



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

RE: 3035595 - RJH CONST. - CANTER HANGER

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

Site Information:

Customer Info: RJH CONST. Project Name: Canter HAnger Model: Custom
Lot/Block: 6 Subdivision: Cannon Creek
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: 40.0 psf Floor Load: 65.0 psf

This package includes 7 individual, Truss Design Drawings and 0 Additional Drawings.

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

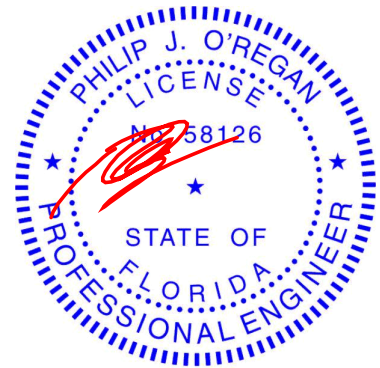
| No. | Seal# | Truss Name | Date |
|-----|-----------|------------|---------|
| 1 | T26620820 | F01 | 1/24/22 |
| 2 | T26620821 | F02 | 1/24/22 |
| 3 | T26620822 | F03 | 1/24/22 |
| 4 | T26620823 | T01 | 1/24/22 |
| 5 | T26620824 | T01G | 1/24/22 |
| 6 | T26620825 | T02 | 1/24/22 |
| 7 | T26620826 | T02G | 1/24/22 |

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:

January 24, 2022

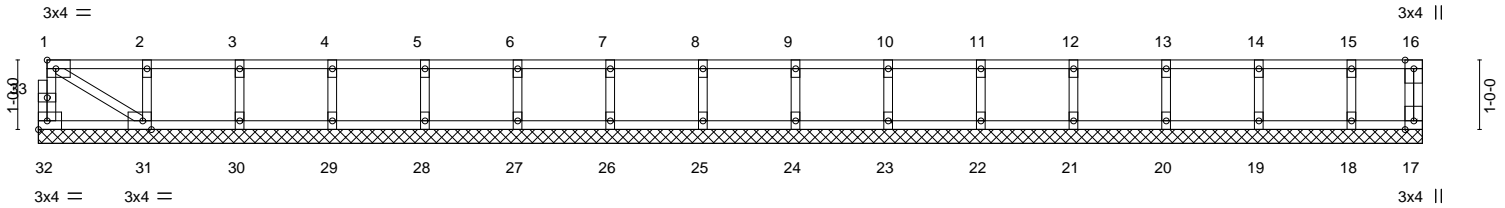
| | | | | | | |
|---------|-------|------------|-----|-----|----------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | RJH CONST. - CANTER HANGER | T26620820 |
| 3035595 | F01 | GABLE | 2 | 1 | Job Reference (optional) | |

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Sun Jan 23 16:17:28 2022 Page 1
ID:4Q6LvwXKhnzjFFgKgaEnyNztAAh-9gDK0Oh60OYbDc3ugHSpXKJG5Bb6k0MY_7p_zuzsQK5

0-1-8

Scale = 1:33.2



| | | | | | | | | | | | | | | | |
|-----------------------|----------------------|---------|--------|--------|----------|--------|---------------------------|----------|---------|---------|----------|---------|-------------------------------|----------|---------|
| | 1-6-12 | 2-10-12 | 4-2-12 | 5-6-12 | 6-10-12 | 8-2-12 | 9-6-12 | 10-10-12 | 12-2-12 | 13-6-12 | 14-10-12 | 16-2-12 | 17-6-12 | 18-10-12 | 19-11-0 |
| Plate Offsets (X,Y)-- | 1-6-12 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-0-4 |
| [31:0-1-8,Edge] | | | | | | | | | | | | | | | |
| LOADING (psf) | SPACING- 2-0-0 | | | | CSI. | | DEFL. in (loc) l/defl L/d | | | | PLATES | | GRIP | | |
| TCLL 40.0 | Plate Grip DOL 1.00 | | | | TC 0.10 | | Vert(LL) n/a - n/a 999 | | | | MT20 | | 244/190 | | |
| TCDL 10.0 | Lumber DOL 1.00 | | | | BC 0.03 | | Vert(CT) n/a - n/a 999 | | | | | | | | |
| BCLL 0.0 | Rep Stress Incr YES | | | | WB 0.03 | | Horz(CT) 0.00 17 n/a n/a | | | | | | | | |
| BCDL 15.0 | Code FBC2020/TPI2014 | | | | Matrix-S | | | | | | | | Weight: 81 lb FT = 20%F, 11%E | | |

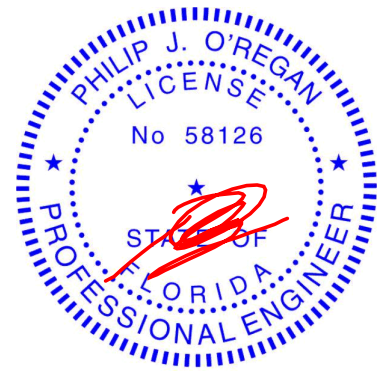
LUMBER-
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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

REACTIONS. All bearings 19-11-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 32, 17, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18

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

NOTES-
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.



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January 24, 2022

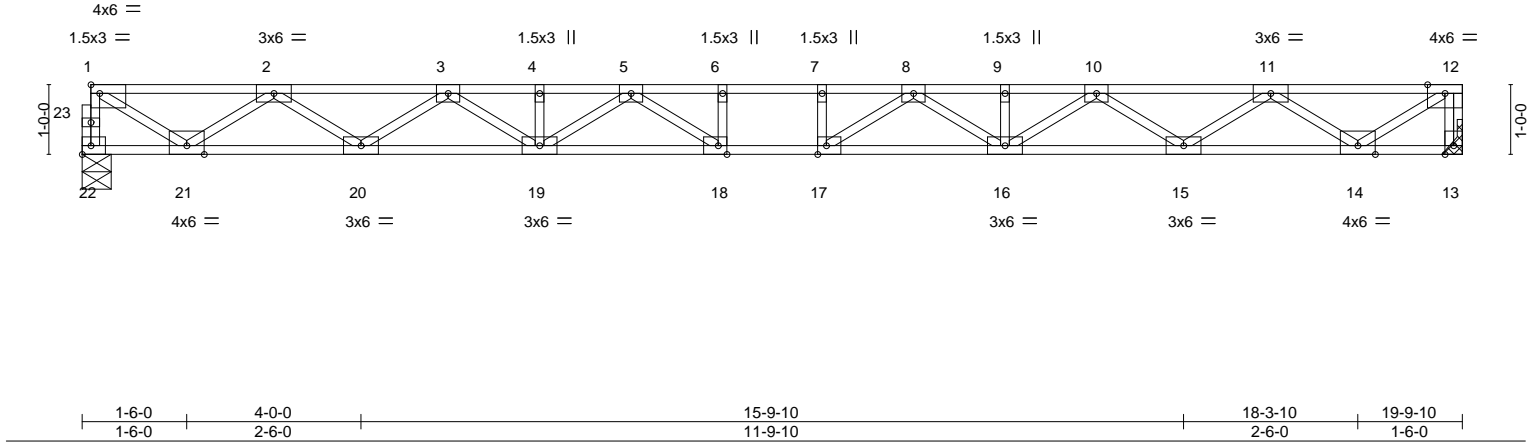
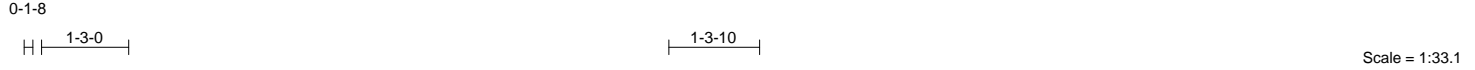
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

| | | | | | | |
|---------|-------|------------|-----|-----|----------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | RJH CONST. - CANTER HANGER | T26620821 |
| 3035595 | F02 | FLOOR | 33 | 1 | Job Reference (optional) | |

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Sun Jan 23 16:17:30 2022 Page 1
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| LOADING (psf) | | SPACING- | | CSI. | | DEFL. | | PLATES | | GRIP | |
|---------------|------|-----------------|-----------------|----------|------|----------|----------------------|---------------|--|-----------------|--|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.23 | Vert(LL) | -0.34 17-18 >698 360 | MT20 | | 244/190 | |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.54 | Vert(CT) | -0.55 17-18 >430 240 | | | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.68 | Horz(CT) | 0.07 13 n/a n/a | | | | |
| BCDL | 15.0 | Code | FBC2020/TPI2014 | Matrix-S | | | | | | | |
| | | | | | | | | Weight: 98 lb | | FT = 20%F, 11%E | |

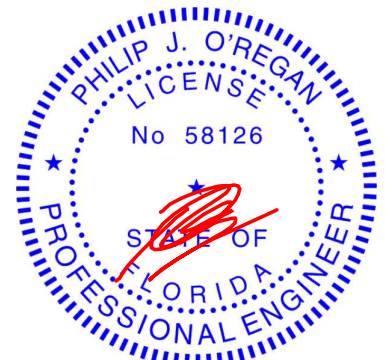
LUMBER-
TOP CHORD 2x4 SP M 31(flat)
BOT CHORD 2x4 SP M 31(flat)
WEBS 2x4 SP No.3(flat)

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) 22=0-5-0, 13=Mechanical
Max Grav 22=843(LC 1), 13=847(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-22=-834/0, 12-13=-836/0, 1-2=-1202/0, 2-3=-2980/0, 3-4=-4171/0, 4-5=-4171/0, 5-6=-4695/0, 6-7=-4695/0, 7-8=-4695/0, 8-9=-4171/0, 9-10=-4171/0, 10-11=-2980/0, 11-12=-1200/0
BOT CHORD 20-21=0/2231, 19-20=0/3656, 18-19=0/4502, 17-18=0/4695, 16-17=0/4502, 15-16=0/3655, 14-15=0/2232
WEBS 12-14=0/1423, 1-21=0/1373, 11-14=-1260/0, 2-21=-1256/0, 11-15=0/913, 2-20=0/914, 10-15=-824/0, 3-20=-825/0, 10-16=0/620, 3-19=0/619, 8-16=-408/0, 5-19=-408/0, 8-17=-80/491, 5-18=-80/491

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
 - All plates are 3x4 MT20 unless otherwise indicated.
 - Refer to girder(s) for truss to truss connections.
 - Required 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - CAUTION, Do not erect truss backwards.



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Date:

January 24,2022

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



6904 Parke East Blvd.
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Aug 16 2021 MiTek Industries, Inc. Sun Jan 23 16:17:31 2022 Page 1
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Figure 1 shows a complex truss structure with 12 vertical members and 23 horizontal members. The structure is labeled with various dimensions and member types. The top horizontal members are labeled 1 through 12, and the bottom horizontal members are labeled 13 through 23. The vertical members are labeled 1 through 12. The structure is supported by a fixed support at the bottom left and a roller support at the bottom right. The dimensions are given in terms of a base unit 'x'. The top horizontal members are labeled 1 through 12, and the bottom horizontal members are labeled 13 through 23. The vertical members are labeled 1 through 12. The structure is supported by a fixed support at the bottom left and a roller support at the bottom right. The dimensions are given in terms of a base unit 'x'.

| | | | |
|----------------|-------------------|-----------------|---|
| LUMBER- | | BRACING- | |
| TOP CHORD | 2x4 SP M 31(flat) | TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD | 2x4 SP M 31(flat) | BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS | 2x4 SP No.3(flat) | | |

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

TOP CHORD 1-22=-1092/0, 12-13=-1095/0, 1-2=-1566/0, 2-3=-3891/0, 3-4=-5451/0, 4-5=-5451/0,
5-6=-6138/0, 6-7=-6138/0, 7-8=-6138/0, 8-9=-5451/0, 9-10=-5451/0, 10-11=-3892/0,
11-12=-1563/0

BOT CHORD 20-21=0/2924, 19-20=0/4785, 18-19=0/5890, 17-18=0/6138, 16-17=0/5890, 15-16=0/4784,
14-15=0/2927

WEBS 12-14=0/1853, 1-21=0/1789, 11-14=-1664/0, 2-21=-1658/0, 11-15=0/1178, 2-20=0/1180,
10-15=-1089/0, 3-20=-1091/0, 10-16=0/802, 3-19=0/801, 8-16=-544/0, 5-19=-544/0,
8-17=-171/685, 5-18=-171/685, 6-18=-252/43, 7-17=-252/43

A circular blue seal for a Professional Engineer in the State of Florida. The outer ring contains the text "PHILIP J. O'REGAN" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The inner ring contains the word "LICENSE" at the top and "STATE OF FLORIDA" at the bottom, also separated by two stars. In the center, the license number "No 58126" is printed. A red ink signature is written across the center of the seal, overlapping the "STATE OF FLORIDA" text.

January 24, 2022

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6904 Parke East Blvd
Tampa, FL 36610

| | | | | | | |
|---------|-------|------------|-----|-----|----------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | RJH CONST. - CANTER HANGER | T26620823 |
| 3035595 | T01 | Common | 26 | 1 | Job Reference (optional) | |

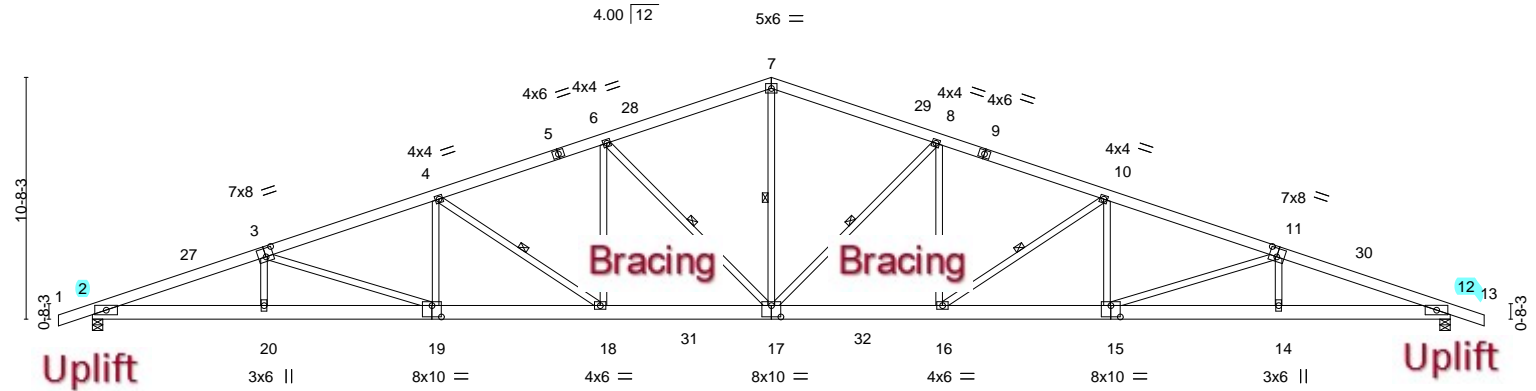
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.430 s Aug 16 2021 MiTek Industries, Inc. Sun Jan 23 16:17:34 2022 Page 1

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| | | | | | | | | | |
|-------|-------|--------|--------|--------|--------|---------|--------|--------|--------|
| 1-6-0 | 7-7-0 | 15-2-0 | 22-7-0 | 30-0-0 | 37-5-0 | 44-10-0 | 52-5-0 | 60-0-0 | 61-6-0 |
| 1-6-0 | 7-7-0 | 7-7-0 | 7-5-0 | 7-5-0 | 7-5-0 | 7-5-0 | 7-7-0 | 7-7-0 | 1-6-0 |

Scale = 1:101.8



| | |
|-----------------------|---|
| Plate Offsets (X,Y)-- | [3:0-4-0,0-4-8], [11:0-4-0,0-4-8], [15:0-5-0,0-6-0], [17:0-5-0,0-6-0], [19:0-5-0,0-6-0] |
|-----------------------|---|

| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
|---------------|----------------------|-----------|-------------------------------|----------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.49 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.25 | BC 0.33 | Vert(LL) -0.47 16-17 >999 240 | | |
| BCLL 0.0 * | Lumber DOL 1.25 | WB 0.86 | Vert(CT) -0.87 16-17 >832 180 | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-MS | Horz(CT) 0.18 12 n/a n/a | | |
| | Code FBC2020/TPI2014 | | | Weight: 475 lb | FT = 20% |

LUMBER-

TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-7-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-5-7 oc bracing.
WEBS 1 Row at midpt 7-17, 8-17, 10-16, 6-17, 4-18

REACTIONS.

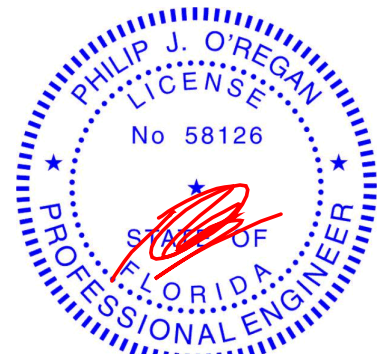
(size) 2=0-5-8, 12=0-5-8
Max Horz 2=234(LC 12)
Max Uplift 2=1073(LC 8), 12=1073(LC 9)
Max Grav 2=2679(LC 2), 12=2679(LC 2)

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

TOP CHORD 2-3=-6748/2783, 3-4=-6155/2594, 4-6=-5190/2272, 6-7=-4212/1947, 7-8=-4212/1947,
8-10=-5190/2272, 10-11=-6155/2594, 11-12=-6748/2783
BOT CHORD 2-20=-2532/6348, 19-20=-2533/6348, 18-19=-2236/5772, 17-18=-1813/4867,
16-17=-1820/4867, 15-16=-2242/5772, 14-15=-2540/6348, 12-14=-2539/6348
WEBS 7-17=-896/2266, 8-17=-1353/686, 8-16=-267/902, 10-16=-1107/568, 10-15=-109/550,
11-15=-640/381, 6-17=-1353/685, 6-18=-267/902, 4-18=-1107/569, 4-19=-109/550,
3-19=-640/377

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=24ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 4-6-0, Interior(1) 4-6-0 to 30-0-0, Exterior(2R) 30-0-0 to 36-0-0, Interior(1) 36-0-0 to 61-6-0 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.
- WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 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 1073 lb uplift at joint 2 and 1073 lb uplift at joint 12.



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Date:

January 24, 2022

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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



6904 Parke East Blvd.
Tampa, FL 36610

| | | | | | | |
|---------|-------|----------------------|-----|-----|----------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | RJH CONST. - CANTER HANGER | T26620824 |
| 3035595 | T01G | COMMON SUPPORTED GAB | 1 | 1 | Job Reference (optional) | |

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Sun Jan 23 16:17:37 2022 Page 1
ID:4Q6LvwXKhnzjFFgKgaEnyNztAAh-PPGkvTolu9gKo_Fdhf6wPDBnGpf0L3ys30UymtzsQJy

1-6-0 30-0-0 60-0-0 61-6-0
1-6-0 30-0-0 30-0-0 1-6-0

Scale = 1:107.6

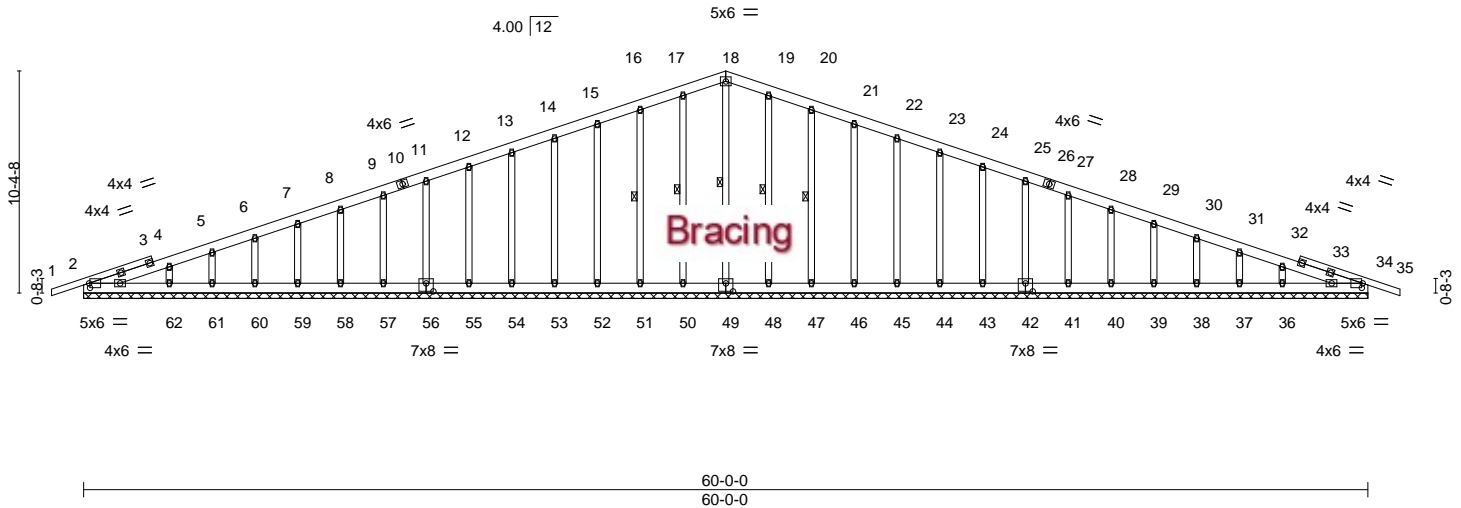


Plate Offsets (X,Y)-- [2:0-0-8,0-2-8], [34:0-0-8,0-2-8], [42:0-4-0,0-4-8], [49:0-4-0,0-4-8], [56:0-4-0,0-4-8]

| LOADING (psf) | SPACING- | CSL | DEFL. | in (loc) | I/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------|----------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL 1.25 | TC 0.13 | Vert(LL) | -0.00 | 35 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.25 | BC 0.05 | Vert(CT) | -0.01 | 35 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.14 | Horz(CT) | 0.01 | 34 | n/a | | |
| BCDL 10.0 | Code FBC2020/TPI2014 | Matrix-S | | | | | Weight: 502 lb | FT = 20% |

LUMBER-

TOP CHORD 2x6 SP No.2 *Except*
1-3,33-35: 2x4 SP No.2
BOT CHORD 2x6 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.
WEBS 1 Row at midpt 18-49, 17-50, 16-51, 19-48, 20-47

REACTIONS.

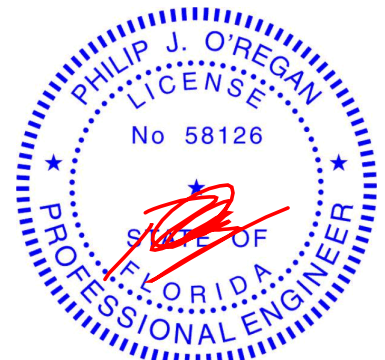
All bearings 60-0-0.
(lb) - Max Horz 2=226(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 50, 51, 52, 53, 54, 55, 56, 57, 58,
59, 60, 61, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37 except 2=-112(LC 8), 62=-129(LC 12), 36=-132(LC 13), 34=-136(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 49, 50, 51, 52, 53, 54, 55, 56,
57, 58, 59, 60, 61, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37 except
2=251(LC 1), 62=270(LC 1), 36=270(LC 1), 34=251(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-259/115, 13-14=-95/266, 14-15=-109/298, 15-16=-123/332, 16-17=-138/369,
17-18=-149/393, 18-19=-149/383, 19-20=-138/339, 20-21=-123/303, 21-22=-109/268

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=24ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-6-0 to 4-6-0, Exterior(2N) 4-6-0 to 30-0-0, Corner(3R) 30-0-0 to 36-0-0, Exterior(2N) 36-0-0 to 61-6-0 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.
- WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 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.



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

January 24,2022

Continued on page 2

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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

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



6904 Parke East Blvd.
Tampa, FL 36610

| | | | | | | |
|---------|-------|----------------------|-----|-----|----------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | RJH CONST. - CANTER HANGER | T26620824 |
| 3035595 | T01G | COMMON SUPPORTED GAB | 1 | 1 | Job Reference (optional) | |

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Sun Jan 23 16:17:38 2022 Page 2
ID:4Q6LvwXKhznjFFgKgaEnyNztAAh-tbp67ppNfSoBQ8qpFNd9xRky0D?F4WC0HgEWIJzsQJx

NOTES-

- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37 except (jt=lb) 2=112, 62=129, 36=132, 34=136.
- 12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



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Tampa, FL 36610

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Tampa, FL 36610

| | | | | | | |
|---------|-------|------------|-----|-----|----------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | RJH CONST. - CANTER HANGER | T26620825 |
| 3035595 | T02 | Common | 3 | 1 | Job Reference (optional) | |

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Sun Jan 23 16:17:40 2022 Page 2
ID:4Q6LvwXKhnzjFFgKgaEnyNztAAh-p_xtYVqeB42ufSzCNogd0sp8P0ZnYEwJL_jdNCzsQJv

- NOTES-**
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 300 lb down and 176 lb up at 7-7-0, 600 lb down and 351 lb up at 15-2-0, 300 lb down and 176 lb up at 22-7-0, 300 lb down and 176 lb up at 30-0-0, 300 lb down and 176 lb up at 37-5-0, and 300 lb down and 176 lb up at 44-10-0, and 300 lb down and 176 lb up at 52-5-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

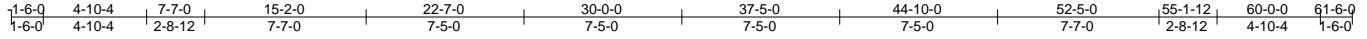
- LOAD CASE(S)** Standard
- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
- Uniform Loads (plf)
- Vert: 1-6=-60, 6-11=-60, 19-22=-20
- Concentrated Loads (lb)
- Vert: 15=-300(F) 14=-300(F) 13=-300(F) 12=-300(F) 16=-300(F) 17=-600(F) 18=-300(F)

| | | | | | | |
|---------|-------|------------|-----|-----|----------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | RJH CONST. - CANTER HANGER | T26620826 |
| 3035595 | T02G | GABLE | 1 | 1 | Job Reference (optional) | |

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Sun Jan 23 16:17:47 2022 Page 1

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Scale = 1:108.2

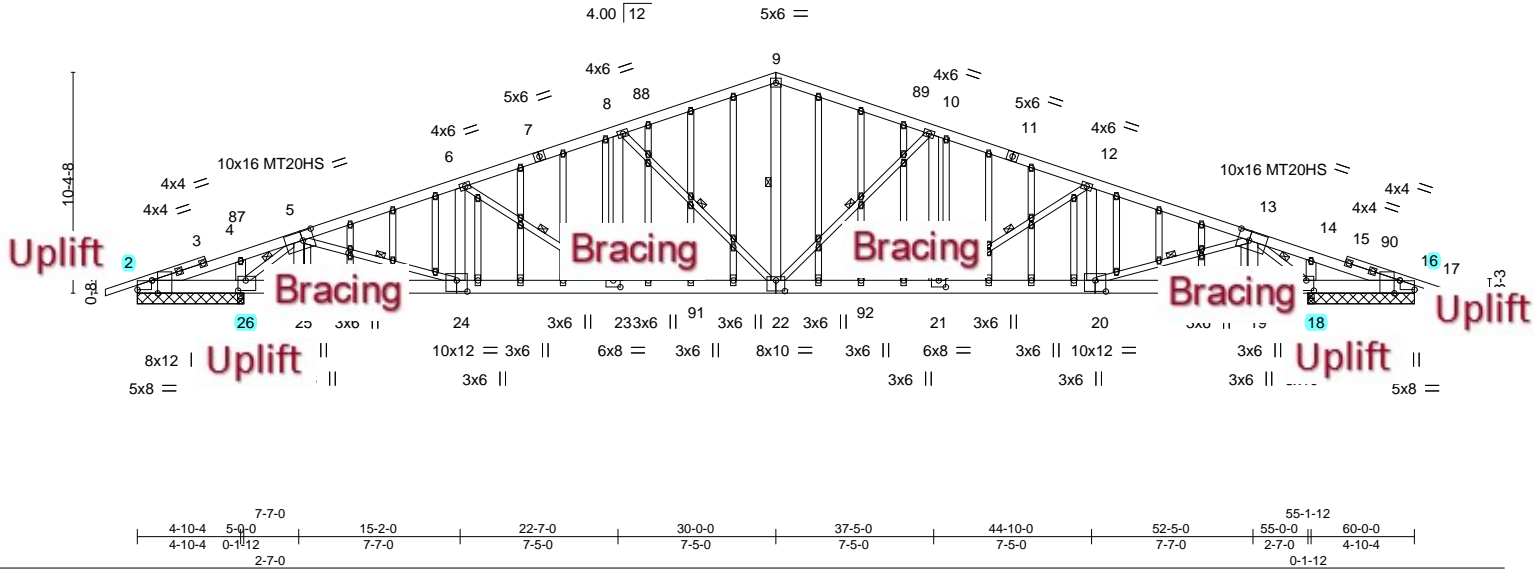


Plate Offsets (X,Y)-- [2:0-7-4,Edge], [2:Edge,0-5-4], [5:0-6-4,0-5-0], [13:0-6-4,0-5-0], [16:0-7-4,Edge], [16:Edge,0-5-4], [18:0-4-4,0-5-12], [20:0-6-0,0-6-4], [21:0-4-0,0-3-12], [22:0-5-0,0-6-0], [23:0-4-0,0-3-12], [24:0-6-0,0-6-4], [26:0-4-4,0-5-12], [50:0-1-10,0-1-0], [56:0-0-0,0-0-0], [56:0-0-0,0-0-0], [59:0-0-0,0-0-0], [59:0-0-0,0-0-0], [62:0-0-0,0-0-0], [70:0-0-0,0-0-0], [70:0-0-0,0-0-0], [72:0-0-0,0-0-0], [79:0-1-10,0-1-0]

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.25 | TC 0.88 | Vert(LL) | 0.43 21-22 | >999 | 240 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.25 | BC 0.46 | Vert(CT) | -0.68 22-23 | >887 | 180 | MT20HS | 187/143 |
| BCLL 0.0 * | Rep Stress Incr | NO | WB 0.88 | Horz(CT) | 0.13 18 | n/a | n/a | | |
| BCDL 10.0 | Code FBC2020/TPI2014 | | Matrix-MS | | | | | Weight: 680 lb | FT = 20% |

LUMBER-

TOP CHORD 2x6 SP No.2 *Except*
1-3,15-17: 2x4 SP No.2

BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x6 SP No.2 *Except*
5-24,13-20,5-26,13-18: 2x4 SP No.2
6-23,8-22,10-22,12-21: 2x4 SP No.3

OTHERS 2x4 SP No.3

REACTIONS.

All bearings 5-0-0.

(lb) - Max Horz 2=226(LC 16)

Max Uplift All uplift 100 lb or less at joint(s) except 2=818(LC 24), 16=818(LC 23), 26=2589(LC 8), 18=2565(LC 9)

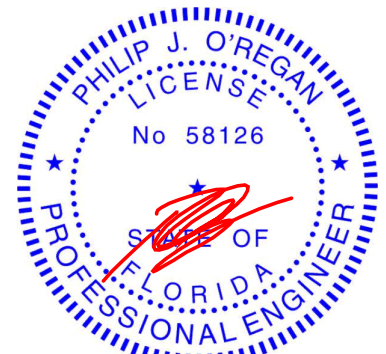
Max Grav All reactions 250 lb or less at joint(s) except 2=358(LC 12), 16=380(LC 12), 26=5815(LC 1), 26=5815(LC 1), 18=5815(LC 1), 18=5815(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1372/2560, 4-5=-1341/2577, 5-6=-7018/3718, 6-8=-6833/3711, 8-9=-5682/3186, 9-10=-5682/3186, 10-12=-6833/3711, 12-13=-7018/3719, 13-14=-1343/2577, 14-16=-1373/2561
BOT CHORD 2-26=-2441/1402, 25-26=-1434/2914, 24-25=-1435/2911, 23-24=-3333/6603, 22-23=-3201/6417, 21-22=-3205/6417, 20-21=-3337/6603, 19-20=-1438/2909, 18-19=-1436/2912, 16-18=-2442/1405
WEBS 5-25=-11/256, 5-24=-1991/3877, 6-24=-273/211, 6-23=-345/241, 8-23=-472/1101, 8-22=-1628/913, 9-22=-1677/3121, 10-22=-1628/913, 10-21=-472/1106, 12-21=-345/253, 12-20=-273/211, 13-20=-1992/3878, 5-26=-7004/3685, 13-18=-7003/3684

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=24ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 4-6-0, Interior(1) 4-6-0 to 30-0-0, Exterior(2R) 30-0-0 to 36-0-0, Interior(1) 36-0-0 to 61-6-0 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.



Philip J. O'Regan PE No.58126
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Date:

January 24,2022

Continued on page 2

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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

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



6904 Parke East Blvd.
Tampa, FL 36610

| | | | | | | |
|---------|-------|------------|-----|-----|----------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | RJH CONST. - CANTER HANGER | T26620826 |
| 3035595 | T02G | GABLE | 1 | 1 | Job Reference (optional) | |

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.430 s Aug 16 2021 MiTek Industries, Inc.
Sun Jan 23 16:17:47 2022
Page 2
ID:4Q6LvW XKhnzjFFgKgaEnyNztAAh-6KsW0uw1YDxv?W0YHmlGpKcK8rzshPwLMawU7lzsQJo

- NOTES-**
- 5) **WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
 - 6) All plates are MT20 plates unless otherwise indicated.
 - 7) All plates are 2x4 MT20 unless otherwise indicated.
 - 8) Gable studs spaced at 2-0-0 oc.
 - 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 10) * 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.
 - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 818 lb uplift at joint 2, 818 lb uplift at joint 16, 2589 lb uplift at joint 26 and 2565 lb uplift at joint 18.
 - 12) 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

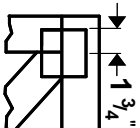
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

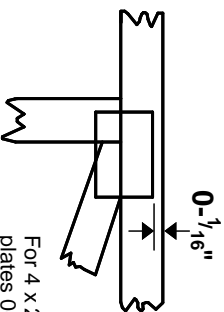
Vert: 1-9=-60, 9-17=-60, 26-81=-20, 18-26=-120(F=-100), 18-84=-20

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

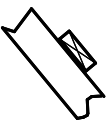
* Plate location details available in **MiTek 20/20** software or upon request.

PLATE SIZE

4 X 4

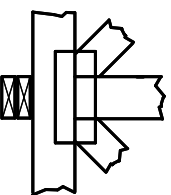
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING



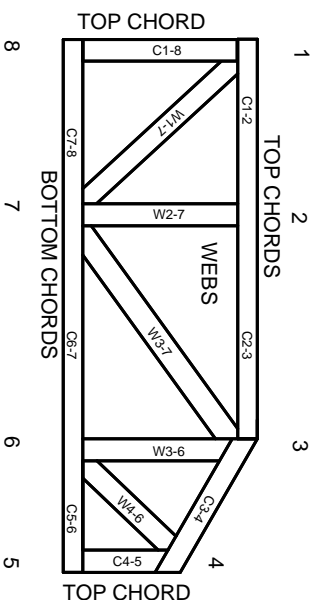
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 1 section 6.3 These truss designs rely on lumber values established by others.

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MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

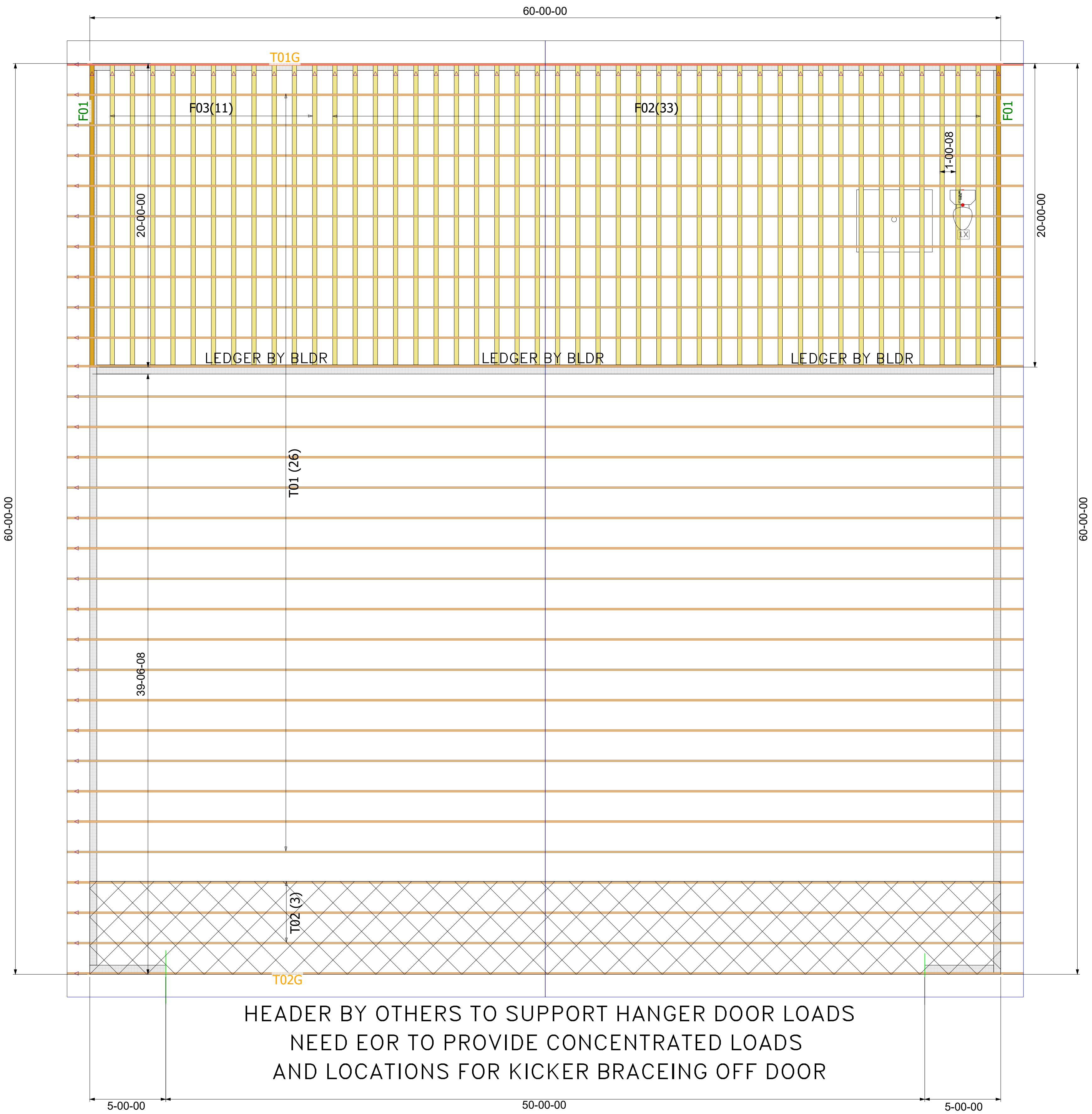


General Safety Notes

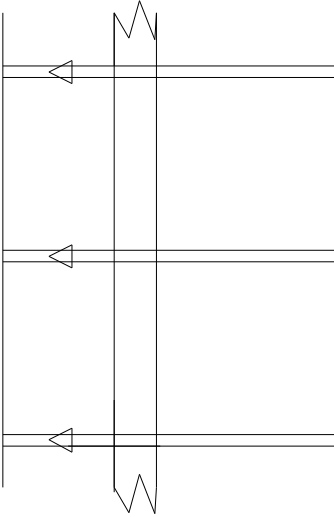
Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/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.

4/12 PITCH – 18” O/H
FLOORS 12” DEEP – 16” O/C



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: RJH CONST. | | |
| Legal Address: Canter Airplane Hanger | | |
| Model: Custom | | |
| Date: 1-21-22 | Drawn By: KLH | Original Ref #: 3035595 |
| Floor 1 Job#: N/A | Floor 2 Job#: N/A | Roof Job #: 3035595 |