MiTek

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

RE: 1125-003 - Johnny Mathis

**MiTek, Inc.**
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200

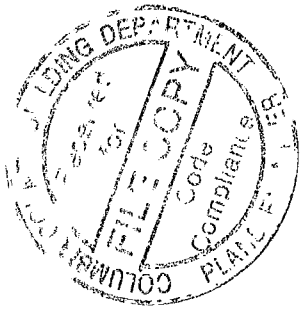
**Site Information:**
Customer Info: Johnny Mathis Project Name: . Model: .
Lot/Block: . Subdivision: .
Address: ., .
City: Lake City State: Fl

**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: FBC2023/TPI2014 Design Program: MiTek 20/20 8.8
Wind Code: ASCE 7-22 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

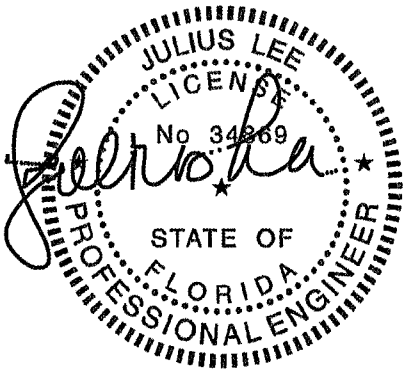
This package includes 9 individual, Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

| No. | Seal# | Truss Name | Date |
|---|---|---|---|
| 1 | T39093311 | A01 | 11/5/25 |
| 2 | T39093312 | A02 | 11/5/25 |
| 3 | T39093313 | A03 | 11/5/25 |
| 4 | T39093314 | A04 | 11/5/25 |
| 5 | T39093315 | A05 | 11/5/25 |
| 6 | T39093316 | A06 | 11/5/25 |
| 7 | T39093317 | A07 | 11/5/25 |
| 8 | T39093318 | B01 | 11/5/25 |
| 9 | T39093319 | B02 | 11/5/25 |




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: Lee, Julius
My license renewal date for the state of Florida is February 28, 2027.




Julius Lee PE No 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date

November 6,2025

**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1 These designs are based upon parameters shown (e g , loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2

| Job | Truss | Truss Type | Qty | Ply | Johnny Mathis | T39093311 |
|---|---|---|---|---|---|---|
| 1125-003 | A01 | Roof Special Structural Gable | 1 | 1 | Job Reference (optional) | |

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run 8 83 S Sep 3 2025 Print: 8 830 S Sep 3 2025 MiTek Industries, Inc. Wed Nov 05 09:37:25 Page. 1
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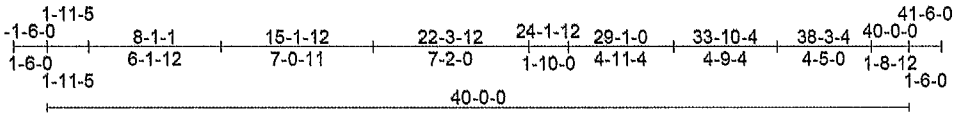
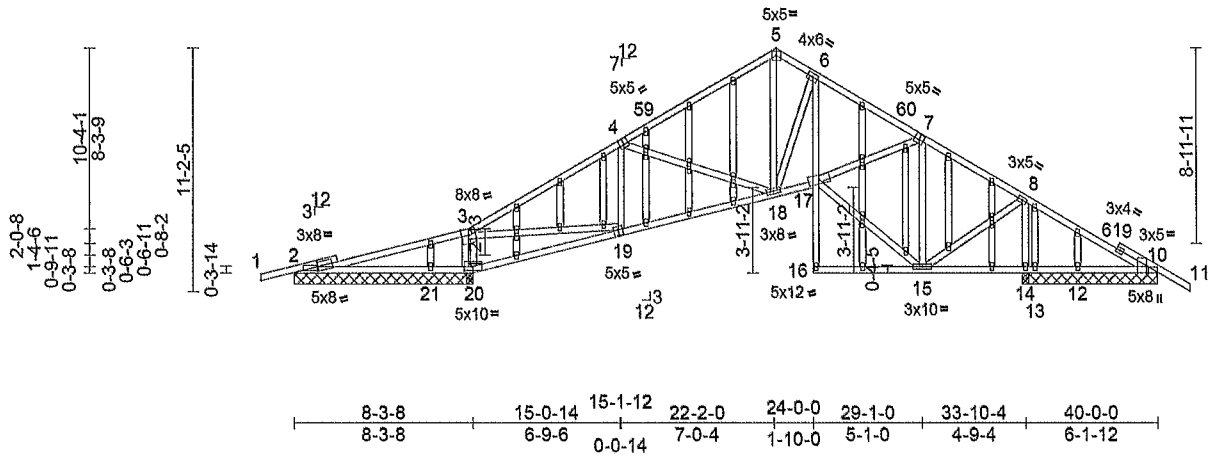



LATERALLY BRACE TOP CHORD WITH PURLINS AT 2-0-0 o/c
IF STRUCTURAL SHEATHING IS NOT DIRECTLY APPLIED







Scale = 1 106.6

Plate Offsets (X, Y) [2 0-0-4,0-2-6], [2 Edge,0-2-4], [4.0-2-8,0-3-4] [7 0-2-8,0-3-0], [10 0-3-8,Edge], [10:0-0-9,Edge], [19:0-2-8,0-3-0], [20 0-5-0,0-1-4], [24 0-1-11,0-1-0], [25 0-1-11,0-1-0], [28 0-1-11,0-1-0], [35 0-1-8,0-1-0], [41:0-1-12,0-1-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | In | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20 0 | Plate Grip DOL | 1 25 | TC | 0 58 | Vert(LL) | 0 07 | 21-55 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10 0 | Lumber DOL | 1 25 | BC | 0 55 | Vert(CT) | -0 16 | 18-19 | >999 | 180 | | |
| BCLL | 0 0* | Rep Stress Incr | YES | WB | 0 56 | Horz(CT) | 0 08 | 14 | n/a | n/a | | |
| BCDL | 10 0 | Code | FBC2023/TPI2014 | Matrix-AS | | | | | | | Weight 306 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No 2
BOT CHORD 2x4 SP No 2
WEBS 2x4 SP No 2
OTHERS 2x4 SP No 2

**BRACING**
TOP CHORD Structural wood sheathing directly applied
BOT CHORD Rigid ceiling directly applied

**REACTIONS** (size) 2=8-3-8, 10=6-3-8, 12=6-3-8, 13=6-3-8, 14=0-3-8, 20=8-3-8, 21=8-3-8
Max Horiz 2=195 (LC 11)
Max Uplift 2=-76 (LC 8), 10=-135 (LC 23), 13=-193 (LC 1), 20=-28 (LC 12)
Max Grav 2=433 (LC 23), 10=4 (LC 24), 12=132 (LC 3), 13=-19 (LC 12), 14=1830 (LC 1), 20=1201 (LC 1), 21=231 (LC 3)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-74/276, 3-5=-1323/95, 5-6=-887/110, 6-8=-1143/130, 8-10=-51/849, 10-11=0/45
BOT CHORD 2-21=-188/27, 20-21=-188/27, 18-20=-315/1139, 17-18=0/937, 16-17=0/91, 6-17=0/324, 15-16=0/20, 14-15=-666/83, 13-14=-666/83, 12-13=-666/83, 10-12=-666/83
WEBS 6-18=-418/41, 3-20=-1114/291, 4-19=-204/82, 3-19=0/1339, 4-18=-339/148, 5-18=-19/602, 7-17=0/626, 8-14=-1581/104, 7-15=-876/18, 15-17=0/431, 8-15=-1/1217

**NOTES**
1) Unbalanced roof live loads have been considered for this design
2) Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCDL=6.0psf; BCDL=6 0psf; h=15ft, B=45ft, L=40ft, eave=5ft; Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 -1-6-0 to 2-3-7, Zone1 2-3-7 to 22-3-12, Zone2 22-3-12 to 27-11-10, Zone1 27-11-10 to 41-6-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 3-06-00 tall by 2-00-00 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 76 lb uplift at joint 2, 135 lb uplift at joint 10, 28 lb uplift at joint 20, 193 lb uplift at joint 13, 76 lb uplift at joint 2 and 135 lb uplift at joint 10
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

**LOAD CASE(S)** Standard


Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd Chesterfield, MO 63017
Date:

November 6,2025

| Job | Truss | Truss Type | Qty | Ply | Johnny Mathis | T39093312 |
|---|---|---|---|---|---|---|
| 1125-003 | A02 | Roof Special | 4 | 1 | Job Reference (optional) | |

Mayo Truss Company, Inc. Mayo, FL - 32066, Run 8 83 S Sep 3 2025 Print: 8 830 S Sep 3 2025 MiTek Industries Inc. Wed Nov 05 09:37.27 Page 1
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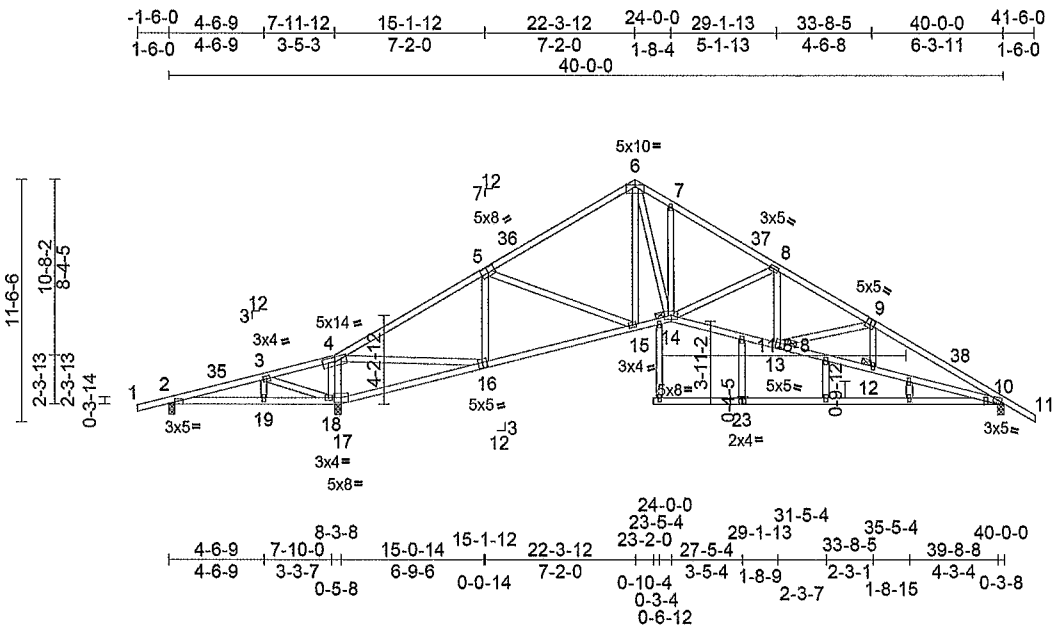





Scale = 1 110 1

Plate Offsets (X, Y) [2 0-3-4,Edge], [5 0-4-0,0-3-0], [9 0-2-8,0-3-0], [13 0-2-8,0-3-0], [16 0-2-8,0-3-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20 0 | Plate Grip DOL | 1 25 | TC | 0.48 | Vert(LL) | -0 18 | 13-14 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10 0 | Lumber DOL | 1.25 | BC | 0 73 | Vert(CT) | -0.38 | 13-14 | >999 | 180 | | |
| BCLL | 0 0* | Rep Stress Incr | YES | WB | 0 54 | Horz(CT) | 0 23 | 10 | n/a | n/a | | |
| BCDL | 10 0 | Code | FBC2023/TPI2014 | Matrix-AS | | | | | | | Weight. 260 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
BOT CHORD Rigid ceiling directly applied
JOINTS 1 Brace at Jt(s) 13, 14, 12

**REACTIONS** (size) 2=0-3-8, 10=0-3-8, 17=0-3-8
Max Horiz 2=193 (LC 11)
Max Uplift 2=-120 (LC 8), 10=-36 (LC 12), 17=-57 (LC 12)
Max Grav 2=207 (LC 23), 10=1283 (LC 1), 17=1964 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=0/625, 3-4=-13/1109, 4-6=-1595/115, 6-7=-1882/165, 7-8=-1963/85, 8-10=-3194/97, 10-11=0/45
BOT CHORD 2-19=-569/0, 18-19=-569/0, 17-18=-1042/113, 15-17=-1300/1249, 14-15=0/1305, 12-14=0/2771, 10-12=0/2770
WEBS 6-14=-98/1369, 5-16=-586/102, 5-15=-63/232, 6-15=-8/189, 7-14=-206/138, 8-13=0/384, 8-14=-677/105, 9-13=-464/85, 9-12=0/188, 4-17=-1320/223, 4-16=-29/2400, 4-18=-134/0, 3-18=-601/201, 3-19=-60/189

**NOTES**
1) Unbalanced roof live loads have been considered for this design
2) Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCDL=6 0psf; BCDL=6 0psf; h=15ft, B=45ft, L=40ft; eave=5ft, Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 -1-6-0 to 2-6-0, Zone1 2-6-0 to 22-3-12, Zone2 22-3-12 to 27-11-10, Zone1 27-11-10 to 41-6-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) All plates are 2x4 (||) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members
7) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula Building designer should verify capacity of bearing surface
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 2, 36 lb uplift at joint 10 and 57 lb uplift at joint 17
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

**LOAD CASE(S)** Standard

JULIUS LEE LICENSE No 34869 STATE OF FLORIDA PROFESSIONAL ENGINEER

Julius Lee PE No 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd Chesterfield, MO 63017
Date:

November 6,2025




MiTek®
16023 Swingley Ridge Rd
Chesterfield MO 63017
314.434 1200 / MiTek-US.com

| Job | Truss | Truss Type | Qty | Ply | Johnny Mathis | T39093313 |
|---|---|---|---|---|---|---|
| 1125-003 | A03 | Roof Special | 5 | 1 | Job Reference (optional) | |

Mayo Truss Company, Inc. Mayo, FL - 32066,

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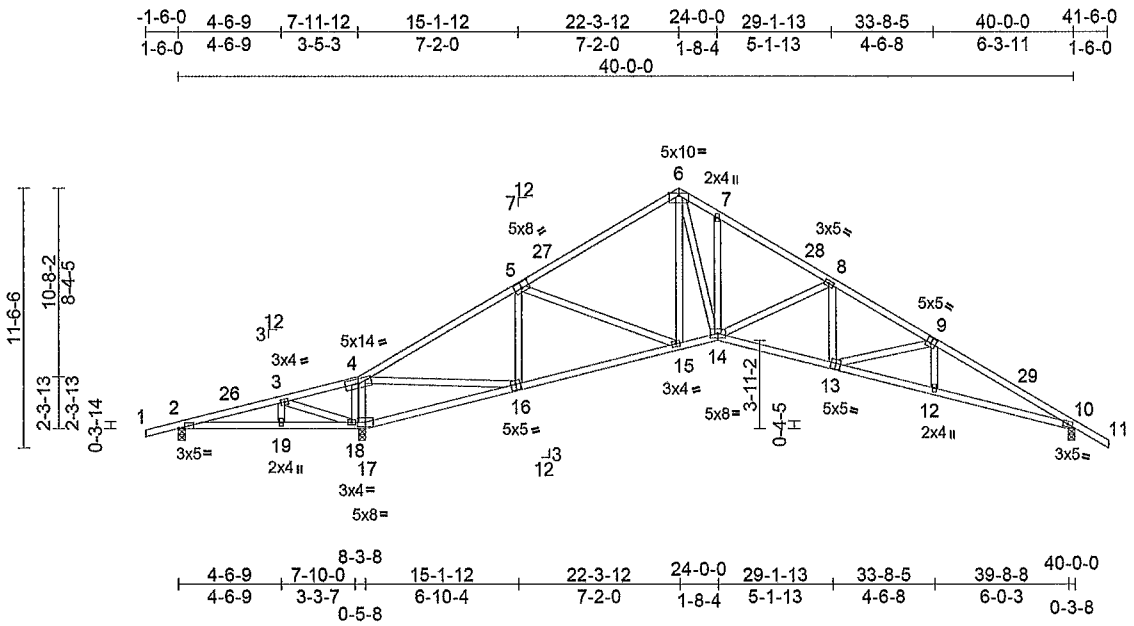


Scale = 1 102 7

Plate Offsets (X, Y) [2 0-3-4,Edge], [5 0-4-0,0-3-0], [9 0-2-8,0-3-0], [13 0-2-8,0-3-0], [16 0-2-8,0-3-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20 0 | Plate Grip DOL | 1 25 | TC | 0 48 | Vert(LL) | -0 18 | 13-14 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10 0 | Lumber DOL | 1 25 | BC | 0 67 | Vert(CT) | -0 38 | 13-14 | >999 | 180 | | |
| BCLL | 0 0* | Rep Stress Incr | YES | WB | 0 54 | Horz(CT) | 0 23 | 10 | n/a | n/a | | |
| BCDL | 10 0 | Code | FBC2023/TPI2014 | Matrix-AS | | | | | | | Weight: 222 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
BOT CHORD Rigid ceiling directly applied

**REACTIONS** (size) 2=0-3-8, 10=0-3-8, 17=0-3-8
Max Horiz 2=193 (LC 11)
Max Uplift 2=-120 (LC 8), 10=-36 (LC 12), 17=-57 (LC 12)
Max Grav 2=207 (LC 23), 10=1283 (LC 1), 17=1964 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=0/625, 3-4=-13/1109, 4-6=-1595/115, 6-7=-1882/165, 7-8=-1963/85, 8-10=-3194/97, 10-11=0/45
BOT CHORD 2-19=-569/0, 18-19=-569/0, 17-18=-1042/113, 15-17=-1300/1249, 14-15=0/1305, 12-14=0/2771, 10-12=0/2770
WEBS 6-14=-98/1369, 5-16=-586/102, 5-15=-63/232, 6-15=-8/189, 7-14=-206/138, 8-13=0/384, 8-14=-677/105, 9-13=-464/85, 9-12=0/188, 4-17=-1320/223, 4-16=-29/2400, 4-18=-134/0, 3-18=-601/201, 3-19=-60/189

**NOTES**
1) Unbalanced roof live loads have been considered for this design
2) Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCDL=6 0psf; BCDL=6 0psf, h=15ft, B=45ft, L=40ft; eave=5ft, Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 -1-6-0 to 2-6-0, Zone1 2-6-0 to 22-3-12, Zone2 22-3-12 to 27-11-10, Zone1 27-11-10 to 41-6-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component
4) This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads
5) * This truss has been designed for a live load of 20 0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members
6) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula Building designer should verify capacity of bearing surface
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 2, 36 lb uplift at joint 10 and 57 lb uplift at joint 17
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

**LOAD CASE(S)** Standard


Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date

November 6,2025




MiTek®
16023 Swingley Ridge Rd
Chesterfield MO 63017
314.434 1200 / MiTek-US.com

| Job | Truss | Truss Type | Qty | Ply | Johnny Mathis |
|---|---|---|---|---|---|
| 1125-003 | A04 | Roof Special | 4 | 1 | T39093314 |
| | | | | | Job Reference (optional) |

Mayo Truss Company, Inc., Mayo, FL - 32066

Run 8.83 S Sep 3 2025 Print. 8 830 S Sep 3 2025 MiTek Industries, Inc. Wed Nov 05 09.37 27 Page: 1

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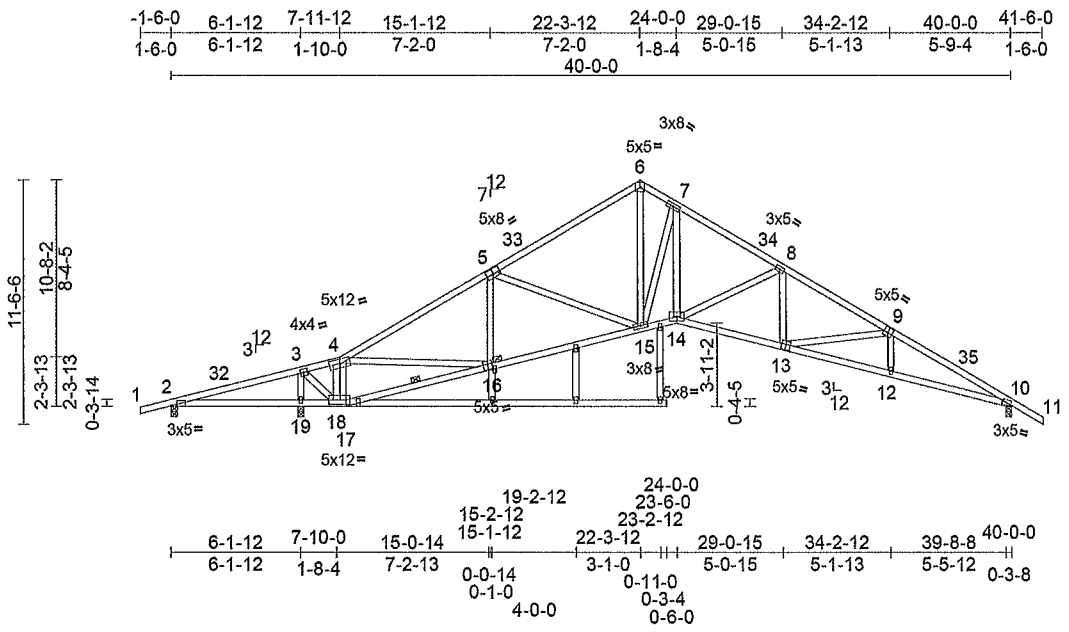


Scale = 1 109.4

Plate Offsets (X, Y) [2 0-3-4,Edge], [5.0-4-0,0-3-0], [9 0-2-8,0-3-0], [10 0-0-14,0-0-7], [13 0-2-8,0-3-0], [16 0-2-8,0-3-0], [16 0-2-0,0-0-8], [17 0-9-12,0-2-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20 0 | Plate Grip DOL | 1 25 | TC | 0 62 | Vert(LL) | -0 23 | 13-14 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10 0 | Lumber DOL | 1.25 | BC | 0 71 | Vert(CT) | -0.47 | 13-14 | >865 | 180 | | |
| BCLL | 0 0* | Rep Stress Incr | YES | WB | 0 85 | Horz(CT) | 0 28 | 10 | n/a | n/a | | |
| BCDL | 10 0 | Code | FBC2023/TPI2014 | Matrix-AS | | | | | | | Weight. 254 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
BOT CHORD Rigid ceiling directly applied
JOINTS 1 Brace at Jt(s) 16

**REACTIONS** (size) 2=0-3-8, 10=0-3-8, 19=0-3-8
Max Horiz 2=193 (LC 11)
Max Uplift 2=-163 (LC 24), 10=-38 (LC 12), 19=-33 (LC 12)
Max Grav 2=20 (LC 23), 10=1368 (LC 1), 19=2095 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/22, 2-3=0/1549, 3-4=-46/222, 4-6=-1989/133, 6-7=-1719/154, 7-8=-2247/108, 8-10=-3500/114, 10-11=0/45

BOT CHORD 2-19=-1457/48, 18-19=-1457/48, 17-18=-145/115, 15-17=-127/1718, 14-15=0/1911, 12-14=-22/3052, 10-12=-21/3043

WEBS 3-19=-1858/65, 7-15=-1327/99, 5-16=-340/84, 5-15=-291/149, 6-15=-78/1434, 7-14=0/1380, 8-14=-688/105, 8-13=0/381, 9-13=-483/91, 9-12=0/179, 4-17=0/384, 4-18=-1505/40, 3-18=0/1822, 4-16=0/1611

**NOTES**

1) Unbalanced roof live loads have been considered for this design
2) Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCDL=6 0psf; BCDL=6 0psf; h=15ft, B=45ft, L=40ft; eave=5ft, Cat II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 -1-6-0 to 2-6-0, Zone1 2-6-0 to 22-3-12, Zone2 22-3-12 to 27-11-10, Zone1 27-11-10 to 41-6-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component
4) All plates are 2x4 (||) 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 163 lb uplift at joint 2, 33 lb uplift at joint 19 and 38 lb uplift at joint 10
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

**LOAD CASE(S)** Standard


Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2025

| Job | Truss | Truss Type | Qty | Ply | Johnny Mathis | T39093315 |
|---|---|---|---|---|---|---|
| 1125-003 | A05 | Roof Special | 2 | 1 | Job Reference (optional) | |

Mayo Truss Company, Inc. Mayo FL - 32066,

Run 8 83 S Sep 3 2025 Print: 8 830 S Sep 3 2025 MiTek Industries, Inc. Wed Nov 05 09:37:28

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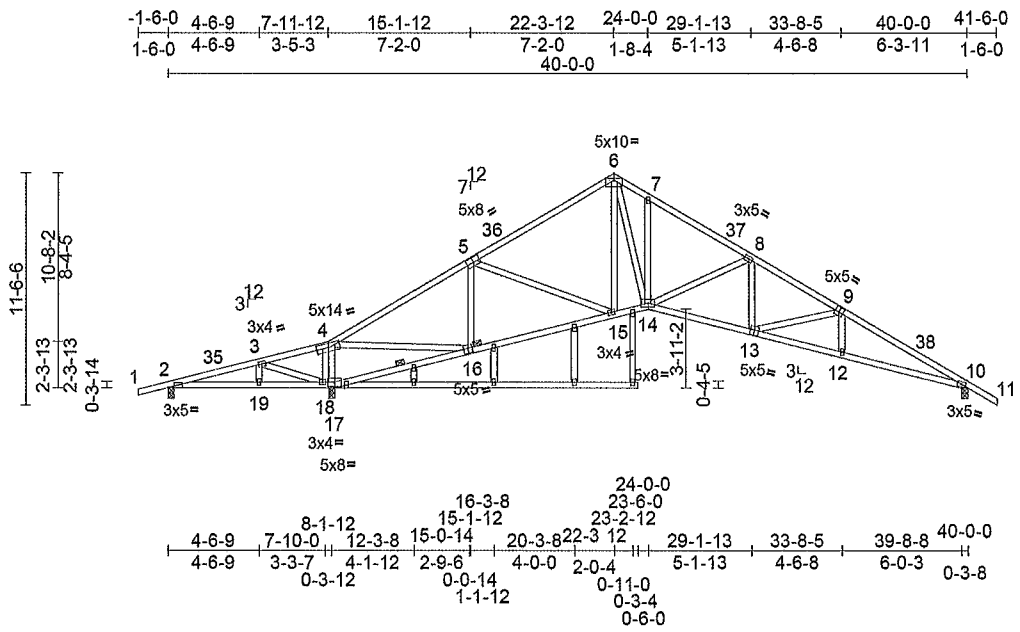
Page 1




Scale = 1 115 1

Plate Offsets (X, Y) [2 0-3-4 Edge], [5 0-4-0,0-3-0], [9 0-2-8,0-3-0], [13 0-2-8,0-3-0], [16 0-2-8,0-3-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20 0 | Plate Grip DOL | 1 25 | TC | 0.49 | Vert(LL) | -0 18 | 13-14 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10 0 | Lumber DOL | 1 25 | BC | 0 67 | Vert(CT) | -0 38 | 13-14 | >999 | 180 | | |
| BCLL | 0 0* | Rep Stress Incr | YES | WB | 0 54 | Horz(CT) | 0 23 | 10 | n/a | n/a | | |
| BCDL | 10 0 | Code | FBC2023/TPI2014 | Matrix-AS | | | | | | | Weight. 257 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
BOT CHORD Rigid ceiling directly applied
JOINTS 1 Brace at Jt(s). 16

**REACTIONS** (size) 2=0-3-8, 10=0-3-8, 17=0-3-8
Max Horiz 2=193 (LC 11)
Max Uplift 2=-120 (LC 8), 10=-36 (LC 12), 17=-57 (LC 12)
Max Grav 2=207 (LC 23), 10=1283 (LC 1), 17=1964 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=0/625, 3-4=-13/1106, 4-6=-1595/115, 6-7=-1873/165, 7-8=-1962/85, 8-10=-3194/97, 10-11=0/45
BOT CHORD 2-19=-569/0, 18-19=-569/0, 17-18=-1038/113, 15-17=-1296/1249, 14-15=0/1306, 12-14=0/2771, 10-12=0/2769
WEBS 6-14=-98/1363, 5-16=-585/102, 5-15=-63/232, 6-15=-8/189, 7-14=-206/138, 8-13=0/384, 8-14=-677/105, 9-13=-464/85, 9-12=0/188, 4-17=-1321/223, 4-16=-29/2394, 4-18=-134/0, 3-18=-593/201, 3-19=-60/189

**NOTES**

1) Unbalanced roof live loads have been considered for this design
2) Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCDL=6 0psf; BCDL=6 0psf; h=15ft, B=45ft, L=40ft; eave=5ft, Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 -1-6-0 to 2-6-0, Zone1 2-6-0 to 22-3-12, Zone2 22-3-12 to 27-11-10, Zone1 27-11-10 to 41-6-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) All plates are 2x4 (||) 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 3-06 00 tall by 2-00-00 wide will fit between the bottom chord and any other members
7) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula Building designer should verify capacity of bearing surface
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 2, 36 lb uplift at joint 10 and 57 lb uplift at joint 17
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

**LOAD CASE(S)** Standard


Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

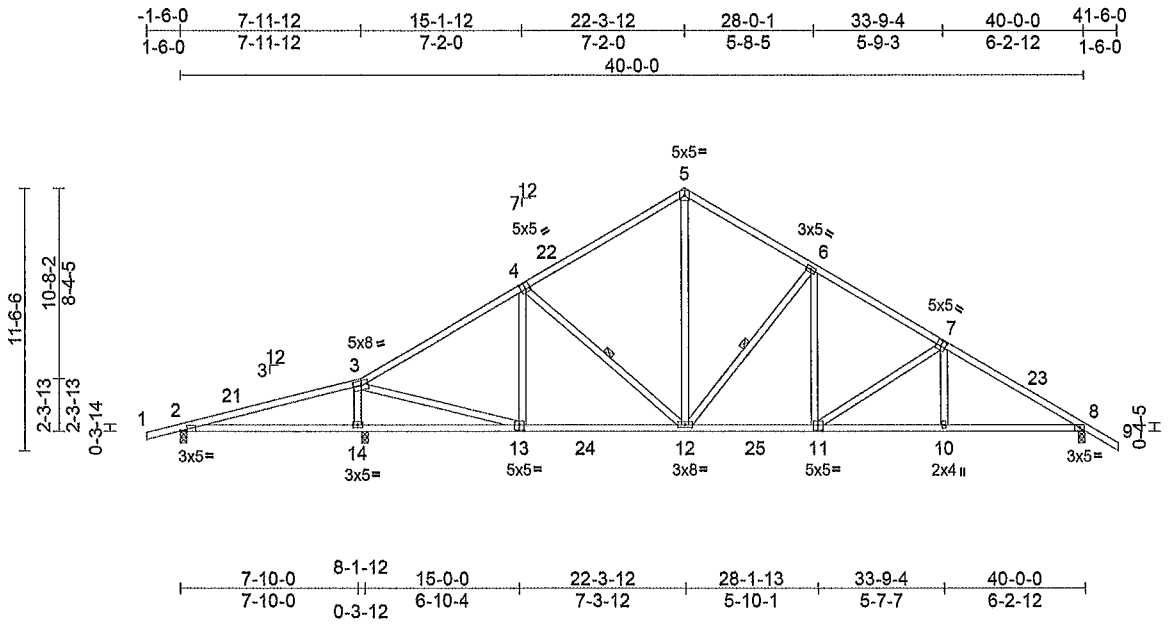
November 6,2025

| Job | Truss | Truss Type | Qty | Ply | Johnny Mathis | T39093316 |
|---|---|---|---|---|---|---|
| 1125-003 | A06 | Roof Special | 5 | 1 | Job Reference (optional) | |

Mayo Truss Company, Inc. Mayo FL - 32066,

Run 8.83 S Sep 3 2025 Print: 8 830 S Sep 3 2025 MiTek Industries, Inc. Wed Nov 05 09:37 28 ID:zM48MQIdIzW_slbRlrBjeyyMHer-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDol7J4zJC?f






Scale = 1 101 6

Plate Offsets (X, Y). [2 0-3-4,Edge], [4 0-2-8,0-3-4], [7 0-2-8,0-3-0], [11 0-2-8,0-3-0], [13:0-2-8,0-3-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20 0 | Plate Grip DOL | 1 25 | TC | 0 58 | Vert(LL) | 0 12 | 14-17 | >768 | 240 | MT20 | 244/190 |
| TCDL | 10 0 | Lumber DOL | 1 25 | BC | 0 60 | Vert(CT) | -0 24 | 12-13 | >999 | 180 | | |
| BCLL | 0 0* | Rep Stress Incr | YES | WB | 0 46 | Horz(CT) | 0 06 | 8 | n/a | n/a | | |
| BCDL | 10 0 | Code | FBC2023/TPI2014 | Matrix-AS | | | | | | | Weight. 221 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
BOT CHORD Rigid ceiling directly applied
WEBS 1 Row at midpt 4-12, 6-12

**REACTIONS** (size) 2=0-3-8, 8=0-3-8, 14=0-3-8
Max Horiz 2=193 (LC 11)
Max Uplift 2=-108 (LC 12), 8=-36 (LC 12), 14=-60 (LC 12)
Max Grav 2=324 (LC 23), 8=1515 (LC 18), 14=1909 (LC 17)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-97/438, 3-5=-1548/197, 5-6=-1325/204, 6-8=-2374/166, 8-9=0/45
BOT CHORD 2-14=-357/80, 12-14=-246/1357, 10-12=-3/1975, 8-10=-2/1979
WEBS 3-14=-1654/139, 3-13=0/1531, 4-13=-234/96, 4-12=-291/104, 5-12=-58/968, 6-12=-760/121, 6-11=0/534, 7-11=-571/70, 7-10=0/247

**NOTES**
1) Unbalanced roof live loads have been considered for this design
2) Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCDL=6 0psf; BCDL=6 0psf; h=15ft, B=45ft, L=40ft; eave=5ft, Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 -1-6-0 to 2-6-0, Zone1 2-6-0 to 22-3-12, Zone2 22-3-12 to 28-0-1, Zone1 28-0-1 to 41-6-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component
4) This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads
5) * This truss has been designed for a live load of 20 0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10 0psf
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 108 lb uplift at joint 2, 60 lb uplift at joint 14 and 36 lb uplift at joint 8
7) 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

**LOAD CASE(S)** Standard


Julius Lee PE No 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd Chesterfield, MO 63017
Date:

November 6,2025



MiTek®
16023 Swingley Ridge Rd
Chesterfield, MO 63017
314.434 1200 / MiTek-US.com

| Job | Truss | Truss Type | Qty | Ply | Johnny Mathis |
|---|---|---|---|---|---|
| 1125-003 | A07 | Roof Special Supported Gable | 1 | 1 | T39093317<br>Job Reference (optional) |

Mayo Truss Company, Inc. Mayo, FL - 32066, Run 8 83 S Sep 3 2025 Print. 8 830 S Sep 3 2025 MiTek Industries, Inc. Wed Nov 05 09:37:28 Page 1

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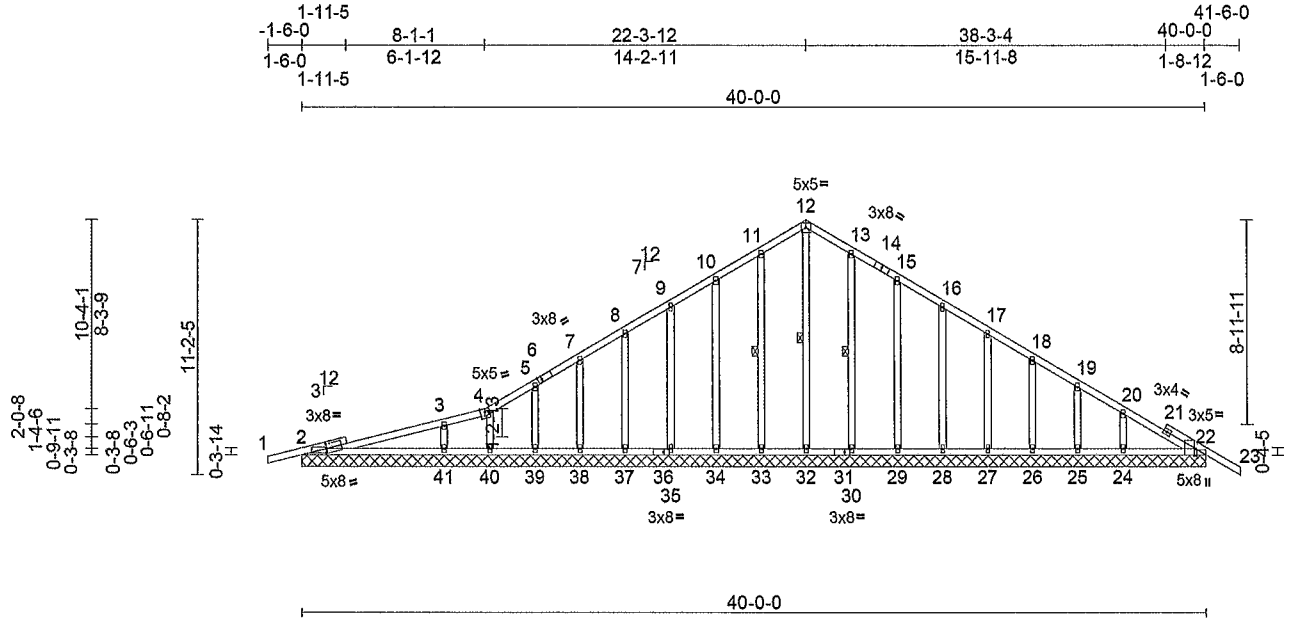
LATERALLY BRACE TOP CHORD WITH PURLINS AT 2-0-0 o/c
IF STRUCTURAL SHEATHING IS NOT DIRECTLY APPLIED




Scale = 1 101 6

Plate Offsets (X, Y) [2 0-0-4,0-2-6], [2:Edge,0-2-4], [6 0-2-2,0-1-8], [22 0-3-8,Edge], [22 0-0-9,Edge], [31 0-2-12,0-1-8], [36.0-2-12,0-1-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20 0 | Plate Grip DOL | 1 25 | TC | 0 38 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10 0 | Lumber DOL | 1 25 | BC | 0 38 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0 0* | Rep Stress Incr | YES | WB | 0 12 | Horz(CT) | 0 01 | 45 | n/a | n/a | | |
| BCDL | 10 0 | Code | FBC2023/TPI2014 | Matrix-AS | | | | | | | Weight. 259 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No 2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No 2

**BRACING**
TOP CHORD Structural wood sheathing directly applied
BOT CHORD Rigid ceiling directly applied
WEBS 1 Row at midpt 12-32, 11-33, 13-30

**REACTIONS** (size) 2=40-0-0, 22=40-0-0, 24=40-0-0, 25=40-0-0, 26=40-0-0, 27=40-0-0, 28=40-0-0, 29=40-0-0, 30=40-0-0, 32=40-0-0, 33=40-0-0, 34=40-0-0, 35=40-0-0, 37=40-0-0, 38=40-0-0, 39=40-0-0, 40=40-0-0, 41=40-0-0
Max Horiz 2=195 (LC 11)
Max Uplift 2=-55 (LC 8), 22=-24 (LC 12), 25=-24 (LC 12), 26=-14 (LC 12), 27=-17 (LC 12), 28=-15 (LC 12), 29=-20 (LC 12), 30=-6 (LC 12), 33=-6 (LC 12), 34=-20 (LC 12), 35=-15 (LC 12), 37=-16 (LC 12), 38=-16 (LC 12), 39=-18 (LC 12), 40=-81 (LC 17), 41=-3 (LC 12)
Max Grav 2=416 (LC 1), 22=242 (LC 1), 24=258 (LC 1), 25=126 (LC 18), 26=169 (LC 1), 27=158 (LC 18), 28=161 (LC 18), 29=160 (LC 18), 30=166 (LC 24), 32=165 (LC 12), 33=166 (LC 17), 34=160 (LC 1), 35=160 (LC 17), 37=164 (LC 23), 38=146 (LC 17), 39=220 (LC 1), 40=15 (LC 9), 41=588 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/22, 2-3=-137/129, 3-4=-127/106, 4-5=-125/130, 5-7=-118/109, 7-8=-105/105, 8-9=-96/173, 9-10=-88/240, 10-11=-109/312, 11-12=-128/369, 12-13=-128/369, 13-15=-109/312, 15-16=-85/240, 16-17=-64/173, 17-18=-52/105, 18-19=-59/42, 19-20=-76/49, 20-22=-129/81, 22-23=0/45
BOT CHORD 2-41=-64/207, 40-41=-64/207, 39-40=-66/207, 38-39=-66/207, 37-38=-66/207, 35-37=-66/207, 34-35=-66/207, 33-34=-66/207, 32-33=-66/207, 30-32=-66/207, 29-30=-66/207, 28-29=-66/207, 27-28=-66/207, 26-27=-66/207, 25-26=-66/207, 24-25=-66/207, 22-24=-66/207
WEBS 12-32=-270/61, 11-33=-126/90, 10-34=-120/119, 9-35=-120/108, 8-37=-122/112, 7-38=-112/105, 5-39=-153/132, 4-40=-19/34, 3-41=-377/225, 13-30=-126/90, 15-29=-120/119, 16-28=-120/109, 17-27=-119/110, 18-26=-125/112, 19-25=-101/106, 20-24=-180/130

**NOTES**
1) Unbalanced roof live loads have been considered for this design
2) Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCDL=6 0psf; BCDL=6 0psf; h=15ft, B=45ft, L=40ft, eave=2ft; Cat II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) All plates are 2x4 (||) MT20 unless otherwise indicated
6) Gable requires continuous bottom chord bearing
7) Gable studs spaced at 2-0-0 oc
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members


Julius Lee PE No. 34869
MiTek Inc DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd Chesterfield, MO 63017
Date

November 6,2025

Continued on page 2



MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434 1200 / MiTek-US.com

| Job | Truss | Truss Type | Qty | Ply | Johnny Mathis |
|---|---|---|---|---|---|
| 1125-003 | A07 | Roof Special Supported Gable | 1 | 1 | T39093317<br>Job Reference (optional) |



10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 2, 24 lb uplift at joint 22, 6 lb uplift at joint 33, 20 lb uplift at joint 34, 15 lb uplift at joint 35, 16 lb uplift at joint 37, 16 lb uplift at joint 38, 18 lb uplift at joint 39, 81 lb uplift at joint 40, 3 lb uplift at joint 41, 6 lb uplift at joint 30, 20 lb uplift at joint 29, 15 lb uplift at joint 28, 17 lb uplift at joint 27, 14 lb uplift at joint 26, 24 lb uplift at joint 25, 55 lb uplift at joint 2 and 24 lb uplift at joint 22.
11) 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

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | Johnny Mathis | T39093318 |
|---|---|---|---|---|---|---|
| 1125-003 | B01 | Scissor | 1 | 1 | Job Reference (optional) | |

Mayo Truss Company, Inc. Mayo, FL - 32066, Run 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2026 MiTek Industries, Inc. Wed Nov 05 09:37:29 Page 1
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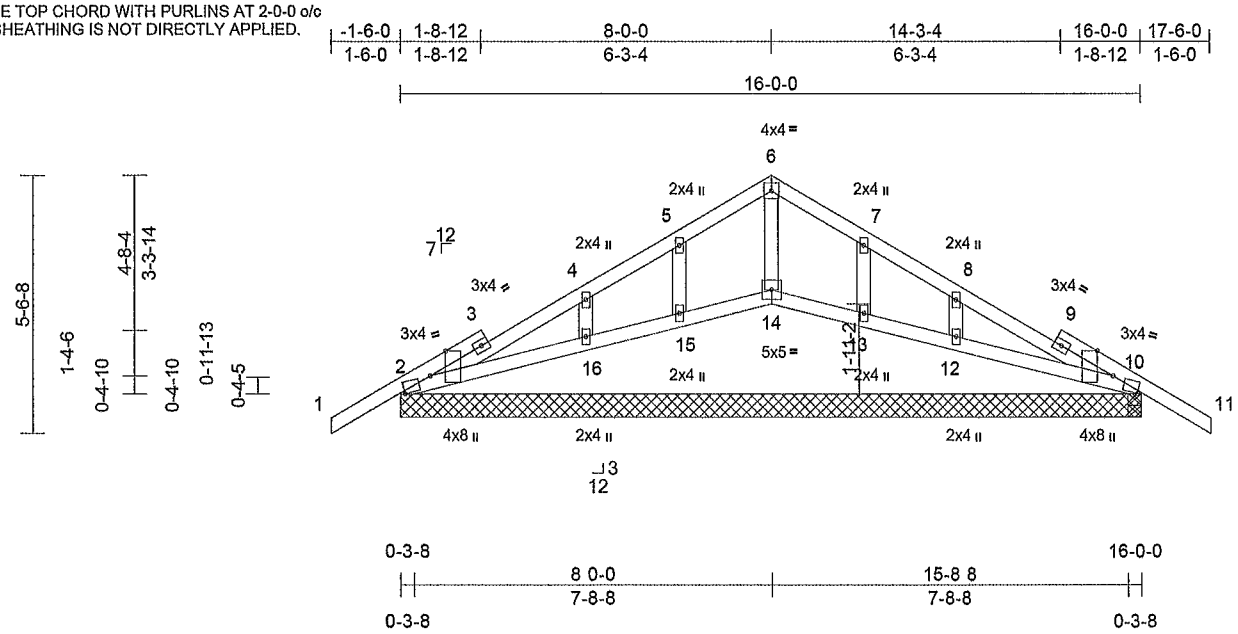
LATERALLY BRACE TOP CHORD WITH PURLINS AT 2-0-0 o/c
IF STRUCTURAL SHEATHING IS NOT DIRECTLY APPLIED.




Scale = 1.49.7

Plate Offsets (X, Y) [2 0-6-6,Edge], [2 0-7-4,Edge], [10 0-6-6,Edge], [10 0-7-4,Edge]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20 0 | Plate Grip DOL | 1 25 | TC | 0 17 | Vert(LL) | 0 00 | 16-19 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10 0 | Lumber DOL | 1.25 | BC | 0 11 | Vert(CT) | -0 01 | 16-19 | >999 | 180 | | |
| BCLL | 0 0* | Rep Stress Incr | YES | WB | 0 02 | Horz(CT) | 0 00 | 20 | n/a | n/a | | |
| BCDL | 10 0 | Code | FBC2023/TPI2014 | Matrix-AS | | | | | | | Weight. 72 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No 2
BOT CHORD 2x4 SP No 2
OTHERS 2x4 SP No 2

**BRACING**
TOP CHORD Structural wood sheathing directly applied
BOT CHORD Rigid ceiling directly applied

**REACTIONS** (size) 2=16-0-0, 10=16-0-0, 12=16-0-0, 13=16-0-0, 14=16-0-0, 15=16-0-0, 16=16-0-0
Max Horiz 2=-90 (LC 10)
Max Uplift 2=-59 (LC 12), 10=-66 (LC 12), 12=-6 (LC 12), 13=-20 (LC 12), 15=-19 (LC 12), 16=-10 (LC 12)
Max Grav 2=242 (LC 23), 10=251 (LC 24), 12=266 (LC 1), 13=127 (LC 24), 14=184 (LC 17), 15=118 (LC 23), 16=285 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/45, 2-4=-68/95, 4-5=-50/75, 5-6=-56/126, 6-7=-56/126, 7-8=-38/73, 8-10=-86/64, 10-11=0/50
BOT CHORD 2-16=-46/103, 16-16=-59/107, 14-15=-52/105, 13-14=-52/105, 12-13=-57/106, 10-12=-56/136
WEBS 6-14=-135/0, 5-15=-103/80, 4-16=-184/109, 7-13=-106/81, 8-12=-176/105

**NOTES**
1) Unbalanced roof live loads have been considered for this design
2) Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCDL=6 0psf; BCDL=6 0psf; h=15ft, B=45ft, L=24ft, eave=2ft, Cat II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads
7) * This truss has been designed for a live load of 20 0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 59 lb uplift at joint 2, 66 lb uplift at joint 10, 19 lb uplift at joint 15, 10 lb uplift at joint 16, 20 lb uplift at joint 13, 6 lb uplift at joint 12, 59 lb uplift at joint 2 and 66 lb uplift at joint 10
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

**LOAD CASE(S)** Standard


Julius Lee PE No. 34869
MiTek Inc DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2025

| Job | Truss | Truss Type | Qty | Ply | Johnny Mathis |
|---|---|---|---|---|---|
| 1125-003 | B02 | Scissor | 5 | 1 | T39093319 |
| | | | | | Job Reference (optional) |

Mayo Truss Company, Inc. Mayo, FL - 32066,

Run 8.83 S Sep 3 2025 Print. 8 830 S Sep 3 2025 MiTek Industries, Inc Wed Nov 05 09:37 29 Page: 1
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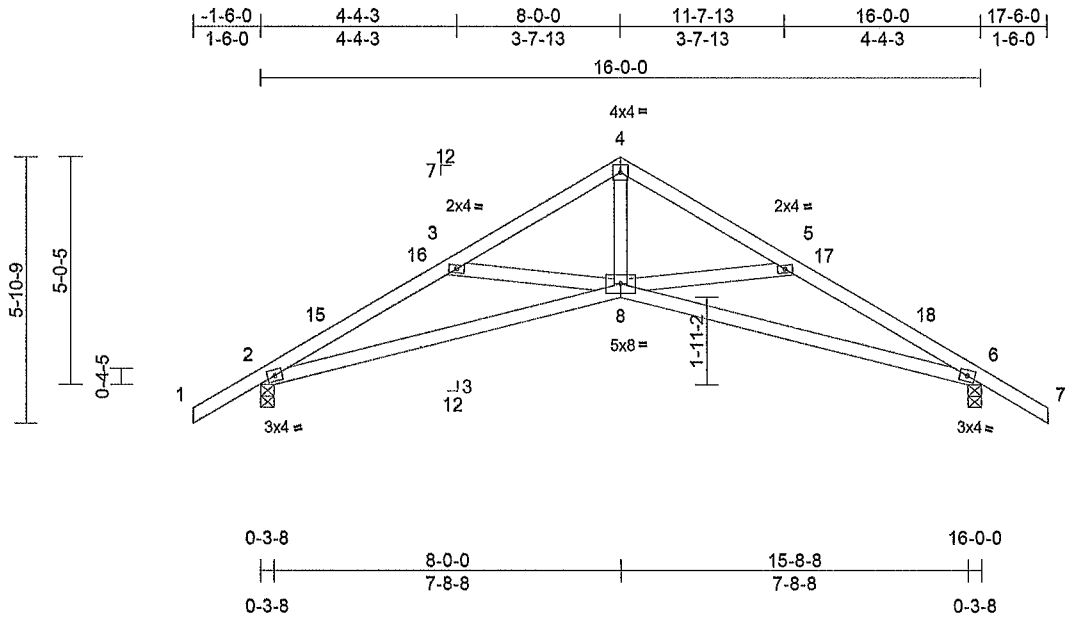






Scale = 1 51 1

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20 0 | Plate Grip DOL | 1 25 | TC | 0 23 | Vert(LL) | -0 09 | 8-11 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10 0 | Lumber DOL | 1 25 | BC | 0.53 | Vert(CT) | -0 19 | 8-11 | >998 | 180 | | |
| BCLL | 0 0* | Rep Stress Incr | YES | WB | 0 19 | Horz(CT) | 0 08 | 6 | n/a | n/a | | |
| BCDL | 10 0 | Code | FBC2023/TPI2014 | Matrix-AS | | | | | | | Weight. 73 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
BOT CHORD Rigid ceiling directly applied

**REACTIONS** (size) 2=0-3-8, 6=0-3-8
Max Horiz 2=-96 (LC 10)
Max Uplift 2=-36 (LC 12), 6=-36 (LC 12)
Max Grav 2=730 (LC 1), 6=730 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/45, 2-3=-1507/118, 3-4=-1147/48, 4-5=-1147/36, 5-6=-1507/131, 6-7=0/45
BOT CHORD 2-8=-26/1317, 6-8=-56/1317
WEBS 4-8=0/858, 3-8=-347/150, 5-8=-347/149

**NOTES**
1) Unbalanced roof live loads have been considered for this design
2) Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCDL=6 0psf; BCDL=6 0psf; h=15ft, B=45ft, L=24ft; eave=4ft, Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 8-0-0, Zone2 8-0-0 to 12-2-15, Zone1 12-2-15 to 17-6-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component
4) This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads
5) * This truss has been designed for a live load of 20 0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members
6) Bearing at joint(s) 2, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula Building designer should verify capacity of bearing surface
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2 and 36 lb uplift at joint 6
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

**LOAD CASE(S)** Standard


Julius Lee PE No. 34869
MiTek Inc DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd Chesterfield, MO 63017
Date

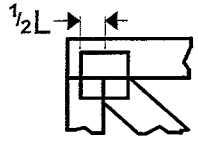
November 6,2025



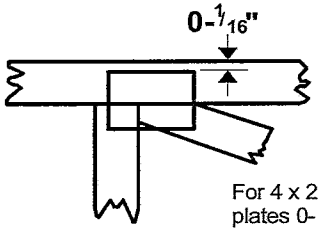

MiTek®
16023 Swingley Ridge Rd
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

# 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.

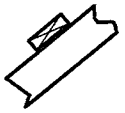
* Plate location details available in MiTek software or upon request.

## PLATE SIZE

4 x 4

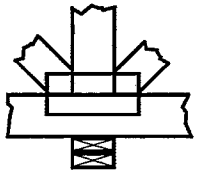
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots

## 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

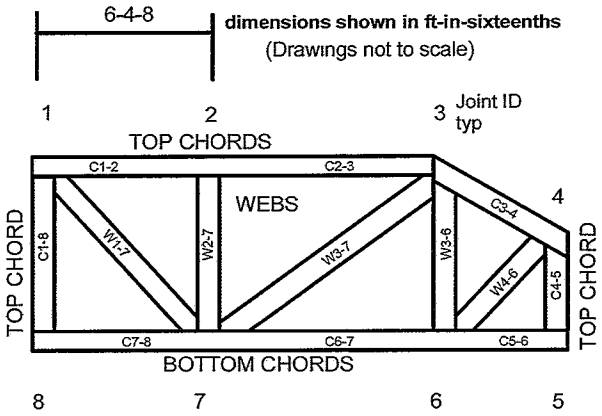


Indicates location where bearings (supports) occur Icons vary but reaction section indicates joint number/letter where bearings occur Min size shown is for crushing only

**Industry Standards:**

ANSI/TPI1· National Design Specification for Metal Plate Connected Wood Truss Construction
DSB-22 Design Standard for Bracing
BCSI Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & 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-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

# Design General Notes

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®

MiTek Engineering Reference Sheet: MII-7473 rev 1/2/2023

# 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

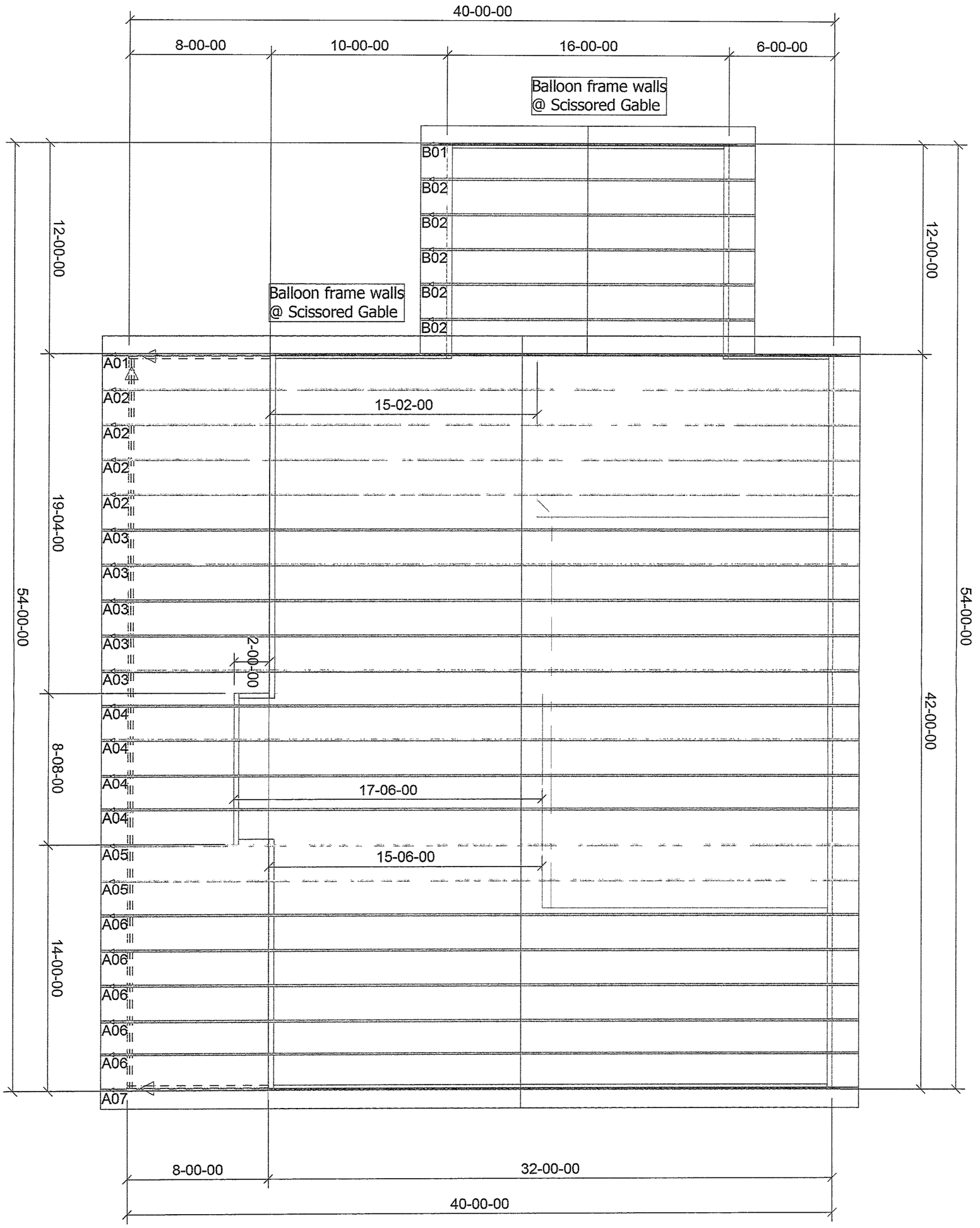
17 Install and load vertically unless indicated otherwise.

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




# Mathis Johnny

Client: IND-RES
Date: 11/5/2025
Quote Date: / /
Seal Date: / /
Designer:
Job Number: 1125-003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