

#73



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

RE: 2820752 - CORNERSTONE - LOT 84 EC

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

Site Information:

Customer Info: Cornerstone Project Name: Spec Hse Model: 1653
Lot/Block: 84 Subdivision: Emerald Cove
Address: TBD, TBD
City: Columbia Cty State: FL

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

Name: License #:
Address:
City: State:

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

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-16 Wind Speed: 130 mph
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 24 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 | T24444447 | CJ01 | 6/23/21 | 23 | T24444469 | T15 | 6/23/21 |
| 2 | T24444448 | CJ03 | 6/23/21 | 24 | T24444470 | T15G | 6/23/21 |
| 3 | T24444449 | CJ05 | 6/23/21 | | | | |
| 4 | T24444450 | EJ01 | 6/23/21 | | | | |
| 5 | T24444451 | EJ01G | 6/23/21 | | | | |
| 6 | T24444452 | HJ10 | 6/23/21 | | | | |
| 7 | T24444453 | T01 | 6/23/21 | | | | |
| 8 | T24444454 | T01A | 6/23/21 | | | | |
| 9 | T24444455 | T01G | 6/23/21 | | | | |
| 10 | T24444456 | T02 | 6/23/21 | | | | |
| 11 | T24444457 | T03 | 6/23/21 | | | | |
| 12 | T24444458 | T04 | 6/23/21 | | | | |
| 13 | T24444459 | T05 | 6/23/21 | | | | |
| 14 | T24444460 | T06 | 6/23/21 | | | | |
| 15 | T24444461 | T07 | 6/23/21 | | | | |
| 16 | T24444462 | T08 | 6/23/21 | | | | |
| 17 | T24444463 | T10 | 6/23/21 | | | | |
| 18 | T24444464 | T11 | 6/23/21 | | | | |
| 19 | T24444465 | T12 | 6/23/21 | | | | |
| 20 | T24444466 | T13 | 6/23/21 | | | | |
| 21 | T24444467 | T14 | 6/23/21 | | | | |
| 22 | T24444468 | T14G | 6/23/21 | | | | |



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-Lake City, FL.

Truss Design Engineer's Name: O'Regan, Philip
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.



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

June 23, 2021

O'Regan, Philip

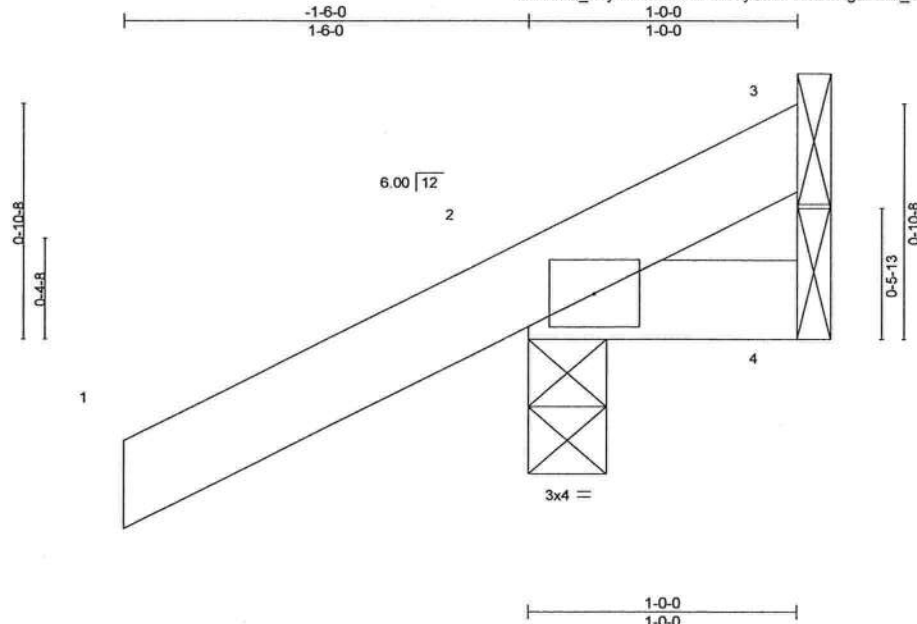
1 of 1

| | | | | | | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | CORNERSTONE - LOT 84 EC | T24444447 |
| 2820752 | CJ01 | Jack-Open | 8 | 1 | Job Reference (optional) | |

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:50:47 2021 Page 1

ID:kPNS_ZXjPFPeUIAx1rKNCsyCIRc-7R8xdLgL9L5k_bdHo8KQVR?e2e?jg_k0DAIlgz3i1c



Scale = 1:8.2

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in | (loc) | I/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|-----------|----------|------|-------|--------|-----|--------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.25 | TC 0.14 | Vert(LL) | 0.00 | 7 | >999 | 240 | MT20 | 244/190 |
| TCDL 7.0 | Lumber DOL | 1.25 | BC 0.03 | Vert(CT) | 0.00 | 7 | >999 | 180 | | |
| 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

BRACING-

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

REACTIONS.

(size) 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.



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June 23,2021

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

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

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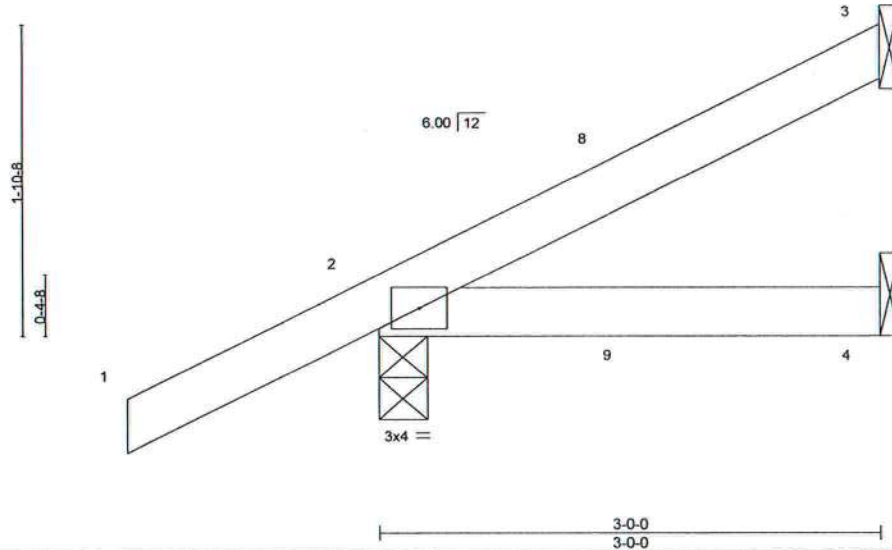
| | | | | | |
|----------------|---------------|-------------------------|----------|----------|--------------------------------------|
| Job 2820752 | Truss CJ03 | Truss Type Jack-Open | Qty 8 | Ply 1 | CORNERSTONE - LOT 84 EC T24444448 |
|----------------|---------------|-------------------------|----------|----------|--------------------------------------|

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:50:47 2021 Page 1
ID:kPNS_ZXjPFPeUIAx1rKNCsyCIRe-7R8xdLg9L5k_bdHo8KQVR7e2e_bg_k0DAIlgz3i1c

-1-6-0 1-6-0 3-0-0 3-0-0

Scale = 1:13.3



| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|-----------|----------|----------|--------|------|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.25 | TC 0.14 | Vert(LL) | 0.01 | 4-7 | >999 | MT20 | 244/190 |
| TCDL 7.0 | Lumber DOL | 1.25 | BC 0.10 | Vert(CT) | -0.01 | 4-7 | >999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.00 | Horz(CT) | -0.00 | 3 | n/a | | |
| BCDL 10.0 | Code FBC2020/TPI2014 | | Matrix-MP | | | | | Weight: 12 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 3-0-0 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=73(LC 12)
Max Uplift 3=-35(LC 12), 2=-58(LC 12), 4=-16(LC 9)
Max Grav 3=60(LC 1), 2=210(LC 1), 4=50(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 2-11-4 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.



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Date:

June 23, 2021

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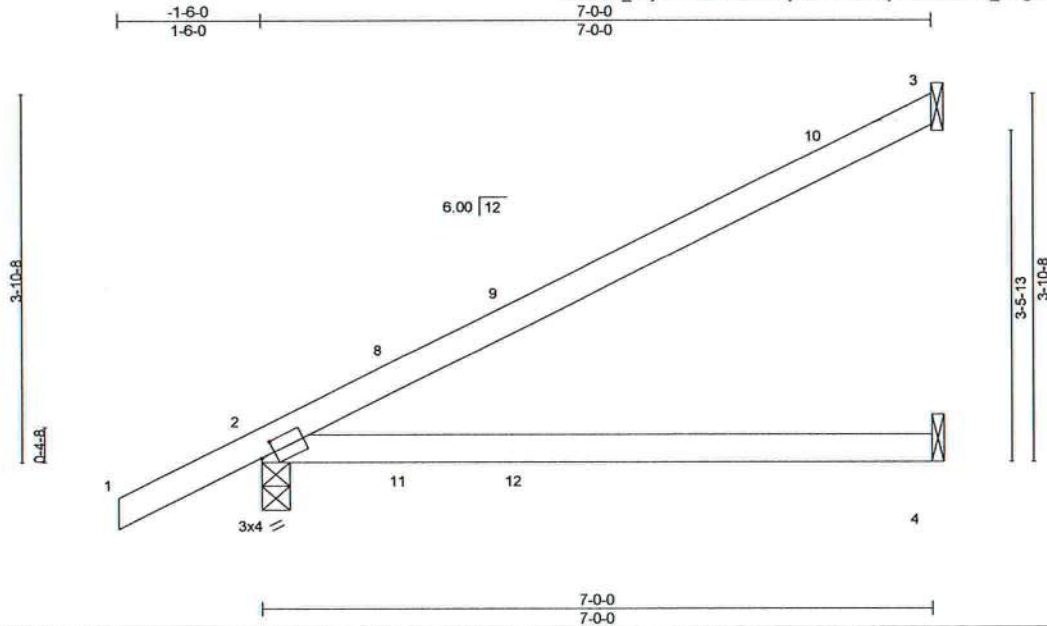
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Tampa, FL 33610

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|----------------|---------------|----------------------------|-----------|----------|--------------------------------------|
| Job 2820752 | Truss EJ01 | Truss Type Jack-Partial | Qty 34 | Ply 1 | CORNERSTONE - LOT 84 EC T24444450 |
|----------------|---------------|----------------------------|-----------|----------|--------------------------------------|

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

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Scale = 1:23.2

Plate Offsets (X,Y)-- [2'-0-1-13,0-1-8]

| LOADING (psf) | SPACING- | 2'-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|--------|-----------|----------|----------|--------|-----|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.25 | TC 0.70 | Vert(LL) | 0.30 4-7 | >274 | 240 | MT20 | 244/190 |
| TCDL 7.0 | Lumber DOL | 1.25 | BC 0.69 | Vert(CT) | 0.26 4-7 | >323 | 180 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.00 | Horz(CT) | -0.01 3 | n/a | n/a | | |
| BCDL 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | |
| | | | | | | | | Weight: 25 lb | FT = 20% |

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6'-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=137(LC 12)
Max Uplift 3=-86(LC 12), 2=-76(LC 12), 4=-40(LC 9)
Max Grav 3=164(LC 1), 2=346(LC 1), 4=126(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 6-11-4 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.



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Date:

June 23,2021

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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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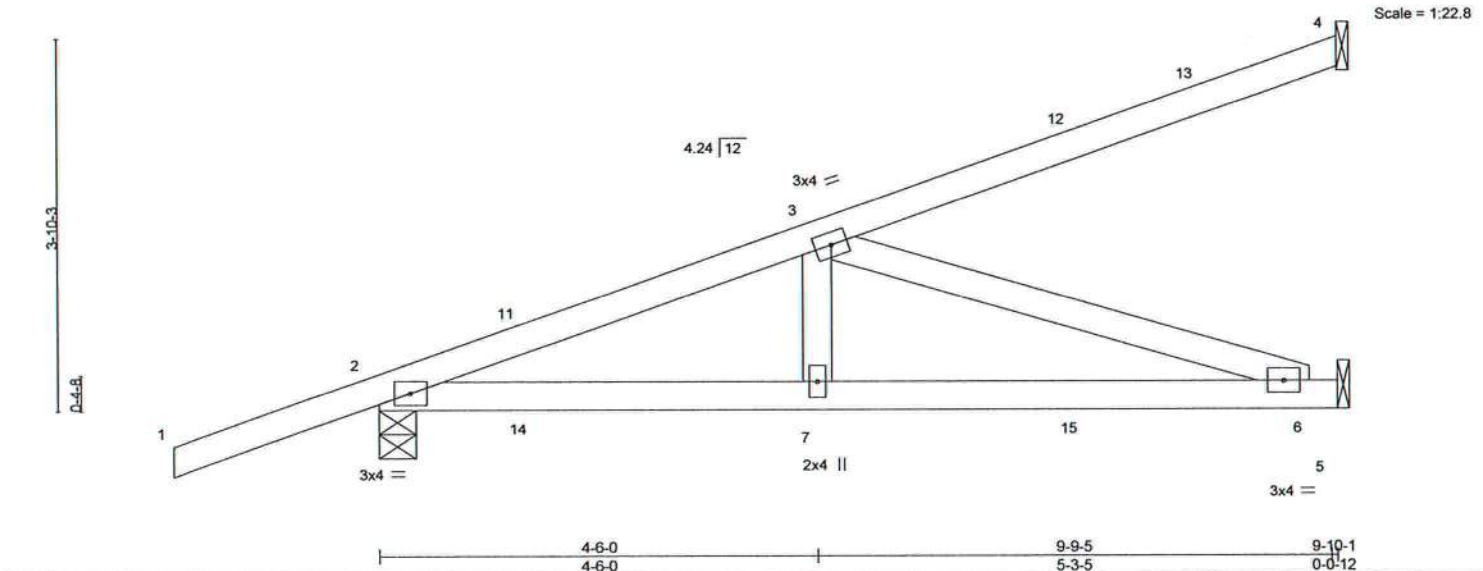
| | | | | | |
|----------------|---------------|-----------------------------------|----------|----------|--------------------------------------|
| Job 2820752 | Truss HJ10 | Truss Type Diagonal Hip Girder | Qty 4 | Ply 1 | CORNERSTONE - LOT 84 EC T24444452 |
|----------------|---------------|-----------------------------------|----------|----------|--------------------------------------|

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Scale = 1:22.8



| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|-----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.25 | TC 0.58 | 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 4)
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; TCDL=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
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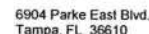
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8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:50:54 2021 Page 1
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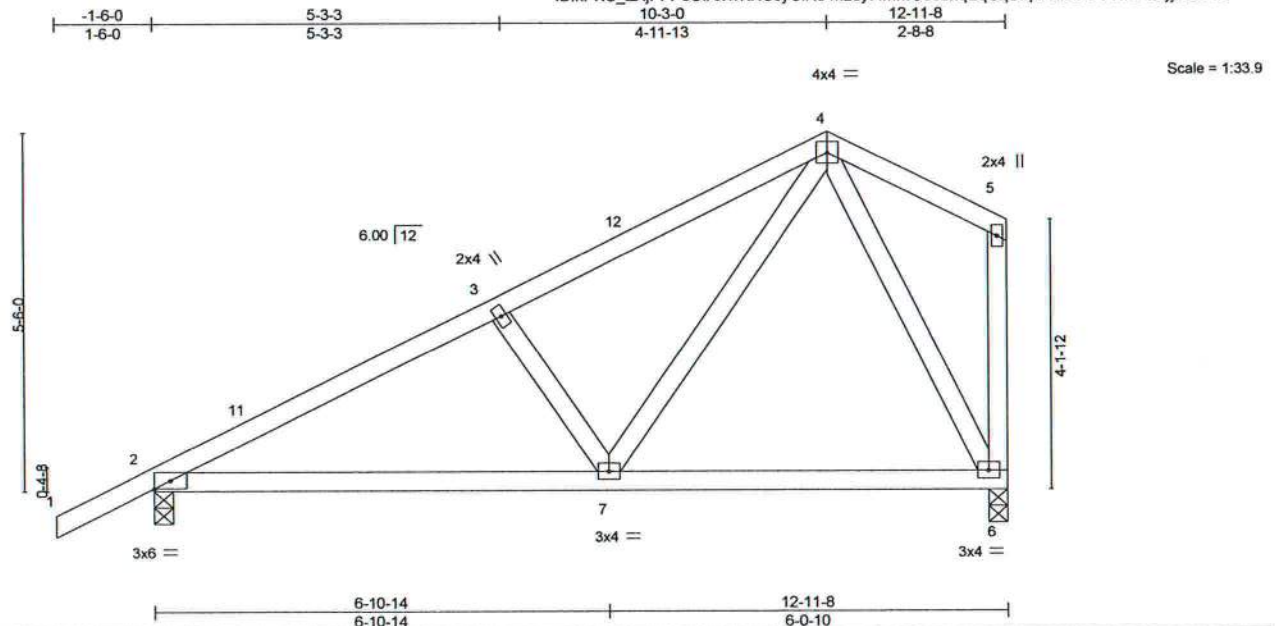
Safety Information available from Truss Plate Institute, 2670 Grain Highway, Suite 203 Waldorf, MD 20601



| | | | | | |
|----------------|---------------|----------------------|----------|----------|--------------------------------------|
| Job 2820752 | Truss T01A | Truss Type Common | Qty 1 | Ply 1 | CORNERSTONE - LOT 84 EC T24444454 |
|----------------|---------------|----------------------|----------|----------|--------------------------------------|

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:50:55 2021 Page 1
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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 0.28 | Vert(LL) | -0.04 | 7-10 | >999 | 240 | MT20 |
| TCDL 7.0 | Lumber DOL | 1.25 | BC 0.42 | Vert(CT) | -0.09 | 7-10 | >999 | 180 | 244/190 |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.26 | Horz(CT) | 0.01 | 6 | n/a | n/a | |
| BCDL 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | |
| | | | | | | | | Weight: 70 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, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 6=0-3-8
Max Horz 2=173(LC 12)
Max Uplift 2=131(LC 12), 6=119(LC 12)
Max Grav 2=560(LC 1), 6=469(LC 1)

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

TOP CHORD 2-3=-686/219, 3-4=-552/214
BOT CHORD 2-7=-299/584
WEBS 3-7=-281/213, 4-7=-166/456, 4-6=-404/212

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 10-3-0, Exterior(2E) 10-3-0 to 12-9-12 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=131, 6=119.



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

June 23, 2021

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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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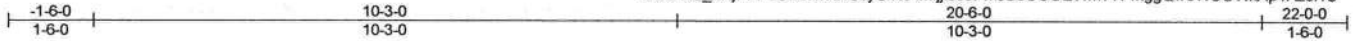
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Tampa, FL 33610

| | | | | | |
|----------------|---------------|--------------------------------------|----------|----------|--------------------------------------|
| Job 2820752 | Truss T01G | Truss Type Common Supported Gable | Qty 1 | Ply 1 | CORNERSTONE - LOT 84 EC T24444455 |
|----------------|---------------|--------------------------------------|----------|----------|--------------------------------------|

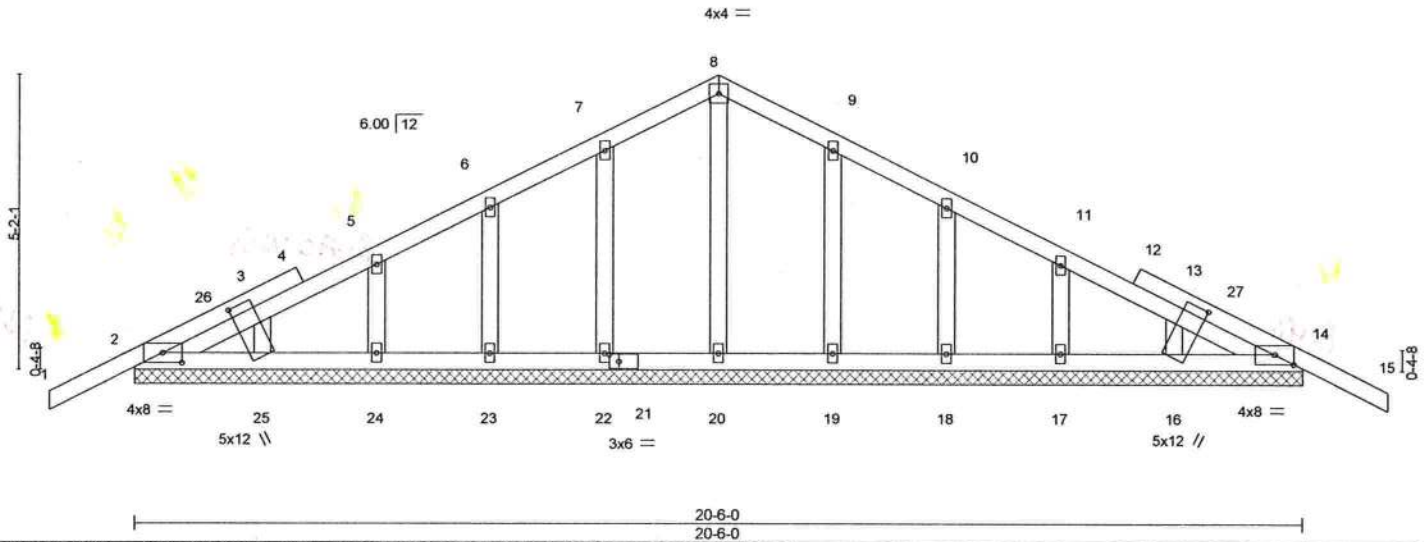
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:50:57 2021 Page 1

ID:KPN5_ZXjPFPeUIAx1rKNCsyCIRc-iMijlocoPMJB80COEWmvYPMggQw0WUWwAp1Az3i1S



Scale = 1:38.9



| | | | | | | | | | |
|--|-------|----------------------|--|----------|------|---------------------------|------------------|----------------|----------|
| Plate Offsets (X,Y)– [2:0-4-0,0-2-1], [14:0-4-0,0-2-1], [16:0-1-13,1-4-6], [21:0-2-0,0-1-8], [25:0-1-13,1-4-6] | | | | | | | | | |
| 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 | 0.13 | Vert(LL) | -0.01 15 n/r 120 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber DOL 1.25 | | BC | 0.04 | Vert(CT) | -0.01 15 n/r 120 | | |
| BCLL | 0.0 * | Rep Stress Incr YES | | WB | 0.05 | Horz(CT) | 0.00 14 n/a n/a | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-S | | | | Weight: 110 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. All bearings 20-6-0.
(lb) - Max Horz 2=83(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 14, 22, 23, 24, 25, 19, 18, 17, 16
Max Grav All reactions 250 lb or less at joint(s) 2, 14, 20, 22, 23, 24, 25, 19, 18, 17, 16

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; 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 Corner(3E) -1-6-0 to 1-6-0, Exterior(2N) 1-6-0 to 10-3-0, Corner(3R) 10-3-0 to 13-3-0, Exterior(2N) 13-3-0 to 22-0-0 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14, 22, 23, 24, 25, 19, 18, 17, 16.



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June 23,2021

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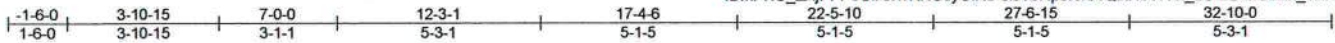
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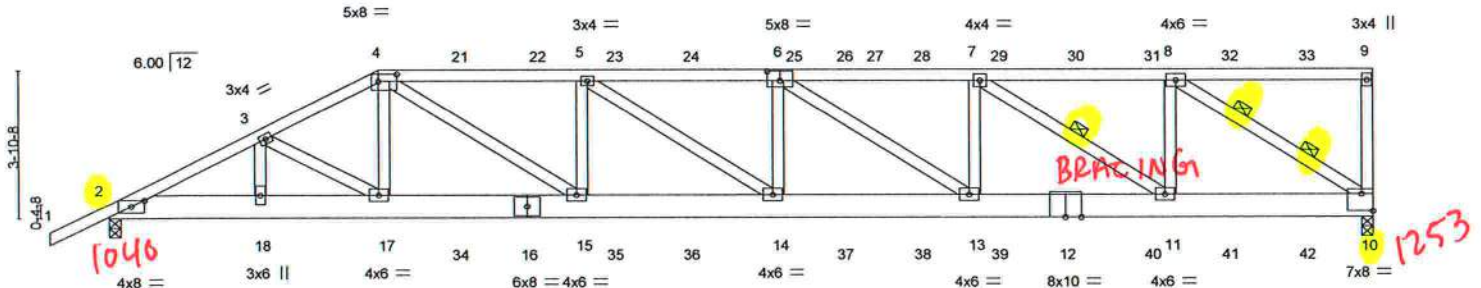
| | | | | | |
|---------|-------|-----------------|-----|-----|-------------------------|
| Job | Truss | Truss Type | Qty | Ply | CORNERSTONE - LOT 84 EC |
| 2820752 | T02 | Half Hip Girder | 1 | 1 | T24444456 |

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:50:59 2021 Page 1
ID:kPNS_ZXjPFPeUIAx1rKNCsyCIRc-elsT8RpsK1c1QRXbvVYE_zUatU0xUBdn_1fw53z3i1Q



Scale = 1:57.8



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

| | | | | | | | | | |
|---------------|----------------------|-------|-----------|----------|----------|--------|------|----------------|----------|
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL | 1.25 | TC 0.59 | Vert(LL) | 0.34 | 14 | >999 | MT20 | 244/190 |
| TCDL 7.0 | Lumber DOL | 1.25 | BC 0.32 | Vert(CT) | -0.52 | 14-15 | >746 | | |
| BCLL 0.0 * | Rep Stress Incr | NO | WB 0.90 | Horz(CT) | 0.09 | 10 | n/a | | |
| BCDL 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | Weight: 230 lb | FT = 20% |

LUMBER-
TOP CHORD 2x4 SP M 31 *Except*
1-4: 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-1-3 oc bracing.
WEBS 1 Row at midpt 7-11
2 Rows at 1/3 pts 8-10

REACTIONS. (size) 10=0-3-8, 2=0-3-8
Max Horz 2=143(LC 8)
Max Uplift 10=1253(LC 5), 2=1040(LC 8)
Max Grav 10=2739(LC 1), 2=2463(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4719/2036, 3-4=-4810/2150, 4-5=-5927/2664, 5-6=-6302/2841, 6-7=-5470/2474, 7-8=-3445/1566, 9-10=-283/146
BOT CHORD 2-18=-1891/4180, 17-18=-1891/4180, 15-17=-1959/4309, 14-15=-2664/5927, 13-14=-2842/6302, 11-13=-2474/5470, 10-11=-1566/3445
WEBS 3-17=-251/243, 4-17=-297/720, 4-15=-907/1978, 5-15=-879/439, 5-14=-229/492, 6-13=-1005/489, 7-13=-363/840, 7-11=-2439/1093, 8-11=-698/1626, 8-10=-4081/1852

- 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; 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 (it=lb) 10=1253, 2=1040.
 - 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, 110 lb down and 90 lb up at 11-0-12, 110 lb down and 90 lb up at 13-0-12, 110 lb down and 90 lb up at 15-0-12, 110 lb down and 90 lb up at 17-0-12, 110 lb down and 88 lb up at 19-0-12, 110 lb down and 90 lb up at 21-0-12, 110 lb down and 90 lb up at 23-0-12, 110 lb down and 90 lb up at 25-0-12, 110 lb down and 90 lb up at 27-0-12, 110 lb down and 90 lb up at 29-0-12, and 110 lb down and 90 lb up at 31-0-12, and 110 lb down and 90 lb up at 31-3-4 on top chord, and 335 lb down and 236 lb up at 7-0-0, 86 lb down and 60 lb up at 9-0-12, 86 lb down and 60 lb up at 11-0-12, 86 lb down and 60 lb up at 13-0-12, 86 lb down and 60 lb up at 15-0-12, 86 lb down and 60 lb up at 17-0-12, 86 lb down and 60 lb up at 19-0-12, 86 lb down and 60 lb up at 21-0-12, 86 lb down and 60 lb up at 23-0-12, 86 lb down and 60 lb up at 25-0-12, 86 lb down and 60 lb up at 27-0-12, 86 lb down and 60 lb up at 29-0-12, and 86 lb down and 60 lb up at 31-0-12, and 86 lb down and 60 lb up at 31-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Continued on page 2



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Date:

June 23, 2021

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| | | | | | | |
|---------|-------|-----------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | CORNERSTONE - LOT 84 EC | T24444456 |
| 2820752 | T02 | Half Hip Girder | 1 | 1 | Job Reference (optional) | |

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:51:00 2021 Page 2
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LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-54, 4-9=-54, 2-10=-20

Concentrated Loads (lb)

Vert: 4=-110(F) 16=-64(F) 17=-335(F) 14=-64(F) 12=-64(F) 21=-110(F) 22=-110(F) 23=-110(F) 24=-110(F) 25=-110(F) 26=-110(F) 28=-110(F) 29=-110(F)
30=-110(F) 31=-110(F) 32=-110(F) 33=-219(F) 34=-64(F) 35=-64(F) 36=-64(F) 37=-64(F) 38=-64(F) 39=-64(F) 40=-64(F) 41=-64(F) 42=-129(F)

24444456

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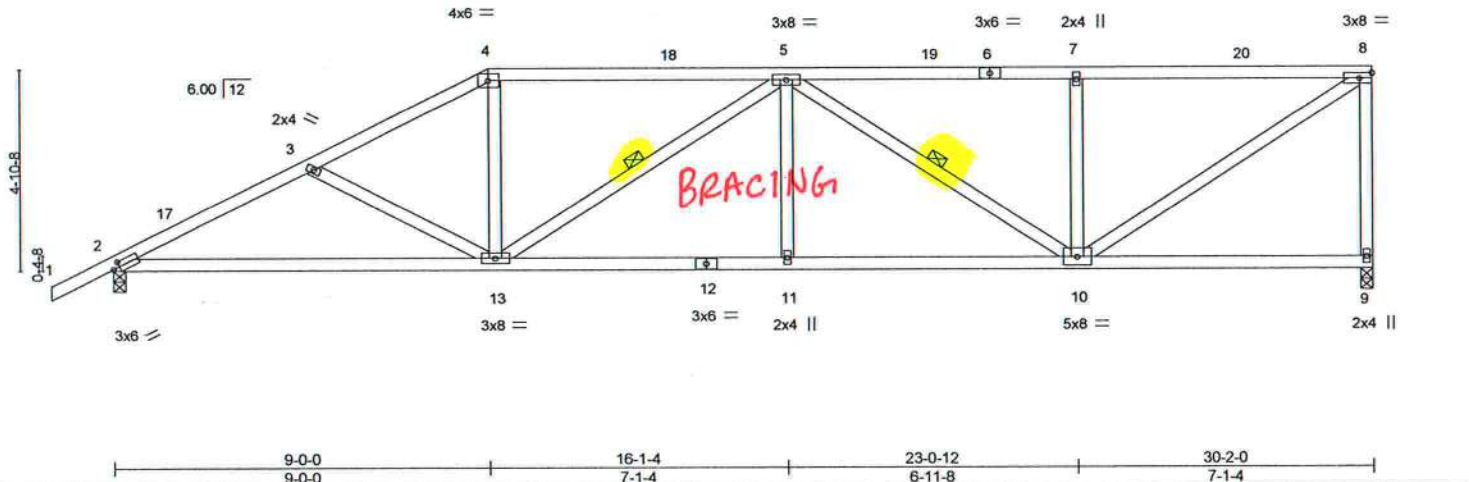
| | | | | | |
|----------------|--------------|------------------------|----------|----------|--------------------------------------|
| Job 2820752 | Truss T03 | Truss Type Half Hip | Qty 2 | Ply 1 | CORNERSTONE - LOT 84 EC T24444457 |
|----------------|--------------|------------------------|----------|----------|--------------------------------------|

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8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:51:01 2021 Page 1
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Scale = 1:53.3



| LOADING (psf) | | SPACING- | | CSI. | | DEFL. | | PLATES | | GRIP | |
|---------------|-------|----------------------|------|-----------|------|----------|----------------------|----------------|--|----------|--|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.59 | Vert(LL) | -0.15 13-16 >999 240 | MT20 | | 244/190 | |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.78 | Vert(CT) | -0.32 13-16 >999 180 | | | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.61 | Horz(CT) | 0.07 9 n/a n/a | | | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | | |
| | | | | | | | | Weight: 162 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 3-8-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-11-7 oc bracing.
WEBS 1 Row at midpt 5-13, 5-10

REACTIONS.

(size) 9=0-3-8, 2=0-3-8
Max Horz 2=178(LC 12)
Max Uplift 9=289(LC 9), 2=294(LC 12)
Max Grav 9=1109(LC 1), 2=1194(LC 1)

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

TOP CHORD 2-3=-2044/500, 3-4=-1794/426, 4-5=-1572/413, 5-7=-1363/352, 7-8=-1363/352, 8-9=-1046/306
BOT CHORD 2-13=-550/1800, 11-13=-477/1869, 10-11=-477/1869
WEBS 3-13=-275/156, 4-13=-54/518, 5-13=-456/170, 5-11=0/254, 5-10=-606/229, 7-10=-398/193, 8-10=-413/1601

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) -1-6-3, Interior(1) 1-6-3 to 9-0-0, Exterior(2R) 9-0-0 to 13-3-3, Interior(1) 13-3-3 to 30-0-4 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) 9=289, 2=294.



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Date:

June 23,2021

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| | | | | | | |
|---------|-------|------------|-----|-----|-------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | CORNERSTONE - LOT 84 EC | T24444458 |
| 2820752 | T04 | Hip | 2 | 1 | | |

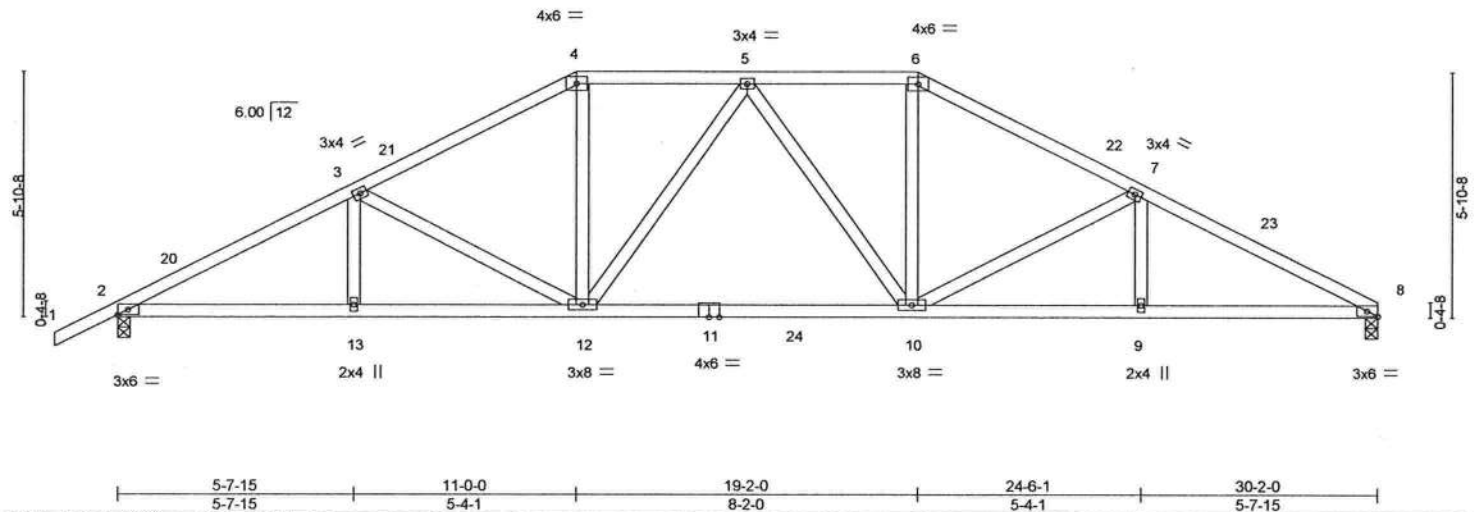
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:51:02 2021 Page 1

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Scale = 1:53.1



| Plate Offsets (X, Y) - [8-0-2-15, Edge] | | | | | | | | | |
|---|----------------------|-------|-----------|----------|-------------|--------|-----|----------------|----------|
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | I/defl | L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL | 1.25 | TC 0.30 | Vert(LL) | -0.20 10-12 | >999 | 240 | MT20 | 244/190 |
| TCDL 7.0 | Lumber DOL | 1.25 | BC 0.75 | Vert(CT) | -0.36 10-12 | >999 | 180 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.36 | Horz(CT) | 0.09 8 | n/a | n/a | | |
| BCDL 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | Weight: 157 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 3-8-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-2-7 oc bracing.

REACTIONS.

(size) 8=0-3-8, 2=0-3-8
Max Horz 2=104(LC 12)
Max Uplift 8=-238(LC 13), 2=-271(LC 12)
Max Grav 8=1205(LC 2), 2=1274(LC 2)

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

TOP CHORD 2-3=-2239/431, 3-4=-1790/370, 4-5=-1563/363, 5-6=-1565/359, 6-7=-1793/372, 7-8=-2243/442
BOT CHORD 2-13=-409/1962, 12-13=-409/1962, 10-12=-234/1628, 9-10=-338/1978, 8-9=-338/1978
WEBS 3-12=-475/195, 4-12=-80/584, 6-10=-79/586, 7-10=-488/205

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 1-6-3, Interior(1) 1-6-3 to 11-0-0, Exterior(2R) 11-0-0 to 15-1-0, Interior(1) 15-1-0 to 19-2-0, Exterior(2R) 19-2-0 to 23-5-3, Interior(1) 23-5-3 to 30-2-0 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.
- 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) 8=238, 2=271.



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June 23, 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

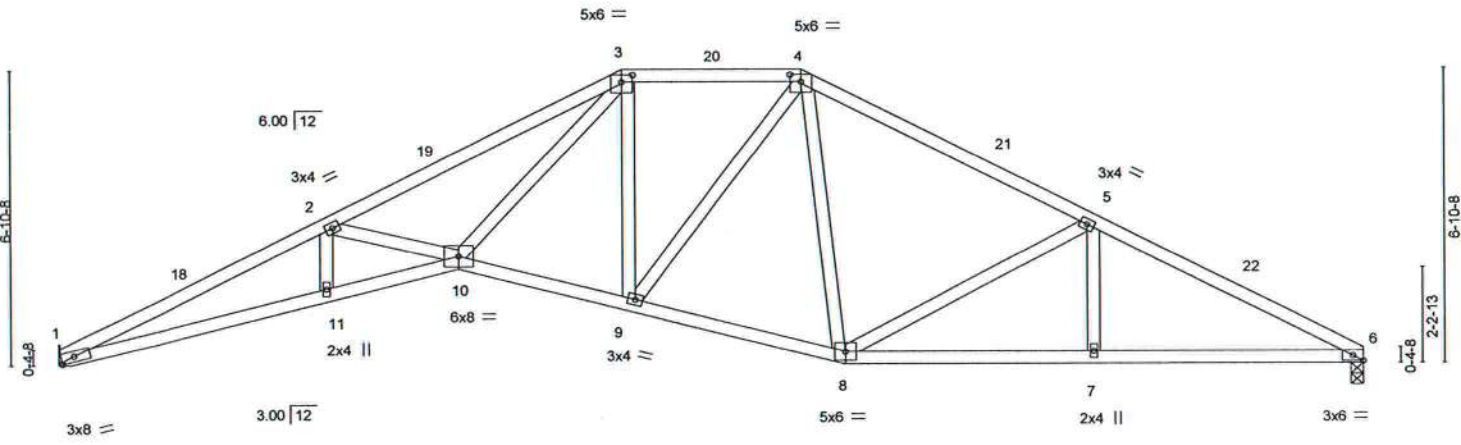
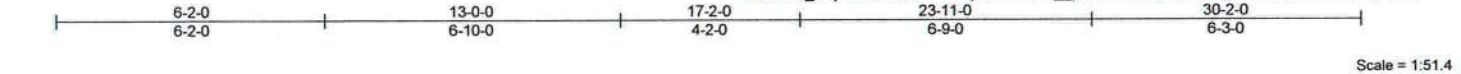
MiTek

6904 Parke East Blvd.
Tampa, FL 33610

| | | | | | |
|----------------|--------------|-------------------|----------|----------|--------------------------------------|
| Job 2820752 | Truss T05 | Truss Type Hip | Qty 1 | Ply 1 | CORNERSTONE - LOT 84 EC T24444459 |
|----------------|--------------|-------------------|----------|----------|--------------------------------------|

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:51:03 2021 Page 1
ID:kPNS_ZXjPFPeUIAx1rKNCsyCIRC-XW6_psNNF6Tv3rMkVdA9pfls5FYQ2NMvfd8Eqz3i1M



| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------|-------|------|-------|----------|--------|-----|--------|------|
|---------------|----------|-------|------|-------|----------|--------|-----|--------|------|

| | | | | | | | |
|------------|----------------------|-----------|----------------------|------|-----|------|---------|
| TCLL 20.0 | Plate Grip DOL 1.25 | TC 0.47 | Vert(LL) -0.23 10-11 | >999 | 240 | MT20 | 244/190 |
| TCDL 7.0 | Lumber DOL 1.25 | BC 0.92 | Vert(CT) -0.42 10-11 | >863 | 180 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.72 | Horz(CT) 0.24 6 | n/a | n/a | | |
| BCDL 10.0 | Code FBC2020/TPI2014 | Matrix-MS | | | | | |

| | |
|--------------------------------|--|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP M 31 *Except* | TOP CHORD Structural wood sheathing directly applied or 3-9-15 oc purlins. |
| 3-4: 2x4 SP No.2 | BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. |
| BOT CHORD 2x4 SP No.2 | |
| WEBS 2x4 SP No.3 | |

REACTIONS. (size) 1=Mechanical, 6=0-3-8
 Max Horz 1=97(LC 16)
 Max Uplift 1=235(LC 12), 6=235(LC 13)
 Max Grav 1=1116(LC 1), 6=1116(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-3771/840, 2-3=-3258/687, 3-4=-1579/401, 4-5=-1571/372, 5-6=-2092/433
 BOT CHORD 1-11=-813/3418, 10-11=-813/3424, 9-10=-260/1641, 8-9=-190/1370, 7-8=-334/1822,
 6-7=-334/1822
 WEBS 2-10=-523/267, 3-10=-427/1902, 3-9=-363/154, 4-9=-130/495, 5-8=-574/241, 5-7=0/256

- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-3, Interior(1) 3-0-3 to 13-0-0, Exterior(2E) 13-0-0 to 17-2-0, Exterior(2R) 17-2-0 to 21-5-3, Interior(1) 21-5-3 to 30-2-0 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) Provide adequate drainage to prevent water ponding.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Refer to girder(s) for truss to truss connections.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=235, 6=235.



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 6904 Parke East Blvd. Tampa FL 33610
 Date: June 23,2021

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| | | | | | |
|----------------|--------------|----------------------------|----------|----------|--------------------------------------|
| Job 2820752 | Truss T06 | Truss Type Roof Special | Qty 4 | Ply 1 | CORNERSTONE - LOT 84 EC T24444460 |
|----------------|--------------|----------------------------|----------|----------|--------------------------------------|

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

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Scale = 1:51.7

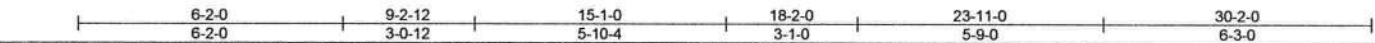
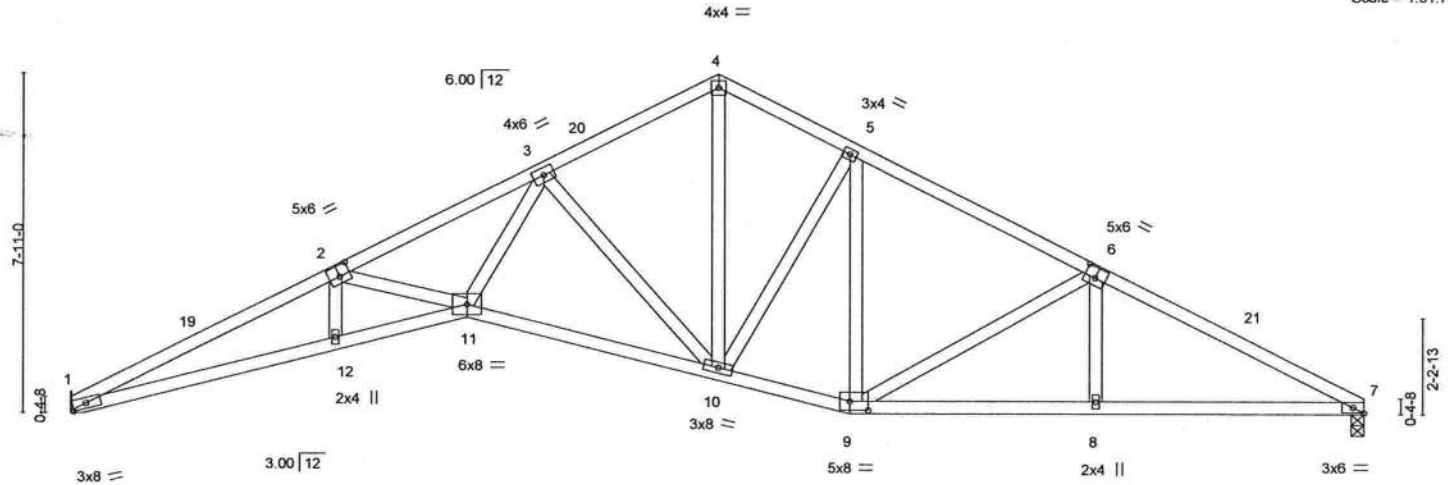


Plate Offsets (X,Y)- [1:0-3-14,0-1-8], [2:0-3-0,0-3-0], [6:0-3-0,0-3-0], [7:0-2-15,Edge], [9:0-5-4,0-2-8]

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | I/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.25 | TC 0.46 | Vert(LL) | -0.25 11 | >999 | 240 | MT20 | 244/190 |
| TCDL 7.0 | Lumber DOL | 1.25 | BC 0.88 | Vert(CT) | -0.48 10-11 | >753 | 180 | | |
| BCLL 0.0 | Rep Stress Incr | YES | WB 0.97 | Horz(CT) | 0.26 7 | n/a | n/a | | |
| BCDL 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | |
| | | | | | | | | Weight: 157 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 2-8-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-7-1 oc bracing.

REACTIONS.

(size) 1=Mechanical, 7=0-3-8
Max Horz 1=112(LC 12)
Max Uplift 1=-231(LC 12), 7=-231(LC 13)
Max Grav 1=1116(LC 1), 7=1116(LC 1)

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

TOP CHORD 1-2=-3726/814, 2-3=-3302/695, 3-4=-1448/365, 4-5=-1440/370, 5-6=-1585/367,
6-7=-2084/418
BOT CHORD 1-12=-800/3371, 11-12=-799/3378, 10-11=-418/2154, 9-10=-196/1404, 8-9=-313/1812,
7-8=-313/1810
WEBS 2-11=-415/204, 3-11=-373/1754, 3-10=-1286/371, 4-10=-246/1079, 5-10=-276/184,
6-9=-531/206, 6-8=0/264

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) 0-0-0 to 3-0-3, Interior(1) 3-0-3 to 15-1-0, Exterior(2R) 15-1-0 to 18-3-12, Interior(1) 18-3-12 to 30-2-0 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=231, 7=231.



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Date:

June 23,2021

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

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| | | | | | | |
|----------------|--------------|----------------------------|----------|----------|---|-----------|
| Job 2820752 | Truss T07 | Truss Type Roof Special | Qty 5 | Ply 1 | CORNERSTONE - LOT 84 EC Job Reference (optional) | T24444461 |
|----------------|--------------|----------------------------|----------|----------|---|-----------|

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:51:06 2021 Page 1
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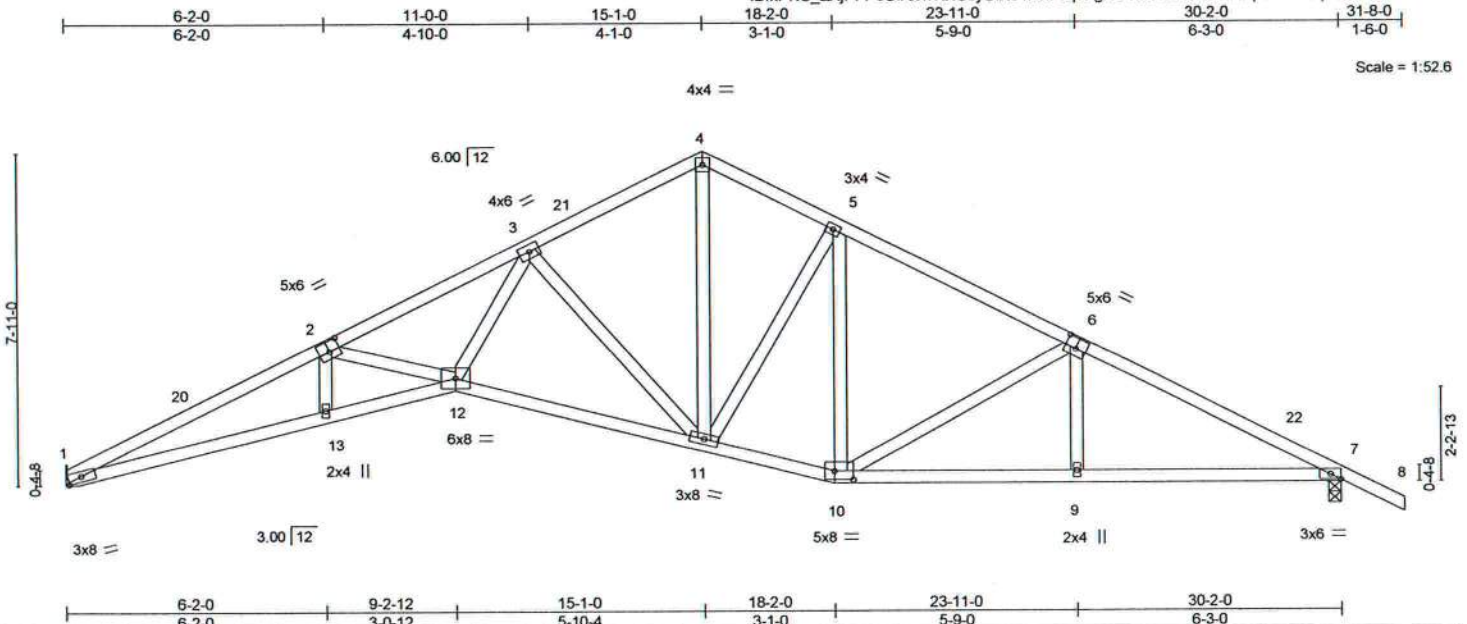


Plate Offsets (X,Y)-- [1:0-3-14,0-1-8], [2:0-3-0,0-3-0], [6:0-3-0,0-3-0], [7:0-2-15,Edge], [10:0-5-4,0-2-8]

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|-----------|----------|----------|--------|------|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.25 | TC 0.46 | Vert(LL) | -0.25 | 12 | >999 | MT20 | 244/190 |
| TCDL 7.0 | Lumber DOL | 1.25 | BC 0.87 | Vert(CT) | -0.48 | 11-12 | >755 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.97 | Horz(CT) | 0.26 | 7 | n/a | | |
| BCDL 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | Weight: 160 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 2-8-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-8-2 oc bracing.

REACTIONS.

(size) 1=Mechanical, 7=0-3-8
Max Horz 1=134(LC 13)
Max Uplift 1=231(LC 12), 7=264(LC 13)
Max Grav 1=1114(LC 1), 7=1199(LC 1)

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

TOP CHORD 1-2=-3718/802, 2-3=-3294/683, 3-4=-1443/361, 4-5=-1435/359, 5-6=-1578/357,
6-7=-2064/408
BOT CHORD 1-13=-778/3364, 12-13=-777/3371, 11-12=-400/2148, 10-11=-177/1398, 9-10=-283/1791,
7-9=-283/1789
WEBS 2-12=-415/205, 3-12=-363/1750, 3-11=-1284/365, 4-11=-243/1075, 5-11=-274/189,
6-10=-513/197, 6-9=0/262

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) 0-0-0 to 3-0-3, Interior(1) 3-0-3 to 15-1-0, Exterior(2R) 15-1-0 to 18-3-12, Interior(1) 18-3-12 to 31-8-0 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=231, 7=264.



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

June 23,2021

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| | | | | | |
|----------------|--------------|----------------------------|----------|----------|--------------------------------------|
| Job 2820752 | Truss T08 | Truss Type Roof Special | Qty 2 | Ply 1 | CORNERSTONE - LOT 84 EC T24444462 |
|----------------|--------------|----------------------------|----------|----------|--------------------------------------|

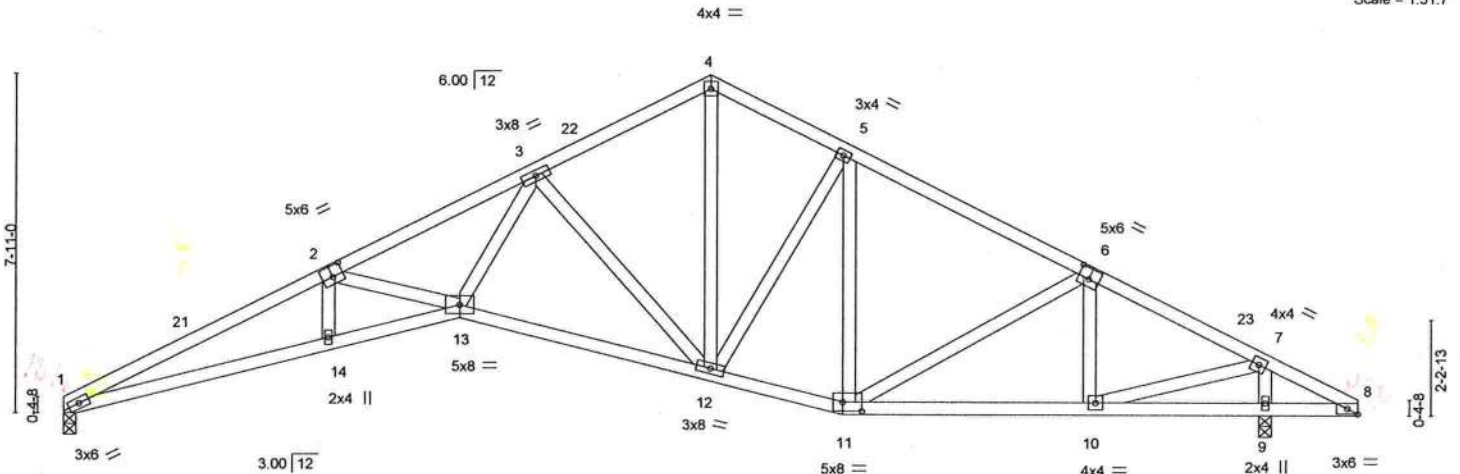
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:51:07 2021 Page 1

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Scale = 1:51.7



| | |
|----------------------|---|
| Plate Offsets (X,Y)- | [2-0-3-0,0-3-0], [6-0-3-0,0-3-0], [8-0-2-15,Edge], [11-0-5-4,0-2-8] |
|----------------------|---|

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.25 | TC 0.43 | Vert(LL) | -0.21 13 | >999 | 240 | MT20 | 244/190 |
| TCDL 7.0 | Lumber DOL | 1.25 | BC 0.81 | Vert(CT) | -0.40 12-13 | >849 | 180 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.90 | Horz(CT) | 0.21 9 | n/a | n/a | | |
| BCDL 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | |
| | | | | | | | | Weight: 165 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 2-10-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 1=0-3-8, 9=0-3-8
Max Horz 1=112(LC 12)
Max Uplift 1=-220(LC 12), 9=-249(LC 13)
Max Grav 1=1031(LC 1), 9=1202(LC 1)

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

TOP CHORD 1-2=-3388/769, 2-3=-2944/648, 3-4=-1236/316, 4-5=-1231/317, 5-6=-1298/294, 6-7=-1321/267
BOT CHORD 1-14=-759/3063, 13-14=-758/3067, 12-13=-384/1897, 11-12=-150/1139, 10-11=-163/1140
WEBS 2-13=-428/207, 3-13=-353/1602, 3-12=-1194/359, 4-12=-205/897, 7-10=-272/1247, 7-9=-1109/310

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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-3, Interior(1) 3-0-3 to 15-1-0, Exterior(2R) 15-1-0 to 18-3-12, Interior(1) 18-3-12 to 30-2-0 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=220, 9=249.



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

June 23,2021

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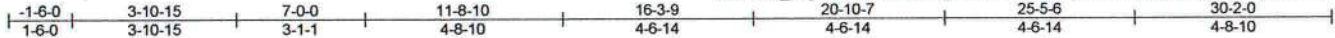
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| | | | | | |
|----------------|--------------|-------------------------------|----------|----------|--------------------------------------|
| Job 2820752 | Truss T10 | Truss Type Half Hip Girder | Qty 1 | Ply 1 | CORNERSTONE - LOT 84 EC T24444463 |
|----------------|--------------|-------------------------------|----------|----------|--------------------------------------|

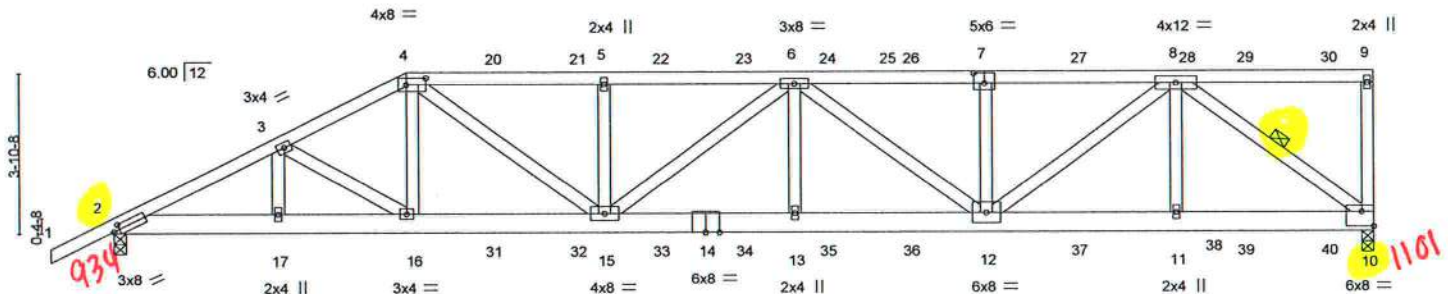
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

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Scale = 1:53.3



| Plate Offsets (X,Y) | 2-0-1-12,0-1-8 | 4-0-5-12,0-2-0 | 7-0-3-0,0-3-0 | 10-Edge,0-4-4 |
|---------------------|----------------|----------------|---------------|---------------|
|---------------------|----------------|----------------|---------------|---------------|

| 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 0.43 | Vert(LL) | 0.30 13-15 | >999 | 240 | MT20 | 244/190 |
| TCDL 7.0 | Lumber DOL | 1.25 | BC 0.98 | Vert(CT) | -0.47 13-15 | >771 | 180 | | |
| BCLL 0.0 * | Rep Stress Incr | NO | WB 0.82 | Horz(CT) | 0.12 10 | n/a | n/a | | |
| BCDL 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | Weight: 194 lb | FT = 20% |

| | | | |
|----------------|----------------------|-----------------|--|
| LUMBER- | | BRACING- | |
| TOP CHORD | 2x4 SP M 31 *Except* | TOP CHORD | Structural wood sheathing directly applied or 2-6-12 oc purlins, except end verticals. |
| | 1-4: 2x4 SP No.2 | | |
| BOT CHORD | 2x6 SP No.2 | BOT CHORD | Rigid ceiling directly applied or 4-9-14 oc bracing. |
| WEBS | 2x4 SP No.3 | WEBS | 1 Row at midpt 8-10 |

REACTIONS. (size) 10=0-3-8, 2=0-3-8
Max Horz 2=143(LC 8)
Max Uplift 10=1101(LC 5), 2=934(LC 8)
Max Grav 10=2450(LC 1), 2=2233(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4411/1892, 3-4=-4280/1912, 4-5=-5045/2266, 5-6=-5045/2266, 6-7=-4477/2015, 7-8=-4472/2012
BOT CHORD 2-17=-1767/3916, 16-17=-1767/3916, 15-16=-1743/3830, 13-15=-2357/5247, 12-13=-2357/5247, 11-12=-1246/2766, 10-11=-1246/2766
WEBS 3-16=-256/158, 4-16=-275/662, 4-15=-716/1513, 5-15=-530/274, 6-15=-254/139, 6-13=-82/380, 6-12=-969/474, 7-12=-483/248, 8-12=-964/2147, 8-11=-78/404, 8-10=-3438/1548

- NOTES-**
- 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; 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) 10=1101, 2=934.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 110 lb down and 90 lb up at 7-0-0, 110 lb down and 90 lb up at 9-0-12, 110 lb down and 90 lb up at 11-0-12, 110 lb down and 90 lb up at 13-0-12, 110 lb down and 90 lb up at 15-0-12, 110 lb down and 90 lb up at 17-0-12, 110 lb down and 87 lb up at 19-0-12, 110 lb down and 90 lb up at 21-0-12, 110 lb down and 90 lb up at 23-0-12, 110 lb down and 90 lb up at 25-0-12, 110 lb down and 90 lb up at 27-0-12, and 111 lb down and 90 lb up at 29-0-12, and 28 lb down and 20 lb up at 30-0-4 on top chord, and 335 lb down and 236 lb up at 7-0-0, 86 lb down and 60 lb up at 9-0-12, 86 lb down and 60 lb up at 11-0-12, 86 lb down and 60 lb up at 13-0-12, 86 lb down and 60 lb up at 15-0-12, 86 lb down and 60 lb up at 17-0-12, 86 lb down and 60 lb up at 19-0-12, 86 lb down and 60 lb up at 21-0-12, 86 lb down and 60 lb up at 23-0-12, 86 lb down and 60 lb up at 25-0-12, and 86 lb down and 60 lb up at 27-0-12, and 87 lb down and 60 lb up at 29-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



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Date:

June 23,2021

| | | | | | |
|--------------------------|-------|-----------------|-----|-----|-------------------------|
| Job | Truss | Truss Type | Qty | Ply | CORNERSTONE - LOT 84 EC |
| 2820752 | T10 | Half Hip Girder | 1 | 1 | T24444463 |
| Job Reference (optional) | | | | | |

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:51:11 2021 Page 2
ID:kPNS_ZXjPFPeUIAx1rKNCsyCIRc-l2b?FYzOVj7KsHSvCBm2TV_gKJzNifvYkvaZWmZ3i1E

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-54, 4-9=-54, 2-10=-20

Concentrated Loads (lb)

Vert: 4=-110(B) 9=-20 16=-335(B) 7=-110(B) 12=-64(B) 20=-110(B) 21=-110(B) 22=-110(B) 23=-110(B) 24=-110(B) 26=-110(B) 27=-110(B) 28=-110(B) 29=-110(B) 30=-111(B) 31=-64(B) 32=-64(B) 33=-64(B) 34=-64(B) 35=-64(B) 36=-64(B) 37=-64(B) 38=-64(B) 39=-64(B) 40=-65(B)



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

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

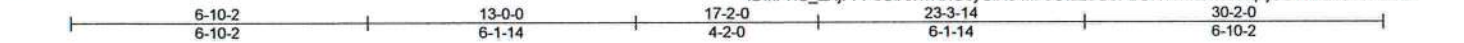


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| | | | | | |
|----------------|--------------|-------------------|----------|----------|--------------------------------------|
| Job 2820752 | Truss T11 | Truss Type Hip | Qty 1 | Ply 1 | CORNERSTONE - LOT 84 EC T24444464 |
|----------------|--------------|-------------------|----------|----------|--------------------------------------|

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8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:51:12 2021 Page 1
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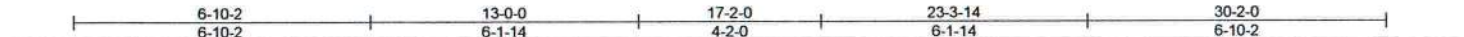
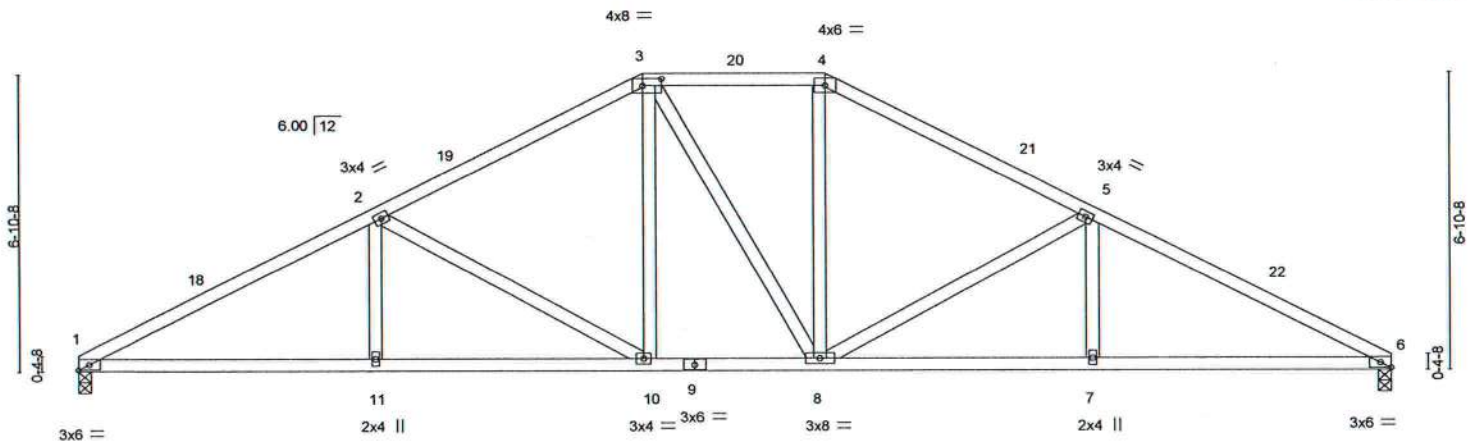


Plate Offsets (X,Y)-- [3:0-5-4,0-2-0], [6:0-2-15,Edge]

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|-----------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.25 | TC 0.45 | Vert(LL) | -0.10 | 10 | >999 | 240 | MT20 | 244/190 |
| TCDL 7.0 | Lumber DOL | 1.25 | BC 0.61 | Vert(CT) | -0.19 | 10-11 | >999 | 180 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.59 | Horz(CT) | 0.08 | 6 | n/a | n/a | | |
| BCDL 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | | Weight: 154 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 3-7-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-0-15 oc bracing.

REACTIONS.

(size) 1=0-3-8, 6=0-3-8
Max Horz 1=97(LC 12)
Max Uplift 1=-235(LC 12), 6=-235(LC 13)
Max Grav 1=1116(LC 1), 6=1116(LC 1)

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

TOP CHORD 1-2=-2058/420, 2-3=-1499/361, 3-4=-1272/358, 4-5=-1500/361, 5-6=-2057/421
BOT CHORD 1-11=-405/1781, 10-11=-405/1781, 8-10=-196/1271, 7-8=-320/1781, 6-7=-320/1781
WEBS 2-11=0/283, 2-10=-596/240, 3-10=-83/399, 4-8=-74/399, 5-8=-595/240, 5-7=0/282

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) 0-0-0 to 3-0-3, Interior(1) 3-0-3 to 13-0-0, Exterior(2E) 13-0-0 to 17-2-0, Exterior(2R) 17-2-0 to 21-5-3, Interior(1) 21-5-3 to 30-2-0 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.
- 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) 1=235, 6=235.



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June 23,2021

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| | | | | | |
|----------------|--------------|--------------------------|----------|----------|--------------------------------------|
| Job 2820752 | Truss T12 | Truss Type Hip Girder | Qty 1 | Ply 1 | CORNERSTONE - LOT 84 EC T24444465 |
|----------------|--------------|--------------------------|----------|----------|--------------------------------------|

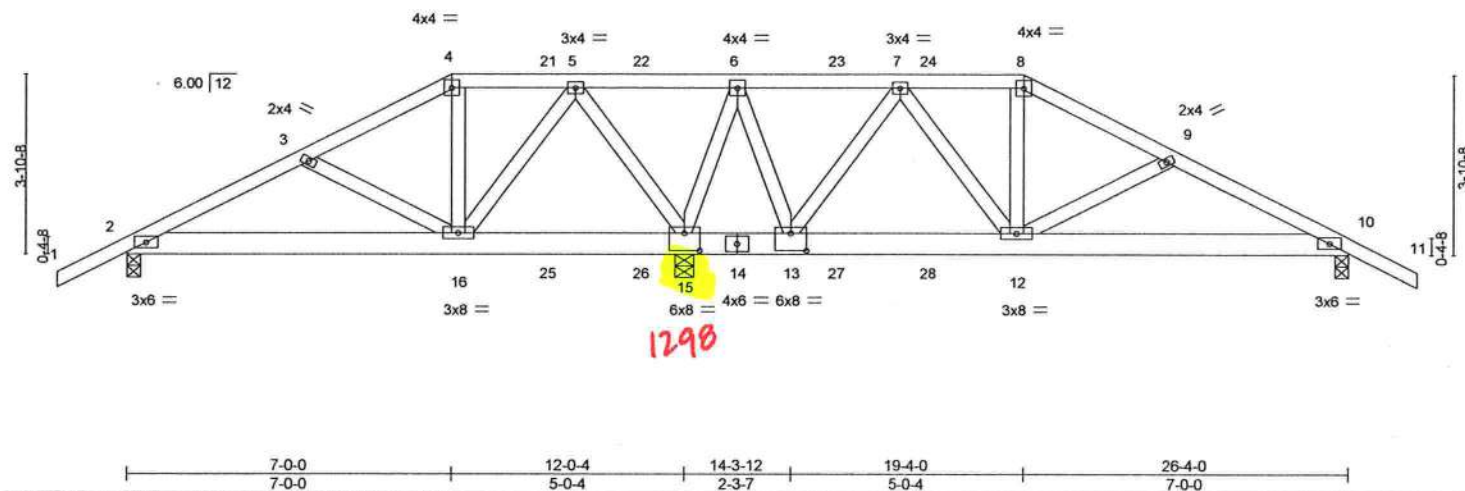
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:51:14 2021 Page 1

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| | | | | | | | | | |
|--------|---------|-------|--------|--------|--------|--------|--------|---------|---------|
| -1-6-0 | 3-10-15 | 7-0-0 | 9-7-15 | 13-2-0 | 16-8-1 | 19-4-0 | 22-5-1 | 26-4-0 | 27-10-0 |
| 1-6-0 | 3-10-15 | 3-1-1 | 2-7-15 | 3-6-1 | 3-6-1 | 2-7-15 | 3-1-1 | 3-10-15 | 1-6-0 |

Scale: 1/4"=1'



| | | | | | | | | | | | |
|---|------|----------------------|------|-----------|------|---------------------------|----------------------|--------|----------------|----------|--|
| Plate Offsets (X,Y)– [13:0-4-0,0-4-8], [15:0-4-0,0-4-8] | | | | | | | | | | | |
| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. in (loc) l/defl L/d | | PLATES | | GRIP | |
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.46 | Vert(LL) | 0.04 12-20 >999 240 | MT20 | | 244/190 | |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.30 | Vert(CT) | -0.05 12-20 >999 180 | | | | |
| BCLL | 0.0 | Rep Stress Incr | NO | WB | 0.47 | Horz(CT) | 0.01 10 n/a n/a | | | | |
| BCDL | 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | Weight: 162 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 5-3-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 15=0-4-15, 10=0-3-8
Max Horz 2=63(LC 13)
Max Uplift 2=170(LC 8), 15=1298(LC 5), 10=312(LC 4)
Max Grav 2=501(LC 19), 15=2867(LC 1), 10=783(LC 20)

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

TOP CHORD 2-3=596/243, 3-4=404/182, 4-5=316/181, 5-6=358/931, 7-8=897/486,
8-9=1043/530, 9-10=1229/560
BOT CHORD 2-16=216/519, 13-15=438/233, 12-13=253/523, 10-12=463/1081
WEBS 5-16=361/863, 5-15=1264/569, 6-15=1586/764, 6-13=489/1054, 7-13=1051/487,
7-12=284/661

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; porch right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=170, 15=1298, 10=312.
- 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, 110 lb down and 90 lb up at 11-0-12, 110 lb down and 83 lb up at 13-0-12, 110 lb down and 83 lb up at 13-3-4, 110 lb down and 90 lb up at 15-3-4, and 110 lb down and 90 lb up at 17-3-4, and 230 lb down and 173 lb up at 19-4-0 on top chord, and 335 lb down and 236 lb up at 7-0-0, 86 lb down and 60 lb up at 9-0-12, 86 lb down and 60 lb up at 11-0-12, 86 lb down and 60 lb up at 13-0-12, 86 lb down and 60 lb up at 13-3-4, 86 lb down and 60 lb up at 15-3-4, and 86 lb down and 60 lb up at 17-3-4, and 335 lb down and 236 lb up at 19-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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



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Date:

June 23,2021

Continued on page 2

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Tampa, FL 36610

| | | | | | | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | CORNERSTONE - LOT 84 EC | T24444465 |
| 2820752 | T12 | Hip Girder | 1 | 1 | Job Reference (optional) | |

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:51:14 2021 Page 2
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LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-54, 4-8=-54, 8-11=-54, 2-10=-20

Concentrated Loads (lb)

Vert: 4=-110(B) 8=-182(B) 14=-129(B) 16=-335(B) 6=-219(B) 12=-335(B) 21=-110(B) 22=-110(B) 23=-110(B) 24=-110(B) 25=-64(B) 26=-64(B) 27=-64(B)
28=-64(B)

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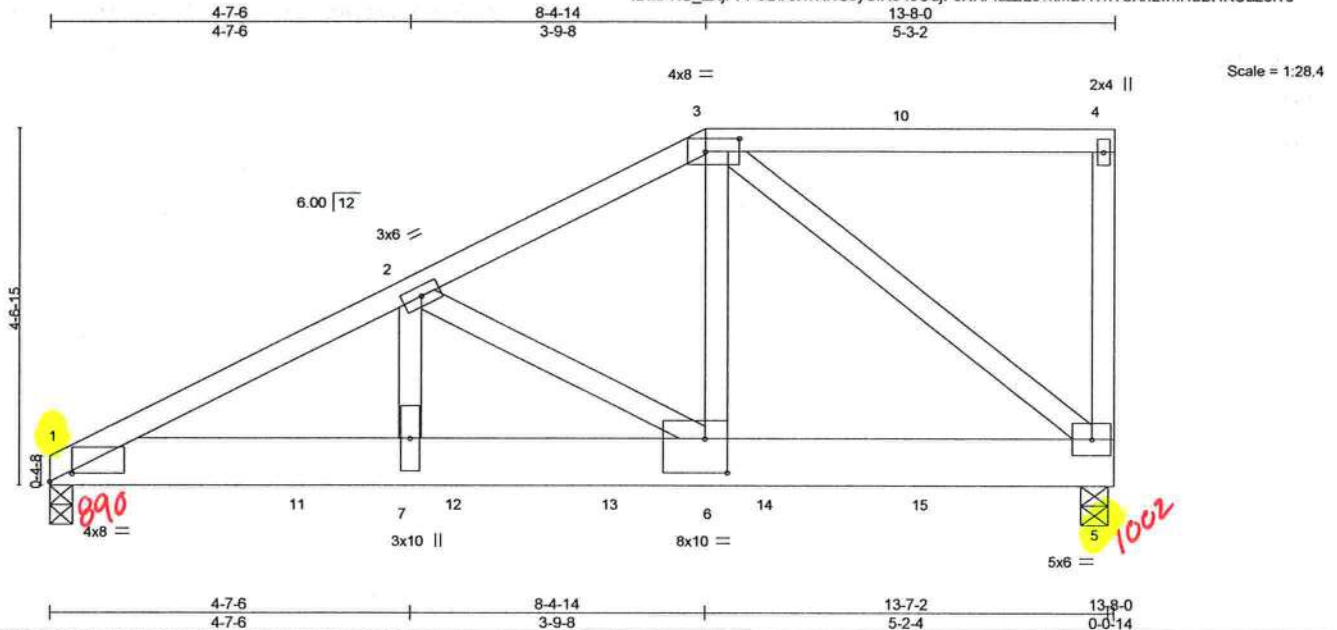


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Tampa, FL 36610

| | | | | | | |
|---------|-------|-----------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | CORNERSTONE - LOT 84 EC | T24444466 |
| 2820752 | T13 | Half Hip Girder | 1 | 2 | Job Reference (optional) | |

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| | | | | | | | | | |
|-----------------------|---|-------|-----------|----------|----------|--------|------|----------------|----------|
| Plate Offsets (X,Y) - | [1:0-3-7,0-1-4], [3:0-5-4,0-2-0], [6:0-3-8,0-5-4] | | | | | | | | |
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | I/defl | L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL | 1.25 | TC 0.34 | Vert(LL) | -0.06 | 6-7 | >999 | MT20 | 244/190 |
| TCDL 7.0 | Lumber DOL | 1.25 | BC 0.27 | Vert(CT) | -0.10 | 6-7 | >999 | | |
| BCLL 0.0 * | Rep Stress Incr | NO | WB 0.78 | Horz(CT) | 0.02 | 5 | n/a | | |
| BCDL 10.0 | Code FBC2020/TP12014 | | Matrix-MS | | | | | | |
| | | | | | | | | Weight: 185 lb | FT = 20% |

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 5=0-4-5
Max Horz 1=143(LC 27)
Max Uplift 1=890(LC 8), 5=1002(LC 8)
Max Grav 1=4089(LC 1), 5=4575(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-6263/1358, 2-3=-3675/801
BOT CHORD 1-7=-1308/5579, 6-7=-1308/5579, 5-6=-771/3389
WEBS 2-7=-464/2263, 2-6=-2678/651, 3-6=-866/4093, 3-5=-4302/978

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=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
- 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) 1=890, 5=1002.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1096 lb down and 255 lb up at 1-2-12, 1096 lb down and 251 lb up at 3-2-12, 1096 lb down and 251 lb up at 5-2-12, 1096 lb down and 251 lb up at 7-2-12, 1094 lb down and 251 lb up at 9-2-12, and 1094 lb down and 251 lb up at 11-2-12, and 1101 lb down and 244 lb up at 13-6-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard



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June 23,2021

Continued on page 2

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| | | | | | |
|----------------|--------------|-------------------------------|----------|----------|--|
| Job 2820752 | Truss T13 | Truss Type Half Hip Girder | Qty 1 | Ply 2 | CORNERSTONE - LOT 84 EC T24444466 Job Reference (optional) |
|----------------|--------------|-------------------------------|----------|----------|--|

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LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-54, 3-4=-54, 1-5=-20

Concentrated Loads (lb)

Vert: 5=-1101(F) 9=-1096(F) 11=-1096(F) 12=-1096(F) 13=-1096(F) 14=-1094(F) 15=-1094(F)



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

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



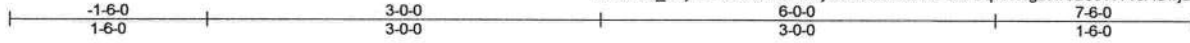
6904 Parke East Blvd.
Tampa, FL 36610

| | | | | | |
|----------------|--------------|----------------------|----------|----------|--------------------------------------|
| Job 2820752 | Truss T14 | Truss Type Common | Qty 1 | Ply 1 | CORNERSTONE - LOT 84 EC T24444467 |
|----------------|--------------|----------------------|----------|----------|--------------------------------------|

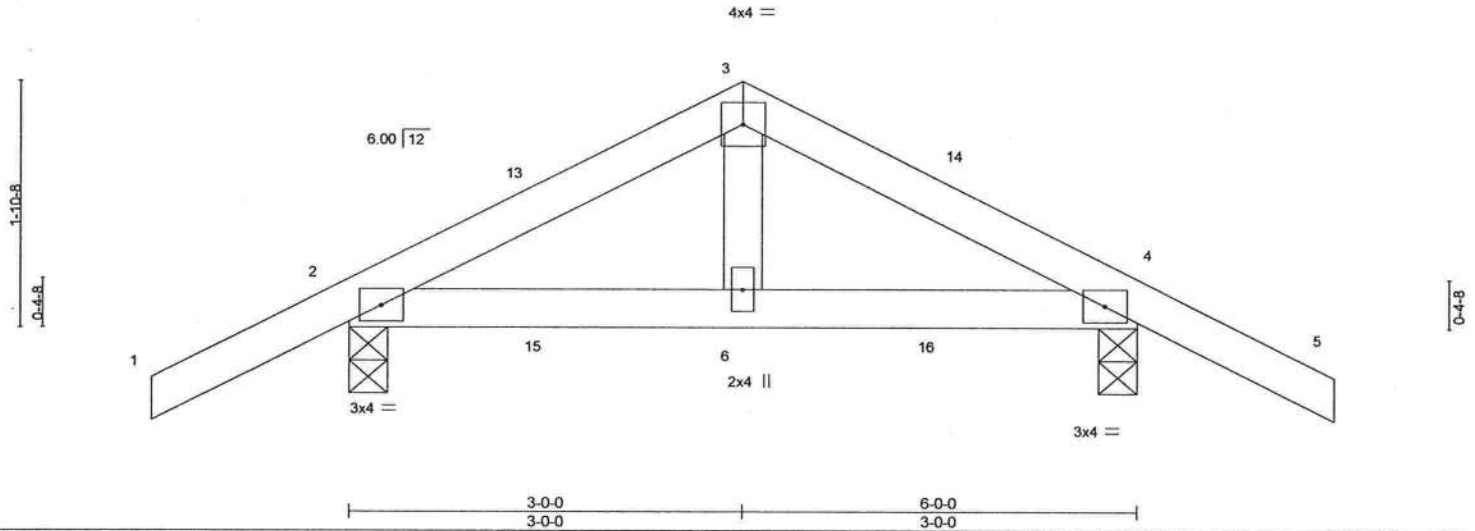
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:51:19 2021 Page 1

ID: kPNS_ZXjPFPeUIAx1rKNCsyCIRc-3b41LH3PcA7BqW3RgswvoBJ6WYv5ASwja9W_ouz3i16



Scale = 1:16.9



| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in | (loc) | I/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|-----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.25 | TC 0.17 | Vert(LL) | 0.01 | 6-9 | >999 | 240 | MT20 | 244/190 |
| TCDL 7.0 | Lumber DOL | 1.25 | BC 0.10 | Vert(CT) | 0.01 | 6-9 | >999 | 180 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.05 | Horz(CT) | -0.00 | 4 | n/a | n/a | | |
| BCDL 10.0 | Code FBC2020/TPI2014 | | Matrix-MP | | | | | | Weight: 26 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 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 4=0-3-8
Max Horz 2=33(LC 12)
Max Uplift 2=81(LC 12), 4=81(LC 13)
Max Grav 2=303(LC 1), 4=303(LC 1)

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

TOP CHORD 2-3=241/393, 3-4=241/393

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 1-6-0, Interior(1) 1-6-0 to 3-0-0, Exterior(2R) 3-0-0 to 6-0-0, Interior(1) 6-0-0 to 7-6-0 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 2, 4.



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

June 23,2021

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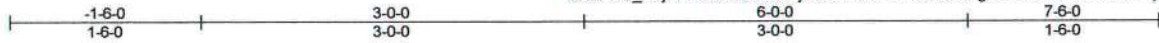
6904 Parke East Blvd.
Tampa, FL 33610

| | | | | | |
|----------------|---------------|--------------------------------------|----------|----------|--------------------------------------|
| Job 2820752 | Truss T14G | Truss Type Common Supported Gable | Qty 1 | Ply 1 | CORNERSTONE - LOT 84 EC T24444468 |
|----------------|---------------|--------------------------------------|----------|----------|--------------------------------------|

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:51:20 2021 Page 1

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Scale = 1:17.4

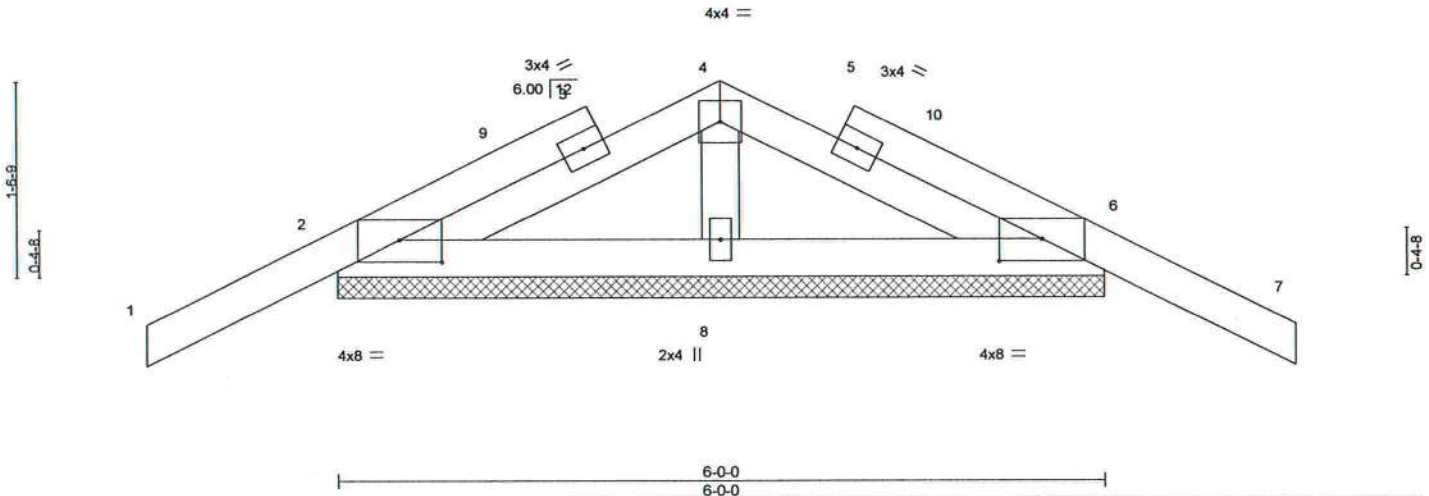


Plate Offsets (X,Y) - [2-0-4-0,0-2-1], [6-0-4-0,0-2-1]

| 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 0.20 | Vert(LL) | -0.00 | 7 | n/r | 120 | MT20 | 244/190 |
| TCDL 7.0 | Lumber DOL | 1.25 | BC 0.09 | Vert(CT) | -0.01 | 7 | n/r | 120 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.03 | Horz(CT) | 0.00 | 6 | n/a | n/a | | |
| BCDL 10.0 | Code FBC2020/TPI2014 | | Matrix-P | | | | | | Weight: 31 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=6-0-0, 6=6-0-0, 8=6-0-0
Max Horz 2=-29(LC 13)
Max Uplift 2=-71(LC 12), 6=-76(LC 13), 8=-22(LC 12)
Max Grav 2=200(LC 23), 6=200(LC 24), 8=212(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; 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 Corner(3E) -1-6-0 to 1-6-0, Exterior(2N) 1-6-0 to 3-0-0, Corner(3R) 3-0-0 to 6-0-0, Exterior(2N) 6-0-0 to 7-6-0 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 8.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



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Date:

June 23,2021

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| | | | | | |
|----------------|--------------|----------------------|----------|----------|--------------------------------------|
| Job 2820752 | Truss T15 | Truss Type Common | Qty 1 | Ply 1 | CORNERSTONE - LOT 84 EC T24444469 |
|----------------|--------------|----------------------|----------|----------|--------------------------------------|

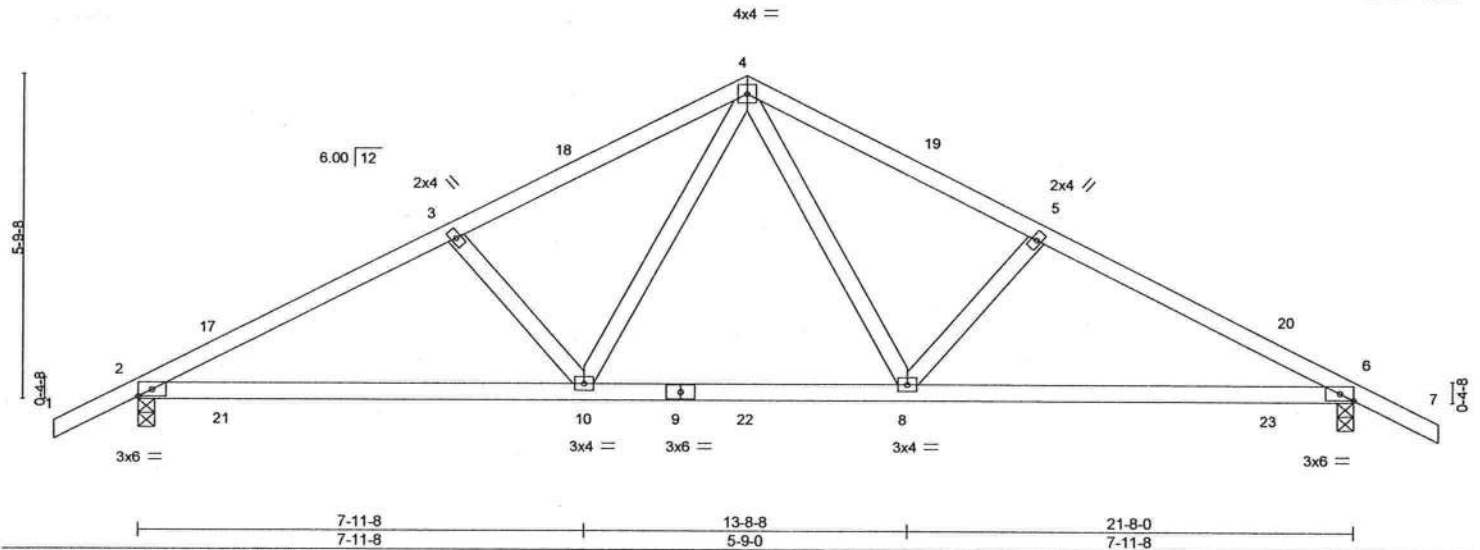
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:51:21 2021 Page 1

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| | | | | | |
|-----------------|------------------|------------------|-----------------|------------------|-----------------|
| -1-6-0 1-6-0 | 5-7-15 5-7-15 | 10-10-0 5-2-1 | 16-0-1 5-2-1 | 21-8-0 5-7-15 | 23-2-0 1-6-0 |
|-----------------|------------------|------------------|-----------------|------------------|-----------------|

Scale = 1:39.5



| LOADING (psf) | | SPACING- | | CSL | | DEFL. | | PLATES | | GRIP | |
|---------------|------|----------------------|------|-----------|------|----------|---------------------|--------|--|----------------|----------|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.43 | Vert(LL) | 0.20 8-16 >999 240 | MT20 | | 244/190 | |
| TCDL | 7.0 | Lumber DOL | 1.25 | BC | 0.56 | Vert(CT) | -0.21 8-16 >999 180 | | | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.41 | Horz(CT) | 0.03 6 n/a n/a | | | | |
| BCDL | 10.0 | Code FBC2020/TP12014 | | Matrix-MS | | | | | | | |
| | | | | | | | | | | 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 4-10-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-1-10 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=-92(LC 13)
Max Uplift 2=-224(LC 9), 6=-224(LC 8)
Max Grav 2=883(LC 1), 6=883(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1352/1239, 3-4=-1172/1209, 4-5=-1172/1209, 5-6=-1352/1239
BOT CHORD 2-10=-1035/1177, 8-10=-655/792, 6-8=-1050/1177
WEBS 4-8=-556/425, 5-8=-308/212, 4-10=-556/425, 3-10=-308/212

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; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=224, 6=224.



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

June 23,2021

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6904 Parke East Blvd.
Tampa, FL 33610

T24444470

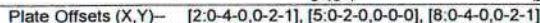
8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:51:23 2021 Page 1

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 22 14:51:23 2021 Page 1

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A horizontal timeline with three tick marks. Above the first tick mark is the label "16-0-1". Above the second tick mark is the label "21-8-0". Above the third tick mark is the label "23-2-0".

Scale = 1:40.8

Weight: 150 lb FT = 20%

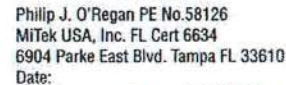
OTHERS 2x4 SP No.3

Rigid ceiling directly applied or 6-0-0 oc bracing

Max Grav 2=622(LC 1), 8=222(LC 24), 10=960(LC 1)

WEBS 5-11=-390/261. 6-11=-574/566. 5-13=-564/433. 4-13=-413/384. 6-10=-873/784

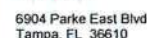
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb)
2=163, 10=239.



June 23, 2021

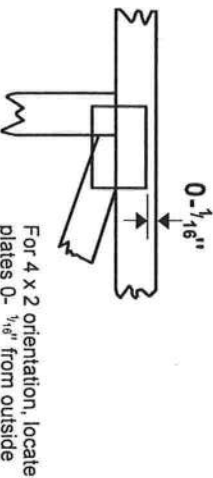
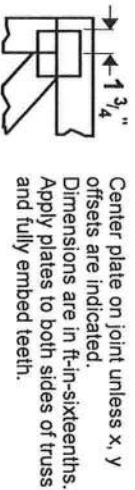
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Symbols

PLATE LOCATION AND ORIENTATION



* Plate location details available in MITek 20120 software or upon request.

PLATE SIZE

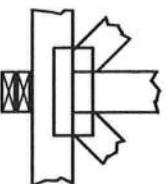
4 X 4

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

LATERAL BRACING LOCATION



BEARING

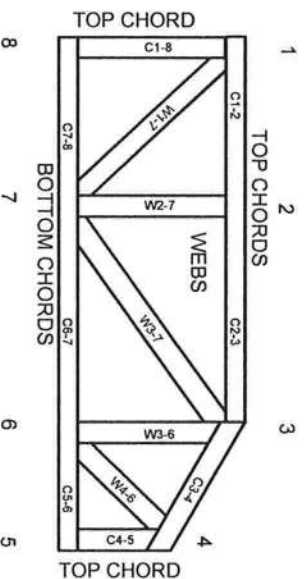


Industry Standards:
ANSI/TP11: National Design Specification for Metal Plate Connected Wood Truss Construction.

DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 section 6.3. These truss designs rely on lumber values established by others.

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



General Safety Notes

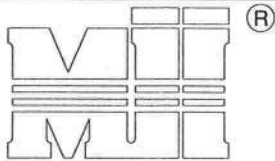
Failure to Follow Could Cause Property Damage or Personal Injury

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

AUGUST 1, 2016

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

MII-T-BRACE 2



MiTek USA, Inc.

ENGINEERED BY
TRENCO
A MiTek Affiliate

MiTek USA, Inc. Page 1 of 1

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

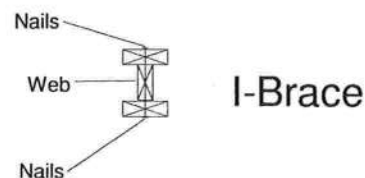
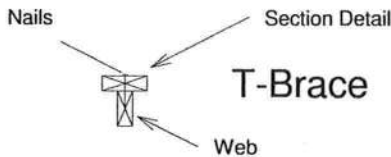
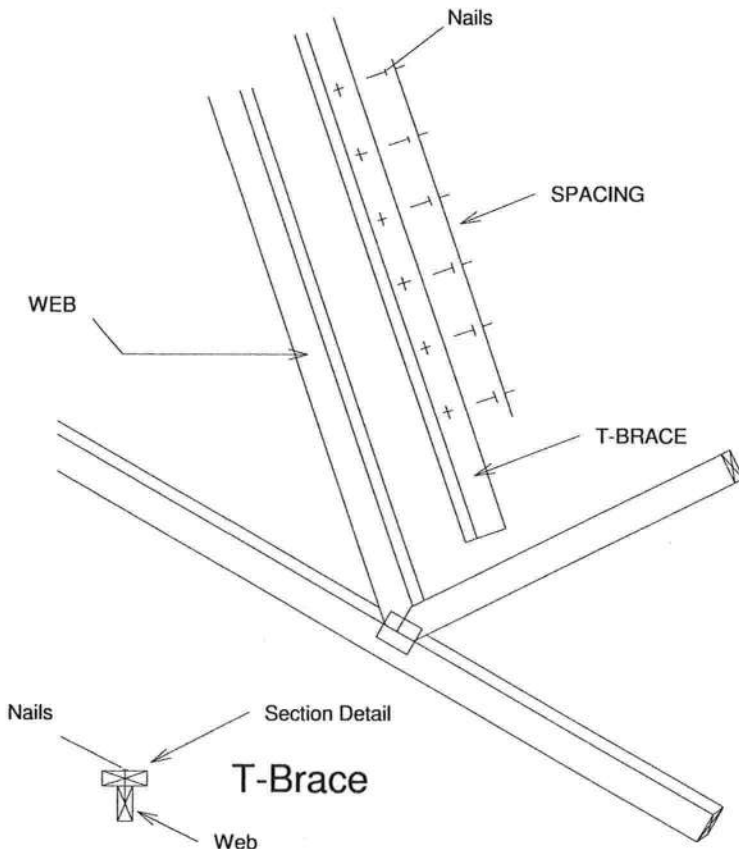
| Web Size | 1 | 2 |
|------------|-------------|-------------|
| 2x3 or 2x4 | 2x4 T-Brace | 2x4 I-Brace |
| 2x6 | 2x6 T-Brace | 2x6 I-Brace |
| 2x8 | 2x8 T-Brace | 2x8 I-Brace |

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

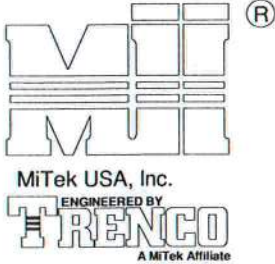
AUGUST 1, 2016

SCAB-BRACE DETAIL

MII-SCAB-BRACE

MiTek USA, Inc.

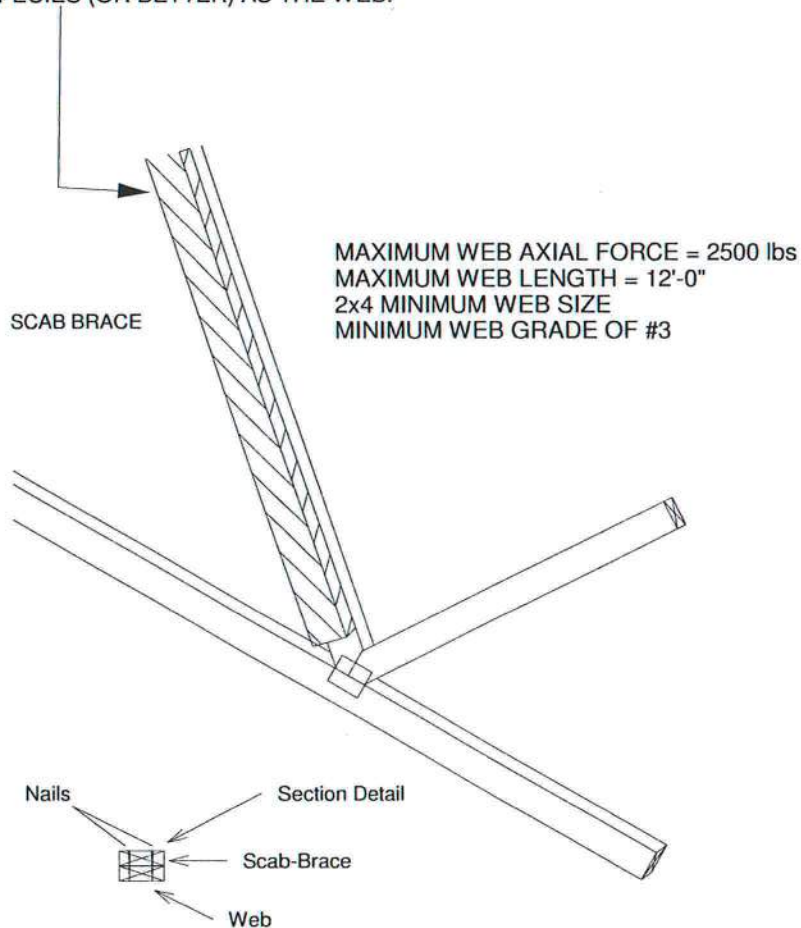
Page 1 of 1



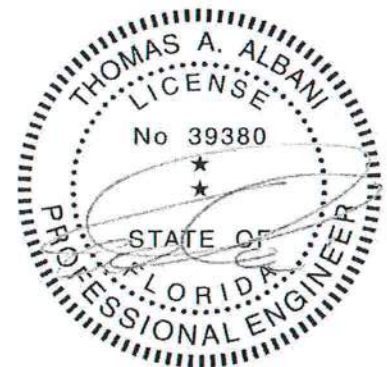
Note: Scab-Bracing to be used when continuous lateral bracing at midpoint (or T-Brace) is impractical.
Scab must cover full length of web +/- 6".

*** 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.



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MiTek USA, Inc. FL Cert 6634
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Date:

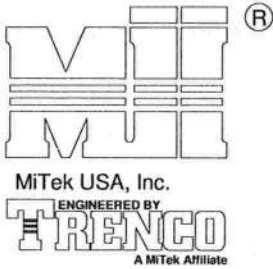
February 12, 2018

AUGUST 1, 2016

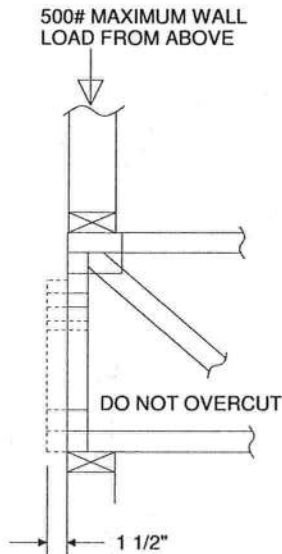
STANDARD REPAIR TO REMOVE END VERTICAL (RIBBON NOTCH VERTICAL)

MII-REP05

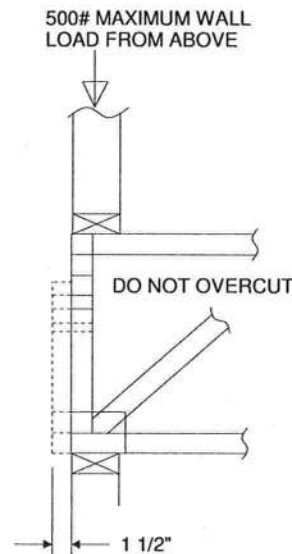
MiTek USA, Inc. Page 1 of 1



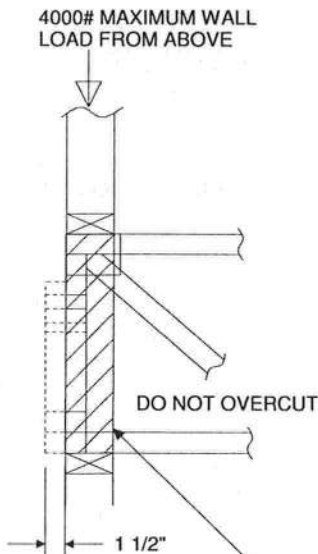
1. THIS IS A SPECIFIC REPAIR DETAIL TO BE USED ONLY FOR ITS ORIGINAL INTENTION. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS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



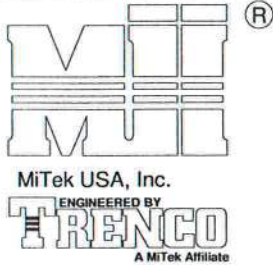
Thomas A. Albani PE No. 39380
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

February 12, 2018

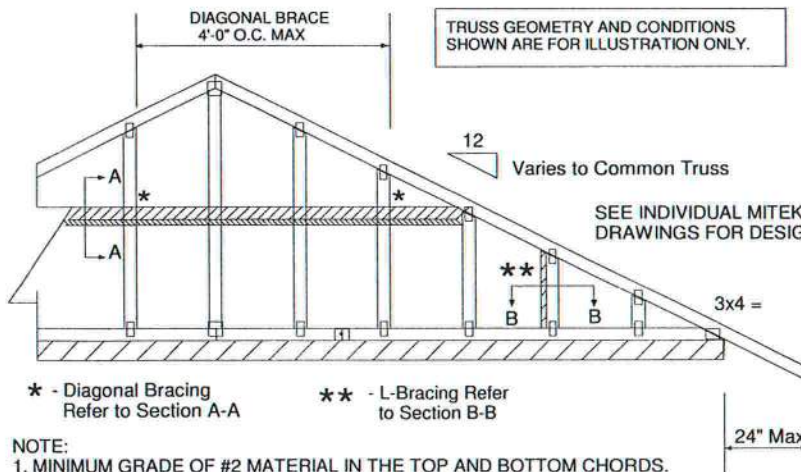
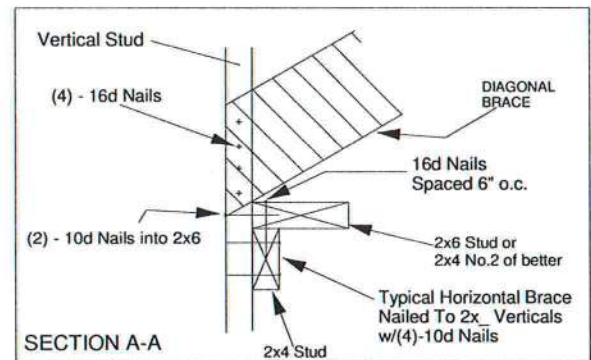
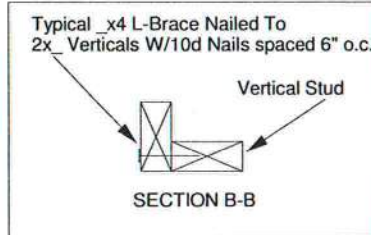
AUGUST 1, 2016

Standard Gable End Detail

MII-GE130-D-SP



MiTek USA, Inc. Page 1 of 2

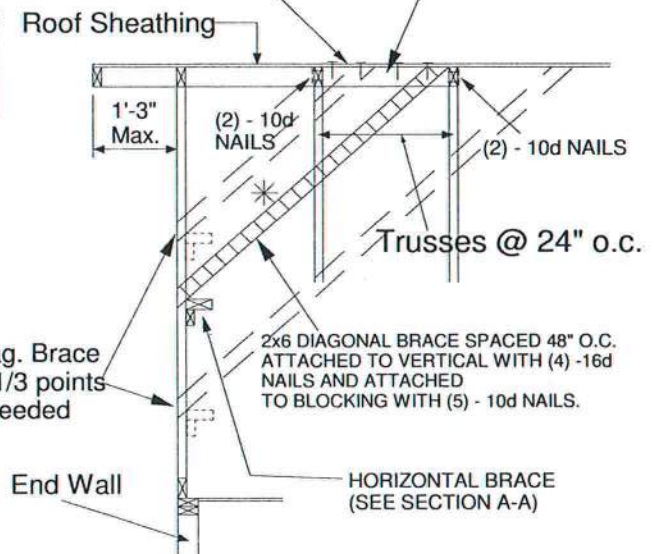


NOTE:

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

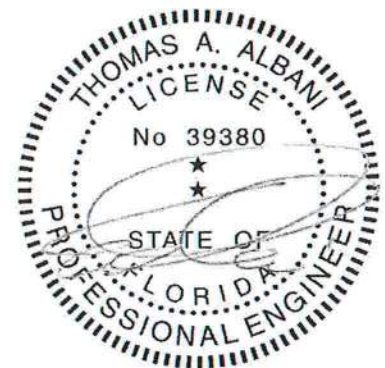


| Minimum Stud Size Species and Grade | Stud Spacing | Without Brace | 1x4 L-Brace | 2x4 L-Brace | DIAGONAL BRACE | 2 DIAGONAL BRACES AT 1/3 POINTS |
|-------------------------------------|--------------|---------------------|-------------|-------------|----------------|---------------------------------|
| | | 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.

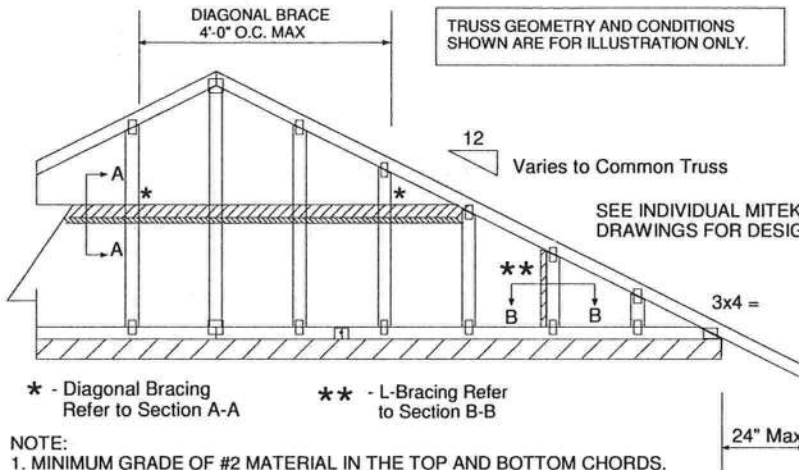
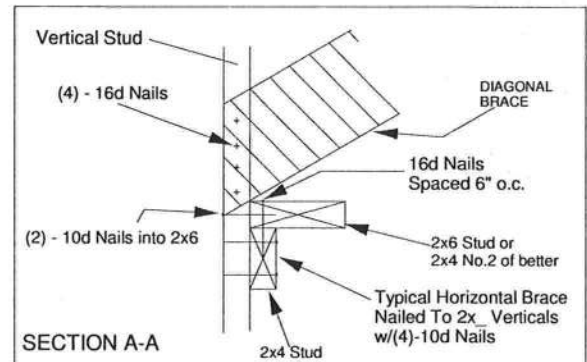
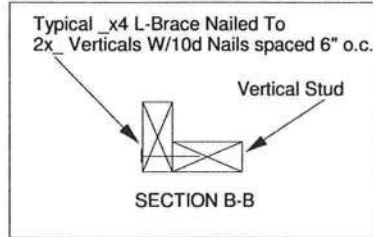
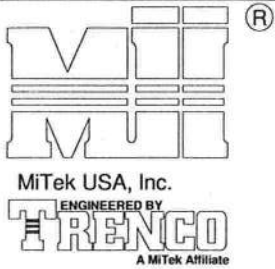
MAX MEAN ROOF HEIGHT = 30 FEET
CATEGORY II BUILDING
EXPOSURE D
ASCE 7-98, ASCE 7-02, ASCE 7-05 130 MPH
ASCE 7-10 160 MPH
DURATION OF LOAD INCREASE : 1.60

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



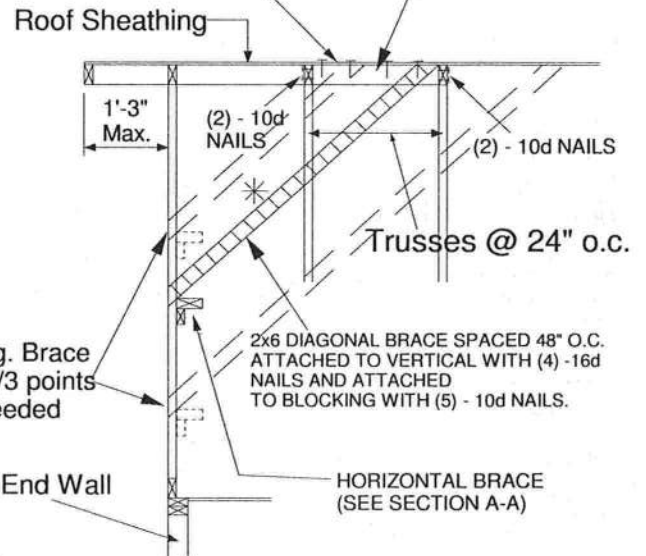
Thomas A. Albani PE No.39380
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

February 12, 2018



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



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")

| Minimum Stud Size Species and Grade | Stud Spacing | Without Brace | 1x4 | 2x4 | DIAGONAL BRACE | 2 DIAGONAL BRACES AT 1/3 POINTS |
|-------------------------------------|--------------|---------------|---------|---------|----------------|---------------------------------|
| | | | L-Brace | L-Brace | | |
| 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.



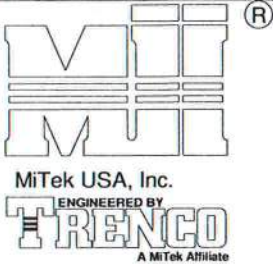
Thomas A. Albani PE No. 39380
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

February 12, 2018

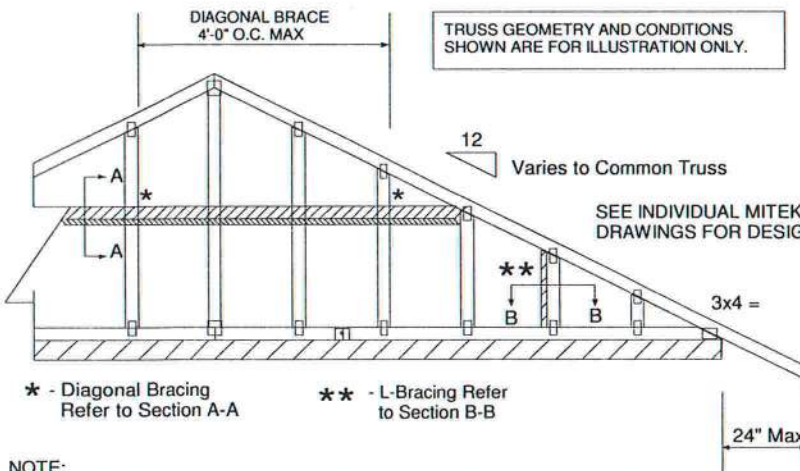
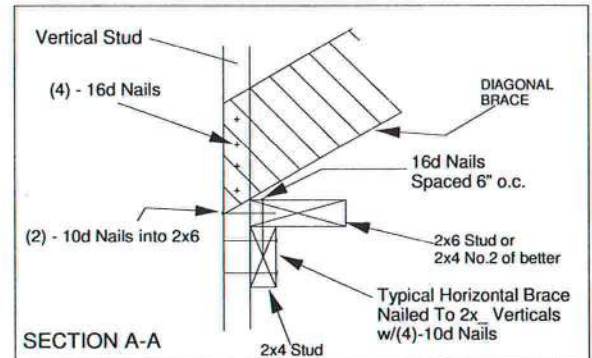
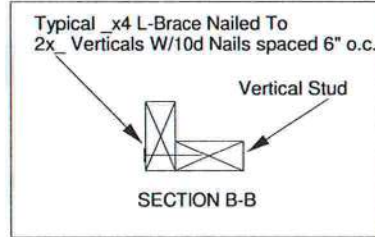
JANUARY 6, 2017

Standard Gable End Detail

MII-GE140-001



MiTek USA, Inc. Page 1 of 2

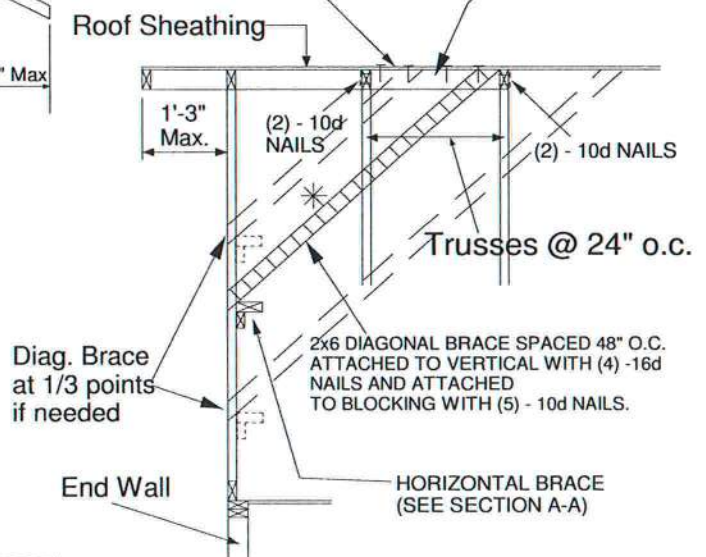


NOTE:

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. 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 DF/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 DF/SPF Std/Stud | 12" O.C. | 3-10-1 | 3-11-7 | 5-7-2 | 7-8-2 | 11-6-4 |
| 2x4 DF/SPF Std/Stud | 16" O.C. | 3-3-14 | 3-5-1 | 4-10-2 | 6-7-13 | 9-11-11 |
| 2x4 DF/SPF Std/Stud | 24" O.C. | 2-8-9 | 2-9-8 | 3-11-7 | 5-5-2 | 8-1-12 |

- * 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.

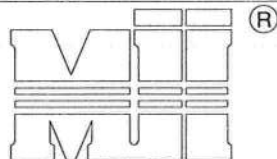
MAXIMUM WIND SPEED = 140 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
CATEGORY II BUILDING
EXPOSURE B or C
ASCE 7-98, ASCE 7-02, ASCE 7-05
DURATION OF LOAD INCREASE : 1.60

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



Thomas A. Albani PE No.39380
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6904 Parke East Blvd. Tampa FL 33610
Date:

January 19, 2018



MiTek USA, Inc.
ENGINEERED BY
TRENCO
A MiTek Affiliate

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.

Varies to Common Truss

SEE INDIVIDUAL MITEK ENGINEERING
DRAWINGS FOR DESIGN CRITERIA

3x4 =

24" Max

* - Diagonal Bracing
Refer to Section A-A

** - L-Bracing Refer
to Section B-B

NOTE:

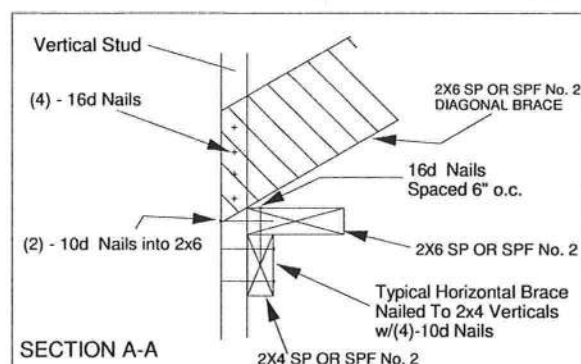
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF 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.



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

1'-0" Max.

(2) - 10d NAILS

(2) - 10d NAILS

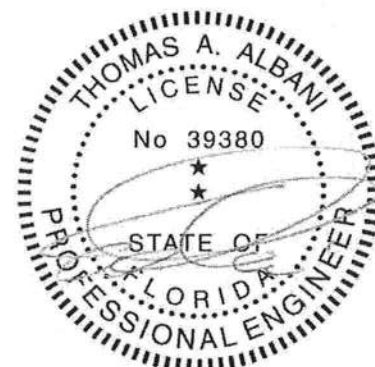
Trusses @ 24" o.c.

Diag. Brace at 1/3 points if needed

End Wall

2x6 DIAGONAL BRACE SPACED 48" O.C. ATTACHED TO VERTICAL WITH (4) - 16d NAILS, AND ATTACHED TO BLOCKING WITH (5) - 10d NAILS.

HORIZONTAL BRACE (SEE SECTION A-A)



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6904 Parke East Blvd. Tampa FL 33610
Date:

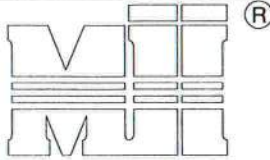
February 12, 2018

AUGUST 1, 2016

Standard Gable End Detail

MII-GE180-D-SP

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 MITTEK ENGINEERING
DRAWINGS FOR DESIGN CRITERIA

3x4 =

24" Max

* - Diagonal Bracing
Refer to Section A-A** - L-Bracing Refer
to Section B-B

NOTE:

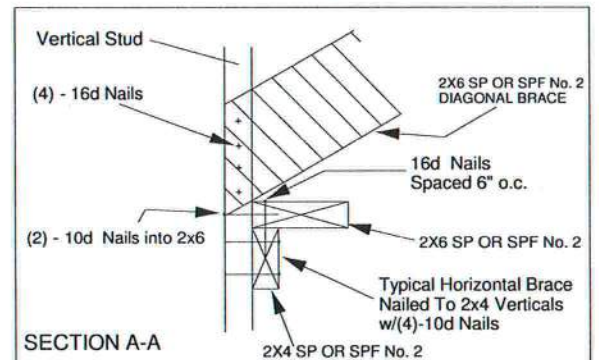
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF 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 |
|-------------------------------------|--------------|---------------|-------------|----------------|---------------------------------|
| | | | | | |
| 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 l-braces attached to both edges. Fasten T and l 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 l braces must be 2x4 SPF No. 2 or SP No. 2.

MAX MEAN ROOF HEIGHT = 30 FEET
EXPOSURE D
ASCE 7-10 180 MPH
DURATION OF LOAD INCREASE : 1.60

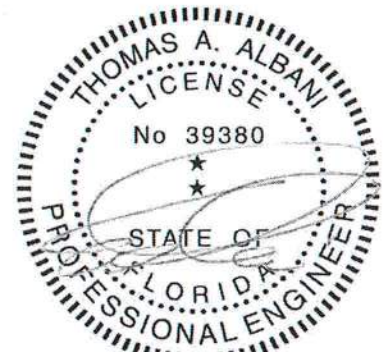
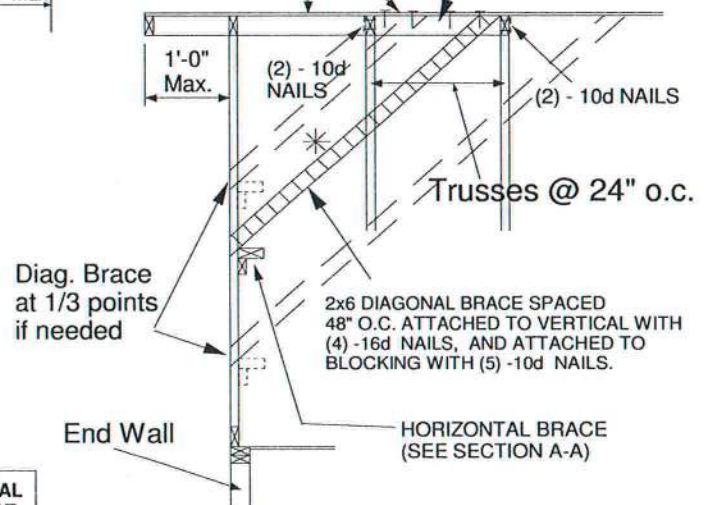
STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.
CONNECTION OF BRACING IS BASED ON MWFRS.



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.

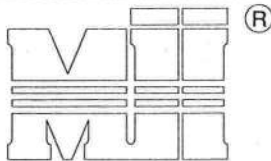
(4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SPF BLOCK

Roof Sheathing



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February 12, 2018



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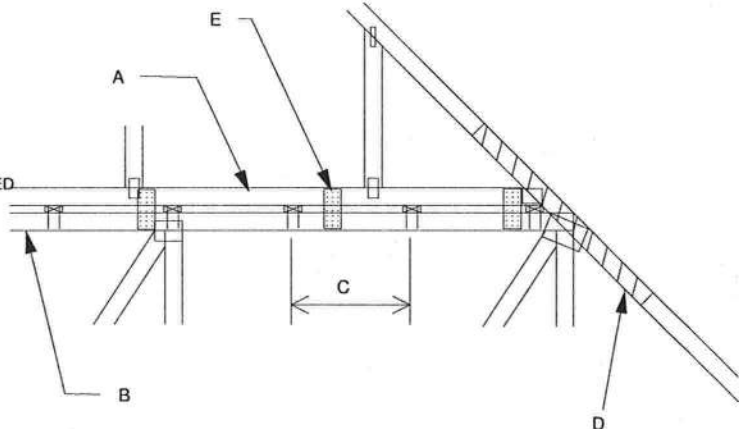


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MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E
 MAX MEAN ROOF HEIGHT = 30 FEET
 MAX TRUSS SPACING = 24" O.C.
 CATEGORY II BUILDING
 EXPOSURE B or C
 ASCE 7-10
 DURATION OF LOAD INCREASE : 1.60

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

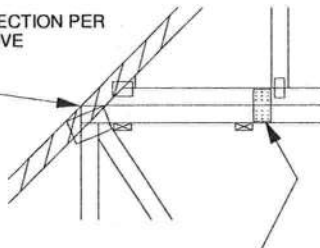
- A - PIGGYBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) (0.131" X 3.5") TOE-NAILED.
- B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. 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)



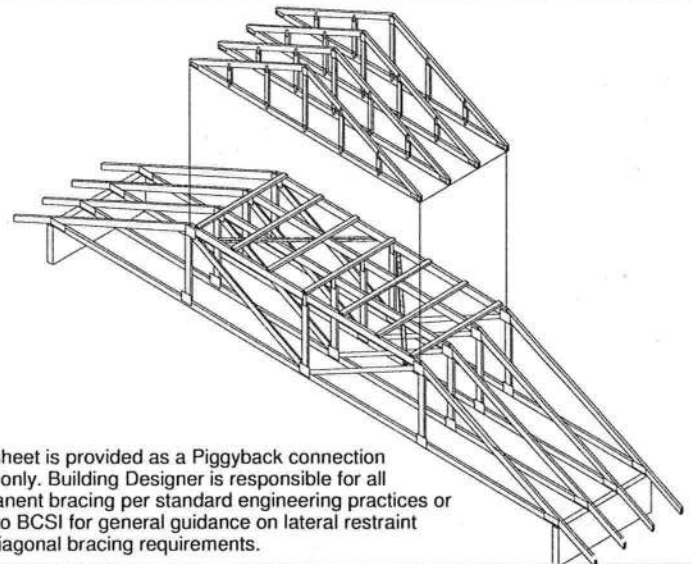
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

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

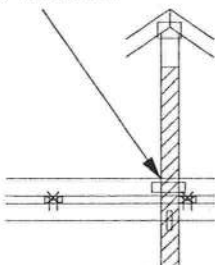


FOR ALL WIND SPEEDS, ATTACH MITEK 3X6 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O.C. W/ (4) (0.131" X 1.5") PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" EDGE DISTANCE.



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.



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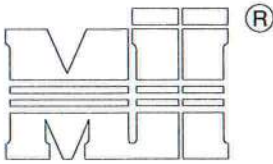
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STANDARD PIGGYBACK TRUSS CONNECTION DETAIL

MII-PIGGY-ALT
7-10

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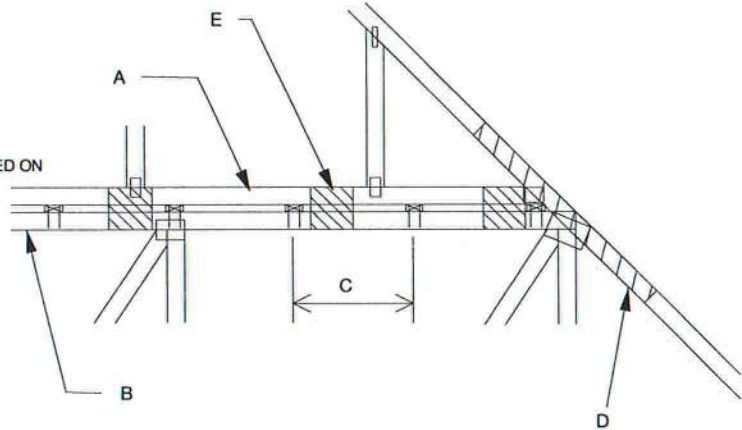
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MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E
MAX MEAN ROOF HEIGHT = 30 FEET
MAX TRUSS SPACING = 24" O.C.
CATEGORY II BUILDING
EXPOSURE B or C
ASCE 7-10
DURATION OF LOAD INCREASE : 1.60

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

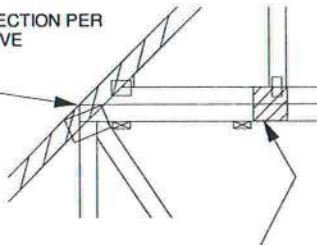
- A - PIGGYBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) 0(0.131" X 3.5") TOE-NAILED.
- B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT TO BASE TRUSS WITH (2) (0.131" X 3.5") NAILS EACH.
- D - 2 X ____ 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 SPEED IN THE RANGE 126 MPH - 160 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)



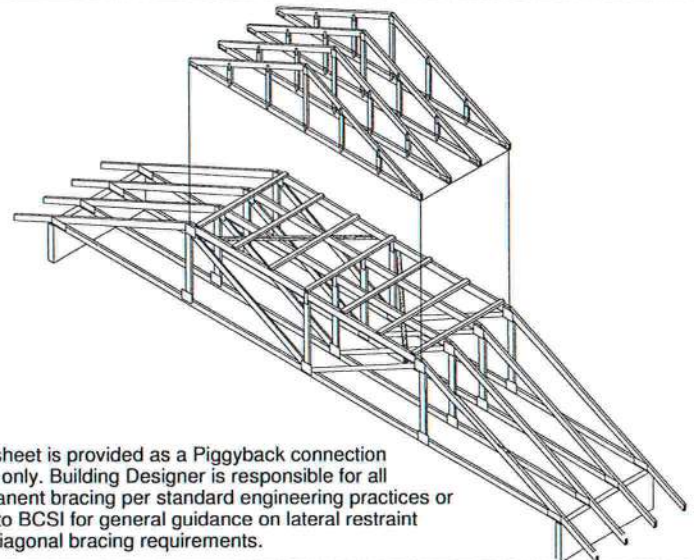
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

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

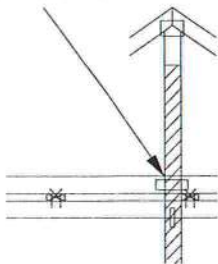


7" x 7" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 24" O.C. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)



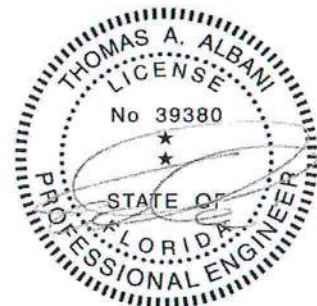
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VERTICAL WEB TO
EXTEND THROUGH
BOTTOM CHORD
OF PIGGYBACK



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 ____ 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.



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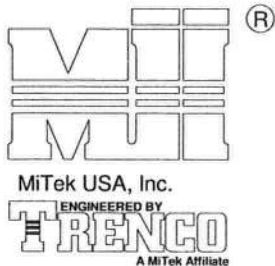
January 19, 2018

AUGUST 1, 2016

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

MII-REP01A1

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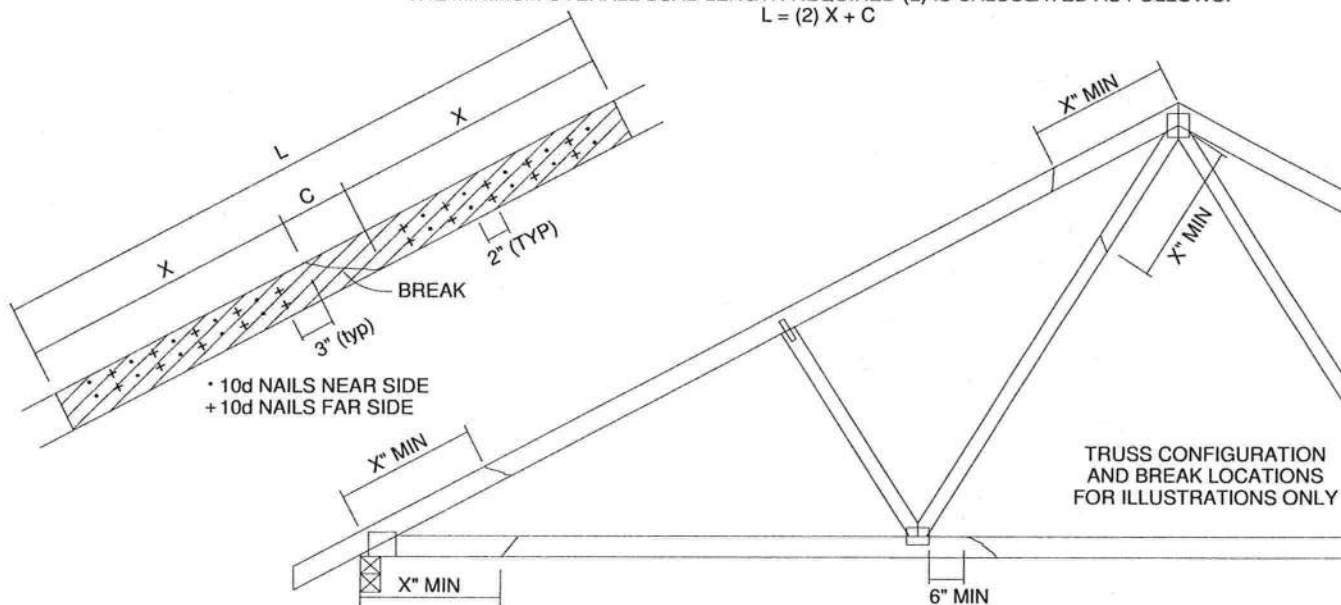


| TOTAL NUMBER OF NAILS EACH SIDE OF BREAK * | | X INCHES | MAXIMUM FORCE (lbs) 15% LOAD DURATION | | | | | | | |
|--|----|----------|---------------------------------------|------|------|------|------|------|------|------|
| | | | SP | | DF | | SPF | | HF | |
| | | | 2x4 | 2x6 | 2x4 | 2x6 | 2x4 | 2x6 | 2x4 | 2x6 |
| 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:
 $L = (2) X + C$

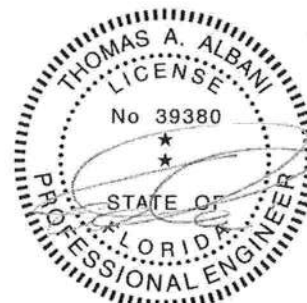


THE LOCATION OF THE BREAK MUST BE GREATER THAN OR EQUAL TO THE REQUIRED X DIMENSION FROM ANY PERIMETER BREAK OR HEEL JOINT AND A MINIMUM OF 6" FROM ANY INTERIOR JOINT (SEE SKETCH ABOVE)

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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January 19, 2018

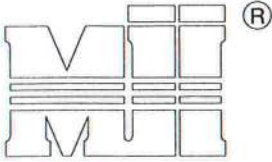
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LATERAL TOE-NAIL DETAIL

MII-TOENAIL_SP

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NOTES:

1. 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.)
2. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
3. 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 2001 (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

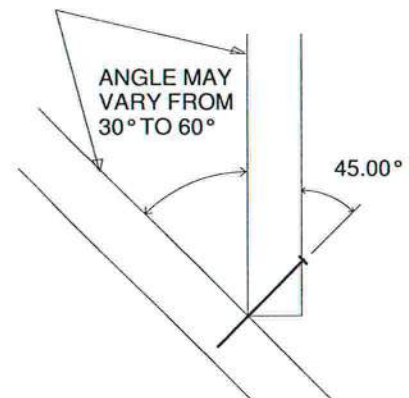
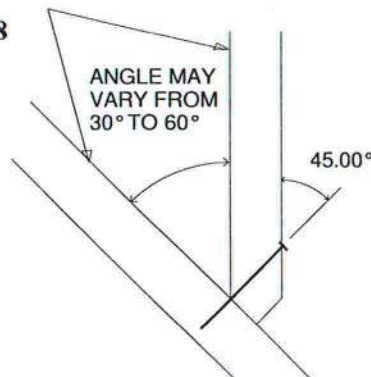
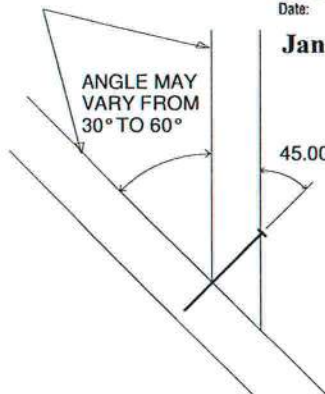
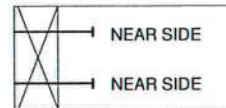
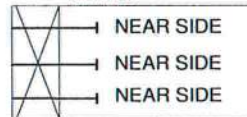
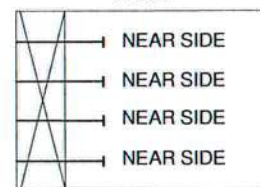
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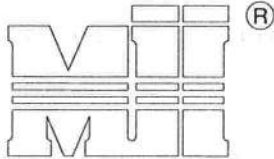
3 (nails) X 84.5 (lb/nail) X 1.15 (DOL) = 291.5 lb Maximum Capacity



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January 19, 2018

SIDE VIEW
(2x3)
2 NAILSSIDE VIEW
(2x4)
3 NAILSSIDE VIEW
(2x6)
4 NAILS

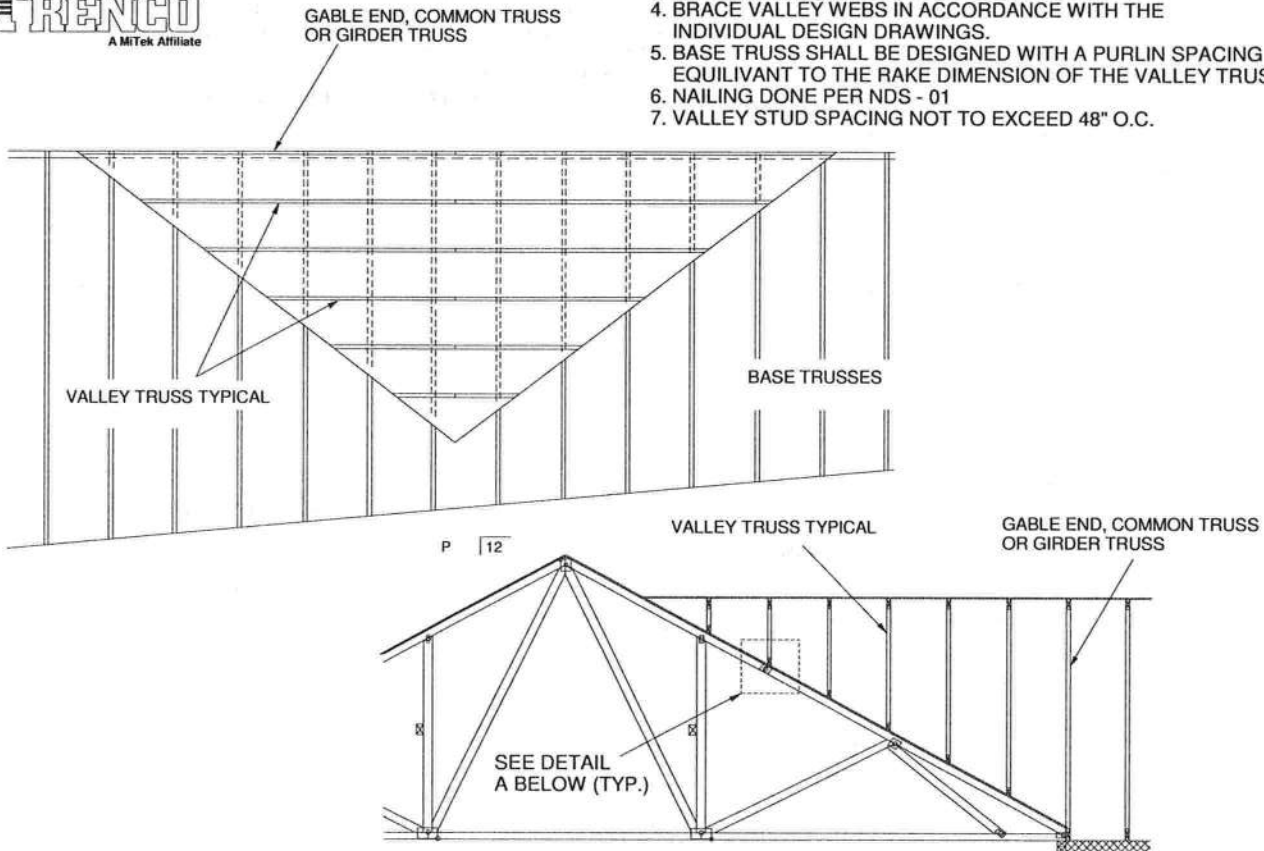
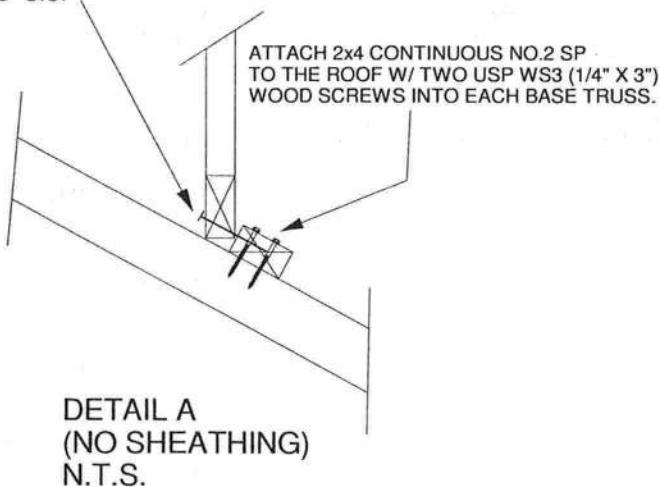


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GENERAL SPECIFICATIONS

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 EQUIVALENT 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

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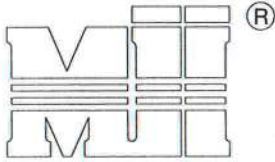
AUGUST 1, 2016

TRUSSED VALLEY SET DETAIL

MII-VALLEY HIGH WIND2

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Page 1 of 1

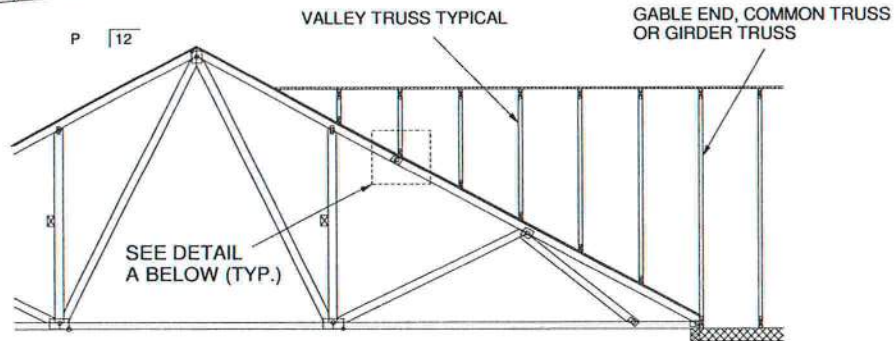
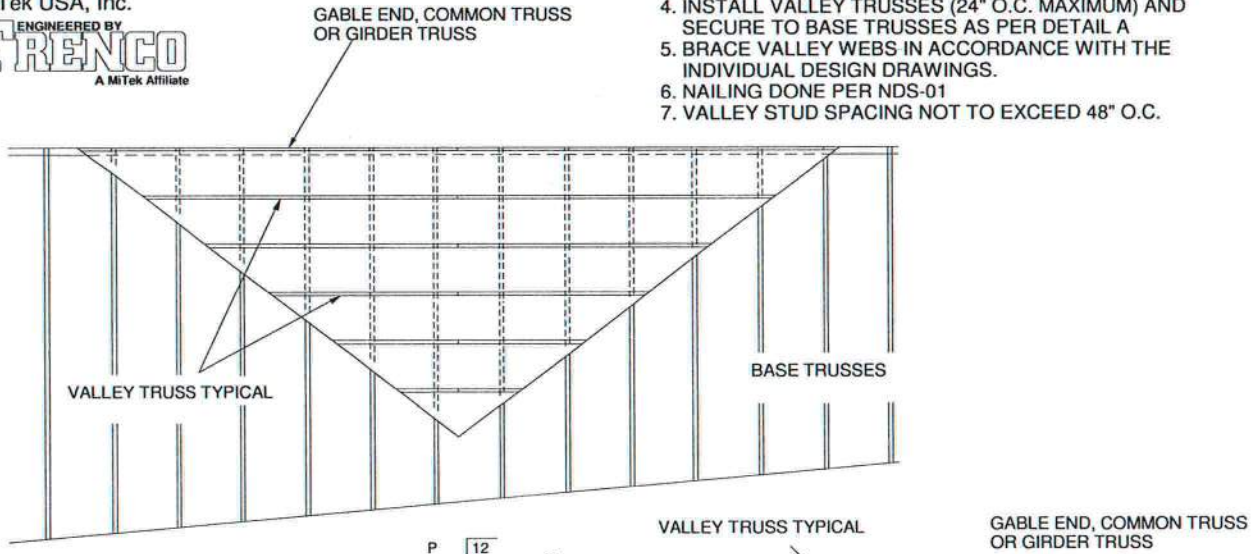


MiTek USA, Inc.

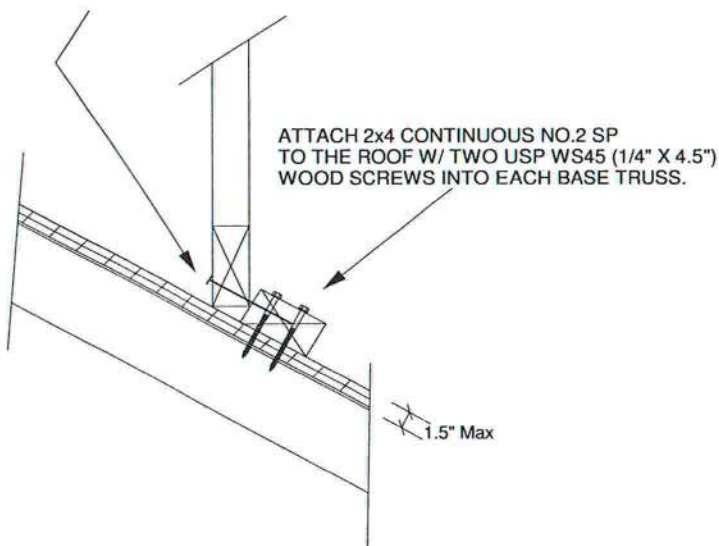
ENGINEERED BY
TRENCO
A MiTek Affiliate

GENERAL SPECIFICATIONS

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.



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

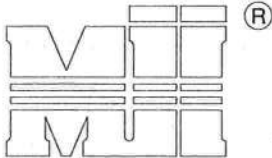


WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH
WIND DESIGN PER ASCE 7-10 160 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
ROOF PITCH = MINIMUM 3/12 MAXIMUM 6/12
CATEGORY II BUILDING
EXPOSURE C
WIND DURATION OF LOAD INCREASE : 1.60
MAX TOP CHORD TOTAL LOAD = 50 PSF
MAX SPACING = 24" O.C. (BASE AND VALLEY)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



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Date:

February 12, 2018

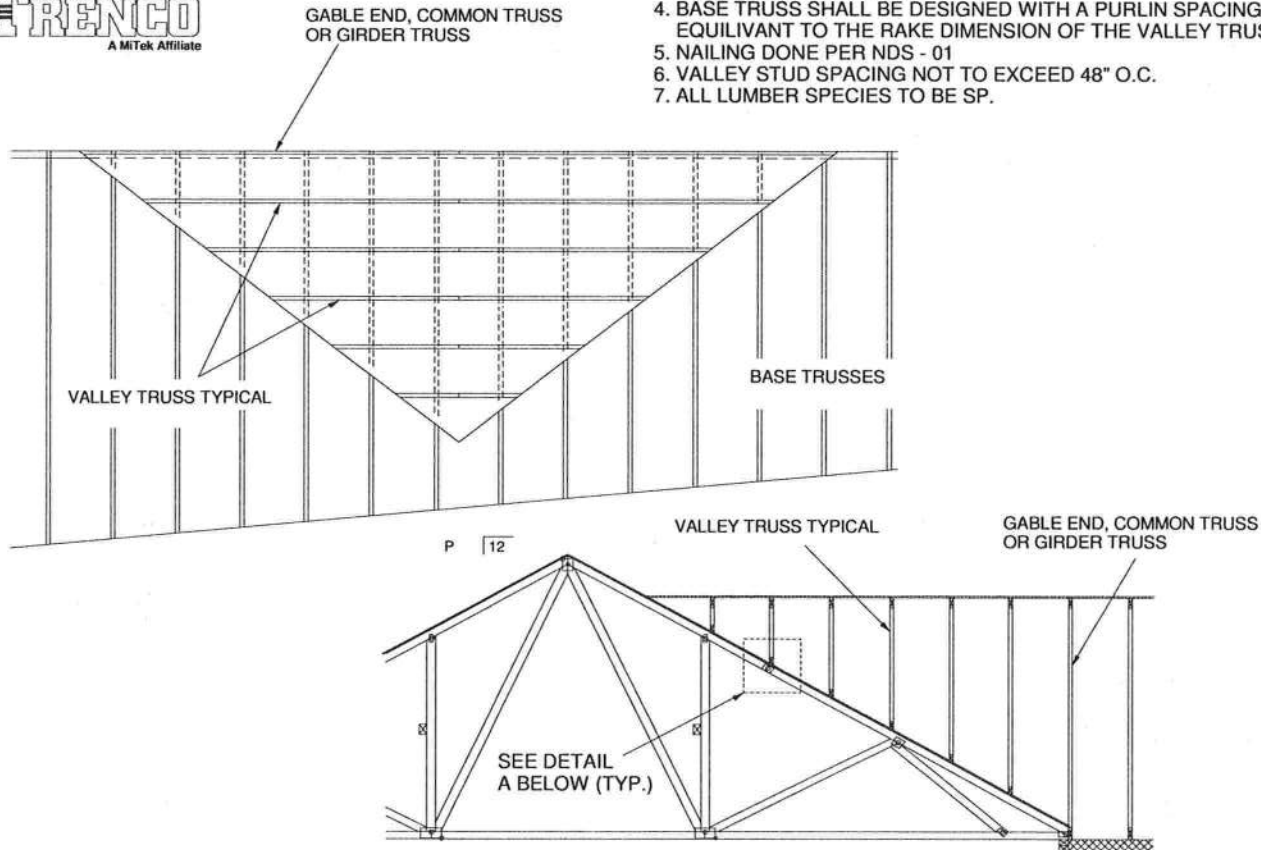


MiTek USA, Inc.

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A MiTek Affiliate

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.

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 7-10 150 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



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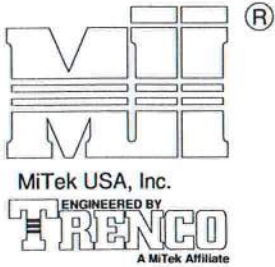
February 12, 2018

AUGUST 1, 2016

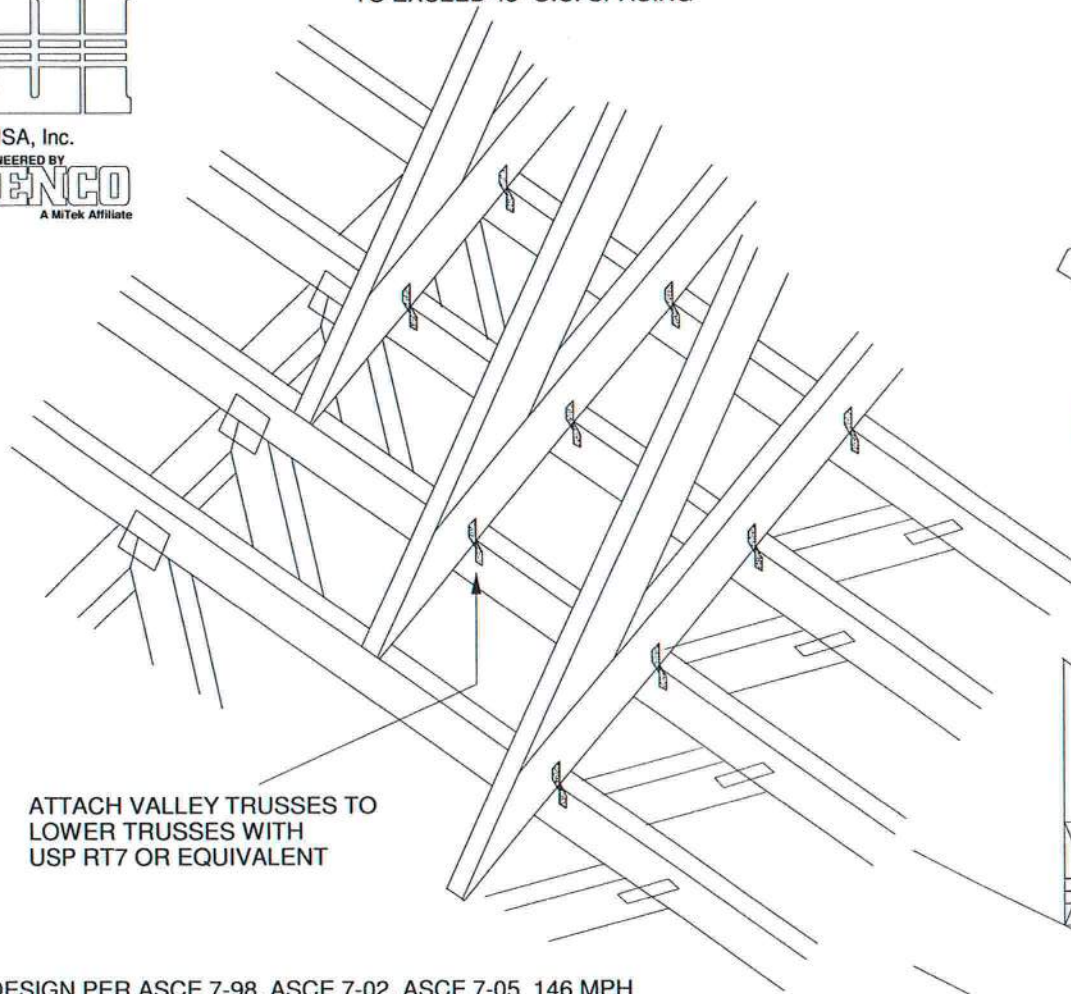
TRUSSED VALLEY SET DETAIL
(HIGH WIND VELOCITY)

MII-VALLEY

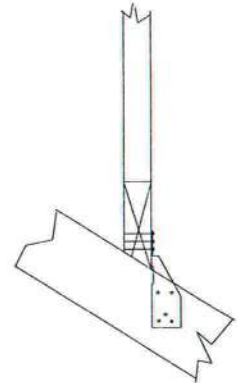
MiTek USA, Inc. Page 1 of 1



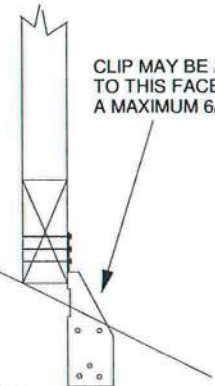
NOTE: VALLEY STUD SPACING NOT
TO EXCEED 48" O.C. SPACING



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 7-10 160 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.

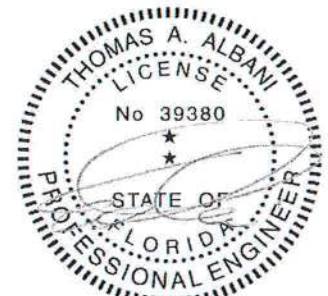
NOTES:

- 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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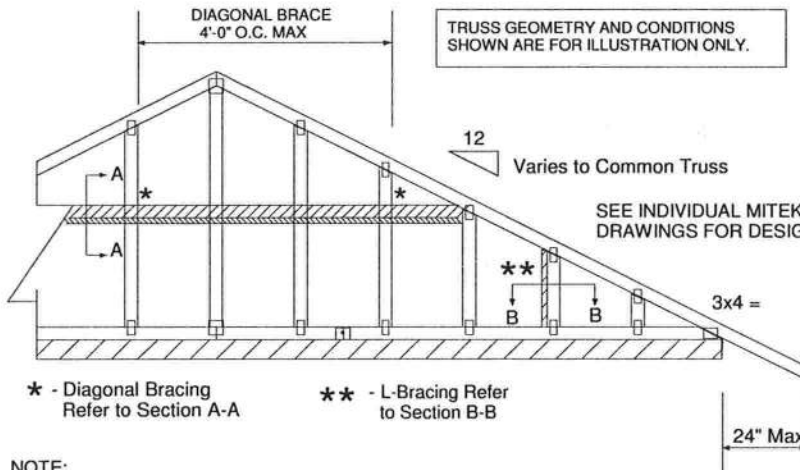
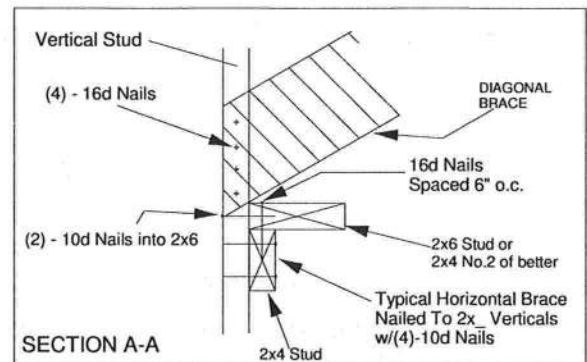
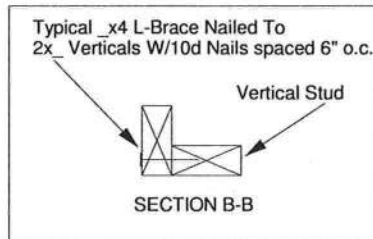
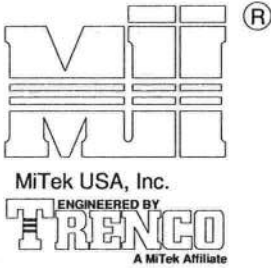
January 19, 2018

AUGUST 1, 2016

Standard Gable End Detail

MII-GE146-001

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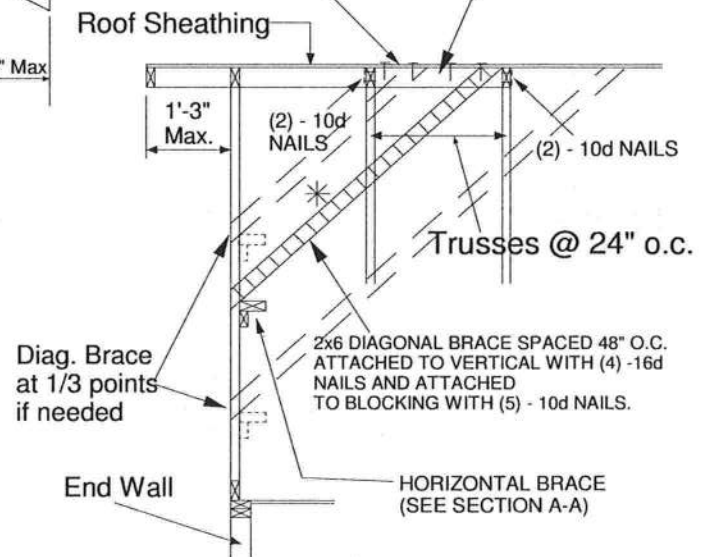


NOTE:

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.

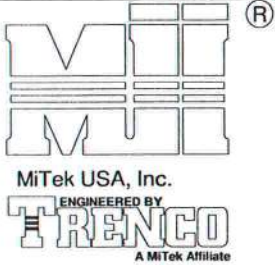
MAXIMUM WIND SPEED = 146 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
CATEGORY II BUILDING
EXPOSURE B or C
ASCE 7-98, ASCE 7-02, ASCE 7-05
DURATION OF LOAD INCREASE : 1.60

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



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January 19, 2018

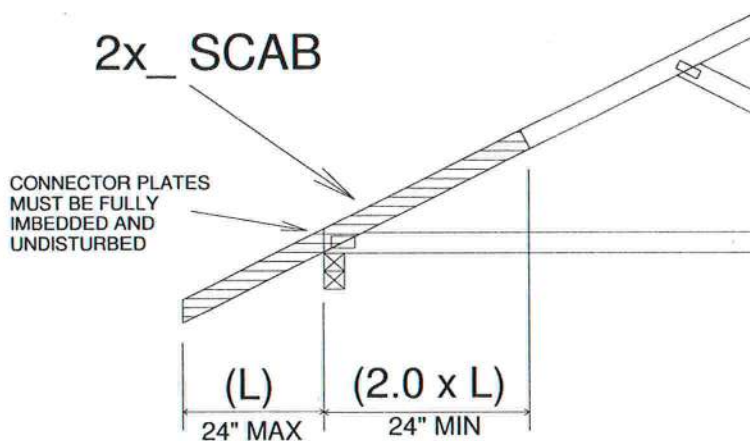


TRUSS CRITERIA:

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

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.

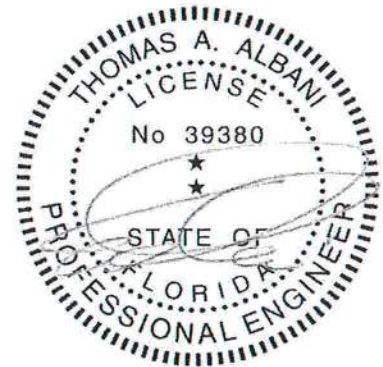


IMPORTANT

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.

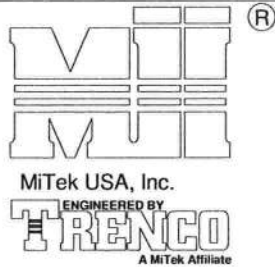
Trusses not fitting these criteria should be examined individually.

REFER TO INDIVIDUAL TRUSS DESIGN
FOR PLATE SIZES AND LUMBER GRADES



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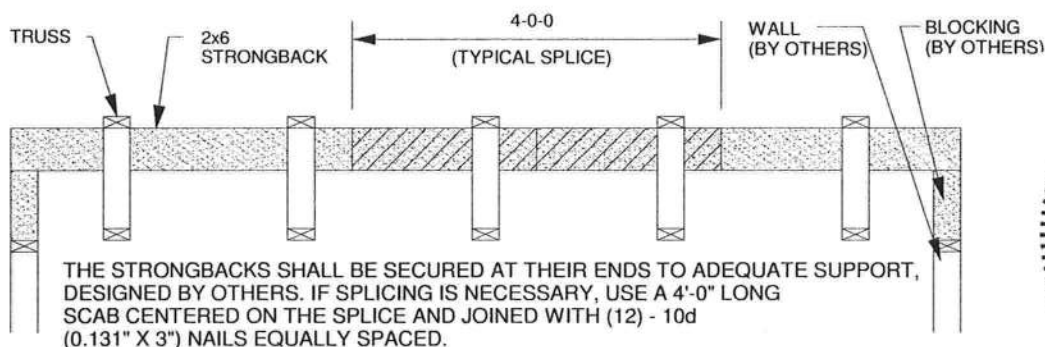
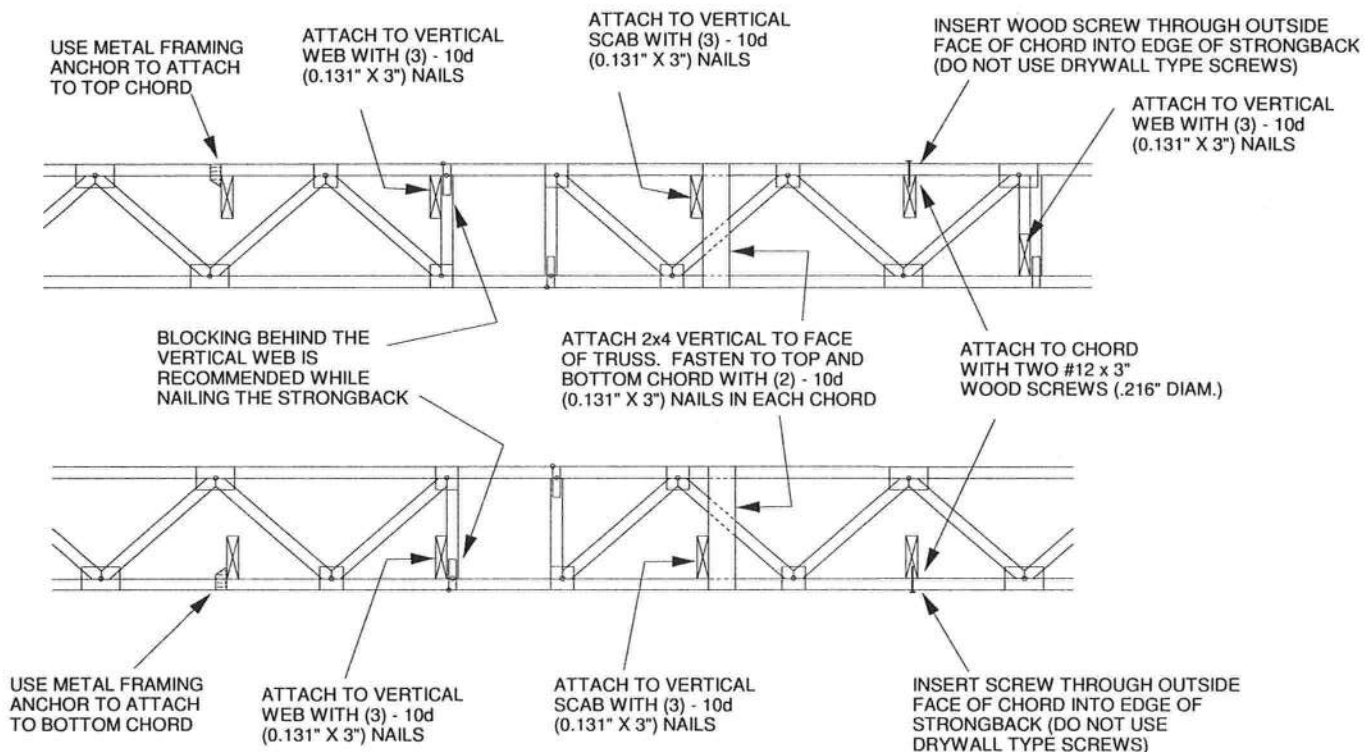
February 12, 2018



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.



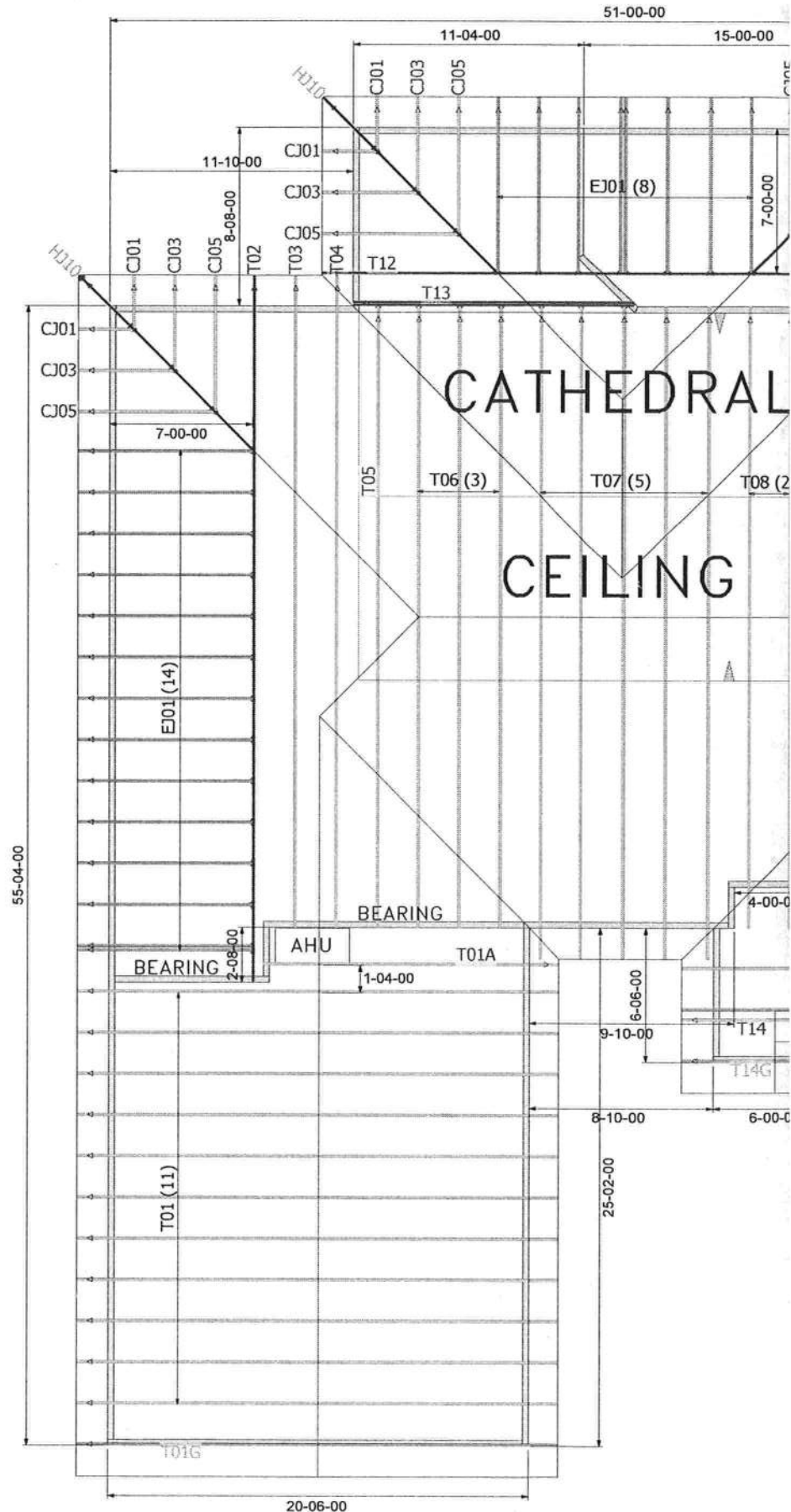
ALTERNATE METHOD OF SPLICING:
OVERLAP STRONGBACK MEMBERS A MINIMUM OF 4'-0" AND FASTEN WITH (12) - 10d (0.131" X 3") NAILS STAGGERED AND EQUALLY SPACED.
(TO BE USED ONLY WHEN STRONGBACK IS NOT ALIGNED WITH A VERTICAL)



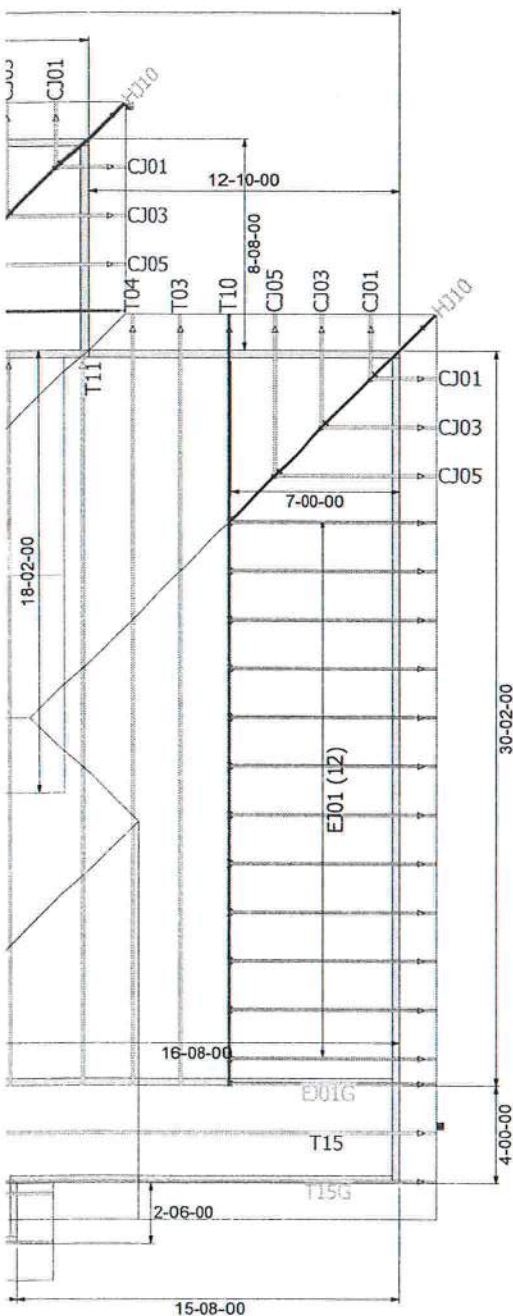
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February 12, 2018

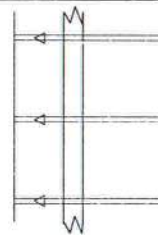
6/12 PITCH -



8" O/H



THE ARROW HEAD AT THE END OF THE TRUSS ON THE TRUSS PLACEMENT PLAN (LAYOUT) CORRESPONDS WITH THE LEFT SIDE OF THE INDIVIDUAL TRUSS DRAWING. USE THIS AS AN ORIENTATION GUIDE WHEN SETTING THE TRUSSES ON THE STRUCTURE.



General Notes:

- Per ANSI/TPI 1-2002 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 10d x 1 1/2" Nails in hanger connections to single ply girder trusses.
- 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. 850-835-4541

ACQ lumber is corrosive to truss plates. Any ACQ lumber that comes in contact with truss plates (i.e. scabbed on tails) must have an approved barrier applied first.

Refer to BCSI-B1 Summary Sheet-Guide 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 of 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 sealed 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.



Lake City
PHONE: 386-755-6894
FAX: 386-755-7973

Jacksonville
PHONE: 904-772-6100
FAX: 904-772-1973

Tallahassee
PHONE: 850-576-5177

Builder:

CORNERSTONE

Legal Address:

Lot 84 Emerald Cove

Model:

1653

| | | |
|--------------|---------------|-----------------|
| Date: | Drawn By: | Original Ref #: |
| 6-22-21 | KLH | 2820752 |
| Floor 1 Job# | Floor 2 Job#: | Roof Job #: |
| N/A | N/A | 2820752 |