

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 2610609 McKee - Clark

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Builders FirstSource-Apex,NC.

Pages or sheets covered by this seal: I44539241 thru I44539256

My license renewal date for the state of North Carolina is December 31, 2021.

North Carolina COA: C-0844



January 27,2021

Johnson, Andrew

**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 | McKee - Clark            |
|---------|-------|-------------|-----|-----|--------------------------|
| 2610609 | F30G  | ROOF TRUSS  | 1   | 1   | I44539241                |
| 2010003 | 1 300 | INCOL INCOC |     |     | Job Reference (optional) |

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jan 26 12:47:18 2021 Page 1 ID:IVPazU2YfbZ3pfi4ZQ30aOzQim7-ZFjLtSQThcLejf7uLKA5LwKkr6P2ByKRGg8l3AzrU77

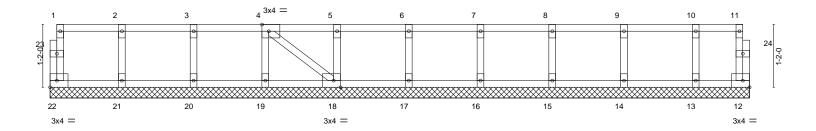
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

0118

0<sub>1</sub>1<sub>7</sub>8 Scale = 1:21.4



|           |            |                            |        |        |      | 13-0-0   |      |       |        |     |               |                 |
|-----------|------------|----------------------------|--------|--------|------|----------|------|-------|--------|-----|---------------|-----------------|
| Plate Off | sets (X,Y) | [4:0-1-8,Edge], [18:0-1-8, | Edge]  | _      |      |          |      |       |        |     |               |                 |
| LOADIN    | G (psf)    | SPACING-                   | 2-0-0  | CSI.   |      | DEFL.    | in   | (loc) | l/defl | L/d | PLATES        | GRIP            |
| TCLL      | 40.0       | Plate Grip DOL             | 1.00   | TC     | 0.09 | 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 Stress Incr            | NO     | WB     | 0.03 | Horz(CT) | 0.00 | 12    | n/a    | n/a |               |                 |
| BCDL      | 5.0        | Code IRC2015/TF            | PI2014 | Matrix | :-S  |          |      |       |        |     | Weight: 58 lb | FT = 20%F, 11%E |

**BRACING-**

TOP CHORD

**BOT CHORD** 

13-0-0

LUMBER-

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

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

REACTIONS. All bearings 13-0-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 22, 12, 21, 20, 19, 18, 17, 16, 15, 14, 13

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

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.





| Job     | Truss | Truss Type | Qty | Ply | McKee - Clark            |
|---------|-------|------------|-----|-----|--------------------------|
|         |       |            |     |     | 144539242                |
| 2610609 | F31   | ROOF TRUSS | 19  | 1   |                          |
|         |       |            |     |     | Job Reference (optional) |

→ |<del>0-6-0</del>

Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jan 26 12:47:19 2021 Page 1 ID:IVPazU2YfbZ3pfi4ZQ30aOzQim7-1RHj4nR5SwTUKpi4v2hKt8tqDWX6wL5aVKulcczrU76

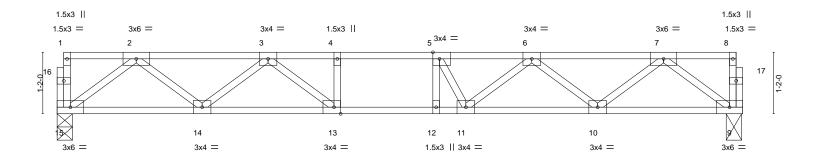
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.



0<sub>1</sub>1<sub>7</sub>8 Scale = 1:21.8



| 1           |           | 2-9-0                     |        | 7-     | 9-0  |          | 1     |       | 10-3-0 |     | 12-11-1       | 2 13-ρ-0        |
|-------------|-----------|---------------------------|--------|--------|------|----------|-------|-------|--------|-----|---------------|-----------------|
|             |           | 2-9-0                     |        | 5-     | 0-0  |          | 1     |       | 2-6-0  |     | 2-8-12        | 0-0-4           |
| Plate Offse | ets (X,Y) | [5:0-1-8,Edge], [13:0-1-8 | ,Edge] |        |      |          |       |       |        |     |               |                 |
| LOADING     | (psf)     | SPACING-                  | 2-0-0  | CSI.   |      | DEFL.    | in    | (loc) | I/defl | L/d | PLATES        | GRIP            |
| TCLL        | 40.0      | Plate Grip DOL            | 1.00   | TC     | 0.43 | Vert(LL) | -0.10 | 12    | >999   | 480 | MT20          | 244/190         |
| TCDL        | 10.0      | Lumber DOL                | 1.00   | BC     | 0.85 | Vert(CT) | -0.14 | 12    | >999   | 360 |               |                 |
| BCLL        | 0.0       | Rep Stress Incr           | YES    | WB     | 0.32 | Horz(CT) | 0.03  | 9     | n/a    | n/a |               |                 |
| BCDL        | 5.0       | Code IRC2015/T            | PI2014 | Matrix | -S   |          |       |       |        |     | Weight: 66 lb | FT = 20%F, 11%E |

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

WEBS 2x4 SP No.3(flat)

REACTIONS. (size) 15=0-3-8, 9=0-3-8 Max Grav 15=695(LC 1), 9=695(LC 1)

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

TOP CHORD 2-3=-1365/0, 3-4=-2107/0, 4-5=-2107/0, 5-6=-2046/0, 6-7=-1370/0

14-15=0/859, 13-14=0/1844, 12-13=0/2107, 11-12=0/2107, 10-11=0/1849, 9-10=0/857 **BOT CHORD** WEBS

7-9=-1072/0, 2-15=-1075/0, 7-10=0/668, 2-14=0/659, 6-10=-624/0, 3-14=-624/0,

6-11=0/372, 3-13=0/512, 5-11=-349/103

### NOTES-

1) Unbalanced floor live loads have been considered for this design.

2) 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.



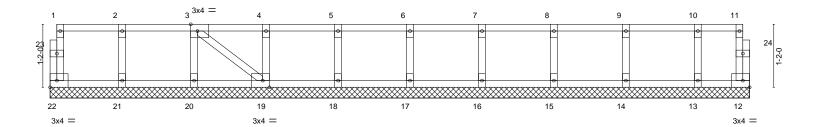


| Job     | Truss | Truss Type | Qty | Ply | McKee - Clark            |
|---------|-------|------------|-----|-----|--------------------------|
| 2610609 | F32G  | GABLE      | 1   | 1   | 144539243                |
| 2010003 | 1 320 | OADLE      |     |     | Job Reference (optional) |

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jan 26 12:47:20 2021 Page 1 ID:IVPazU2YfbZ3pfi4ZQ30aOzQim7-Vdr5I7RjDDbLyzGHTlCZQLP4Kw4Wfspjk\_dr82zrU75

0<sub>11</sub>8

Scale = 1:21.3



| -           | 1-4-0     | 2-8-0                   | 4-0-0    | 5-4-0 | 6-8-0 |          | 0-0            |       | 9-4-0  | _   | 10-8-0 | 12-0-0        | 12-11-8         |
|-------------|-----------|-------------------------|----------|-------|-------|----------|----------------|-------|--------|-----|--------|---------------|-----------------|
| '           | 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         | 0-11-8          |
| Plate Offse | ets (X,Y) | [3:0-1-8,Edge], [19:0-1 | -8,Edge] |       |       |          |                |       |        |     |        |               |                 |
| LOADING     | (psf)     | SPACING-                | 2-0-0    | CSI.  |       | DEFL.    | in             | (loc) | l/defl | L/d |        | PLATES        | GRIP            |
| TCLL        | 40.0      | Plate Grip DOL          | 1.00     | TC    | 0.09  | Vert(LL) | n/a            | ` -   | n/a    | 999 |        | MT20          | 244/190         |
| TCDL        | 10.0      | Lumber DOL              | 1.00     | ВС    | 0.01  | Vert(CT) | n/a            | -     | n/a    | 999 |        |               |                 |
| BCLL        | 0.0       | Rep Stress Incr         | NO       | WB    | 0.03  | Horz(CT) | 0.00           | 12    | n/a    | n/a |        |               |                 |
| BCDL        | 5.0       | Code IRC2015/           | TPI2014  | Matri | x-S   |          |                |       |        |     |        | Weight: 58 lb | FT = 20%F, 11%E |
|             |           |                         |          |       |       |          |                |       |        |     |        |               |                 |
| LUMBER-     |           |                         |          |       |       | BRACING  | <del>j</del> - |       |        |     |        |               |                 |

LUMBER-TOP CHORD

0118

2x4 SP No.2(flat) BOT CHORD 2x4 SP No.2(flat) **WEBS** 

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

except end verticals.

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

REACTIONS. All bearings 12-11-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 22, 12, 21, 20, 19, 18, 17, 16, 15, 14, 13

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

### NOTES-

**OTHERS** 

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

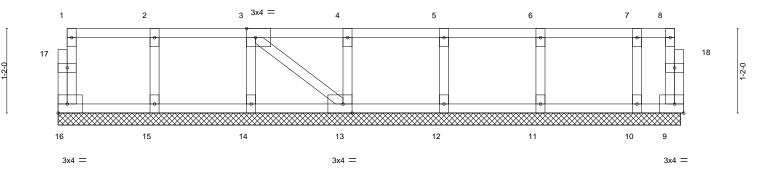


| Job     | Truss | Truss Type | Qty | Ply | McKee - Clark            |
|---------|-------|------------|-----|-----|--------------------------|
|         |       |            |     |     | 144539244                |
| 2610609 | F33G  | ROOF TRUSS | 1   | 1   |                          |
|         |       |            |     |     | Job Reference (optional) |

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jan 26 12:47:28 2021 Page 1 ID:IVPazU2YfbZ3pfi4ZQ30aOzQim7-GAK7zsYkLgcDvBupxQLRI1ISH8pOXUovaEZGPbzrU6z







|                     |                                 |          | 8-7-12                           | <u> </u>                      |
|---------------------|---------------------------------|----------|----------------------------------|-------------------------------|
| Plate Offsets (X,Y) | [3:0-1-8,Edge], [13:0-1-8,Edge] |          |                                  |                               |
|                     |                                 |          |                                  |                               |
| LOADING (psf)       | SPACING- 2-0-0                  | CSI.     | <b>DEFL.</b> in (loc) I/defl L/d | PLATES GRIP                   |
| TCLL 40.0           | Plate Grip DOL 1.00             | TC 0.09  | 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 Stress Incr NO              | WB 0.03  | Horz(CT) 0.00 13 n/a n/a         |                               |
| BCDL 5.0            | Code IRC2015/TPI2014            | Matrix-S |                                  | Weight: 41 lb FT = 20%F, 11%E |

8-7-12

LUMBER-

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

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

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

except end verticals.

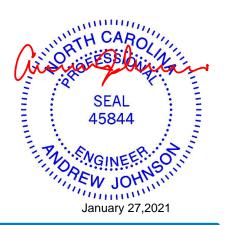
**BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 8-7-4.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 16, 15, 14, 13, 12, 11, 10

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

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 3) Gable studs spaced at 1-4-0 oc.
- 5) Non Standard bearing condition. Review required.
- 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.





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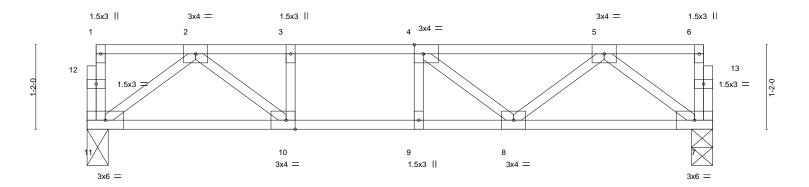
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.







|              |                     |  | 5-10-12                               |  | 1   | 8-7-12        |                 |
|--------------|---------------------|--|---------------------------------------|--|---|---------------|-----------------|
|              | 1                   |  | 5-10-12                               |  | ı   | 2-9-0         | <u> </u>        |
| Plate Offset | s (X,Y)             | [4:0-1-8,Edge], [10:0-1-8,Edge]  |                                       |  |   |               |                 |
| TCDL<br>BCLL | 40.0<br>10.0<br>0.0 | SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES | CSI.<br>TC 0.41<br>BC 0.59<br>WB 0.24 | DEFL.         in (loc)           Vert(LL)         -0.06         8-9           Vert(CT)         -0.07         8-9           Horz(CT)         0.01         7 | l/defl L/d<br>>999 480<br>>999 360<br>n/a n/a | MT20 2        | GRIP<br>244/190 |
| BCDL         | 5.0                 | Code IRC2015/TPI2014   | Matrix-S                              |  |   | Weight: 45 lb | FT = 20%F, 11%I |

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

REACTIONS. (size) 11=0-3-8, 7=0-3-8 Max Grav 11=456(LC 1), 7=456(LC 1)

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

TOP CHORD 2-3=-895/0, 3-4=-895/0, 4-5=-763/0

**BOT CHORD** 10-11=0/523, 9-10=0/895, 8-9=0/895, 7-8=0/559 WEBS 5-7=-699/0, 2-11=-651/0, 5-8=0/266, 2-10=0/497

- 1) Unbalanced floor live loads have been considered for this design.
- 2) 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 | McKee - Clark            |
|---------|-------|------------|-----|-----|--------------------------|
| 0040000 | For   | DOOF TRUES | 40  |     | 144539246                |
| 2610609 | F35   | ROOF TRUSS | 12  | 1   |                          |
|         |       |            |     |     | Job Reference (optional) |

Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jan 26 12:47:32 2021 Page 1 ID:IVPazU2YfbZ3pfi4ZQ30aOzQim7-9xZepEbFOv6eOpBaAGQNvtv05I\_UTCMUUsXUYMzrU6v

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

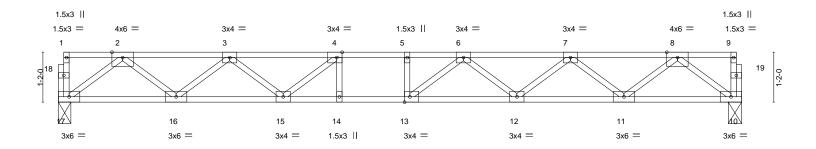
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.



1-5-8

0-1-8 Scale = 1:26.9



| ⊢           | 2-9-      |                   |             | 5-3-0 | +     |      | 10-8-8   |             | _      | 13-2-8 |               | 11-8            |
|-------------|-----------|-------------------|-------------|-------|-------|------|----------|-------------|--------|--------|---------------|-----------------|
| - DI + O"   | 2-9-      |                   |             | 2-6-0 | •     |      | 5-5-8    |             |        | 2-6-0  | 2-9           | 9-0             |
| Plate Offse | ets (X,Y) | [4:0-1-8,Edge], [ | [13:0-1-8,E | =agej |       |      |          |             |        |        |               |                 |
| LOADING     | (psf)     | SPACING           | G-          | 2-0-0 | CSI.  |      | DEFL.    | in (loc)    | I/defl | L/d    | PLATES        | GRIP            |
| TCLL        | 40.0      | Plate Grip        | p DOL       | 1.00  | TC    | 0.55 | Vert(LL) | -0.20 12-13 | >923   | 480    | MT20          | 244/190         |
| TCDL        | 10.0      | Lumber D          | OOL         | 1.00  | BC    | 0.77 | Vert(CT) | -0.28 12-13 | >666   | 360    |               |                 |
| BCLL        | 0.0       | Rep Stres         | ss Incr     | YES   | WB    | 0.44 | Horz(CT) | 0.05 10     | n/a    | n/a    |               |                 |
| BCDL        | 5.0       | Code IR           | C2015/TP    | I2014 | Matri | x-S  |          |             |        |        | Weight: 80 lb | FT = 20%F, 11%E |

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

WEBS 2x4 SP No.3(flat)

REACTIONS. (size) 17=0-3-8, 10=0-3-12 Max Grav 17=858(LC 1), 10=858(LC 1)

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

TOP CHORD 2-3=-1782/0, 3-4=-2824/0, 4-5=-3213/0, 5-6=-3213/0, 6-7=-2831/0, 7-8=-1780/0

BOT CHORD  $16-17=0/1069,\ 15-16=0/2458,\ 14-15=0/3213,\ 13-14=0/3213,\ 12-13=0/3157,\ 11-12=0/2463,\ 13-14=0/3213,\ 13-1$ 

10-11=0/1067

**WEBS** 8-10=-1335/0, 2-17=-1338/0, 8-11=0/929, 2-16=0/928, 7-11=-890/0, 3-16=-880/0,

7-12=0/479, 3-15=0/519, 6-12=-424/0, 4-15=-634/0, 6-13=-199/400

- 1) Unbalanced floor live loads have been considered for this design.
- 2) 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       | McKee - Clark                |                               |               |
|-----------------------------|---|------------|------------------------------|-----------|------------------------------|-------------------------------|---------------|
| 2610609                     | F36G                                      | ROOF TRUSS | 2                            | 1         |                              |                               | 144539247     |
| 2010003                     | 1 300                                     | NOOF INCOO | -                            |           | Job Reference (optional)     |                               |               |
| Builders FirstSource (A     | pex, NC), Apex, NC - 27523,               |            |                              |           | r 9 2020 MiTek Industries, I | Inc. Tue Jan 26 12:47:33 2021 |               |
|                             |   |            | ID:IVPazU2YfbZ               | 3pfi4ZQ3  | 0aOzQim7-d7700act9DEV0       | ymmj_xcR5Sl39WZCl1ejWH1       | 4ozrU6u       |
| Q-1-8                       | }   |            |                              |           |                              | 0-1-8                         |               |
| 1                           |   | 2 3x4 =    | 3                            |           | 4                            | 5                             | Scale = 1:9.4 |
|                             |   |            |                              |           |                              |                               | Ī             |
| 11                          |   |            |                              |           |                              |                               | 12            |
| -2-0                        | •   |            |                              |           |                              | -                             | 1-2-0         |
| 7                           |   |            |                              |           |                              |                               | 2-            |
|                             |   |            |                              |           |                              |                               |               |
|                             |   | •          |                              |           |                              |                               |               |
|                             |   |            |                              |           |                              |                               |               |
| 10                          |   | 9          | 8                            |           | 7                            | 6                             |               |
| ;                           | 3x4 =                                     |            | 3x4 =                        |           |                              | 3x4 =                         |               |
|                             |   | _          | 0.0                          |           |                              |                               |               |
| <del>-</del>                |   |            | 0-0<br>0-0                   |           |                              |                               |               |
| Plate Offsets (X,Y)         | [2:0-1-8,Edge], [8:0-1-8,Edge]            |            |                              |           |                              |                               |               |
| LOADING (psf)               | SPACING- 2-0                              |            | DEFL. in                     | . ,       | I/defl L/d                   | PLATES GRIP                   |               |
| TCLL 40.0<br>TCDL 10.0      | Plate Grip DOL 1.0<br>Lumber DOL 1.0      |            | Vert(LL) n/a<br>Vert(CT) n/a | -         | n/a 999<br>n/a 999           | MT20 244/190                  |               |
| BCLL 0.0<br>BCDL 5.0        | Rep Stress Incr N<br>Code IRC2015/TPI2014 | O WB 0.03  | Horz(CT) 0.00                | 6         | n/a n/a                      | Weight: 26 lb FT = 20         | 0%F, 11%E     |
| LUMBER-<br>TOP CHORD 2x4 SI | P No.2(flat)                              |            | BRACING-<br>TOP CHORD        | Structura | al wood sheathing directly   | applied or 5-0-0 oc purlins,  |               |

**BOT CHORD** 

except end verticals.

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

REACTIONS. All bearings 5-0-0.

BOT CHORD 2x4 SP No.2(flat)

(lb) - Max Grav All reactions 250 lb or less at joint(s) 10, 6, 9, 8, 7

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

### NOTES-

WEBS

**OTHERS** 

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.

2x4 SP No.3(flat)

2x4 SP No.3(flat)

- 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.





Job Truss Truss Type Qty McKee - Clark 144539248 2610609 F37 **ROOF TRUSS** Job Reference (optional)
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jan 26 12:47:34 2021 Page 1 Builders FirstSource (Apex, NC), Apex, NC - 27523, ID:IVPazU2YfbZ3pfi4ZQ30aOzQim7-5KhOEwcVwWMMd6LzHhSr\_I?STZplxBKny90bcEzrU6t 0-1-8 0-10-0 1-3-0 3x4 = 3 1.5x3 || 4 3x4 = 5 1.5x3 || 1 1.5x3 || 2 11 10 1.5x3 = 15x3 = 1.5x3 || 3x4 =3x6 = 3x6 = Plate Offsets (X,Y)--[2:0-1-8,Edge], [7:0-1-8,Edge] LOADING (psf) SPACING-DEFL. L/d **PLATES** GRIP CSI. in (loc) I/defI 40.ó Plate Grip DOL **TCLL** 1.00 TC 0.18 Vert(LL) -0.01 6-7 >999 480 MT20 244/190 TCDL 10.0 Lumber DOL 1.00 BC 0.21 Vert(CT) -0.02 6-7 >999 360 **BCLL** 0.0 Rep Stress Incr YES WB 0.09 Horz(CT) 0.00 6 n/a n/a **BCDL** Code IRC2015/TPI2014 FT = 20%F, 11%E 5.0 Matrix-S Weight: 30 lb LUMBER-BRACING-2x4 SP No.2(flat) 2x4 SP No.2(flat) TOP CHORD TOP CHORD Structural wood sheathing directly applied or 5-4-0 oc purlins, except end verticals.

**BOT CHORD** 

BOT CHORD

WEBS 2x4 SP No.3(flat)

REACTIONS. (size) 9=0-3-8, 6=0-3-8 Max Grav 9=273(LC 1), 6=273(LC 1)

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

TOP CHORD 2-3=-322/0, 3-4=-322/0

**BOT CHORD** 8-9=0/322, 7-8=0/322, 6-7=0/279

4-6=-347/0, 2-9=-394/0 **WEBS** 

### NOTES-

1) Unbalanced floor live loads have been considered for this design.

2) 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.





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

Job Truss Truss Type Qty McKee - Clark 144539249 2610609 F38G **ROOF TRUSS** Job Reference (optional) Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jan 26 12:47:35 2021 Page 1 ID:IVPazU2YfbZ3pfi4ZQ30aOzQim7-ZWFmRGd7hqUDFGw9rPz4XWXeZzC1geXxBpm89hzrU6s 0-1-8 0-1-8 Scale = 1:10.0 3x4 = 3 5 12 11 10 3x4 =3x4 =3x4 =Plate Offsets (X,Y)--[2:0-1-8,Edge], [8:0-1-8,Edge] SPACING-**PLATES** GRIP LOADING (psf) CSI. DEFL. in (loc) I/defI L/d **TCLL** 40.0 Plate Grip DOL 1.00 TC 0.09 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 Stress Incr NO WB 0.03 Horz(CT) 0.00 6 n/a n/a **BCDL** Code IRC2015/TPI2014 FT = 20%F, 11%E 5.0 Matrix-P Weight: 27 lb LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.2(flat) BOT CHORD 2x4 SP No.2(flat) **WEBS** 2x4 SP No.3(flat) **OTHERS** 2x4 SP No.3(flat) TOP CHORD Structural wood sheathing directly applied or 5-4-0 oc purlins,

except end verticals.

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

REACTIONS. All bearings 5-4-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 10, 6, 9, 8, 7

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

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

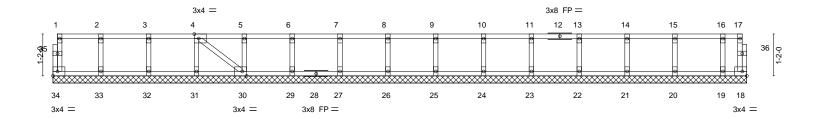


| Job     | Truss | Truss Type | Qty | Ply | McKee - Clark            |
|---------|-------|------------|-----|-----|--------------------------|
| 2610609 | F39G  | ROOF TRUSS | 1   | 1   | 144539250                |
| 2010009 | 15390 | ROOF IROSS | '   | '   | Job Reference (optional) |

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jan 26 12:47:36 2021 Page 1 ID:IVPazU2YfbZ3pfi4ZQ30aOzQim7-1ip8fbelS8c4tQVLP6VJ3j4pGMYGP5n4PTVih7zrU6r

0-<u>11</u>-8

0-11-8 Scale: 3/8"=1



| 19-4-0    |                              |  |   |   |  |   |   |  |   |  |  |
|-----------|------------------------------|--|---|---|--|---|---|--|---|--|--|
| ets (X,Y) | [4:0-1-8,Edge], [30:0-1-8    | ,Edge]   |   |   |  |   |   |  |   |  |  |
| (psf)     | SPACING-                     | 2-0-0  | CSI.  |   | DEFL.  | in                                      | (loc)   | l/defl   | L/d   | PLATES   | GRIP   |
| 40.0      | Plate Grip DOL               | 1.00   | TC  | 0.09  | Vert(LL)   | n/a                                     | -   | n/a  | 999   | MT20   | 244/190  |
| 10.0      | Lumber DOL                   | 1.00   | BC  | 0.01  | Vert(CT)   | n/a                                     | -   | n/a  | 999   |  |  |
| 0.0       | Rep Stress Incr              | NO   | WB  | 0.03  | Horz(CT)   | 0.00                                    | 18  | n/a  | n/a   |  |  |
| 5.0       | Code IRC2015/TI              | PI2014   | Matri   | x-S   |  |   |   |  |   | Weight: 83 lb  | FT = 20%F, 11%E  |
|           | (psf)<br>40.0<br>10.0<br>0.0 | (psf)         SPACING-           40.0         Plate Grip DOL           10.0         Lumber DOL           0.0         Rep Stress Incr | (psf)         SPACING-         2-0-0           40.0         Plate Grip DOL         1.00           10.0         Lumber DOL         1.00           0.0         Rep Stress Incr         NO | (psf)         SPACING-<br>40.0         2-0-0<br>Plate Grip DOL<br>1.00         CSI.<br>TC           10.0         Lumber DOL<br>0.0         1.00<br>Rep Stress Incr         BC<br>NO | (psf)         SPACING-         2-0-0         CSI.           40.0         Plate Grip DOL         1.00         TC         0.09           10.0         Lumber DOL         1.00         BC         0.01           0.0         Rep Stress Incr         NO         WB         0.03 | (psf)   SPACING-   2-0-0   CSI.   DEFL. | (psf)   SPACING-   2-0-0   CSI.   DEFL.   in   40.0   Plate Grip DOL   1.00   BC   0.01   Vert(CT)   n/a   0.0   Rep Stress Incr   NO   WB   0.03   Horz(CT)   0.00 | (psf)   SPACING-   2-0-0   CSI.   DEFL.   in (loc) | (psf)   SPACING-   2-0-0   CSI.   DEFL.   in (loc)   l/defl   40.0   Plate Grip DOL   1.00   TC   0.09   Vert(LL)   n/a   - n/a   10.0   Lumber DOL   1.00   BC   0.01   Vert(CT)   n/a   - n/a   0.0   Rep Stress Incr   NO   WB   0.03   Horz(CT)   0.00   18   n/a   n/a | (psf)   SPACING-   2-0-0   CSI.   DEFL.   in (loc)   //defl   L/d     40.0   Plate Grip DOL   1.00   BC   0.01   Vert(LL)   n/a   - n/a   999   10.0   Lumber DOL   1.00   BC   0.01   Vert(CT)   n/a   - n/a   999   0.0   Rep Stress Incr   NO   WB   0.03   Horz(CT)   0.00   18   n/a   n/a   n/a   18   18   18   18   18   18   18   1 | (psf)   SPACING-   2-0-0   CSI.   DEFL.   in (loc)   l/defl   L/d   PLATES |

19-4-0

LUMBER-BRACING-

2x4 SP No.2(flat) TOP CHORD TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, BOT CHORD 2x4 SP No.2(flat) except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. All bearings 19-4-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 34, 18, 33, 32, 31, 30, 29, 27, 26, 25, 24, 23, 22, 21, 20,

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

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



| Job     | Truss | Truss Type | Qty | Ply | McKee - Clark            |
|---------|-------|------------|-----|-----|--------------------------|
|         |       |            |     |     | I44539251                |
| 2610609 | F40   | ROOF TRUSS | 2   | 1   |                          |
|         |       |            |     |     | Job Reference (optional) |

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jan 26 12:47:37 2021 Page 1 ID:IVPazU2YfbZ3pfi4ZQ30aOzQim7-VvNWsxfODRkxUa4Yyp0YcxdxwmqS8WeEe7FFDZzrU6q



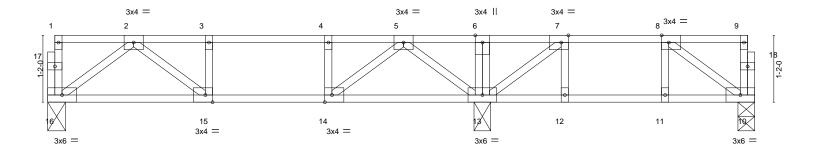


Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

0<sub>1</sub>1<sub>7</sub>8 Scale = 1:20.1



|                     | 2-9-0                   |                    |                          |                  |              |     | 12-4-0        |                 |  |  |
|---------------------|-------------------------|--------------------|--------------------------|------------------|--------------|-----|---------------|-----------------|--|--|
|                     | 2-9-0                   |                    | 4-10-0                   |                  | 4-9-0        |     |               |                 |  |  |
| Plate Offsets (X,Y) | [7:0-1-8,Edge], [8:0-1- | ·8,Edge], [14:0-1- | 8,Edge], [15:0-1-8,Edge] |                  |              |     |               |                 |  |  |
| LOADING (psf)       | SPACING-                | 2-0-0              | CSI.                     | <b>DEFL</b> . in | (loc) I/defl | L/d | PLATES        | GRIP            |  |  |
| TCLL 40.0           | Plate Grip DOL          | . 1.00             | TC 0.29                  | Vert(LL) -0.03   | 15-16 >999   | 480 | MT20          | 244/190         |  |  |
| TCDL 10.0           | Lumber DOL              | 1.00               | BC 0.27                  | Vert(CT) -0.03   | 15-16 >999   | 360 |               |                 |  |  |
| BCLL 0.0            | Rep Stress Inc          | r YES              | WB 0.18                  | Horz(CT) 0.01    | 10 n/a       | n/a |               |                 |  |  |
| BCDL 5.0            | Code IRC2015            | 5/TPI2014          | Matrix-S                 |                  |              |     | Weight: 63 lb | FT = 20%F, 11%E |  |  |

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

WEBS 2x4 SP No.3(flat)

(size) 16=0-3-12, 10=0-3-8, 13=0-3-8

Max Grav 16=399(LC 10), 10=253(LC 7), 13=696(LC 1)

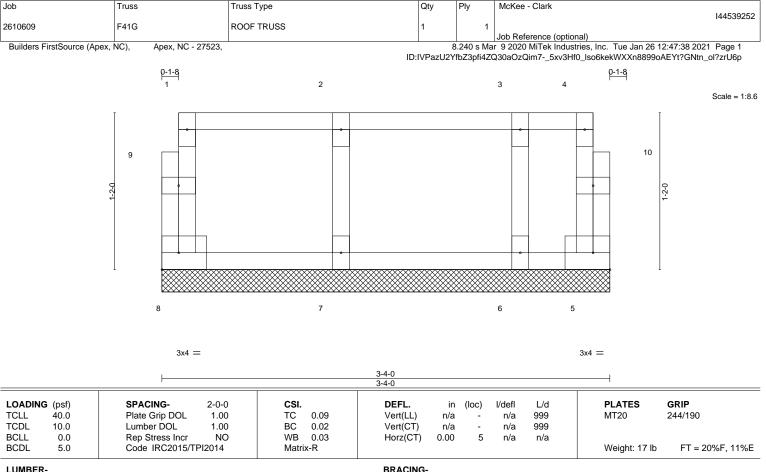
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-689/0, 3-4=-689/0, 4-5=-689/0, 7-8=-275/0

**BOT CHORD** 15-16=0/440, 14-15=0/689, 13-14=0/421, 12-13=0/275, 11-12=0/275, 10-11=0/275  $2\text{-}16\text{=-}548/0,\,5\text{-}13\text{=-}562/0,\,2\text{-}15\text{=-}0/318,\,5\text{-}14\text{=-}0/387,\,8\text{-}10\text{=-}336/0,\,7\text{-}13\text{=-}402/0}$ **WEBS** 

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 1.5x3 MT20 unless otherwise indicated.
- 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.
- 4) CAUTION, Do not erect truss backwards.







TOP CHORD

**BOT CHORD** 

LUMBER-

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

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

REACTIONS. All bearings 3-4-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 8, 5, 7, 6

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

### NOTES-

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



Structural wood sheathing directly applied or 3-4-0 oc purlins,

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

except end verticals.



| Job     | Truss | Truss Type | Qty | Ply | McKee - Clark            |
|---------|-------|------------|-----|-----|--------------------------|
| 0040000 | F42   | DOOF TRUCK |     |     | 144539253                |
| 2610609 | F42   | ROOF TRUSS | 4   | 1   | 11.54                    |
|         |       |            |     |     | Job Reference (optional) |

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jan 26 12:47:40 2021 Page 1 ID:IVPazU2YfbZ3pfi4ZQ30aOzQim7-wU2fUzhGWM6WL1o7eyZFEZFTG\_rnLoEgK5TvquzrU6n

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

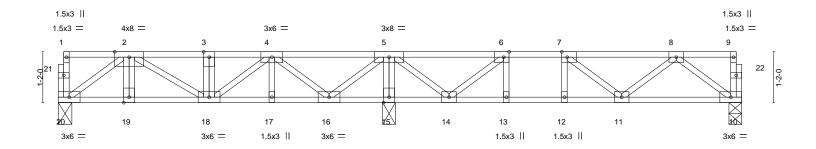
Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.



1-2-8

0-1-8 Scale = 1:26.4



| 1-7-8               | 3-5-8                          | 7-7-0     | 12-11-0                          | 15-8-0                        |  |  |
|---------------------|--------------------------------|-----------|----------------------------------|-------------------------------|--|--|
| 1-7-8               | 1-10-0                         | 4-1-8     | 5-4-0                            | 2-9-0                         |  |  |
| Plate Offsets (X,Y) | [6:0-1-8,Edge], [7:0-1-8,Edge] |           |                                  |                               |  |  |
| LOADING (psf)       | SPACING- 2-0-0                 |           | <b>DEFL.</b> in (loc) I/defl L/d | PLATES GRIP                   |  |  |
| TCLL 40.0           | Plate Grip DOL 1.00            | 0 TC 0.22 | Vert(LL) -0.04 11-12 >999 480    | MT20 244/190                  |  |  |
| TCDL 10.0           | Lumber DOL 1.00                | 0 BC 0.29 | Vert(CT) -0.05 11-12 >999 360    |                               |  |  |
| BCLL 0.0            | Rep Stress Incr NO             | O WB 0.45 | Horz(CT) 0.01 10 n/a n/a         |                               |  |  |
| BCDL 5.0            | Code IRC2015/TPI2014           | Matrix-S  |                                  | Weight: 87 lb FT = 20%F, 11%E |  |  |

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

2x4 SP SS(flat) TOP CHORD

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

REACTIONS. (size) 20=0-3-12, 10=0-3-8, 15=0-3-8

Max Grav 20=828(LC 8), 10=378(LC 4), 15=1226(LC 1)

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

TOP CHORD 2-3=-1471/0, 3-4=-1475/0, 4-5=-408/0, 6-7=-590/44, 7-8=-566/0

19-20=0/1111, 18-19=0/1110, 17-18=0/1089, 16-17=0/1089, 15-16=-616/0, 14-15=-616/0, BOT CHORD

13-14=-44/590, 12-13=-44/590, 11-12=-44/590, 10-11=0/459 5-15=-1173/0, 2-20=-1345/0, 5-16=0/943, 4-16=-918/0, 8-10=-574/0, 5-14=0/574,

6-14=-667/0, 3-18=-484/0, 4-18=0/577, 2-18=0/416

### NOTES-

**WEBS** 

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Magnitude of user added load(s) on this truss have been applied uniformly across all gravity load cases with no adjustments.
- 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.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 350 lb down at 1-4-8, and 350 Ib down at 3-5-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

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

Vert: 10-20=-10, 1-9=-100

Concentrated Loads (lb)

Vert: 2=-350(F) 3=-350(F)



January 27,2021



| Job     | Truss | Truss Type  | Qty | Ply | McKee - Clark            |
|---------|-------|-------------|-----|-----|--------------------------|
| 0040000 | E404  | DOOF TRUING | 40  |     | 144539254                |
| 2610609 | F42A  | ROOF TRUSS  | 13  | 1   |                          |
|         |       |             |     |     | Job Reference (optional) |

Builders FirstSource (Apex, NC),

Apex, NC - 27523,

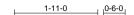
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jan 26 12:47:41 2021 Page 1 ID:IVPazU2YfbZ3pfi4ZQ30aOzQim7-Ogc1iJiuHgENzBNJBf4UmnnYyN4q4GnpZlDSMKzrU6m

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

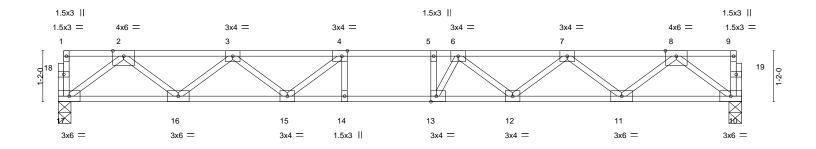
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.





0-1-8 Scale = 1:26.4



| <u> </u>   | 15-8-0                          |          |          |       |       |        |     |               |                 |  |
|--|---------------------------------|----------|----------|-------|-------|--------|-----|---------------|-----------------|--|
| 15-8-0   15- |                                 |          |          |       |       |        |     |               |                 |  |
| Flate Offsets (A, I)   | [4.0-1-6,Euge], [13.0-1-6,Euge] |          |          |       |       |        |     |               |                 |  |
| 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 0.61  | Vert(LL) | -0.18 | 13    | >999   | 480 | MT20          | 244/190         |  |
| TCDL 10.0  | Lumber DOL 1.00                 | BC 0.75  | Vert(CT) | -0.25 | 13    | >735   | 360 |               |                 |  |
| BCLL 0.0   | Rep Stress Incr YES             | WB 0.43  | Horz(CT) | 0.05  | 10    | n/a    | n/a |               |                 |  |
| BCDL 5.0   | Code IRC2015/TPI2014            | Matrix-S |          |       |       |        |     | Weight: 78 lb | FT = 20%F, 11%E |  |

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SP No.2(flat)

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

REACTIONS. (size) 17=0-3-8, 10=0-3-8 Max Grav 17=842(LC 1), 10=842(LC 1)

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

TOP CHORD 2-3=-1741/0, 3-4=-2746/0, 4-5=-3097/0, 5-6=-3097/0, 6-7=-2747/0, 7-8=-1741/0

BOT CHORD 16-17=0/1047, 15-16=0/2400, 14-15=0/3097, 13-14=0/3097, 12-13=0/3061, 11-12=0/2403,

10-11=0/1046

2-17=-1311/0, 2-16=0/904, 3-16=-858/0, 3-15=0/503, 4-15=-609/0, 8-10=-1309/0, **WEBS** 

8-11=0/905, 7-11=-861/0, 7-12=0/448, 6-12=-446/0, 6-13=-233/465, 5-13=-296/107

### NOTES-

1) Unbalanced floor live loads have been considered for this design.

2) 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 | McKee - Clark            |
|---------|-------|------------|-----|-----|--------------------------|
|         |       |            |     |     | 144539255                |
| 2610609 | F42B  | ROOF TRUSS | 2   | 1   |                          |
|         |       |            |     |     | Job Reference (optional) |

Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jan 26 12:47:42 2021 Page 1 ID:IVPazU2YfbZ3pfi4ZQ30aOzQim7-ssAPvfjW2\_NEbLyVINcjJ\_KkKnNupjCzoPy0vnzrU6I

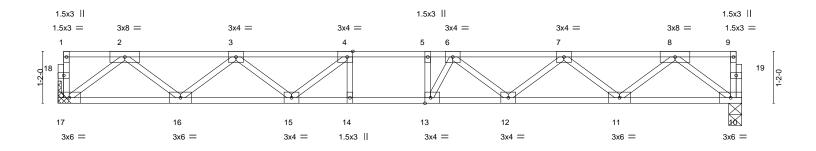
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

2-2-0 oc bracing: 13-14,12-13.





| 15-4-8   | <u> </u>        |
|--|-----------------|
| Plate Offsets (X,Y) [4:0-1-8,Edge], [13:0-1-8,Edge]                        |                 |
|  |                 |
| LOADING (psf) SPACING- 2-0-0 CSI. DEFL. in (loc) 1/defl L/d PLATES GRI     | iP              |
| TCLL 40.0 Plate Grip DOL 1.00 TC 0.57 Vert(LL) -0.18 13 >999 480 MT20 244, | /190            |
| TCDL 10.0 Lumber DOL 1.00 BC 0.96 Vert(CT) -0.25 13-14 >736 360            |                 |
| BCLL 0.0 Rep Stress Incr YES WB 0.42 Horz(CT) 0.05 10 n/a n/a              |                 |
| BCDL 5.0 Code IRC2015/TPI2014 Matrix-S Weight: 78 lb F                     | FT = 20%F, 11%E |

TOP CHORD

15-4-8

LUMBER-**BRACING-**

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

2x4 SP No.3(flat) **BOT CHORD** 

REACTIONS. (size) 17=Mechanical, 10=0-3-8 Max Grav 17=826(LC 1), 10=826(LC 1)

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

TOP CHORD 2-3=-1702/0, 3-4=-2667/0, 4-5=-2987/0, 5-6=-2987/0, 6-7=-2668/0, 7-8=-1701/0

BOT CHORD  $16-17=0/1025,\ 15-16=0/2343,\ 14-15=0/2987,\ 13-14=0/2987,\ 12-13=0/2966,\ 11-12=0/2343,\ 14-15=0/2987,\ 13-14=0/2987,\ 12-13=0/2966,\ 11-12=0/2343,\ 14-15=0/2987,\ 13-14=0/2987,\ 13-1$ 

10-11=0/1025

**WEBS** 2-17=-1283/0, 2-16=0/880, 3-16=-835/0, 3-15=0/475, 4-15=-555/0, 8-10=-1283/0,

8-11=0/880, 7-11=-836/0, 7-12=0/423, 6-12=-416/0, 6-13=-253/422, 5-13=-266/138

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 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.



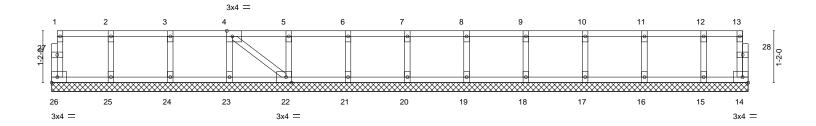


| Job     | Truss | Truss Type | Qty | Ply | McKee - Clark            |
|---------|-------|------------|-----|-----|--------------------------|
| 2610609 | F43G  | ROOF TRUSS | 1   | 1   | 144539256                |
| 2610609 | F43G  | ROOF IRUSS | '   | '   | Job Reference (optional) |

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Jan 26 12:47:43 2021 Page 1 ID:IVPazU2YfbZ3pfi4ZQ30aOzQim7-K3ko7?j9oHV5CVXhJ47yrCs0XBxvYGW603iZRDzrU6k

0<sub>1</sub>1<sub>7</sub>8

0<sub>1</sub>1<sub>7</sub>8 Scale = 1:25.9



| <u> </u>  | 15-8-0<br>15-8-0                                    |                 |        |       |      |          |      |       |        |     |               |                 |
|-----------|---|-----------------|--------|-------|------|----------|------|-------|--------|-----|---------------|-----------------|
| Plate Off | Plate Offsets (X,Y) [4:0-1-8,Edge], [22:0-1-8,Edge] |                 |        |       |      |          |      |       |        |     |               |                 |
| LOADING   | G (psf)   | SPACING-        | 2-0-0  | CSI.  |      | DEFL.    | in   | (loc) | I/defl | L/d | PLATES        | GRIP            |
| TCLL      | 40.0  | Plate Grip DOL  | 1.00   | TC    | 0.09 | 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 Stress Incr | NO     | WB    | 0.03 | Horz(CT) | 0.00 | 14    | n/a    | n/a |               |                 |
| BCDL      | 5.0   | Code IRC2015/Ti | PI2014 | Matri | x-S  |          |      |       |        |     | Weight: 68 lb | FT = 20%F, 11%E |

LUMBER-

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

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

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

except end verticals.

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

REACTIONS. All bearings 15-8-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 26, 14, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15

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

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



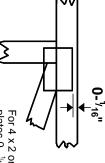


### Symbols

## 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- <sup>1</sup>/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



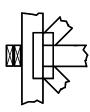
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



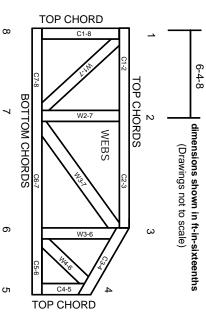
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only

### Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction. Design Standard for Bracing. Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

ANSI/TPI1: DSB-89:

## 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.

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

# **General Safety Notes**

# Failure to Follow Could Cause Property Damage or Personal Injury

- 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.

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Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.

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- Cut members to bear tightly against each other.
- 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.

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- 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.

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- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- 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.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.