

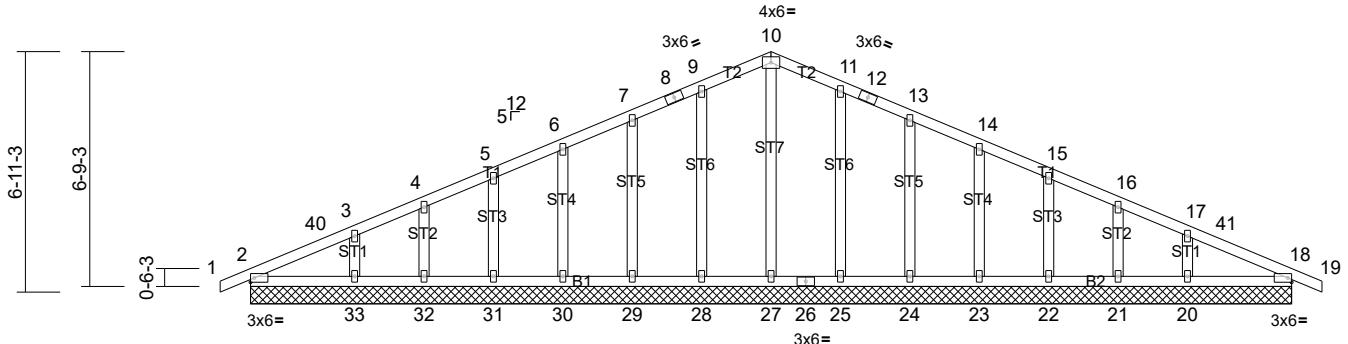
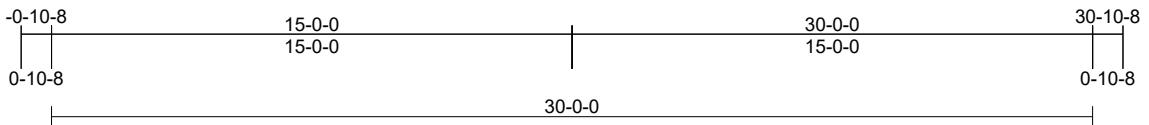
|                      |             |                                      |          |          |   |
|----------------------|-------------|--------------------------------------|----------|----------|---|
| Job<br>2505793-31159 | Truss<br>A1 | Truss Type<br>Common Supported Gable | Qty<br>1 | Ply<br>1 | The Freddy - Fisher Building Corp<br>Job Reference (optional) |
|----------------------|-------------|--------------------------------------|----------|----------|---|

84 Components, Dunn, NC 28334

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Scale = 1:57.9

30-0-0

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in       | (loc) | l/defl | L/d | PLATES | GRIP                    |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|--------|-----|--------|-------------------------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.15            | TC        | 0.28 | Vert(LL) | n/a   | -      | n/a | 999    |                         |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.15            | BC        | 0.22 | Vert(CT) | n/a   | -      | n/a | 999    |                         |
| TCDL         | 10.0     | Rep Stress Incr | YES             | WB        | 0.22 | Horz(CT) | -0.01 | 20     | n/a | n/a    |                         |
| BCLL         | 0.0*     | Code            | IRC2021/TPI2014 | Matrix-MS |      |          |       |        |     |        | Weight: 164 lb FT = 20% |

**LUMBER**

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

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins.

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS**

All bearings 30-0-0.  
(lb) - Max Horiz 2=105 (LC 17), 34=105 (LC 17)  
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 20, 21, 22, 23, 24, 25, 28, 29, 30, 31, 32, 33, 34  
Max Grav All reactions 250 (lb) or less at joint (s) 2, 21, 22, 23, 24, 25, 28, 29, 30, 31, 32, 34 except 20=375 (LC 2), 27=341 (LC 2), 33=265 (LC 2)

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

TOP CHORD 2=40=175/262, 3=40=167/300, 3=4=123/277, 4=5=91/285, 5=6=53/283, 6=7=17/283, 7=8=0/257, 8=9=0/285, 9=10=0/280, 10=11=0/280, 11=12=0/287, 13=14=17/285, 14=15=53/284, 15=16=92/290, 16=17=115/262, 17=41=173/308, 18=41=184/262

WEBS 10-27=300/7

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 15-0-0, Corner(3R) 15-0-0 to 18-0-0, Exterior(2N) 18-0-0 to 30-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 2, 28, 29, 30, 31, 32, 33, 25, 24, 23, 22, 21, 20, 2.

**LOAD CASE(S)**

Standard

|                      |             |                      |          |          |   |
|----------------------|-------------|----------------------|----------|----------|---|
| Job<br>2505793-31159 | Truss<br>A2 | Truss Type<br>Common | Qty<br>7 | Ply<br>1 | The Freddy - Fisher Building Corp<br>Job Reference (optional) |
|----------------------|-------------|----------------------|----------|----------|---|

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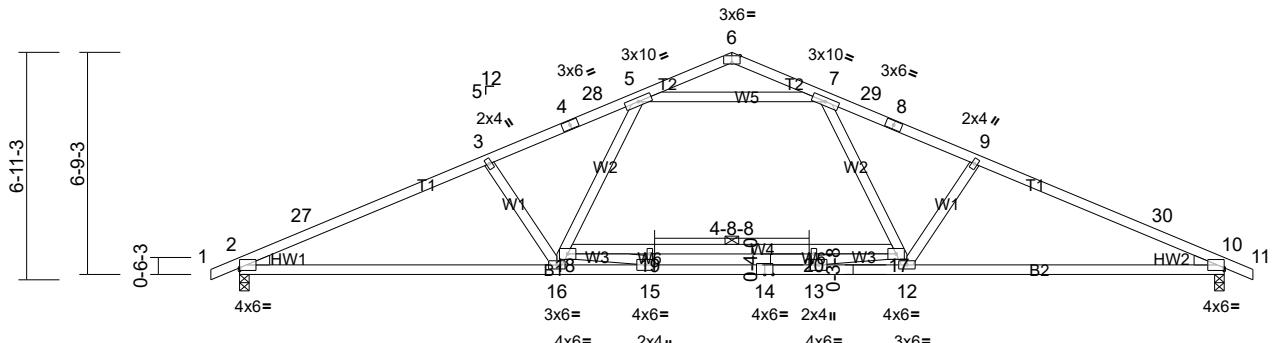
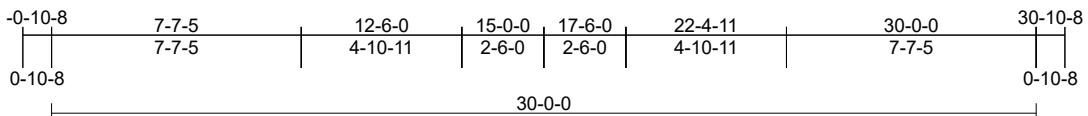


Plate Offsets (X, Y): [2:Edge,0-0-15], [6:0-3-0,Edge], [10:Edge,0-0-15]

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in       | (loc) | I/defl | L/d  | PLATES | GRIP |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|--------|------|--------|------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.15            | TC        | 0.68 | Vert(LL) | -0.32 | 12-23  | >999 | 240    |      |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.15            | BC        | 0.94 | Vert(CT) | -0.49 | 12-23  | >728 | 180    |      |
| TCDL         | 10.0     | Rep Stress Incr | YES             | WB        | 0.80 | Horz(CT) | 0.10  | 10     | n/a  | n/a    |      |
| BCLL         | 0.0*     | Code            | IRC2021/TPI2014 | Matrix-MS |      |          |       |        |      |        |      |
| BCDL         | 10.0     |                 |                 |           |      |          |       |        |      |        |      |

Weight: 158 lb FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2  
 WEDGE Left: 2x4 SP No.2  
 Right: 2x4 SP No.2

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 2-10-9 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.  
 WEBS 1 Row at midpt 17-18

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 2=962/0-3-8, (min. 0-1-10),  
 10=962/0-3-8, (min. 0-1-10)  
 Max Horiz 2=105 (LC 16)  
 Max Uplift 2=127 (LC 16), 10=-127 (LC 17)  
 Max Grav 2=1353 (LC 2), 10=1353 (LC 2)

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

TOP CHORD 2-27=-2564/131, 3-27=-2474/156,  
 3-4=-2335/123, 4-28=-2270/133,  
 5-28=-2255/142, 5-6=-252/92, 6-7=-252/92,  
 7-29=-2255/142, 8-29=-2270/133,  
 8-9=-2335/123, 9-30=-2474/156,  
 10-30=-2564/131

BOT CHORD 2-16=-171/2284, 15-16=-132/1797,  
 14-15=0/2291, 13-14=0/2291,  
 12-13=-32/1797, 10-12=-62/2284

WEBS 7-17=-26/685, 12-17=-98/538,  
 9-12=-431/232, 16-18=-100/538,  
 5-18=-26/685, 3-16=-431/232, 18-19=-631/0,  
 19-20=-631/0, 17-20=-631/0, 13-17=0/782,  
 15-18=0/782, 5-7=-1627/103

**NOTES**

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
 Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 15-0-0, Exterior(2R) 15-0-0 to 17-10-9, Interior (1) 17-10-9 to 30-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 7) 200.0lb AC unit load placed on the bottom chord, 15-0-0 from left end, supported at two points, 5-0-0 apart.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 127 lb uplift at joint 10 and 127 lb uplift at joint 2.

**LOAD CASE(S)** Standard

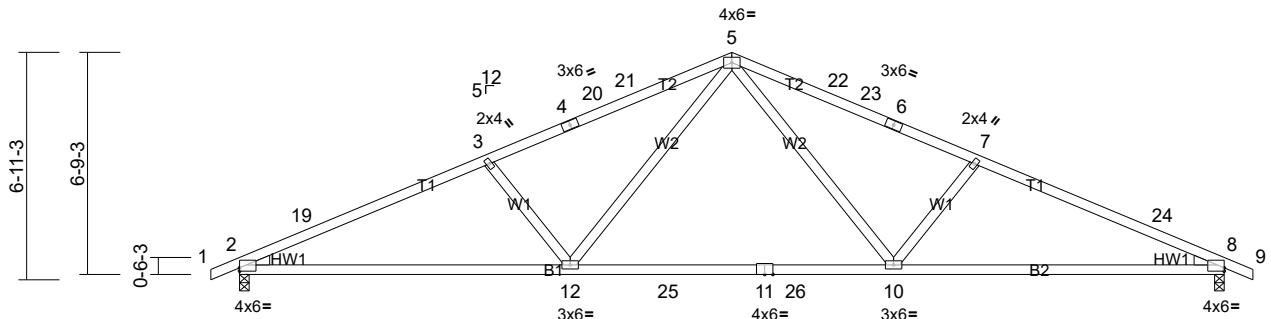
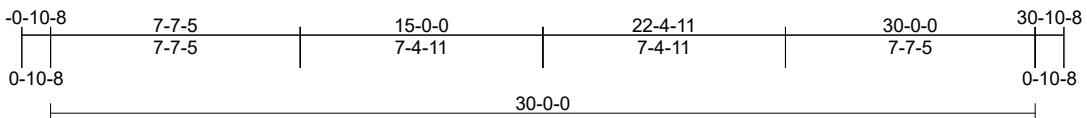
|                      |              |                      |          |          |   |
|----------------------|--------------|----------------------|----------|----------|---|
| Job<br>2505793-31159 | Truss<br>A2A | Truss Type<br>Common | Qty<br>1 | Ply<br>1 | The Freddy - Fisher Building Corp<br>Job Reference (optional) |
|----------------------|--------------|----------------------|----------|----------|---|

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Scale = 1:61.7

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

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in       | (loc) | I/defl | L/d  | PLATES | GRIP                    |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|--------|------|--------|-------------------------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.15            | TC        | 0.91 | Vert(LL) | -0.34 | 10-12  | >999 | 240    |                         |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.15            | BC        | 0.86 | Vert(CT) | -0.55 | 10-12  | >652 | 180    |                         |
| TCDL         | 10.0     | Rep Stress Incr | YES             | WB        | 0.21 | Horz(CT) | 0.08  | 8      | n/a  | n/a    |                         |
| BCLL         | 0.0*     | Code            | IRC2021/TPI2014 | Matrix-MS |      |          |       |        |      |        | Weight: 133 lb FT = 20% |

**LUMBER**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x4 SP No.2  
 WEDGE Left: 2x4 SP No.2  
 Right: 2x4 SP No.2

**BRACING**

TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied or 9-10-4 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 2=862/0-3-8, (min. 0-1-9),  
 8=862/0-3-8, (min. 0-1-9)

Max Horiz 2=-105 (LC 17)

Max Uplift 2=-227 (LC 16), 8=-227 (LC 17)

Max Grav 2=1348 (LC 3), 8=1348 (LC 3)

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

TOP CHORD 2-19=-2527/383, 3-19=-2459/414,  
 3-4=-2291/362, 4-20=-2224/372,  
 20-21=-2213/374, 5-21=-2205/390,  
 5-22=-2205/390, 22-23=-2213/374,

6-23=-2224/372, 6-7=-2291/362,  
 7-24=-2459/414, 8-24=-2527/383

BOT CHORD 2-12=-403/2270, 12-25=-156/1526,  
 11-25=-156/1526, 11-26=-156/1526,  
 10-26=-156/1526, 8-10=-298/2270

WEBS 5-10=-168/872, 7-10=-465/240,  
 5-12=-168/872, 3-12=-465/240

**NOTES**

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
 $V_{asd}=103\text{mph}$ ; TCDL=6.0psf; BCDL=3.0psf;  $h=25\text{ft}$ ; Cat II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 15-0-0, Exterior(2R) 15-0-0 to 18-0-0, Interior (1) 18-0-0 to 30-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16;  $P_r=20.0\text{ psf}$  (roof LL: Lum DOL=1.15 Plate DOL=1.15);  $P_g=10.0\text{ psf}$ ;  $P_f=7.7\text{ psf}$  (Lum DOL = 1.15 Plate DOL = 1.15);  $I_s=1.0$ ; Rough Cat B; Partially Exp.;  $C_e=1.0$ ;  $C_s=1.00$ ;  $C_t=1.10$
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 227 lb uplift at joint 2 and 227 lb uplift at joint 8.

**LOAD CASE(S)** Standard

|                      |             |                      |          |          |   |
|----------------------|-------------|----------------------|----------|----------|---|
| Job<br>2505793-31159 | Truss<br>A3 | Truss Type<br>Common | Qty<br>6 | Ply<br>1 | The Freddy - Fisher Building Corp<br>Job Reference (optional) |
|----------------------|-------------|----------------------|----------|----------|---|

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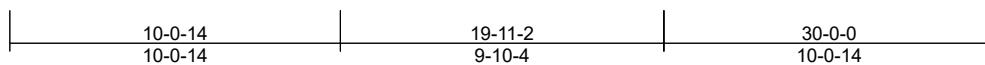
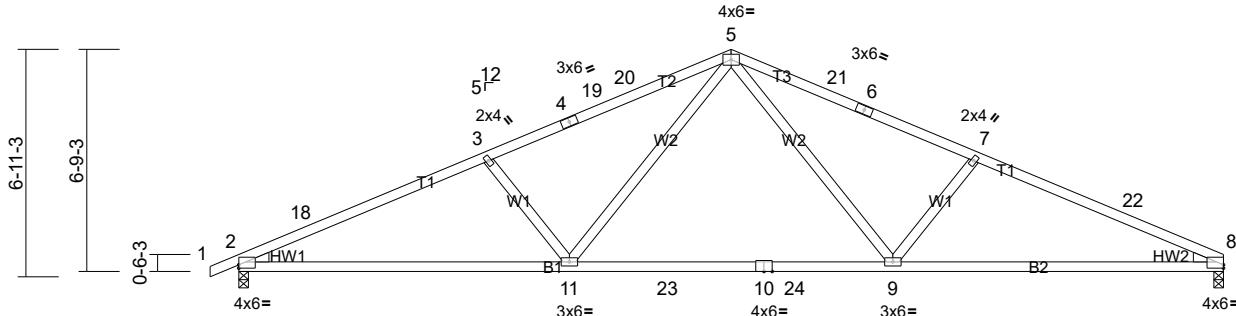
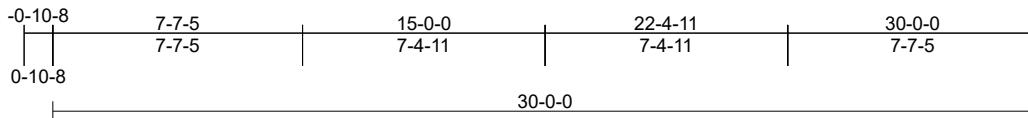


Plate Offsets (X, Y): [2:Edge,0-1-3], [8:Edge,0-1-3]

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in       | (loc) | I/defl | L/d  | PLATES | GRIP                    |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|--------|------|--------|-------------------------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.15            | TC        | 0.91 | Vert(LL) | -0.34 | 9-11   | >999 | 240    |                         |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.15            | BC        | 0.87 | Vert(CT) | -0.55 | 9-11   | >655 | 180    |                         |
| TCDL         | 10.0     | Rep Stress Incr | YES             | WB        | 0.21 | Horz(CT) | 0.08  | 8      | n/a  | n/a    |                         |
| BCLL         | 0.0*     | Code            | IRC2021/TPI2014 | Matrix-MS |      |          |       |        |      |        | Weight: 132 lb FT = 20% |

**LUMBER**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x4 SP No.2  
 WEDGE Left: 2x4 SP No.2  
 Right: 2x4 SP No.2

**BRACING**

TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied or 9-9-7 oc  
 bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 2=862/0-3-8, (min. 0-1-9),  
 8=831/0-3-8, (min. 0-1-9)

Max Horiz 2=110 (LC 16)

Max Uplift 2=227 (LC 16), 8=210 (LC 17)

Max Grav 2=1349 (LC 3), 8=1303 (LC 3)

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

TOP CHORD 2-18=-2528/383, 3-18=-2460/414,  
 3-4=-2292/365, 4-19=-2225/372,  
 19-20=-2215/374, 5-20=-2206/391,  
 5-21=-2209/397, 6-21=-2217/381,  
 6-7=-2295/379, 7-22=-2464/415,  
 8-22=-2531/395

BOT CHORD 2-11=-409/2271, 11-23=-161/1527,  
 10-23=-161/1527, 10-24=-161/1527,  
 9-24=-161/1527, 8-9=-312/2275

WEBS 5-9=-169/876, 7-9=-468/241, 5-11=-168/872,  
 3-11=-465/240

**NOTES**

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
 $V_{asd}=103\text{mph}$ ; TCDL=6.0psf; BCDL=3.0psf;  $h=25\text{ft}$ ; Cat II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 15-0-0, Exterior(2R) 15-0-0 to 18-0-0, Interior (1) 18-0-0 to 30-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16;  $P_r=20.0\text{ psf}$  (roof LL: Lum DOL=1.15 Plate DOL=1.15);  $P_g=10.0\text{ psf}$ ;  $P_f=7.7\text{ psf}$  (Lum DOL = 1.15 Plate DOL = 1.15);  $I_s=1.0$ ; Rough Cat B; Partially Exp.;  $C_e=1.0$ ;  $C_s=1.00$ ;  $C_t=1.10$
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 227 lb uplift at joint 2 and 210 lb uplift at joint 8.

**LOAD CASE(S)** Standard

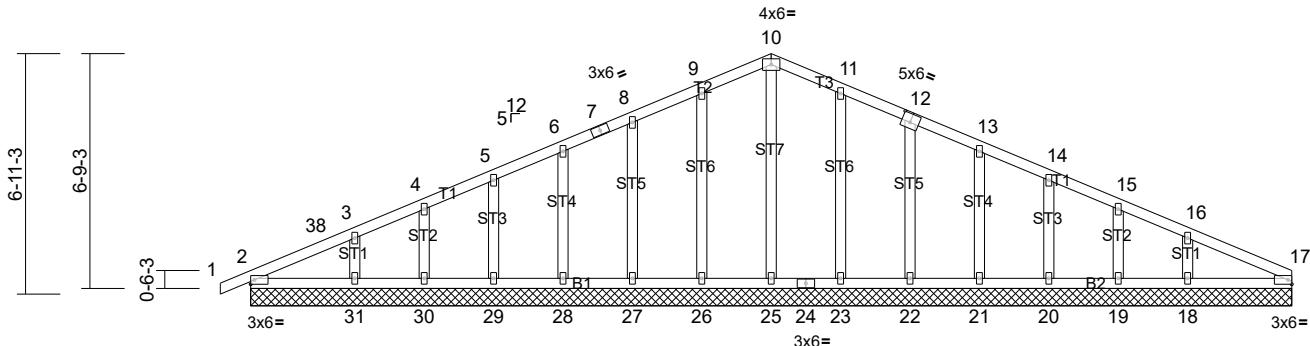
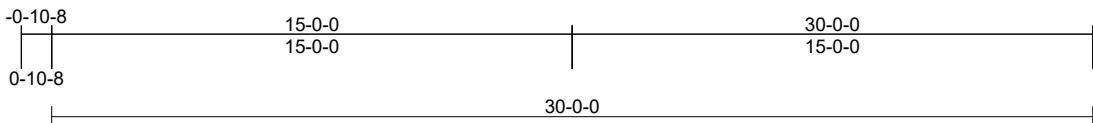
|                      |             |                                      |          |          |   |
|----------------------|-------------|--------------------------------------|----------|----------|---|
| Job<br>2505793-31159 | Truss<br>A4 | Truss Type<br>Common Supported Gable | Qty<br>1 | Ply<br>1 | The Freddy - Fisher Building Corp<br>Job Reference (optional) |
|----------------------|-------------|--------------------------------------|----------|----------|---|

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Scale = 1:57.9

30-0-0

Plate Offsets (X, Y): [12:0-3-0,0-3-0]

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in       | (loc) | l/defl | L/d | PLATES | GRIP |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|--------|-----|--------|------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.15            | TC        | 0.21 | Vert(LL) | n/a   | -      | n/a | 999    |      |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.15            | BC        | 0.17 | Vert(CT) | n/a   | -      | n/a | 999    |      |
| TCDL         | 10.0     | Rep Stress Incr | YES             | WB        | 0.16 | Horz(CT) | -0.01 | 18     | n/a | n/a    |      |
| BCLL         | 0.0*     | Code            | IRC2021/TPI2014 | Matrix-MS |      |          |       |        |     |        |      |
| BCDL         | 10.0     |                 |                 |           |      |          |       |        |     |        |      |

Weight: 163 lb FT = 20%

**LUMBER**

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

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS**

All bearings 30-0-0.  
(lb) - Max Horiz 2=110 (LC 16), 32=110 (LC 16)  
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 18, 19, 20, 21, 22, 23, 26, 27, 28, 29, 30, 31, 32  
Max Grav All reactions 250 (lb) or less at joint (s) 2, 19, 20, 21, 22, 23, 26, 27, 28, 29, 30, 32 except 18=338 (LC 2), 25=264 (LC 2), 31=253 (LC 2)

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

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 15-0-0, Corner(3R) 15-0-0 to 18-0-0, Exterior(2N) 18-0-0 to 30-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); ls=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 7) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 8) All plates are 2x4 (||) MT20 unless otherwise indicated.
- 9) Gable requires continuous bottom chord bearing.
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 2, 26, 27, 28, 29, 30, 31, 23, 22, 21, 20, 19, 18, 2.

**LOAD CASE(S)**

Standard

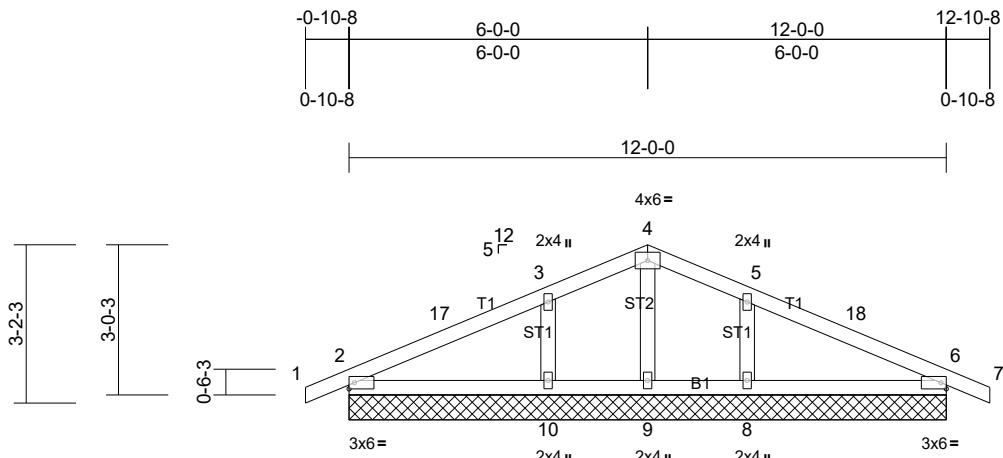
|                      |             |                                      |          |          |   |
|----------------------|-------------|--------------------------------------|----------|----------|---|
| Job<br>2505793-31159 | Truss<br>A5 | Truss Type<br>Common Supported Gable | Qty<br>1 | Ply<br>1 | The Freddy - Fisher Building Corp<br>Job Reference (optional) |
|----------------------|-------------|--------------------------------------|----------|----------|---|

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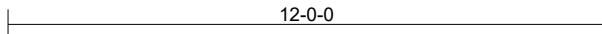
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Scale = 1:37.8



| Loading     | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in       | (loc) | l/defl | L/d | PLATES        | GRIP         |
|-------------|----------|-----------------|-----------------|-----------|------|----------|-------|--------|-----|---------------|--------------|
| TCLL (roof) | 20.0     | Plate Grip DOL  | 1.15            | TC        | 0.34 | Vert(LL) | n/a   | -      | n/a | 999           |              |
| Snow (PfPg) | 7.7/10.0 | Lumber DOL      | 1.15            | BC        | 0.22 | Vert(CT) | n/a   | -      | n/a | 999           | MT20 244/190 |
| TCDL        | 10.0     | Rep Stress Incr | YES             | WB        | 0.05 | Horz(CT) | -0.01 | 6      | n/a | n/a           |              |
| BCLL        | 0.0*     | Code            | IRC2021/TPI2014 | Matrix-MS |      |          |       |        |     |               |              |
| BCDL        | 10.0     |                 |                 |           |      |          |       |        |     | Weight: 49 lb | FT = 20%     |

## LUMBER

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

## BRACING

**BRACING** TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins.

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 12-0-0.

(lb) - Max Horiz 2=-45 (LC 21), 11=-45 (LC 21)  
 Max Uplift All uplift 100 (lb) or less at joint(s)  
 2, 9, 11 except 8=-127 (LC 17),  
 10=-110 (LC 16)  
 Max Grav All reactions 250 (lb) or less at joint  
 (s) 2, 9, 11 except 8=423 (LC 2)

(3) 2, 3, 5, 11 except 3-420 (LC 2),  
10-382 (LC 2)

TOP CHORD (b) or less except where shown:  
2-17=-246/390, 3-17=-237/442,  
3-4=-147/388, 4-5=-144/389, 5-18=-239/446,

$$6-18=-247/390$$

BOT CHORD 2-10=-360/290, 9-10=-360/290,

$$8-9=-360/290, 6$$

WEBS 4-9=-304/124, 5-8=-269/224

## NOTES

1) Unbalanced roof live loads have been considered.

desi

2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 6-0-0, Corner(3R) 6-0-0 to 9-0-0, Exterior(2N) 9-0-0 to 12-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16;  $Pr=20.0 \text{ psf}$  (roof LL: Lum DOL=1.15 Plate DOL=1.15);  $Pg=10.0 \text{ psf}$ ;  $Pf=7.7 \text{ psf}$  (Lum DOL = 1.15 Plate DOL = 1.15);  $ls=1.0$ ; Rough Cat B; Partially Exp.;  $Ce=1.0$ ;  $Cs=1.00$ ;  $Ct=1.10$
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 7) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 2, 9, 2 except (it=lb) 10=109, 8=127.

LOAD CASE(S) Standard

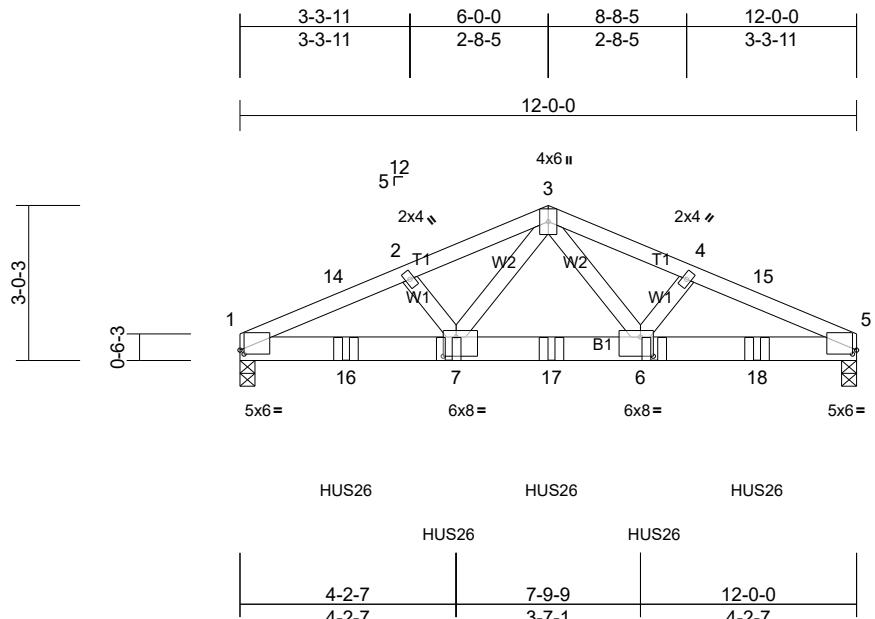
|                      |             |                             |          |          |   |
|----------------------|-------------|-----------------------------|----------|----------|---|
| Job<br>2505793-31159 | Truss<br>A6 | Truss Type<br>Common Girder | Qty<br>1 | Ply<br>2 | The Freddy - Fisher Building Corp<br>Job Reference (optional) |
|----------------------|-------------|-----------------------------|----------|----------|---|

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Scale = 1:33.3

Plate Offsets (X, Y): [1:0-0-15,0-0-15], [5:0-0-15,0-0-15], [6:0-3-0,0-4-8], [7:0-3-0,0-4-8]

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in       | (loc) | l/defl | L/d  | PLATES | GRIP                    |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|--------|------|--------|-------------------------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.15            | TC        | 0.34 | Vert(LL) | -0.07 | 6-7    | >999 | 240    |                         |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.15            | BC        | 0.42 | Vert(CT) | -0.14 | 6-7    | >999 | 180    |                         |
| TCDL         | 10.0     | Rep Stress Incr | NO              | WB        | 0.38 | Horz(CT) | 0.02  | 5      | n/a  | n/a    |                         |
| BCLL         | 0.0*     | Code            | IRC2021/TPI2014 | Matrix-MS |      |          |       |        |      |        | Weight: 121 lb FT = 20% |

**LUMBER**

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SP DSS  
WEBS 2x4 SP No.2

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 4-6-7 oc purlins.

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

**REACTIONS** (lb/size) 1=2355/0-3-8, (min. 0-2-2), 5=2381/0-3-8, (min. 0-2-2)

Max Horiz 1=40 (LC 12)

Max Uplift 1=620 (LC 12), 5=-627 (LC 13)

Max Grav 1=3609 (LC 3), 5=3649 (LC 3)

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

TOP CHORD 1-14=-6942/1187, 2-14=-6898/1191, 2-3=-6883/1191, 3-4=-6884/1192,

4-15=-6900/1192, 5-15=-6944/1187

BOT CHORD 1-16=-1104/6367, 7-16=-1104/6367, 7-17=-761/4635, 6-17=-761/4635,

6-18=-1065/6370, 5-18=-1065/6370

WEBS 3-6=-539/3060, 3-7=-539/3058

**NOTES**

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.

Web connected as follows: 2x4 - 1 row at 0-9-0 oc.

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

3) Unbalanced roof live loads have been considered for this design.

4) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

- 5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); ls=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 6) Unbalanced snow loads have been considered for this design.
- 7) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 620 lb uplift at joint 1 and 627 lb uplift at joint 5.
- 11) Use Simpson Strong-Tie HUS26 (14-16d Girder, 4-16d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 10-0-12 to connect truss(es) A3 (1 ply 2x4 SP) to back face of bottom chord.
- 12) Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-3=-35, 3-5=-35, 8-11=-20  
Concentrated Loads (lb)

Vert: 6=-814 (B), 7=-814 (B), 16=-814 (B), 17=-814 (B), 18=-814 (B)

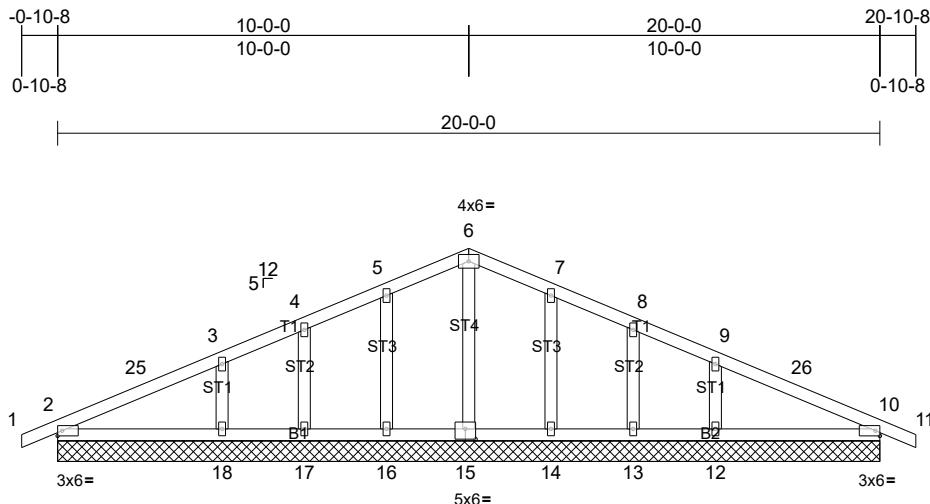
|                      |             |                                      |          |          |   |
|----------------------|-------------|--------------------------------------|----------|----------|---|
| Job<br>2505793-31159 | Truss<br>B1 | Truss Type<br>Common Supported Gable | Qty<br>1 | Ply<br>1 | The Freddy - Fisher Building Corp<br>Job Reference (optional) |
|----------------------|-------------|--------------------------------------|----------|----------|---|

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Scale = 1:47.5

20-0-0

Plate Offsets (X, Y): [15:0-3-0,0-3-0]

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in       | (loc) | I/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.15            | TC        | 0.35 | Vert(LL) | n/a   | -      | n/a | 999           |          |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.15            | BC        | 0.25 | Vert(CT) | n/a   | -      | n/a | 999           |          |
| TCDL         | 10.0     | Rep Stress Incr | YES             | WB        | 0.13 | Horz(CT) | -0.01 | 10     | n/a | n/a           |          |
| BCLL         | 0.0*     | Code            | IRC2021/TPI2014 | Matrix-MS |      |          |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |           |      |          |       |        |     |               |          |
|              |          |                 |                 |           |      |          |       |        |     | Weight: 93 lb | FT = 20% |

**LUMBER**

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

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins.

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS**

All bearings 20-0-0.

(lb) - Max Horiz 2=72 (LC 16), 22=72 (LC 16)

Max Uplift All uplift 100 (lb) or less at joint(s) 2, 13, 14, 15, 16, 17, 22 except

12=126 (LC 17), 18=110 (LC 16)

Max Grav All reactions 250 (lb) or less at joint(s) 2, 13, 14, 16, 17, 22 except

12=430 (LC 2), 15=417 (LC 2),

18=358 (LC 2)

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

TOP CHORD 2-25=-227/385, 3-25=-220/437, 3-4=-157/392, 4-5=-130/413, 5-6=-87/397, 6-7=-85/390, 7-8=-129/409, 8-9=-148/376, 9-26=-216/435, 10-26=-232/378

BOT CHORD 2-18=-356/275, 17-18=-356/275, 16-17=-356/275, 15-16=-356/275, 14-15=-349/273, 13-14=-349/273, 12-13=-349/273, 10-12=-349/273

WEBS 6-15=-384/112, 9-12=-272/174

**NOTES**

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 10-0-0, Corner(3R) 10-0-0 to 13-0-0, Exterior(2N) 13-0-0 to 20-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); ls=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 7) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 8) All plates are 2x4 (||) MT20 unless otherwise indicated.
- 9) Gable requires continuous bottom chord bearing.
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 16, 17, 14, 13, 2, 2 except (jt=lb) 18=109, 12=126.

**LOAD CASE(S)** Standard

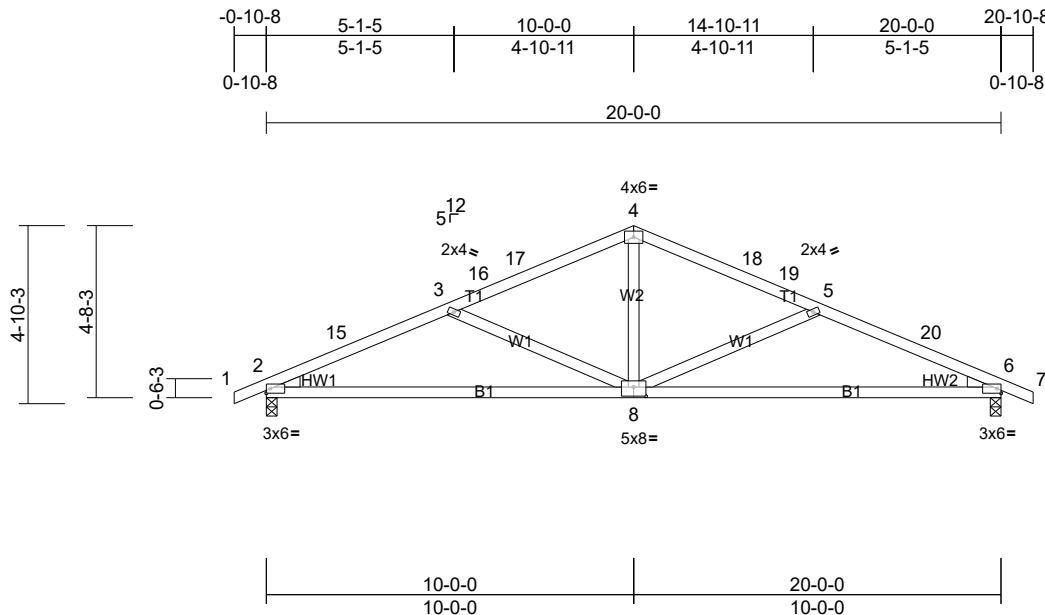
|                      |             |                      |          |          |   |
|----------------------|-------------|----------------------|----------|----------|---|
| Job<br>2505793-31159 | Truss<br>B2 | Truss Type<br>Common | Qty<br>5 | Ply<br>1 | The Freddy - Fisher Building Corp<br>Job Reference (optional) |
|----------------------|-------------|----------------------|----------|----------|---|

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Scale = 1:54.2

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

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in       | (loc) | I/defl | L/d  | PLATES | GRIP                   |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|--------|------|--------|------------------------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.15            | TC        | 0.30 | Vert(LL) | -0.15 | 8-11   | >999 | 240    |                        |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.15            | BC        | 0.92 | Vert(CT) | -0.32 | 8-11   | >760 | 180    |                        |
| TCDL         | 10.0     | Rep Stress Incr | YES             | WB        | 0.21 | Horz(CT) | 0.04  | 6      | n/a  | n/a    |                        |
| BCLL         | 0.0*     | Code            | IRC2021/TPI2014 | Matrix-MS |      |          |       |        |      |        | Weight: 89 lb FT = 20% |

**LUMBER**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2  
 WEDGE Left: 2x4 SP No.2  
 Right: 2x4 SP No.2

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 4-8-10 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 2=585/0-3-8, (min. 0-1-8),  
 6=585/0-3-8, (min. 0-1-8)

Max Horiz 2=-72 (LC 21)  
 Max Uplift 2=-157 (LC 16), 6=-157 (LC 17)  
 Max Grav 2=853 (LC 2), 6=853 (LC 2)

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

TOP CHORD 2-15=-1475/362, 3-15=-1422/381,  
 3-16=-1102/266, 16-17=-1054/270,  
 4-17=-1040/284, 4-18=-1040/284,  
 18-19=-1054/270, 5-19=-1102/266,  
 5-20=-1422/381, 6-20=-1475/362

BOT CHORD 2-8=-286/1312, 6-8=-291/1312

WEBS 4-8=-78/557, 5-8=-410/198, 3-8=-410/198

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)  
 $V_{asd}=103\text{ mph}$ ; TCDL=6.0psf; BCDL=3.0psf;  $h=25\text{ ft}$ ; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior (1) 13-0-0 to 20-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); ls=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 157 lb uplift at joint 2 and 157 lb uplift at joint 6.

**LOAD CASE(S)** Standard

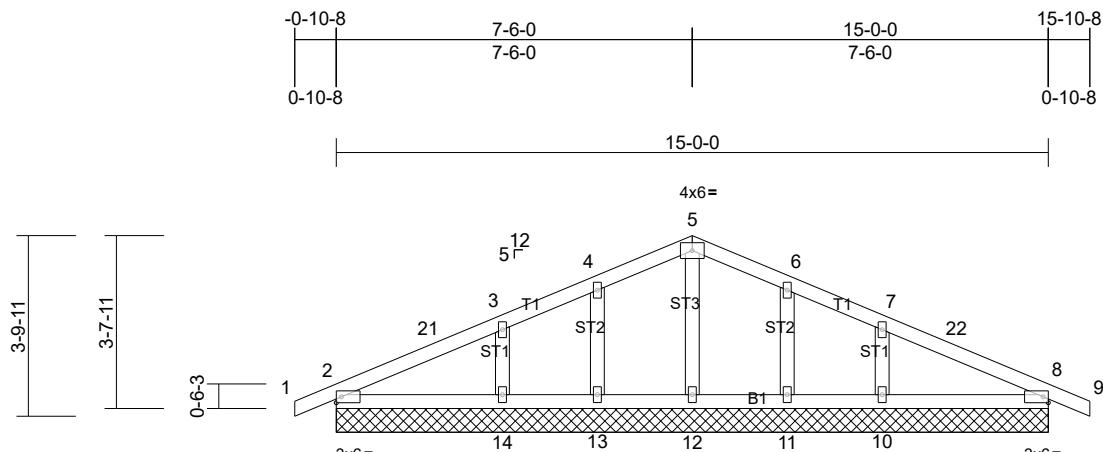
|                      |             |                                      |          |          |   |
|----------------------|-------------|--------------------------------------|----------|----------|---|
| Job<br>2505793-31159 | Truss<br>C1 | Truss Type<br>Common Supported Gable | Qty<br>1 | Ply<br>1 | The Freddy - Fisher Building Corp<br>Job Reference (optional) |
|----------------------|-------------|--------------------------------------|----------|----------|---|

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Scale = 1:40

15-0-0

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in       | (loc) | I/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.15            | TC        | 0.29 | Vert(LL) | n/a   | -      | n/a | 999           |          |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.15            | BC        | 0.19 | Vert(CT) | n/a   | -      | n/a | 999           |          |
| TCDL         | 10.0     | Rep Stress Incr | YES             | WB        | 0.08 | Horz(CT) | -0.01 | 8      | n/a | n/a           |          |
| BCLL         | 0.0*     | Code            | IRC2021/TPI2014 | Matrix-MS |      |          |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |           |      |          |       |        |     |               |          |
|              |          |                 |                 |           |      |          |       |        |     | Weight: 65 lb | FT = 20% |

**LUMBER**

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

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins.

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS**

All bearings 15-0-0.  
(lb) - Max Horiz 2=55 (LC 16), 15=55 (LC 16)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
2, 11, 12, 13, 14, 15 except 10=-111 (LC 17)  
Max Grav All reactions 250 (lb) or less at joint  
(s) 2, 11, 13, 15 except 10=372 (LC 2)  
2, 12=444 (LC 2), 14=309 (LC 2)

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

TOP CHORD 2-21=-212/341, 3-21=-205/386,  
3-4=-139/353, 4-5=-100/362, 5-6=-101/364,  
6-7=-134/348, 7-22=-204/391, 8-22=-217/341  
BOT CHORD 2-14=-315/256, 13-14=-315/256,  
12-13=-315/256, 11-12=-315/256,  
10-11=-315/256, 8-10=-315/256

WEBS 5-12=-381/152

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 7-6-0, Corner(3R) 7-6-0 to 10-6-0, Exterior(2N) 10-6-0 to 15-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); ls=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 2, 12, 13, 14, 11, 2 except (jt=lb) 10=110.

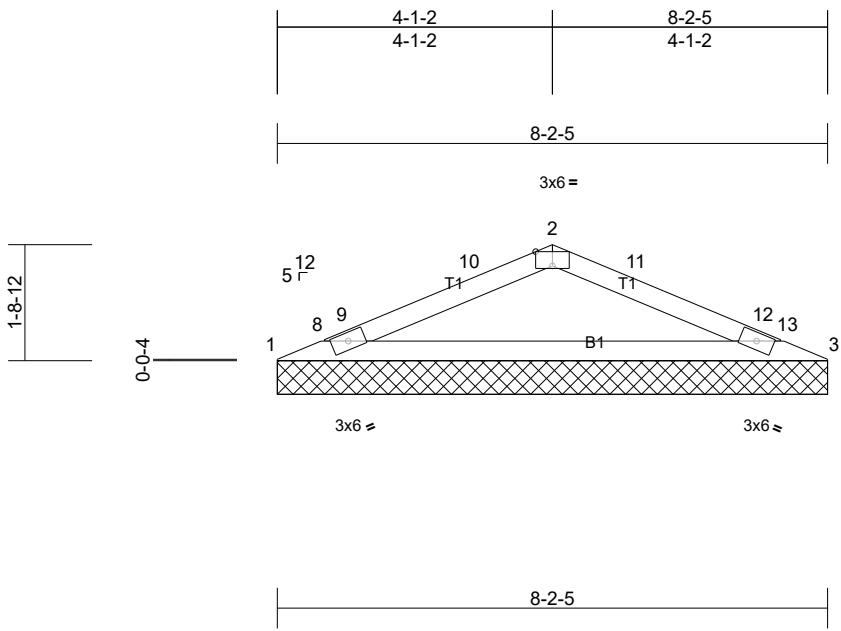
**LOAD CASE(S)** Standard



|                      |              |                      |          |          |   |
|----------------------|--------------|----------------------|----------|----------|---|
| Job<br>2505793-31159 | Truss<br>V1A | Truss Type<br>Valley | Qty<br>1 | Ply<br>1 | The Freddy - Fisher Building Corp<br>Job Reference (optional) |
|----------------------|--------------|----------------------|----------|----------|---|

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Scale = 1:25.2

Plate Offsets (X, Y): [2:0-3-0,Edge]

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in        | (loc) | I/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.15            | TC        | 0.53 | n/a       | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.15            | BC        | 0.41 | Vert(TL)  | n/a   | -      | n/a | 999           |          |
| TCDL         | 10.0     | Rep Stress Incr | YES             | WB        | 0.00 | Horiz(TL) | 0.03  | 3      | n/a | n/a           |          |
| BCLL         | 0.0*     | Code            | IRC2021/TPI2014 | Matrix-MP |      |           |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |           |      |           |       |        |     |               |          |
|              |          |                 |                 |           |      |           |       |        |     | Weight: 23 lb | FT = 20% |

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

4) Unbalanced snow loads have been considered for this design.

5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.

6) Gable requires continuous bottom chord bearing.

7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 1 and 58 lb uplift at joint 3.

**BRACING**

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

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**LOAD CASE(S)** Standard**REACTIONS** (lb/size) 1=227/8-2-5, (min. 0-1-8), 3=227/8-2-5, (min. 0-1-8)

Max Horiz 1=25 (LC 20)

Max Uplift 1=-58 (LC 16), 3=-58 (LC 17)

Max Grav 1=328 (LC 2), 3=328 (LC 2)

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

TOP CHORD 1-8=-722/371, 8-9=-704/372, 1-9=-701/373, 1-10=-423/236, 2-10=-387/243, 2-11=-387/244, 3-11=-423/237, 3-12=-701/373, 12-13=-704/372, 3-13=-722/371

BOT CHORD 1-3=346/655

**NOTES**

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-10 to 3-0-10, Interior (1) 3-0-10 to 4-1-12, Exterior(2R) 4-1-12 to 7-1-12, Interior (1) 7-1-12 to 8-2-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces &amp; MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); ls=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

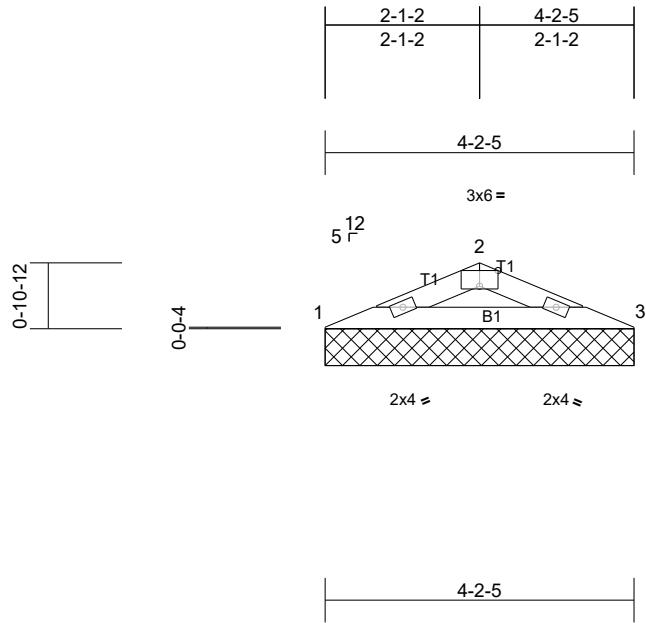
|                      |              |                      |          |          |   |
|----------------------|--------------|----------------------|----------|----------|---|
| Job<br>2505793-31159 | Truss<br>V2A | Truss Type<br>Valley | Qty<br>1 | Ply<br>1 | The Freddy - Fisher Building Corp<br>Job Reference (optional) |
|----------------------|--------------|----------------------|----------|----------|---|

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Scale = 1:22.2

Plate Offsets (X, Y): [2:0-3-0,Edge]

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in        | (loc) | I/defl | L/d | PLATES | GRIP                   |
|--------------|----------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|--------|------------------------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.15            | TC        | 0.12 | Vert(LL)  | n/a   | -      | n/a | 999    |                        |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.15            | BC        | 0.14 | Vert(TL)  | n/a   | -      | n/a | 999    |                        |
| TCDL         | 10.0     | Rep Stress Incr | YES             | WB        | 0.00 | Horiz(TL) | 0.00  | 3      | n/a | n/a    |                        |
| BCLL         | 0.0*     | Code            | IRC2021/TPI2014 | Matrix-MP |      |           |       |        |     |        | Weight: 11 lb FT = 20% |
| BCDL         | 10.0     |                 |                 |           |      |           |       |        |     |        |                        |

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

7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 1 and 30 lb uplift at joint 3.

**LOAD CASE(S)** Standard**BRACING**

TOP CHORD Structural wood sheathing directly applied or 4-2-5 oc purlins.

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 1=116/4-2-5, (min. 0-1-8), 3=116/4-2-5, (min. 0-1-8)

Max Horiz 1=12 (LC 16)

Max Uplift 1=-30 (LC 16), 3=-30 (LC 17)

Max Grav 1=168 (LC 2), 3=168 (LC 2)

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

TOP CHORD 1-2=-325/220, 2-3=-252/179

BOT CHORD 1-3=-197/293

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); ls=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 6) Gable requires continuous bottom chord bearing.