2x4	2x6		2x4	2x6	2x4	2x6	2x4	2x6	2x4	2x6
20	30	24"	1706	2559	1561	2342	1320	1980	1352	2028
26	39	30"	2194	3291	2007	3011	1697	2546	1738	2608
32	48	36"	2681	4022	2454	3681	2074	3111	2125	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:

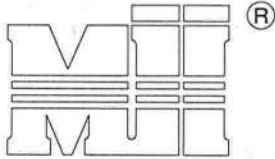
1. THIS REPAIR DETAIL IS TO BE USED ONLY FOR THE APPLICATION SHOWN. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS WILL BE CAPABLE 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.



Thomas A. Albani PE No. 39380  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

January 19, 2018

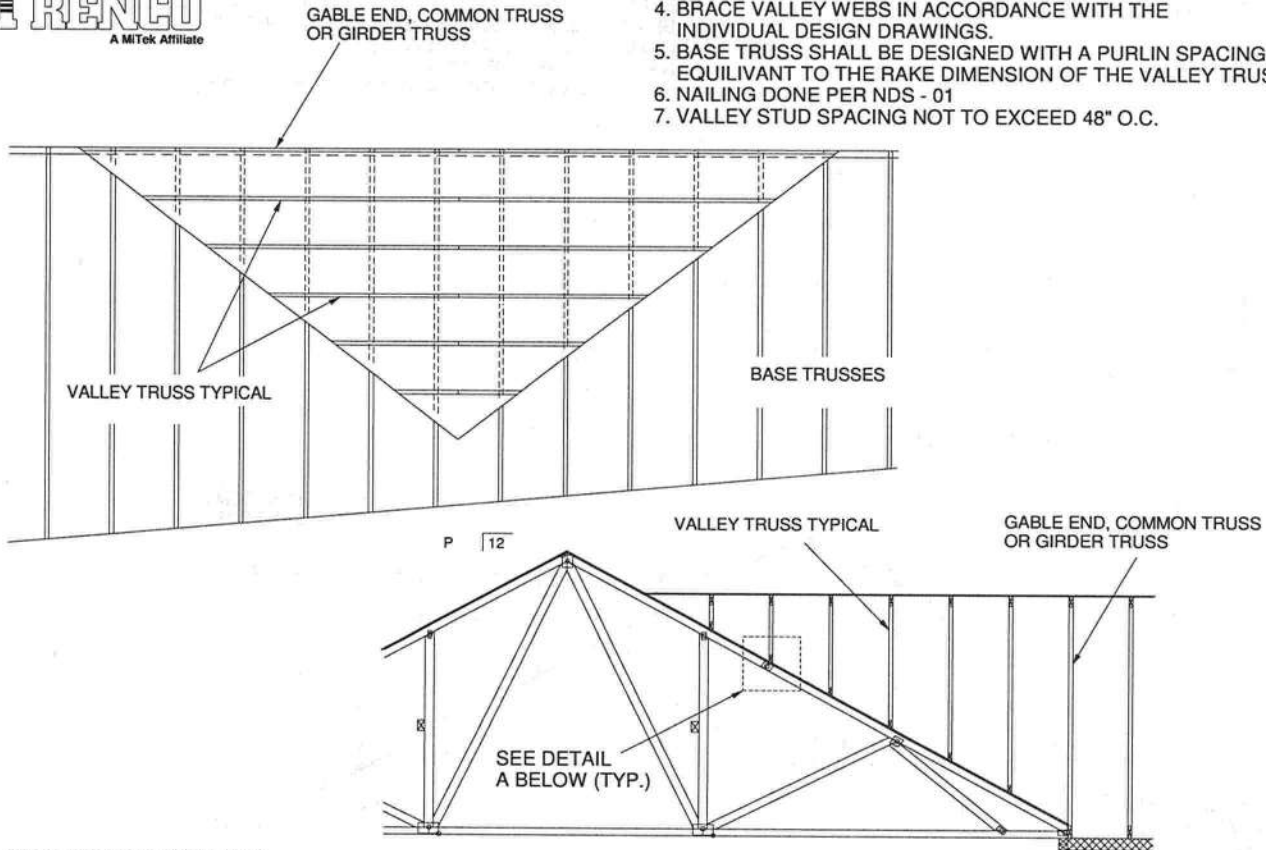




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## GENERAL SPECIFICATIONS

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 EQUIVARIANT 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.

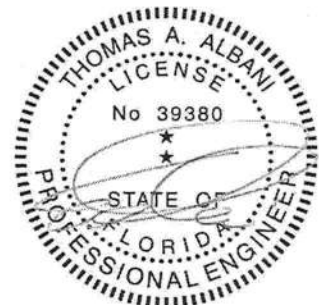


SECURE VALLEY TRUSS  
W/ ONE ROW OF 10d  
NAILS 6" O.C.

ATTACH 2x4 CONTINUOUS NO.2 SP  
TO THE ROOF W/ TWO USP WS3 (1/4" X 3")  
WOOD SCREWS INTO EACH BASE TRUSS.

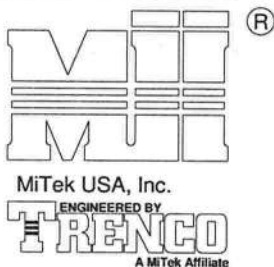
DETAIL A  
(NO SHEATHING)  
N.T.S.

WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH  
WIND DESIGN PER ASCE 7-10 160 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



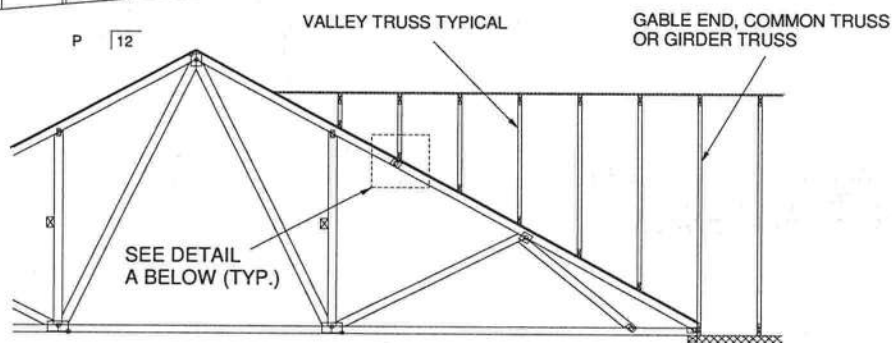
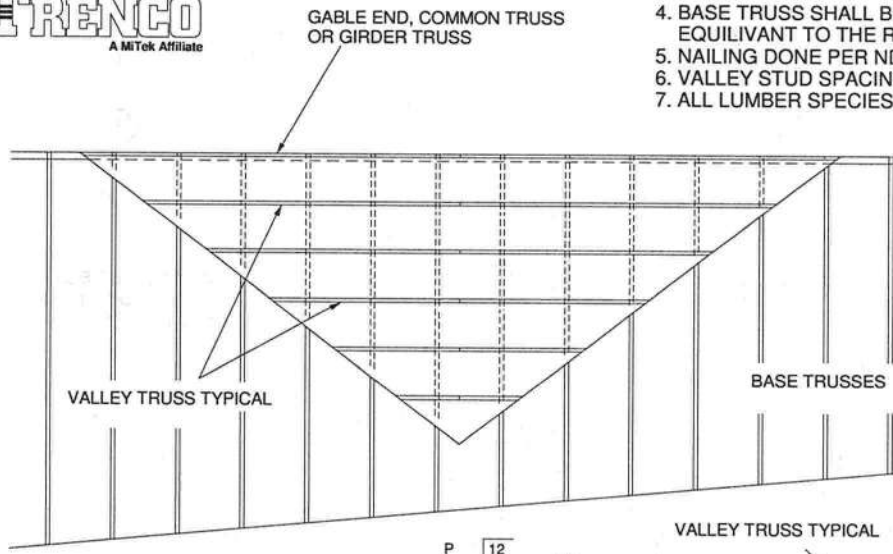
Thomas A. Albani PE No.39380  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

January 19, 2018

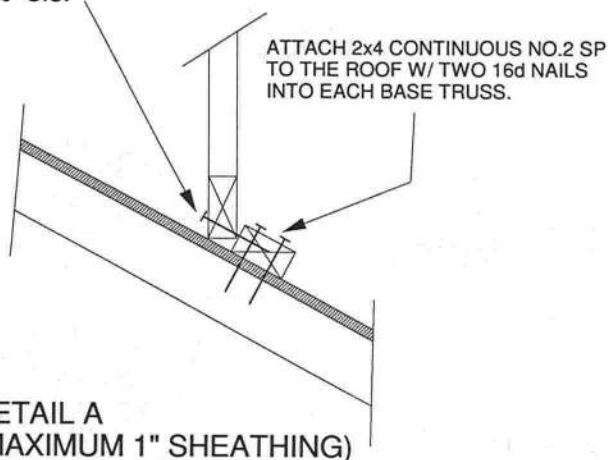


## GENERAL SPECIFICATIONS

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.

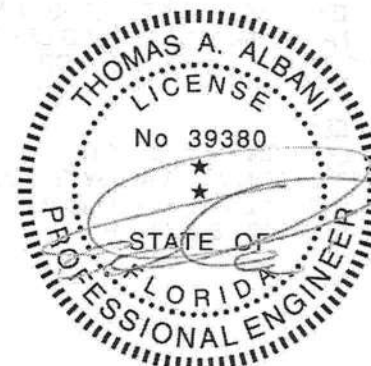


SECURE VALLEY TRUSS  
W/ ONE ROW OF 16d  
NAILS 6" O.C.



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

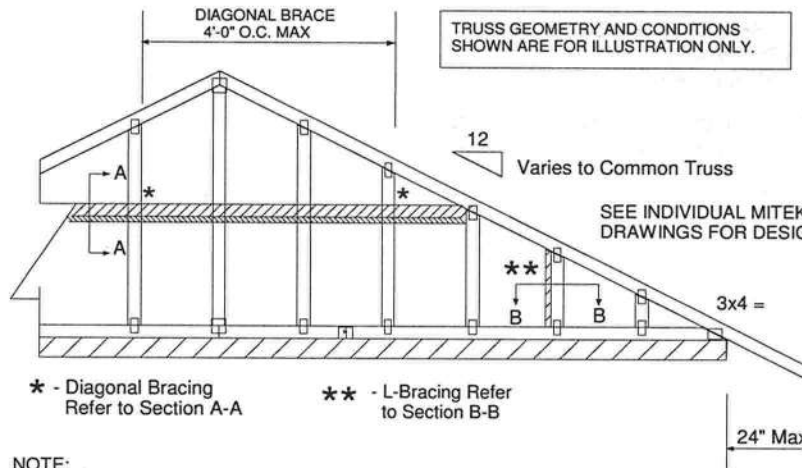
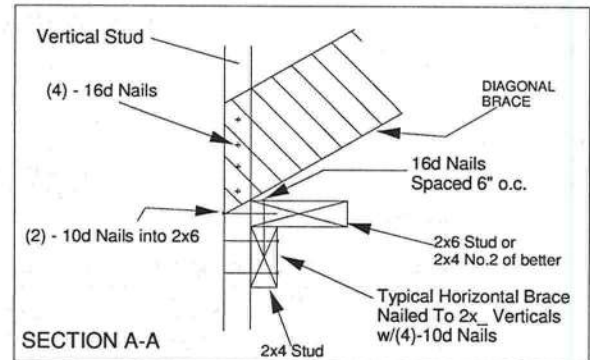
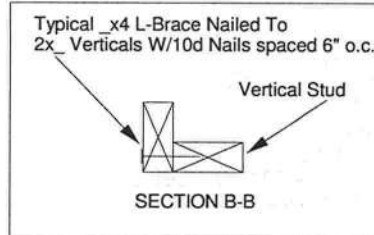
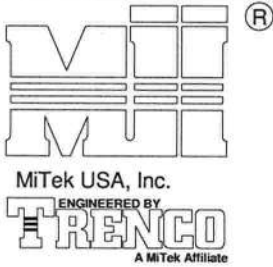
WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 120 MPH  
WIND DESIGN PER ASCE 7-10 150 MPH  
MAX MEAN ROOF HEIGHT = 30 FEET  
ROOF PITCH = MINIMUM 3/12 MAXIMUM 10/12  
CATEGORY II BUILDING  
EXPOSURE C OR B  
WIND DURATION OF LOAD INCREASE : 1.60  
MAX TOP CHORD TOTAL LOAD = 60 PSF  
MAX SPACING = 24"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



Thomas A. Albani PE No.39380  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

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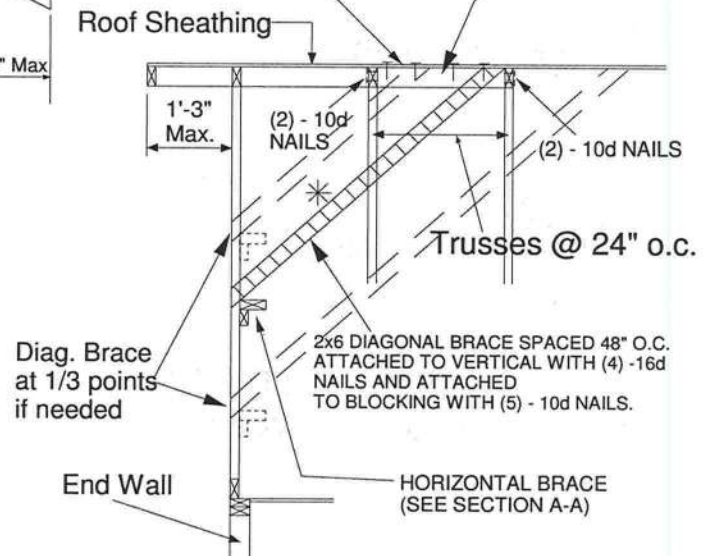


## NOTE:

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:  
2x4 No 3/STUD SP 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. 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 SP BLOCK



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.	3-11-3	6-8-0	7-2-14	11-9-10
2x4 SP No 3/Stud	16" O.C.	3-6-14	5-9-5	7-1-13	10-8-11
2x4 SP No 3/Stud	24" O.C.	3-1-8	4-8-9	6-2-15	9-4-7

- \* 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 web with 10d nails 8" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length.

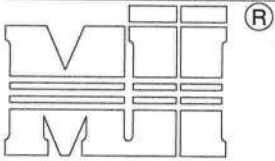
MAXIMUM WIND SPEED = 146 MPH  
MAX MEAN ROOF HEIGHT = 30 FEET  
CATEGORY II BUILDING  
EXPOSURE B or C  
ASCE 7-98, ASCE 7-02, ASCE 7-05  
DURATION OF LOAD INCREASE : 1.60

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



Thomas A. Albani PE No.39380  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd, Tampa FL 33610  
Date:

January 19, 2018



MiTek USA, Inc.

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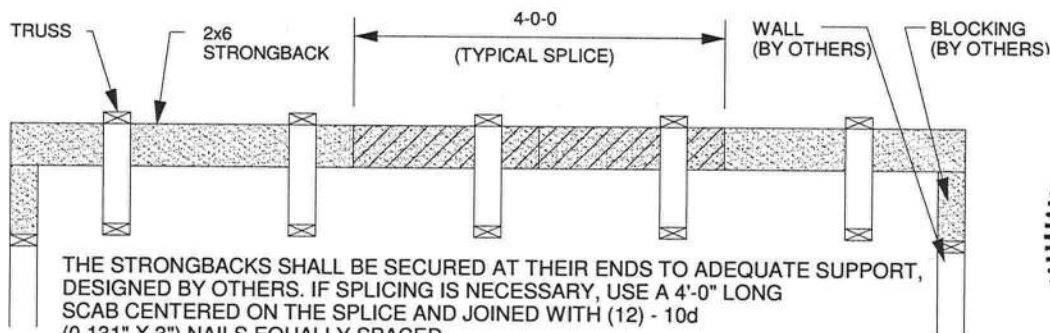
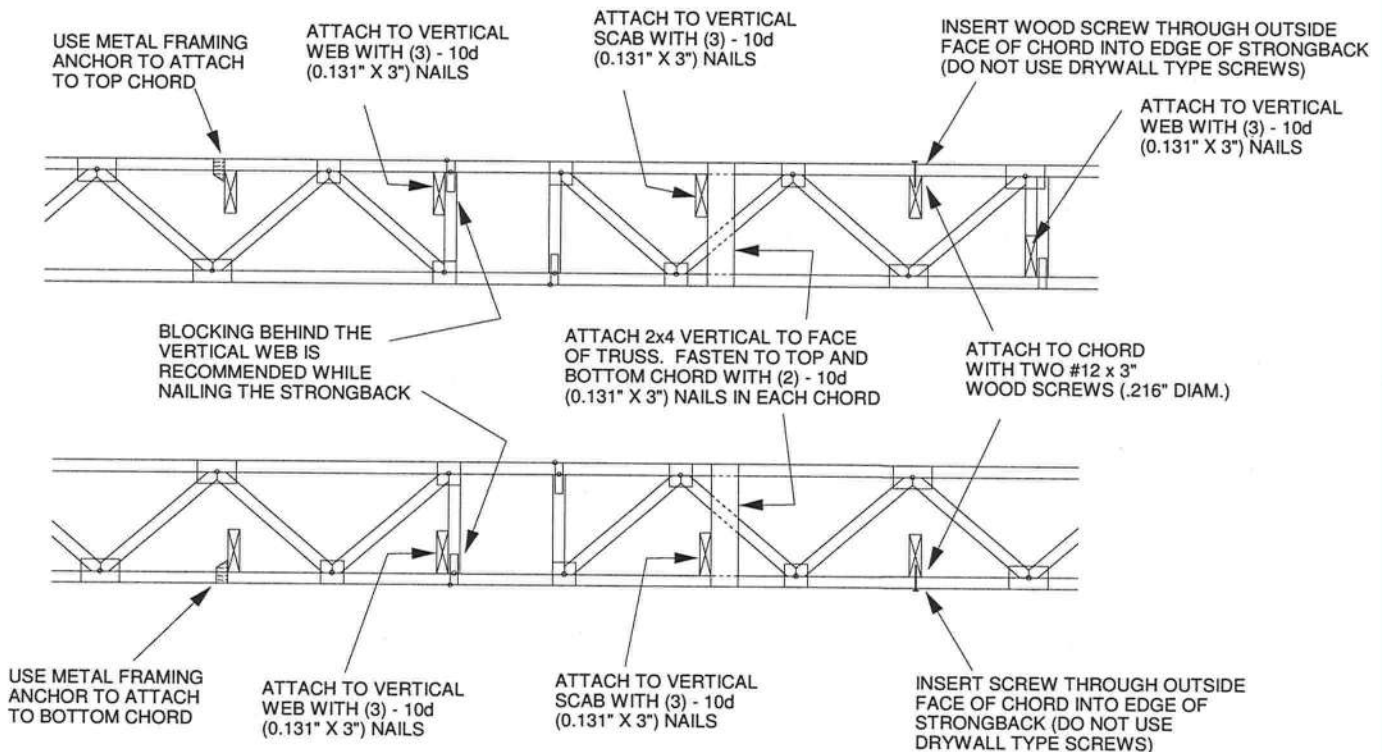
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TO MINIMIZE VIBRATION COMMON TO ALL SHALLOW FRAMING SYSTEMS, 2x6 "STRONGBACK" IS RECOMMENDED, LOCATED EVERY 8 TO 10 FEET ALONG A FLOOR TRUSS.

NOTE 1: 2X6 STRONGBACK ORIENTED VERTICALLY MAY BE POSITIONED DIRECTLY UNDER THE TOP CHORD OR DIRECTLY ABOVE THE BOTTOM CHORD. SECURELY FASTENED TO THE TRUSS USING ANY OF THE METHODS ILLUSTRATED BELOW.

NOTE 2: STRONGBACK BRACING ALSO SATISFIES THE LATERAL BRACING REQUIREMENTS FOR THE BOTTOM CHORD OF THE TRUSS WHEN IT IS PLACED ON TOP OF THE BOTTOM CHORD, IS CONTINUOUS FROM END TO END, CONNECTED WITH A METHOD OTHER THAN METAL FRAMING ANCHOR, AND PROPERLY CONNECTED, BY OTHERS, AT THE ENDS.



THE STRONGBACKS SHALL BE SECURED AT THEIR ENDS TO ADEQUATE SUPPORT, DESIGNED BY OTHERS. IF SPLICING IS NECESSARY, USE A 4'-0" LONG SCAB CENTERED ON THE SPLICE AND JOINED WITH (12) - 10d (0.131" X 3") NAILS EQUALLY SPACED.

ALTERNATE METHOD OF SPLICING:

OVERLAP STRONGBACK MEMBERS A MINIMUM OF 4'-0" AND FASTEN WITH (12) - 10d (0.131" X 3") NAILS STAGGERED AND EQUALLY SPACED.

(TO BE USED ONLY WHEN STRONGBACK IS NOT ALIGNED WITH A VERTICAL)



Thomas A. Albani PE No. 39380  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

February 12, 2018