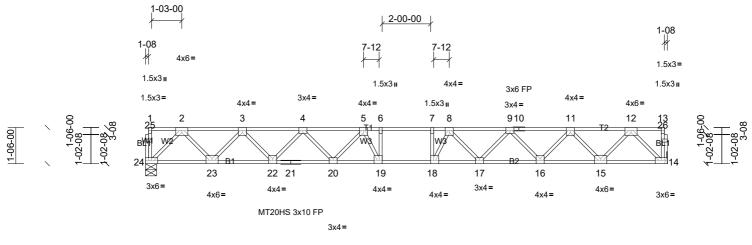
| Job        | Truss | Truss Type | Qty | Ply |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F100  | Floor      | 8   | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:30 ID:4LILMeWNoakzsP20qTM ylzQX0H-oHoC2eE5L28oTzUGwzTklke5okd3?CLdrcZe4ZytG9h Page: 1



11-09-04 10-09-04 9-09-04 21-06-08 9-09-04 9-09-04 1-00-00

Scale = 1:47.8

| Loading | (psf) | Spacing         | 1-07-03         | CSI       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.64 | Vert(LL)  | -0.31 | 18-19 | >817   | 480 | MT20HS        | 148/108         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 1.00 | Vert(TL)  | -0.49 | 18-19 | >522   | 360 | MT20          | 197/144         |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.27 | Horiz(TL) | 0.10  | 14    | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 88 lb | FT = 20%F, 11%E |

LUMBER

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF No.2(flat) 2x4 SPF No.2(flat) **WEBS** 2x4 SPF No.2(flat) **OTHERS** 

**BRACING** TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 2-2-0 oc

bracing.

14= Mechanical, (min. 1-08), REACTIONS (size)

24=5-08, (min. 1-08)

Max Grav 14=931 (LC 1), 24=931 (LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown. TOP CHORD 2-3=-1548/0, 3-4=-2631/0, 4-5=-3307/0,

5-6=-3596/0, 6-7=-3596/0, 7-8=-3596/0. 8-9=-3307/0, 9-10=-2631/0, 10-11=-2631/0,

11-12=-1548/0

**BOT CHORD** 23-24=0/893, 22-23=0/2182, 21-22=0/3062,

20-21=0/3062, 19-20=0/3535, 18-19=0/3596 17-18=0/3535, 16-17=0/3062, 15-16=0/2182,

14-15=0/893

**WEBS** 6-19=-343/122, 7-18=-343/122,

2-24=-1262/0, 2-23=0/973, 3-23=-943/0, 3-22=0/667, 4-22=-641/0, 4-20=0/370, 5-20=-402/0, 5-19=-219/503, 12-14=-1262/0, 12-15=0/973, 11-15=-943/0, 11-16=0/667, 9-16=-641/0, 9-17=0/370, 8-17=-402/0,

8-18=-219/503

#### **NOTES**

- Unbalanced floor live loads have been considered for
- 2) All plates are MT20 plates unless otherwise indicated.
- All plates are 4x4 MT20 unless otherwise indicated.
- Bearings are assumed to be: Joint 24 SPF No.2 crushing capacity of 425 psi.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

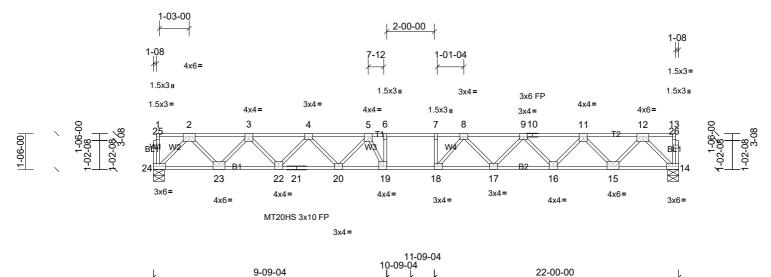
Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

| Job        | Truss | Truss Type | Qty | Ply |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F101  | Floor      | 10  | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:31 ID:BaVrWGTtkLEYNokEbdH2nvzQX0L-K4FqrIDTbk0xrpv4MGyVDX6tKKOVGlzTcyq5Y6ytG9i

10-02-12

Page: 1



Scale = 1:48.5

| Loading | (psf) | Spacing         | 1-07-03         | csı       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.81 | Vert(LL)  | -0.31 | 18    | >848   | 480 | MT20HS        | 148/108         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.57 | Vert(TL)  | -0.48 | 18    | >542   | 360 | MT20          | 197/144         |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.28 | Horiz(TL) | 0.08  | 14    | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 90 lb | FT = 20%F, 11%E |

1-00-00 1-00-00

9-09-04

#### LUMBER

TOP CHORD 2x4 SPF No.2(flat) 2x4 SPF 2100F 1.8E(flat) BOT CHORD **WEBS** 2x4 SPF No.2(flat) **OTHERS** 2x4 SPF No.2(flat)

# **BRACING**

**FORCES** 

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.

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

**REACTIONS** (size) 14=5-08, (min. 1-08), 24=5-08,

(min. 1-08) Max Grav 14=951 (LC 1), 24=951 (LC 1)

(lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

TOP CHORD 2-3=-1586/0, 3-4=-2706/0, 4-5=-3416/0, 5-6=-3752/0, 6-7=-3752/0, 7-8=-3752/0,

8-9=-3421/0, 9-10=-2705/0, 10-11=-2705/0,

11-12=-1586/0 **BOT CHORD** 

23-24=0/913, 22-23=0/2239, 21-22=0/3155, 20-21=0/3155, 19-20=0/3668, 18-19=0/3752,

17-18=0/3662, 16-17=0/3156, 15-16=0/2238,

14-15=0/914

**WEBS** 6-19=-349/87, 2-24=-1290/0, 2-23=0/1000,

3-23=-970/0, 3-22=0/695, 4-22=-667/0, 4-20=0/390, 5-20=-443/0, 5-19=-193/543 12-14=-1290/0, 12-15=0/1000, 11-15=-969/0,

11-16=0/694, 9-16=-670/0, 9-17=0/393,

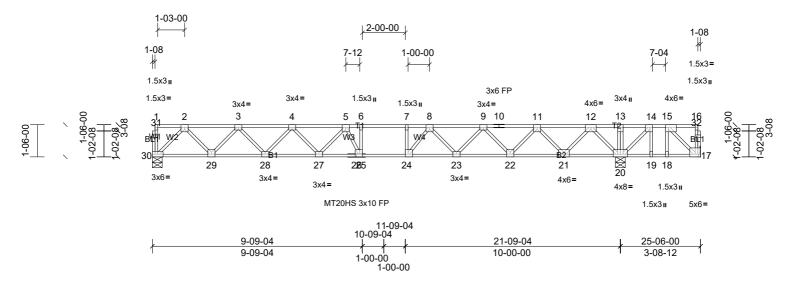
8-17=-394/0, 8-18=-177/468

#### **NOTES**

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- All bearings are assumed to be SPF 2100F 1.8E crushing capacity of 525 psi.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F102  | Floor      | 2   | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:31 ID:4LILMeWNoakzsP20qTM\_ylzQX0H-oHoC2eE5L28oTzUGwzTklke4wkdK?BMdrcZe4ZytG9h Page: 1



#### Scale = 1:53.9

| Loading | (psf) | Spacing         | 1-07-03         | csı       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES         | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|----------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.69 | Vert(LL)  | -0.25 | 25-27 | >999   | 480 | MT20HS         | 148/108         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.98 | Vert(TL)  | -0.39 | 25-27 | >666   | 360 | MT20           | 197/144         |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.34 | Horiz(TL) | 0.07  | 20    | n/a    | n/a |                |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 107 lb | FT = 20%F, 11%E |

#### LUMBER

TOP CHORD 2x4 SPF 2100F 1.8E(flat) BOT CHORD 2x4 SPF No.2(flat) 2x4 SPF No.2(flat) **WEBS OTHERS** 2x4 SPF No.2(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 2-2-0 oc

**REACTIONS** (size)

TOP CHORD

**BOT CHORD** 

17= Mechanical, (min. 1-08), 20=5-08, (min. 1-08), 30=5-08,

(min. 1-08)

Max Uplift 17=-641 (LC 3)

Max Grav 17=-35 (LC 4), 20=1909 (LC 1),

30=834 (LC 10)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

2-3=-1364/0, 3-4=-2269/0, 4-5=-2780/0,

5-6=-2846/0, 6-7=-2846/0, 7-8=-2846/0, 8-9=-2242/0, 9-10=-1344/0, 10-11=-1344/0,

12-13=0/1834, 13-14=0/1834, 14-15=0/860 29-30=0/797, 28-29=0/1910, 27-28=0/2615,

26-27=0/2903, 25-26=0/2903, 24-25=0/2846, 23-24=0/2595, 22-23=0/1890, 21-22=0/777,

20-21=-790/0, 19-20=-860/0, 18-19=-860/0,

17-18=-860/0

**WEBS** 7-24=-378/0, 2-30=-1125/0, 2-29=0/844,

3-29=-811/0, 3-28=0/534, 4-28=-515/0, 4-27=0/267, 5-27=-262/0, 5-25=-374/295,

12-20=-1485/0, 12-21=0/1153, 11-21=-1115/0, 11-22=0/847, 9-22=-816/0, 9-23=0/526, 8-23=-531/0, 8-24=0/626,

14-20=-1421/0, 15-17=0/1198, 14-19=0/392, 15-18=-363/0

#### **NOTES**

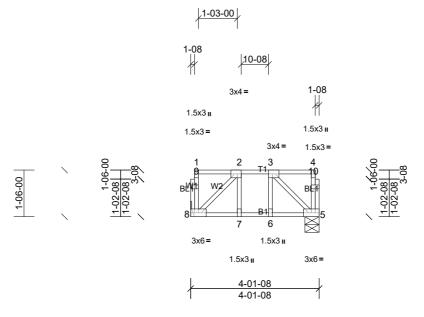
- 1) Unbalanced floor live loads have been considered for
- All plates are MT20 plates unless otherwise indicated.
- All plates are 4x4 MT20 unless otherwise indicated.
- Bearings are assumed to be: Joint 30 SPF No.2 crushing capacity of 425 psi, Joint 20 SPF No.2 crushing capacity of 425 psi.
- Refer to girder(s) for truss to truss connections.

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 641 lb uplift at joint 17.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
- 9) CAUTION, Do not erect truss backwards.

| Job        | Truss | Truss Type | Qty | Ply |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F103  | Floor      | 8   | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:31 ID:FCO45aSdCk\_q7UasTCFaiUzQX0N-oHoC2eE5L28oTzUGwzTklkeDXksg?GDdrcZe4ZytG9h

Page: 1



Scale = 1:37.2

| Loading | (psf) | Spacing         | 1-07-03         | csı       | -    | DEFL      | in   | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.08 | Vert(LL)  | 0.00 | 7-8   | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.06 | Vert(TL)  | 0.00 | 7-8   | >999   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.03 | Horiz(TL) | 0.00 | 5     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |      |       |        |     | Weight: 21 lb | FT = 20%F, 11%E |

# LUMBER

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF No.2(flat) WEBS 2x4 SPF No.2(flat) OTHERS 2x4 SPF No.2(flat)

# BRACING

TOP CHORD Structural wood sheathing directly applied or 4-1-8 oc purlins, except end verticals.

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

bracing.

**REACTIONS** (size) 5=5-08, (min. 1-08), 8= Mechanical, (min. 1-08)

Max Grav 5=165 (LC 1), 8=165 (LC 1)

(lb) - Max. Comp./Max. Ten. - All forces 250

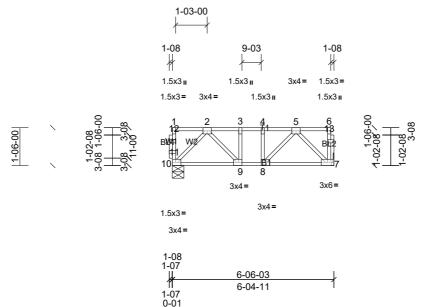
(lb) or less except when shown.

# FORCES NOTES

- Unbalanced floor live loads have been considered for this design.
- 2) Bearings are assumed to be: , Joint 5 SPF No.2 crushing capacity of 425 psi.
- B) Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F106  | Floor      | 1   | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:31 ID: jOySJwTFz16hle921wmpFhzQX0M-K4FqrIDTbk0xrpv4MGyVDX62qKVgGpcTcyq5Y6ytG9i Page: 1



Scale = 1:45.8

| Loading | (psf) | Spacing         | 1-07-03         | csı       | -    | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.08 | Vert(LL)  | -0.01 | 7-8   | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.11 | Vert(TL)  | -0.01 | 7-8   | >999   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.05 | Horiz(TL) | 0.00  | 7     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 30 lb | FT = 20%F, 11%E |

#### LUMBER

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF No.2(flat) **WEBS** 2x4 SPF No.2(flat) 2x4 SPF No.2(flat) **OTHERS** 

# **BRACING**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

**REACTIONS** (size) 7= Mechanical, (min. 1-08), 10=5-08, (min. 1-08)

Max Grav 7=268 (LC 1), 10=273 (LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

TOP CHORD 2-3=-308/0, 3-4=-308/0, 4-5=-308/0

**BOT CHORD** 8-9=0/308 5-7=-307/0, 2-10=-307/0

# **WEBS**

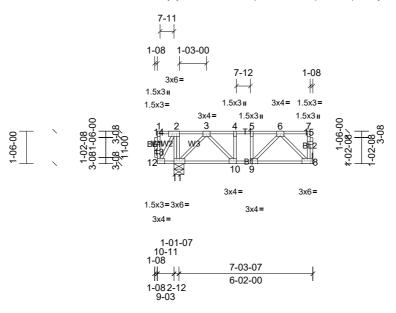
### **NOTES** 1) Unbalanced floor live loads have been considered for this design.

- Bearings are assumed to be: Joint 10 SPF No.2 crushing capacity of 425 psi.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F107  | Floor      | 1   | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:31 ID:jOySJwTFz16hle921wmpFhzQX0M-K4FqrlDTbk0xrpv4MGyVDX62qKVoGpdTcyq5Y6ytG9i

Page: 1



Scale = 1:53.3

| Loading | (psf) | Spacing         | 1-07-03         | csı       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.08 | Vert(LL)  | -0.01 | 8-9   | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.10 | Vert(TL)  | -0.01 | 8-9   | >999   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.05 | Horiz(TL) | 0.00  | 8     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 37 lb | FT = 20%F, 11%E |

#### LUMBER

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF No.2(flat) WEBS 2x4 SPF No.2(flat) OTHERS 2x4 SPF No.2(flat)

# **BRACING**

BOT CHORD

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc

bracing, Except:

6-0-0 oc bracing: 11-12.

**REACTIONS** (size) 8= Mechanical, (min. 1-08),

11=5-08, (min. 1-08)

Max Grav 8=264 (LC 4), 11=348 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

TOP CHORD 3-4=-301/0, 4-5=-301/0, 5-6=-301/0

BOT CHORD 9-10=0/301

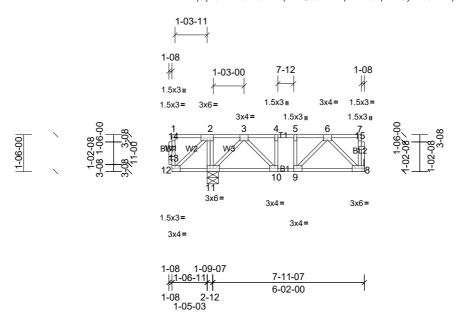
WEBS 3-11=-296/0, 6-8=-302/0

#### NOTES

- Unbalanced floor live loads have been considered for this design.
- Bearings are assumed to be: Joint 11 SPF No.2 crushing capacity of 425 psi.
- 3) Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F108  | Floor      | 1   | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:31 ID:jOySJwTFz16hle921wmpFhzQX0M-K4FqrIDTbk0xrpv4MGyVDX62VKVpGpbTcyq5Y6ytG9i Page: 1



Scale = 1:47.1

| Loading | (psf) | Spacing         | 1-07-03         | CSI       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.10 | Vert(LL)  | -0.01 | 8-9   | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.10 | Vert(TL)  | -0.01 | 8-9   | >999   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.05 | Horiz(TL) | 0.00  | 8     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 39 lb | FT = 20%F, 11%E |

# LUMBER

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF No.2(flat) **WEBS** 2x4 SPF No.2(flat) 2x4 SPF No.2(flat) **OTHERS** 

# **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** (size) 8= Mechanical, (min. 1-08), 11=5-08, (min. 1-08)

Max Grav 8=261 (LC 4), 11=417 (LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

3-4=-294/0, 4-5=-294/0, 5-6=-294/0

TOP CHORD **BOT CHORD** 9-10=0/294

**WEBS** 3-11=-302/0, 6-8=-298/0

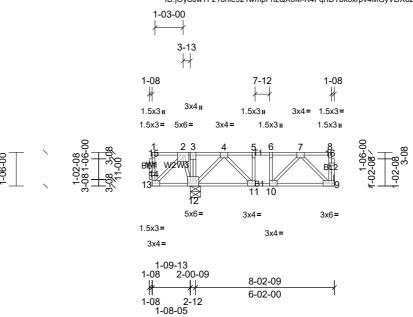
# **NOTES**

- 1) Unbalanced floor live loads have been considered for this design.
- Bearings are assumed to be: Joint 11 SPF No.2 crushing capacity of 425 psi.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F109  | Floor      | 1   | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:31 ID:jOySJwTFz16hle921wmpFhzQX0M-K4FqrlDTbk0xrpv4MGyVDX62ZKVoGpZTcyq5Y6ytG9i

Page: 1



Scale = 1:51.4

| Loading | (psf) | Spacing         | 1-07-03         | CSI       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.09 | Vert(LL)  | -0.01 | 9-10  | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.10 | Vert(TL)  | -0.02 | 9-10  | >999   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.05 | Horiz(TL) | 0.00  | 9     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 41 lb | FT = 20%F, 11%E |

#### LUMBER

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF No.2(flat) WEBS 2x4 SPF No.2(flat) OTHERS 2x4 SPF No.2(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** (size) 9= Mechanical, (min. 1-08), 12=5-08, (min. 1-08)

Max Grav 9=259 (LC 4), 12=448 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

TOP CHORD 4-5=-289/0, 5-6=-289/0, 6-7=-289/0

BOT CHORD 10-11=0/289

WEBS 4-12=-321/0, 7-9=-294/0

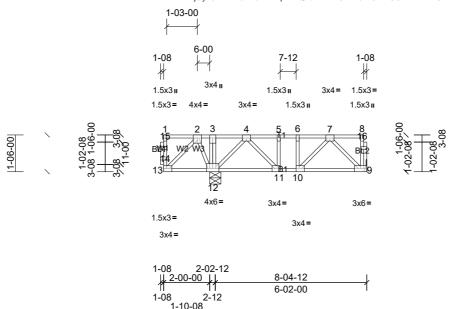
# NOTES

- Unbalanced floor live loads have been considered for this design.
- 2) Bearings are assumed to be: Joint 12 SPF No.2 crushing capacity of 425 psi.
- 3) Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F110  | Floor      | 2   | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:32 ID:jOySJwTFz16hle921wmpFhzQX0M-oHoC2eE5L28oTzUGwzTklkeDCkr1?GmdrcZe4ZytG9h

Page: 1



Scale = 1:47.1

| Loading | (psf) | Spacing         | 1-07-03         | CSI       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.10 | Vert(LL)  | -0.01 | 9-10  | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.10 | Vert(TL)  | -0.02 | 9-10  | >999   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.06 | Horiz(TL) | 0.00  | 9     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 41 lb | FT = 20%F, 11%E |

# LUMBER

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF No.2(flat) WEBS 2x4 SPF No.2(flat) OTHERS 2x4 SPF No.2(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** (size) 9= Mechanical, (min. 1-08), 12=5-08, (min. 1-08)

Max Grav 9=257 (LC 4), 12=468 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

TOP CHORD 4-5=-286/0, 5-6=-286/0, 6-7=-286/0

BOT CHORD 10-11=0/286

WEBS 4-12=-329/0, 7-9=-293/0

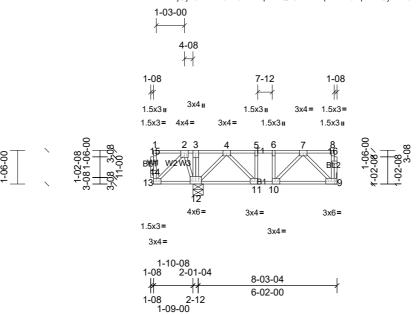
# NOTES

- Unbalanced floor live loads have been considered for this design.
- 2) Bearings are assumed to be: Joint 12 SPF No.2 crushing capacity of 425 psi.
- 3) Refer to girder(s) for truss to truss connections.
- ) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F111  | Floor      | 1   | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:32 ID:jOySJwTFz16hle921wmpFhzQX0M-K4FqrIDTbk0xrpv4MGyVDX62XKVoGpYTcyq5Y6ytG9i

Page: 1



Scale = 1:51.4

| Loading | (psf) | Spacing         | 1-07-03         | csı       | -    | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.09 | Vert(LL)  | -0.01 | 9-10  | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.10 | Vert(TL)  | -0.02 | 9-10  | >999   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.05 | Horiz(TL) | 0.00  | 9     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 41 lb | FT = 20%F, 11%E |

#### LUMBER

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF No.2(flat) WEBS 2x4 SPF No.2(flat) OTHERS 2x4 SPF No.2(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** (size) 9= Mechanical, (min. 1-08), 12=5-08, (min. 1-08)

Max Grav 9=258 (LC 4), 12=454 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

TOP CHORD 4-5=-288/0, 5-6=-288/0, 6-7=-288/0

BOT CHORD 10-11=0/288

WEBS 4-12=-323/0, 7-9=-294/0

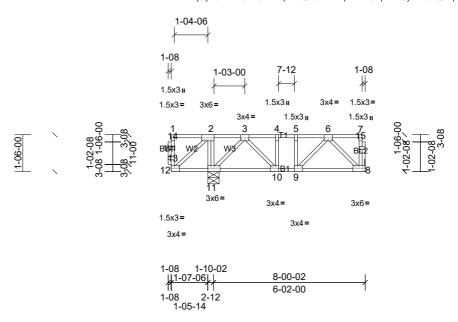
# NOTES

- Unbalanced floor live loads have been considered for this design.
- Bearings are assumed to be: Joint 12 SPF No.2 crushing capacity of 425 psi.
- 3) Refer to girder(s) for truss to truss connections.
- ) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F112  | Floor      | 1   | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:32 ID:jOySJwTFz16hle921wmpFhzQX0M-K4FqrIDTbk0xrpv4MGyVDX62QKVpGpaTcyq5Y6ytG9i

Page: 1



Scale = 1:47.1

| Loading | (psf) | Spacing         | 1-07-03         | CSI       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.10 | Vert(LL)  | -0.01 | 8-9   | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.10 | Vert(TL)  | -0.02 | 8-9   | >999   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.05 | Horiz(TL) | 0.00  | 8     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 39 lb | FT = 20%F, 11%E |

# LUMBER

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF No.2(flat) WEBS 2x4 SPF No.2(flat) OTHERS 2x4 SPF No.2(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** (size) 8= Mechanical, (min. 1-08), 11=5-08, (min. 1-08)

Max Grav 8=261 (LC 4), 11=424 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

TOP CHORD 3-4=-293/0, 4-5=-293/0, 5-6=-293/0

BOT CHORD 9-10=0/293

WEBS 3-11=-302/0, 6-8=-297/0

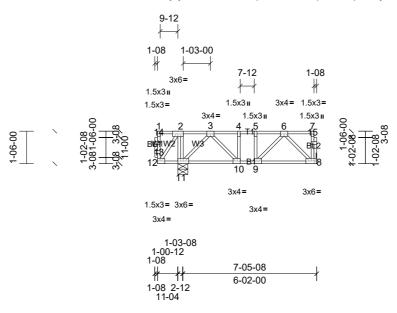
#### **NOTES**

- Unbalanced floor live loads have been considered for this design.
- 2) Bearings are assumed to be: Joint 11 SPF No.2 crushing capacity of 425 psi.
- 3) Refer to girder(s) for truss to truss connections.
- ) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F113  | Floor      | 1   | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:32 ID:jOySJwTFz16hle921wmpFhzQX0M-K4FqrlDTbk0xrpv4MGyVDX62pKVpGpdTcyq5Y6ytG9i

Page: 1



Scale = 1:53.3

| Loading | (psf) | Spacing         | 1-07-03         | csı       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.08 | Vert(LL)  | -0.01 | 8-9   | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.10 | Vert(TL)  | -0.01 | 8-9   | >999   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.05 | Horiz(TL) | 0.00  | 8     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 37 lb | FT = 20%F, 11%E |

#### LUMBER

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF No.2(flat) WEBS 2x4 SPF No.2(flat) OTHERS 2x4 SPF No.2(flat)

# **BRACING**

BOT CHORD

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc

bracing, Except:

6-0-0 oc bracing: 11-12.

REACTIONS (size) 8= Mechanical, (min. 1-08),

11=5-08, (min. 1-08)

Max Grav 8=263 (LC 4), 11=365 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

TOP CHORD 3-4=-300/0, 4-5=-300/0, 5-6=-300/0

BOT CHORD 9-10=0/300

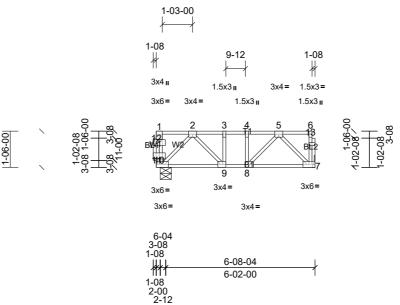
WEBS 3-11=-298/0, 6-8=-301/0

#### **NOTES**

- Unbalanced floor live loads have been considered for this design.
- Bearings are assumed to be: Joint 11 SPF No.2 crushing capacity of 425 psi.
- B) Refer to girder(s) for truss to truss connections.
- 4) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F114  | Floor      | 1   | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:32 ID:jOySJwTFz16hle921wmpFhzQX0M-K4FqrlDTbk0xrpv4MGyVDX62nKVdGpbTcyq5Y6ytG9i Page: 1



Scale = 1:47.8

| Loading | (psf) | Spacing         | 1-07-03         | csı       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.08 | Vert(LL)  | -0.01 | 7-8   | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.11 | Vert(TL)  | -0.01 | 7-8   | >999   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.05 | Horiz(TL) | 0.00  | 7     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 32 lb | FT = 20%F, 11%E |

#### LUMBER

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF No.2(flat) **WEBS** 2x4 SPF No.2(flat) 2x4 SPF No.2(flat) **OTHERS** 

# **BRACING**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing.

**REACTIONS** (size) 7= Mechanical, (min. 1-08), 10=5-08, (min. 1-08)

Max Grav 7=272 (LC 1), 10=277 (LC 1) (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

2-3=-319/0, 3-4=-319/0, 4-5=-319/0

TOP CHORD **BOT CHORD** 8-9=0/319

**WEBS** 5-7=-314/0, 2-10=-317/0

# **NOTES**

**FORCES** 

- 1) Unbalanced floor live loads have been considered for this design.
- Bearings are assumed to be: Joint 10 SPF No.2 crushing capacity of 425 psi.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

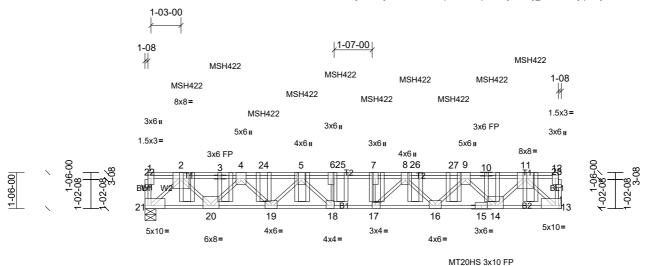
 Job
 Truss
 Truss Type
 Qty
 Ply

 21071052BF
 F115
 Floor Girder
 1
 1
 Job Reference (optional)

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:33 ID:QJYEPLaWc6MGyAwzd0y9fozQX0C-K4FqrlDTbk0xrpv4MGyVDX6y KKfGh2Tcyq5Y6ytG9i

6x8=

Page: 1



Scale = 1:48.2

| Loading | (psf) | Spacing         | 1-07-03         | csı       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.45 | Vert(LL)  | -0.25 | 16-17 | >816   | 480 | MT20HS        | 148/108         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.82 | Vert(TL)  | -0.38 | 16-17 | >536   | 360 | MT20          | 197/144         |
| BCLL    | 0.0   | Rep Stress Incr | NO              | WB        | 0.53 | Horiz(TL) | 0.10  | 13    | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 89 lb | FT = 20%F, 11%E |

17-04-00 17-04-00

#### LUMBER

 TOP CHORD
 2x4 SPF No.2(flat)

 BOT CHORD
 2x4 SPF 2100F 1.8E(flat)

 WEBS
 2x4 SPF No.2(flat)

 OTHERS
 2x4 SPF No.2(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

REACTIONS (size)

13= Mechanical, (min. 1-08),

21=5-08, (min. 1-08)

Max Grav 13=1901 (LC 4), 21=1863 (LC 3)

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

TOP CHORD 2-3=-3190/0, 3-4=-3190/0, 4-24=-5137/0,

5-24=-5137/0, 5-6=-5984/0, 6-25=-5984/0, 7-25=-5984/0, 7-8=-5984/0, 8-26=-5203/0, 26-27=-5203/0, 9-27=-5203/0, 9-10=-3261/0,

10-11=-3261/0

BOT CHORD 20-21=0/1917, 19-20=0/4443, 18-19=0/5804, 17-18=0/5984, 16-17=0/5831, 15-16=0/4547,

14-15=0/4547, 13-14=0/1957

WEBS 11-13=-2703/0, 2-21=-2649/0, 11-14=0/1891,

2-20=0/1844, 9-14=-1865/0, 4-20=-1818/0, 9-16=0/1015, 4-19=0/1069, 8-16=-998/0, 5-19=-1056/0, 8-17=0/711, 5-18=0/749,

6-18=-485/0, 7-17=-465/0

### NOTES

- Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- 3) The Fabrication Tolerance at joint 15 = 11%
- Bearings are assumed to be: Joint 21 SPF 2100F 1.8E crushing capacity of 525 psi.
- 5) Refer to girder(s) for truss to truss connections.
- 6) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

- 8) Use USP MSH422 (With 10d nails into Girder & 6-10d nails into Truss) or equivalent spaced at 1-7-3 oc max. starting at 1-8-15 from the left end to 16-0-9 to connect truss(es) to back face of top chord.
- Fill all nail holes where hanger is in contact with lumber.
   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

 Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (lb/ft) Vert: 13-21=-8, 1-12=-80

Concentrated Loads (lb)

Vert: 10=-199 (B), 3=-200 (B), 11=-209 (B), 2=-204

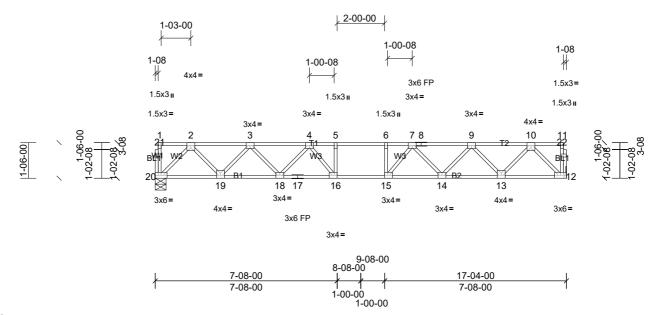
(B), 5=-195 (B), 7=-193 (B), 24=-197 (B), 25=-193

(B), 26=-194 (B), 27=-197 (B)

| Job        | Truss | Truss Type | Qty | Ply |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F117  | Floor      | 11  | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:33 ID:uEaB2tOUNBLX1jiuhffP?QzQX0S-oHoC2eE5L28oTzUGwzTklke7hkis?DQdrcZe4ZytG9h

Page: 1



Scale = 1:48.8

| Loading | (psf) | Spacing         | 1-07-03         | CSI       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.45 | Vert(LL)  | -0.14 | 16-18 | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.69 | Vert(TL)  | -0.22 | 16-18 | >950   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.21 | Horiz(TL) | 0.05  | 12    | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 71 lb | FT = 20%F, 11%E |

# LUMBER

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF No.2(flat) WEBS 2x4 SPF No.2(flat) OTHERS 2x4 SPF No.2(flat)

### BRACING

TOP CHORD

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

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

bracing.

**REACTIONS** (size) 12= Mechanical, (min. 1-08), 20=5-08, (min. 1-08)

Max Grav 12=746 (LC 1), 20=746 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

2-3=-1197/0, 3-4=-1939/0, 4-5=-2308/0,

5-6=-2308/0, 6-7=-2308/0, 7-8=-1939/0,

8-9=-1939/0, 9-10=-1197/0

BOT CHORD 19-20=0/708, 18-19=0/1665, 17-18=0/2195,

16-17=0/2195, 15-16=0/2308, 14-15=0/2195,

13-14=0/1665, 12-13=0/708

WEBS 2-20=-999/0, 2-19=0/727, 3-19=-696/0,

3-18=0/406, 4-18=-381/0, 4-16=-72/419, 10-12=-999/0, 10-13=0/727, 9-13=-696/0,

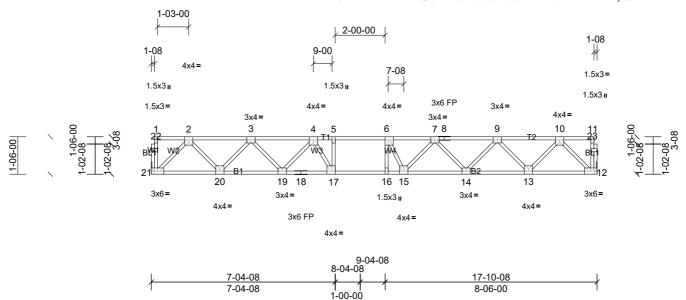
9-14=0/406, 7-14=-381/0, 7-15=-72/419

# NOTES

- Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- B) Bearings are assumed to be: Joint 20 SPF No.2 crushing capacity of 425 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F119  | Floor      | 3   | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:33 ID: BaVrWGTtkLEYNokEbdH2nvzQX0L-oHoC2eE5L28oTzUGwzTklke6ckee?DHdrcZe4ZytG9harder and the property of the pro Page: 1



Scale = 1:46.4

| Loading | (psf) | Spacing         | 1-07-03         | CSI       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.52 | Vert(LL)  | -0.17 | 16    | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.96 | Vert(TL)  | -0.26 | 16    | >799   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.21 | Horiz(TL) | 0.06  | 12    | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 74 lb | FT = 20%F, 11%E |

1-00-00

# LUMBER

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF No.2(flat) **WEBS** 2x4 SPF No.2(flat) 2x4 SPF No.2(flat) **OTHERS** 

# **BRACING**

**FORCES** 

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, Except:

2-2-0 oc bracing: 16-17.

**REACTIONS** (size) 12= Mechanical, (min. 1-08), 21= Mechanical, (min. 1-08)

Max Grav 12=770 (LC 1), 21=770 (LC 1)

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

2-3=-1244/0, 3-4=-2022/0, 4-5=-2449/0,

TOP CHORD 5-6=-2449/0, 6-7=-2423/0, 7-8=-2029/0,

8-9=-2029/0, 9-10=-1242/0

**BOT CHORD** 20-21=0/732, 19-20=0/1731, 18-19=0/2313,

17-18=0/2313, 16-17=0/2449, 15-16=0/2449, 14-15=0/2313, 13-14=0/1730, 12-13=0/732

5-17=-300/0, 2-21=-1033/0, 2-20=0/761,

3-20=-724/0, 3-19=0/432, 4-19=-433/0,

4-17=-38/500, 10-12=-1034/0, 10-13=0/757,

9-13=-726/0, 9-14=0/445, 7-14=-422/0,

7-15=0/310, 6-15=-326/177

# **NOTES**

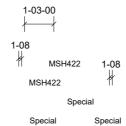
**WEBS** 

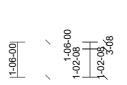
- 1) Unbalanced floor live loads have been considered for this design.
- All plates are 4x4 MT20 unless otherwise indicated.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

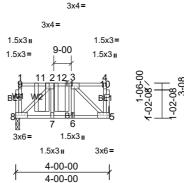
| Job        | Truss | Truss Type   | Qty | Ply |                          |
|------------|-------|--------------|-----|-----|--------------------------|
| 21071052BF | F120  | Floor Girder | 1   | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:33 ID:vV6cchb8NQU7aKV9AjTOB0zQX0B-K4FqrlDTbk0xrpv4MGyVDX6qnKMqGn4Tcyq5Y6ytG9i

Page: 1







Scale = 1:49.4

| Loading | (psf) | Spacing         | 1-07-03         | CSI       | -    | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.97 | Vert(LL)  | -0.03 | 7-8   | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.68 | Vert(TL)  | -0.04 | 7-8   | >999   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | NO              | WB        | 0.15 | Horiz(TL) | 0.00  | 5     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 21 lb | FT = 20%F, 11%E |

#### LUMBER

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF No.2(flat) WEBS 2x4 SPF No.2(flat) OTHERS 2x4 SPF No.2(flat)

#### **BRACING**

TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins. except end verticals.

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

**REACTIONS** (size) 5= Mechanical, (min. 1-08),

8=2-00, (min. 1-08)

Max Uplift 5=-130 (LC 9), 8=-402 (LC 10) Max Grav 5=1312 (LC 4), 8=934 (LC 3)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

TOP CHORD 5-10=-742/0, 4-10=-742/0, 2-12=-673/328,

3-12=-673/328

BOT CHORD 7-8=-328/673, 6-7=-328/673, 5-6=-328/673 WEBS 3-5=-887/467, 2-8=-919/448, 3-6=0/253

#### **NOTES**

- Unbalanced floor live loads have been considered for this design.
- Bearings are assumed to be: Joint 8 SPF No.2 crushing capacity of 425 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 402 lb uplift at joint 8 and 130 lb uplift at joint 5.
- 6) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
- Use USP MSH422 (With 10d nails into Girder & 6-10d nails into Truss) or equivalent spaced at 0-10-2 oc max. starting at 1-1-7 from the left end to 1-11-9 to connect truss(es) to back face of top chord.
- 9) Fill all nail holes where hanger is in contact with lumber.

- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 705 lb up at 2-7-11, and 762 lb down at 3-9-12 on top chord. The design/selection of such connection device (s) is the responsibility of others.
- 11) 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

 Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (lb/ft)

Vert: 5-8=-8, 1-4=-80

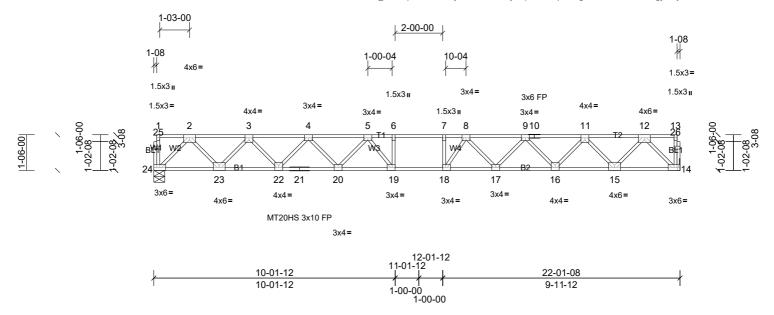
Concentrated Loads (lb)

Vert: 4=-728 (B), 3=157 (F), 11=-549 (F=157,

B=-706), 12=-706 (B)

| Job        | Truss | Truss Type | Qty | Ply |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F121  | Floor      | 2   | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:33  $ID: YYJkZ\_X0YtsqTZcCOAtDUyzQX0G-suhRdyCrqQu4DfKtpYRGgJZk6w2LXIhKOI4Y?gytG9j$  Page: 1



Scale = 1:48.7

| Loading | (psf) | Spacing         | 1-07-03         | CSI       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.65 | Vert(LL)  | -0.31 | 18-19 | >843   | 480 | MT20HS        | 148/108         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.56 | Vert(TL)  | -0.49 | 18-19 | >539   | 360 | MT20          | 197/144         |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.28 | Horiz(TL) | 0.08  | 14    | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 90 lb | FT = 20%F, 11%E |

LUMBER

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF 2100F 1.8E(flat) **WEBS** 2x4 SPF No.2(flat) 2x4 SPF No.2(flat) OTHERS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or 5-10-10 oc purlins, except end verticals.

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

**REACTIONS** (size) 14= Mechanical, (min. 1-08), 24=5-08, (min. 1-08)

Max Grav 14=957 (LC 1), 24=957 (LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

TOP CHORD 2-3=-1597/0, 3-4=-2726/0, 4-5=-3449/0,

5-6=-3796/0, 6-7=-3796/0, 7-8=-3796/0,

8-9=-3448/0, 9-10=-2726/0, 10-11=-2726/0,

11-12=-1597/0

BOT CHORD 23-24=0/919, 22-23=0/2254, 21-22=0/3181, 20-21=0/3181, 19-20=0/3698, 18-19=0/3796,

17-18=0/3700, 16-17=0/3181, 15-16=0/2254,

14-15=0/919

**WEBS** 6-19=-268/47, 7-18=-300/60, 2-24=-1298/0,

> 2-23=0/1008, 3-23=-977/0, 3-22=0/702, 4-22=-677/0, 4-20=0/399, 5-20=-410/0,

5-19=-172/488, 12-14=-1298/0,

12-15=0/1008, 11-15=-977/0, 11-16=0/702,

9-16=-676/0, 9-17=0/397, 8-17=-427/0,

8-18=-175/510

#### NOTES

- Unbalanced floor live loads have been considered for
- All plates are MT20 plates unless otherwise indicated.
- All plates are 3x4 MT20 unless otherwise indicated.
- Bearings are assumed to be: Joint 24 SPF 2100F 1.8E crushing capacity of 525 psi.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

7) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

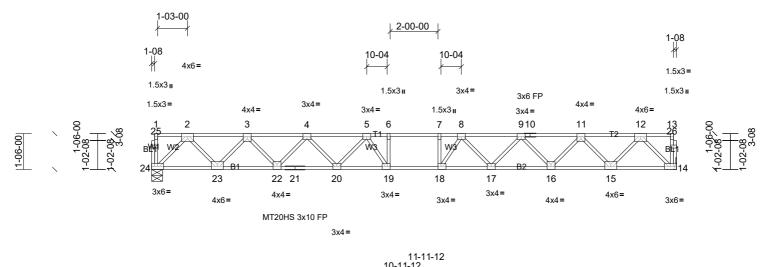
| Job        | Truss | Truss Type | Qty | Ply |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F122  | Floor      | 9   | 1   | Job Reference (optional) |

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21-11-08

9-11-12

Page: 1



Scale = 1:48.4

| Loading | (psf) | Spacing         | 1-07-03         | csı       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.61 | Vert(LL)  | -0.30 | 18-19 | >865   | 480 | MT20HS        | 148/108         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.55 | Vert(TL)  | -0.47 | 18-19 | >552   | 360 | MT20          | 197/144         |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.28 | Horiz(TL) | 0.08  | 14    | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 90 lb | FT = 20%F, 11%E |

1-00-00 1-00-00

LOAD CASE(S) Standard

9-11-12

9-11-12

LUMBER TOP CHORD 2x4 SPF No.2(flat)

**WEBS** 

**OTHERS** 

BOT CHORD 2x4 SPF 2100F 1.8E(flat) 2x4 SPF No.2(flat) 2x4 SPF No.2(flat)

**BRACING** TOP CHORD Structural wood sheathing directly applied or

5-11-9 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

**REACTIONS** (size) 14= Mechanical, (min. 1-08),

24=5-08, (min. 1-08)

Max Grav 14=950 (LC 1), 24=950 (LC 1) (lb) - Max. Comp./Max. Ten. - All forces 250

**FORCES** (lb) or less except when shown.

TOP CHORD 2-3=-1583/0, 3-4=-2699/0, 4-5=-3408/0,

5-6=-3738/0, 6-7=-3738/0, 7-8=-3738/0

8-9=-3408/0, 9-10=-2699/0, 10-11=-2699/0,

11-12=-1583/0

**BOT CHORD** 23-24=0/912, 22-23=0/2233, 21-22=0/3147,

20-21=0/3147, 19-20=0/3652, 18-19=0/3738, 17-18=0/3652, 16-17=0/3147, 15-16=0/2233,

14-15=0/912

**WEBS** 6-19=-291/65, 7-18=-291/65, 2-24=-1287/0,

2-23=0/998, 3-23=-967/0, 3-22=0/692, 4-22=-666/0, 4-20=0/388, 5-20=-416/0,

5-19=-181/493, 12-14=-1287/0, 12-15=0/998, 11-15=-967/0, 11-16=0/692, 9-16=-666/0, 9-17=0/388, 8-17=-416/0, 8-18=-181/493

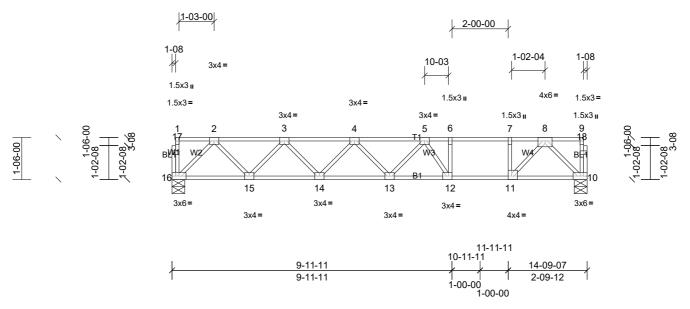
# **NOTES**

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 3x4 MT20 unless otherwise indicated.
- Bearings are assumed to be: Joint 24 SPF 2100F 1.8E crushing capacity of 525 psi.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F123  | Floor      | 3   | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:34 ID:4LILMeWNoakzsP20qTM ylzQX0H-K4FqrlDTbk0xrpv4MGyVDX6u3KM2Gl5Tcyq5Y6ytG9i

Page: 1



Scale = 1:41.2

| Loading | (psf) | Spacing         | 1-07-03         | csı       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.76 | Vert(LL)  | -0.22 | 12-13 | >806   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.66 | Vert(TL)  | -0.33 | 12-13 | >522   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.27 | Horiz(TL) | 0.02  | 10    | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 61 lb | FT = 20%F, 11%E |

# LUMBER

 TOP CHORD
 2x4 SPF 2100F 1.8E(flat)

 BOT CHORD
 2x4 SPF 2100F 1.8E(flat)

 WEBS
 2x4 SPF No.2(flat)

 OTHERS
 2x4 SPF No.2(flat)

# **BRACING**

TOP CHORD

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

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

bracing.

**REACTIONS** (size) 10=5-08, (min. 1-08), 16=5-07,

(min. 1-08)

Max Grav 10=634 (LC 1), 16=634 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

2-3=-985/0, 3-4=-1518/0, 4-5=-1696/0,

5-6=-1248/0, 6-7=-1248/0, 7-8=-1248/0 BOT CHORD 15-16=0/597, 14-15=0/1346, 13-14=0/1692,

12-13=0/1596, 11-12=0/1248, 10-11=0/593

6-12=0/363, 7-11=-534/0, 2-16=-843/0,

2-15=0/575, 3-15=-538/0, 3-14=0/256,

4-14=-259/0, 5-12=-668/0, 8-10=-833/0,

8-11=0/974

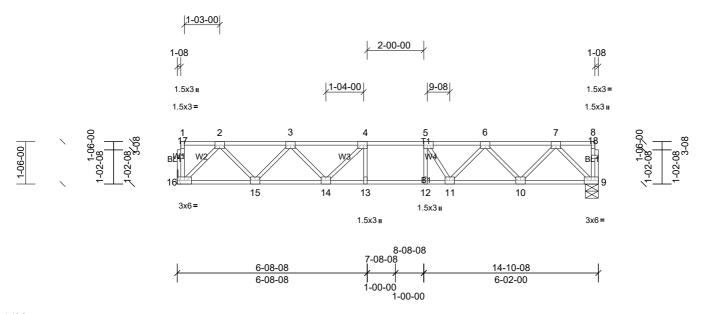
#### **NOTES**

**WEBS** 

- Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- All bearings are assumed to be SPF 2100F 1.8E
- crushing capacity of 525 psi.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F124  | Floor      | 1   | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:34 ID:YYJkZ X0YtsqTZcCOAtDUyzQX0G-K4FqrIDTbk0xrpv4MGyVDX6 SKLmGnpTcyq5Y6ytG9i Page: 1



Scale = 1:40.9

| Loading | (psf) | Spacing         | 1-07-03         | csı       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.36 | Vert(LL)  | -0.11 | 13-14 | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.74 | Vert(TL)  | -0.16 | 13-14 | >999   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.16 | Horiz(TL) | 0.03  | 9     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 62 lb | FT = 20%F, 11%E |

# LUMBER

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF No.2(flat) **WEBS** 2x4 SPF No.2(flat) 2x4 SPF No.2(flat) **OTHERS** 

# **BRACING**

TOP CHORD

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

**REACTIONS** (size) 9=5-08, (min. 1-08), 16= Mechanical, (min. 1-08)

Max Grav 9=638 (LC 1), 16=638 (LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

2-3=-992/0, 3-4=-1535/0, 4-5=-1693/0,

5-6=-1548/0, 6-7=-989/0

15-16=0/599, 14-15=0/1365, 13-14=0/1693, BOT CHORD

12-13=0/1693, 11-12=0/1693, 10-11=0/1352,

9-10=0/603

**WEBS** 2-16=-845/0, 2-15=0/584, 3-15=-555/0,

3-14=0/295, 4-14=-350/0, 7-9=-852/0,

7-10=0/573, 6-10=-539/0, 6-11=0/347,

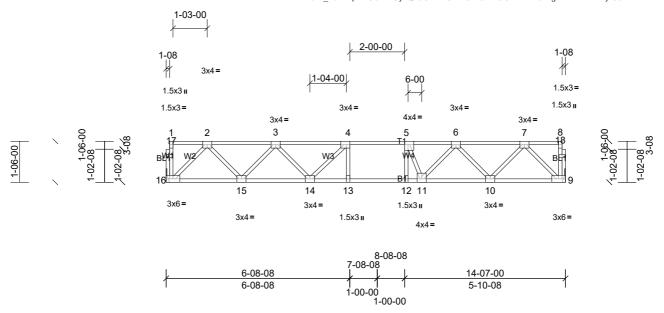
5-11=-413/0

# NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are 3x4 MT20 unless otherwise indicated.
- Bearings are assumed to be: , Joint 9 SPF No.2 crushing capacity of 425 psi.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F126  | Floor      | 10  | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:34 ID:YYJkZ X0YtsqTZcCOAtDUyzQX0G-oHoC2eE5L28oTzUGwzTklke92kgS?E7drcZe4ZytG9h Page: 1



Scale = 1:42.3

| Loading | (psf) | Spacing         | 1-07-03         | csı       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.36 | Vert(LL)  | -0.11 | 13-14 | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.78 | Vert(TL)  | -0.15 | 13-14 | >999   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.16 | Horiz(TL) | 0.03  | 9     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 61 lb | FT = 20%F, 11%E |

# LUMBER

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF No.2(flat) **WEBS** 2x4 SPF No.2(flat) 2x4 SPF No.2(flat) **OTHERS** 

# **BRACING**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

**REACTIONS** (size) 9= Mechanical, (min. 1-08), 16= Mechanical, (min. 1-08)

Max Grav 9=625 (LC 1), 16=625 (LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

TOP CHORD 2-3=-967/0, 3-4=-1488/0, 4-5=-1622/0,

5-6=-1512/0, 6-7=-963/0

15-16=0/586, 14-15=0/1331, 13-14=0/1622, BOT CHORD

12-13=0/1622, 11-12=0/1622, 10-11=0/1312,

9-10=0/592

**WEBS** 2-16=-826/0, 2-15=0/567, 3-15=-540/0,

3-14=0/278, 4-14=-320/0, 7-9=-835/0,

7-10=0/552, 6-10=-519/0, 6-11=0/363,

5-11=-456/0

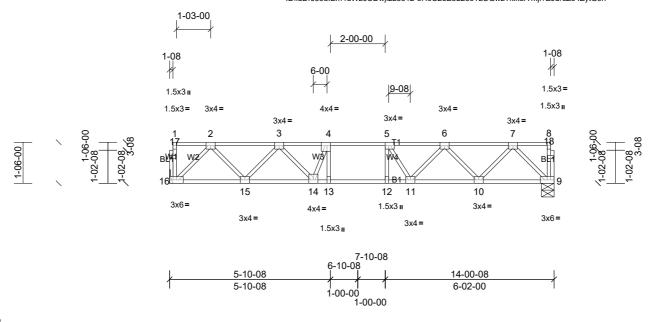
### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are 3x4 MT20 unless otherwise indicated. 3) Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F128  | Floor      | 14  | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:34 ID:ldDrJ56ulEm4uWz0UDwji2z3612-oHoC2eE5L28oTzUGwzTklkeA1kjl?EJdrcZe4ZytG9h

Page: 1



#### Scale = 1:42.3

| Loading | (psf) | Spacing         | 1-07-03         | CSI       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.30 | Vert(LL)  | -0.08 | 11-12 | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.63 | Vert(TL)  | -0.11 | 11-12 | >999   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.15 | Horiz(TL) | 0.03  | 9     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 59 lb | FT = 20%F, 11%E |

# LUMBER

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF No.2(flat) **WEBS** 2x4 SPF No.2(flat) 2x4 SPF No.2(flat) **OTHERS** 

# **BRACING**

TOP CHORD

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

**REACTIONS** (size) 9=5-08, (min. 1-08), 16= Mechanical, (min. 1-08) Max Grav 9=601 (LC 1), 16=601 (LC 1)

(lb) - Max. Comp./Max. Ten. - All forces 250

**FORCES** 

(lb) or less except when shown.

2-3=-918/0, 3-4=-1419/0, 4-5=-1500/0,

5-6=-1409/0, 6-7=-919/0

15-16=0/567, 14-15=0/1247, 13-14=0/1500, BOT CHORD

12-13=0/1500, 11-12=0/1500, 10-11=0/1253,

9-10=0/566

**WEBS** 2-16=-800/0, 2-15=0/522, 3-15=-489/0,

3-14=0/325, 4-14=-379/24, 7-9=-798/0, 7-10=0/526, 6-10=-495/0, 6-11=0/293,

5-11=-316/13

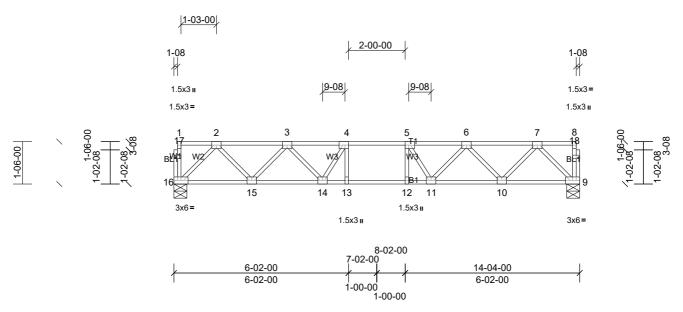
### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are 3x4 MT20 unless otherwise indicated.
- 3) Bearings are assumed to be: , Joint 9 SPF No.2 crushing capacity of 425 psi.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F129  | Floor      | 4   | 1   | Job Reference (optional) |

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Page: 1



Scale = 1:40.9

| Loading | (psf) | Spacing         | 1-07-03         | CSI       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.29 | Vert(LL)  | -0.08 | 13-14 | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.61 | Vert(TL)  | -0.12 | 13-14 | >999   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | YES             | WB        | 0.15 | Horiz(TL) | 0.03  | 9     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 60 lb | FT = 20%F, 11%E |

# LUMBER

 TOP CHORD
 2x4 SPF No.2(flat)

 BOT CHORD
 2x4 SPF No.2(flat)

 WEBS
 2x4 SPF No.2(flat)

 OTHERS
 2x4 SPF No.2(flat)

# **BRACING**

TOP CHORD

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 begins

bracing.

**REACTIONS** (size) 9=5-08, (min. 1-08), 16=5-08, (min. 1-08)

Max Grav 9=614 (LC 1), 16=614 (LC 1)

(lb) - Max. Comp./Max. Ten. - All forces 250

FORCES (lb) - Max. Comp./Max.

(lb) or less except when shown.

2-3=-944/0, 3-4=-1458/0, 4-5=-1567/0,

5-6=-1458/0, 6-7=-944/0 BOT CHORD 15-16=0/579, 14-15=0/1287, 13-14=0/

15-16=0/579, 14-15=0/1287, 13-14=0/1567, 12-13=0/1567, 11-12=0/1567, 10-11=0/1287,

9-10=0/579

WEBS 2-16=-817/0, 2-15=0/543, 3-15=-511/0,

3-14=0/312, 4-14=-348/0, 7-9=-817/0, 7-10=0/543, 6-10=-511/0, 6-11=0/312,

5-11=-348/0

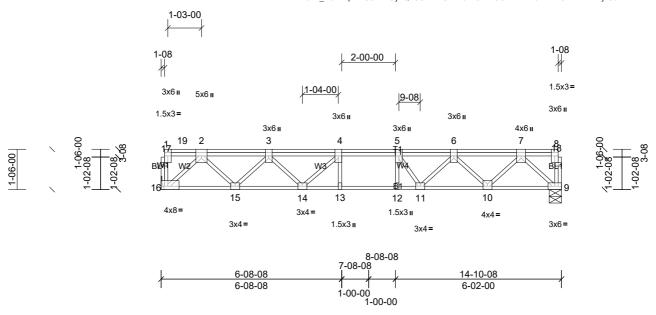
### NOTES

- Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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 |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F131  | Floor      | 1   | 1   | Job Reference (optional) |

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Page: 1



Scale = 1:43

| Loading | (psf) | Spacing         | 1-07-03         | csı       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.71 | Vert(LL)  | -0.09 | 13-14 | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.75 | Vert(TL)  | -0.14 | 13-14 | >999   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | NO              | WB        | 0.28 | Horiz(TL) | 0.04  | 9     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 77 lb | FT = 20%F, 11%E |

Vert: 19=-1332

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

OTHERS 2x4 SPF No.2(flat)

**BRACING** 

**BOT CHORD** 

LUMBER

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc

bracing.

**REACTIONS** (size) 9=5-08, (min. 1-08), 16= Mechanical, (min. 1-08)

Max Grav 9=698 (LC 1), 16=1910 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

TOP CHORD 16-17=-691/0, 1-17=-690/0, 2-3=-1614/0,

 $3-4=-2013/0,\ 4-5=-2091/0,\ 5-6=-1873/0,$ 

6-7=-1146/0

BOT CHORD 15-16=0/1304, 14-15=0/1906, 13-14=0/2091,

12-13=0/2091, 11-12=0/2091, 10-11=0/1574,

9-10=0/694

WEBS 2-16=-1757/0, 2-15=0/450, 3-15=-424/0,

3-14=0/295, 4-14=-308/74, 7-9=-957/0, 7-10=0/656, 6-10=-621/0, 6-11=0/518,

5-11=-509/0

#### **NOTES**

- Unbalanced floor live loads have been considered for this design.
- Bearings are assumed to be: , Joint 9 SPF No.2 crushing capacity of 425 psi.
- Refer to girder(s) for truss to truss connections.
- 4) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

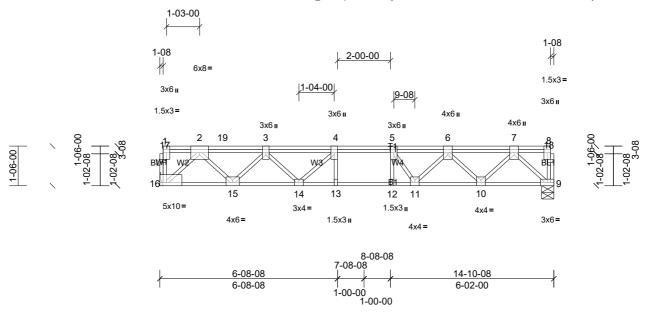
#### LOAD CASE(S) Standard

Dead + Floor Live (balanced): Lumber Increase=1.00,
Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 9-16=-8, 1-8=-80
Concentrated Loads (lb)

| Job        | Truss | Truss Type | Qty | Ply |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F132  | Floor      | 1   | 1   | Job Reference (optional) |

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Page: 1



Scale = 1:43.7

| Loading | (psf) | Spacing         | 1-07-03         | CSI       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.67 | Vert(LL)  | -0.11 | 13-14 | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.57 | Vert(TL)  | -0.18 | 13-14 | >993   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | NO              | WB        | 0.45 | Horiz(TL) | 0.05  | 9     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 77 lb | FT = 20%F, 11%E |

#### LUMBER

TOP CHORD 2x4 SPF 2100F 1.8E(flat) BOT CHORD 2x4 SPF 2100F 1.8E(flat) **WEBS** 2x4 SPF No.2(flat) 2x4 SPF No.2(flat) **OTHERS** 

# **BRACING**

**FORCES** 

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

**REACTIONS** (size) 9=5-08, (min. 1-08), 16= Mechanical, (min. 1-08) Max Grav 9=843 (LC 1), 16=1766 (LC 1)

(lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

TOP CHORD 2-19=-2647/0, 3-19=-2647/0, 3-4=-3091/0, 4-5=-2847/0, 5-6=-2470/0, 6-7=-1426/0

15-16=0/2032, 14-15=0/3250, 13-14=0/2847, BOT CHORD 12-13=0/2847, 11-12=0/2847, 10-11=0/1977,

9-10=0/849

**WEBS** 2-16=-2821/0, 2-15=0/893, 3-15=-873/0,

3-14=-376/190, 4-14=-187/516, 7-9=-1173/0, 7-10=0/836, 6-10=-798/0, 6-11=0/800,

5-11=-800/0

### NOTES

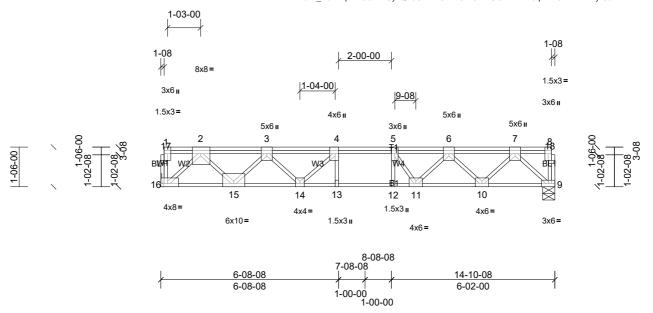
- 1) Unbalanced floor live loads have been considered for this design.
- Bearings are assumed to be: , Joint 9 SPF 2100F 1.8E crushing capacity of 525 psi.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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

Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (lb/ft) Vert: 9-16=-8, 1-8=-80 Concentrated Loads (lb) Vert: 19=-1332

| Job        | Truss | Truss Type | Qty | Ply |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F133  | Floor      | 1   | 1   | Job Reference (optional) |

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Scale = 1:43.7

| Loading | (psf) | Spacing         | 1-07-03         | csı       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.76 | Vert(LL)  | -0.18 | 13-14 | >982   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.94 | Vert(TL)  | -0.28 | 13-14 | >630   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | NO              | WB        | 0.56 | Horiz(TL) | 0.06  | 9     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 77 lb | FT = 20%F, 11%E |

#### LUMBER

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF 2100F 1.8E(flat) **WEBS** 2x4 SPF No.2(flat) 2x4 SPF No.2(flat) **OTHERS** 

### **BRACING**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size)

9=5-08, (min. 1-08), 16= Mechanical, (min. 1-08)

Max Grav 9=991 (LC 1), 16=1617 (LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown. TOP CHORD

2-3=-2990/0, 3-4=-4081/0, 4-5=-3663/0, 5-6=-3086/0, 6-7=-1717/0

15-16=0/1626, 14-15=0/4345, 13-14=0/3663, BOT CHORD

12-13=0/3663, 11-12=0/3663, 10-11=0/2390,

9-10=0/1013

5-12=0/339, 2-16=-2245/0, 2-15=0/1978,

3-15=-1964/0, 3-14=-525/146,

4-14=-124/757, 7-9=-1399/0, 7-10=0/1021,

6-10=-976/0, 6-11=0/1090, 5-11=-1171/0

### NOTES

**WEBS** 

- 1) Unbalanced floor live loads have been considered for this design.
- Bearings are assumed to be: , Joint 9 SPF 2100F 1.8E crushing capacity of 525 psi.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

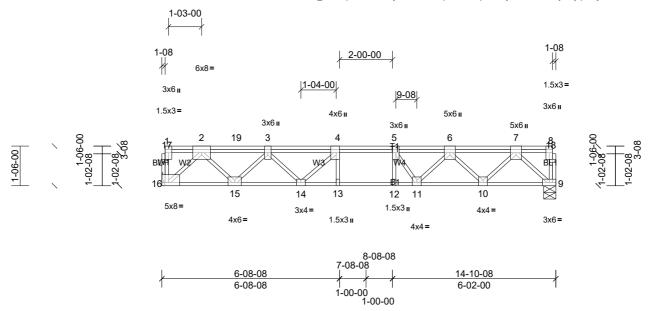
#### LOAD CASE(S) Standard

Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (lb/ft) Vert: 9-16=-8, 1-8=-80 Concentrated Loads (lb) Vert: 3=-1332

| Job        | Truss | Truss Type | Qty | Ply |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F134  | Floor      | 1   | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:35 ID:YYJkZ X0YtsqTZcCOAtDUyzQX0G-K4FqrlDTbk0xrpv4MGyVDX6u4KNfGjcTcyq5Y6ytG9i

Page: 1



Scale = 1:43.7

| Loading | (psf) | Spacing         | 1-07-03         | csı       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.76 | Vert(LL)  | -0.12 | 13-14 | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | ВС        | 0.62 | Vert(TL)  | -0.19 | 13-14 | >909   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | NO              | WB        | 0.43 | Horiz(TL) | 0.05  | 9     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 77 lb | FT = 20%F, 11%E |

# LUMBER

TOP CHORD 2x4 SPF 2100F 1.8E(flat)
BOT CHORD 2x4 SPF 2100F 1.8E(flat)
WEBS 2x4 SPF No.2(flat)
OTHERS 2x4 SPF No.2(flat)

### BRACING

**FORCES** 

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

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

**REACTIONS** (size)

(size) 9=5-08, (min. 1-08), 16= Mechanical, (min. 1-08) Max Grav 9=882 (LC 1), 16=1726 (LC 1)

(lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

TOP CHORD 2-19=-2807/0, 3-19=-2807/0, 3-4=-3391/0,

4-5=-3055/0, 5-6=-2635/0, 6-7=-1504/0 BOT CHORD 15-16=0/1971, 14-15=0/3628, 13-14=0/3055,

12-13=0/3055, 11-12=0/3055, 10-11=0/2088,

9-10=0/893

WEBS 2-16=-2737/0, 2-15=0/1211, 3-15=-1192/0,

3-14=-490/159, 4-14=-152/643, 7-9=-1232/0,

7-10=0/886, 6-10=-848/0, 6-11=0/878,

5-11=-879/0

### NOTES

- Unbalanced floor live loads have been considered for this design.
- Bearings are assumed to be: , Joint 9 SPF 2100F 1.8E crushing capacity of 525 psi.
- Refer to girder(s) for truss to truss connections.
- 1) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

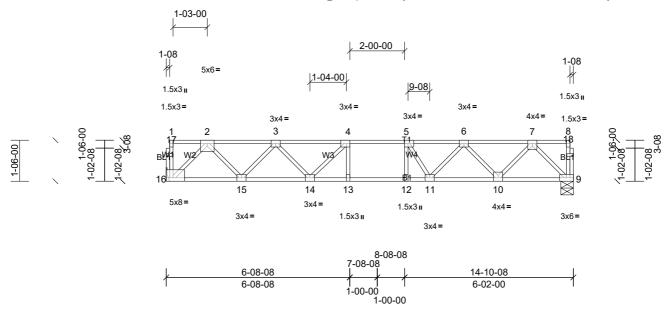
#### LOAD CASE(S) Standard

 Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (lb/ft)
 Vert: 9-16=-8, 1-8=-80
 Concentrated Loads (lb)
 Vert: 19=-1332

| Job        | Truss | Truss Type | Qty | Ply |                          |
|------------|-------|------------|-----|-----|--------------------------|
| 21071052BF | F135  | Floor      | 1   | 1   | Job Reference (optional) |

Run: 8.43 S Jan 4 2021 Print: 8.430 S Jan 4 2021 MiTek Industries, Inc. Thu Jul 29 09:22:35 ID:YYJkZ X0YtsqTZcCOAtDUyzQX0G-oHoC2eE5L28oTzUGwzTklke47kfk?AHdrcZe4ZytG9h

Page: 1



Scale = 1:42.3

| Loading | (psf) | Spacing         | 1-07-03         | csı       |      | DEFL      | in    | (loc) | l/defl | L/d | PLATES        | GRIP            |
|---------|-------|-----------------|-----------------|-----------|------|-----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL    | 40.0  | Plate Grip DOL  | 1.00            | TC        | 0.68 | Vert(LL)  | -0.17 | 13-14 | >999   | 480 | MT20          | 197/144         |
| TCDL    | 10.0  | Lumber DOL      | 1.00            | BC        | 0.89 | Vert(TL)  | -0.26 | 13-14 | >687   | 360 |               |                 |
| BCLL    | 0.0   | Rep Stress Incr | NO              | WB        | 0.41 | Horiz(TL) | 0.04  | 9     | n/a    | n/a |               |                 |
| BCDL    | 5.0   | Code            | IRC2012/TPI2007 | Matrix-SH |      |           |       |       |        |     | Weight: 62 lb | FT = 20%F, 11%E |

#### LUMBER

TOP CHORD 2x4 SPF No.2(flat)
BOT CHORD 2x4 SPF 2100F 1.8E(flat)
WEBS 2x4 SPF No.2(flat)
OTHERS 2x4 SPF No.2(flat)

# **BRACING**

**FORCES** 

TOP CHORD

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.

bracing

REACTIONS (size) 9=5-08, (min. 1-08), 16= Mechanical, (min. 1-08) Max Grav 9=763 (LC 1), 16=1845 (LC 1)

(lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown.

2-3=-2078/0, 3-4=-2400/0, 4-5=-2337/0,

5-6=-2021/0, 6-7=-1227/0

BOT CHORD 15-16=0/1795, 14-15=0/2354, 13-14=0/2337,

 $12\hbox{-}13\hbox{-}0/2337,\ 11\hbox{-}12\hbox{-}0/2337,\ 10\hbox{-}11\hbox{-}0/1692,$ 

9-10=0/732

WEBS 4-13=-277/62, 5-12=-53/399, 2-16=-2536/0,

2-15=0/422, 3-15=-410/0, 4-14=-268/285, 7-9=-1034/0, 7-10=0/735, 6-10=-692/0,

6-11=0/540, 5-11=-741/0

### NOTES

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- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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

Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 9-16=-8, 1-8=-80
Concentrated Loads (lb)
Vert: 2=-1332