

RE: J1024-5459

Lot 156 Duncan's Creek

Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J1024-5459

Lot/Block: Model:
Address: Subdivision: State:

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.4

Wind Code: N/A Wind Speed: N/A mph Roof Load: N/A psf Floor Load: 55.0 psf

This package includes 12 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal# | Truss Name | Date |
|-----|-----------|------------|-----------|
| 1 | 164502648 | F00 | 3/27/2024 |
| 2 | 164502649 | F01 | 3/27/2024 |
| 3 | 164502650 | F02 | 3/27/2024 |
| 4 | 164502651 | F03 | 3/27/2024 |
| 5 | 164502652 | F04 | 3/27/2024 |
| 6 | 164502653 | F05 | 3/27/2024 |
| 7 | 164502654 | F06 | 3/27/2024 |
| 8 | 164502655 | F07 | 3/27/2024 |
| 9 | 164502656 | F08 | 3/27/2024 |
| 10 | 164502657 | FKW00 | 3/27/2024 |
| 11 | 164502658 | FKW07 | 3/27/2024 |
| 12 | 164502659 | FKW08 | 3/27/2024 |

The truss drawing(s) referenced above have been prepared by

Truss Engineering Co. under my direct supervision

based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2024

North Carolina COA: C-0844

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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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.



March 27, 2024

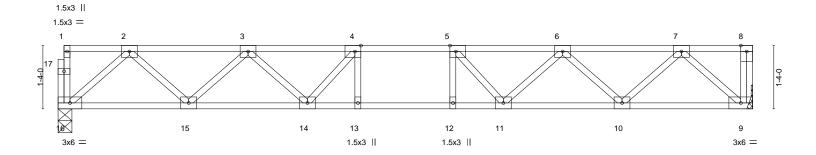
| Job | Truss | Truss Type | Qty | Ply | Lot 156 Duncan's Creek |
|------------|-------|------------|-----|-----|--------------------------|
| | | | | | 164502648 |
| J1024-5459 | F00 | Floor | 1 | 1 | |
| | | | | | Job Reference (optional) |

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 26 16:54:53 2024 Page 1 ID:Dm7ZyERNI?2o6wzlFxt7?MyCJDH-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Scale = 1:24.3



<u> 1-0-0</u>



| | | | 14-7-8 | |
|--|--|---------------------------------------|---|--|
| Plate Offsets (X,Y) | [4:0-1-8,Edge], [5:0-1-8,Edge] | | | |
| LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 | SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES | CSI. TC 0.31 BC 0.64 WB 0.36 | DEFL. in (loc) l/defl L/d Vert(LL) -0.11 11-12 >999 480 Vert(CT) -0.14 11-12 >999 360 Horz(CT) 0.03 9 n/a n/a | PLATES GRIP MT20 244/190 |
| BCDL 5.0 | Code IRC2015/TPI2014 | Matrix-S | | Weight: 77 lb $FT = 20\%F$, 11%E |

14-7-8

LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.1(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, BOT CHORD 2x4 SP No.1(flat)

except end verticals. WEBS 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 16=0-3-8, 9=Mechanical Max Grav 16=784(LC 1), 9=791(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1378/0, 3-4=-2133/0, 4-5=-2329/0, 5-6=-2133/0, 6-7=-1378/0

BOT CHORD 15-16=0/840, 14-15=0/1886, 13-14=0/2329, 12-13=0/2329, 11-12=0/2329, 10-11=0/1886, 9-10=0/840

> $2-16 = -1115/0, \ 2-15 = 0/749, \ 3-15 = -707/0, \ 7-9 = -1119/0, \ 7-10 = 0/748, \ 6-10 = -706/0, \ 7-10 = 0/748, \ 6-10 = -706/0, \ 7-10 = 0/748, \ 6-10 = -706/0, \ 7-10 = 0/748, \ 6-10 = -706/0, \ 7-10 = 0/748, \ 6-10 = -706/0, \ 7-10 = 0/748, \ 6-10 = -706/0, \ 7-10 = 0/748, \ 6-10 = -706/0, \ 7-10 = 0/748, \ 6-10 = -706/0, \ 7-10 = 0/748, \ 6-10 = -706/0, \ 7-10 = 0/748, \ 6-10 = -706/0, \ 7-10 = 0/748, \ 6-10 = -706/0, \ 7-10 = 0/748, \ 6-10 = -706/0, \ 7-10 = 0/748, \ 6-10 = -706/0, \ 7-10 = 0/748, \ 6-10 = -706/0, \ 7-10 = 0/748, \ 6-10 = -706/0, \ 7-10 = 0/748, \ 7-10 = 0/$ 6-11=0/410, 3-14=0/410, 4-14=-465/0, 5-11=-465/0

NOTES-

WEBS

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.





| Job | Truss | Truss Type | Qty | Ply | Lot 156 Duncan's Creek |
|------------|-------|------------|-----|-----|--------------------------|
| | | | | | 164502649 |
| J1024-5459 | F01 | Floor | 4 | 1 | |
| | | | | | Job Reference (optional) |

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 26 16:54:54 2024 Page 1 ID:Dm7ZyERNI?2o6wzlFxt7?MyCJDH-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.





Scale = 1:33.0

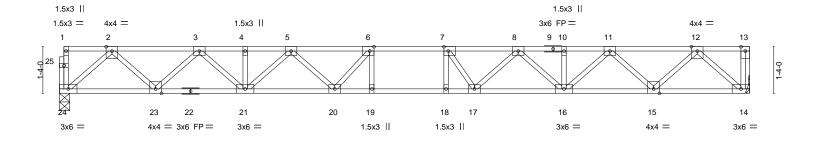


Plate Offsets (X,Y)--[6:0-1-8,Edge], [7:0-1-8,Edge] LOADING (psf) SPACING-CSI. DEFL. in (loc) I/defl L/d **PLATES GRIP** TCLL 40.0 Plate Grip DOL 1.00 TC 0.39 Vert(LL) -0.25 19 >919 480 244/190 MT20 TCDL 10.0 Lumber DOL 1.00 BC 0.86 Vert(CT) -0.35 18-19 >668 360 **BCLL** Rep Stress Incr YES WB 0.44 0.07 0.0 Horz(CT) 14 n/a n/a Code IRC2015/TPI2014 Weight: 105 lb FT = 20%F. 11%E **BCDL** 5.0 Matrix-S

TOP CHORD

BOT CHORD

19-9-0

LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

REACTIONS. (size) 24=0-3-8, 14=Mechanical Max Grav 24=852(LC 1), 14=857(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1587/0, 3-4=-2695/0, 4-5=-2695/0, 5-6=-3286/0, 6-7=-3433/0, 7-8=-3294/0,

8-10=-2698/0, 10-11=-2698/0, 11-12=-1587/0

 $23-24=0/928,\ 21-23=0/2222,\ 20-21=0/3087,\ 19-20=0/3433,\ 18-19=0/3433,\ 17-18=0/3433,\ 18-19$ 16-17=0/3078, 15-16=0/2222, 14-15=0/929

2-24=-1234/0, 2-23=0/916, 3-23=-883/0, 3-21=0/642, 5-21=-532/0, 5-20=0/398, WFBS

 $12 - 14 = -1237/0, \ 12 - 15 = 0/915, \ 11 - 15 = -883/0, \ 11 - 16 = 0/646, \ 8 - 16 = -517/0, \ 8 - 17 = 0/428, \ 11 - 12 =$

7-17=-500/94, 6-20=-465/88

NOTES-

BOT CHORD

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.



March 27,2024



| Job | 1 | Truss | Truss Type | Qty | Ply | Lot 156 Duncan's Creek | |
|-----|---------|-------|------------|-----|-----|--------------------------|---|
| | | | | | | I64502650 |) |
| J10 | 24-5459 | F02 | Floor | 4 | 1 | | |
| | | | | | | Job Reference (optional) | |

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 26 16:54:54 2024 Page 1 ID: Dm7ZyERNI? 206wzIFxt7? MyCJDH-RfC? PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC? for the property of the proper

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

0-1-8 H | 1-3-0

1-0-0 ⊢ —| <u>1-0-0</u> 0-1-8 Scale = 1:33.0

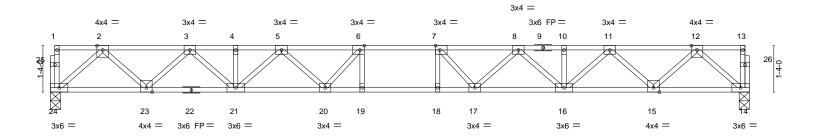


Plate Offsets (X,Y)--[6:0-1-8,Edge], [7:0-1-8,Edge] **GRIP** LOADING (psf) SPACING-CSI. DEFL. in (loc) L/d **PLATES** -0.27 18-19 TCLL 40.0 Plate Grip DOL 1.00 TC 0.39 Vert(LL) >889 480 244/190 MT20 TCDL 10.0 Lumber DOL 1.00 BC 0.87 Vert(CT) -0.37 18-19 >645 360 **BCLL** Rep Stress Incr YES WB 0.45 0.07 0.0 Horz(CT) 14 n/a n/a BCDL Code IRC2015/TPI2014 Weight: 106 lb FT = 20%F. 11%E 5.0 Matrix-S

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

REACTIONS. (size) 24=0-3-8, 14=0-3-8 Max Grav 24=865(LC 1), 14=865(LC 1)

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

TOP CHORD 2-3=-1615/0, 3-4=-2751/0, 4-5=-2751/0, 5-6=-3368/0, 6-7=-3538/0, 7-8=-3368/0,

8-10=-2751/0, 10-11=-2751/0, 11-12=-1615/0

BOT CHORD $23-24=0/943,\ 21-23=0/2263,\ 20-21=0/3154,\ 19-20=0/3538,\ 18-19=0/3538,\ 17-18=0/3538,$

16-17=0/3154, 15-16=0/2263, 14-15=0/943

2-24=-1253/0, 2-23=0/935, 3-23=-902/0, 3-21=0/662, 12-14=-1253/0, 12-15=0/935, WFBS

 $11-15 = -902/0, \ 11-16 = 0/662, \ 8-16 = -548/0, \ 8-17 = 0/419, \ 5-21 = -548/0, \ 5-20 = 0/419, \ 5-20 =$

6-20=-500/77, 7-17=-500/77

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 1.5x3 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) 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.





Job Truss Truss Type Qty Lot 156 Duncan's Creek 164502651 J1024-5459 F03 Floor Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 26 16:54:55 2024 Page 1

Fayetteville, NC - 28314, Comtech, Inc.

1-3-0

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0-9-0 2-0-0 1-0-0

Scale = 1:33.0

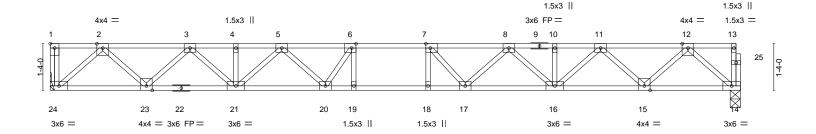


Plate Offsets (X,Y)--[1:Edge,0-1-8], [6:0-1-8,Edge], [7:0-1-8,Edge] LOADING (psf) SPACING-CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL 40.0 Plate Grip DOL 1.00 TC 0.39 Vert(LL) -0.25 18 >919 480 244/190 MT20 TCDL 10.0 Lumber DOL 1.00 ВС 0.86 Vert(CT) -0.35 18-19 >668 360 **BCLL** 0.0 Rep Stress Incr YES WB 0.44 0.07 Horz(CT) 14 n/a n/a Code IRC2015/TPI2014 Weight: 105 lb FT = 20%F. 11%E **BCDL** 5.0 Matrix-S

19-9-0

LUMBER-**BRACING-**

2x4 SP No.1(flat) TOP CHORD TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

BOT CHORD 2x4 SP No.1(flat) except end verticals. WEBS 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 24=Mechanical, 14=0-3-8 Max Grav 24=857(LC 1), 14=852(LC 1)

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

TOP CHORD 2-3=-1587/0, 3-4=-2698/0, 4-5=-2698/0, 5-6=-3294/0, 6-7=-3433/0, 7-8=-3286/0,

8-10=-2695/0, 10-11=-2695/0, 11-12=-1587/0

BOT CHORD 23-24=0/929, 21-23=0/2222, 20-21=0/3078, 19-20=0/3433, 18-19=0/3433, 17-18=0/3433,

16-17=0/3087, 15-16=0/2222, 14-15=0/928

2-24=-1237/0, 2-23=0/916, 3-23=-883/0, 3-21=0/646, 5-21=-517/0, 5-20=0/428, WFBS

6-20=-500/94, 12-14=-1234/0, 12-15=0/916, 11-15=-883/0, 11-16=0/642, 8-16=-532/0,

8-17=0/398, 7-17=-465/88

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.





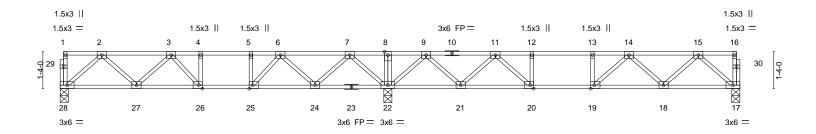
| Job | Truss | Truss Type | Qty | Ply | Lot 156 Duncan's Creek |
|------------|-------|------------|-----|-----|--------------------------|
| | | | | | 164502652 |
| J1024-5459 | F04 | Floor | 3 | 1 | |
| | | | | | Job Reference (optional) |

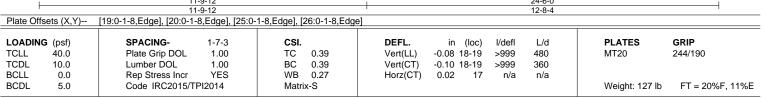
8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 26 16:54:55 2024 Page 1 ID:Dm7ZyERNI?2o6wzlFxt7?MyCJDH-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f





0-1-8 Scale = 1:41.5





LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat) WEBS 2x4 SP No.3(flat)

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

6-0-0 oc bracing: 24-25,22-24,21-22.

except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

REACTIONS. (size) 28=0-3-8, 22=0-3-8, 17=0-3-8

Max Grav 28=466(LC 10), 22=1210(LC 1), 17=501(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-755/0, 3-4=-1017/0, 4-5=-1017/0, 5-6=-1017/0, 6-7=-519/148, 7-8=0/796,

8-9=0/796, 9-11=-535/88, 11-12=-1166/0, 12-13=-1166/0, 13-14=-1166/0, 14-15=-831/0 BOT CHORD

27-28=0/492, 26-27=0/984, 25-26=0/1017, 24-25=-18/850, 22-24=-283/181, 20-21=0/910,

19-20=0/1166, 18-19=0/1093, 17-18=0/532

2-28=-653/0, 2-27=0/365, 3-27=-319/0, 7-22=-828/0, 7-24=0/526, 6-24=-530/0, WFBS $6-25=0/424,\ 9-22=-869/0,\ 9-21=0/562,\ 11-21=-565/0,\ 15-17=-706/0,\ 15-18=0/416,$

14-18=-365/0, 11-20=0/480

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) 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.
- 5) CAUTION, Do not erect truss backwards.





| Job | Truss | Truss Type | Qty | Ply | Lot 156 Duncan's Creek |
|------------|-------|------------|-----|-----|--------------------------|
| | | | | | I64502653 |
| J1024-5459 | F05 | Floor | 1 | 1 | |
| | | | | | Job Reference (optional) |

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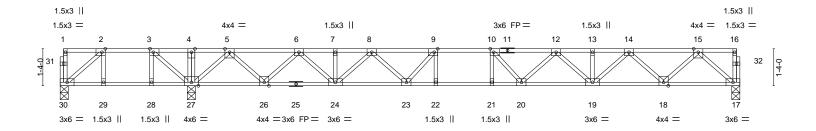
Structural wood sheathing directly applied or 6-0-0 oc purlins,

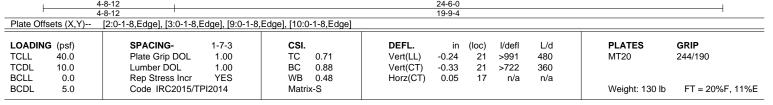
Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

except end verticals.

6-0-0 oc bracing: 29-30,28-29,27-28.

0-1-8





BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat) WEBS 2x4 SP No.3(flat)

(size) 30=0-3-8, 27=0-3-8, 17=0-3-8

Max Uplift 30=-184(LC 4)

Max Grav 30=130(LC 3), 27=1363(LC 1), 17=805(LC 7)

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

2-3=-54/402, 3-4=0/973, 4-5=0/973, 5-6=-852/0, 6-7=-2086/0, 7-8=-2086/0,

8-9=-2804/0, 9-10=-3055/0, 10-12=-2981/0, 12-13=-2491/0, 13-14=-2491/0,

14-15=-1485/0

BOT CHORD 29-30=-402/54, 28-29=-402/54, 27-28=-402/54, 24-26=0/1546, 23-24=0/2531,

22-23=0/3055, 21-22=0/3055, 20-21=0/3055, 19-20=0/2840, 18-19=0/2072, 17-18=0/875 **WEBS** 2-30=-66/531, 3-27=-860/0, 5-27=-1363/0, 5-26=0/1014, 6-26=-974/0, 6-24=0/742,

15-17=-1163/0, 15-18=0/849, 14-18=-815/0, 14-19=0/570, 12-19=-474/0, 12-20=0/324,

8-24=-611/0, 8-23=0/458, 9-23=-557/0, 10-20=-361/155

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 30=184.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.





| Job | Truss | Truss Type | Qty | Ply | Lot 156 Duncan's Creek |
|------------|-------|------------|-----|-----|--------------------------|
| | | | | | 164502654 |
| J1024-5459 | F06 | Floor | 9 | 1 | |
| | | | | | Job Reference (optional) |

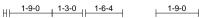
8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 26 16:54:56 2024 Page 1 ID:Dm7ZyERNI?2o6wzlFxt7?MyCJDH-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

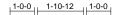
Structural wood sheathing directly applied or 6-0-0 oc purlins,

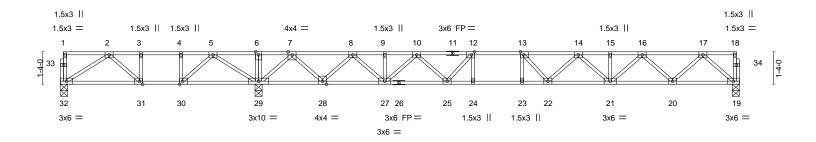
Rigid ceiling directly applied or 6-0-0 oc bracing.

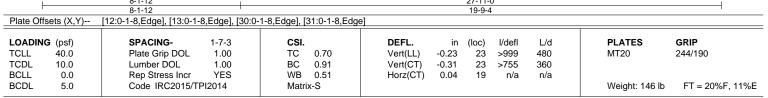
except end verticals.











TOP CHORD

LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

BOT CHORD

REACTIONS. (size) 32=0-3-8, 29=0-3-8, 19=0-3-8

Max Uplift 32=-121(LC 4)

Max Grav 32=275(LC 3), 29=1536(LC 1), 19=774(LC 7)

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

TOP CHORD

8-9=-1716/0, 9-10=-1716/0, 10-12=-2500/0, 12-13=-2802/0, 13-14=-2780/0,

14-15=-2356/0, 15-16=-2356/0, 16-17=-1418/0

31-32=-231/316, 30-31=-555/334, 29-30=-981/63, 28-29=-519/0, 27-28=0/1143, **BOT CHORD**

25-27=0/2189, 24-25=0/2802, 23-24=0/2802, 22-23=0/2802, 21-22=0/2678, 20-21=0/1972,

WEBS 5-29=-904/0, 2-32=-372/275, 2-31=-440/25, 5-30=0/750, 4-30=-380/0, 7-29=-1366/0,

7-28=0/1071, 8-28=-1035/0, 8-27=0/796, 17-19=-1116/0, 17-20=0/805, 16-20=-770/0, 16-21=0/523, 14-21=-437/0, 14-22=-16/271, 10-27=-657/0, 10-25=0/494, 12-25=-610/0,

13-22=-283/209

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.



March 27,2024



| Job | Truss | Truss Type | Qty | Ply | Lot 156 Duncan's Creek |
|------------|-------|------------|-----|-----|--------------------------|
| | | | | | 164502655 |
| J1024-5459 | F07 | Floor | 2 | 1 | |
| | | | | | Job Reference (optional) |

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 26 16:54:57 2024 Page 1 ID:Dm7ZyERNI?2o6wzlFxt7?MyCJDH-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.





0-1-8 Scale = 1:33.7

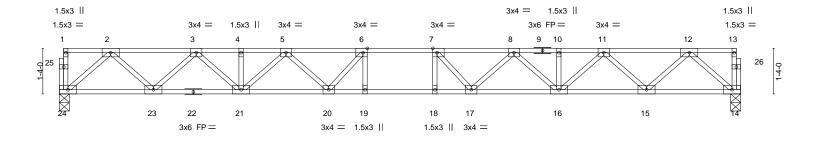


Plate Offsets (X,Y)--[6:0-1-8,Edge], [7:0-1-8,Edge] LOADING (psf) SPACING-CSI. DEFL. in (loc) L/d **PLATES GRIP** -0.26 18-19 TCLL 40.0 Plate Grip DOL 1.00 TC 0.37 Vert(LL) >905 480 244/190 MT20 TCDL 10.0 Lumber DOL 1.00 ВС 0.84 Vert(CT) -0.36 18-19 >657 360 **BCLL** Rep Stress Incr YES WB 0.44 0.07 0.0 Horz(CT) 14 n/a n/a BCDL Code IRC2015/TPI2014 Weight: 105 lb FT = 20%F. 11%E Matrix-S

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

REACTIONS. (size) 24=0-3-8, 14=0-3-8 Max Grav 24=860(LC 1), 14=860(LC 1)

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

TOP CHORD 2-3=-1603/0, 3-4=-2727/0, 4-5=-2727/0, 5-6=-3333/0, 6-7=-3496/0, 7-8=-3333/0,

8-10=-2727/0, 10-11=-2727/0, 11-12=-1603/0

BOT CHORD $23-24=0/937,\ 21-23=0/2246,\ 20-21=0/3125,\ 19-20=0/3496,\ 18-19=0/3496,\ 17-18=0/3496,$

16-17=0/3125, 15-16=0/2246, 14-15=0/937 WFBS

2-24=-1245/0, 2-23=0/927, 3-23=-894/0, 3-21=0/654, 5-21=-541/0, 5-20=0/408, 12-14=-1245/0, 12-15=0/927, 11-15=-894/0, 11-16=0/654, 8-16=-541/0, 8-17=0/408,

7-17=-484/79, 6-20=-484/79

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x6 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) 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.





| Job | Truss | Truss Type | Qty | Ply | Lot 156 Duncan's Creek |
|------------|-------|------------|-----|-----|--------------------------|
| | | _ | | | 164502656 |
| J1024-5459 | F08 | Floor | 3 | 1 | |
| | | | | | Job Reference (optional) |

1-3-0

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 26 16:54:57 2024 Page 1 ID:Dm7ZyERNI?2o6wzIFxt7?MyCJDH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-9-0 1-11-8 0-9-0

Scale: 3/8"=1

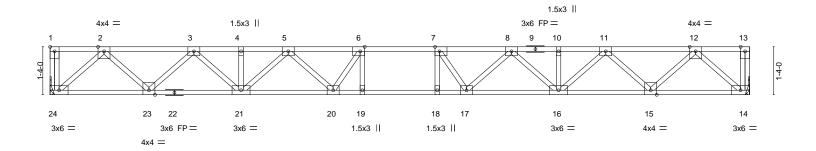


Plate Offsets (X,Y)--[1:Edge,0-1-8], [6:0-1-8,Edge], [7:0-1-8,Edge] SPACING-**PLATES GRIP** LOADING (psf) CSI. DEFL. (loc) I/defl L/d TCLL 40.0 Plate Grip DOL 1.00 TC 0.35 Vert(LL) -0.24 18-19 >969 480 244/190 MT20 TCDL 10.0 Lumber DOL 1.00 ВС 0.82 Vert(CT) -0.33 18-19 >703 360 **BCLL** 0.0 Rep Stress Incr YES WB 0.43 0.06 Horz(CT) 14 n/a n/a Code IRC2015/TPI2014 Weight: 104 lb FT = 20%F, 11%E **BCDL** 5.0 Matrix-S

LUMBER-**BRACING-**

2x4 SP No.1(flat) TOP CHORD TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

BOT CHORD 2x4 SP No.1(flat) except end verticals.

WEBS 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 24=Mechanical, 14=Mechanical Max Grav 24=845(LC 1), 14=845(LC 1)

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

TOP CHORD 2-3=-1560/0, 3-4=-2642/0, 4-5=-2642/0, 5-6=-3211/0, 6-7=-3331/0, 7-8=-3211/0,

8-10=-2642/0, 10-11=-2642/0, 11-12=-1560/0 BOT CHORD

23-24=0/915, 21-23=0/2181, 20-21=0/3011, 19-20=0/3331, 18-19=0/3331, 17-18=0/3331,

16-17=0/3011, 15-16=0/2181, 14-15=0/915

2-24=-1218/0, 2-23=0/897, 3-23=-864/0, 3-21=0/627, 5-21=-502/0, 5-20=0/407, WFBS

 $12 - 14 = -1218/0, \ 12 - 15 = 0/897, \ 11 - 15 = -864/0, \ 11 - 16 = 0/627, \ 8 - 16 = -502/0, \ 8 - 17 = 0/407, \ 12 - 12 =$

7-17=-463/105, 6-20=-463/105

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.





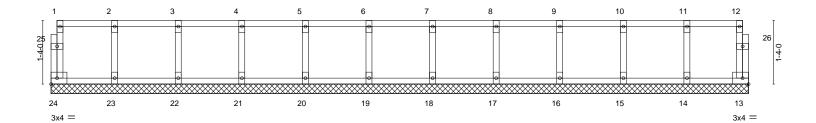
| Job | Truss | Truss Type | Qty | Ply | Lot 156 Duncan's Creek | 7 |
|------------|--------|------------|-----|-----|--------------------------|---|
| 14004 5450 | FIGURO | OARI F | | | I64502657 | |
| J1024-5459 | FKW00 | GABLE | 1 | 1 | | |
| | | | | | Job Reference (optional) | |

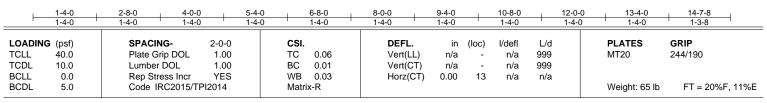
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8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 26 16:54:58 2024 Page 1 ID:Dm7ZyERNI?2o6wzlFxt7?MyCJDH-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

0₁₁8

Scale: 1/2"=1





LUMBER-BRACING-

TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat) 2x4 SP No.3(flat) WEBS

OTHERS 2x4 SP No.3(flat) 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. All bearings 14-7-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 13, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14

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

NOTES-

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) 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.



March 27,2024



Job Truss Truss Type Qty Ply Lot 156 Duncan's Creek 164502658 J1024-5459 FKW07 **GABLE** Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 26 16:54:58 2024 Page 1

Comtech, Inc,

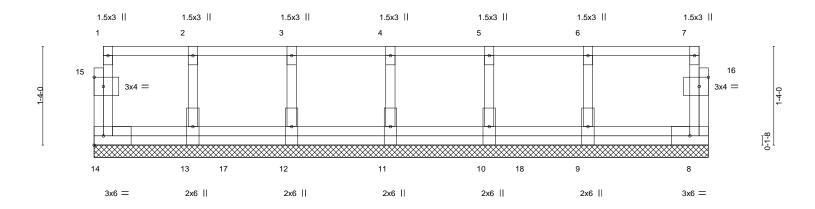
0_1_8

Fayetteville, NC - 28314,

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0-1-8

Scale = 1:15.6



| | 1 | 1-4-0 | 2-8-0 | 1 | 4-0-0 | 1 5-4-0 | | 1 | 6-8-0 |) | 8-3-8 | 1 |
|--------------|----------|---------------------------|-----------|-------|-------|----------|------|-------|--------|-----|---------------|-----------------|
| | | 1-4-0 | 1-4-0 | 1 | 1-4-0 | 1-4-0 | | | 1-4-0 |) ' | 1-7-8 | |
| Plate Offset | ts (X,Y) | [15:0-1-8,0-1-8], [16:0-1 | -8,0-1-8] | | | | | | | | | |
| | | | | | | | | | | | | |
| LOADING | (psf) | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.10 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.03 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 8 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2015/T | PI2014 | Matri | x-R | | | | | | Weight: 49 lb | FT = 20%F, 11%E |

LUMBER-

2x4 SP No.1(flat) TOP CHORD BOT CHORD 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat) **OTHERS** 2x4 SP No.3(flat) BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 8-3-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 14, 8, 13, 12, 11, 10, 9

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

NOTES-

- 1) Plates checked for a plus or minus 1 degree rotation about its center.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 8-14=-10. 1-7=-100

Concentrated Loads (lb) Vert: 11=-92 17=-92 18=-92



March 27,2024

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

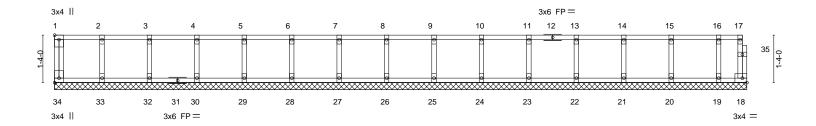


| Job | Truss | Truss Type | Qty | Ply | Lot 156 Duncan's Creek |
|------------|-------|------------|-----|-----|--------------------------|
| | | | | | 164502659 |
| J1024-5459 | FKW08 | GABLE | 1 | 1 | |
| | | | | | Job Reference (optional) |

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Mar 26 16:54:58 2024 Page 1 ID:Dm7ZyERNI?2o6wzlFxt7?MyCJDH-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

0-11-8

Scale = 1:32.4



| 1-4-0 | 2-8-0 4-0- | 5-4-0 | 6-8-0 | 8-0-0 | 9-4-0 | 10-8-0 | 12-0-0 | 13-4-0 | 0 14-8-0 | 16-0-0 17-4-0 | 18-8-0 19-5-8 |
|---|------------|---------------|-------|-------|-------|-----------|--------|--------|------------|---------------|-----------------|
| 1-4-0 | 1-4-0 1-4- | 0 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 1-4-0 | 1-4-0 0-9-8 |
| Plate Offsets (X,Y) [1:Edge,0-1-8], [34:Edge,0-1-8] | | | | | | | | | | | |
| | | | | | | | | | | | |
| LOADING (psf) | SPACIN | I G- 2 | -0-0 | CSI. | | DEFL. | in | (loc) | I/defl L/d | PLATES | GRIP |
| TCLL 40.0 | Plate Gr | ip DOL | 1.00 | TC | 0.06 | Vert(LL) | n/a | - | n/a 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber | DOL | 1.00 | BC | 0.01 | Vert(CT) | n/a | - | n/a 999 | | |
| BCLL 0.0 | Rep Str | ess Incr ' | YES | WB | 0.03 | Horz(CT) | 0.00 | 18 | n/a n/a | | |
| BCDL 5.0 | Code IF | RC2015/TPI20 | 14 | Matri | x-R | | | | | Weight: 86 lb | FT = 20%F, 11%E |
| | | | | | | | | | | | |
| LUMBED | | | | | | DD A CINI | | | | | |

LUMBER-BRACING-

TOP CHORD 2x4 SP No.1(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, BOT CHORD 2x4 SP No.1(flat) except end verticals.

WEBS 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. **OTHERS** 2x4 SP No.3(flat)

REACTIONS. All bearings 19-5-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 34, 18, 33, 32, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20,

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

NOTES-

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) 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.
- 7) CAUTION, Do not erect truss backwards.





818 Soundside Road Edenton, NC 27932

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- $\frac{1}{16}$ 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 × 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



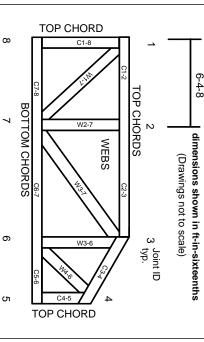
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur Min size shown is for crushing only.

Industry Standards: ANSI/TPI1: National Design Specification for Metal

DSB-22:

Plate Connected Wood Truss Construction.
Design Standard for Bracing.
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.

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MITOK



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

▲ General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.

'n

- 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.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

9

- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- 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
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- The design does not take into account any dynamic or other loads other than those expressly stated.