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

RE: 0820-076 - Capital Metal Supply

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

**Site Information:**

Customer Info: Adam Bedenbaugh Project Name: . Model: .
Lot/Block: . Subdivision: .
Address: ., .
City: Columbia County State: Fl

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

Name: License #:
Address:
City: State:

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

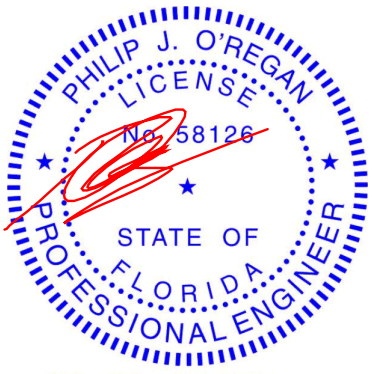
Design Code: FBC2017/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-10 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: 55.0 psf

This package includes 10 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 | T22149287 | A1GE | 12/11/20 |
| 2 | T22149288 | A2 | 12/11/20 |
| 3 | T22149289 | A3 | 12/11/20 |
| 4 | T22149290 | A3A | 12/11/20 |
| 5 | T22149291 | A4GIR | 12/11/20 |
| 6 | T22149292 | A5GIR | 12/11/20 |
| 7 | T22149293 | F01 | 12/11/20 |
| 8 | T22149294 | F02 | 12/11/20 |
| 9 | T22149295 | M1 | 12/11/20 |
| 10 | T22149296 | M2 | 12/11/20 |

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Mayo Truss Company, Inc..

Truss Design Engineer's Name: ORegan, Philip
My license renewal date for the state of Florida is February 28, 2021.




Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date: December 11,2020

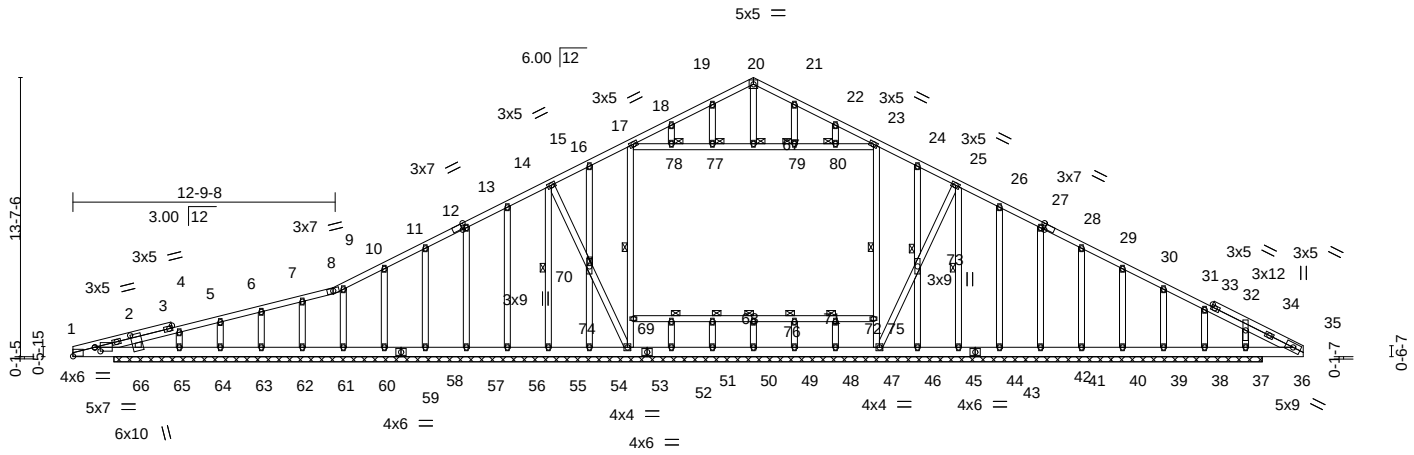
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), 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.

| Job | Truss | Truss Type | Qty | Ply | Capital Metal Supply |
|---|---|---|---|---|---|
| 0820-076 | A1GE | Roof Special Supported Gable | 2 | 1 | T22149287 |
| | | | | | Job Reference (optional) |

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.430 s Nov 30 2020 MiTek Industries, Inc. Fri Dec 11 07:59:05 2020 Page 1
ID:BlpzK7yHFgqpnY9zGmhONFyRV_2-VRPIISg0RG80taBibVZwrofw09CFxrchUm?vMjyA5nK

12-8-4 | 33-2-4 | 60-0-0
12-8-4 | 20-6-0 | 26-9-12

Scale = 1:112.4




2-0-0 | 60-0-0
2-0-0 | 58-0-0

Plate Offsets (X,Y)-- [1:0-3-4,0-2-4], [1:Edge,0-5-3], [12:0-1-9,Edge], [28:0-1-9,Edge], [66:0-1-13,1-9-12]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.20 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.25 | BC | 0.10 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.34 | Horz(CT) | 0.01 | 36 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2017/TPI2014 | Matrix-S | | | | | | | Weight: 500 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x6 SP No.2 |
| WEBS | 2x4 SP No.2 |
| OTHERS | 2x4 SP No.2 |

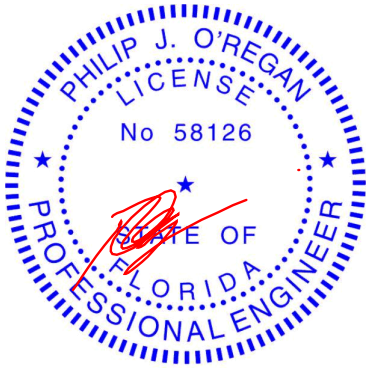
**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing. |
| WEBS | 1 Row at midpt 17-53, 15-55, 23-46, 25-44 |
| JOINTS | 1 Brace at Jt(s): 67, 68, 69, 70, 71, 72, 73, 76, 77, 78, 79, 80 |

**REACTIONS.** All bearings 56-0-0.
(lb) - Max Horz 1=366(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 1, 56, 57, 58, 60, 61, 62, 63, 64, 42, 41, 40, 39, 38, 37, 36, 54 except 53=-127(LC 12), 66=-107(LC 12), 46=-158(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 50, 51, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 48, 47, 44, 42, 41, 40, 39, 38, 37, 49, 54, 45 except 53=628(LC 17), 66=258(LC 1), 46=510(LC 18), 36=412(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 16-17=-159/283, 17-18=-460/289, 18-19=-425/307, 19-20=-411/356, 20-21=-411/356, 21-22=-425/307, 22-23=-459/289, 23-24=-94/283
WEBS 53-74=-494/187, 17-74=-495/188, 46-75=-460/187, 23-75=-461/187, 34-36=-256/152, 17-78=0/393, 77-78=0/389, 67-77=0/389, 67-79=0/389, 79-80=0/389, 23-80=0/393

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=60ft; eave=2ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) 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.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 56, 57, 58, 60, 61, 62, 63, 64, 42, 41, 40, 39, 38, 37, 36, 54 except (jt=lb) 53=127, 66=107, 46=158.

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

December 11,2020



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6904 Parke East Blvd.
Tampa, FL 36610

| Job | Truss | Truss Type | Qty | Ply | Capital Metal Supply |
|---|---|---|---|---|---|
| 0820-076 | A2 | Attic | 10 | 1 | T22149288 |
| | | | | | Job Reference (optional) |

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.430 s Nov 30 2020 MiTek Industries, Inc. Fri Dec 11 07:59:07 2020 Page 1
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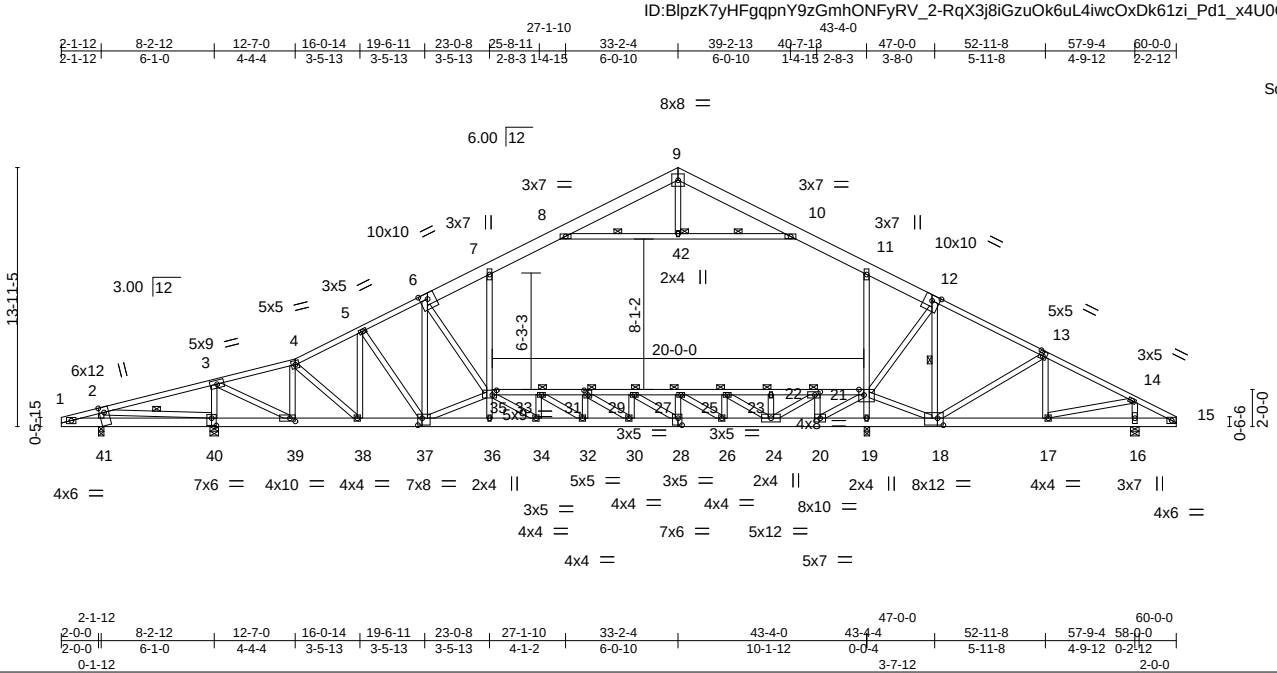






Plate Offsets (X,Y)-- [13:0-2-8,0-3-0], [18:0-3-12,0-4-8], [21:0-3-4,Edge], [22:0-3-8,0-2-0], [28:0-2-8,0-4-8], [31:0-2-8,0-3-0], [35:0-2-12,0-3-0], [37:0-2-12,0-4-8], [39:0-3-8,0-2-0], [40:0-3-0,0-4-12]

| LOADING (psf) | | SPACING- 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL 1.25 | TC | 0.88 | Vert(LL) | -0.30 | 31-33 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL 1.25 | BC | 0.85 | Vert(CT) | -0.60 | 31-33 | >706 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr YES | WB | 0.86 | Horz(CT) | 0.05 | 19 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2017/TPI2014 | Matrix-AS | | Attic | -0.16 | 21-35 | 1497 | 360 | Weight: 523 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.2 *Except* |
| | 6-9,9-12: 2x8 SP 2400F 2.0E |
| BOT CHORD | 2x6 SP No.2 *Except* |
| | 31-35,21-31: 2x4 SP No.2 |
| WEBS | 2x4 SP No.2 *Except* |
| | 18-21: 2x4 SP No.1 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied. |
| BOT CHORD | Rigid ceiling directly applied. |
| WEBS | 1 Row at midpt 2-40, 8-42, 10-42, 12-18 |
| JOINTS | 1 Brace at Jt(s): 31, 42, 33, 29, 27, 25, 23, 22 |

**REACTIONS.** (size) 40=0-5-8, 41=0-3-8, 19=0-3-8, 16=0-5-8
Max Horz 41=366(LC 11)
Max Uplift 40=-65(LC 12), 41=-872(LC 18), 16=-146(LC 12)
Max Grav 40=3711(LC 18), 19=2525(LC 19), 16=1312(LC 1)

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

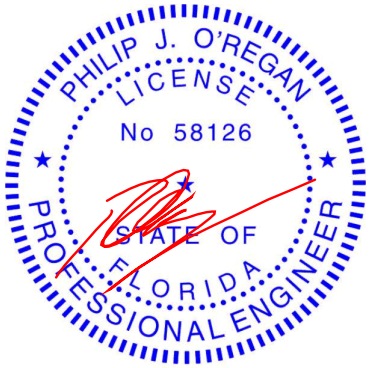
TOP CHORD 1-2=-127/675, 2-3=-664/3117, 3-4=-1056/362, 4-5=-2237/724, 5-6=-2623/841, 6-7=-2330/746, 7-8=-2014/784, 8-9=-573/267, 9-10=-605/277, 10-11=-2112/794, 11-12=-2355/724, 12-13=-1359/513, 13-14=-1425/462

BOT CHORD 1-41=-614/117, 40-41=-772/115, 39-40=-2515/638, 38-39=-230/1154, 37-38=-437/2209, 36-37=-863/3876, 34-36=-874/3891, 32-34=-848/4504, 30-32=-751/4622, 28-30=-625/4352, 26-28=-454/3670, 24-26=-238/2561, 20-24=-951/325, 19-20=-3274/639, 18-19=-3405/681, 17-18=-289/1226, 33-35=-2379/592, 31-33=-2572/498, 29-31=-2564/369, 27-29=-2057/198, 25-27=-1055/183, 23-25=-269/1040, 22-23=-269/1040, 21-22=-581/3036

WEBS 2-41=0/603, 2-40=-2387/588, 3-40=-3168/920, 3-39=-949/4031, 4-39=-1928/551, 4-38=-283/1445, 5-38=-874/214, 5-37=-18/586, 6-37=-131/332, 6-35=-727/330, 7-35=-44/844, 8-42=-1752/631, 10-42=-1752/631, 19-21=-2211/537, 11-21=-303/525, 12-21=-95/1405, 12-18=-1883/379, 14-17=-377/1255, 14-16=-1165/492, 33-34=-596/23, 29-30=-56/263, 27-28=-82/496, 25-26=-105/735, 23-24=-264/56, 20-22=-1640/271, 34-35=0/1189, 32-33=-182/526, 30-31=-384/153, 28-29=-813/204, 26-27=-1322/258, 24-25=-1761/300, 22-24=-372/2416, 20-21=-375/2784, 18-21=-953/4900, 35-37=-1474/459

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=60ft; eave=7ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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6904 Parke East Blvd. Tampa FL 33610
Date:

December 11,2020

Continued on page 2



MiTek
6904 Parke East Blvd.
Tampa, FL 36610

**NOTES-**

3) 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.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Ceiling dead load (5.0 psf) on member(s). 7-8, 10-11, 8-42, 10-42; Wall dead load (5.0psf) on member(s).7-35, 11-21
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 33-35, 31-33, 29-31, 27-29, 25-27, 23-25, 22-23, 21-22
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 40 except (jt=lb) 41=872, 16=146.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Attic room checked for L/360 deflection.

| Job | Truss | Truss Type | Qty | Ply | Capital Metal Supply |
|---|---|---|---|---|---|
| 0820-076 | A3 | Attic | 13 | 1 | T22149289 |
| | | | | | Job Reference (optional) |

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.430 s Nov 30 2020 MiTek Industries, Inc. Fri Dec 11 07:59:10 2020 Page 1
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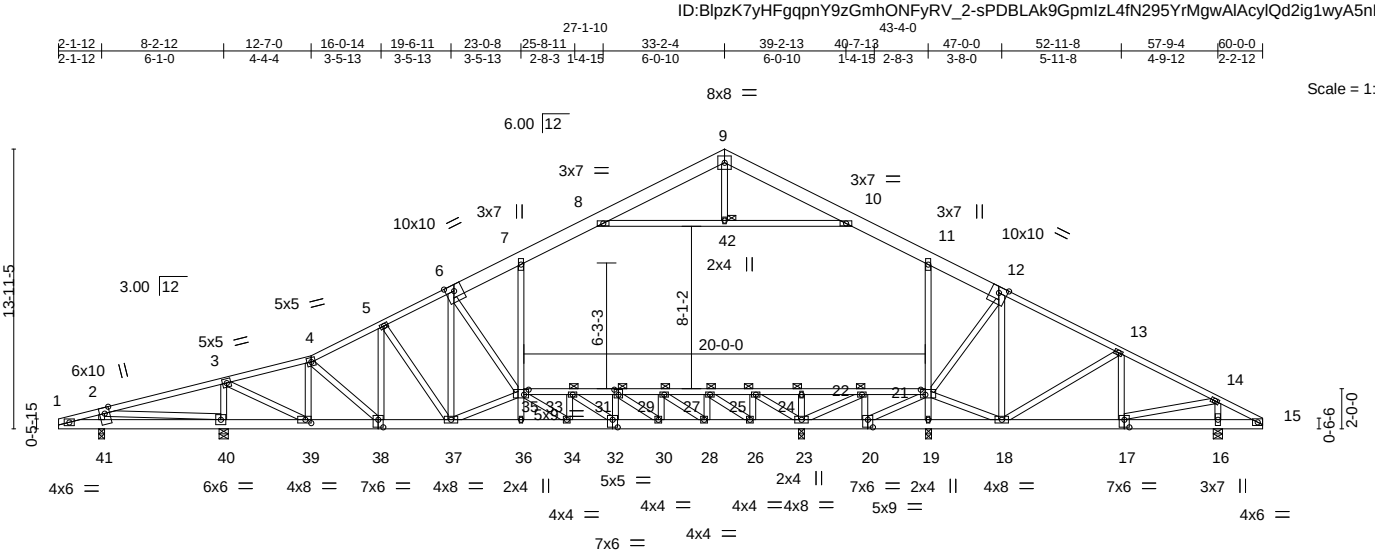



Plate Offsets (X,Y)-- [17:0-3-0,0-4-8], [20:0-3-0,0-4-8], [21:0-2-12,0-3-0], [31:0-2-8,0-3-0], [32:0-3-0,0-4-8], [35:0-2-12,0-3-0], [38:0-3-0,0-4-8], [39:0-3-8,0-2-0]

| 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 | 0.64 | Vert(LL) | -0.17 | 33-35 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.25 | BC | 0.82 | Vert(CT) | -0.35 | 36 | >991 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.99 | Horz(CT) | 0.05 | 16 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2017/TPI2014 | | Matrix-AS | | Attic | 0.09 | 21-35 | 2757 | 360 | Weight: 523 lb | FT = 20% |

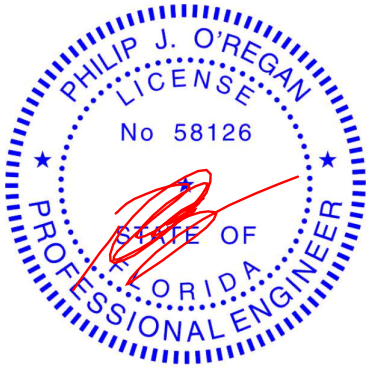
**LUMBER-**
TOP CHORD 2x4 SP No.2 *Except*
6-9,9-12: 2x8 SP 2400F 2.0E
BOT CHORD 2x6 SP No.2 *Except*
31-35: 2x4 SP No.2, 21-31: 2x4 SP No.1
WEBS 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
JOINTS 1 Brace at Jt(s): 31, 42, 24, 33, 29, 27, 25, 22

**REACTIONS.** All bearings 0-3-8 except (jt=length) 40=0-5-8, 16=0-5-8.
(lb) - Max Horz 41=366(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) except 41=-468(LC 18), 40=-200(LC 12), 19=-164(LC 8), 16=-132(LC 12)
Max Grav All reactions 250 lb or less at joint(s) except 40=2823(LC 18), 19=765(LC 23), 16=1353(LC 1), 23=2537(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-86/474, 2-3=-461/2040, 3-4=-1024/350, 4-5=-1804/641, 5-6=-2054/736, 6-7=-1542/604, 7-8=-1455/685, 8-9=-633/291, 9-10=-673/298, 10-11=-1536/692, 11-12=-1619/596, 12-13=-1510/537, 13-14=-1472/474
BOT CHORD 1-41=-418/77, 40-41=-595/76, 39-40=-1723/503, 38-39=-215/1113, 37-38=-368/1838, 36-37=-838/3762, 34-36=-850/3786, 32-34=-712/3697, 30-32=-503/3127, 28-30=-282/2313, 26-28=-21/1133, 23-26=-537/289, 20-23=-870/322, 17-18=-306/1293, 33-35=-2207/568, 31-33=-1742/379, 29-31=-1131/138, 27-29=-157/555, 25-27=-433/1953, 24-25=-750/3724, 22-24=-750/3724, 21-22=-460/2290
WEBS 2-41=0/299, 2-40=-1534/430, 3-40=-2440/788, 3-39=-785/3074, 4-39=-1452/469, 4-38=-206/989, 5-38=-596/169, 5-37=0/321, 6-37=-207/660, 6-35=-913/360, 7-35=-188/282, 8-42=-967/492, 10-42=-967/492, 19-21=-680/203, 11-21=-479/155, 12-18=-452/134, 13-17=-266/189, 14-17=-391/1302, 14-16=-1202/498, 23-24=-368/76, 33-34=-127/302, 31-32=-118/424, 29-30=-136/648, 27-28=-166/923, 25-26=-166/1021, 20-22=-69/435, 34-35=-372/330, 32-33=-623/238, 30-31=-1023/277, 28-29=-1448/320, 26-27=-1959/380, 23-25=-2131/382, 22-23=-1570/319, 20-21=-1019/275, 35-37=-1925/536, 18-21=-330/1361

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=60ft; eave=7ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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Date:

December 11,2020

Continued on page 2



MiTek
6904 Parke East Blvd.
Tampa, FL 36610

| Job | Truss | Truss Type | Qty | Ply | Capital Metal Supply |
|---|---|---|---|---|---|
| 0820-076 | A3 | Attic | 13 | 1 | T22149289<br>Job Reference (optional) |



**NOTES-**

3) 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.
4) All plates are 3x5 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Ceiling dead load (5.0 psf) on member(s). 7-8, 10-11, 8-42, 10-42; Wall dead load (5.0psf) on member(s).7-35, 11-21
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 33-35, 31-33, 29-31, 27-29, 25-27, 24-25, 22-24, 21-22
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 468 lb uplift at joint 41, 200 lb uplift at joint 40, 164 lb uplift at joint 19 and 132 lb uplift at joint 16.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
11) Attic room checked for L/360 deflection.



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6904 Parke East Blvd.
Tampa, FL 36610

| Job | Truss | Truss Type | Qty | Ply | Capital Metal Supply |
|---|---|---|---|---|---|
| 0820-076 | A3A | Attic | 5 | 1 | T22149290 |
| | | | | | Job Reference (optional) |

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.430 s Nov 30 2020 MiTek Industries, Inc. Fri Dec 11 07:59:12 2020 Page 1
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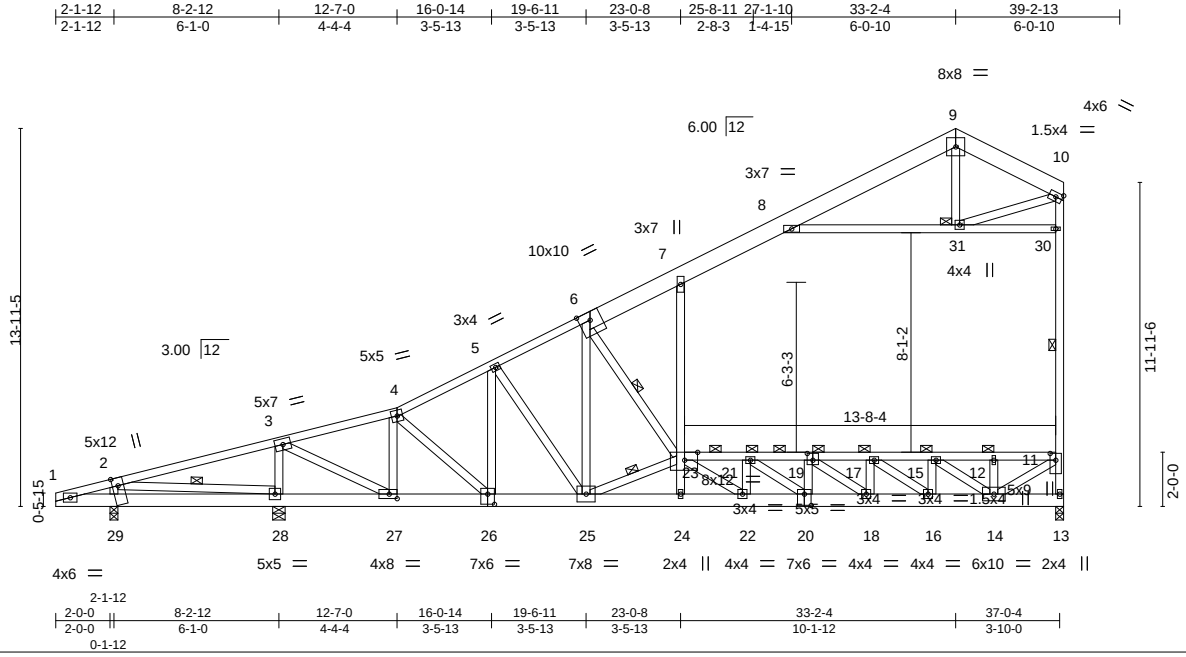


Plate Offsets (X,Y)-- [11:0-3-0,0-2-8], [19:0-2-8,0-3-0], [20:0-3-0,0-5-0], [23:0-5-12,Edge], [26:0-3-0,0-4-8], [27:0-3-8,0-2-0]

| 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 | 0.97 | Vert(LL) | -0.32 | 21-23 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.25 | BC | 0.97 | Vert(CT) | -0.67 | 22-24 | >519 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.88 | Horz(CT) | 0.05 | 13 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2017/TPI2014 | | Matrix-AS | | Attic | -0.16 | 11-23 | 1019 | 360 | Weight: 351 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x4 SP No.2 *Except*
6-9,9-10: 2x8 SP 2400F 2.0E
BOT CHORD 2x6 SP No.2 *Except*
19-23,11-19: 2x4 SP No.2
WEBS 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied. Except:
2-2-0 oc bracing: 21-23
2-5-0 oc bracing: 19-21
2-9-0 oc bracing: 17-19
3-2-0 oc bracing: 15-17
4-4-0 oc bracing: 11-12
4-6-0 oc bracing: 12-15
WEBS 1 Row at midpt 2-28, 6-23, 11-30, 23-25
JOINTS 1 Brace at Jt(s): 31, 21, 19, 17, 15, 12

**REACTIONS.** (size) 29=0-3-8, 28=0-5-8, 13=0-3-8
Max Horz 29=402(LC 12)
Max Uplift 29=-1036(LC 18), 28=-147(LC 12)
Max Grav 28=3202(LC 18), 13=2016(LC 18)

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

TOP CHORD 1-2=-166/740, 2-3=-661/3578, 3-4=-260/503, 4-5=-789/0, 5-6=-1184/16, 7-8=-259/3, 8-9=-507/217, 9-10=-526/269
BOT CHORD 1-29=-680/155, 28-29=-716/0, 27-28=-3297/112, 26-27=-388/0, 25-26=-324/781, 24-25=-1168/5553, 22-24=-1187/5607, 20-22=-772/5634, 18-20=-400/5120, 16-18=-162/4382, 14-16=-2/3264, 21-23=-5563/759, 19-21=-5118/430, 17-19=-4311/149, 15-17=-3193/0, 12-15=-1699/0, 11-12=-1699/0
WEBS 2-29=0/685, 2-28=-2767/546, 3-28=-2614/495, 3-27=-351/3320, 4-27=-1602/264, 4-26=-151/1438, 5-26=-903/136, 5-25=0/604, 6-25=-427/1687, 6-23=-1789/463, 7-23=-616/479, 8-31=-195/417, 30-31=-276/52, 11-13=-1957/102, 11-30=-577/229, 10-30=-483/234, 21-22=-304/327, 19-20=-226/420, 17-18=-153/607, 15-16=-89/857, 12-14=-283/0, 22-23=-334/518, 20-21=-634/414, 18-19=-931/300, 16-17=-1372/196, 14-15=-1834/85, 11-14=0/2352, 23-25=-4889/969, 10-31=-264/730

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=37ft; eave=5ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Ceiling dead load (5.0 psf) on member(s). 7-8, 8-31, 30-31; Wall dead load (5.0psf) on member(s).7-23, 11-30
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 21-23, 19-21, 17-19, 15-17, 12-15, 11-12

Continued on page 2

PHILIP J. O'REGAN LICENSE No 58126 STATE OF FLORIDA PROFESSIONAL ENGINEER

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date: December 11,2020



MiTek
6904 Parke East Blvd.
Tampa, FL 36610

| Job | Truss | Truss Type | Qty | Ply | Capital Metal Supply |
|---|---|---|---|---|---|
| 0820-076 | A3A | Attic | 5 | 1 | T22149290<br>Job Reference (optional) |



**NOTES-**

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1036 lb uplift at joint 29 and 147 lb uplift at joint 28.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) This truss has large uplift reaction at jt. 29 from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
10) Attic room checked for L/360 deflection.



MiTek
6904 Parke East Blvd.
Tampa, FL 36610

| Job | Truss | Truss Type | Qty | Ply | Capital Metal Supply |
|---|---|---|---|---|---|
| 0820-076 | A4GIR | ATTIC | 1 | 3 | T22149291 |
| | | | | | Job Reference (optional) |

Mayo Truss, Mayo, Fl

8.420 s Sep 14 2020 MiTek Industries, Inc. Fri Dec 11 13:48:41 2020 Page 1

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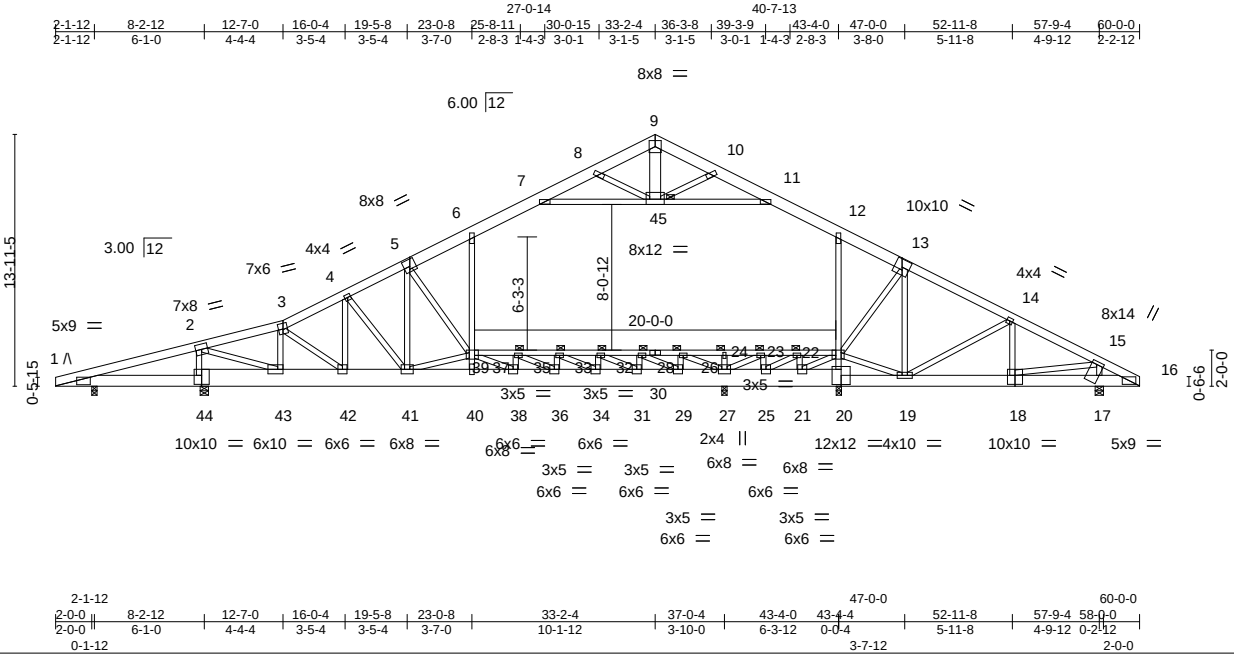



Plate Offsets (X,Y)-- [1:1-11-0,Edge], [3:0-3-0,0-3-12], [5:0-4-0,0-4-8], [15:0-2-0,0-3-4], [18:0-5-0,0-6-0], [20:0-6-0,0-1-2], [22:0-2-8,Edge], [39:0-2-8,Edge], [43:0-3-8,0-3-0], [45:0-6-0,0-3-8]

| 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 | 0.42 | Vert(LL) | -0.18 | 40 | >999 | 240 | MT20 | 137/130 |
| TCDL | 10.0 | Lumber DOL | 1.25 | BC | 0.79 | Vert(CT) | -0.30 | 40-41 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.80 | Horz(CT) | 0.09 | 17 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2017/TPI2014 | | Matrix-AS | | Attic | 0.10 | 22-39 | 2428 | 360 | Weight: 2037 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x6 SP No.2 *Except*
5-9,9-13: 2x8 SP 2400F 2.0E
BOT CHORD 2x8 SP 2400F 2.0E *Except*
30-39,22-30: 2x4 SP No.2, 20-44: 1-1/2X11-1/4 LP-LSL 1.75E
WEBS 2x4 SP No.2 *Except*
2-43: 2x4 SP No.1, 9-45: 2x8 SP 2400F 2.0E

**BRACING-**

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
JOINTS 1 Brace at Jt(s): 45, 26, 37, 35, 33, 32, 28, 24, 23

PLY-TO-PLY CONNECTION REQUIRES THAT AN APPROVED FACE MOUNT HANGER (SPECIFIED BY OTHERS) IS REQUIRED AT JOINT 9 FOR LOAD REPORTED IN NOTES. FACE MOUNT HANGER SHALL BE ATTACHED WITH A MINIMUM OF 0.25"x 4.5" SCREWS OR OTHER FASTENERS THAT PENETRATES ALL PLIES, PER HANGER MANUFACTURER SPECIFICATIONS.

**REACTIONS.** All bearings 0-3-8 except (jt=length) 44=0-5-8, 17=0-5-8.
(lb) - Max Horz 1=369(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) except 44=-2908(LC 12), 20=-621(LC 12), 17=-2262(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1 except 44=11185(LC 18), 20=1790(LC 19), 17=9748(LC 18), 27=4041(LC 18)

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

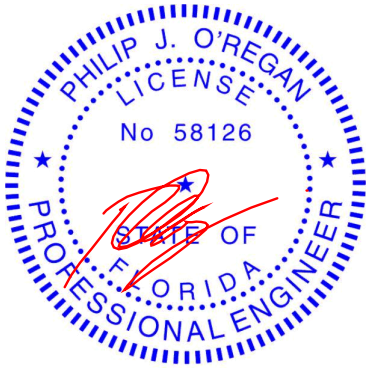
TOP CHORD 1-2=-1562/481, 2-3=-14508/5389, 3-4=-19377/8208, 4-5=-20422/9019, 5-6=-19796/9251, 6-7=-20901/9976, 7-8=-23834/11656, 8-9=-23349/11410, 9-10=-23315/11404, 10-11=-23565/11550, 11-12=-21031/10002, 12-13=-19732/9196, 13-14=-17262/7957, 14-15=-14078/6416, 15-16=-2676/1148

BOT CHORD 1-44=-419/1559, 43-44=-909/1952, 42-43=-5262/14644, 41-42=-7163/17611, 40-41=-8315/21011, 38-40=-8400/21240, 36-38=-8174/20649, 34-36=-7545/18811, 31-34=-6821/16486, 29-31=-6059/13815, 27-29=-5284/10877, 25-27=-4664/9083, 21-25=-4673/9861, 20-21=-4530/10099, 19-20=-4317/9797, 18-19=-5657/12656, 17-18=-982/2355, 16-17=-982/2355, 37-39=-2389/61, 35-37=-887/38, 33-35=-1292/1854, 32-33=-2054/4445, 30-32=-2829/7383, 28-30=-2829/7383, 26-28=-3011/8608, 24-26=-3011/8608, 23-24=-3449/9224, 22-23=-3440/8399

WEBS 2-44=-9533/4815, 2-43=-7506/15428, 3-43=-7642/3978, 39-40=-1804/718, 6-39=-2887/1653, 7-45=-1876/3441, 11-45=-1727/3185, 20-22=-2213/1218, 12-22=-3607/1831, 13-22=-2144/4741, 13-19=-3807/1810, 14-19=-1370/3217, 14-18=-3204/1578, 15-18=-4733/10441, 15-17=-7600/3580, 9-45=-188/339, 26-27=-335/82, 37-38=-336/931, 35-36=-384/1199, 33-34=-411/1422, 31-32=-417/1578, 28-29=-60/521, 24-25=-547/310, 21-23=0/346, 24-27=-522/770, 23-25=-1002/12, 21-22=-330/0, 27-28=-1411/209, 29-32=-3437/907, 31-33=-3125/891, 34-35=-2719/847, 36-37=-2150/735, 38-39=-691/277, 4-42=-1969/1397, 5-41=0/1170, 5-39=-689/385, 4-41=-980/1461, 3-42=-2500/3902, 39-41=-2771/602, 19-22=-2766/6174, 8-45=-759/441, 10-45=-326/275

**NOTES-**

1) N/A




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

December 11,2020

Continued on page 2



MiTek
6904 Parke East Blvd.
Tampa, FL 36610

**NOTES-**

2) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 4 rows staggered at 0-4-0 oc.
   Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 1-1/2x11-1/4 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 15-17 2x4 - 1 row at 0-7-0 oc, 2x8 - 4 rows staggered at 0-4-0 oc.
3) 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.
4) Unbalanced roof live loads have been considered for this design.
5) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=60ft; eave=7ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
6) 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.
7) All plates are 3x7 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) Ceiling dead load (5.0 psf) on member(s). 6-7, 11-12, 7-45, 11-45; Wall dead load (5.0psf) on member(s).6-39, 12-22
11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 37-39, 35-37, 33-35, 32-33, 28-32, 26-28, 24-26, 23-24, 22-23
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2908 lb uplift at joint 44, 621 lb uplift at joint 20 and 2262 lb uplift at joint 17.
13) "/\" indicates Released bearing: allow for upward movement at joint(s) 1.
14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 20000 lb down and 9696 lb up at 33-2-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
16) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-6=-60, 6-7=-70, 7-9=-60, 9-11=-60, 11-12=-70, 12-16=-60, 1-16=-20, 22-39=-30, 7-11=-10
   Drag: 6-39=-10, 12-22=-10
   Concentrated Loads (lb)
   Vert: 9=-11250(F)

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6904 Parke East Blvd.
Tampa, FL 36610

| Job | Truss | Truss Type | Qty | Ply | Capital Metal Supply |
|---|---|---|---|---|---|
| 0820-076 | A5GIR | Attic | 1 | 3 | T22149292 |
| | | | | | Job Reference (optional) |

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.430 s Nov 30 2020 MiTek Industries, Inc. Fri Dec 11 07:59:18 2020 Page 1
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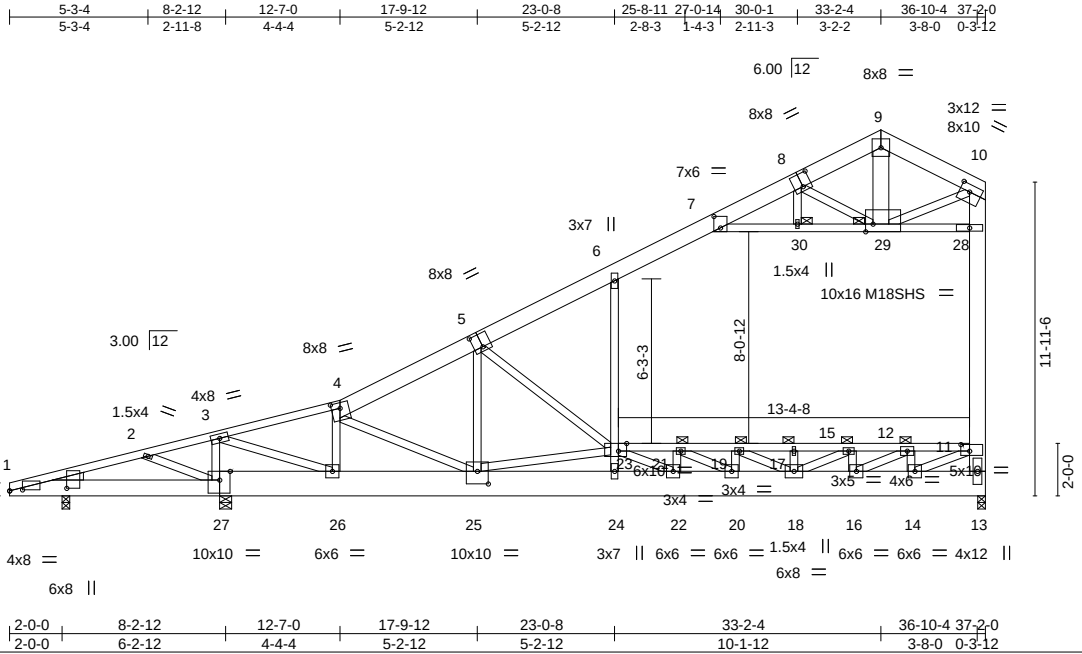



Plate Offsets (X,Y)-- [1:0-1-3,2-2-1], [1:0-5-14,0-0-8], [4:0-4-0,0-2-8], [5:0-4-0,0-6-0], [7:0-3-0,0-5-4], [8:0-4-0,0-6-0], [10:0-4-8,0-3-4], [11:0-4-0,0-3-0], [23:0-3-12,Edge], [25:0-5-0,0-5-12], [27:0-4-12,Edge], [29:0-3-6,0-3-8]

| 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 | 0.96 | Vert(LL) | -0.32 | 22-24 | >999 | 240 | MT20 | 137/130 |
| TCDL | 10.0 | Lumber DOL | 1.25 | BC | 0.63 | Vert(CT) | -0.51 | 22-24 | >682 | 180 | M18SHS | 244/190 |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.88 | Horz(CT) | 0.02 | 13 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2017/TPI2014 | | Matrix-AS | | Attic | -0.16 | 11-23 | 1032 | 360 | Weight: 1422 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x8 SP 2400F 2.0E *Except*
1-4: 2x4 SP No.1
BOT CHORD 2x8 SP 2400F 2.0E *Except*
11-23: 2x4 SP No.2, 13-27: 1-1/2X11-1/4 LP-LSL 1.75E
WEBS 2x4 SP No.2 *Except*
7-28: 2x4 SP No.1, 9-29: 2x8 SP 2400F 2.0E
10-13: 1-1/2X7-1/4 LP-LSL 1.75E, 10-29: 2x4 SP SS
WEDGE
Left: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
JOINTS 1 Brace at Jt(s): 29, 30, 12, 15, 17, 19, 21

PROVIDE CONNECTION OF TRUSS TO BEARING PLATE AT JOINT 1 CAPABLE OF WITHSTANDING 2963 LBS UPLIFT REACTION DUE TO GRAVITY LOADING APPLIED TO THE TRUSS. IT IS THE RESPONSIBILITY OF THE PROJECT ARCHITECT/ENGINEER TO DESIGN THE CONNECTION OF THE TRUSS TO THE BEARING PLATE, PROVIDE AND DESIGNCONNECTION SYSTEM FOR A CONTINUOUS LOAD PATH FROM THE TRUSS TO THE FOUNDATION, AND DESIGN FOOTING/FOUNDATION TO RESIST SUCH UPLIFT. FAILURE TO DO SO WILL VOID THIS CONSTRUCTION.

PLY-TO-PLY CONNECTION REQUIRES THAT AN APPROVED FACE MOUNT HANGER (SPECIFIED BY OTHERS) IS REQUIRED AT JOINT 9 FOR LOAD REPORTED IN NOTES. FACE MOUNT HANGER SHALL BE ATTACHED WITH A MINIMUM OF 0.25"x 4.5" SCREWS OR OTHER FASTENERS THAT PENETRATES ALL PLIES, PER HANGER MANUFACTURER SPECIFICATIONS.

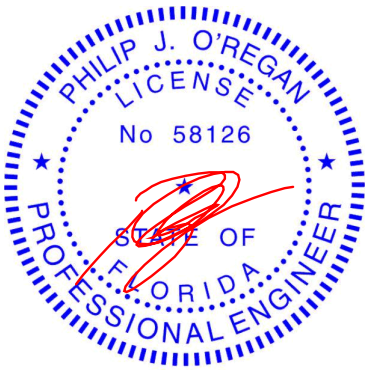
**REACTIONS.** (size) 27=0-5-8, 13=0-3-8 (req. 0-4-6), 1=0-3-8
Max Horz 1=404(LC 12)
Max Uplift 27=-518(LC 12), 13=-1305(LC 12), 1=-3247(LC 18)
Max Grav 27=8543(LC 18), 13=18728(LC 18), 1=195(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1638/7992, 2-3=-1894/8936, 3-4=-505/1043, 4-5=-4576/503, 5-6=-2213/0, 6-7=-4506/687, 7-8=-16660/3547, 8-9=-14850/3107, 9-10=-14858/3096, 11-13=-18723/3673, 11-28=-15017/3107, 10-28=-14988/3114
BOT CHORD 1-27=-7495/724, 26-27=-8989/1114, 25-26=-725/0, 24-25=-3449/16065, 22-24=-3581/16607, 20-22=-3012/15747, 18-20=-2102/12542, 16-18=-381/4629, 14-16=-152/414, 13-14=-6228/1405, 21-23=-13502/2436, 19-21=-10297/1527, 17-19=-6096/596, 15-17=-6096/596, 12-15=-2384/0, 11-12=-990/2358
WEBS 2-27=-1153/331, 3-27=-5278/1038, 3-26=-1484/8699, 4-26=-5426/1022, 4-25=-900/5547, 5-25=-647/2995, 5-23=-2030/564, 23-24=-3817/962, 6-23=-5926/1620, 7-30=-3244/14033, 29-30=-3248/14046, 28-29=-7699/1316, 9-29=-5774/1068, 10-29=-4023/20041, 8-29=-3821/999, 8-30=-607/171, 12-14=-2860/392, 15-16=-2599/471, 19-20=-606/2361, 21-22=-633/1878, 22-23=-1013/670, 20-21=-3774/1071, 18-19=-4946/1095, 15-18=-932/4371, 12-16=-936/5583, 11-14=-1130/6971, 23-25=-12423/2459

**NOTES-**

1) N/A
2) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 4 rows staggered at 0-4-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 1-1/2x11-1/4 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 4 rows staggered at 0-4-0 oc.
3) 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.
4) Unbalanced roof live loads have been considered for this design.

Continued on page 2




Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date: December 11,2020



MiTek
6904 Parke East Blvd.
Tampa, FL 36610

**NOTES-**

5) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=37ft; eave=5ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Ceiling dead load (5.0 psf) on member(s). 6-7, 7-30, 29-30, 28-29; Wall dead load (5.0psf) on member(s).6-23
10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 21-23, 19-21, 17-19, 15-17, 12-15, 11-12
11) WARNING: Required bearing size at joint(s) 13 greater than input bearing size.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 518 lb uplift at joint 27, 1305 lb uplift at joint 13 and 3247 lb uplift at joint 1.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
14) This truss has large uplift reaction at jt. 1 from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 19794 lb down and 3895 lb up at 33-2-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
16) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

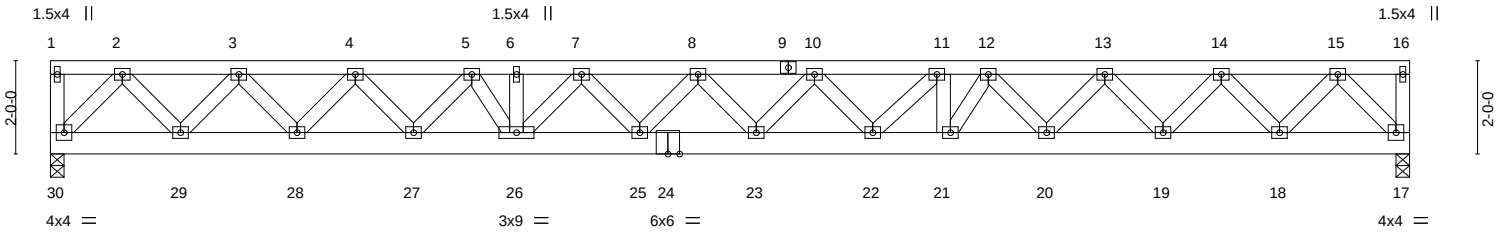
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-60, 4-6=-60, 6-7=-70, 7-9=-60, 9-10=-60, 13-31=-20, 11-23=-30, 7-28=-10
   Drag: 6-23=-10
   Concentrated Loads (lb)
   Vert: 9=-11250(F)

| Job | Truss | Truss Type | Qty | Ply | Capital Metal Supply |
|---|---|---|---|---|---|
| 0820-076 | F01 | FLOOR | 16 | 1 | T22149293 |
| | | | | | Job Reference (optional) |

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.430 s Nov 30 2020 MiTek Industries, Inc. Fri Dec 11 07:59:19 2020 Page 1
ID:BlpzK7yHFgqpnY9zGmhONFyRV_2-58FbEEro8av1YkGOPRpCQlEFYouxDBilixOfrvyA5n6

1-3-0 0-9-12 1-4-8 0-9-12

Scale = 1:49.4




10-0-0 19-2-0 29-2-0
10-0-0 9-2-0 10-0-0

| LOADING (psf) | | SPACING- | 1-4-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.46 | Vert(LL) | -0.46 | 23 | >753 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.46 | Vert(CT) | -0.63 | 23 | >548 | 240 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.30 | Horz(CT) | 0.07 | 17 | n/a | n/a | | |
| BCDL | 5.0 | Code FBC2017/TPI2014 | | Matrix-S | | | | | | | Weight: 179 lb | FT = 11% |

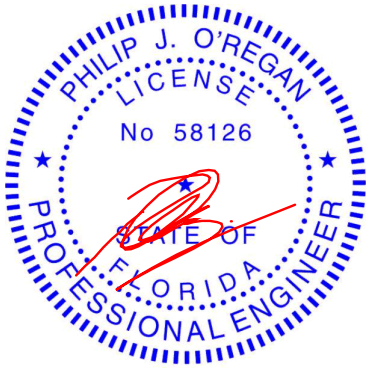
**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP SS
WEBS 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-4-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 30=0-3-8, 17=0-3-8
Max Grav 30=1059(LC 1), 17=1059(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1510/0, 3-4=-2679/0, 4-5=-3559/0, 5-6=-4119/0, 6-7=-4119/0, 7-8=-4496/0, 8-10=-4579/0, 10-11=-4342/0, 11-12=-4166/0, 12-13=-3554/0, 13-14=-2680/0, 14-15=-1509/0
BOT CHORD 29-30=0/859, 28-29=0/2160, 27-28=0/3182, 26-27=0/3931, 25-26=0/4386, 23-25=0/4598, 22-23=0/4532, 21-22=0/4166, 20-21=0/3941, 19-20=0/3181, 18-19=0/2161, 17-18=0/859
WEBS 11-21=-296/0, 2-30=-1286/0, 2-29=0/1067, 3-29=-1067/0, 3-28=0/850, 4-28=-826/0, 4-27=0/617, 5-27=-610/0, 5-26=0/371, 15-17=-1285/0, 15-18=0/1066, 14-18=-1068/0, 14-19=0/851, 13-19=-823/0, 13-20=0/612, 12-20=-634/0, 12-21=0/443, 7-26=-409/0, 10-22=-312/0, 11-22=0/258

**NOTES-**
1) All plates are 3x4 MT20 unless otherwise indicated.
2) The Fabrication Tolerance at joint 24 = 11%, joint 9 = 11%
3) 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.

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Date:

December 11,2020



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| Job | Truss | Truss Type | Qty | Ply | Capital Metal Supply |
|---|---|---|---|---|---|
| 0820-076 | F02 | FLOOR | 12 | 1 | T22149294 |
| | | | | | Job Reference (optional) |

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.430 s Nov 30 2020 MiTek Industries, Inc. Fri Dec 11 07:59:19 2020 Page 1
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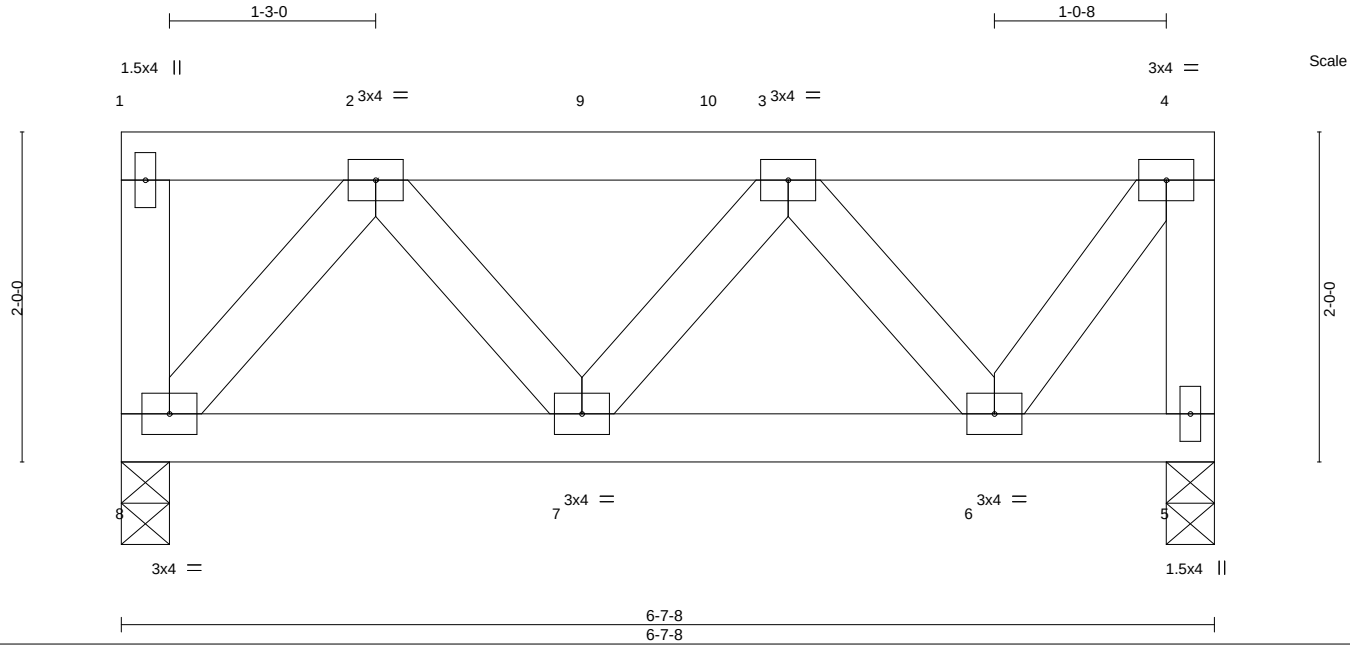



| LOADING (psf) | | SPACING- | 1-4-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.10 | Vert(LL) | -0.00 | 7 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.07 | Vert(CT) | -0.00 | 7 | >999 | 240 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.06 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 5.0 | Code | FBC2017/TPI2014 | Matrix-P | | | | | | | Weight: 38 lb | FT = 11% |

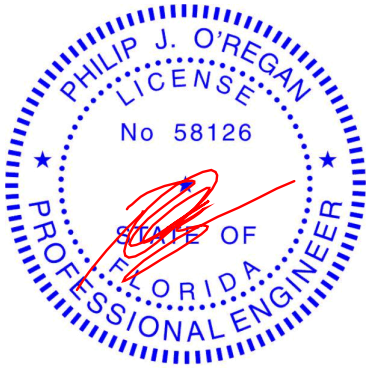
**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

**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) 5=0-3-8, 8=0-3-8
Max Grav 5=232(LC 1), 8=232(LC 1)

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

**NOTES-**
1) 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.

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| Job | Truss | Truss Type | Qty | Ply | Capital Metal Supply |
|---|---|---|---|---|---|
| 0820-076 | M1 | Monopitch | 16 | 1 | T22149295 |
| | | | | | Job Reference (optional) |

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.430 s Nov 30 2020 MiTek Industries, Inc. Fri Dec 11 07:59:20 2020 Page 1
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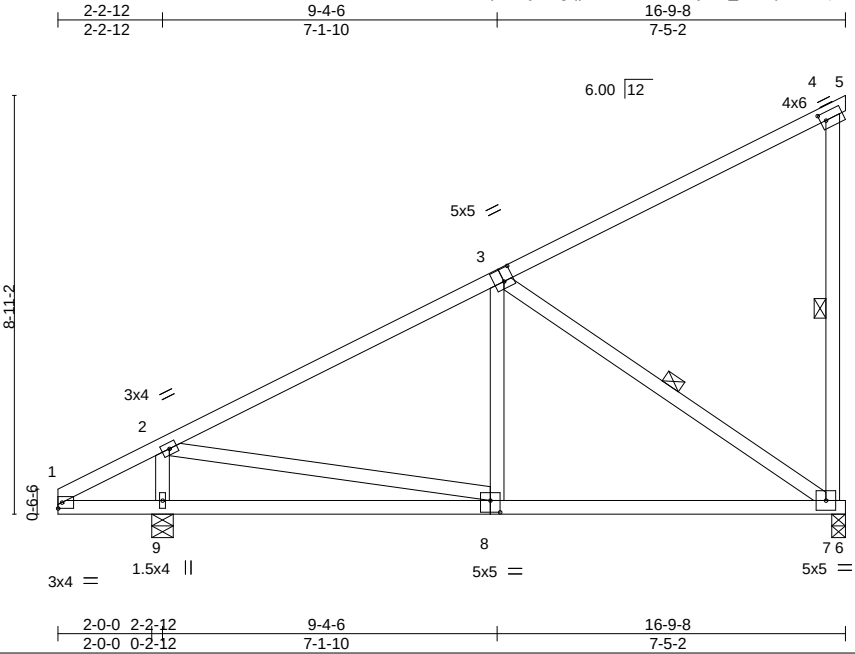



Plate Offsets (X,Y)-- [3:0-2-8,0-3-4], [4:0-1-7,0-2-0], [8:0-2-8,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.48 | Vert(LL) | -0.07 | 7-8 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.25 | BC | 0.48 | Vert(CT) | -0.14 | 7-8 | >999 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.20 | Horz(CT) | -0.01 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code FBC2017/TPI2014 | | Matrix-AS | | | | | | | Weight: 97 lb | FT = 20% |

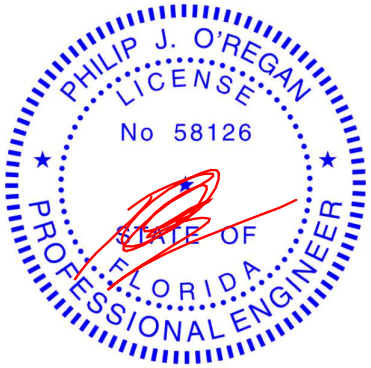
**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-7, 3-7

**REACTIONS.** (size) 9=0-5-8, 7=0-3-8
Max Horz 9=378(LC 11)
Max Uplift 9=-152(LC 12), 7=-125(LC 9)
Max Grav 9=764(LC 1), 7=607(LC 17)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-619/193
BOT CHORD 8-9=-547/416, 7-8=-410/528
WEBS 2-9=-659/418, 2-8=-87/476, 3-8=0/251, 3-7=-587/366

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 152 lb uplift at joint 9 and 125 lb uplift at joint 7.
5) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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| Job | Truss | Truss Type | Qty | Ply | Capital Metal Supply |
|---|---|---|---|---|---|
| 0820-076 | M2 | Monopitch | 10 | 1 | T22149296 |
| | | | | | Job Reference (optional) |

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.430 s Nov 30 2020 MiTek Industries, Inc. Fri Dec 11 07:59:21 2020 Page 1
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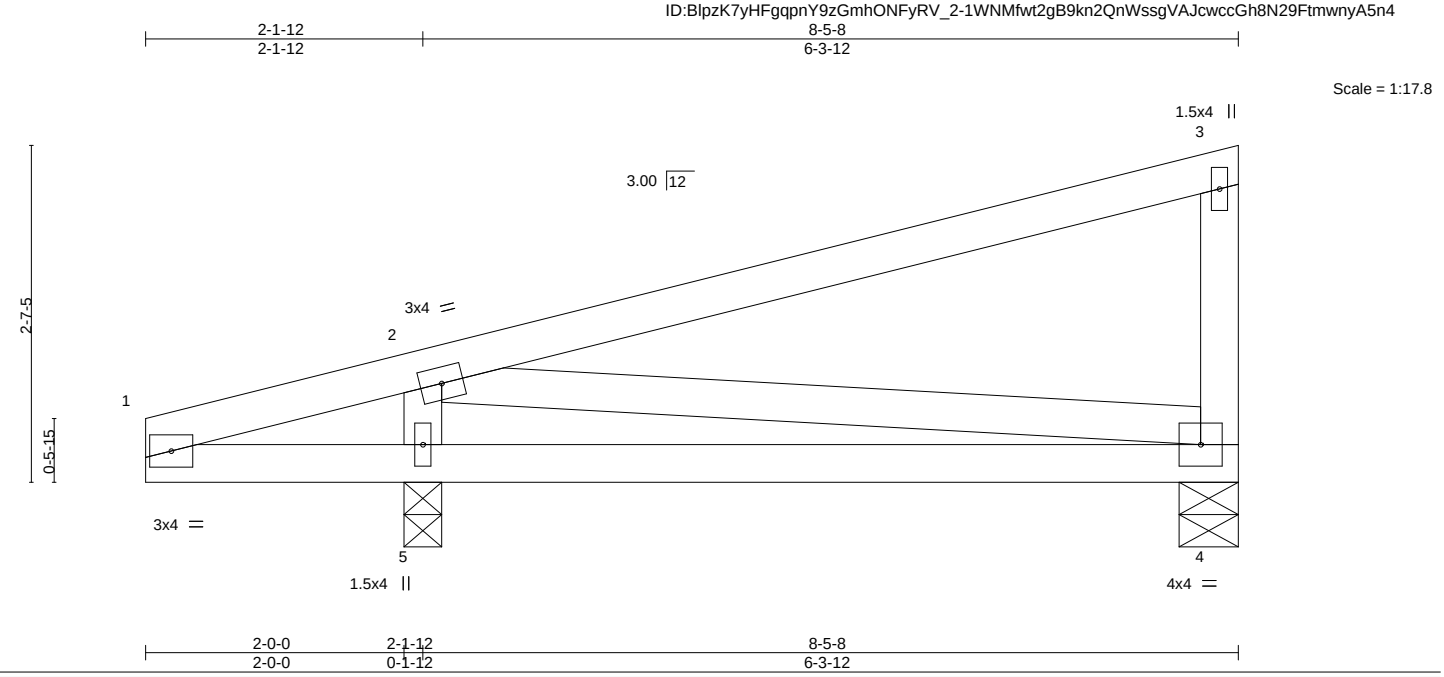



| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.25 | TC | 0.40 | Vert(LL) | 0.11 | 4-5 | >665 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.25 | BC | 0.34 | Vert(CT) | -0.10 | 4-5 | >763 | 180 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.10 | Horz(CT) | -0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | FBC2017/TPI2014 | Matrix-AS | | | | | | | Weight: 38 lb | FT = 20% |

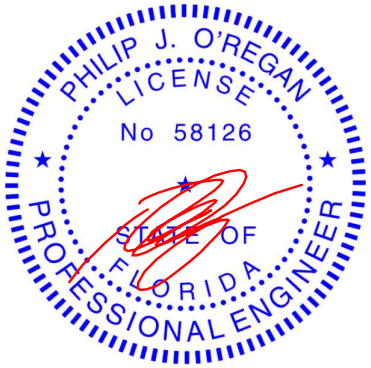
**LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 4=0-5-8, 5=0-3-8
Max Horz 5=94(LC 11)
Max Uplift 4=-102(LC 12), 5=-204(LC 12)
Max Grav 4=217(LC 1), 5=448(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 4-5=-321/182
WEBS 2-5=-351/253, 2-4=-146/291

**NOTES-**
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 4 and 204 lb uplift at joint 5.
5) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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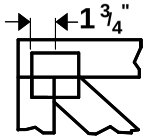
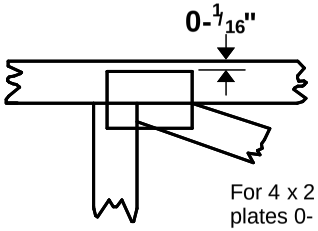
# Symbols

## PLATE LOCATION AND ORIENTATION




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




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

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

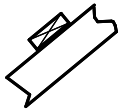
*** Plate location details available in MiTek 20/20 software or upon request.**

## PLATE SIZE

4 x 4

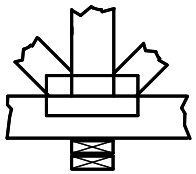
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING

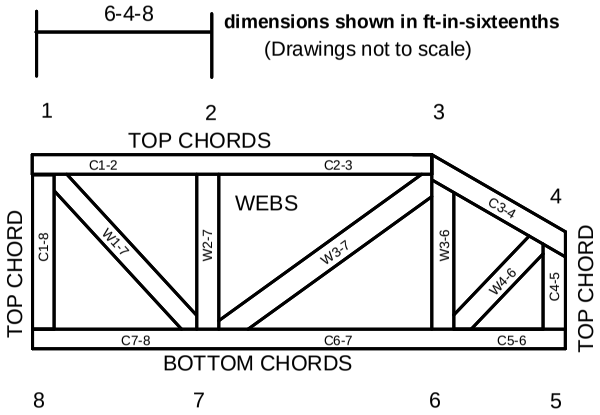


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

**Industry Standards:**

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System




**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/TPI 1 section 6.3 These truss designs rely on lumber values established by others.



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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

21.The design does not take into account any dynamic or other loads other than those expressly stated.