





## DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER  
 Builder: GREENPARK HOMES  
 Project: LAMBERT LANE PH.2  
 Location: CALEDON  
 Model: PRESTON 11A  
 Lot #:   
 Elevation: 1 LOT 38

Job Track: 50033  
 PlanLog: 201318  
 Layout ID: 403945  
 Ref #  
 Page: 1 of 4  
 Date: 06-27-2019  
 Designer:  
 Sales Rep: Mario DiCano

### Roof Trusses

| PROFILE | QTY<br>PLY | MARK<br>TYPE                 | PITCH        | SPAN     | HEIGHT   | LUMBER         | OVERHANG<br>LEFT<br>RIGHT | HEEL HEIGHT<br>LEFT<br>RIGHT | LBS.<br>BFT.     | BUNDLE #<br>STACK # | LOAD BY<br>REMARKS |
|---------|------------|------------------------------|--------------|----------|----------|----------------|---------------------------|------------------------------|------------------|---------------------|--------------------|
|         | 1<br>2-ply | T1<br>Hip Girder             | 9/12         | 26-10-00 | 5-11-14  | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 271.86<br>171.33 |                     |                    |
|         | 1          | T2<br>Hip                    | 9/12         | 26-10-00 | 7-05-14  | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 124.51<br>77.50  |                     |                    |
|         | 1          | T3<br>Hip                    | 9/12         | 26-10-00 | 8-11-14  | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 128.46<br>81.33  |                     |                    |
|         | 1          | T4<br>Piggyback<br>Base      | 9/12         | 26-10-00 | 9-05-00  | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 127.95<br>80.00  |                     |                    |
|         | 6          | T4X<br>Piggyback<br>Base     | 9/12         | 27-06-00 | 9-05-00  | 2 x 4          | 1-03-08                   | 1-00-04<br>1-06-04           | 766.34<br>480.00 |                     |                    |
|         | 2          | T5<br>Hip                    | 9/12         | 27-06-00 | 10-05-14 | 2 x 4          | 1-03-08                   | 1-06-04<br>3-02-00           | 269.73<br>167.00 |                     |                    |
|         | 5          | T5S<br>Piggyback<br>Base     | 9/12         | 27-06-00 | 10-05-14 | 2 x 4          | 1-03-08                   | 1-06-04<br>1-10-00           | 730.61<br>460.00 |                     |                    |
|         | 1<br>2-ply | T6<br>Roof Special<br>Girder | 9/12         | 14-10-00 | 7-01-00  | 2 x 4          |                           | 1-06-04<br>1-06-04           | 186.18<br>123.33 |                     |                    |
|         | 1          | T6G<br>Roof Special          | 9/12         | 14-10-00 | 7-01-00  | 2 x 4          |                           | 1-06-04<br>1-06-04           | 91.59<br>60.83   |                     |                    |
|         | 1          | T9<br>Hip                    | 9/12         | 27-11-00 | 8-11-14  | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 142.42<br>89.83  |                     |                    |
|         | 1          | T10<br>Hip                   | 9/12         | 27-11-00 | 7-05-14  | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 141.37<br>88.67  |                     |                    |
|         | 1<br>2-ply | T11<br>Hip Girder            | 9/12         | 27-11-00 | 5-11-14  | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 301.42<br>188.67 |                     |                    |
|         | 2          | T12<br>Common                | 9/12         | 10-00-00 | 5-03-04  | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 87.54<br>57.67   |                     |                    |
|         | 2          | T13<br>Roof Special          | 9/12<br>7/12 | 10-00-00 | 5-03-04  | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 96.56<br>64.67   |                     |                    |



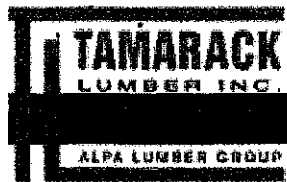
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Job Track: 50033  
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 Layout ID: 403945  
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 Date: 06-27-2019  
 Designer:   
 Sales Rep: Mario DiCano

### Roof Trusses

| PROFILE | QTY<br>PLY | MARK<br>TYPE                  | PITCH | SPAN     | HEIGHT  | LUMBER | OVERHANG<br>LEFT<br>RIGHT | HEEL HEIGHT<br>LEFT<br>RIGHT | LBS.<br>BFT.    | BUNDLE #<br>STACK # | LOAD BY<br>REMARKS |
|---------|------------|-------------------------------|-------|----------|---------|--------|---------------------------|------------------------------|-----------------|---------------------|--------------------|
|         | 1          | T14<br>Common                 | 9/12  | 11-05-00 | 5-09-10 | 2 x 4  | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 48.96<br>31.67  |                     |                    |
|         | 1          | T15<br>Hip Girder             | 9/12  | 11-05-00 | 5-02-02 | 2 x 4  | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 54.5<br>35.17   |                     |                    |
|         | 3          | T16<br>Common                 | 6/12  | 8-04-08  | 3-00-13 | 2 x 4  | 1-03-08                   | 6-12<br>6-12                 | 75.6<br>50.50   |                     |                    |
|         | 1<br>2-ply | T18<br>Roof Special<br>Girder | 0/12  | 5-11-08  | 1-04-00 | 2 x 4  |                           | 1-04-00<br>1-04-00           | 40.56<br>25.67  |                     |                    |
|         | 1<br>2-ply | T19<br>Flat Girder            | 0/12  | 12-04-08 | 1-08-07 | 2 x 4  |                           | 1-08-07<br>1-08-07           | 84.52<br>57.00  |                     |                    |
|         | 1<br>2-ply | T200<br>Half Hip<br>Girder    | 4/12  | 24-09-12 | 2-02-00 | 2 x 6  | 1-03-08                   | 3-15<br>1-09-02              | 231.5<br>136.00 |                     |                    |
|         | 1          | PB1<br>Piggyback              | 9/12  | 5-09-05  | 1-00-14 | 2 x 4  |                           |                              | 13.03<br>9.00   |                     |                    |
|         | 1          | PB2<br>Piggyback              | 9/12  | 5-09-05  | 1-06-00 | 2 x 4  |                           |                              | 14.05<br>9.67   |                     |                    |
|         | 10         | PB3<br>Piggyback              | 9/12  | 5-09-05  | 2-02-00 | 2 x 4  |                           |                              | 132.72<br>86.67 |                     |                    |
|         | 1          | V1<br>Valley                  | 9/12  | 10-09-09 | 4-00-09 | 2 x 4  |                           |                              | 29.22<br>18.67  |                     |                    |
|         | 1          | V2<br>Valley                  | 9/12  | 6-09-09  | 2-06-09 | 2 x 4  |                           |                              | 17.74<br>11.00  |                     |                    |
|         | 1          | V3<br>Valley                  | -9/12 | 2-11-07  | 2-01-01 | 2 x 4  |                           | 1-11-09                      | 8.57<br>6.00    |                     |                    |
|         | 1          | V4<br>Valley                  | -9/12 | 4-11-07  | 3-07-01 | 2 x 4  |                           | 3-05-09                      | 15.41<br>10.00  |                     |                    |
|         | 1          | V5<br>Valley                  | -9/12 | 6-11-07  | 5-01-01 | 2 x 4  |                           | 4-11-09                      | 23.48<br>15.00  |                     |                    |



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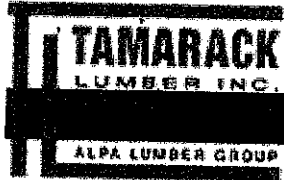
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| PROFILE | QTY<br>PLY | MARK<br>TYPE               | PITCH  | SPAN    | HEIGHT  | LUMBER | OVERHANG<br>LEFT<br>RIGHT | HEEL HEIGHT<br>LEFT<br>RIGHT | LBS.<br>BFT.     | BUNDLE #<br>STACK # | LOAD BY<br>REMARKS |
|---------|------------|----------------------------|--------|---------|---------|--------|---------------------------|------------------------------|------------------|---------------------|--------------------|
|         | 1          | V6<br>Valley               | -9 /12 | 8-11-07 | 6-07-01 | 2 x 4  |                           | 6-05-09                      | 31.54<br>20.00   |                     |                    |
|         | 14         | J1<br>Jack-Open            | 9 /12  | 5-11-08 | 5-11-14 | 2 x 4  | 1-03-08                   | 1-06-04<br>5-11-14           | 283.62<br>189.00 |                     |                    |
|         | 2          | J2<br>Jack-Open<br>Girder  | 9 /12  | 1-09-07 | 2-10-05 | 2 x 4  | 1-03-08<br>4-02-01        | 1-06-04<br>2-10-05           | 28.62<br>20.33   |                     |                    |
|         | 2          | J3<br>Jack-Open            | 9 /12  | 3-09-07 | 4-04-05 | 2 x 4  | 1-03-08<br>2-02-01        | 1-06-04<br>4-04-05           | 34.33<br>23.00   |                     |                    |
|         | 4          | J4<br>Jack-Open            | 9 /12  | 1-09-07 | 2-10-05 | 2 x 4  | 1-03-08<br>1-01           | 1-06-04<br>2-10-05           | 38.29<br>26.00   |                     |                    |
|         | 4          | J5<br>Jack-Open            | 9 /12  | 1-10-08 | 4-04-05 | 2 x 4  | 1-03-08<br>1-10-15        | 1-06-04<br>2-11-02           | 49.7<br>33.33    |                     |                    |
|         | 2          | J6<br>Jack-Open            | 9 /12  | 4-10-08 | 5-02-02 | 2 x 4  | 1-03-08                   | 1-06-04<br>5-02-02           | 34.96<br>23.00   |                     |                    |
|         | 2          | J7<br>Jack-Open<br>Girder  | 9 /12  | 1-09-07 | 2-10-05 | 2 x 4  | 1-03-08<br>3-01-01        | 1-06-04<br>2-10-05           | 25.67<br>18.00   |                     |                    |
|         | 2          | J8<br>Jack-Open            | 9 /12  | 3-09-07 | 4-04-05 | 2 x 4  | 1-03-08<br>1-01-01        | 1-06-04<br>4-04-05           | 31.4<br>20.67    |                     |                    |
|         | 10         | J9<br>Jack-Open            | 4 /12  | 4-03-08 | 2-02-00 | 2 x 4  | 1-03-08                   | 3-15<br>1-09-02              | 117.16<br>73.33  |                     |                    |
|         | 1          | J10<br>Jack-Open<br>Girder | 4 /12  | 1-09-07 | 1-04-00 | 2 x 4  | 1-03-08<br>2-06-01        | 3-15<br>11-01                | 8.7<br>6.00      |                     |                    |
|         | 1          | J11<br>Jack-Open           | 4 /12  | 3-09-07 | 2-00-00 | 2 x 4  | 1-03-08<br>6-01           | 3-15<br>1-07-01              | 11.11<br>7.33    |                     |                    |
|         | 1          | J12<br>Jack-Open           | 4 /12  | 1-09-07 | 1-04-00 | 2 x 4  | 1-03-08<br>1-01           | 3-15<br>11-01                | 6.95<br>4.00     |                     |                    |
|         | 1          | J13<br>Jack-Open           | 4 /12  | 1-10-08 | 2-00-00 | 2 x 4  | 1-03-08<br>1-10-15        | 3-15<br>11-07                | 8.35<br>5.33     |                     |                    |

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|---------|------------|------------------|-------|---------|---------|--------|---------------------------|------------------------------|----------------|---------------------|--------------------|
|         | 6          | J14<br>Jack-Open | 4 /12 | 4-01-08 | 2-01-06 | 2 x 4  | 1-03-08                   | 3-15<br>1-08-07              | 67.95<br>44.00 |                     |                    |

TOTAL # TRUSS= 110

TOTAL BFT OF ALL TRUSSES= 3208.17

BFT.

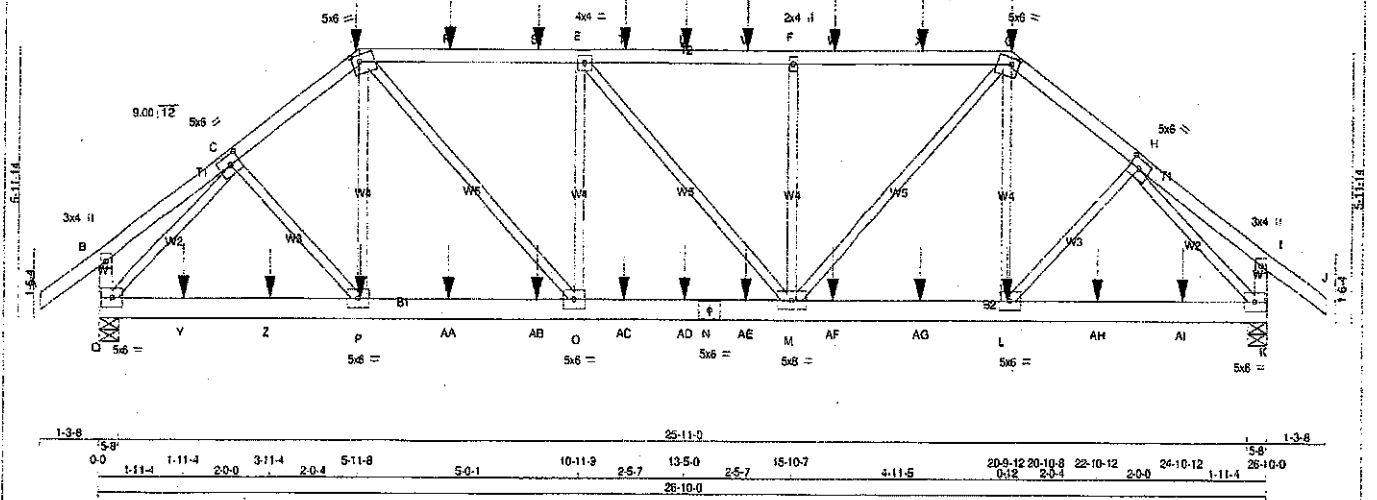
TOTAL WEIGHT OF ALL TRSSES 5033.76 LBS

## HARDWARE

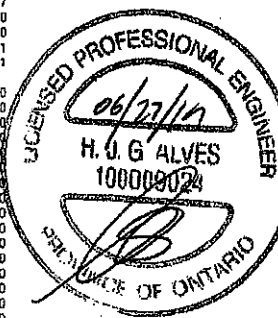
| QTY | TYPE     | MODEL    | LENGTH |
|-----|----------|----------|--------|
| 7   | Hardware | LJS26DS  |        |
| 3   | Hardware | LUS24    |        |
| 1   | Hardware | HGUS26-2 |        |
| 1   |          | HUC26-2  |        |

TOTAL NUMBER OF  
ITEMS=

12



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| <b>LUMLER</b><br>N. L. G. A. RULES<br>CHORDS SIZE LUMLER<br>A - D 2x4 DRY No.2<br>D - G 2x4 DRY No.2<br>G - J 2x4 DRY No.2<br>Q - B 2x4 DRY No.2<br>K - I 2x4 DRY No.2<br>Q - N 2x8 DRY No.2<br>N - K 2x6 DRY No.2<br>ALL WEBS 2x3 DRY No.2<br>DRY: SEASONED LUMLER.<br>DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:<br>CHORDS #ROWS SURFACE SPACING (IN) LOAD(PLF)<br>TOP CHORDS : (0.122"x3") SPIRAL NAILS<br>A-D 1 12 SIDE(61.0)<br>D-G 1 12 SIDE(61.0)<br>G-J 1 12 SIDE(61.0)<br>Q-B 1 12 TOP<br>K-I 1 12 TOP<br>BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS<br>C-N 2 12 SIDE(183.1)<br>N-K 2 12 SIDE(183.1)<br>WEBS : (0.122"x3") SPIRAL NAILS<br>P-D 1 6 SIDE(50.6)<br>L-G 1 6 SIDE(50.6)<br>2x3 1 6<br>NAILS TO BE DRIVEN FROM ONE SIDE ONLY.<br>GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.<br>TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.<br>SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.<br>PLATES (table is in inches)<br>JT TYPE PLATES W LEN Y X<br>B TMW+p MT20 3.0 4.0<br>C TMWV-t MT20 5.0 6.0 2.50 2.75<br>D TTWW-m MT20 5.0 6.0 1.75 2.00<br>E TMWV-t MT20 4.0 4.0<br>F TMW+w MT20 2.0 4.0<br>G TTWW-m MT20 5.0 6.0 1.75 2.00<br>H TMWV-t MT20 5.0 6.0 2.50 2.75<br>I TMW+p MT20 3.0 4.0<br>K BMWV1-t MT20 5.0 6.0<br>L O.P<br>L BMWV-t MT20 5.0 6.0<br>M BMWVW-t MT20 5.0 6.0<br>N BS-t MT20 5.0 6.0<br>Q BMWV1-t MT20 5.0 6.0 | <b>DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER</b><br><b>BEARINGS</b><br>FACTORED GROSS REACTION<br>JT VERT 3718 0<br>Q 3718 0<br>K 3718 0<br>UNFACTORED REACTIONS<br>1ST LCASE MAX/MIN COMPONENT REACTIONS<br>JT COMBINED SNOW LIVE PERMLIVE WIND DEAD SOIL<br>Q 2720 1634 / 0 365 / 0 0 / 0 0 / 0 722 / 0 0 / 0<br>K 2720 1634 / 0 365 / 0 0 / 0 0 / 0 722 / 0 0 / 0<br>BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) Q, K<br><b>BRACING</b><br>TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.89 FT.<br>MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.<br>ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.<br><b>LOADING</b><br>TOTAL LOAD CASES: (4)<br>CHORDS MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD LC1 MAX. CS1 (LC) UNBRAC LENGTH FR-TO<br>FR-TO<br>A-B 0 / 42 -102.1 -102.1 0.08 (1) 10.00 C-P 0 / 584 0.07 (1)<br>B-C 0 / 13 -102.1 -102.1 0.08 (1) 10.00 P-D -177 / 304 0.06 (3)<br>C-D -4172 / 0 -102.1 -102.1 0.13 (1) 4.57 D-O 0 / 1891 0.23 (1)<br>D-R -4577 / 0 -102.1 -102.1 0.53 (1) 3.89 Q-E -1134 / 0 0.30 (1)<br>R-S -4577 / 0 -102.1 -102.1 0.53 (1) 3.89 E-M -20 / 0 0.01 (1)<br>S-E -4577 / 0 -102.1 -102.1 0.53 (1) 3.89 M-F -1141 / 0 0.30 (1)<br>E-T -4565 / 0 -102.1 -102.1 0.53 (1) 3.89 M-G 0 / 1888 0.23 (1)<br>T-U -4565 / 0 -102.1 -102.1 0.53 (1) 3.89 L-H 0 / 907 0.05 (3)<br>U-V -4565 / 0 -102.1 -102.1 0.53 (1) 3.89 L-G 0 / 585 0.07 (1)<br>V-F -4565 / 0 -102.1 -102.1 0.53 (1) 3.89 Q-C -4393 / 0 0.71 (1)<br>F-W -4564 / 0 -102.1 -102.1 0.52 (1) 3.92 H-K -4395 / 0 0.71 (1)<br>W-X -4564 / 0 -102.1 -102.1 0.52 (1) 3.92<br>X-G -4564 / 0 -102.1 -102.1 0.52 (1) 3.92<br>G-H -4174 / 0 -102.1 -102.1 0.13 (1) 4.57<br>H-I 0 / 13 -102.1 -102.1 0.08 (1) 10.00<br>I-J 0 / 42 -102.1 -102.1 0.08 (1) 10.00<br>O-B -270 / 0 0.0 0.02 (1) 7.81<br>K-I -270 / 0 0.0 0.02 (1) 7.81<br>WEBS MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD LC1 MAX. CS1 (LC) UNBRAC LENGTH FR-TO<br>C-Y 0 / 2819 -38.5 -38.5 0.28 (1) 10.00<br>Y-Z 0 / 2819 -38.5 -38.5 0.28 (1) 10.00<br>Z-P 0 / 2819 -38.5 -38.5 0.28 (1) 10.00<br>P-AA 0 / 3317 -38.5 -38.5 0.28 (1) 10.00<br>AA-AB 0 / 3317 -38.5 -38.5 0.28 (1) 10.00<br>AB-O 0 / 3317 -38.5 -38.5 0.28 (1) 10.00<br>O-AC 0 / 4578 -38.5 -38.5 0.36 (1) 10.00<br>AC-AD 0 / 4578 -38.5 -38.5 0.36 (1) 10.00<br>AD-N 0 / 4578 -38.5 -38.5 0.36 (1) 10.00<br>N-AE 0 / 4578 -38.5 -38.5 0.36 (1) 10.00<br>AE-M 0 / 4578 -38.5 -38.5 0.36 (1) 10.00<br>M-AF 0 / 3319 -38.5 -38.5 0.29 (1) 10.00<br>AF-AG 0 / 3319 -38.5 -38.5 0.29 (1) 10.00<br>AG-L 0 / 3319 -38.5 -38.5 0.29 (1) 10.00<br>L-AH 0 / 2921 -38.5 -38.5 0.28 (1) 10.00<br>AH-AI 0 / 2921 -38.5 -38.5 0.28 (1) 10.00<br>AI-K 0 / 2921 -38.5 -38.5 0.28 (1) 10.00 | <b>DESIGN CRITERIA</b><br>SPECIFIED LOADS:<br>TOP CH. LL = 20.0 PSF<br>DL = 8.0 PSF<br>BOT CH. LL = 10.5 PSF<br>DL = 7.0 PSF<br>TOTAL LOAD = 52.5 PSF<br>SPACING = 24 IN. C/C<br>LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12<br>THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9. NBCC 2010, NBCC 2015<br>THIS DESIGN COMPLIES WITH:<br>PART 9 OF BCBC 2018, OBC 2012<br>CSA 086-09, CSA 086-14<br>TPIC 2011, TPIC 2014<br>55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD<br>ALLOWABLE DEFL.(LL) = L/360 (0.89")<br>CALCULATED VERT. DEFL.(LL) = U/999 (0.08")<br>ALLOWABLE DEFL.(TL) = L/360 (0.89")<br>CALCULATED VERT. DEFL.(TL) = U/999 (0.14")<br>CSI: TC=0.53/1.00 (D-E:1), BC=0.36/1.00 (M-O:1), WB=0.71/1.00 (H-K:1), SS=0.28/1.00 (D-E:1)<br>DOL LUMLER=1.00 NAIL=1.00 LS BEND=1.00<br>CCMP=1.00 SHEAR=1.00 TENS=1.00<br>COMPANION LIVE LOAD FACTOR = 1.00<br>TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.<br>NAIL VALUES<br>PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)<br>MAX MIN MAX MIN MAX MIN<br>MT20 618 354 1887 788 1987 1656<br>PLATE PLACEMENT TOL. = 0.250 inches<br>PLATE ROTATION TOL. = 5.0 Deg.<br>JSI GRIP = 0.89 (1) (INPUT = 0.90)<br>JSI METAL = 0.55 (1) (INPUT = 1.00) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------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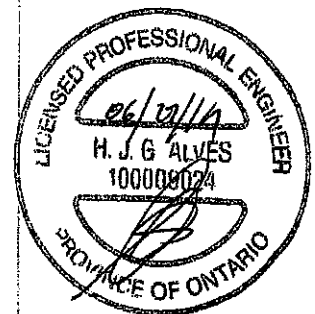
**THIS STRUCTURE MUST BE CONSTRUCTED TO MEET OR EXCEED THE PROVISIONS OF THE ONTARIO BUILDING CODE**

Structural component only  
 DWG# T-1916675 CONTINUED ON PAGE 2

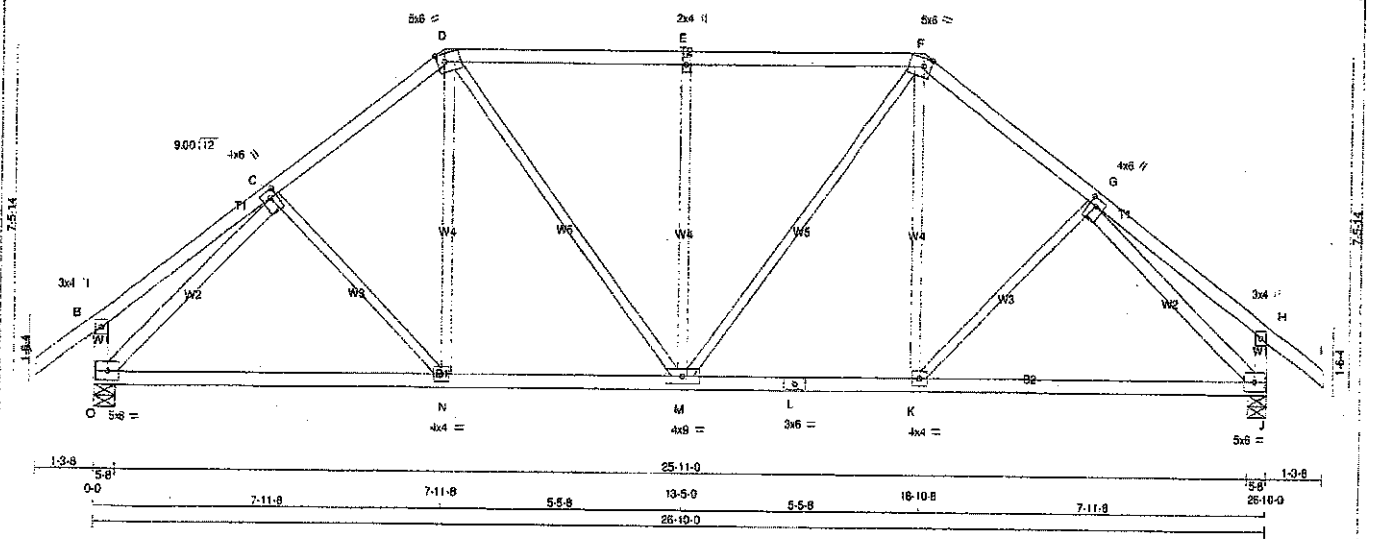
| FACTORED CONCENTRATED LOADS (LBS) |          |      |      |      |       |      |       |      |       |
|-----------------------------------|----------|------|------|------|-------|------|-------|------|-------|
| JT                                | LOC.     | LC1  | MAX- | MAX+ | FACE  | DIR. | TYPE  | HEEL | CONN. |
| P                                 | 8-0-4    | -38  | -38  | ---  | FRONT | VERT | TOTAL | ---  | C1    |
| R                                 | 8-0-4    | -202 | -202 | ---  | FRONT | VERT | TOTAL | ---  | C1    |
| S                                 | 10-0-4   | -202 | -202 | ---  | FRONT | VERT | TOTAL | ---  | C1    |
| T                                 | 12-0-4   | -202 | -202 | ---  | FRONT | VERT | TOTAL | ---  | C1    |
| U                                 | 13-9-0   | -202 | -202 | ---  | FRONT | VERT | TOTAL | ---  | C1    |
| V                                 | 14-9-12  | -202 | -202 | ---  | FRONT | VERT | TOTAL | ---  | C1    |
| W                                 | 16-9-12  | -202 | -202 | ---  | FRONT | VERT | TOTAL | ---  | C1    |
| X                                 | 18-9-12  | -202 | -202 | ---  | FRONT | VERT | TOTAL | ---  | C1    |
| Y                                 | 1-11-4   | -76  | -97  | ---  | FRONT | VERT | TOTAL | ---  | C1    |
| Z                                 | 3-11-4   | -76  | -97  | ---  | FRONT | VERT | TOTAL | ---  | C1    |
| AA                                | 8-0-4    | -38  | -38  | ---  | FRONT | VERT | TOTAL | ---  | C1    |
| AB                                | 10-0-4   | -38  | -38  | ---  | FRONT | VERT | TOTAL | ---  | C1    |
| AC                                | 12-0-4   | -38  | -38  | ---  | FRONT | VERT | TOTAL | ---  | C1    |
| AD                                | 13-5-0   | -38  | -38  | ---  | FRONT | VERT | TOTAL | ---  | C1    |
| AE                                | 14-9-12  | -38  | -38  | ---  | FRONT | VERT | TOTAL | ---  | C1    |
| AF                                | 18-9-12  | -38  | -38  | ---  | FRONT | VERT | TOTAL | ---  | C1    |
| AG                                | 18-9-12  | -38  | -38  | ---  | FRONT | VERT | TOTAL | ---  | C1    |
| AH                                | 22-10-12 | -76  | -97  | ---  | FRONT | VERT | TOTAL | ---  | C1    |
| AI                                | 24-10-12 | -76  | -97  | ---  | FRONT | VERT | TOTAL | ---  | C1    |

#### CONNECTION REQUIREMENTS

- 1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.



Structural component only *yu*  
DWG# T-1916675



**LUMBER**

N.L.G.A. RULES

| CHORDS | SIZE | DRY | LUMBER | DESCR. |
|--------|------|-----|--------|--------|
| A - D  | 2x4  | DRY | No.2   | SPF    |
| D - F  | 2x4  | DRY | No.2   | SPF    |
| F - I  | 2x4  | DRY | No.2   | SPF    |
| O - B  | 2x4  | DRY | No.2   | SPF    |
| J - H  | 2x4  | DRY | No.2   | SPF    |
| O - L  | 2x4  | DRY | No.2   | SPF    |
| L - J  | 2x4  | DRY | No.2   | SPF    |

ALL WEBS EXCEPT

| CHORDS | SIZE | DRY | LUMBER | DESCR. |
|--------|------|-----|--------|--------|
| O - C  | 2x4  | DRY | No.2   | SPF    |
| G - J  | 2x4  | DRY | No.2   | SPF    |

DRY: SEASONED LUMBER.

**PLATES (Table is in inches)**

| JT | TYPE   | PLATES | W   | LEN | Y    | X    |
|----|--------|--------|-----|-----|------|------|
| B  | TMV+p  | MT20   | 3.0 | 4.0 |      |      |
| C  | TMWW+1 | MT20   | 4.0 | 6.0 | 2.00 | 1.75 |
| D  | TTWW-m | MT20   | 5.0 | 6.0 | Edge | 2.00 |
| E  | TMW+w  | MT20   | 2.0 | 4.0 |      |      |
| F  | TTWW-m | MT20   | 5.0 | 6.0 | Edge | 2.00 |
| G  | TMWW+1 | MT20   | 4.0 | 6.0 | 2.00 | 1.75 |
| H  | TMV+p  | MT20   | 3.0 | 4.0 |      |      |
| J  | BMWW-1 | MT20   | 5.0 | 6.0 |      |      |
| K  | BMWW-1 | MT20   | 4.0 | 4.0 |      |      |
| L  | BS+1   | MT20   | 3.0 | 6.0 |      |      |
| M  | BMWW-1 | MT20   | 4.0 | 4.0 |      |      |
| N  | BMWW-1 | MT20   | 4.0 | 4.0 |      |      |
| O  | BMWW-1 | MT20   | 5.0 | 6.0 |      |      |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | VERT | HORIZ | DOWN | HORIZ | UPLIFT | BRG | IN-SX | REGRD | BRG | IN-SX |
|----|------|-------|------|-------|--------|-----|-------|-------|-----|-------|
| O  | 2027 | 0     | 2027 | 0     | 0      | 5-8 | 5-8   |       |     |       |
| J  | 2027 | 0     | 2027 | 0     | 0      | 5-8 | 5-8   |       |     |       |

**UNFACTORED REACTIONS**

| JT | 1ST CASE | MAX. MIN. | COMPONENT REACTIONS | PERM. LIVE | WIND  | DEAD    | SOIL  |
|----|----------|-----------|---------------------|------------|-------|---------|-------|
| O  | 1506     | 859 / 0   | 282 / 0             | 0 / 0      | 0 / 0 | 365 / 0 | 0 / 0 |
| J  | 1506     | 859 / 0   | 282 / 0             | 0 / 0      | 0 / 0 | 365 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) O, J

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.50 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**  
TOTAL LOAD CASES: (4)

| CHORDS |             |                  |               | WEBS  |             |               |               |
|--------|-------------|------------------|---------------|-------|-------------|---------------|---------------|
| MEMB.  | FORCE (LBS) | VERT. LOAD (PLF) | MAX. CSI (LG) | MEMB. | FORCE (LBS) | MAX. CSI (LG) | MAX. CSI (LG) |
| FR-TO  |             | FROM TO          |               | FR-TO |             |               |               |
| A-B    | 0 / 42      | -102.1 -102.1    | 0.14 (1)      | C-N   | -35 / 97    | 0.02 (3)      |               |
| B-C    | 0 / 28      | -102.1 -102.1    | 0.25 (1)      | N-D   | 0 / 359     | 0.09 (2)      |               |
| C-D    | -1906 / 0   | -102.1 -102.1    | 0.24 (1)      | D-M   | 0 / 505     | 0.11 (1)      |               |
| D-E    | -1810 / 0   | -102.1 -102.1    | 0.43 (1)      | M-E   | -679 / 0    | 0.69 (1)      |               |
| E-F    | -1810 / 0   | -102.1 -102.1    | 0.43 (1)      | F-G   | 0 / 505     | 0.11 (1)      |               |
| F-G    | -1906 / 0   | -102.1 -102.1    | 0.24 (1)      | G-H   | 0 / 359     | 0.09 (2)      |               |
| G-H    | 0 / 28      | -102.1 -102.1    | 0.25 (1)      | H-I   | -35 / 97    | 0.02 (3)      |               |
| H-I    | 0 / 42      | -102.1 -102.1    | 0.14 (1)      | I-J   | -2213 / 0   | 0.86 (1)      |               |
| I-J    | -297 / 0    | 0.0 0.0          | 0.03 (1)      | J-K   | -2213 / 0   | 0.86 (1)      |               |
| J-K    | -297 / 0    | 0.0 0.0          | 0.03 (1)      |       |             |               |               |
| K-L    | 0 / 1525    | -38.5 -38.5      | 0.61 (2)      |       |             |               |               |
| L-M    | 0 / 1505    | -38.5 -38.5      | 0.62 (2)      |       |             |               |               |
| M-N    | 0 / 1505    | -38.5 -38.5      | 0.62 (2)      |       |             |               |               |
| N-O    | 0 / 1505    | -38.5 -38.5      | 0.62 (2)      |       |             |               |               |
| O-P    | 0 / 1525    | -38.5 -38.5      | 0.61 (2)      |       |             |               |               |

**DESIGN CRITERIA**

SPECIFIED LOADS:  
TOP CH. LL = 28.0 PSF  
DL = 6.0 PSF  
BOY CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. OC

LOADING IN FLAT SECTION BASED ON A SLOPE OF 8.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF NBC 2018, OSC 2012  
- CSA 088-09, CSA 088-14  
- TPIC 2011, TPIC 2014

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.89")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.17")  
ALLOWABLE DEFL.(TL) = L/360 (0.89")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.28")

CSI: TC=0.43/1.00 (D-E:1), BC=0.62/1.00 (M-N:2), WS=0.86/1.00 (C-O:1), SS=0.27/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

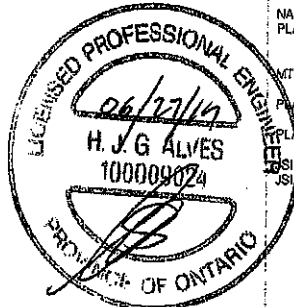
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION  
(PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 818 354 1667 786 1967 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

SSI BRIP= 0.90 (G) (INPUT = 0.90)  
SSI METAL= 0.97 (G) (INPUT = 1.00)



Structural component only  
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Structural component only  
DWG# T-1916677



**DESIGN CRITERIA**

**SPECIFIED LOADS:**

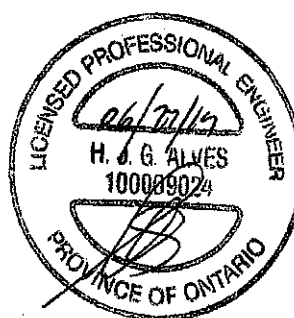
|            |      |      |     |
|------------|------|------|-----|
| TOP CH.    | LL = | 28.0 | PSF |
|            | DL = | 6.0  | PSF |
| BOT CH.    | LL = | 10.5 | PSF |
|            | DL = | 7.0  | PSF |
| TOTAL LOAD | =    | 52.5 | PSF |

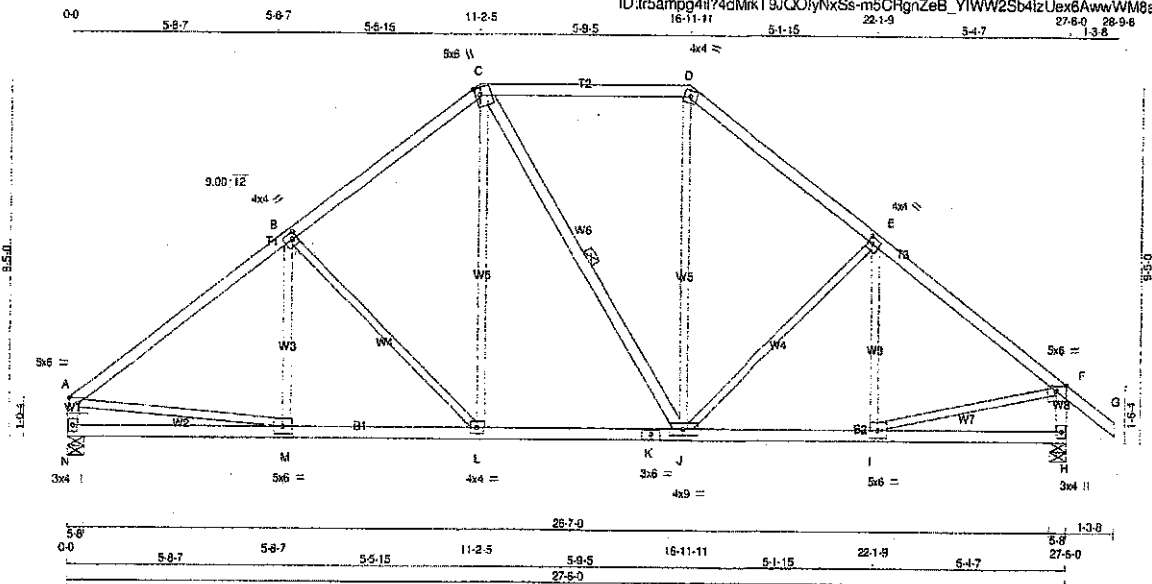
**SPACING = 24.0 IN. C/C**

**LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12**

|     |        |       |       |          |       |
|-----|--------|-------|-------|----------|-------|
| O-N | 0/0    | -38.5 | -38.5 | 0.20 (3) | 10.00 |
| N-M | 0/1636 | -38.5 | -38.5 | 0.40 (2) | 10.00 |
| M-L | 0/1336 | -38.5 | -38.5 | 0.35 (2) | 10.00 |
| L-K | 0/1236 | -38.5 | -38.5 | 0.35 (2) | 10.00 |
| K-J | 0/1835 | -38.5 | -38.5 | 0.40 (2) | 10.00 |
| J-I | 0/0    | -38.5 | -38.5 | 0.20 (3) | 10.00 |

DWG# T-1916678





Scale = 1/4" = 1'-0"

TOTAL WEIGHT = 8 X 128 = 768 lb

**LUMBER**

N, L, & A. RULES

| CHORDS                | SIZE | LUMBER |
|-----------------------|------|--------|
| A - C                 | 2x4  | DRY    |
| C - D                 | 2x4  | DRY    |
| D - G                 | 2x4  | DRY    |
| N - A                 | 2x4  | DRY    |
| H - F                 | 2x4  | DRY    |
| N - K                 | 2x4  | DRY    |
| K - H                 | 2x4  | DRY    |
| ALL WEBS EXCEPT C - J | 2x3  | DRY    |
|                       | 2x4  | DRY    |

DRY: SEASONED LUMBER.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| DESOR. | FACTORED       | MAXIMUM FACTORED | INPUT | REQD  |
|--------|----------------|------------------|-------|-------|
|        | GROSS REACTION | GROSS REACTION   | BRG   | BRG   |
|        | VERT           | HORZ             | IN-SX | IN-SX |
| JT     | 1933           | 0                | 5-8   | 5-8   |
| N      | 2074           | 0                | 5-8   | 5-8   |

**UNFACTORED REACTIONS**

| DESOR. | 1ST CASE | MAX / MIN | COMPONENT REACTIONS | SNOW  | LIVE  | PERM LIVE | WIND  | DEAD  | SOIL  |
|--------|----------|-----------|---------------------|-------|-------|-----------|-------|-------|-------|
| JT     | 1445     | 798 / 0   | 289 / 0             | 0 / 0 | 0 / 0 | 358 / 0   | 0 / 0 | 0 / 0 | 0 / 0 |
| N      | 1541     | 879 / 0   | 289 / 0             | 0 / 0 | 0 / 0 | 374 / 0   | 0 / 0 | 0 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) N, H

**DESIGN CRITERIA**

**SPECIFIED LOADS:**

|            |           |     |
|------------|-----------|-----|
| TOP CH.    | LL = 29.0 | PSF |
| DL = 6.0   | PSF       |     |
| BOT CH.    | LL = 10.5 | PSF |
| DL = 7.0   | PSF       |     |
| TOTAL LOAD | = 52.5    | PSF |

**SPACING = 24.0 IN/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(65 % OF 37.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL (LL) = L/360 (0.92")

CALCULATED VERT. DEFL (LL) = L/999 (0.06")

ALLOWABLE DEFL (TL) = L/360 (0.92")

CALCULATED VERT. DEFL (TL) = L/999 (0.13")

CSI: TC=0.58/1.00 (A-B:1), BC=0.47/1.00 (L-M:2), WB=0.68/1.00 (B-L:1), SS=0.23/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

**PLATES (table is in inches)**

| JT | TYPE    | PLATES | W   | LEN | Y    | X    |
|----|---------|--------|-----|-----|------|------|
| A  | TMWW-p  | MT20   | 5.0 | 6.0 | 1.75 | 3.00 |
| B  | TMWW-l  | MT20   | 4.0 | 4.0 | 2.00 | 1.50 |
| C  | TTWW-m  | MT20   | 5.0 | 8.0 | 2.25 | 1.50 |
| D  | TTWW-m  | MT20   | 4.0 | 4.0 |      |      |
| E  | TMWW-l  | MT20   | 4.0 | 4.0 | 2.00 | 1.50 |
| F  | TMWW-p  | MT20   | 5.0 | 6.0 | 1.75 | 3.25 |
| H  | BMV-l-p | MT20   | 3.0 | 4.0 |      |      |
| I  | BMV-l-p | MT20   | 5.0 | 6.0 |      |      |
| J  | BMV-l-p | MT20   | 4.0 | 9.0 |      |      |
| K  | BS-l    | MT20   | 3.0 | 6.0 |      |      |
| L  | BMV-l-p | MT20   | 4.0 | 4.0 |      |      |
| M  | BMV-l-p | MT20   | 5.0 | 6.0 |      |      |
| N  | BMV-l-p | MT20   | 3.0 | 4.0 |      |      |

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.98 FT.

MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

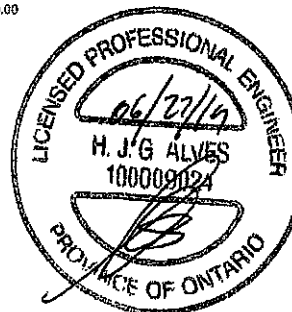
1 LATERAL BRACE(S) AT 1/2 LENGTH OF C-J.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

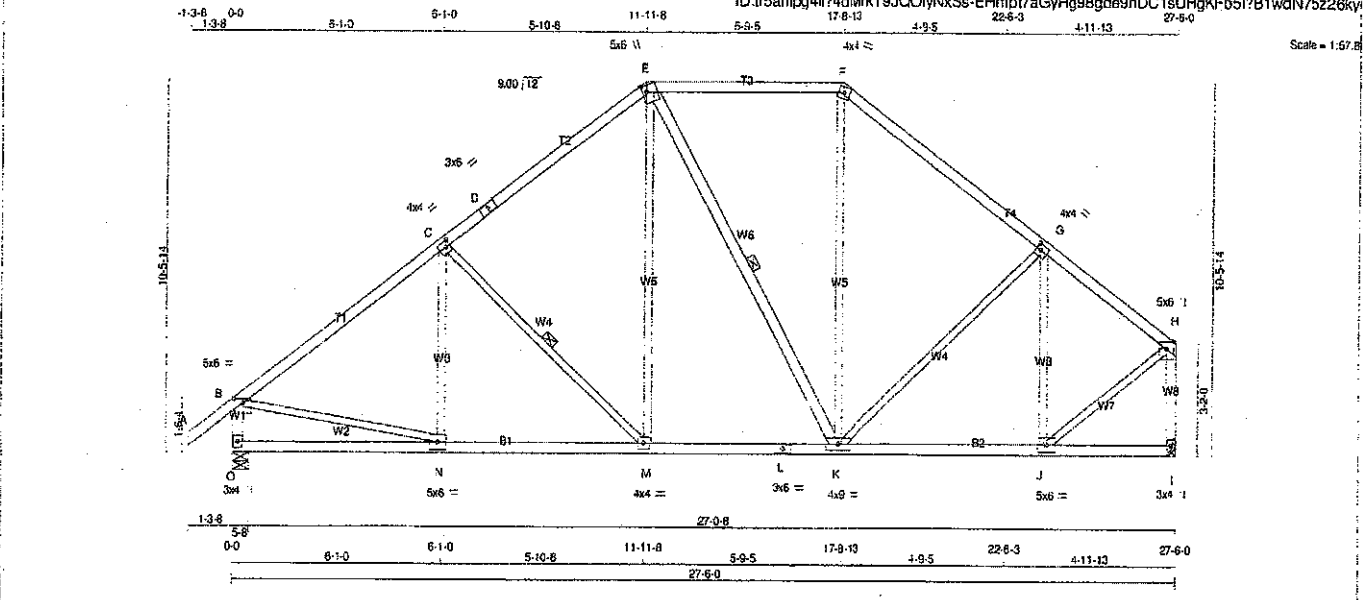
**LOADING**

TOTAL LOAD CASES: (4)

| CHORDS | MAX. FACTORED | FACTORED         | MAX.     | MAX.     | WEBS  | MAX. FACTORED | MAX.       |
|--------|---------------|------------------|----------|----------|-------|---------------|------------|
| MEMB.  | FORCE (LBS)   | VERT. LOAD (PLF) | CSH (LC) | UNBRAC   | MEMB. | FORCE (LBS)   | MAX (LBS)  |
| FR-TO  |               |                  |          |          | FR-TO |               |            |
| A-B    | -2284 / 0     | -102.1           | -102.1   | 0.58 (1) | 3.98  | M-B           | 0 / 219    |
| B-C    | -1814 / 0     | -102.1           | -102.1   | 0.47 (1) | 4.46  | B-L           | -805 / 0   |
| C-D    | -1392 / 0     | -102.1           | -102.1   | 0.47 (1) | 4.93  | L-C           | 0 / 825    |
| D-E    | -1774 / 0     | -102.1           | -102.1   | 0.42 (1) | 4.56  | C-J           | -52 / 0    |
| E-F    | -2085 / 0     | -102.1           | -102.1   | 0.45 (1) | 4.28  | J-D           | 0 / 556    |
| F-G    | 0 / 42        | -102.1           | -102.1   | 0.14 (1) | 10.00 | J-E           | -420 / 0   |
| N-A    | -1836 / 0     | 0.0              | 0.0      | 0.18 (1) | 6.18  | E-E           | -152 / 119 |
| H-F    | -1988 / 0     | 0.0              | 0.0      | 0.21 (1) | 5.98  | A-M           | 0 / 1854   |
|        |               |                  |          |          |       | I-F           | 0 / 1724   |
| N-M    | 0 / 0         | -38.5            | -38.5    | 0.23 (3) | 10.00 |               |            |
| M-L    | 0 / 1842      | -38.5            | -38.5    | 0.47 (2) | 10.00 |               |            |
| L-K    | 0 / 1419      | -38.5            | -38.5    | 0.36 (2) | 10.00 |               |            |
| K-J    | 0 / 1419      | -38.5            | -38.5    | 0.36 (2) | 10.00 |               |            |
| J-I    | 0 / 1683      | -38.5            | -38.5    | 0.41 (2) | 10.00 |               |            |
| I-H    | 0 / 0         | -38.5            | -38.5    | 0.19 (3) | 10.00 |               |            |



Structural component only  
 DWG# T-1916679



**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | LUMBER | DESCR. |
|--------|------|--------|--------|
| A - D  | 2x4  | DRY    | No.2   |
| D - E  | 2x4  | DRY    | No.2   |
| E - F  | 2x4  | DRY    | No.2   |
| F - H  | 2x4  | DRY    | No.2   |
| O - B  | 2x4  | DRY    | No.2   |
| I - H  | 2x4  | DRY    | No.2   |
| O - L  | 2x4  | DRY    | No.2   |
| L - I  | 2x4  | DRY    | No.2   |

ALL WEBS 2x3 DRY No.2

EXCEPT

E - K 2x4 DRY No.2

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT TYPE | PLATES | W   | LEN | Y    | X    |
|---------|--------|-----|-----|------|------|
| B TMW-p | MT20   | 5.0 | 6.0 | 1.50 | 3.00 |
| C TMW-w | MT20   | 4.0 | 4.0 | 2.00 | 1.50 |
| D TS-t  | MT20   | 3.0 | 6.0 |      |      |
| E TTW-m | MT20   | 5.0 | 6.0 | 2.25 | 1.50 |
| F TTW-m | MT20   | 4.0 | 4.0 |      |      |
| G TMW-w | MT20   | 4.0 | 4.0 | 2.00 | 1.50 |
| H TMW-p | MT20   | 5.0 | 6.0 | Edge |      |
| I BMW-p | MT20   | 3.0 | 4.0 |      |      |
| J BMW-w | MT20   | 5.0 | 6.0 |      |      |
| K BMW-w | MT20   | 4.0 | 9.0 |      |      |
| L BS-t  | MT20   | 3.0 | 6.0 |      |      |
| M BMW-w | MT20   | 4.0 | 4.0 |      |      |
| N BMW-w | MT20   | 5.0 | 6.0 |      |      |
| O BMW-p | MT20   | 3.0 | 4.0 |      |      |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX      | IN-SX      |
|----|------|------|------|------|--------|------------|------------|
| O  | 2074 | 0    | 2074 | 0    | 0      | 5-8        | 5-8        |
| I  | 1933 | 0    | 1933 | 0    | 0      | MECHANICAL | MECHANICAL |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT I MINIMUM BEARING LENGTH AT JOINT I = 3-8.

**UNFACTORED REACTIONS**

| JT | COMBINED | SNOW    | LIVE    | PERM.LIVE | WIND  | DEAD    | SOIL  |
|----|----------|---------|---------|-----------|-------|---------|-------|
| O  | 1541     | 879 / 0 | 289 / 0 | 0 / 0     | 0 / 0 | 374 / 0 | 0 / 0 |
| I  | 1445     | 798 / 0 | 289 / 0 | 0 / 0     | 0 / 0 | 358 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) O

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.08 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/2 LENGTH OF C-M, E-K.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

**LOADING**

TOTAL LOAD CASES: (4)

| CHORDS |                                 |            |        |          | WEBS   |       |                                 |           |  |
|--------|---------------------------------|------------|--------|----------|--------|-------|---------------------------------|-----------|--|
| MEMB.  | MAX. FACTORED<br>FORCE<br>(LBS) | FACTORED   |        |          | MAX.   | MEMB. | MAX. FACTORED<br>FORCE<br>(LBS) | MAX       |  |
|        |                                 | VERT. LOAD | LC1    | MAX      | UNBRAC |       |                                 | CSI (LC1) |  |
|        |                                 | (PLF)      |        |          |        |       |                                 |           |  |
| FR-TO  |                                 | FROM       | TO     |          | LENGTH | FR-TO |                                 |           |  |
| A-B    | 0 / 42                          | -102.1     | -102.1 | 0.14 (1) | 10.00  | N-C   | -70 / 187                       | 0.04 (3)  |  |
| B-C    | 2071 / 0                        | -102.1     | -102.1 | 0.60 (1) | 4.08   | C-M   | -562 / 0                        | 0.26 (1)  |  |
| C-D    | -1657 / 0                       | -102.1     | -102.1 | 0.54 (1) | 4.53   | M-E   | 0 / 601                         | 0.14 (2)  |  |
| D-E    | -1657 / 0                       | -102.1     | -102.1 | 0.54 (1) | 4.53   | E-K   | -172 / 0                        | 0.13 (1)  |  |
| E-F    | -1210 / 0                       | -102.1     | -102.1 | 0.46 (1) | 5.22   | K-F   | 0 / 406                         | 0.09 (2)  |  |
| F-G    | -1544 / 0                       | -102.1     | -102.1 | 0.47 (1) | 4.77   | K-G   | 0 / 25                          | 0.01 (3)  |  |
| G-H    | -1442 / 0                       | -102.1     | -102.1 | 0.37 (1) | 5.00   | J-G   | -663 / 0                        | 0.39 (1)  |  |
| O-B    | -1879 / 0                       | 0.0        | 0.0    | 0.21 (1) | 5.99   | S-N   | 0 / 1724                        | 0.38 (1)  |  |
| I-H    | -1881 / 0                       | 0.0        | 0.0    | 0.33 (1) | 6.12   | J-H   | 0 / 1478                        | 0.33 (1)  |  |
|        |                                 |            |        |          |        |       |                                 |           |  |
| O-N    | 0 / 0                           | -38.5      | -38.5  | 0.28 (3) | 10.00  |       |                                 |           |  |
| N-M    | 0 / 1892                        | -38.5      | -38.5  | 0.48 (2) | 10.00  |       |                                 |           |  |
| M-L    | 0 / 1294                        | -38.5      | -38.5  | 0.38 (2) | 10.00  |       |                                 |           |  |
| L-K    | 0 / 1294                        | -38.5      | -38.5  | 0.38 (2) | 10.00  |       |                                 |           |  |
| K-J    | 0 / 1194                        | -38.5      | -38.5  | 0.36 (2) | 10.00  |       |                                 |           |  |
| J-I    | 0 / 0                           | -38.5      | -38.5  | 0.17 (3) | 10.00  |       |                                 |           |  |

**DESIGN CRITERIA**

SPECIFIED LOADS:  
TOP CH. LL = 29.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

LOADING IN PLAT SECTION BASED ON A SLOPE OF 8.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF NBC 2010, OBC 2012  
- CSA 088-08, CSA 088-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.92")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.07")  
ALLOWABLE DEFL.(TL) = L/360 (0.92")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

CSI: TC=0.60/1.00 (B-C:1), BC=0.48/1.00 (M-N:2), WB=0.39/1.00 (S-N:1), SS=0.24/1.00 (B-C:1)

DOL LIMIT=1.00 NAIL=1.00 LS BEND=1.10  
COMB=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

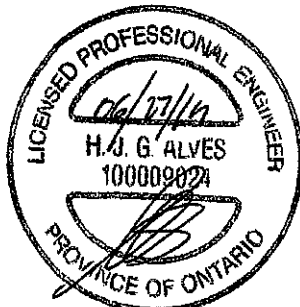
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1667 788 1987 1856

PLATE PLACEMENT TOL. = 0.250 inches

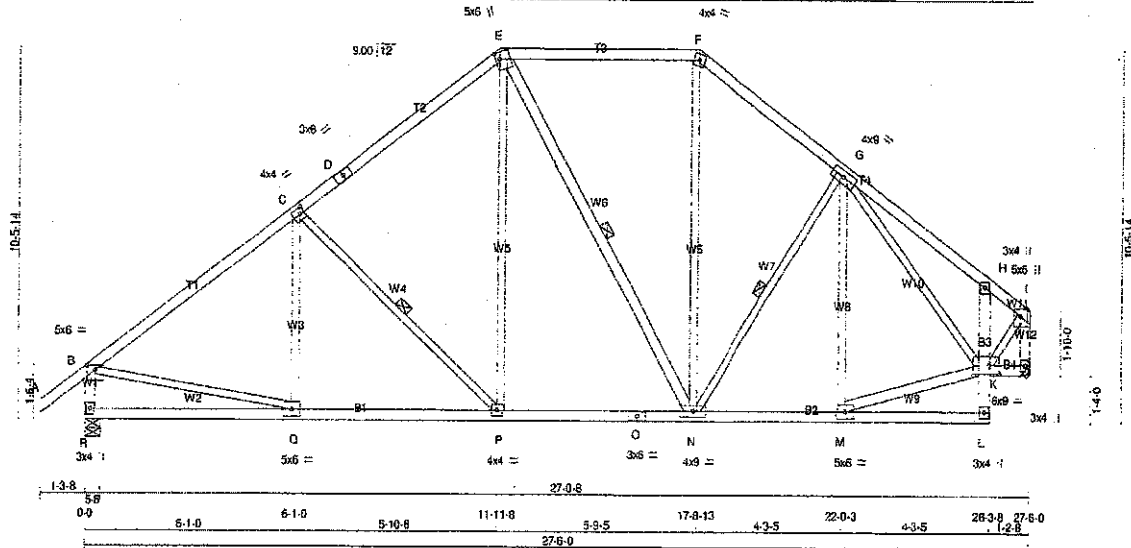
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.83 (C) (INPUT = 0.90)  
JSI METAL = 0.55 (H) (INPUT = 1.00)



**THIS STRUCTURE MUST BE CONSTRUCTED TO MEET OR EXCEED THE PROVISIONS OF THE ONTARIO BUILDING CODE**

Structural component only  
DWG# T-1916680



**LUMBER**

| N. L. G. A. RULES | CHORDS | SIZE | LUMBER |
|-------------------|--------|------|--------|
| A - D             | 2x4    | DRY  | No.2   |
| D - E             | 2x4    | DRY  | No.2   |
| E - F             | 2x4    | DRY  | No.2   |
| F - G             | 2x4    | DRY  | No.2   |
| G - H             | 2x4    | DRY  | No.2   |
| H - I             | 2x4    | DRY  | No.2   |
| I - J             | 2x4    | DRY  | No.2   |
| J - K             | 2x4    | DRY  | No.2   |
| K - L             | 2x4    | DRY  | No.2   |
| L - H             | 2x4    | DRY  | No.2   |
| H - J             | 2x4    | DRY  | No.2   |
| J - K             | 2x4    | DRY  | No.2   |
| K - J             | 2x4    | DRY  | No.2   |
| ALL WEBS          | 2x3    | DRY  | No.2   |
| EXCEPT            |        |      |        |
| E - N             | 2x4    | DRY  | No.2   |
| M - K             | 2x4    | DRY  | No.2   |

DRY: SEASONED LUMBER.

| PLATES (table in inches) |          |      |     |     |      |      |
|--------------------------|----------|------|-----|-----|------|------|
| JT TYPE                  | PLATES   | W    | LEN | Y   | X    |      |
| B                        | TMVW-p   | MT20 | 5.0 | 6.0 | 1.50 | 3.00 |
| C                        | TMVW-l   | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| D                        | TS-1     | MT20 | 3.0 | 6.0 |      |      |
| E                        | TTWV+m   | MT20 | 5.0 | 8.0 | 2.25 | 1.50 |
| F                        | TTW-m    | MT20 | 4.0 | 4.0 |      |      |
| G                        | TMVWV-l  | MT20 | 4.0 | 9.0 |      |      |
| H                        | TMV-p    | MT20 | 3.0 | 4.0 |      |      |
| I                        | TMVW+p   | MT20 | 5.0 | 6.0 |      | Edge |
| J                        | BMV1-p   | MT20 | 3.0 | 4.0 |      |      |
| K                        | BMVWVW-l | MT20 | 6.0 | 9.0 | 3.00 | 3.50 |
| L                        | BMV-p    | MT20 | 3.0 | 4.0 |      |      |
| M                        | BMVW-l   | MT20 | 5.0 | 6.0 |      |      |
| N                        | SMVWVW-l | MT20 | 4.0 | 9.0 |      |      |
| O                        | BS-1     | MT20 | 3.0 | 6.0 |      |      |
| P                        | BMVW-l   | MT20 | 4.0 | 4.0 |      |      |
| Q                        | SMVW-l   | MT20 | 5.0 | 6.0 |      |      |
| R                        | BMV1-p   | MT20 | 3.0 | 4.0 |      |      |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.



**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

**BEARINGS**

| SPF | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQD BRG   |
|-----|-------------------------|---------------------------------|-----------|------------|
| JT  | VERT                    | DOWN                            | UPLIFT    | IN-SX      |
| R   | 2074                    | 0                               | 0         | 5-8        |
| J   | 1933                    | 0                               | 0         | MECHANICAL |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT J. MINIMUM BEARING LENGTH AT JOINT J = 3-8.

**UNFACTORED REACTIONS**

| SPF | 1ST CASE | MAX. MIN. COMPONENT REACTIONS | PERM. LIVE | WIND  | DEAD  | SOIL    |
|-----|----------|-------------------------------|------------|-------|-------|---------|
| JT  | COMBINED | SNOW                          | LIVE       |       |       |         |
| R   | 1541     | 879 / 0                       | 289 / 0    | 0 / 0 | 0 / 0 | 374 / 0 |
| J   | 1445     | 798 / 0                       | 289 / 0    | 0 / 0 | 0 / 0 | 358 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) R

**BRACING**  
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.08 FT.  
 MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT. OR RIGID CEILING DIRECTLY APPLIED.  
 ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

1 LATERAL BRACE(S) AT 1/2 LENGTH OF C-P, E-N, G-N.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

**LOADING**  
 TOTAL LOAD CASES: (4)

| CHORDS |             |                  |                       | WEBS                 |       |             |                        |
|--------|-------------|------------------|-----------------------|----------------------|-------|-------------|------------------------|
| MEMB.  | FORCE (LBS) | VERT. LOAD (PLF) | FACTORED CS1 (LC) MAX | MAX. UNBRACED LENGTH | MEMB. | FORCE (LBS) | MAX. FACTORED CS1 (LC) |
| FR-TO  |             |                  |                       |                      | FR-TO |             |                        |
| A-B    | 0 / 42      | -102.1           | -102.1 0.14 (1)       | 10.00                | Q-C   | -72 / 184   | 0.04 (3)               |
| B-C    | -2071 / 0   | -102.1           | -102.1 0.80 (1)       | 4.08                 | C-P   | -590 / 0    | 0.28 (1)               |
| C-D    | -1658 / 0   | -102.1           | -102.1 0.54 (1)       | 4.53                 | P-E   | 0 / 611     | 0.14 (2)               |
| D-E    | -1858 / 0   | -102.1           | -102.1 0.54 (1)       | 4.53                 | E-N   | -180 / 0    | 0.14 (1)               |
| E-F    | -1207 / 0   | -102.1           | -102.1 0.48 (1)       | 5.22                 | N-F   | 0 / 455     | 0.10 (2)               |
| F-G    | -1534 / 0   | -102.1           | -102.1 0.25 (1)       | 5.07                 | N-G   | -108 / 0    | 0.05 (1)               |
| G-H    | -1238 / 0   | -102.1           | -102.1 0.23 (1)       | 5.52                 | N-G   | -225 / 41   | 0.21 (1)               |
| H-I    | -1242 / 0   | -102.1           | -102.1 0.11 (1)       | 5.86                 | G-K   | -431 / 0    | 0.37 (1)               |
| R-B    | -1979 / 0   | 0.0              | 0.0 0.21 (1)          | 6.00                 | B-Q   | 0 / 1724    | 0.39 (1)               |
| J-I    | -1907 / 0   | 0.0              | 0.0 0.21 (1)          | 5.09                 | M-K   | 0 / 1288    | 0.21 (1)               |
|        |             |                  |                       |                      | K-I   | 0 / 1535    | 0.35 (1)               |
| R-Q    | 0 / 0       | -38.5            | -38.5 0.26 (3)        | 10.00                |       |             |                        |
| Q-P    | 0 / 1692    | -38.5            | -38.5 0.48 (2)        | 10.00                |       |             |                        |
| P-O    | 0 / 1294    | -38.5            | -38.5 0.35 (2)        | 10.00                |       |             |                        |
| O-N    | 0 / 1294    | -38.5            | -38.5 0.35 (2)        | 10.00                |       |             |                        |
| N-M    | 0 / 1259    | -38.5            | -38.5 0.32 (2)        | 10.00                |       |             |                        |
| M-L    | 0 / 23      | -38.5            | -38.5 0.12 (3)        | 10.00                |       |             |                        |
| L-K    | 0 / 82      | 0.0              | 0.0 0.05 (1)          | 10.00                |       |             |                        |
| K-H    | -305 / 0    | 0.0              | 0.0 0.04 (1)          | 7.81                 |       |             |                        |
| K-J    | 0 / 0       | -38.5            | -38.5 0.02 (3)        | 10.00                |       |             |                        |

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 29.0 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 10.5 PSF  
 DL = 7.0 PSF  
 TOTAL LOAD = 52.5 PSF

**SPACING = 24.0 IN. OC**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 3.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
 - PART 9 OF BCBC 2018, OBC 2012  
 - CSA 088-09, CSA 088-14  
 - TPIC 2011, TPIC 2014

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.92")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.07")  
 ALLOWABLE DEFL.(TL) = L/360 (0.92")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.60/1.00 (B-C:1), BC=0.48/1.00 (P-Q:2), WB=0.39/1.00 (B-Q:1), SS=0.24/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE LEFT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

**NAIL VALUES**  
 PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
 MAX MIN MAX MIN MAX MIN  
 MT20 618 354 1887 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

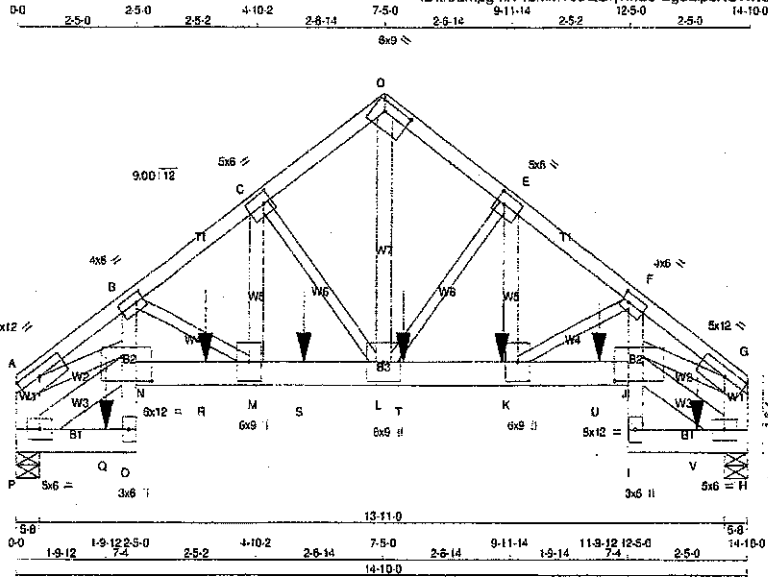
JSI GRIP = 0.83 (R) (INPUT = 0.90)  
 JSI METAL = 0.46 (C) (INPUT = 1.00)

Structural component only  
 DWG# T-1916681

Tamarack Roof Truss, Burlington

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Scale = 1/40

TOTAL WEIGHT = 2 X 93 = 186 lb

| LUMBER | N. L. G. A. RULES | CHORDS     | SIZE | LUMBER | DESCR. |
|--------|-------------------|------------|------|--------|--------|
| A - D  | 2x4 DRY           | No.2       | SPF  |        |        |
| D - G  | 2x4 DRY           | No.2       | SPF  |        |        |
| P - A  | 2x6 DRY           | No.2       | SPF  |        |        |
| H - G  | 2x6 DRY           | No.2       | SPF  |        |        |
| P - O  | 2x6 DRY           | No.2       | SPF  |        |        |
| O - B  | 2x4 DRY           | No.2       | SPF  |        |        |
| N - J  | 2x6 DRY           | 2100F 1.8E | SPF  |        |        |
| I - F  | 2x4 DRY           | No.2       | SPF  |        |        |
| I - H  | 2x6 DRY           | No.2       | SPF  |        |        |

| ALL WEBS EXCEPT | SIZE    | LUMBER | DESCR. |
|-----------------|---------|--------|--------|
| P - N           | 2x6 DRY | No.2   | SPF    |
| J - N           | 2x6 DRY | No.2   | SPF    |
| B - M           | 2x3 DRY | No.2   | SPF    |
| C - L           | 2x3 DRY | No.2   | SPF    |
| L - E           | 2x3 DRY | No.2   | SPF    |
| K - F           | 2x3 DRY | No.2   | SPF    |

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

| CHORDS #ROWS                             | SURFACE SPACING (IN) | LOAD(PLF)   |
|------------------------------------------|----------------------|-------------|
| TOP CHORDS : (0.122"x3") SPIRAL NAILS    |                      |             |
| A-D 1                                    | 12                   | TOP         |
| D-G 1                                    | 12                   | TOP         |
| P-A 2                                    | 12                   | TOP         |
| H-G 2                                    | 12                   | TOP         |
| BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS |                      |             |
| P-O 2                                    | 12                   | SIDE(0.0)   |
| N-J 2                                    | 12                   | SIDE(197.8) |
| I-H 2                                    | 12                   | SIDE(0.0)   |
| O-B 1                                    | 12                   | TOP         |
| F-I 1                                    | 12                   | TOP         |

| WEBS : (0.122"x3") SPIRAL NAILS | SIZE | LOAD(PLF)   |
|---------------------------------|------|-------------|
| 2x3 1                           | 8    | SIDE(298.5) |
| K-E 1                           | 5    |             |
| 2x4 1                           | 6    |             |
| M-G 1                           | 5    |             |
| 2x6 2                           | 6    |             |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

| JT TYPE | PLATES | W   | LEN  | Y    | X    |
|---------|--------|-----|------|------|------|
| A       | MT20   | 5.0 | 12.0 | 2.00 | 5.25 |
| B       | MT20   | 4.0 | 6.0  | 2.00 | 1.75 |
| C       | MT20   | 5.0 | 6.0  | 2.50 | 2.00 |
| D       | MT20   | 6.0 | 3.0  | 2.25 | 6.25 |
| E       | MT20   | 5.0 | 6.0  | 2.50 | 2.00 |
| F       | MT20   | 4.0 | 6.0  | 2.00 | 1.75 |
| G       | MT20   | 5.0 | 12.0 | 2.00 | 5.25 |
| H       | MT20   | 5.0 | 6.0  |      |      |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS | FACTORED       | MAXIMUM FACTORED | INPUT        | REORD |
|----------|----------------|------------------|--------------|-------|
|          | GROSS REACTION | GROSS REACTION   | BRG          | BRG   |
| JT VERT  | HORZ           | HORZ             | UPLIFT IN-SX | IN-SX |
| P        | 7308 0         | 7308 0           | 5-8          | 5-8   |
| H        | 8057 0         | 8057 0           | 5-8          | 5-8   |

| UNFACTORED REACTIONS |           |                              |          |           |       |          |
|----------------------|-----------|------------------------------|----------|-----------|-------|----------|
|                      | 1ST LOASE | MAX/MIN. COMPONENT REACTIONS |          |           |       |          |
| JT                   | COMBINED  | SNOW                         | LIVE     | PERM.LIVE | WIND  | DEAD     |
| P                    | 5442      | 3066 / 0                     | 1045 / 0 | 0 / 0     | 0 / 0 | 1330 / 0 |
| H                    | 5998      | 3384 / 0                     | 1148 / 0 | 0 / 0     | 0 / 0 | 1465 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) P, H

BRACING  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.14 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

| CHORDS | MAX. FACTORED | FACTORED               | WEBS  | MAX. FACTORED |
|--------|---------------|------------------------|-------|---------------|
| MEMB.  | FORCE (LBS)   | VERT. LOAD LC1 MAX     | MEMB. | FORCE (LBS)   |
| FR-TO  |               | FROM TO                | FR-TO |               |
| A-B    | -12569 / 0    | -102.1 -102.1 0.05 (1) | L-D   | 0 / 8315      |
| B-C    | -9597 / 0     | -102.1 -102.1 0.45 (1) | P-N   | -325 / 0      |
| C-D    | -7141 / 0     | -102.1 -102.1 0.23 (1) | A-N   | 0 / 10069     |
| D-E    | -7141 / 0     | -102.1 -102.1 0.23 (1) | J-H   | -329 / 0      |
| E-F    | -9674 / 0     | -102.1 -102.1 0.46 (1) | J-G   | 0 / 10201     |
| F-G    | -12734 / 0    | -102.1 -102.1 0.67 (1) | M-C   | 0 / 3814      |
| P-A    | -6715 / 0     | 0.0 0.0 0.24 (1)       | K-E   | 0 / 3941      |
| H-G    | -6803 / 0     | 0.0 0.0 0.25 (1)       | B-M   | -2954 / 0     |
| P-Q    | 0 / 280       | -38.5 -38.5 0.28 (1)   | L-E   | -3426 / 0     |
| Q-O    | 0 / 280       | -38.5 -38.5 0.28 (1)   | K-F   | -3038 / 0     |
| O-N    | 0 / 1585      | 0.0 0.0 0.42 (1)       |       |               |
| N-B    | 0 / 3100      | 0.0 0.0 0.55 (1)       |       |               |
| R-M    | 0 / 10273     | -38.5 -38.5 0.48 (1)   |       |               |
| M-S    | 0 / 7712      | -38.5 -38.5 0.35 (1)   |       |               |
| S-L    | 0 / 7712      | -38.5 -38.5 0.35 (1)   |       |               |
| L-T    | 0 / 7774      | -38.5 -38.5 0.34 (1)   |       |               |
| T-K    | 0 / 7774      | -38.5 -38.5 0.34 (1)   |       |               |
| K-U    | 0 / 10408     | -38.5 -38.5 0.49 (1)   |       |               |
| U-J    | 0 / 10408     | -38.5 -38.5 0.49 (1)   |       |               |
| J-I    | 0 / 895       | 0.0 0.0 0.36 (1)       |       |               |
| J-F    | 0 / 3197      | 0.0 0.0 0.57 (1)       |       |               |
| I-V    | 0 / 284       | -38.5 -38.5 0.42 (1)   |       |               |
| V-H    | 0 / 284       | -38.5 -38.5 0.42 (1)   |       |               |

| FACTORED CONCENTRATED LOADS (LBS) | LOC.    | LC1   | MAX.  | MAX+ | FACE | DIR. | TYPE  | HEEL | CONN. |
|-----------------------------------|---------|-------|-------|------|------|------|-------|------|-------|
| K                                 | 9-9-12  | -1895 | -1895 | ---  | BACK | VERT | TOTAL | ---  | C1    |
| O                                 | 1-8-12  | -1905 | -1905 | ---  | BACK | VERT | TOTAL | ---  | C1    |
| R                                 | 3-9-12  | -1895 | -1895 | ---  | BACK | VERT | TOTAL | ---  | C1    |
| S                                 | 5-8-12  | -1895 | -1895 | ---  | BACK | VERT | TOTAL | ---  | C1    |
| T                                 | 7-8-12  | -1895 | -1895 | ---  | BACK | VERT | TOTAL | ---  | C1    |
| U                                 | 11-9-12 | -1900 | -1900 | ---  | BACK | VERT | TOTAL | ---  | C1    |
| V                                 | 13-9-12 | -1895 | -1895 | ---  | BACK | VERT | TOTAL | ---  | C1    |

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. OC

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, OBC 2012  
- CSA 086-09, CSA 098-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.49")  
CALCULATED VERT. DEFL.(LL) = L/399 (0.12")  
ALLOWABLE DEFL.(TL) = L/360 (0.49")  
CALCULATED VERT. DEFL.(TL) = L/855 (0.20")

CSI: TC=0.67/1.00 (F-G:1), BC=0.57/1.00 (F-J:1), WB=0.90/1.00 (G-J:1), SSI=0.66/1.00 (K-L:1)

DDL LUMBER=1.20 NAIL=1.00 LS BEND=1.00  
COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

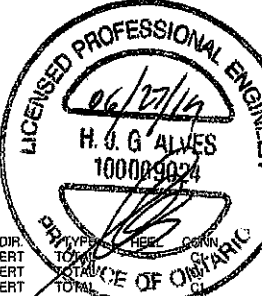
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

SI GRIP=0.89 (C) (INPUT = 0.90)  
SI METAL=0.93 (A) (INPUT = 1.00)



|          |            |          |     |             |                 |          |
|----------|------------|----------|-----|-------------|-----------------|----------|
| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC.   | GREENPARK HOMES | DRWG NO. |
| 403945   | T6         | 1        | 2   | TRUSS DESC. |                 |          |

Tamarack Roof Truss, Burlington

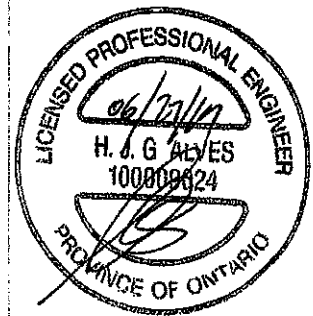
Version 5.300 S May 10 2019 MiTek Industries, Inc. Thu Jun 27 11:05:40 2019 Page 2  
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PLATES (table is in inches)

| JT | TYPE    | PLATES | W   | LEN  | Y    | X    |
|----|---------|--------|-----|------|------|------|
| I  | BMV+p   | MT20   | 3.0 | 6.0  |      |      |
| J  | BVMWW-I | MT20   | 8.0 | 12.0 | 5.75 | 7.00 |
| K  | BMWW-I  | MT20   | 6.0 | 9.0  |      |      |
| L  | BMWWW-I | MT20   | 8.0 | 9.0  |      |      |
| M  | BMWW-I  | MT20   | 6.0 | 9.0  |      |      |
| N  | BVMWW-I | MT20   | 8.0 | 12.0 | 5.75 | 7.00 |
| O  | BMV+p   | MT20   | 3.0 | 6.0  |      |      |
| P  | BMVW-I  | MT20   | 5.0 | 6.0  |      |      |

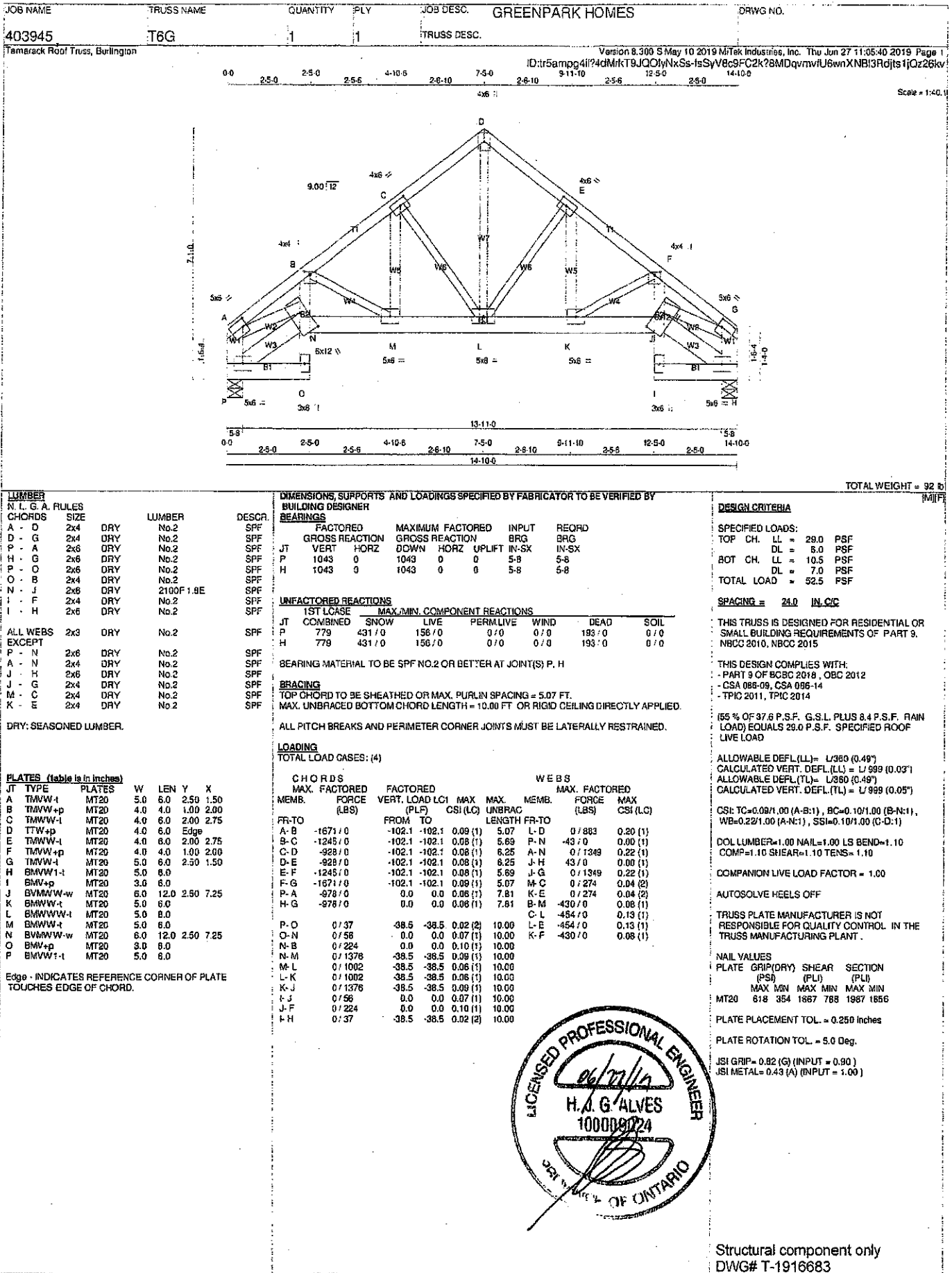
RECEIVED  
AUG 28 2019

TOWN OF CALEDON  
BUILDING SECTION  
FILE NO



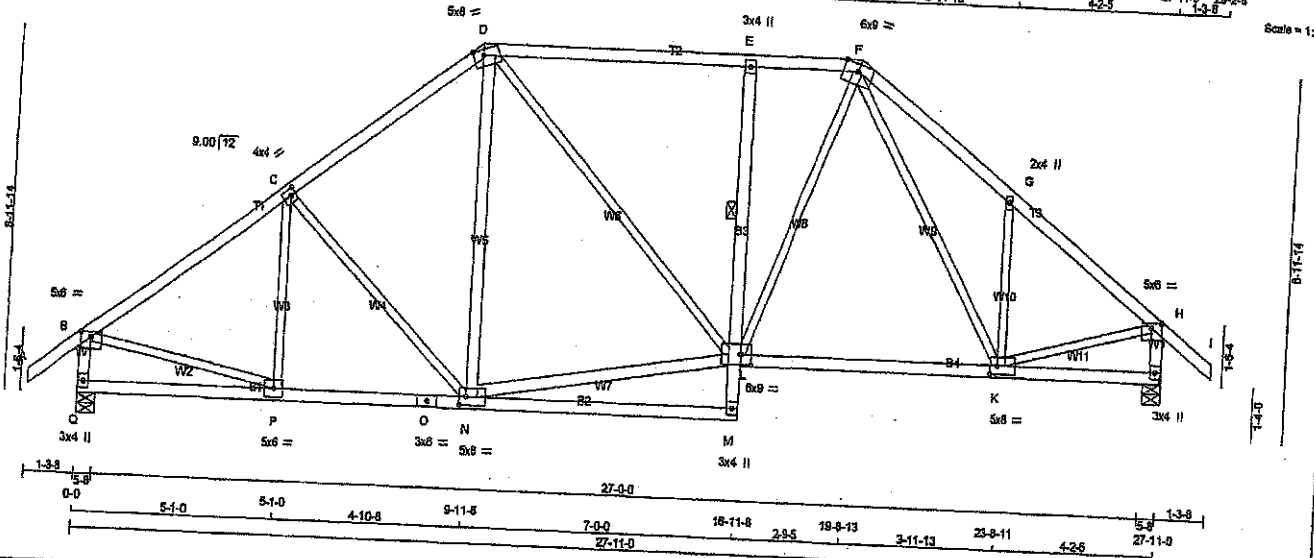
Structural component only  
DWG# T-1916682

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|                                                                     |                         |                      |                 |                                |             |          |
|---------------------------------------------------------------------|-------------------------|----------------------|-----------------|--------------------------------|-------------|----------|
| JOB NAME<br><b>200172-400371</b><br>Tamarack Roof Truss, Burlington | TRUSS NAME<br><b>T9</b> | QUANTITY<br><b>1</b> | PLY<br><b>1</b> | JOB DESC.<br><b>Preston 11</b> | TRUSS DESC. | DRWG NO. |
|---------------------------------------------------------------------|-------------------------|----------------------|-----------------|--------------------------------|-------------|----------|

Version 8.230 8 Nov 17 2018 MTEK Industries, Inc. Mon Mar 18 20:53:05 2018 Page 1  
ID:tr5ampg4l74dMrkT9JQOlyNxs-wR618XZ1o7dXS43MV17kfar3Pnlusebk22HZ9KzZbiC  
18-11-8 19-8-13 3-11-13 23-8-11 4-2-5 27-11-0 29-2-5 1-3-8  
Scale = 1:52.7



| LUMBER            |      |        |      |
|-------------------|------|--------|------|
| N. L. G. A. RULES | SIZE | LUMBER |      |
| CHORDS            |      |        |      |
| A - D             | 2x4  | DRY    | No.2 |
| D - F             | 2x4  | DRY    | No.2 |
| F - I             | 2x4  | DRY    | No.2 |
| I - O             | 2x4  | DRY    | No.2 |
| O - M             | 2x4  | DRY    | No.2 |
| M - E             | 2x4  | DRY    | No.2 |
| E - J             | 2x4  | DRY    | No.2 |
| ALL WEBS          | 2x3  | DRY    | No.2 |
| EXCEPT            |      |        |      |
| N - D             | 2x4  | DRY    | No.2 |
| N - L             | 2x4  | DRY    | No.2 |

DRY: SEASONED LUMBER.

#### PLATES (table is in inches)

| JT | TYPE     | PLATES | W   | LEN | Y    | X    |
|----|----------|--------|-----|-----|------|------|
| B  | TMVW-p   | MT20   | 5.0 | 6.0 | 1.50 | 3.00 |
| C  | TMVW-p   | MT20   | 4.0 | 4.0 | 2.00 | 1.50 |
| D  | TMVW-m   | MT20   | 8.0 | 8.0 | 1.75 | 3.25 |
| E  | TMV-p    | MT20   | 3.0 | 4.0 |      |      |
| F  | TMVW-m   | MT20   | 6.0 | 8.0 | Edge |      |
| G  | TMVW-p   | MT20   | 2.0 | 4.0 |      |      |
| H  | TMVW-p   | MT20   | 5.0 | 6.0 | 1.50 | 3.00 |
| J  | BMV1-p   | MT20   | 3.0 | 4.0 |      |      |
| K  | BMVWVW-H | MT20   | 5.0 | 8.0 | 2.50 | 2.25 |
| L  | BMVWVW-H | MT20   | 6.0 | 8.0 | 3.00 | 3.25 |
| M  | BMV-p    | MT20   | 3.0 | 4.0 |      |      |
| N  | BMVWVW-H | MT20   | 5.0 | 8.0 | 2.50 | 2.00 |
| O  | BS-4     | MT20   | 3.0 | 6.0 |      |      |
| P  | BMVWVW-H | MT20   | 5.0 | 8.0 |      |      |
| Q  | BMV1-p   | MT20   | 3.0 | 4.0 |      |      |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS |                | FACTORED |      | MAXIMUM FACTORED |      | INPUT |        | REQ'D |       |
|----------|----------------|----------|------|------------------|------|-------|--------|-------|-------|
| JT       | GROSS REACTION | VERT     | HORZ | GROSS REACTION   | DOWN | HORZ  | UPLIFT | BRG   | IN-SX |
| Q        | 2103           | 0        | 0    | 2103             | 0    | 0     | 0      | 5-8   | 5-8   |
| J        | 2103           | 0        | 0    | 2103             | 0    | 0     | 0      | 5-8   | 5-8   |

#### UNFACTORED REACTIONS

| JT | 1ST CASE | MAX/MIN. COMPONENT REACTIONS |         |            |       |         |       |  |  |
|----|----------|------------------------------|---------|------------|-------|---------|-------|--|--|
| Q  | COMBINED | SNOW                         | LIVE    | PERM. LIVE | WIND  | DEAD    | SOIL  |  |  |
| J  | 1553     | 891 / 0                      | 293 / 0 | 0 / 0      | 0 / 0 | 379 / 0 | 0 / 0 |  |  |
| J  | 1553     | 891 / 0                      | 293 / 0 | 0 / 0      | 0 / 0 | 379 / 0 | 0 / 0 |  |  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) Q, J

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.17 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED.  
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.  
1 LATERAL BRACE(S) AT 1/2 LENGTH OF E-L.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS |             | FACTORED   |          | WEBS   |             | MAX. FACTORED    |               |
|--------|-------------|------------|----------|--------|-------------|------------------|---------------|
| MEMB.  | FORCE (LBS) | VERT. LOAD | LC1 MAX  | MEMB.  | FORCE (LBS) | MAX. FORCE (LBS) | MAX. CS1 (LC) |
| FR-TO  |             | FROM TO    | CS1 (LC) | UNBRAC |             |                  |               |
| A-B    | 0 / 42      | -102.1     | -102.1   | 10.00  | P-C         | -214 / 82        | 0.09 (1)      |
| B-C    | -2083 / 0   | -102.1     | -102.1   | 4.32   | C-N         | -340 / 0         | 0.32 (1)      |
| C-D    | -1871 / 0   | -102.1     | -102.1   | 4.53   | N-D         | 0 / 286          | 0.05 (3)      |
| D-E    | -1837 / 0   | -102.1     | -102.1   | 4.17   | N-L         | 0 / 1474         | 0.24 (1)      |
| E-F    | -1841 / 0   | -102.1     | -102.1   | 4.35   | D-L         | 0 / 544          | 0.12 (1)      |
| F-G    | -2134 / 0   | -102.1     | -102.1   | 4.43   | L-F         | 0 / 867          | 0.20 (1)      |
| G-H    | -2100 / 0   | -102.1     | -102.1   | 4.48   | K-G         | -500 / 0         | 0.16 (1)      |
| H-I    | 0 / 42      | -102.1     | -102.1   | 10.00  | B-P         | 0 / 1748         | 0.39 (1)      |
| Q-B    | -2018 / 0   | 0.0        | 0.0      | 5.84   | K-H         | 0 / 1768         | 0.40 (1)      |
| J-H    | -2059 / 0   | 0.0        | 0.0      | 5.90   | F-K         | 0 / 835          | 0.08 (1)      |
| Q-P    | 0 / 0       | -38.5      | -38.5    | 10.00  |             |                  |               |
| P-O    | 0 / 1703    | -38.5      | -38.5    | 10.00  |             |                  |               |
| O-N    | 0 / 1703    | -38.5      | -38.5    | 10.00  |             |                  |               |
| N-M    | 0 / 19      | -38.5      | -38.5    | 10.00  |             |                  |               |
| M-L    | 0 / 136     | 0.0        | 0.0      | 10.00  |             |                  |               |
| L-E    | -705 / 0    | 0.0        | 0.0      | 10.00  |             |                  |               |
| L-K    | 0 / 1525    | -38.5      | -38.5    | 10.00  |             |                  |               |
| K-J    | 0 / 0       | -38.5      | -38.5    | 10.00  |             |                  |               |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.0 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. OC

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2018, CBC 2012  
- CSA 086-08, CSA 083-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 6.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.93")  
CALCULATED VERT. DEFL.(LL) = L/899 (0.12")  
ALLOWABLE DEFL.(TL) = L/360 (0.93")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.21")

CS1: TO=0.63/1.00 (D-E-1), BC=0.52/1.00 (N-P-2), WB=0.40/1.00 (F-K-1), SS=0.92/1.00 (D-E-1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

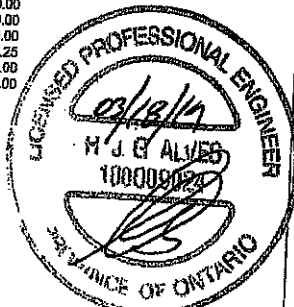
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION  
(PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1667 798 1887 1656

PLATE PLACEMENT TOL. = 0.250 inches

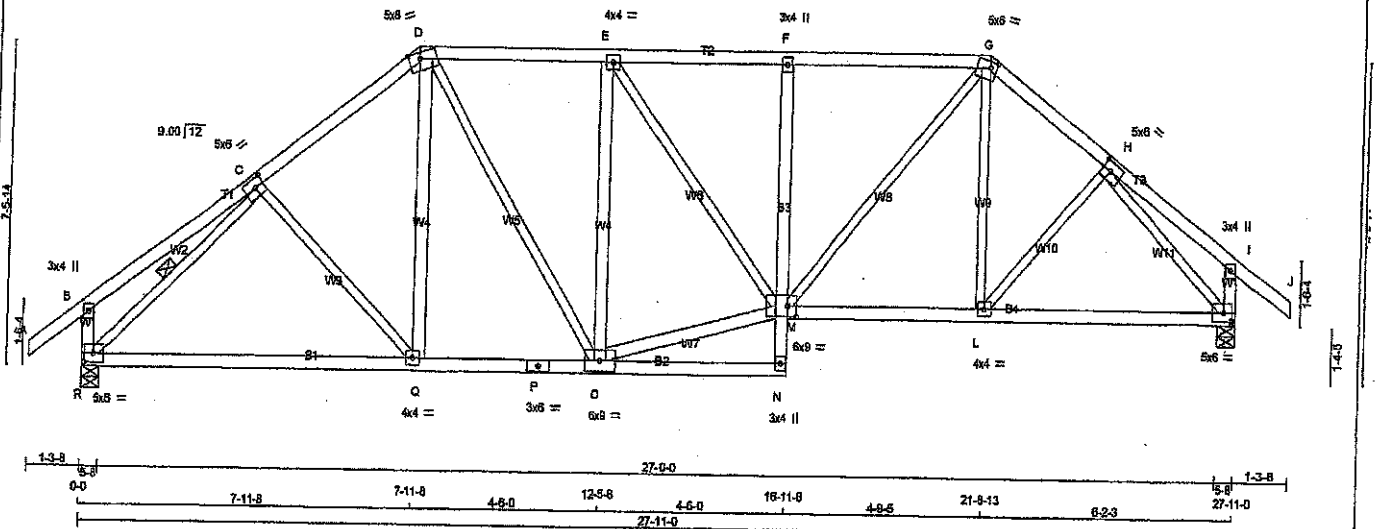
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (N) (INPUT = 0.90)  
JSI METAL= 0.84 (O) (INPUT = 1.00)



DWG NO. TAM 19105526  
STRUCTURAL  
COMPONENT ONLY

|                                 |                   |               |          |                                                                                                                                                               |          |
|---------------------------------|-------------------|---------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| JOB NAME<br>200172-400371       | TRUSS NAME<br>T10 | QUANTITY<br>1 | PLY<br>1 | JOB DESC.<br>Preston 11                                                                                                                                       | DRWG NO. |
| Tamarack Roof Truss, Burlington |                   |               |          | Version 8.230 S Nov 17 2018 Mitak Industries, Inc. Mar Mar 18 20:53:05 2019 Page 1<br>ID: b5ampg4174dMrkT9JQOlyNxSs-OdQMtafZRI04EaY3kezCnOITBgWb?JUH06imzZbIB |          |
| Scale = 1:49.5                  |                   |               |          |                                                                                                                                                               |          |



| LUMBER            |      |          |        |
|-------------------|------|----------|--------|
| N. L. G. A. RULES | SIZE | LUMBER   | DESCR. |
| CHORDS            |      |          |        |
| A - D             | 2x4  | DRY No.2 | SPF    |
| D - G             | 2x4  | DRY No.2 | SPF    |
| G - J             | 2x4  | DRY No.2 | SPF    |
| J - B             | 2x4  | DRY No.2 | SPF    |
| K - I             | 2x4  | DRY No.2 | SPF    |
| I - P             | 2x4  | DRY No.2 | SPF    |
| P - N             | 2x4  | DRY No.2 | SPF    |
| N - K             | 2x4  | DRY No.2 | SPF    |
| M - K             | 2x4  | DRY No.2 | SPF    |
| ALL WEBS          | 2x3  | DRY No.2 | SPF    |
| EXCEPT            |      |          |        |
| Q - D             | 2x4  | DRY No.2 | SPF    |
| O - E             | 2x4  | DRY No.2 | SPF    |
| O - M             | 2x4  | DRY No.2 | SPF    |

DRY, SEASONED LUMBER.

#### PLATES (table is in inches)

| JT TYPE | PLATES   | W    | LEN | Y   | X         |
|---------|----------|------|-----|-----|-----------|
| B, F, I |          |      |     |     |           |
| B       | TMV+p    | MT20 | 3.0 | 4.0 |           |
| C       | TMVW-i   | MT20 | 5.0 | 6.0 | 2.50 2.75 |
| D       | TTWV-m   | MT20 | 5.0 | 8.0 | 1.75 3.25 |
| E       | TMVW-i   | MT20 | 4.0 | 4.0 |           |
| G       | TTWV-m   | MT20 | 5.0 | 6.0 | 1.75 2.00 |
| H       | TMVW-i   | MT20 | 5.0 | 6.0 | 2.50 2.50 |
| K       | BMVW-i   | MT20 | 5.0 | 6.0 | 2.50 2.50 |
| L       | BMVW-i   | MT20 | 4.0 | 4.0 |           |
| M       | BMVWVW-i | MT20 | 8.0 | 9.0 | 3.00 2.75 |
| N       | BMV+p    | MT20 | 3.0 | 4.0 |           |
| O       | BMVWVW-i | MT20 | 6.0 | 9.0 |           |
| P       | BS-i     | MT20 | 3.0 | 6.0 |           |
| Q       | BMVW-i   | MT20 | 4.0 | 4.0 |           |
| R       | BMVW-i   | MT20 | 5.0 | 6.0 | 2.50 2.75 |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS |      | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQD BRG |
|----------|------|-------------------------|---------------------------------|-----------|----------|
| JT       |      | VERT                    | HORZ                            | DOWN      | UPLIFT   |
| R        | 2103 | 0                       | 2103                            | 0         | 5-8      |
| K        | 2103 | 0                       | 2103                            | 0         | 5-8      |

#### UNFACTORED REACTIONS

| JT | 1ST CASE | MAX     | MIN     | COMPONENT REACTIONS | PERM  | LIVE  | WIND    | DEAD  | SOIL  |
|----|----------|---------|---------|---------------------|-------|-------|---------|-------|-------|
| R  | 1563     | 891 / 0 | 283 / 0 | 0 / 0               | 0 / 0 | 0 / 0 | 379 / 0 | 0 / 0 | 0 / 0 |
| K  | 1563     | 891 / 0 | 283 / 0 | 0 / 0               | 0 / 0 | 0 / 0 | 379 / 0 | 0 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) R, K

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.21 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/2 LENGTH OF C-R.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS |                           | WEBS                           |                                |
|--------|---------------------------|--------------------------------|--------------------------------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | MAX. FACTORED VERT. LOAD (LBS) | MAX. FACTORED HORZ. LOAD (LBS) |
| FR-TO  |                           | FROM                           | TO                             |
| A-B    | 0 / 42                    | -102.1                         | -102.1 0.14 (1)                |
| B-C    | 0 / 27                    | -102.1                         | -102.1 0.25 (1)                |
| C-D    | -2009 / 0                 | -102.1                         | -102.1 0.24 (1)                |
| D-E    | -1908 / 0                 | -102.1                         | -102.1 0.27 (1)                |
| E-F    | -2268 / 0                 | -102.1                         | -102.1 0.29 (1)                |
| F-G    | -2274 / 0                 | -102.1                         | -102.1 0.35 (1)                |
| G-H    | -2074 / 0                 | -102.1                         | -102.1 0.15 (1)                |
| H-I    | 0 / 18                    | -102.1                         | -102.1 0.13 (1)                |
| I-J    | 0 / 42                    | -102.1                         | -102.1 0.14 (1)                |
| R-B    | -268 / 0                  | 0.0                            | 0.0 0.03 (1)                   |
| K-I    | -270 / 0                  | 0.0                            | 0.0 0.03 (1)                   |
| R-Q    | 0 / 1595                  | -38.5                          | -38.5 0.61 (2)                 |
| Q-P    | 0 / 1589                  | -38.5                          | -38.5 0.61 (2)                 |
| P-O    | 0 / 1589                  | -38.5                          | -38.5 0.61 (2)                 |
| O-N    | 0 / 27                    | -38.5                          | -38.5 0.14 (3)                 |
| N-M    | 0 / 98                    | 0.0                            | 0.0 0.06 (1)                   |
| M-F    | -514 / 0                  | 0.0                            | 0.0 0.23 (1)                   |
| M-L    | 0 / 1843                  | -38.5                          | -38.5 0.49 (2)                 |
| L-K    | 0 / 1532                  | -38.5                          | -38.5 0.47 (2)                 |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 8.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, OBC 2012  
- CSA 086-09, CSA 088-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.93")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.18")  
ALLOWABLE DEFL.(TL) = L/360 (0.93")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.31")

CS: TC=0.35/1.00 (F-G-1), BC=0.61/1.00 (O-Q-2), WB=0.62/1.00 (H-K-1), SS=0.23/1.00 (F-G-1)

DCL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

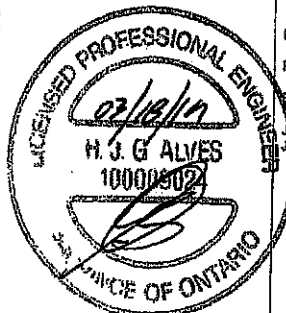
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PL) (PL)  
MAX MIN MAX MIN MAX MIN  
MT20 610 354 1007 788 1007 1055

PLATE PLACEMENT TOL = 0.250 inches

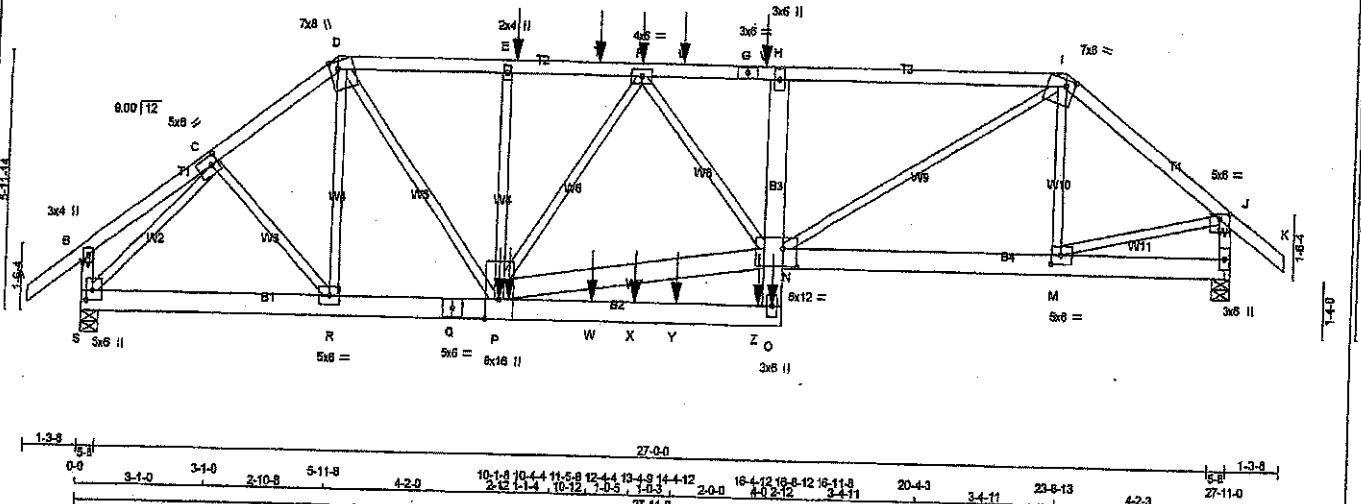
PLATE ROTATION TOL = 5.0 Deg.

GRIP= 0.90 (R) (INPUT = 0.90)  
METAL= 0.57 (H) (INPUT = 1.00)



DRWG NO. TAM 71405527  
STRUCTURAL  
COMPONENT ONLY

| JOB NAME                        | TRUSS NAME | QUANTITY | PLY | JOB DESC.   | DRWG NO. |
|---------------------------------|------------|----------|-----|-------------|----------|
| 200172-400371                   | T11        | 1        | 2   | Preston 11  |          |
| Tamarack Roof Truss, Burlington |            |          |     | TRUSS DESC. |          |



| CHORDS                | SIZE | LUMBER         | DESCR. |
|-----------------------|------|----------------|--------|
| A - D                 | 2x4  | DRY 1650F 1.5E | SPF    |
| D - G                 | 2x4  | DRY 1650F 1.5E | SPF    |
| G - I                 | 2x4  | DRY 1650F 1.5E | SPF    |
| I - K                 | 2x4  | DRY 1650F 1.5E | SPF    |
| S - B                 | 2x4  | DRY No.2       | SPF    |
| L - J                 | 2x4  | DRY No.2       | SPF    |
| S - Q                 | 2x6  | DRY No.2       | SPF    |
| Q - O                 | 2x6  | DRY No.2       | SPF    |
| O - H                 | 2x6  | DRY No.2       | SPF    |
| N - L                 | 2x6  | DRY No.2       | SPF    |
| ALL WEBS EXCEPT P - N | 2x6  | DRY No.2       | SPF    |

DRY, SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

| CHORDS #ROWS                            | SURFACE SPACING (IN) | LOAD(PLF)   |
|-----------------------------------------|----------------------|-------------|
| TOP CHORDS: (0.122'X3') SPIRAL NAILS    |                      |             |
| A-D 1                                   | 12                   | TOP         |
| D-G 1                                   | 12                   | SIDE(81.0)  |
| G-I 1                                   | 12                   | SIDE(81.0)  |
| I-K 1                                   | 12                   | TOP         |
| S-B 1                                   | 12                   | TOP         |
| L-J 1                                   | 12                   | TOP         |
| BOTTOM CHORDS: (0.122'X3') SPIRAL NAILS |                      |             |
| S-Q 2                                   | 12                   | TOP         |
| Q-O 2                                   | 12                   | SIDE(183.1) |
| O-H 2                                   | 12                   | SIDE(385.1) |
| N-L 2                                   | 12                   | TOP         |
| WEBS: (0.122'X3') SPIRAL NAILS          |                      |             |
| E-P 1                                   | 6                    | SIDE(244.5) |
| 2x6 1                                   | 6                    |             |
| 2x6 2                                   | 6                    |             |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (tabia is in inches)

| JT TYPE    | PLATES | W   | LEN  | Y     | X    |
|------------|--------|-----|------|-------|------|
| B TMW+p    | MT20   | 3.0 | 4.0  |       |      |
| C TMWW+T   | MT20   | 5.0 | 8.0  | 2.50  | 2.00 |
| D TMWW+m   | MT20   | 7.0 | 8.0  | Edges | 2.50 |
| E TMWW+T   | MT20   | 2.0 | 4.0  |       |      |
| F TMWW+T   | MT20   | 4.0 | 8.0  |       |      |
| G TS+I     | MT20   | 3.0 | 8.0  |       |      |
| H TMW+p    | MT20   | 3.0 | 8.0  |       |      |
| I TMWW+m   | MT20   | 7.0 | 8.0  | 1.75  | 2.50 |
| J TMW+p    | MT20   | 5.0 | 8.0  | 1.50  | 3.00 |
| L BMW+T    | MT20   | 3.0 | 6.0  |       |      |
| M BMWW+I   | MT20   | 5.0 | 8.0  | 2.50  | 2.75 |
| N BVWWWW+I | MT20   | 8.0 | 12.0 | 5.00  | 4.00 |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQD BRG |
|----------|-------------------------|---------------------------------|-----------|----------|
| JT       | VERT                    | DOWN                            | UP        | IN-SX    |
| L        | 4221                    | 0                               | 0         | 5-8      |
| S        | 4311                    | 0                               | 0         | 5-8      |

UNFACTORED REACTIONS

| 1ST LCASE   | MAX/MIN. COMPONENT REACTIONS | SNOW     | LIVE    | PERM. LIVE | WIND  | DEAD    | SOIL  |
|-------------|------------------------------|----------|---------|------------|-------|---------|-------|
| JT COMBINED |                              |          |         |            |       |         |       |
| L           | 3117                         | 1808 / 0 | 509 / 0 | 0 / 0      | 0 / 0 | 803 / 0 | 0 / 0 |
| S           | 3176                         | 1867 / 0 | 505 / 0 | 0 / 0      | 0 / 0 | 805 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) L, S

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.49 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

| CHORDS | FACTORED MAX. FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. UNBRACED LENGTH (FT) | WEBS  | FACTORED MAX. FORCE (LBS) | MAX. UNBRACED LENGTH (FT) |
|--------|---------------------------|---------------------------|---------------------------|-------|---------------------------|---------------------------|
| FR-TO  |                           |                           |                           | FR-TO |                           |                           |
| A-B    | 0 / 42                    | -102.1 -102.1 0.08 (1)    | 10.00                     | R-D   | -338 / 0                  | 0.08 (1)                  |
| B-C    | -2 / 11                   | -102.1 -102.1 0.05 (1)    | 10.00                     | P-E   | -581 / 0                  | 0.16 (1)                  |
| C-D    | -5051 / 0                 | -102.1 -102.1 0.10 (1)    | 4.80                      | N-I   | 0 / 5779                  | 0.72 (1)                  |
| D-E    | -6278 / 0                 | -102.1 -102.1 0.17 (1)    | 4.33                      | M-I   | -690 / 0                  | 0.11 (1)                  |
| E-T    | -6278 / 0                 | -102.1 -102.1 0.16 (1)    | 4.33                      | M-J   | 0 / 3904                  | 0.48 (1)                  |
| T-F    | -6278 / 0                 | -102.1 -102.1 0.16 (1)    | 4.33                      | D-P   | 0 / 3790                  | 0.47 (1)                  |
| F-U    | -8567 / 0                 | -102.1 -102.1 0.37 (1)    | 3.56                      | P-N   | 0 / 7138                  | 0.46 (1)                  |
| U-G    | -8567 / 0                 | -102.1 -102.1 0.37 (1)    | 3.56                      | S-C   | -5288 / 0                 | 0.85 (1)                  |
| G-V    | -8567 / 0                 | -102.1 -102.1 0.37 (1)    | 3.56                      | C-R   | 0 / 782                   | 0.09 (1)                  |
| V-H    | -8567 / 0                 | -102.1 -102.1 0.37 (1)    | 3.56                      | P-F   | -2287 / 0                 | 0.77 (1)                  |
| H-I    | -8699 / 0                 | -102.1 -102.1 0.84 (1)    | 3.49                      | F-N   | 0 / 1858                  | 0.23 (1)                  |
| I-J    | -4734 / 0                 | -102.1 -102.1 0.20 (1)    | 4.82                      |       |                           |                           |
| J-K    | 0 / 42                    | -102.1 -102.1 0.06 (1)    | 10.00                     |       |                           |                           |
| S-B    | -274 / 0                  | 0.0 0.0 0.02 (1)          | 7.81                      |       |                           |                           |
| L-J    | -4184 / 0                 | 0.0 0.0 0.24 (1)          | 5.80                      |       |                           |                           |
| S-R    | 0 / 3500                  | -38.5 -38.5 0.28 (1)      | 10.00                     |       |                           |                           |
| R-Q    | 0 / 4014                  | -38.5 -38.5 0.30 (1)      | 10.00                     |       |                           |                           |
| Q-P    | 0 / 4014                  | -38.5 -38.5 0.30 (1)      | 10.00                     |       |                           |                           |
| P-W    | 0 / 425                   | -38.5 -38.5 0.14 (2)      | 10.00                     |       |                           |                           |
| W-X    | 0 / 425                   | -38.5 -38.5 0.14 (2)      | 10.00                     |       |                           |                           |
| X-Y    | 0 / 425                   | -38.5 -38.5 0.14 (2)      | 10.00                     |       |                           |                           |
| Y-Z    | 0 / 425                   | -38.5 -38.5 0.14 (2)      | 10.00                     |       |                           |                           |
| Z-O    | 0 / 425                   | -38.5 -38.5 0.14 (2)      | 10.00                     |       |                           |                           |
| O-N    | 0 / 2130                  | 0.0 0.0 0.35 (2)          | 10.00                     |       |                           |                           |
| N-H    | -815 / 0                  | 0.0 0.0 0.22 (1)          | 7.81                      |       |                           |                           |
| N-M    | 0 / 5762                  | -38.5 -38.5 0.32 (1)      | 10.00                     |       |                           |                           |
| M-L    | 0 / 0                     | -38.5 -38.5 0.09 (2)      | 10.00                     |       |                           |                           |

FACTORED CONCENTRATED LOADS (LBS)

| JT | LOC.    | LC1   | MAX.  | FACE | DIR. | TYPE | HEEL  | CONN. |
|----|---------|-------|-------|------|------|------|-------|-------|
| E  | 10-4-4  | -126  | -126  | ---  | BACK | VERT | TOTAL | ---   |
| F  | 13-4-9  | -126  | -126  | ---  | BACK | VERT | TOTAL | ---   |
| O  | 16-8-12 | -1944 | -1944 | ---  | BACK | VERT | TOTAL | ---   |
| P  | 10-1-8  | -1613 | -1613 | ---  | BACK | VERT | TOTAL | ---   |
| T  | 10-4-4  | -26   | -26   | ---  | BACK | VERT | TOTAL | ---   |
| U  | 12-4-4  | -126  | -126  | ---  | BACK | VERT | TOTAL | ---   |
| V  | 16-4-12 | -126  | -126  | ---  | BACK | VERT | TOTAL | ---   |
| W  | 12-4-4  | -26   | -26   | ---  | BACK | VERT | TOTAL | ---   |
| X  | 13-4-9  | -26   | -26   | ---  | BACK | VERT | TOTAL | ---   |

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 28.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 2x8 IN/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2018, OBC 2012  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

(55% OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = L/360 (0.93')  
CALCULATED VERT. DEFL. (LL) = 1/999 (0.16')  
ALLOWABLE DEFL. (TL) = L/360 (0.93')  
CALCULATED VERT. DEFL. (TL) = 1/999 (0.28')

CSI: TC=0.84/1.00 (H+I), BC=0.35/1.00 (N-C), WB=0.65/1.00 (C-S), SS=0.18/1.00 (F-H)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00  
COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

VALUES  
GRIP (DRY) SHEAR SECTION  
(PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1657 769 1997 1858

PLATE PLACEMENT TOL. = 0.250 inches

LATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.20 (I) (INPUT = 0.90)  
JSI METAL = 0.65 (C) (INPUT = 1.00)

DRWG NO. TAM 7405528  
STRUCTURAL  
COMPONENT ONLY

CONTINUED ON PAGE 2

|                                  |                          |                      |                 |                                |          |
|----------------------------------|--------------------------|----------------------|-----------------|--------------------------------|----------|
| JOB NAME<br><b>200172-400371</b> | TRUSS NAME<br><b>T11</b> | QUANTITY<br><b>1</b> | PLY<br><b>2</b> | JOB DESC.<br><b>Preston 11</b> | DRWG NO. |
| Tamarack Roof Truss, Burlington  |                          |                      |                 | TRUSS DESC.                    |          |

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Mon Mar 18 20:53:08 2018 Page 2  
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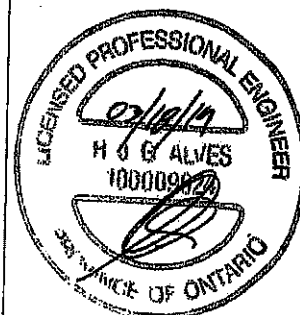
**PLATES (table is in inches)**

| JT | TYPE    | PLATES | W   | LEN  | Y    | X    |
|----|---------|--------|-----|------|------|------|
| O  | BMV+p   | MT20   | 3.0 | 6.0  |      |      |
| P  | BMVWW+~ | MT20   | 8.0 | 16.0 | Edge |      |
| Q  | BS-I    | MT20   | 5.0 | 6.0  |      |      |
| R  | BMVW-I  | MT20   | 5.0 | 6.0  |      |      |
| S  | BMVW1+p | MT20   | 5.0 | 6.0  | 2.75 | 2.00 |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

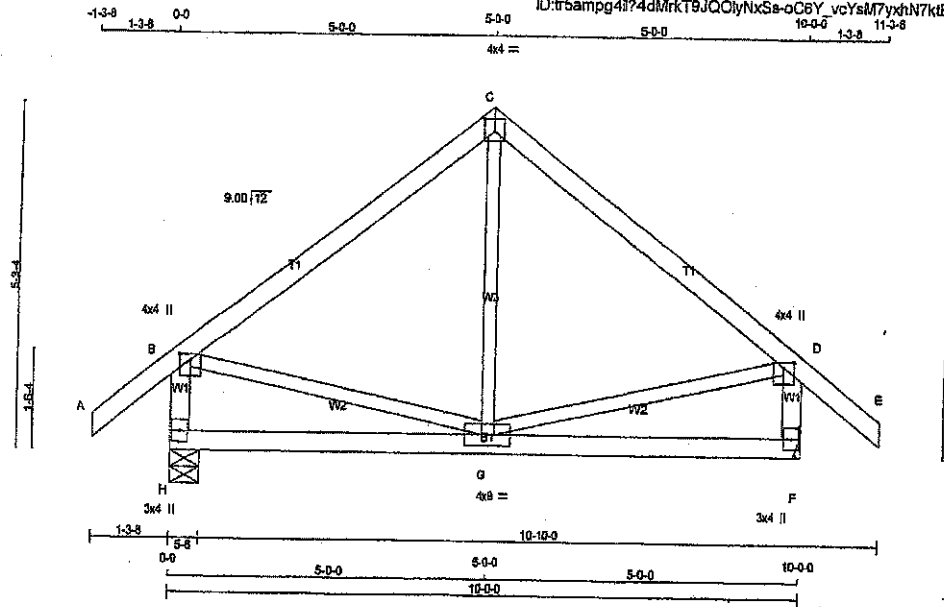
**FACTORED CONCENTRATED LOADS (LBS)**

| JT | LOC.    | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE  | HEEL | CONN. |
|----|---------|-----|------|------|------|------|-------|------|-------|
| Y  | 14-4-12 | -28 | -28  |      | BACK | VERT | TOTAL |      |       |
| Z  | 18-4-12 | -32 | -32  |      | BACK | VERT | TOTAL |      |       |



DWG NO. TAM **71905528**  
STRUCTURAL  
COMPONENT ONLY **3/2**

|                                                                                    |            |          |     |            |          |
|------------------------------------------------------------------------------------|------------|----------|-----|------------|----------|
| JOB NAME                                                                           | TRUSS NAME | QUANTITY | PLY | JOB DESC.  | DRWG NO. |
| 200172-400371                                                                      | T12        | 2        | 1   | Preston 11 |          |
| Tamarack Roof Truss, Burlington                                                    |            |          |     |            |          |
| Version 6.230 S Nov 17 2018 Mitek Industries, Inc. Mon Mar 18 20:53:09 2019 Page 1 |            |          |     |            |          |
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| Scale = 1:32.5                                                                     |            |          |     |            |          |



| LUMBER | N.L.G.A. RULES | CHORDS | SIZE | DRY | LUMBER |
|--------|----------------|--------|------|-----|--------|
| A - C  | 2x4            | DRY    | No.2 |     |        |
| C - E  | 2x4            | DRY    | No.2 |     |        |
| H - B  | 2x4            | DRY    | No.2 |     |        |
| F - D  | 2x4            | DRY    | No.2 |     |        |
| H - F  | 2x4            | DRY    | No.2 |     |        |

ALL WEBS 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

| PLATES (table ts in inches) | W   | LEN | Y    | X    |
|-----------------------------|-----|-----|------|------|
| JT TYPE PLATES              |     |     |      |      |
| B TMVW+p MT20               | 4.0 | 4.0 | 1.00 | 2.00 |
| C TTW+p MT20                | 4.0 | 4.0 | 2.25 | 2.00 |
| D TMVW+p MT20               | 4.0 | 4.0 | 1.00 | 2.00 |
| F BMV1+p MT20               | 3.0 | 4.0 |      |      |
| G BMVWV+t MT20              | 4.0 | 9.0 |      |      |
| H BMV1+p MT20               | 3.0 | 4.0 |      |      |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS | FACTORED       | MAXIMUM FACTORED | INPUT | REQD       |
|----------|----------------|------------------|-------|------------|
|          | GROSS REACTION | GROSS REACTION   | BRG   | BRG        |
| JT       | VERT           | DOWN             | IN-SX | IN-SX      |
| H        | 844            | 0                | 0     | 5-8        |
| F        | 844            | 0                | 0     | MECHANICAL |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 1-8.

#### UNFACTORED REACTIONS

| 1ST LCASE | MAX/MIN. COMPONENT REACTIONS | WIND  | DEAD  | SOIL      |
|-----------|------------------------------|-------|-------|-----------|
| JT        | COMBINED                     | SNOW  | LIVE  | FERM/LIVE |
| H         | 622                          | 370/0 | 105/0 | 0/0       |
| F         | 622                          | 370/0 | 105/0 | 0/0       |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. FURLIN SPACING = 6.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS | MAX. FACTORED | FACTORED   | VERT. LOAD | LC1      | MAX.   | MAX.  | MEMB. | MAX. FACTORED |
|--------|---------------|------------|------------|----------|--------|-------|-------|---------------|
| MEMB.  | FORCE         | VERT. LOAD | LC1        | MAX.     | MAX.   | MEMB. | FORCE | MAX.          |
| FR-TO  | FROM          | TO         | CS1 (LC)   | UNBRAC   | LENGTH | FR-TO | FROM  | TO            |
| A-B    | 0/42          | -102.1     | -102.1     | 0.14 (1) | 10.00  | G-C   | 0/213 | 0.05 (3)      |
| B-C    | -473/0        | -102.1     | -102.1     | 0.33 (1) | 6.25   | B-G   | 0/389 | 0.09 (1)      |
| C-D    | -473/0        | -102.1     | -102.1     | 0.33 (1) | 8.25   | G-D   | 0/389 | 0.09 (1)      |
| D-E    | 0/42          | -102.1     | -102.1     | 0.14 (1) | 10.00  |       |       |               |
| H-B    | -770/0        | 0.0        | 0.0        | 0.08 (1) | 7.81   |       |       |               |
| F-D    | -770/0        | 0.0        | 0.0        | 0.08 (1) | 7.81   |       |       |               |
| H-G    | 0/0           | -38.5      | -38.5      | 0.22 (3) | 10.00  |       |       |               |
| G-F    | 0/0           | -38.5      | -38.5      | 0.22 (3) | 10.00  |       |       |               |

TOTAL WEIGHT = 2 X 44 = 88 lb

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

|            |      |      |     |
|------------|------|------|-----|
| TOP CH.    | LL = | 29.0 | PSF |
|            | DL = | 6.0  | PSF |
| BOT CH.    | LL = | 10.5 | PSF |
|            | DL = | 7.0  | PSF |
| TOTAL LOAD | =    | 52.5 | PSF |

SPACING = 24.0 IN./C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF NBC 2010, NBC 2015  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

(55% OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) =  $L/360$  (0.33")  
CALCULATED VERT. DEFL. (LL) =  $L/999$  (0.02")  
ALLOWABLE DEFL. (TL) =  $L/360$  (0.33")  
CALCULATED VERT. DEFL. (TL) =  $L/999$  (0.03")

CS1: TC=0.33/1.00 (C-D:1), BC=0.22/1.00 (G-H:3), WB=0.09/1.00 (B-G:1), SS=0.16/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

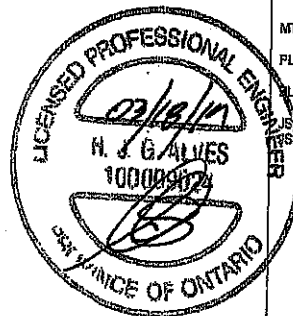
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION  
(PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1997 788 1987 1658

PLATE PLACEMENT TOL. = 0.250 inches

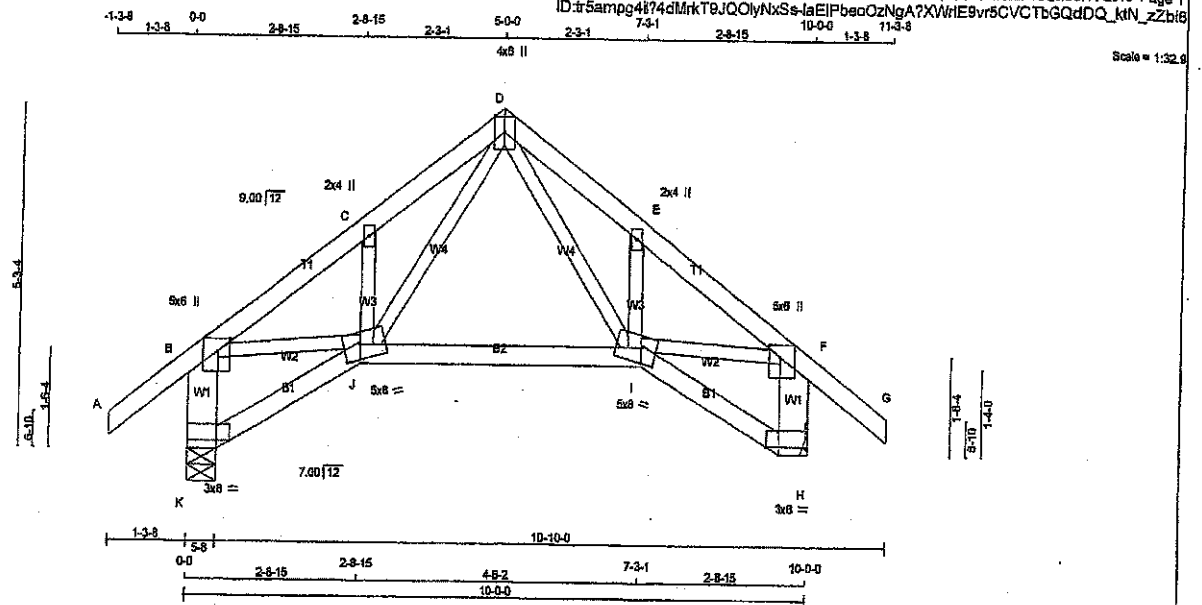
PLATE ROTATION TOL. = 5.0 Deg.

GRIP= 0.72 (D) (INPUT = 0.90)  
METAL= 0.19 (D) (INPUT = 1.00)



DWG NO. TAM 71405529  
STRUCTURAL  
COMPONENT ONLY

|                                 |            |             |     |                                                                                    |          |
|---------------------------------|------------|-------------|-----|------------------------------------------------------------------------------------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY    | PLY | JOB DESC.                                                                          | DRWG NO. |
| 200172-400371                   | T13        | 2           | 1   | Preston 11                                                                         |          |
| Tamarack Roof Truss, Burlington |            | TRUSS DESC. |     | Version 8.230 S Nov 17 2018 MITek Industries, Inc. Mon Mar 18 20:53:11 2016 Page 1 |          |



| CHORDS          | SIZE | LUMBER | DESCR. |
|-----------------|------|--------|--------|
| A - D           | 2x4  | DRY    | No.2   |
| D - G           | 2x4  | DRY    | No.2   |
| K - B           | 2x6  | DRY    | No.2   |
| H - F           | 2x6  | DRY    | No.2   |
| K - J           | 2x4  | DRY    | No.2   |
| J - I           | 2x4  | DRY    | No.2   |
| I - H           | 2x4  | DRY    | No.2   |
| ALL WEBS EXCEPT | 2x3  | DRY    | No.2   |

DRY: SEASONED LUMBER.

#### PLATES (table is in inches)

| JT TYPE    | PLATES | W   | LEN | Y    | X    |
|------------|--------|-----|-----|------|------|
| B TMVW+p   | MT20   | 5.0 | 6.0 | 2.25 | 2.25 |
| C TMW+w    | MT20   | 2.0 | 4.0 |      |      |
| D TTVW+p   | MT20   | 4.0 | 6.0 | Edge |      |
| E TMW+w    | MT20   | 2.0 | 4.0 |      |      |
| F TMVW+p   | MT20   | 5.0 | 6.0 | 2.25 | 2.25 |
| H BVM1-p   | MT20   | 3.0 | 8.0 | Edge | 2.50 |
| I BBWWVW-m | MT20   | 5.0 | 8.0 | 2.75 | 3.25 |
| J BBWWVW-m | MT20   | 5.0 | 8.0 | 2.75 | 3.25 |
| K BVM1-p   | MT20   | 3.0 | 8.0 | Edge | 2.50 |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQD BRG   |
|----------|-------------------------|---------------------------------|-----------|------------|
| JT       | VERT                    | DOWN                            | IN-SX     | IN-SX      |
| K        | 844                     | 844                             | 0         | 5-8        |
| H        | 844                     | 844                             | 0         | MECHANICAL |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT H. MINIMUM BEARING LENGTH AT JOINT H = 1-8.

#### UNFACTORED REACTIONS

| 1ST CASE    | MAX/MIN COMPONENT REACTIONS        |
|-------------|------------------------------------|
| JT COMBINED | SNOW LIVE PERM.LIVE WIND DEAD SOIL |
| K           | 622 370/0 105/0 0/0 0/0 147/0 0/0  |
| H           | 622 370/0 105/0 0/0 0/0 147/0 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) K

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. CS1 (LC) | MAX. UNBRACED LENGTH FR-TO | WEBS  | MAX. FACTORED FORCE (LBS) | MAX. CS1 (LC) |
|--------|---------------------------|---------------------------|---------------|----------------------------|-------|---------------------------|---------------|
| FR-TO  |                           | FROM TO                   |               |                            | MEMB. |                           |               |
| A-B    | 0/42                      | -102.1 -102.1             | 0.14 (1)      | 10.00                      | D-I   | 0/566                     | 0.13 (1)      |
| B-C    | -938/0                    | -102.1 -102.1             | 0.10 (1)      | 6.25                       | I-E   | -298/0                    | 0.05 (1)      |
| C-D    | -938/0                    | -102.1 -102.1             | 0.08 (1)      | 6.25                       | J-D   | 0/566                     | 0.13 (1)      |
| D-E    | -938/0                    | -102.1 -102.1             | 0.06 (1)      | 6.25                       | J-C   | -298/0                    | 0.05 (1)      |
| E-F    | -938/0                    | -102.1 -102.1             | 0.10 (1)      | 6.25                       | B-J   | 0/781                     | 0.17 (1)      |
| F-G    | 0/42                      | -102.1 -102.1             | 0.14 (1)      | 10.00                      | I-F   | 0/781                     | 0.17 (1)      |
| K-B    | -791/0                    | 0.0 0.0                   | 0.08 (1)      | 7.81                       |       |                           |               |
| H-F    | -791/0                    | 0.0 0.0                   | 0.08 (1)      | 7.81                       |       |                           |               |
| K-J    | 0/0                       | -38.5 -38.5               | 0.07 (3)      | 10.00                      |       |                           |               |
| J-I    | 0/481                     | -38.5 -38.5               | 0.28 (2)      | 10.00                      |       |                           |               |
| I-H    | 0/0                       | -38.5 -38.5               | 0.07 (3)      | 10.00                      |       |                           |               |

TOTAL WEIGHT = 2 X 48 = 97 lb

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

|              |               |
|--------------|---------------|
| TOP CH.      | LL = 29.0 PSF |
| DL = 6.0 PSF |               |
| BOT CH.      | LL = 10.5 PSF |
| DL = 7.0 PSF |               |
| TOTAL LOAD   | = 52.5 PSF    |

SPACING = 24.0 IN./C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF NBC 2010, NBC 2012  
- CSA 086-08, CSA 086-14  
- TPC 2011, TPC 2014

(65 % OF 37.6 P.S.F. G.S.L. PLUS 6.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) =  $L/360$  (0.33")  
CALCULATED VERT. DEFL.(LL) =  $L/898$  (0.04")  
ALLOWABLE DEFL.(TL) =  $L/360$  (0.33")  
CALCULATED VERT. DEFL.(TL) =  $L/999$  (0.06")

CS1: TC=0.14/1.00 (F-G:1), SC=0.23/1.00 (I-J:2), WB=0.17/1.00 (B-J:1), SS1=0.10/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

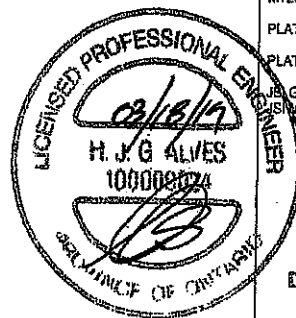
#### NAIL VALUES

| PLATE | GRIP(DRY) | SHEAR | SECTION |
|-------|-----------|-------|---------|
| (PSI) | (PLI)     | (PLI) |         |
| MT20  | 618       | 354   | 1687    |
|       | 788       | 1687  | 1656    |

PLATE PLACEMENT TOL. = 0.250 inches

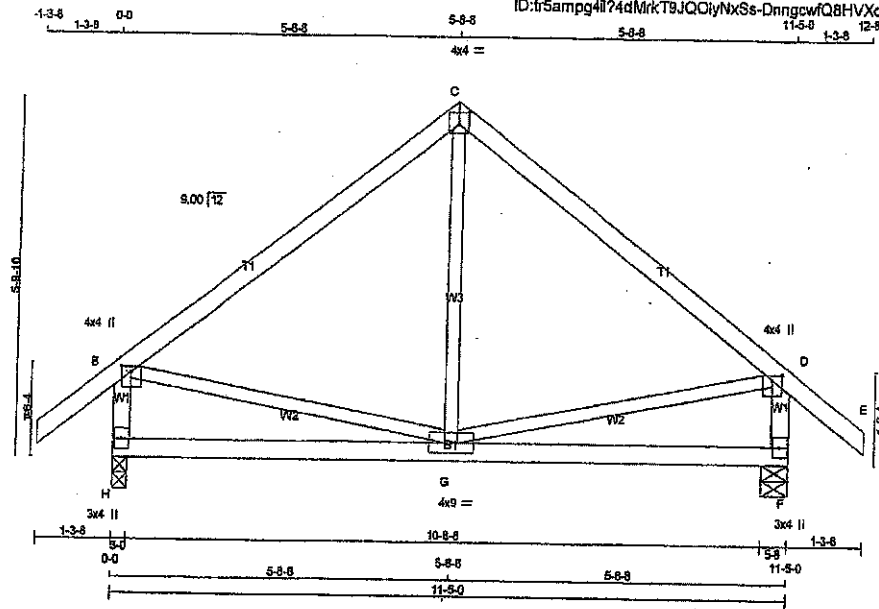
PLATE ROTATION TOL. = 5.0 Deg.

GRIP= 0.75 (F) (INPUT = 0.90)  
METAL= 0.39 (F) (INPUT = 1.00)



DRWG NO. TAM 77905530  
STRUCTURAL  
COMPONENT ONLY

|                                                                                    |            |          |     |            |          |
|------------------------------------------------------------------------------------|------------|----------|-----|------------|----------|
| JOB NAME                                                                           | TRUSS NAME | QUANTITY | PLY | JOB DESC.  | DRWG NO. |
| 200172-400371                                                                      | T14        | 1        | 1   | Preston 11 |          |
| Tamarack Roof Truss, Burlington                                                    |            |          |     |            |          |
| Version 8.230 S Nov 17 2018 MITek Industries, Inc. Mon Mar 18 20:53:12 2019 Page 1 |            |          |     |            |          |
| ID:tr5ampg4l74dMrkT9JQOlyNxSs-DnngswfQ8HVXo98IP7IOR2dJfca??uxMfeTRvQzZbi5          |            |          |     |            |          |
| Scale = 1:34.0                                                                     |            |          |     |            |          |



| LUMBER   | N. L. G. A. RULES | LUMBER | DESCR. |
|----------|-------------------|--------|--------|
| CHORDS   | SIZE              |        |        |
| A - C    | 2x4 DRY           | No.2   | SPF    |
| C - E    | 2x4 DRY           | No.2   | SPF    |
| H - B    | 2x4 DRY           | No.2   | SPF    |
| F - D    | 2x4 DRY           | No.2   | SPF    |
| H - F    | 2x4 DRY           | No.2   | SPF    |
| ALL WEBS | 2x3 DRY           | No.2   | SPF    |
| EXCEPT   |                   |        |        |

DRY: SEASONED LUMBER.

#### PLATES (table is in inches)

| JT | TYPE    | PLATES | W   | LEN | Y    | X    |
|----|---------|--------|-----|-----|------|------|
| B  | TMVW+p  | MT20   | 4.0 | 4.0 | 1.00 | 2.00 |
| C  | TTW+p   | MT20   | 4.0 | 4.0 | 2.25 | 2.00 |
| D  | TMVW+p  | MT20   | 4.0 | 4.0 | 1.00 | 2.00 |
| F  | BMV1+p  | MT20   | 3.0 | 4.0 |      |      |
| G  | BMVWV+p | MT20   | 4.0 | 9.0 |      |      |
| H  | BMV1+p  | MT20   | 3.0 | 4.0 |      |      |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS |      | FACTORED       |      |                | MAXIMUM FACTORED |       |       | INPUT | REQD |
|----------|------|----------------|------|----------------|------------------|-------|-------|-------|------|
|          |      | GROSS REACTION |      | GROSS REACTION |                  |       | BRG   | BRG   |      |
| JT       | VERT | HORZ           | DOWN | HORZ           | UPLIFT           | IN-SX | IN-SX |       |      |
| H        | 943  | 0              | 943  | 0              | 0                | 3-0   | 3-0   |       |      |
| F        | 943  | 0              | 943  | 0              | 0                | 5-8   | 5-8   |       |      |

#### UNFACTORED REACTIONS

| JT | 1ST CASE | MAX/MIN. COMPONENT REACTIONS | SNOW    | LIVE  | PERM. LIVE | WIND    | DEAD  | SOIL  |
|----|----------|------------------------------|---------|-------|------------|---------|-------|-------|
| H  | 696      | 412 / 0                      | 120 / 0 | 0 / 0 | 0 / 0      | 165 / 0 | 0 / 0 | 0 / 0 |
| F  | 696      | 412 / 0                      | 120 / 0 | 0 / 0 | 0 / 0      | 165 / 0 | 0 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H, F

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS |                                 |                                 |                        | WEBS                     |       |                                 |                 |
|--------|---------------------------------|---------------------------------|------------------------|--------------------------|-------|---------------------------------|-----------------|
| MEMB.  | MAX. FACTORED<br>FORCE<br>(LBS) | FACTORED<br>VERT. LOAD<br>(PLF) | LC1<br>MAX<br>CSI (LC) | MAX.<br>UNBRAC<br>LENGTH | MEMB. | MAX. FACTORED<br>FORCE<br>(LBS) | MAX<br>CSI (LC) |
| FR-TO  |                                 | FROM TO                         |                        |                          | FR-TO |                                 |                 |
| A-B    | 0 / 42                          | -102.1                          | -102.1                 | 0.14 (1)                 | 10.00 | G-C                             | 0 / 254         |
| B-C    | -557 / 0                        | -102.1                          | -102.1                 | 0.43 (1)                 | 6.25  | B-G                             | 0 / 455         |
| C-D    | -557 / 0                        | -102.1                          | -102.1                 | 0.43 (1)                 | 6.25  | G-D                             | 0 / 455         |
| D-E    | 0 / 42                          | -102.1                          | -102.1                 | 0.14 (1)                 | 10.00 |                                 |                 |
| H-B    | -860 / 0                        | 0.0                             | 0.0                    | 0.09 (1)                 | 7.81  |                                 |                 |
| F-D    | -860 / 0                        | 0.0                             | 0.0                    | 0.09 (1)                 | 7.81  |                                 |                 |
| H-G    | 0 / 0                           | -38.5                           | -38.5                  | 0.28 (3)                 | 10.00 |                                 |                 |
| G-F    | 0 / 0                           | -38.5                           | -38.5                  | 0.29 (3)                 | 10.00 |                                 |                 |

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

|            |      |      |     |
|------------|------|------|-----|
| TOP CH.    | LL = | 29.0 | PSF |
| DL =       | 6.0  | PSF  |     |
| BOT CH.    | LL = | 10.5 | PSF |
| DL =       | 7.0  | PSF  |     |
| TOTAL LOAD | =    | 62.5 | PSF |

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, OBC 2012
- CSA 085-09, CSA 085-14
- TPIC 2011, TPIC 2014

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) =  $L/360$  (0.38")  
CALCULATED VERT. DEFL. (LL) =  $L/369$  (0.38")  
ALLOWABLE DEFL. (TL) =  $L/360$  (0.38")  
CALCULATED VERT. DEFL. (TL) =  $L/369$  (0.38")

CSI: TC=0.43/1.00 (C-D-1), BC=0.29/1.00 (G-H-3),  
WB=0.10/1.00 (B-G-1), SSI=0.18/1.00 (C-D-1)

DOL LUMBER=1.00 NAIL=1.00 LB BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

#### NAIL VALUES

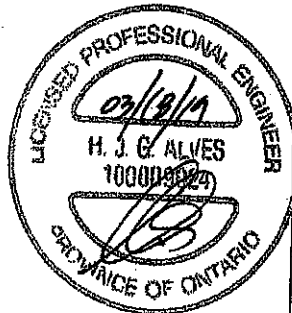
| PLATE | GRIP(DRY) |     | SHEAR |     | SECTION |      |
|-------|-----------|-----|-------|-----|---------|------|
|       | (PSI)     |     | (PLI) |     | (PLI)   |      |
|       | MAX       | MIN | MAX   | MIN | MAX     | MIN  |
| MT20  | 618       | 354 | 1267  | 788 | 1987    | 1656 |

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.83 (B) (INPUT = 0.80)

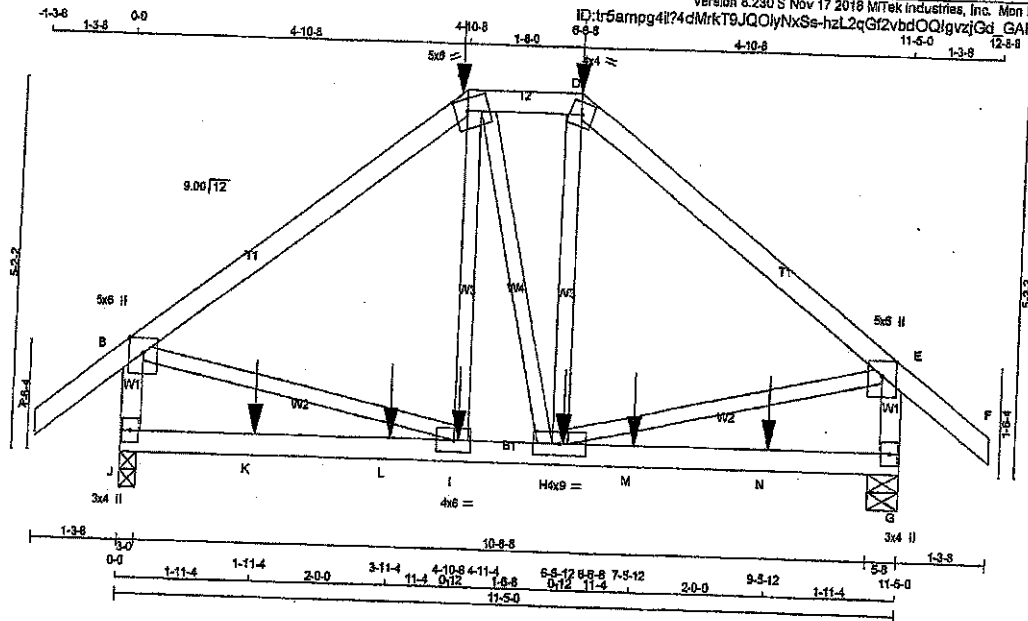
JSI METAL= 0.22 (B) (INPUT = 1.00)



DRWG NO. TAM 71905531  
STRUCTURAL  
COMPANION ONLY

| JOB NAME                        | TRUSS NAME | QUANTITY | PLY | JOB DESC.  | DRWG NO. |
|---------------------------------|------------|----------|-----|------------|----------|
| 200172-400371                   | T15        | 1        | 1   | Preston 11 |          |
| Tamarack Roof Truss, Burlington |            |          |     |            |          |

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 ID:tr5ampg4il74dMrKT9JQOlyNxSs-hzL2qGf2vbdOQlgvzJGd GARm?6mk1ZWuID\_RszZbId  
 6-8-8 11-6-0 12-8-8  
 1-3-8 1-3-8 0-0 4-10-8 1-8-0 4-10-8 1-3-8  
 5x9 5x9  
 Scale = 1/2" = 1'-0"



| LUMBER |      | N. L. G. A. RULES |  |        |
|--------|------|-------------------|--|--------|
| CHORDS | SIZE |                   |  | LUMBER |
| A - C  | 2x4  | DRY               |  | No.2   |
| C - D  | 2x4  | DRY               |  | No.2   |
| D - F  | 2x4  | DRY               |  | No.2   |
| J - B  | 2x4  | DRY               |  | No.2   |
| G - E  | 2x4  | DRY               |  | No.2   |
| J - G  | 2x4  | DRY               |  | No.2   |

ALL WEBS 2x3 DRY  
EXCEPT

DRY: SEASONED LUMBER.

| PLATES (table is in inches) |         |        |     |     |           |
|-----------------------------|---------|--------|-----|-----|-----------|
| JT                          | TYPE    | PLATES | W   | LEN | Y X       |
| B                           | TMWV+p  | MT20   | 5.0 | 8.0 | Edge      |
| C                           | TTWV-m  | MT20   | 5.0 | 6.0 | 2.00 2.25 |
| D                           | TTW-m   | MT20   | 4.0 | 4.0 |           |
| E                           | TMWV+p  | MT20   | 5.0 | 8.0 | Edge      |
| G                           | BMV1+p  | MT20   | 3.0 | 4.0 |           |
| H                           | BMWVW-t | MT20   | 4.0 | 9.0 |           |
| I                           | BMWVW-t | MT20   | 4.0 | 8.0 |           |
| J                           | BMV1+p  | MT20   | 3.0 | 4.0 |           |

Edge - INDICATES REFERENCE CORNER OF PLATE  
TOUCHES EDGE OF CHORD.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

| FACTORED<br>GROSS REACTION |      | MAXIMUM FACTORED<br>GROSS REACTION |      | INPUT<br>BRG | RECORD<br>BRG |       |       |
|----------------------------|------|------------------------------------|------|--------------|---------------|-------|-------|
| JT                         | VERT | HORZ                               | DOWN | HORZ         | UPLIFT        | IN-SX | IN-SX |
| J                          | 1558 | 0                                  | 1558 | 0            | 0             | 3-0   | 3-0   |
| G                          | 1557 | 0                                  | 1557 | 0            | 0             | 5-8   | 5-8   |

### UNFACTORED REACTIONS

| 1ST CASE |          | MAX. MIN. COMPONENT REACTIONS |       |            |      |       |      |
|----------|----------|-------------------------------|-------|------------|------|-------|------|
| JT       | COMBINED | SNOW                          | LIVE  | PERM. LIVE | WIND | DEAD  | SOIL |
| J        | 1158     | 862/0                         | 211/0 | 0/0        | 0/0  | 283/0 | 0/0  |
| G        | 1155     | 682/0                         | 210/0 | 0/0        | 0/0  | 283/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) J. G

## BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.86 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY  
APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

| CHORDS        |             |                  |               |              | WEBS              |               |                 |                       |              |
|---------------|-------------|------------------|---------------|--------------|-------------------|---------------|-----------------|-----------------------|--------------|
| MAX. FACTORED |             | FACTORED         |               |              |                   | MAX. FACTORED |                 |                       |              |
| MEMB.         | FORCE (LBS) | VERT. LOAD (LBS) | LC1 MAX (PLF) | MAX CSI (LC) | MAX UNBRAC LENGTH | MEMB.         | MAX FORCE (LBS) | MAX FACTORED CSI (LC) | MAX CSI (LC) |
| FR-TO         |             | FROM             | TO            |              |                   | FR-TO         |                 |                       |              |
| A-B           | 0/42        | -102.1           | -102.1        | 0.15 (1)     | 10.00             | I-C           | 0/218           | 0.06 (3)              |              |
| B-C           | -13297/0    | -102.1           | -102.1        | 0.54 (1)     | 4.87              | C-H           | 0/18            | 0.05 (3)              |              |
| C-D           | -1084/0     | -102.1           | -102.1        | 0.07 (1)     | 5.02              | H-D           | 0/231           | 0.08 (3)              |              |
| D-E           | -1331/0     | -102.1           | -102.1        | 0.54 (1)     | 4.86              | B-I           | 0/1091          | 0.23 (3)              |              |
| E-F           | 0/42        | -102.1           | -102.1        | 0.15 (1)     | 10.00             | H-E           | 0/1400          | 0.21 (3)              |              |
| J-B           | -1444/0     | 0.0              | 0.0           | 0.15 (1)     | 8.75              |               |                 |                       |              |
| G-E           | -1440/0     | 0.0              | 0.0           | 0.16 (1)     | 6.77              |               |                 |                       |              |
| J-K           | 0/0         | -38.5            | -38.5         | 0.29 (3)     | 10.00             |               |                 |                       |              |
| K-L           | 0/0         | -38.5            | -38.5         | 0.29 (3)     | 10.00             |               |                 |                       |              |
| L-I           | 0/0         | -38.5            | -38.5         | 0.29 (3)     | 10.00             |               |                 |                       |              |
| I-H           | 0/1061      | -38.5            | -38.5         | 0.44 (2)     | 10.00             |               |                 |                       |              |
| H-M           | 0/0         | -38.5            | -38.5         | 0.30 (3)     | 10.00             |               |                 |                       |              |
| M-N           | 0/0         | -38.5            | -38.5         | 0.30 (3)     | 10.00             |               |                 |                       |              |
| N-G           | 0/0         | -38.5            | -38.5         | 0.30 (3)     | 10.00             |               |                 |                       |              |

03/13/11

H. G. ALVE

100009224

LICENSED

| FACTORED CONCENTRATED LOADS (LB/9) |        |      |      |      |      |      |       |      |      |
|------------------------------------|--------|------|------|------|------|------|-------|------|------|
| JOINT                              | LOC.   | LC1  | MAX- | MAX+ | FACE | DIR. | TYPE  | HEEL | COL. |
| C                                  | 4-10-8 | -448 | -    | -    | BACK | VERT | TOTAL | -    | -    |
| D                                  | 6-8-8  | -448 | -448 | -    | BACK | VERT | TOTAL | -    | -    |
| H                                  | 6-5-12 | -55  | -70  | -    | BACK | VERT | TOTAL | -    | -    |
| I                                  | 4-11-4 | -55  | -70  | -    | BACK | VERT | TOTAL | -    | -    |
| K                                  | 1-11-4 | -55  | -70  | -    | BACK | VERT | TOTAL | -    | -    |
| L                                  | 3-11-4 | -55  | -70  | -    | BACK | VERT | TOTAL | -    | -    |
| M                                  | 7-5-12 | -55  | -70  | -    | BACK | VERT | TOTAL | -    | -    |
| N                                  | 9-5-12 | -55  | -70  | -    | BACK | VERT | TOTAL | -    | -    |

## DESIGN CRITERIA

**SPECIFIED LOADS:**

TOP CH. LL = 29.0 PSF

HOT CH DL = 6.0 PSF  
LL = 12.5 PSF

|     |     |    |   |      |     |
|-----|-----|----|---|------|-----|
| BOI | CM. | LL | = | 10.5 | PSF |
|     |     | DL | = | 7.0  | PSF |

TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A  
SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL  
OR SMALL BUILDING REQUIREMENTS OF  
PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, OBC 2012  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)=  $L/360$  (0.38")  
 CALCULATED VERT. DEFL(LL) =  $L/999$  (0.05")  
 ALLOWABLE DEFL.(TL)=  $L/360$  (0.38")  
 CALCULATED VERT. DEFL(TL) =  $L/999$  (0.08")

CSI: TC=0.54/1.00 (D-E:1), BC=0.44/1.00 (H-I:2),  
WB=0.27/1.00 (E-H:1), SS=0.22/1.00 (G-H:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00  
COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

| T20 | TIL VALUES |     |       |     |         |      |
|-----|------------|-----|-------|-----|---------|------|
|     | GRIP (DRY) |     | SHEAR |     | SECTION |      |
|     | (PSI)      |     | (PLI) |     | (PLI)   |      |
|     | MAX        | MIN | MAX   | MIN | MAX     | MIN  |
|     | 818        | 354 | 1667  | 788 | 1987    | 1858 |

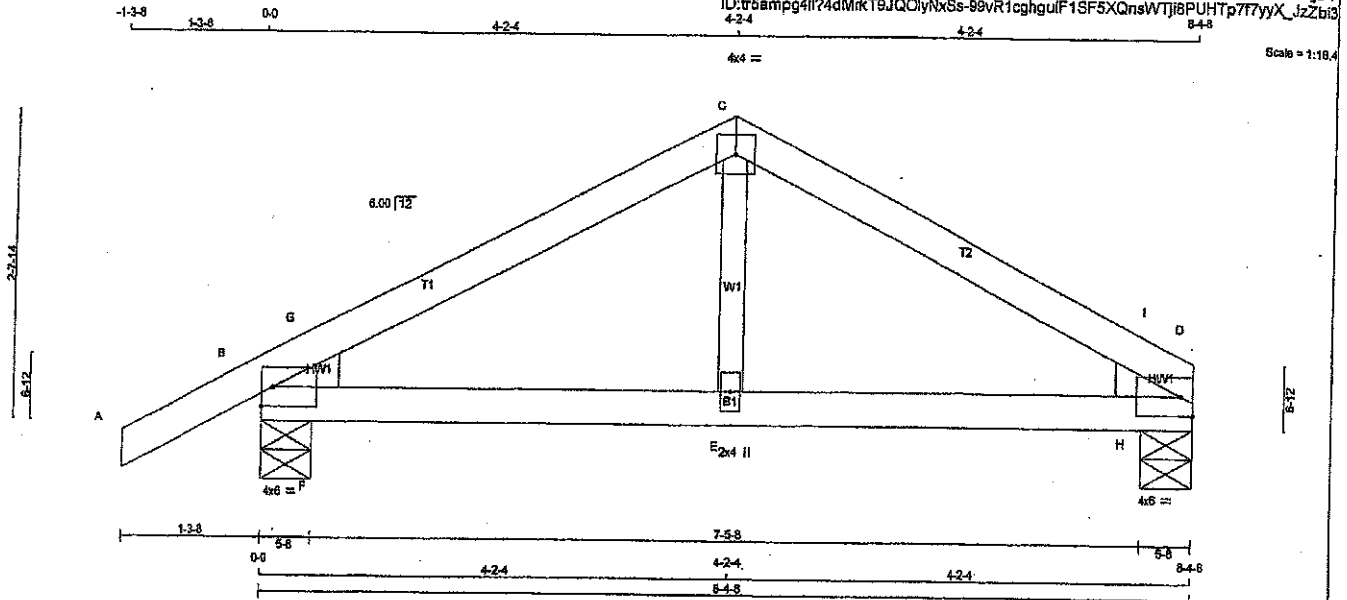
LATE PLACEMENT TOL = 0.250 inches

LATE ROTATION TOL. = 5.0 Deg.

GRIP= 0.78 (f) (INPUT = 0.90 )  
METAL= 0.55 (E) (INPUT = 1.00 )

DWG NO. TAM 7705532  
STRUCTURAL  
COMPONENT ONLY

|                                 |                   |               |          |                         |          |
|---------------------------------|-------------------|---------------|----------|-------------------------|----------|
| JOB NAME<br>200172-400371       | TRUSS NAME<br>T16 | QUANTITY<br>3 | PLY<br>1 | JOB DESC.<br>Preston 11 | DRWG NO. |
| Tamarack Roof Truss, Burlington |                   |               |          | TRUSS DESC.             |          |



| LUMBER                |      |        |        |
|-----------------------|------|--------|--------|
| N. L. G. A. RULES     | SIZE | LUMBER | DESCR. |
| CHORDS                |      |        |        |
| A - C                 | 2x4  | DRY    | No.2   |
| C - D                 | 2x4  | DRY    | No.2   |
| B - D                 | 2x4  | DRY    | No.2   |
| ALL WEBS              | 2x3  | DRY    | No.2   |
| DRY, SEASONED LUMBER. |      |        |        |

| PLATES (table is in inches) |         |        |     |         |
|-----------------------------|---------|--------|-----|---------|
| JT                          | TYPE    | PLATES | W   | LEN Y X |
| B                           | TMBH1-I | MT20   | 4.0 | 6.0     |
| C                           | TTW-p   | MT20   | 4.0 | 4.0     |
| D                           | TMBH1-I | MT20   | 4.0 | 6.0     |
| E                           | BMW-w   | MT20   | 2.0 | 4.0     |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS |                         |                                 |                 |
|----------|-------------------------|---------------------------------|-----------------|
| JT       | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG IN-SX |
| B        | 727                     | 727                             | 5-8             |
| D        | 589                     | 589                             | 5-8             |

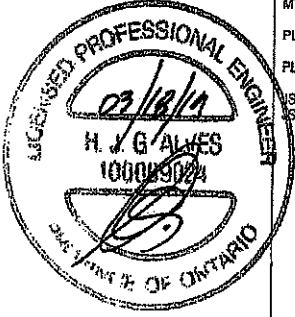
| UNFACTORED REACTIONS |           |                             |        |       |           |         |       |
|----------------------|-----------|-----------------------------|--------|-------|-----------|---------|-------|
| JT                   | 1ST LCASE | MAX/MIN COMPONENT REACTIONS | SNOW   | LIVE  | PERM.LIVE | WIND    | DEAD  |
| B                    | 335       | 322 / 0                     | 98 / 0 | 0 / 0 | 0 / 0     | 125 / 0 | 0 / 0 |
| D                    | 440       | 243 / 0                     | 88 / 0 | 0 / 0 | 0 / 0     | 109 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, D

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

| LOADING               |                           |                           |               |
|-----------------------|---------------------------|---------------------------|---------------|
| TOTAL LOAD CASES: (4) |                           |                           |               |
| CHORDS                |                           |                           |               |
| MEMB.                 | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. CS1 (LC) |
| FR-TO                 |                           |                           |               |
| A-B                   | 0 / 21                    | -102.1                    | 10.00         |
| B-G                   | -888 / 0                  | -102.1                    | 6.25          |
| C-C                   | -846 / 0                  | -102.1                    | 6.25          |
| C-I                   | -846 / 0                  | -102.1                    | 6.25          |
| I-D                   | -898 / 0                  | -102.1                    | 6.25          |
| B-F                   | 0 / 589                   | -38.5                     | 10.00         |
| F-E                   | 0 / 589                   | -38.5                     | 10.00         |
| E-H                   | 0 / 589                   | -38.5                     | 10.00         |
| H-D                   | 0 / 589                   | -38.5                     | 10.00         |



#### DESIGN CRITERIA

**SPECIFIED LOADS:**  
TOP CH. LL = 28.0 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

**SPACING = 24.0 IN./C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2018, OBC 2012  
- CSA 086-08, CSA 086-14  
- TPIC 2011, TPIC 2014

(65% OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) =  $L/360$  (0.28")  
CALCULATED VERT. DEFL. (LL) =  $L/999$  (0.01")  
ALLOWABLE DEFL. (TL) =  $L/360$  (0.28")  
CALCULATED VERT. DEFL. (TL) =  $L/999$  (0.02")

CS1: TO=0.18/1.00 (C-I), BC=0.23/1.00 (E-F), WB=0.08/1.00 (C-E), SS=0.15/1.00 (C-I)

DOL LUMBER=1.00 NAIL=1.00 LB BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

| NAIL VALUES |            |            |              |
|-------------|------------|------------|--------------|
| PLATE       | GRIP (DRY) | SHEAR (PL) | SECTION (PL) |
| MT20        | 816        | 354        | 1897         |

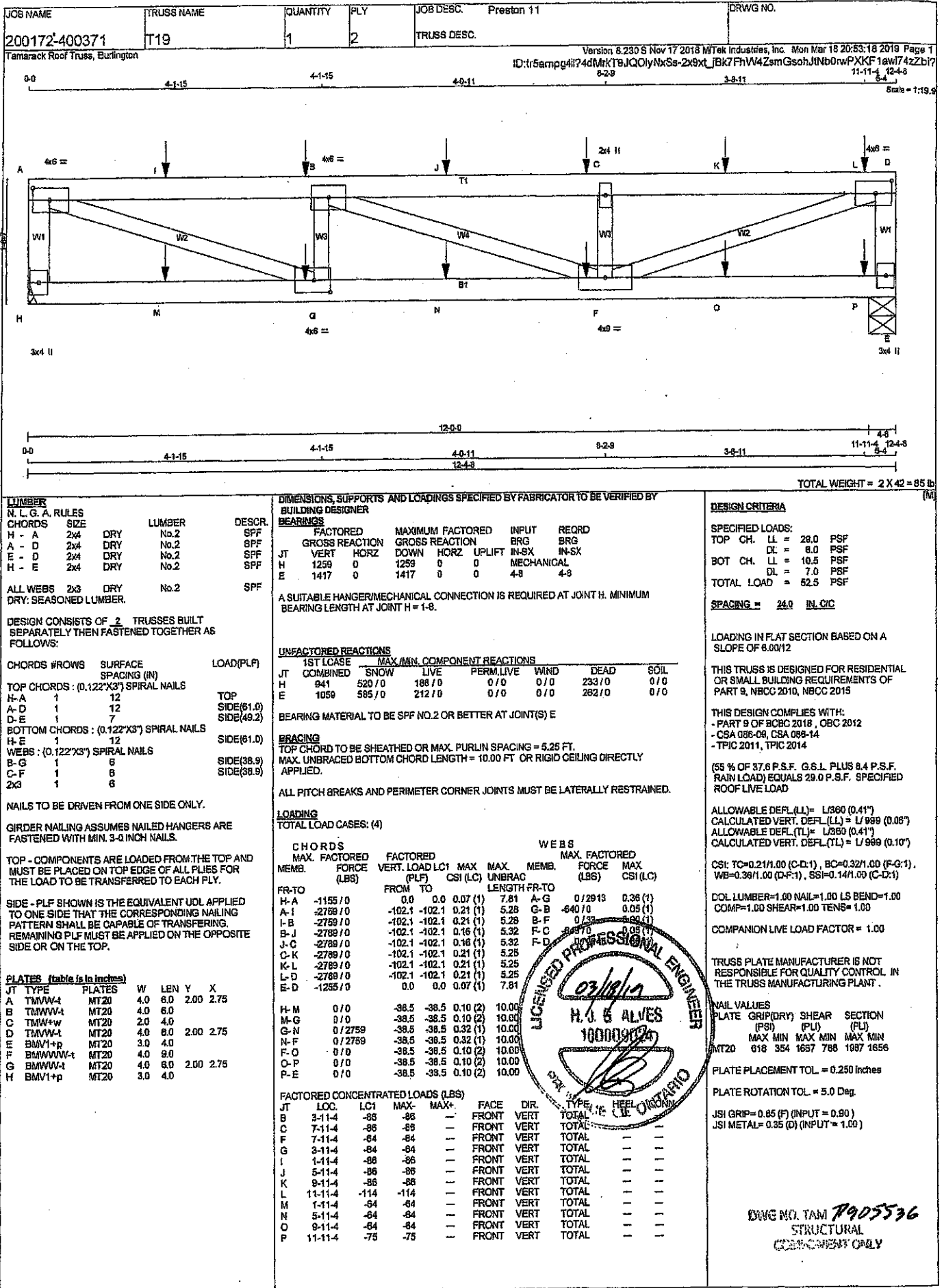
PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

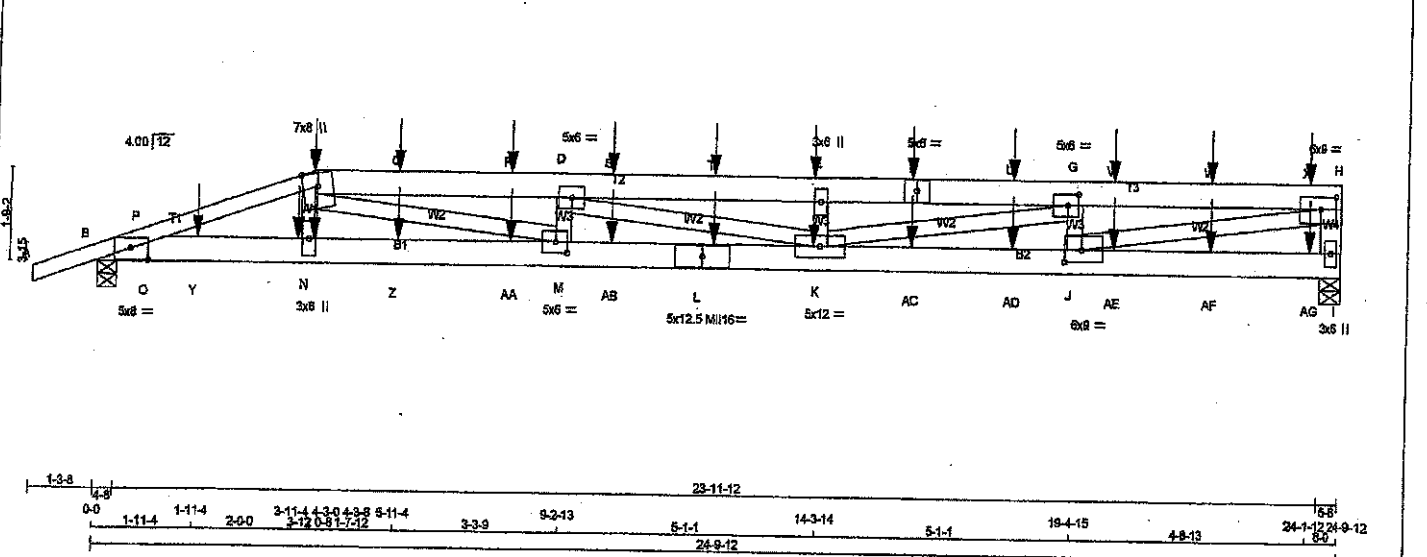
SI GRIP=0.88 (B) (INPUT = 0.90)  
SI METAL=0.18 (D) (INPUT = 1.00)

DRWG NO. TAM 7705533  
STRUCTURAL  
COMPONENT ONLY





|                                  |                           |                      |                 |                                                                                                                                                              |          |
|----------------------------------|---------------------------|----------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| JOB NAME<br><b>200172-400371</b> | TRUSS NAME<br><b>T200</b> | QUANTITY<br><b>1</b> | PLY<br><b>2</b> | JOB DESC.<br><b>Preston 11</b>                                                                                                                               | DRWG NO. |
| Tamarack Roof Truss, Burlington  |                           |                      |                 | Version 8.230 S Nov 17 2018 Mittek Industries, Inc. Tue Mar 19 09:15:58 2019 Page 1<br>ID:tr5ampg4i74dMkT9JQOlyNxSe-LyEt2b_6cBL8Q_4x8fH7QLaR2muVd5bE2g5JzZQp |          |



| LUMBER         |      |        |            |
|----------------|------|--------|------------|
| N.L.G.A. RULES | SIZE | LUMBER | DESCR.     |
| A - C          | 2x4  | DRY    | 1850F 1.5E |
| C - F          | 2x6  | DRY    | 1850F 1.5E |
| F - H          | 2x6  | DRY    | 1850F 1.5E |
| I - H          | 2x6  | DRY    | No.2       |
| B - L          | 2x6  | DRY    | 2100F 1.8E |
| L - I          | 2x6  | DRY    | 2100F 1.8E |

ALL WEBS 2x4 DRY No.2 SPF  
DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

| CHORDS #ROWS                             | SURFACE SPACING (IN) | LOAD(PLF)   |
|------------------------------------------|----------------------|-------------|
| TOP CHORDS : (0.122"x3") SPIRAL NAILS    |                      |             |
| A-C                                      | 11                   | SIDE(81.0)  |
| C-F                                      | 11                   | SIDE(244.1) |
| F-H                                      | 12                   | SIDE(183.1) |
| H-I                                      | 4                    | SIDE(48.0)  |
| BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS |                      |             |
| B-L                                      | 11                   | SIDE(263.7) |
| L-I                                      | 12                   | SIDE(197.8) |
| WEBS : (0.122"x3") SPIRAL NAILS          |                      |             |
| N-C                                      | 2                    | SIDE(272.2) |
| K-E                                      | 4                    | SIDE(41.9)  |
| 2x4                                      | 6                    |             |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

| PLATES (table is in inches) | TYPE    | PLATES | W   | LEN  | Y    | X    |
|-----------------------------|---------|--------|-----|------|------|------|
| JT                          | TMB1-I  | MT20   | 5.0 | 8.0  | 2.75 | 4.00 |
| B                           | TTWW+m  | MT20   | 7.0 | 8.0  | Edge |      |
| C                           | TTWW-t  | MT20   | 5.0 | 8.0  |      |      |
| D                           | TTWW-t  | MT20   | 5.0 | 8.0  |      |      |
| E                           | TTWW+m  | MT20   | 3.0 | 6.0  |      |      |
| F                           | TS-t    | MT20   | 5.0 | 6.0  |      |      |
| G                           | TTWW-t  | MT20   | 5.0 | 6.0  | 2.50 | 2.50 |
| H                           | TTWW-t  | MT20   | 8.0 | 8.0  | 2.75 | 4.00 |
| I                           | BMV1+tp | MT20   | 3.0 | 6.0  |      |      |
| J                           | BMWW-t  | MT20   | 6.0 | 9.0  | 2.75 | 4.00 |
| K                           | BMWW-t  | MT20   | 5.0 | 12.0 |      |      |
| L                           | BS-t    | MT16   | 5.0 | 12.5 |      |      |
| M                           | BMWW-t  | MT20   | 5.0 | 8.0  | 2.50 | 2.75 |
| N                           | BMWW+m  | MT20   | 3.0 | 8.0  |      |      |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS |      | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQRD BRG |
|----------|------|-------------------------|---------------------------------|-----------|-----------|
| JT       | VERT | HORZ                    | DOWN                            | HORZ      | UPLIFT    |
| I        | 3023 | 0                       | 3023                            | 0         | 0         |
| B        | 3909 | 0                       | 3909                            | 0         | 0         |

#### UNFACTORED REACTIONS

| JT | COMBINED | SNOW     | LIVE    | PERMLIVE | WIND  | DEAD    | SOIL  |
|----|----------|----------|---------|----------|-------|---------|-------|
| I  | 2257     | 1254 / 0 | 447 / 0 | 0 / 0    | 0 / 0 | 568 / 0 | 0 / 0 |
| B  | 2803     | 1663 / 0 | 540 / 0 | 0 / 0    | 0 / 0 | 699 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) I, B

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.23 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS |             | MAX. FACTORED | FACTORED | MAX. UNBRACED | WEBS  |             | MAX. FACTORED |
|--------|-------------|---------------|----------|---------------|-------|-------------|---------------|
| MEMB.  | FORCE (LBS) | VERT. LOAD    | CS1 (LC) | LENGTH        | MEMB. | FORCE (LBS) | CS1 (LC)      |
| FR-TO  |             |               |          |               | FR-TO |             |               |
| A-B    | 0 / 22      | -102.1        | -102.1   | 0.08 (1)      | N-C   | 0 / 1682    | 0.15 (1)      |
| B-P    | -11358 / 0  | -102.1        | -102.1   | 0.20 (1)      | J-H   | 0 / 5910    | 0.88 (1)      |
| P-C    | -11293 / 0  | -102.1        | -102.1   | 0.30 (1)      | C-M   | 0 / 4054    | 0.36 (1)      |
| C-Q    | -14487 / 0  | -102.1        | -102.1   | 0.29 (1)      | J-G   | -1897 / 0   | 0.11 (1)      |
| Q-R    | -14487 / 0  | -102.1        | -102.1   | 0.29 (1)      | M-D   | -715 / 0    | 0.04 (1)      |
| R-D    | -14487 / 0  | -102.1        | -102.1   | 0.29 (1)      | K-G   | 0 / 4805    | 0.41 (1)      |
| D-S    | -14097 / 0  | -102.1        | -102.1   | 0.32 (1)      | D-K   | -403 / 0    | 0.07 (1)      |
| S-T    | -14097 / 0  | -102.1        | -102.1   | 0.32 (1)      | K-E   | -715 / 0    | 0.04 (1)      |
| T-E    | -14097 / 0  | -102.1        | -102.1   | 0.32 (1)      | O-P   | -11 / 89    | 0.00 (1)      |
| E-F    | -14097 / 0  | -102.1        | -102.1   | 0.30 (1)      |       |             |               |
| F-U    | -14097 / 0  | -102.1        | -102.1   | 0.30 (1)      |       |             |               |
| U-Q    | -14097 / 0  | -102.1        | -102.1   | 0.30 (1)      |       |             |               |
| G-V    | -8935 / 0   | -102.1        | -102.1   | 0.22 (1)      |       |             |               |
| V-W    | -8935 / 0   | -102.1        | -102.1   | 0.22 (1)      |       |             |               |
| W-X    | -8935 / 0   | -102.1        | -102.1   | 0.22 (1)      |       |             |               |
| X-H    | -8935 / 0   | -102.1        | -102.1   | 0.22 (1)      |       |             |               |
| H-I    | -2752 / 0   | 0.0           | 0.0      | 0.10 (1)      |       |             |               |

| MEMB. | LOC.   | LC1  | MAX- | MAX+ | FACE | DIR. | TYPE  | HEEL | CONN. |
|-------|--------|------|------|------|------|------|-------|------|-------|
| JT    | 4-3-8  | -282 | -282 |      | BACK | VERT | TOTAL |      |       |
| C     | 14-2-4 | -93  | -93  |      | BACK | VERT | TOTAL |      |       |
| E     | 16-2-4 | -93  | -93  |      | BACK | VERT | TOTAL |      |       |

#### FACTORED CONCENTRATED LOADS (LBS)

| JT | LOC.   | LC1  | MAX- | MAX+ | FACE | DIR. | TYPE  | HEEL | CONN. |
|----|--------|------|------|------|------|------|-------|------|-------|
| C  | 4-3-8  | -282 | -282 |      | BACK | VERT | TOTAL |      |       |
| E  | 14-2-4 | -93  | -93  |      | BACK | VERT | TOTAL |      |       |
| F  | 16-2-4 | -93  | -93  |      | BACK | VERT | TOTAL |      |       |

TOTAL WEIGHT = 2 X 118 = 232 lb

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2018, CBC 2012  
- CSA 088-08, CSA 088-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.83")  
CALCULATED VERT. DEFL.(LL) = L/637 (0.47")  
ALLOWABLE DEFL.(TL) = L/360 (0.83")  
CALCULATED VERT. DEFL.(TL) = L/385 (0.77")

CSI: TO=0.32/1.00 (D-E-1), BC=0.52/1.00 (K-M-1),  
WB=0.88/1.00 (H-J-1), SS=0.22/1.00 (B-C-1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00  
COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

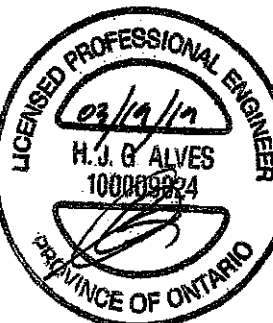
NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1667 788 1987 1656  
MT16 438 276 2341 1245 4283 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

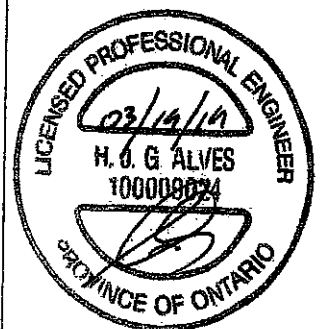
JSI GRIP= 0.88 (B) (INPUT = 0.90)  
JSI METAL= 0.90 (B) (INPUT = 1.00)

DWG NO. TAM 179058/10  
STRUCTURAL COMPONENT ONLY 1/2



|                                 |            |          |     |                                                                                    |          |
|---------------------------------|------------|----------|-----|------------------------------------------------------------------------------------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY | PLY | JOB DESC.                                                                          | DRWG NO. |
| 200172-400371                   | T200       | 1        | 2   | Preston 11                                                                         |          |
| Tamarack Roof Truss, Burlington |            |          |     | Version 8.230 S Nov 17 2018 MITek Industries, Inc. Tue Mar 19 08:15:58 2019 Page 2 |          |
|                                 |            |          |     | ID:tr5ampg4f74dMrkT9JQOlvNxSs-LYeT2b_6oBL8Q_4x8fHq7QLaR2muVd5bE2g5JzZQp            |          |

| FACTORED CONCENTRATED LOADS (LBS) |         |       |       |      |       |      |       |      |       |
|-----------------------------------|---------|-------|-------|------|-------|------|-------|------|-------|
| JT                                | LOC.    | LC1   | MAX-  | MAX+ | FACE  | DIR. | TYPE  | HEEL | CONN. |
| K                                 | 14-2-4  | -68   | -68   | —    | BACK  | VERT | TOTAL | —    | —     |
| L                                 | 12-2-4  | -68   | -68   | —    | BACK  | VERT | TOTAL | —    | —     |
| N                                 | 3-11-4  | -57   | -57   | —    | BACK  | VERT | TOTAL | —    | —     |
| N                                 | 4-9-0   | -1221 | -1221 | —    | FRONT | VERT | TOTAL | —    | —     |
| Q                                 | 5-11-4  | -93   | -93   | —    | BACK  | VERT | TOTAL | —    | —     |
| R                                 | 8-2-4   | -93   | -93   | —    | BACK  | VERT | TOTAL | —    | —     |
| S                                 | 10-2-4  | -93   | -93   | —    | BACK  | VERT | TOTAL | —    | —     |
| T                                 | 12-2-4  | -93   | -93   | —    | BACK  | VERT | TOTAL | —    | —     |
| U                                 | 18-2-4  | -93   | -93   | —    | BACK  | VERT | TOTAL | —    | —     |
| V                                 | 20-2-4  | -93   | -93   | —    | BACK  | VERT | TOTAL | —    | —     |
| W                                 | 22-2-4  | -93   | -93   | —    | BACK  | VERT | TOTAL | —    | —     |
| X                                 | 24-1-12 | -110  | -110  | —    | BACK  | VERT | TOTAL | —    | —     |
| Y                                 | 1-11-4  | -112  | -112  | —    | BACK  | VERT | TOTAL | —    | —     |
| Z                                 | 5-11-4  | -68   | -68   | —    | BACK  | VERT | TOTAL | —    | —     |
| AA                                | 8-2-4   | -68   | -68   | —    | BACK  | VERT | TOTAL | —    | —     |
| AB                                | 10-2-4  | -68   | -68   | —    | BACK  | VERT | TOTAL | —    | —     |
| AC                                | 16-2-4  | -68   | -68   | —    | BACK  | VERT | TOTAL | —    | —     |
| AD                                | 18-2-4  | -68   | -68   | —    | BACK  | VERT | TOTAL | —    | —     |
| AE                                | 20-2-4  | -68   | -68   | —    | BACK  | VERT | TOTAL | —    | —     |
| AF                                | 22-2-4  | -68   | -68   | —    | BACK  | VERT | TOTAL | —    | —     |
| AG                                | 24-1-12 | -74   | -74   | —    | BACK  | VERT | TOTAL | —    | —     |

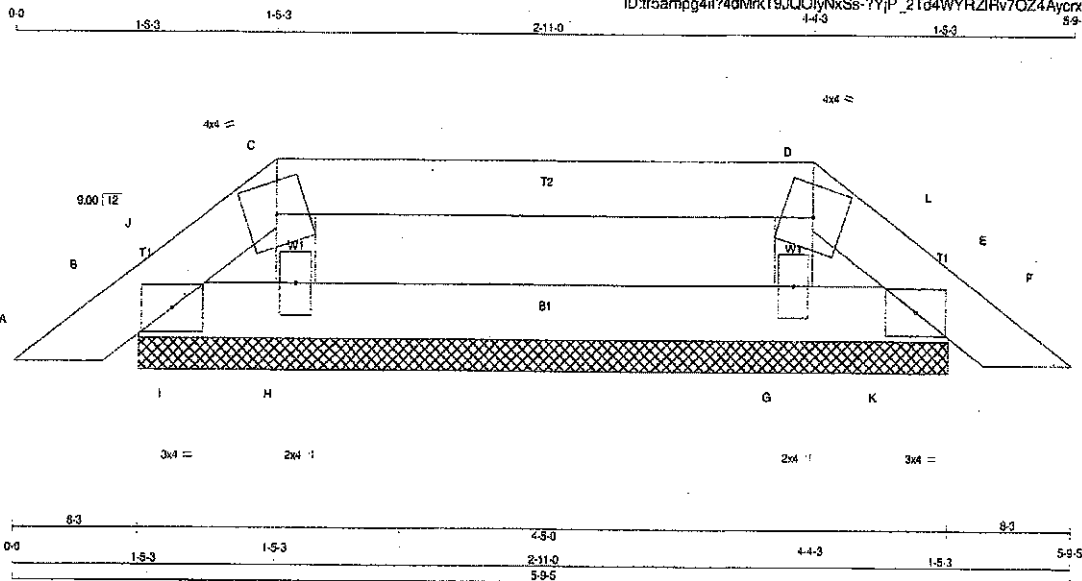


DWG NO. 1AM 17905613  
 STRUCTURAL  
 COMPONENT ON: 1/2

JOB NAME TRUSS NAME QUANTITY PLY JOB DESC. GREENPARK HOMES DWG NO.  
403945 PB1 1 1 TRUSS DESC.

Tamarack Roof Truss, Burlington

Version 8.300 S May 10 2019 Mitek Industries, Inc. Thu Jun 27 11:05:26 2019 Page 1  
ID:tr5ampg4il74dMrkT9JQOlyNkSs-?Y/P\_2Td4WYRZIRv7OZ4AycnrlMUGYsy0yOJ7z265



Scale = 1/10

**LUMBER**  
N.L.G.A. RULES  
CHORDS SIZE LUMBER  
A - C 2x4 DRY No.2  
C - D 2x4 DRY No.2  
D - F 2x4 DRY No.2  
B - E 2x4 DRY No.2  
ALL WEBS 2x3 DRY No.2  
DRY: SEASONED LUMBER.

**PLATES (table is in inches)**  
JT TYPE PLATES W LEN Y X  
B TMB1-I MT20 3.0 4.0  
C TTW-m MT20 4.0 4.0  
D TTW-m MT20 4.0 4.0  
E TMB1-I MT20 3.0 4.0  
G BMW1-w MT20 2.0 4.0  
H BMW1-w MT20 2.0 4.0

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

| DESCR. | FACTORED GROSS REACTION |      | MAXIMUM FACTORED GROSS REACTION |      | INPUT BRG IN-SX | REQD BRG IN-SX |
|--------|-------------------------|------|---------------------------------|------|-----------------|----------------|
|        | VERT                    | HORZ | DOWN                            | HORZ |                 |                |
| JT     |                         |      |                                 |      |                 |                |
| B      | 137                     | 0    | 137                             | 0    | 4-5-0           | 4-5-0          |
| E      | 137                     | 0    | 137                             | 0    | 4-5-0           | 4-5-0          |
| H      | 234                     | 0    | 234                             | 0    | 4-5-0           | 4-5-0          |
| G      | 234                     | 0    | 234                             | 0    | 4-5-0           | 4-5-0          |

**UNFACTORED REACTIONS**

| JT | COMBINED | MAX/MIN. COMPONENT REACTIONS |      |      |           |      |      |
|----|----------|------------------------------|------|------|-----------|------|------|
|    |          | 1ST LOASE                    | SNOW | LIVE | PERM.LIVE | WIND | DEAD |
| B  | 92       | 83/0                         | 0/5  | 0/0  | 0/0       | 14/0 | 0/0  |
| E  | 92       | 83/0                         | 0/5  | 0/0  | 0/0       | 14/0 | 0/0  |
| H  | 181      | 80/0                         | 51/0 | 0/0  | 0/0       | 50/0 | 0/0  |
| G  | 181      | 80/0                         | 51/0 | 0/0  | 0/0       | 50/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, E, H, G

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

| CHORDS |                           |                               |                      | WEBS  |                           |                      |          |
|--------|---------------------------|-------------------------------|----------------------|-------|---------------------------|----------------------|----------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) | MAX. UNBRACED LENGTH | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. UNBRACED LENGTH | FR-TO    |
| FR-TO  |                           |                               |                      | FR-TO |                           |                      |          |
| A-B    | 0/17                      | -102.1 -102.1                 | 0.03 (1)             | 10.00 | H-C                       | -137/0               | 0.02 (1) |
| B-J    | -57/5                     | -102.1 -102.1                 | 0.02 (1)             | 6.25  | G-D                       | -137/0               | 0.02 (1) |
| J-C    | -43/0                     | -102.1 -102.1                 | 0.01 (1)             | 6.25  | F-J                       | -27/0                | 0.00 (1) |
| C-O    | -3/0                      | -102.1 -102.1                 | 0.15 (1)             | 10.00 | K-L                       | -27/0                | 0.00 (1) |
| D-L    | -43/0                     | -102.1 -102.1                 | 0.01 (1)             | 6.25  |                           |                      |          |
| L-E    | -57/5                     | -102.1 -102.1                 | 0.02 (1)             | 6.25  |                           |                      |          |
| E-F    | 0/17                      | -102.1 -102.1                 | 0.03 (1)             | 10.00 |                           |                      |          |
| B-I    | 0/25                      | -38.5 -38.5                   | 0.00 (1)             | 10.00 |                           |                      |          |
| I-H    | 0/25                      | -38.5 -38.5                   | 0.04 (3)             | 10.00 |                           |                      |          |
| H-G    | 0/3                       | -38.5 -38.5                   | 0.04 (3)             | 10.00 |                           |                      |          |
| G-K    | 0/25                      | -38.5 -38.5                   | 0.04 (3)             | 10.00 |                           |                      |          |
| K-E    | 0/25                      | -38.5 -38.5                   | 0.00 (1)             | 10.00 |                           |                      |          |

**DESIGN CRITERIA**

SPECIFIED LOADS:  
TOP CH. LL = 29.0 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN./C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2015, CBC 2012  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

DESIGN ASSUMPTIONS  
- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.15/1.00 (C-D:1), BC=0.04/1.00 (H-I:3), WB=0.02/1.00 (D-G:1), SS=0.12/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

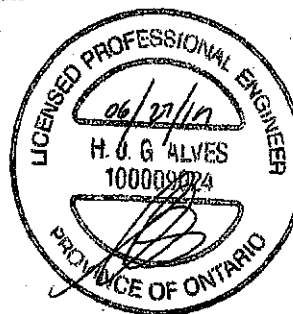
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT

NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1667 788 1987 1856

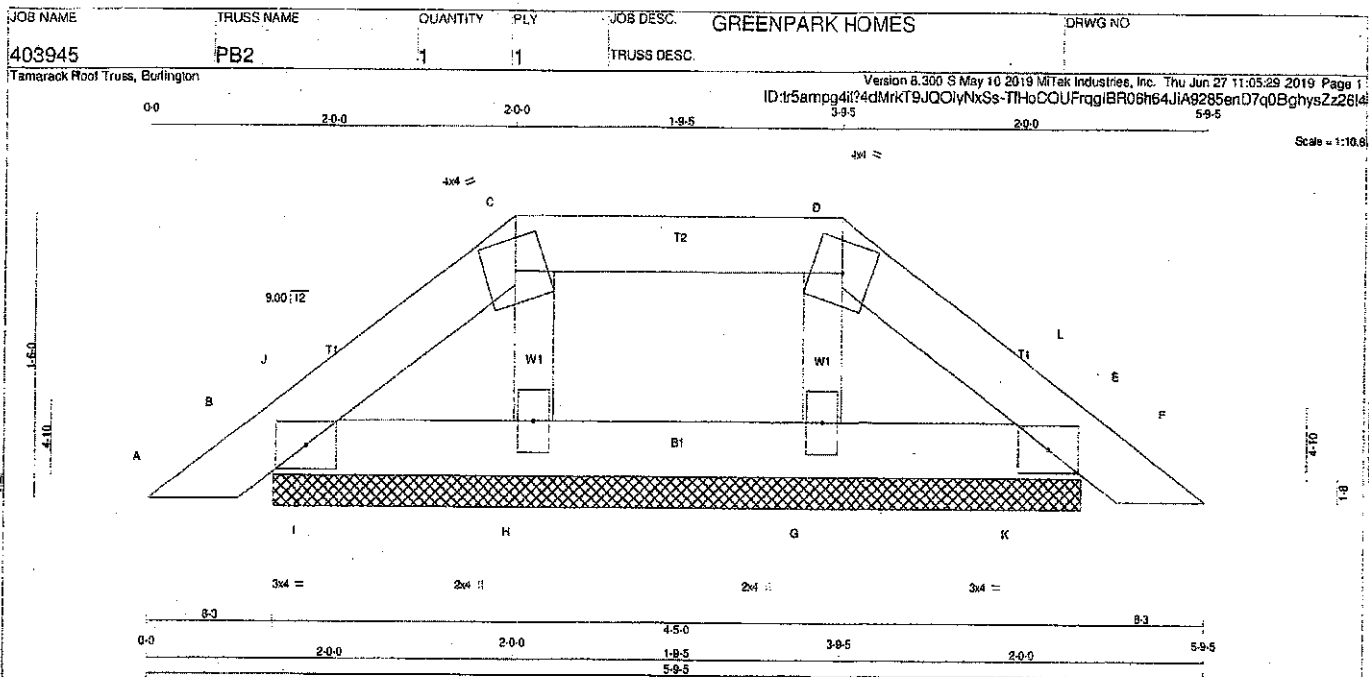
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.12 (C) (INPUT = 0.90)  
JSI METAL= 0.03 (H) (INPUT = 1.00)



Structural component only  
DWG# T-1916672



**LUMBER**  
N.L.G.A. RULES  
CHORDS SIZE LUMBER DESCR.  
A - C 2x4 DRY No.2 SPF  
C - D 2x4 DRY No.2 SPF  
D - F 2x4 DRY No.2 SPF  
B - E 2x4 DRY No.2 SPF  
ALL WEBS 2x3 DRY No.2 SPF  
DRY: SEASONED LUMBER.

**PLATES (table is in inches)**  
JT TYPE PLATES W LEN Y X  
B TMB1-I MT20 3.0 4.0  
C TTW-m MT20 4.0 4.0  
D TTW-m MT20 4.0 4.0  
E TMB1-I MT20 3.0 4.0  
G BMW1-w MT20 2.0 4.0  
H BMW1-w MT20 2.0 4.0

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

| JT | FACTORED GROSS REACTION |      | MAXIMUM FACTORED GROSS REACTION |      | INPUT BRG | REQRD BRG |
|----|-------------------------|------|---------------------------------|------|-----------|-----------|
|    | VERT                    | HORZ | DOWN                            | HORZ | IN-SX     | IN-SX     |
| B  | 176                     | 0    | 176                             | 0    | 4-5/0     | 4-5/0     |
| E  | 176                     | 0    | 176                             | 0    | 4-5/0     | 4-5/0     |
| H  | 195                     | 0    | 195                             | 0    | 4-5/0     | 4-5/0     |
| G  | 195                     | 0    | 195                             | 0    | 4-5/0     | 4-5/0     |

**UNFACTORED REACTIONS**

| 1ST CASE |          | MAX/MIN. COMPONENT REACTIONS |      |           |      |      |      |
|----------|----------|------------------------------|------|-----------|------|------|------|
| JT       | COMBINED | SNOW                         | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| B        | 126      | 87/0                         | 13/0 | 0/0       | 0/0  | 28/0 | 0/0  |
| E        | 126      | 87/0                         | 13/0 | 0/0       | 0/0  | 28/0 | 0/0  |
| H        | 148      | 76/0                         | 34/0 | 0/0       | 0/0  | 38/0 | 0/0  |
| G        | 148      | 76/0                         | 34/0 | 0/0       | 0/0  | 38/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, E, H, G

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

| CHORDS |                           |                           |                   | WEBS               |       |                           |                 |
|--------|---------------------------|---------------------------|-------------------|--------------------|-------|---------------------------|-----------------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | LC1 MAX. CS1 (LC) | MAX. UNBRAC LENGTH | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. CS1 (LC)   |
| FR-TO  |                           | FROM                      | TO                |                    | FR-TO |                           |                 |
| A-B    | 0/17                      | -102.1                    | -102.1            | 0.03 (1)           | 10.00 | H-C                       | -120/0 0.02 (1) |
| B-J    | -51/0                     | -102.1                    | -102.1            | 0.00 (3)           | 6.25  | G-D                       | -120/0 0.02 (1) |
| C-D    | -43/0                     | -102.1                    | -102.1            | 0.02 (1)           | 6.25  | I-J                       | -54/7 0.00 (1)  |
| D-E    | -23/0                     | -102.1                    | -102.1            | 0.05 (1)           | 6.25  | K-L                       | -54/7 0.00 (1)  |
| E-F    | -43/0                     | -102.1                    | -102.1            | 0.02 (1)           | 6.25  |                           |                 |
| F-G    | -51/0                     | -102.1                    | -102.1            | 0.00 (3)           | 6.25  |                           |                 |
| G-H    | 0/17                      | -102.1                    | -102.1            | 0.03 (1)           | 10.00 |                           |                 |
| H-I    | 0/34                      | -38.5                     | -38.5             | 0.03 (1)           | 10.00 |                           |                 |
| I-J    | 0/23                      | -38.5                     | -38.5             | 0.02 (2)           | 10.00 |                           |                 |
| J-K    | 0/34                      | -38.5                     | -38.5             | 0.03 (1)           | 10.00 |                           |                 |
| K-L    | 0/34                      | -38.5                     | -38.5             | 0.03 (1)           | 10.00 |                           |                 |

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 29.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

**SPACING = 24.0 IN. GIG**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2018, CBC 2012  
- CSA 086-09, CSA 088-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.05/1.00 (C-D:1), BC=0.03/1.00 (B-I:1), WB=0.02/1.00 (C-H:1), SS=0.07/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

**NAIL VALUES**  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1667 768 1987 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.12 (B) (INPUT = 0.99)  
JSI METAL = 0.03 (B) (INPUT = 1.00)

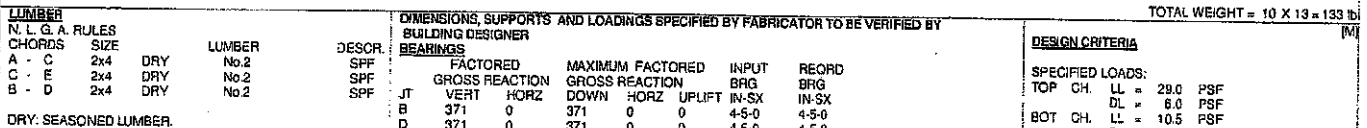
**RECEIVED**  
AUG 28 2019

TOWN OF CALEDON  
BUILDING SECTION  
FILE NO



Structural component only  
DWG# T-1916673

Version 8.300 S May 10 2019 MiTek Industries, Inc. Thu Jun 27 11:05:30 2019 Page 1  
ID:tr5ampg4i74dMrt9JQOLyNxS-yxrAPKVtc8o9bbiFpbYFNhCAVzcyak9QKRVO?z2613



Edge - INDICATES REFERENCE CORNER OF PLATE  
TOUCHES EDGE OF CHORD.

ALL DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS |      | FACTORED       |      | MAXIMUM FACTORED |        |       | INPUT | REQD |
|----------|------|----------------|------|------------------|--------|-------|-------|------|
|          |      | GROSS REACTION |      | GROSS REACTION   |        |       | BRG   | BRG  |
| JT       | VERT | HORZ           | DOWN | HORZ             | UPLIFT | IN-SX | IN-SX |      |
| B        | 371  | 0              | 371  | 0                | 0      | 4-5-0 | 4-5-0 |      |
| D        | 371  | 0              | 371  | 0                | 0      | 4-5-0 | 4-5-0 |      |

### UNFACTORED REACTIONS

| 1ST LCASE |          | MAX./MIN. COMPONENT REACTIONS |        |            |       |        |       |
|-----------|----------|-------------------------------|--------|------------|-------|--------|-------|
| JT        | COMBINED | SNOW                          | LIVE   | PERM. LIVE | WIND  | DEAD   | SOIL  |
| B         | 274      | 163 / 0                       | 46 / 0 | 0 / 0      | 0 / 0 | 65 / 0 | 0 / 0 |
| O         | 274      | 163 / 0                       | 46 / 0 | 0 / 0      | 0 / 0 | 65 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B. D.

## BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

## LOADING

**TOTAL LOAD CASES: {4}**

| CHORDS        |             |                  |        |              | WEBBS         |       |             |              |  |
|---------------|-------------|------------------|--------|--------------|---------------|-------|-------------|--------------|--|
| MAX. FACTORED |             | FACTORED         |        |              | MAX. FACTORED |       |             |              |  |
| MEMB.         | FORCE (LBS) | VERT. LOAD (PLF) | LC1    | MAX CSI (LC) | MAX. UNBRAC   | MEMB. | FORCE (LBS) | MAX CSI (LC) |  |
| FR-TO         |             | FROM             | TO     |              | LENGTH        | FR-TO |             |              |  |
| A-B           | 0/17        | -102.1           | -102.1 | 0.03 (1)     | 10.00         | F-G   | 0/223       | 0.00 (1)     |  |
| B-G           | -342/0      | -102.1           | -102.1 | 0.08 (3)     | 6.25          | H-I   | 0/223       | 0.00 (1)     |  |
| G-C           | -190/0      | -102.1           | -102.1 | 0.10 (1)     | 6.25          |       |             |              |  |
| C-I           | -190/0      | -102.1           | -102.1 | 0.10 (1)     | 6.25          |       |             |              |  |
| D-D           | -342/0      | -102.1           | -102.1 | 0.08 (3)     | 6.25          |       |             |              |  |
| D-E           | 0/17        | -102.1           | -102.1 | 0.03 (1)     | 10.00         |       |             |              |  |
| B-F           | 0/163       | -38.5            | -38.5  | 0.06 (3)     | 10.00         |       |             |              |  |
| F-H           | 0/163       | -38.5            | -38.5  | 0.12 (2)     | 10.00         |       |             |              |  |
| H-D           | 0/163       | -38.5            | -38.5  | 0.06 (3)     | 10.00         |       |             |              |  |

### DESIGN CRITERIA

**SPECIFIED LOADS:**

|            |      |      |     |
|------------|------|------|-----|
| TOP CH.    | LL = | 29.0 | PSF |
|            | DL = | 6.0  | PSF |
| BOT CH.    | LL = | 10.5 | PSF |
|            | DL = | 7.0  | PSF |
| TOTAL LOAD | =    | 52.5 | PSF |

SPACING 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR  
SMALL BUILDING REQUIREMENTS OF PART 9,  
NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF ECBC 2018, OBC 2012  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.10/1.00 (C-G:1), BC=0.12/1.00 (F-H:2),  
WB=0.00/1.00 (F-G:1), SS=0.12/1.00 (D-I:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

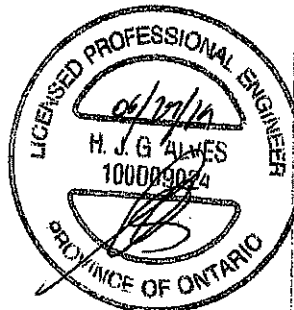
### NAIL VALUES

| PLATE | GRIP(DRY) |       | SHEAR |       | SECTION |       |
|-------|-----------|-------|-------|-------|---------|-------|
|       | (PSI)     | (PLI) | (PLI) | (PLI) | (PLI)   | (PLI) |
| MT20  | 618       | 354   | 1667  | 788   | 1987    | 1658  |

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.23 (B) (INPUT = 0.90 )  
JSI METAL= 0.07 (D) (INPUT = 1.00 )



Structural component only  
DWG# T-1916674

Version 8.300 S May 10 2019 M/Tek Industries, Inc. Thu Jun 27 11:05:41 2019 Page 1  
ID:tr5ampg4il74dmrkT9JQOlyNxSs-720KjUdn0WBbdHxPOdi8Bie0hxg81VjnyXbaGsz26ku

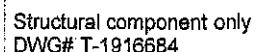


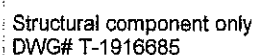
TOTAL WEIGHT = 29 lb

**SPECIFIED LOADS:**

|            |      |      |     |
|------------|------|------|-----|
| TOP CH.    | LL = | 29.0 | PSF |
|            | DL = | 6.0  | PSF |
| BOT CH.    | LL = | 10.5 | PSF |
|            | DL = | 7.0  | PSF |
| TOTAL LOAD | =    | 52.5 | PSF |

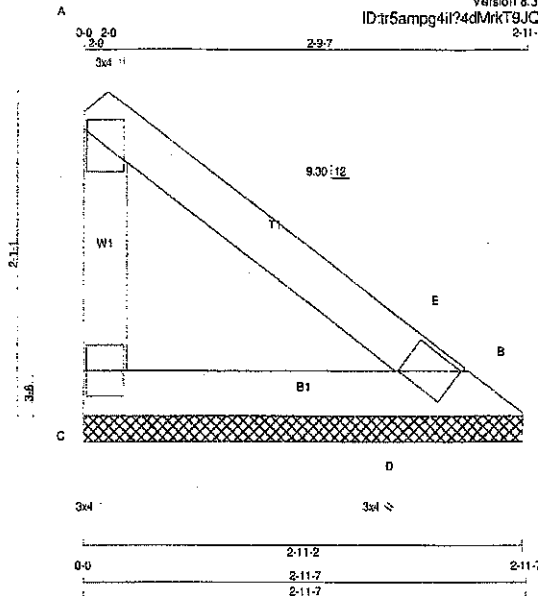
JSI GRIP= 0.82 (B) (INPUT = 0.90 )  
JSI METAL= 0.26 (B) (INPUT = 1.00 )





| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC.   | GREENPARK HOMES | DRWG NO. |
|----------|------------|----------|-----|-------------|-----------------|----------|
| 403945   | V3         | 1        | 1   | TRUSS DESC. |                 |          |

Tamarack Roof Truss, Burlington



Version 8.300 S May 10 2019 MITek Industries, Inc. Thu Jun 27 11:05:43 2019 Page 1  
ID:tr5ampg4it24dMrkT9JQOlyNkSs-3R748A11Y7RJs5oV2KcH7kRmkPIVSY4Pr4hKlz26ksi

Scale = 1/16"

TOTAL WEIGHT = 910

| LUMBER            |        |      |        | DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER |     |                         |                                 | DESIGN CRITERIA |          |
|-------------------|--------|------|--------|-----------------------------------------------------------------------------------------------|-----|-------------------------|---------------------------------|-----------------|----------|
| N. L. G. A. RULES | CHORDS | SIZE | LUMBER | DESCR.                                                                                        | SPF | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG       | REQD BRG |
| C - A             | 2x4    | DRY  | No.2   | SPF                                                                                           | SPF | VERT                    | DOWN                            | IN-SX           | IN-SX    |
| A - B             | 2x4    | DRY  | No.2   | SPF                                                                                           | SPF | HORZ                    | HORZ                            | 2-11-2          | 2-11-2   |
| C - B             | 2x4    | DRY  | No.2   | SPF                                                                                           | SPF | 0                       | 0                               | 2-11-2          | 2-11-2   |

DRY, SEASONED LUMBER.

| PLATES (table is in inches) | JT TYPE | PLATES | W   | LEN | Y | X |
|-----------------------------|---------|--------|-----|-----|---|---|
| A                           | TMV+p   | MT20   | 3.0 | 4.0 |   |   |
| B                           | TBMt-h  | MT20   | 3.0 | 4.0 |   |   |
| C                           | BMVt+p  | MT20   | 3.0 | 4.0 |   |   |

| UNFACTORED REACTIONS |          |          |      |      |            |      |      |
|----------------------|----------|----------|------|------|------------|------|------|
| JT                   | 1ST CASE | COMBINED | SNOW | LIVE | PERM. LIVE | WIND | DEAD |
| C                    | 154      | 85.0     | 31.0 | 0.0  | 0.0        | 38.0 | 0.0  |
| B                    | 154      | 85.0     | 31.0 | 0.0  | 0.0        | 38.0 | 0.0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) C, B

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

**LOADING**  
TOTAL LOAD CASES: (4)

| CHORDS |                           |                           |                        | WEBS  |                           |                        |  |
|--------|---------------------------|---------------------------|------------------------|-------|---------------------------|------------------------|--|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. FACTORED CSI (LC) | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. FACTORED CSI (LC) |  |
| FR-TO  |                           | FROM TO                   |                        | FR-TO |                           |                        |  |
| C-A    | -127.0                    | 0.0                       | 0.0 (1)                | D-E   | -91.32                    | 0.00 (1)               |  |
| A-E    | 0.0                       | 102.1                     | 102.1 (1)              |       |                           |                        |  |
| E-B    | -22.0                     | -102.1                    | -102.1 (2)             |       |                           |                        |  |
| C-D    | 0.0                       | -38.5                     | -38.5 (1)              |       |                           |                        |  |
| D-B    | -22.0                     | -38.5                     | -38.5 (1)              |       |                           |                        |  |

**SPACING = 24.0 IN. CG**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2010, OBC 2012  
- CSA 088-09, CSA 088-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.11/1.00 (A-E:1), BC=0.11/1.00 (C-D:1), WB=0.00/1.00 (D-E:1), SSI=0.10/1.00 (B-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

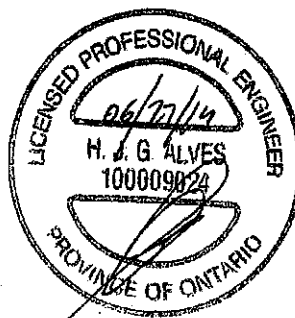
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

**NAIL VALUES**  
PLATE GRIP (DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1687 788 1987 1856

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.09 (B) (INPUT = 0.90)  
JSI METAL= 0.04 (A) (INPUT = 1.00)



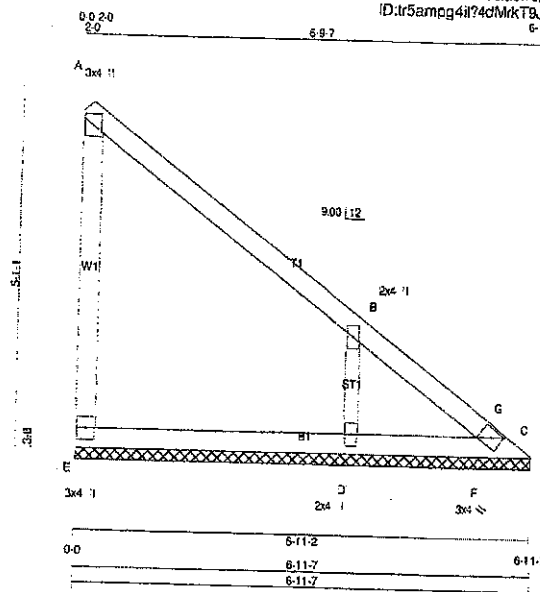
RECEIVED  
AUG 28 2019  
TOWN OF CALEDON  
BUILDING SECTION  
FILE NO.

Structural component only  
DWG# T-1916686

Version 8.300 S May 10 2019 Mitek Industries, Inc. Thu Jun 27 11:05:44 2019 Page 1  
ID:tr5ampg4il74dMrKT9JQOlyNxSs-XdhTLWqJRZAUlf 3lrpKGXC8hGEvqDeVqFsBz26Kr



Structural component only  
DWG# T-1916687



**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | LUMBER   |
|--------|------|----------|
| E - A  | 2x4  | DRY No.2 |
| A - C  | 2x4  | DRY No.2 |
| E - C  | 2x4  | DRY No.2 |

ALL WEBS 2x3 DRY No.2  
 DRY: SEASONED LUMBER.

**BEARINGS**

| SPF | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | RECORD BRG |
|-----|-------------------------|---------------------------------|-----------|------------|
| JT  | VERT                    | DOWN                            | IN-SX     | IN-SX      |
| E   | 240                     | 0                               | 0         | 0          |
| A   | 114                     | 0                               | 0         | 0          |
| C   | 619                     | 0                               | 0         | 0          |

**DESIGN CRITERIA**

SPECIFIED LOADS:  
 TOP CH. LL = 29.0 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 10.5 PSF  
 DL = 7.0 PSF  
 TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. OC

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
 - PART 9 OF CBC 2018, CBC 2012  
 - CSA 088-09, CSA 086-14  
 - TPIC 2011, TPIC 2014

(5% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.25/1.00 (B-G:1), BC=0.12/1.00 (D-F:3), WS=0.07/1.00 (B-D:1), SS=0.16/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
 PLATE GRIP(DRY) SHEAR SECTION  
 (PSI) (PLI) (PLI)  
 MAX MIN MAX MIN MAX MIN  
 MT20 618 354 1567 788 1567 1566

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.32 (B) (INPUT = 0.90)  
 JSI METAL = 0.24 (B) (INPUT = 1.00)

**PLATES (table is in inches)**

| JT | TYPE   | PLATES | W   | LEN | V | X |
|----|--------|--------|-----|-----|---|---|
| A  | TMV+p  | MT20   | 3.0 | 4.0 |   |   |
| B  | TMV+w  | MT20   | 2.0 | 4.0 |   |   |
| C  | TQM1-h | MT20   | 3.0 | 4.0 |   |   |
| D  | BMV1+w | MT20   | 2.0 | 4.0 |   |   |
| E  | BMV1+p | MT20   | 3.0 | 4.0 |   |   |

**UNFACTORED REACTIONS**

| JT | COMBINED | SNOW    | LIVE   | PERM.LIVE | WIND  | DEAD    | SOIL  |
|----|----------|---------|--------|-----------|-------|---------|-------|
| E  | 179      | 100 / 0 | 35 / 0 | 0 / 0     | 0 / 0 | 44 / 0  | 0 / 0 |
| C  | 85       | 48 / 0  | 16 / 0 | 0 / 0     | 0 / 0 | 21 / 0  | 0 / 0 |
| D  | 463      | 254 / 0 | 94 / 0 | 0 / 0     | 0 / 0 | 115 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, C, D

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

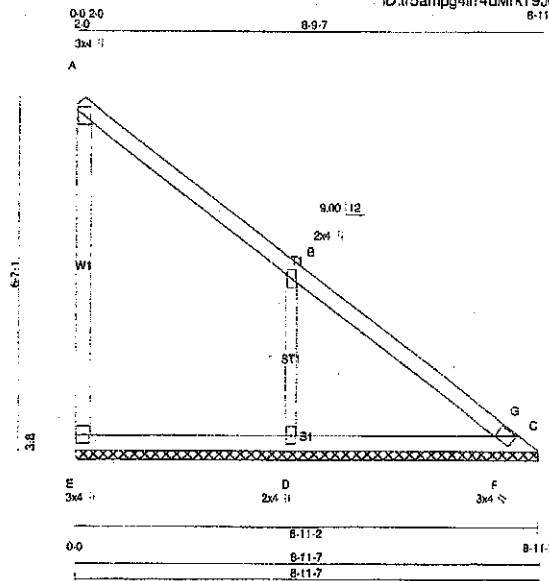
| CHORDS |                           |                           |        |              | WEBS                 |       |                           |              |  |
|--------|---------------------------|---------------------------|--------|--------------|----------------------|-------|---------------------------|--------------|--|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | LC1    | MAX CS1 (LC) | MAX. UNBRACED LENGTH | MEMB. | MAX. FACTORED FORCE (LBS) | MAX CS1 (LC) |  |
| FR-TO  |                           | FROM                      | TO     |              | FR-TO                |       |                           |              |  |
| E-A    | -176 / 0                  | 0.0                       | 0.0    | 0.08 (1)     | 7.81                 | D-B   | -447 / 0                  | 0.07 (1)     |  |
| A-B    | -25 / 0                   | -102.1                    | -102.1 | 0.24 (1)     | 6.25                 | F-G   | 0 / 4                     | 0.00 (1)     |  |
| B-G    | 0 / 34                    | -102.1                    | -102.1 | 0.25 (1)     | 10.00                |       |                           |              |  |
| G-C    | -44 / 0                   | -102.1                    | -102.1 | 0.04 (1)     | 6.25                 |       |                           |              |  |
| E-D    | 0 / 0                     | -38.5                     | -38.5  | 0.12 (3)     | 10.00                |       |                           |              |  |
| D-F    | 0 / 23                    | -38.5                     | -38.5  | 0.12 (3)     | 10.00                |       |                           |              |  |
| F-C    | 0 / 20                    | -38.5                     | -38.5  | 0.02 (2)     | 10.00                |       |                           |              |  |



Structural component only  
 DWG# T-1916688

Tamarack Roof Truss, Burlington

Version 8.300 S May 10 2019 MiTek Industries, Inc. Thu Jun 27 11:05:45 2019 Page 1  
 ID:tr5ampg4il74dMrkT9JQOlyNxsS-0qFrZg14h16vEAdTM4MXpj\_Y33zLMI9Z0Pez26k



Scale = 1/32"

TOTAL WEIGHT = 32 lb

| LUMBER                |      |     |        |
|-----------------------|------|-----|--------|
| N. L. G. A. RULES     | SIZE | DRY | LUMBER |
| CHORDS                |      |     |        |
| E - A                 | 2x4  | DRY | No.2   |
| A - C                 | 2x4  | DRY | No.2   |
| E - C                 | 2x4  | DRY | No.2   |
| ALL WEBS              | 2x3  | DRY | No.2   |
| DRY, SEASONED LUMBER. |      |     |        |

| DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER |      |                         |                                 |           |            |        |        |  |  |
|-----------------------------------------------------------------------------------------------|------|-------------------------|---------------------------------|-----------|------------|--------|--------|--|--|
| BEARINGS                                                                                      |      |                         |                                 |           |            |        |        |  |  |
| DESCR.                                                                                        | SPF  | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | RECORD BRG |        |        |  |  |
| JT                                                                                            | VERT | HORIZ                   | DOWN                            | HORIZ     | UPLIFT     | IN-SX  | IN-SX  |  |  |
| E                                                                                             | 214  | 0                       | 214                             | 0         | 0          | 8-11-2 | 8-11-2 |  |  |
| C                                                                                             | 265  | 0                       | 265                             | 0         | 0          | 8-11-2 | 8-11-2 |  |  |
| D                                                                                             | 776  | 0                       | 776                             | 0         | 0          | 8-11-2 | 8-11-2 |  |  |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
 TOP CH. LL = 29.0 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 10.5 PSF  
 DL = 7.0 PSF  
 TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. OC

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
 PART 9 OF BCBC 2018, OBC 2012  
 CSA 086-09, CSA 086-14  
 TPIC 2011, TPIC 2014

(55 % OF 37.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.32/1.00 (B-G-1), BC=0.18/1.00 (D-F-2), WB=0.11/1.00 (B-D-1), SSI=0.17/1.00 (A-B-1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
 PLATE GRIP(ORY) SHEAR SECTION  
 (PSI) (PLI) (PLI)  
 MAX MIN MAX MIN MAX MIN  
 MT20 618 354 1687 788 1687 1688

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP=0.38 (B) (INPUT = 0.90)  
 JSI METAL=0.28 (B) (INPUT = 1.00)

| PLATES (table is in inches) |        |        |     |     |     |
|-----------------------------|--------|--------|-----|-----|-----|
| JT                          | TYPE   | PLATES | W   | LEN | Y X |
| A                           | TMV+p  | MT20   | 3.0 | 4.0 |     |
| B                           | TMV+w  | MT20   | 2.0 | 4.0 |     |
| C                           | TBM1-h | MT20   | 3.0 | 4.0 |     |
| D                           | BMV1+w | MT20   | 2.0 | 4.0 |     |
| E                           | BMV1+p | MT20   | 3.0 | 4.0 |     |

#### UNFACTORED REACTIONS

| JT | 1ST LCASE | MAX./MIN. COMPONENT REACTIONS | SNOW    | LIVE  | PERM.LIVE | WIND    | DEAD  | SOIL |
|----|-----------|-------------------------------|---------|-------|-----------|---------|-------|------|
| E  | 159       | 89 / 0                        | 31 / 0  | 0 / 0 | 0 / 0     | 39 / 0  | 0 / 0 |      |
| C  | 198       | 110 / 0                       | 39 / 0  | 0 / 0 | 0 / 0     | 49 / 0  | 0 / 0 |      |
| D  | 580       | 319 / 0                       | 117 / 0 | 0 / 0 | 0 / 0     | 144 / 0 | 0 / 0 |      |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, C, D

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
 MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

#### LOADING

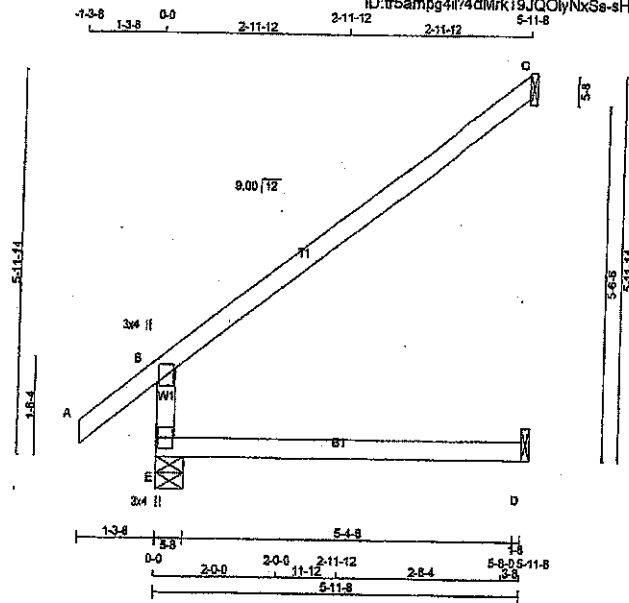
TOTAL LOAD CASES: (4)

| CHORDS |                           |                           |                             | WEBS  |                           |                             |  |
|--------|---------------------------|---------------------------|-----------------------------|-------|---------------------------|-----------------------------|--|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. UNBRACED LENGTH (L.C.) | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. UNBRACED LENGTH (L.C.) |  |
| FR-TO  |                           |                           |                             | FR-TO |                           |                             |  |
| E-A    | -183 / 0                  | 0.0                       | 0.0 0.15 (1)                | D-B   | -530 / 0                  | 0.11 (1)                    |  |
| A-B    | -33 / 0                   | -102.1                    | -102.1 0.32 (1)             | F-G   | -125 / 49                 | 0.00 (1)                    |  |
| B-G    | 0 / 22                    | -102.1                    | -102.1 0.32 (1)             |       |                           |                             |  |
| G-C    | -41 / 0                   | -102.1                    | -102.1 0.08 (3)             |       |                           |                             |  |
| E-D    | 0 / 0                     | -38.5                     | -38.5 0.18 (2)              |       |                           |                             |  |
| D-F    | 0 / 15                    | -38.5                     | -38.5 0.18 (2)              |       |                           |                             |  |
| F-G    | -17 / 0                   | -38.5                     | -38.5 0.16 (1)              |       |                           |                             |  |



Structural component only  
 DWG# T-1916689

|                                 |            |             |     |            |          |
|---------------------------------|------------|-------------|-----|------------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY    | PLY | JOB DESC.  | DRWG NO. |
| 200172-400371                   | J1         | 15          | 1   | Preston 11 |          |
| Tamarack Roof Truss, Burlington |            | TRUSS DESC. |     |            |          |



Scale = 1/32"

| LUMBER | N. L. G. A. RULES | CHORDS | SIZE | DRY | LUMBER | DESCR. |
|--------|-------------------|--------|------|-----|--------|--------|
| E - B  | 2x4               | DRY    | No.2 | SPF |        |        |
| A - C  | 2x4               | DRY    | No.2 | SPF |        |        |
| E - D  | 2x4               | DRY    | No.2 | SPF |        |        |

DRY: SEASONED LUMBER.

**PLATES** (table is in inches)

| JT | TYPE   | PLATES | W   | LEN | Y | X |
|----|--------|--------|-----|-----|---|---|
| B  | TMV+p  | MT20   | 3.0 | 4.0 |   |   |
| E  | BMV1+p | MT20   | 3.0 | 4.0 |   |   |

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

| FACTORED       | MAXIMUM FACTORED | INPUT | REQD |
|----------------|------------------|-------|------|
| GROSS REACTION | GROSS REACTION   | BRG   | BRG  |
| JT             | VERT             | DOWN  | UP   |
| E              | 581              | 0     | 0    |
| C              | 228              | 0     | 0    |
| D              | 44               | 0     | 0    |

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

**UNFACTORED REACTIONS**

| JT | COMBINED | SNOW  | LIVE | PERM | WIND | DEAD  | SOIL |
|----|----------|-------|------|------|------|-------|------|
| E  | 406      | 288/0 | 0/0  | 0/0  | 0/0  | 109/0 | 0/0  |
| C  | 157      | 130/0 | 0/0  | 0/0  | 0/0  | 27/0  | 0/0  |
| D  | 35       | 0/0   | 0/0  | 0/0  | 0/0  | 35/0  | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

| CHORDS | MEMB. | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (LBS) | FACTORED HORZ. LOAD (LBS) | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (LBS) | FACTORED HORZ. LOAD (LBS) |
|--------|-------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| FR-TO  |       |                           |                           |                           |                           |                           |                           |
| E-B    |       | -521/0                    | 0.0                       | 0.0                       | 11 (4)                    | 7.61                      |                           |
| A-B    |       | 0/42                      | -102.1                    | -102.1                    | 0.14 (1)                  | 10.00                     |                           |
| B-C    |       | -46/0                     | -102.1                    | -102.1                    | 0.82 (1)                  | 6.25                      |                           |
| E-D    |       | 0/0                       | -17.5                     | -17.5                     | 0.13 (4)                  | 10.00                     |                           |



TOTAL WEIGHT = 15 X 19 = 279 lb

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 29.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 42.0 PSF

**SPACING = 24.0 IN/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF NBC 2010, NBC 2015  
- CSA 086-08, CSA 086-14  
- TPIC 2011, TPIC 2014

**DESIGN ASSUMPTIONS**  
- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 37.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = 1/999 (0.00")  
ALLOWABLE DEFL.(TL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = 1/999 (0.03")

CSI: TO=0.82/1.00 (B-C:1), BO=0.13/1.00 (D-E:4),  
WB=0.00/1.00 (p/a:0), SSI=0.24/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

**NAIL VALUES**  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

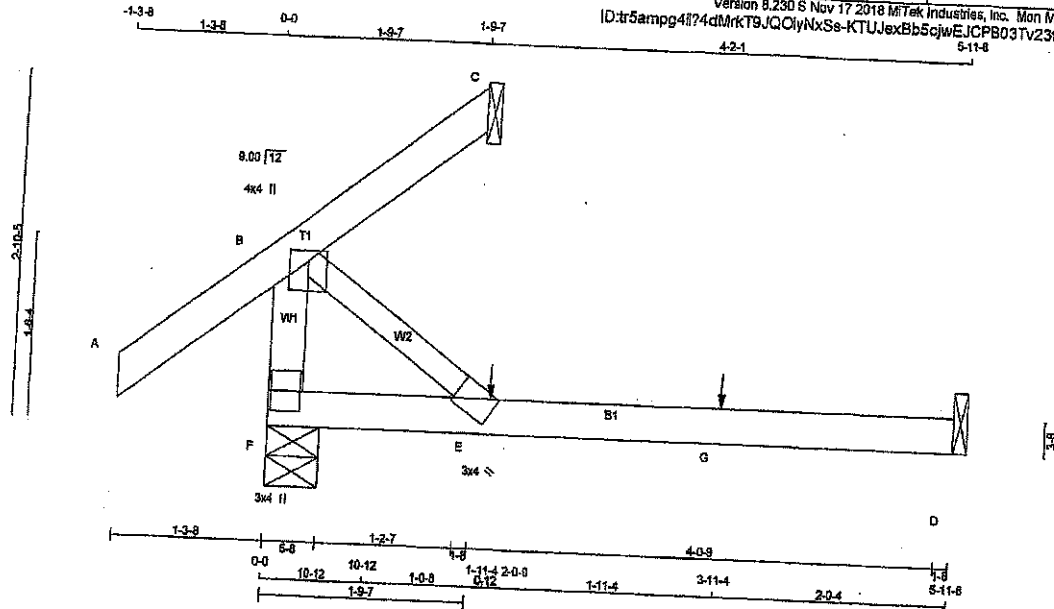
JSI GRIP= 0.24 (B) (INPUT = 0.90)  
JSI METAL= 0.16 (B) (INPUT = 1.00)

DATE: 10/10/2019  
TAM 11905550  
STRUCTURAL  
CHECK ONLY

|                                  |                         |                      |                 |                                |             |          |
|----------------------------------|-------------------------|----------------------|-----------------|--------------------------------|-------------|----------|
| JOB NAME<br><b>200172-400371</b> | TRUSS NAME<br><b>J2</b> | QUANTITY<br><b>2</b> | PLY<br><b>1</b> | JOB DESC.<br><b>Preston 11</b> | TRUSS DESC. | DRWG NO. |
| Tamarack Roof Truss, Burlington  |                         |                      |                 |                                |             |          |

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Mon Mar 18 20:52:34 2019 Page 1  
ID:tr5ampg4i74dMrkT9JQClyNxSs-KTUJexBb5cjwEJCpB03TV23tcHpU6j7mwjGQZdzZbth

Scale = 1:17.7



**LUMBER**  
N.L.G.A. RULES  
CHORDS SIZE LUMBER  
F - B 2x4 DRY No.2  
A - C 2x4 DRY No.2  
F - D 2x4 DRY No.2  
ALL WEBS 2x4 DRY No.2  
DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE    | PLATES | W   | LEN | Y    | X    |
|----|---------|--------|-----|-----|------|------|
| B  | TM/VW+p | MT20   | 4.0 | 4.0 | 1.00 | 2.00 |
| E  | BMV+w   | MT20   | 3.0 | 4.0 | 2.00 | 1.25 |
| F  | BMV+p   | MT20   | 3.0 | 4.0 |      |      |

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

| JT | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQD BRG |
|----|-------------------------|---------------------------------|-----------|----------|
| F  | 401                     | 401                             | 0         | 0        |
| C  | 37                      | 37                              | 0         | 0        |
| D  | 115                     | 146                             | 0         | 0        |

SEE MITEK STANDARD DETAIL 837821H FOR CONNECTION TO JOINT(S) C, D

**UNFACTORED REACTIONS**

| JT | 1ST LCASE | MAX/MIN COMPONENT REACTIONS | PERM LIVE | WIND  | DEAD   | SOIL  |
|----|-----------|-----------------------------|-----------|-------|--------|-------|
| F  | 301       | 163 / 0                     | 63 / 0    | 0 / 0 | 0 / 0  | 0 / 0 |
| C  | 25        | 21 / 0                      | 0 / 0     | 0 / 0 | 75 / 0 | 0 / 0 |
| D  | 104       | 0 / 0                       | 83 / 0    | 0 / 0 | 4 / 0  | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

| MEMB. | CHORDS MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. CSI (LC) | MAX. UNBRACED LENGTH (FT) | WEBS MAX. FACTORED FORCE (LBS) | MAX. CSI (LC) |
|-------|----------------------------------|---------------------------|---------------|---------------------------|--------------------------------|---------------|
| F-B   | -288 / 0                         | 0.0                       | 0.03 (1)      | 7.81                      | 0 / 0                          | 0.00 (1)      |
| A-B   | 0 / 42                           | -102.1                    | 0.15 (1)      | 10.00                     | 0 / 0                          | 0.00 (1)      |
| B-C   | -39 / 0                          | -102.1                    | 0.15 (1)      | 6.25                      | 0 / 0                          | 0.00 (1)      |
| F-E   | 0 / 0                            | -38.5                     | 0.28 (2)      | 10.00                     | 0 / 0                          | 0.00 (1)      |
| E-G   | 0 / 0                            | -38.5                     | 0.33 (2)      | 10.00                     | 0 / 0                          | 0.00 (1)      |
| G-D   | 0 / 0                            | -38.5                     | 0.33 (2)      | 10.00                     | 0 / 0                          | 0.00 (1)      |

**FACTORED CONCENTRATED LOADS (LBS)**

| JT | LOC.   | LC1 | MAX. | MAX+ | FACE  | DIR. | TYPE  | HEEL | CONN. |
|----|--------|-----|------|------|-------|------|-------|------|-------|
| F  | 1-11-4 | 1   | 1    | 1    | FRONT | VERT | TOTAL | 1    | 1     |
| G  | 3-11-4 | 1   | 1    | 1    | FRONT | VERT | TOTAL | 1    | 1     |

**DESIGN CRITERIA**

SPECIFIED LOADS:  
TOP CH. LL = 29.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2010, CBC 2012  
- CSA 088-09, CSA 088-14  
- TPIC 2011, TPIC 2014

DESIGN ASSUMPTIONS  
- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = L/887 (0.08")  
ALLOWABLE DEFL.(TL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = L/532 (0.13")

CSH: TC=0.15/1.00 (A-B-1), BC=0.33/1.00 (D-E-2), WB=0.00/1.00 (B-E-1), SH=0.13/1.00 (E-F-2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00  
COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

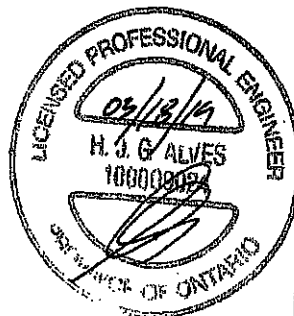
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 818 354 1887 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

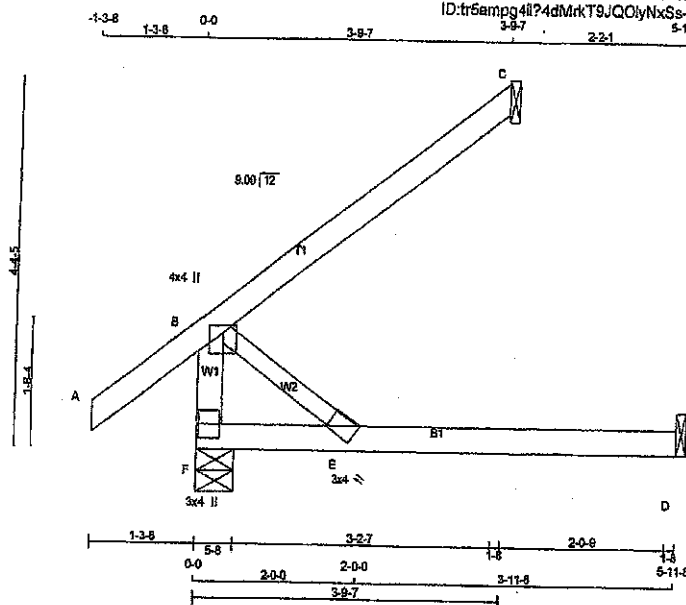
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.23 (B) (INPUT = 0.80)  
JSI METAL= 0.05 (B) (INPUT = 1.00)



ENGR NO. TAM 77905571  
STRUCTURAL  
CC-004-050V ONLY

|                                 |                  |               |          |                         |          |
|---------------------------------|------------------|---------------|----------|-------------------------|----------|
| JOB NAME<br>200172-400371       | TRUSS NAME<br>J3 | QUANTITY<br>2 | PLY<br>1 | JOB DESC.<br>Preston 11 | DRWG NO. |
| Tamarack Roof Truss, Burlington |                  |               |          |                         |          |



| LUMBER                | N. L. G. A. RULES | CHORDS | SIZE | LUMBER | DESCR. |
|-----------------------|-------------------|--------|------|--------|--------|
| F - B                 | 2x4               | DRY    | No.2 | SPF    |        |
| A - C                 | 2x4               | DRY    | No.2 | SPF    |        |
| F - D                 | 2x4               | DRY    | No.2 | SPF    |        |
| ALL WEBS              | 2x4               | DRY    | No.2 | SPF    |        |
| DRY: SEASONED LUMBER. |                   |        |      |        |        |

| PLATES (table is in inches) | JT TYPE | PLATES | W   | LEN | Y    | X    |
|-----------------------------|---------|--------|-----|-----|------|------|
| B                           | TMW+p   | MT20   | 4.0 | 4.0 | 1.00 | 2.00 |
| E                           | BMW+w   | MT20   | 3.0 | 4.0 |      |      |
| F                           | BMV1+p  | MT20   | 3.0 | 4.0 |      |      |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQD BRG |
|----------|-------------------------|---------------------------------|-----------|----------|
| JT       | VERT                    | HORZ                            | DOWN      | HORZ     |
| F        | 449                     | 0                               | 449       | 0        |
| C        | 193                     | 0                               | 193       | 0        |
| D        | 115                     | 0                               | 146       | 0        |

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

#### UNFACTORED REACTIONS

| 1ST LOSE | MAX/MIN. COMPONENT REACTIONS | PERM. LIVE | WIND | DEAD       | SOIL |
|----------|------------------------------|------------|------|------------|------|
| JT       | COMBINED                     | SNOW       | LIVE | PERM. LIVE | WIND |
| F        | 334                          | 190/0      | 63/0 | 0/0        | 81/0 |
| C        | 133                          | 110/0      | 0/0  | 0/0        | 23/0 |
| D        | 104                          | 0/0        | 63/0 | 0/0        | 42/0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. FACTORED VERT. LOAD (LBS) | MAX. FACTORED HORZ. LOAD (LBS) | WEBS  | MAX. FACTORED FORCE (LBS) | MAX. FACTORED HORZ. LOAD (LBS) |
|--------|---------------------------|---------------------------|--------------------------------|--------------------------------|-------|---------------------------|--------------------------------|
| PR-TO  |                           | FROM                      | TO                             | LENGTH                         | FR-TO |                           |                                |
| F-B    | -394/0                    | 0.0                       | 0.0                            | 0.03 (1)                       | 7.81  | 0/0                       | 0.00 (1)                       |
| A-B    | 0/42                      | -102.1                    | -102.1                         | 0.14 (1)                       | 10.00 |                           |                                |
| B-C    | 0/0                       | -102.1                    | -102.1                         | 0.25 (1)                       | 10.00 |                           |                                |
| F-E    | 0/0                       | -38.5                     | -38.5                          | 0.28 (3)                       | 10.00 |                           |                                |
| E-D    | 0/0                       | -38.5                     | -38.5                          | 0.31 (3)                       | 10.00 |                           |                                |

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

|            |            |
|------------|------------|
| TOP CH. LL | = 29.0 PSF |
| DL         | = 6.0 PSF  |
| BOT CH. LL | = 10.5 PSF |
| DL         | = 7.0 PSF  |
| TOTAL LOAD | = 52.5 PSF |

##### SPACING = 24.0 IN/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF NBC 2018, NBC 2012  
- CSA 088-09, CSA 088-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = 1/867 (0.08")  
ALLOWABLE DEFL.(TL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = 1/532 (0.13")

CSI: TC=0.25/1.00 (B-C:1), BC=0.31/1.00 (D-E:3), WB=0.00/1.00 (B-E:1), SSI=0.12/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

#### NAIL VALUES

| PLATE GRIP(DRY) | SHEAR (PSI) | SECTION (PLI) |
|-----------------|-------------|---------------|
| MAX MIN         | MAX MIN     | MAX MIN       |
| MT20            | 618 354     | 1667 785      |

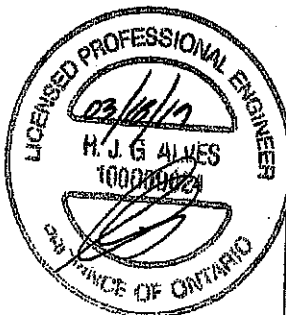
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.27 (B) (INPUT = 0.80)  
JSI METAL = 0.07 (B) (INPUT = 1.00)

**RECEIVED**  
AUG 28 2019

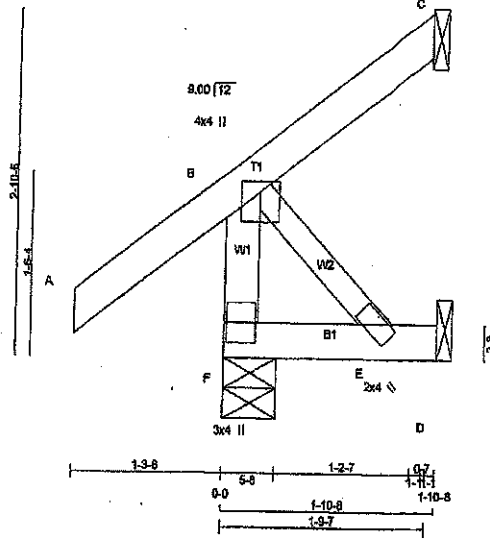
TOWN OF CALEDON  
BUILDING SECTION  
FILE NO.



ENG. NO. TAM 17905552  
STRUCTURAL  
CONSULTANT ONLY

|                                 |                  |               |          |                         |          |
|---------------------------------|------------------|---------------|----------|-------------------------|----------|
| JOB NAME<br>200172-400371       | TRUSS NAME<br>J4 | QUANTITY<br>4 | PLY<br>1 | JOB DESC.<br>Preston 11 | DRWG NO. |
| Tamarack Roof Truss, Burlington |                  |               |          |                         |          |

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Mon Mar 18 20:52:37 2019 Page 1  
 ID:tr5ampg4174dMkT9JQOlyNxSs-k2ARgZDT0X5V5mw\_s9dAWghO4Vvml4tDchV4AyzZbie  
 1-3-8 1-3-8 0-0 1-2-7 1-9-7 1-10-8  
 Scale = 1:17.7



| LUMBER                |        |      |        |        |
|-----------------------|--------|------|--------|--------|
| N. L. G. A. RULES     | CHORDS | SIZE | LUMBER | DESCR. |
| F - B                 | 2x4    | DRY  | No.2   | SPF    |
| A - C                 | 2x4    | DRY  | No.2   | SPF    |
| F - D                 | 2x4    | DRY  | No.2   | SPF    |
| ALL WEBS              | 2x8    | DRY  | No.2   | SPF    |
| DRY: SEASONED LUMBER. |        |      |        |        |

| PLATES (table is in inches) |        |      |     |     |           |
|-----------------------------|--------|------|-----|-----|-----------|
| JT TYPE                     | PLATES | W    | LEN | Y   | X         |
| B                           | TMVV+p | MT20 | 4.0 | 4.0 | 1.00 2.00 |
| E                           | BMV+w  | MT20 | 2.0 | 4.0 |           |
| F                           | BMV1+p | MT20 | 3.0 | 4.0 |           |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| FACTORED GROSS REACTION |      | MAXIMUM FACTORED GROSS REACTION |      | INPUT |        | REQ'D |       |
|-------------------------|------|---------------------------------|------|-------|--------|-------|-------|
| JT                      | VERT | HORZ                            | DOWN | HORZ  | UPLIFT | BRG   | IN-SX |
| F                       | 322  | 0                               | 322  | 0     | 0      | 5-8   | 5-8   |
| C                       | 37   | 0                               | 37   | 0     | -45    | 1-8   | 1-8   |
| D                       | 38   | 0                               | 48   | 0     | 0      | 1-8   | 1-8   |

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT

#### UNFACTORED REACTIONS

| JT | COMBINED | MAX/MIN COMPONENT REACTIONS |        |       |           |       | DEAD   | SOIL  |
|----|----------|-----------------------------|--------|-------|-----------|-------|--------|-------|
|    |          | 1ST LOASE                   | SNOW   | LIVE  | PERM LIVE | WIND  |        |       |
| F  | 229      | 163 / 0                     | 20 / 0 | 0 / 0 | 0 / 0     | 0 / 0 | 47 / 0 | 0 / 0 |
| C  | 25       | 21 / -31                    | 0 / 0  | 0 / 0 | 0 / 0     | 0 / 0 | 4 / 0  | 0 / 0 |
| D  | 33       | 0 / 0                       | 20 / 0 | 0 / 0 | 0 / 0     | 0 / 0 | 13 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.  
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (5)

| CHORDS |             | FACTORED   |        |          |          | WEBS   |       | MAX. FACTORED |              |
|--------|-------------|------------|--------|----------|----------|--------|-------|---------------|--------------|
| MEMB.  | FORCE (LBS) | VERT. LOAD | LC1    | MAX      | CS1 (LC) | UNGRAC | MEMB. | FORCE (LBS)   | MAX CS1 (LC) |
| FR-TO  |             | FROM       | TO     |          |          | LENGTH | FR-TO |               |              |
| F-B    | -288 / 0    | 0.0        | 0.0    | 0.03 (1) | 7.81     |        | B-E   | 0 / 0         | 0.00 (1)     |
| A-B    | 0 / 42      | -102.1     | -102.1 | 0.14 (1) | 10.00    |        |       |               |              |
| B-C    | -33 / 0     | -102.1     | -102.1 | 0.13 (1) | 6.25     |        |       |               |              |
| F-E    | 0 / 0       | -38.5      | -38.5  | 0.03 (3) | 10.00    |        |       |               |              |
| E-D    | 0 / 0       | -38.5      | -38.5  | 0.03 (3) | 10.00    |        |       |               |              |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

TOTAL WEIGHT = 4 X 9 = 37 lb

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

TOP CH. LL = 28.0 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 10.5 PSF  
 DL = 7.0 PSF  
 TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
 - PART 9 OF BCBC 2018, OBC 2012  
 - CSA 086-09, CSA 086-14  
 - TPIC 2011, TPIC 2014

##### DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 37.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.19")  
 CALCULATED VERT. DEFL.(LL) = L/999 (0.00")  
 ALLOWABLE DEFL.(TL) = L/360 (0.19")  
 CALCULATED VERT. DEFL.(TL) = L/999 (0.00")

CSI: TC=0.14/1.00 (A-B), BC=0.03/1.00 (E-F),  
 WB=0.00/1.00 (B-E), SS=0.09/1.00 (B-C)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

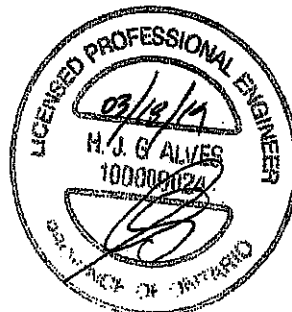
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
 PLATE GRIP(DRY) SHEAR SECTION  
 (PSI) (PLI) (PLI)  
 MAX MIN MAX MIN MAX MIN  
 MT20 618 354 1667 786 1967 1668

PLATE PLACEMENT TOL. = 0.250 inches

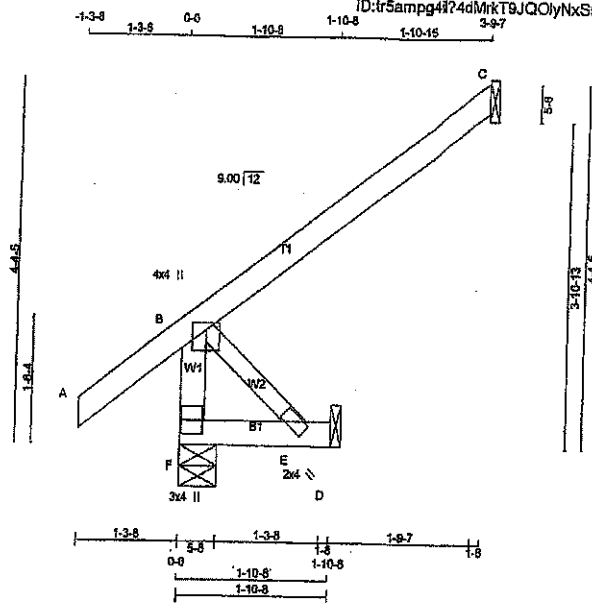
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.23 (B) (INPUT = 0.80)  
 JSI METAL = 0.06 (B) (INPUT = 1.00)



DESIGNATED 77905563  
 STRUCTURAL  
 DESIGN ONLY

|                                 |            |          |     |             |          |
|---------------------------------|------------|----------|-----|-------------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY | PLY | JOB DESC.   | DRWG NO. |
| 200172-400371                   | J5         | 4        | 1   | Preston 11  |          |
| Tamarack Roof Truss, Burlington |            |          |     | TRUSS DESC. |          |



| LUMBER                | N. L. G. A. RULES | CHORDS | SIZE | LUMBER | DESCR. |
|-----------------------|-------------------|--------|------|--------|--------|
| F - B                 | 2x4               | DRY    | No.2 | SPF    |        |
| A - C                 | 2x4               | DRY    | No.2 | SPF    |        |
| F - D                 | 2x4               | DRY    | No.2 | SPF    |        |
| ALL WEBS              | 2x4               | DRY    | No.2 | SPF    |        |
| DRY: SEASONED LUMBER. |                   |        |      |        |        |

#### PLATES (table is in inches)

| JT | TYPE   | PLATES | W   | LEN | Y    | X    |
|----|--------|--------|-----|-----|------|------|
| B  | TMVW+p | MT20   | 4.0 | 4.0 | 1.00 | 2.00 |
| E  | BMVW+w | MT20   | 2.0 | 4.0 |      |      |
| F  | BMV1+p | MT20   | 3.0 | 4.0 |      |      |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS |                | FACTORED |                |      | MAXIMUM FACTORED |       |       | INPUT | REQD |
|----------|----------------|----------|----------------|------|------------------|-------|-------|-------|------|
| JT       | GROSS REACTION |          | GROSS REACTION |      |                  | BRG   | BRG   |       |      |
| F        | VERT           | HORZ     | DOWN           | HORZ | UPLIFT           | IN-SX | IN-SX |       |      |
| C        | 370            | 0        | 370            | 0    | 0                | 5-8   | 5-8   |       |      |
| D        | 193            | 0        | 193            | 0    | 0                | 1-8   | 1-8   |       |      |
|          | 35             | 0        | 46             | 0    | 0                | 1-8   | 1-8   |       |      |

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

#### UNFACTORED REACTIONS

| 1ST LCASE |          | MAX. MIN. COMPONENT REACTIONS |      |            |      |      |      |
|-----------|----------|-------------------------------|------|------------|------|------|------|
| JT        | COMBINED | SNOW                          | LIVE | PERM. LIVE | WIND | DEAD | SOIL |
| F         | 262      | 190/0                         | 20/0 | 0/0        | 0/0  | 52/0 | 0/0  |
| C         | 133      | 110/0                         | 0/0  | 0/0        | 0/0  | 28/0 | 0/0  |
| D         | 33       | 0/0                           | 20/0 | 0/0        | 0/0  | 18/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (5)

| CHORDS |                           |                           |                  | WEBS                    |       |                           |                  |
|--------|---------------------------|---------------------------|------------------|-------------------------|-------|---------------------------|------------------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | LC1 MAX CSI (LC) | LC2 MAX UNBRACED LENGTH | MEMB. | MAX. FACTORED FORCE (LBS) | LC1 MAX CSI (LC) |
| FR-TO  |                           | FROM                      | TO               |                         | FR-TO |                           |                  |
| F-B    | -334/0                    | 0.0                       | 0.0              | 0.03 (1)                | 7.81  | B-E                       | 0/0              |
| A-B    | 0/42                      | -102.1                    | -102.1           | 0.14 (1)                | 10.00 |                           | 0.00 (1)         |
| B-C    | 0/0                       | -102.1                    | -102.1           | 0.25 (1)                | 10.00 |                           |                  |
| F-E    | 0/0                       | -38.5                     | -38.5            | 0.04 (3)                | 10.00 |                           |                  |
| E-D    | 0/0                       | -38.5                     | -38.5            | 0.03 (3)                | 10.00 |                           |                  |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

TOTAL WEIGHT = 4 X 12 = 48 lb

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

|            |           |     |
|------------|-----------|-----|
| TOP CH.    | LL = 28.0 | PSF |
| DL = 6.0   | PSF       |     |
| BOT CH.    | LL = 10.5 | PSF |
| DL = 7.0   | PSF       |     |
| TOTAL LOAD | = 52.5    | PSF |

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF NBC 2010, NBC 2012  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) =  $L/360$  (0.18")  
CALCULATED VERT. DEFL. (LL) =  $L/999$  (0.00")  
ALLOWABLE DEFL. (TL) =  $L/360$  (0.18")  
CALCULATED VERT. DEFL. (TL) =  $L/999$  (0.00")

CSI: TO=0.25/1.00 (B-C:1), BC=0.04/1.00 (E-F:3),

WB=0.00/1.00 (B-E:1), SSI=0.12/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

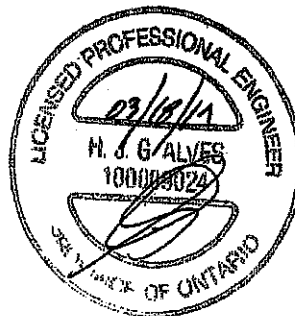
#### NAIL VALUES

| PLATE   | GRIP(DRY) | SHEAR   | SECTION |
|---------|-----------|---------|---------|
| (PSI)   | (PLI)     | (PLI)   | (PLI)   |
| MAX MIN | MAX MIN   | MAX MIN | MAX MIN |
| MT20    | 618       | 354     | 1667    |
|         | 738       | 1987    | 1636    |

PLATE PLACEMENT TOL = 0.250 inches

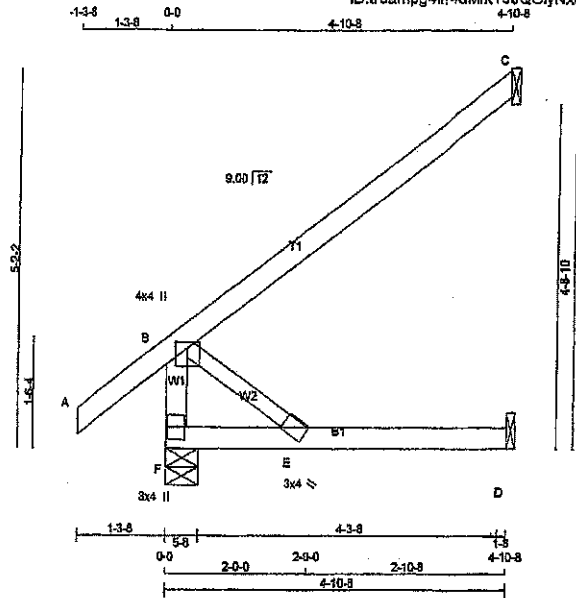
PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.27 (B) (INPUT = 0.90)  
JSI METAL= 0.07 (B) (INPUT = 1.00)



DESIGNED BY TMM 7405554  
STRUCTURAL  
CHECKED BY ONLY

|                                 |            |          |     |             |          |
|---------------------------------|------------|----------|-----|-------------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY | PLY | JOB DESC.   | DRWG NO. |
| 200172-400371                   | J6         | 2        | 1   | Preston 11  |          |
| Tamarack Roof Truss, Burlington |            |          |     | TRUSS DESC. |          |



TOTAL WEIGHT = 2 X 17 = 35 lb

| LUMBER                |      |        |        |
|-----------------------|------|--------|--------|
| N. L. G. A. RULES     | SIZE | LUMBER | DESCR. |
| CHORDS                | 2x4  | No.2   | SPF    |
| F - B                 | 2x4  | DRY    | No.2   |
| A - C                 | 2x4  | DRY    | No.2   |
| F - D                 | 2x4  | DRY    | No.2   |
| ALL WEBS              | 2x3  | DRY    | No.2   |
| DRY: SEASONED LUMBER. |      |        |        |

| DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER |                         |                                 |           |          |        |       |       |  |  |
|-----------------------------------------------------------------------------------------------|-------------------------|---------------------------------|-----------|----------|--------|-------|-------|--|--|
| BEARINGS                                                                                      |                         |                                 |           |          |        |       |       |  |  |
| JT                                                                                            | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQD BRG |        |       |       |  |  |
| F                                                                                             | VERT                    | HORZ                            | DOWN      | HORZ     | UPLIFT | IN-SX | IN-SX |  |  |
| F                                                                                             | 484                     | 0                               | 484       | 0        | 0      | 5-8   | 5-8   |  |  |
| C                                                                                             | 249                     | 0                               | 249       | 0        | 0      | 1-8   | 1-8   |  |  |
| D                                                                                             | 94                      | 0                               | 119       | 0        | 0      | 1-8   | 1-8   |  |  |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
 TOP CH. LL = 29.0 PSF  
 DL = 6.0 PSF  
 BOT CH. LL = 10.5 PSF  
 DL = 7.0 PSF  
 TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
 - PART 9 OF BCBC 2018, OBC 2012  
 - CSA 086-09, CSA 088-14  
 - TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = 1/360 (0.19")  
 CALCULATED VERT. DEFL. (LL) = 1/899 (0.04")  
 ALLOWABLE DEFL. (TL) = 1/360 (0.19")  
 CALCULATED VERT. DEFL. (TL) = 1/971 (0.05")

CSI: TO=0.41/1.00 (B-C:1), BC=0.21/1.00 (D-E:3), WB=0.00/1.00 (B-E:1), SS=0.16/1.00 (B-C:1)

DOL LUMBER=1.00, NAIL=1.00 LS BEND=1.10  
 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
 PLATE GRIP (DRY) SHEAR SECTION  
 (PSI) (PLI) (PLI)  
 MAX MIN MAX MIN MAX MIN  
 MT20 618 354 1657 788 1987 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.31 (B) (INPUT = 0.90)  
 JSI METAL = 0.08 (B) (INPUT = 1.00)

| PLATES (table is in inches) |        |        |     |     |           |
|-----------------------------|--------|--------|-----|-----|-----------|
| JT                          | TYPE   | PLATES | W   | LEN | Y X       |
| B                           | TMVW+p | MT20   | 4.0 | 4.0 | 1.00 2.00 |
| E                           | BMVW+w | MT20   | 3.0 | 4.0 |           |
| F                           | BMV1+p | MT20   | 3.0 | 4.0 |           |

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

#### UNFACTORED REACTIONS

| JT | COMBINED | SNOW  | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|----|----------|-------|------|-----------|------|------|------|
| F  | 353      | 222/0 | 51/0 | 0/0       | 0/0  | 80/0 | 0/0  |
| C  | 171      | 142/0 | 0/0  | 0/0       | 0/0  | 29/0 | 0/0  |
| D  | 85       | 0/0   | 51/0 | 0/0       | 0/0  | 34/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURUN SPACING = 10.00 FT.  
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS |                           |                           |                        | WEBS  |                           |                        |  |
|--------|---------------------------|---------------------------|------------------------|-------|---------------------------|------------------------|--|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. FACTORED CS1 (LC) | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. FACTORED CS1 (LC) |  |
| FR-TO  |                           | FROM                      | TO                     | FR-TO |                           |                        |  |
| F-B    | -380/0                    | 0.0                       | 0.0 0.04 (1)           | B-E   | 0/0                       | 0.00 (1)               |  |
| A-B    | 0/42                      | -102.1                    | -102.1 0.14 (1)        |       |                           |                        |  |
| B-C    | 0/0                       | -102.1                    | -102.1 0.41 (1)        |       |                           |                        |  |
| F-E    | 0/0                       | -38.5                     | -38.5 0.20 (3)         |       |                           |                        |  |
| E-D    | 0/0                       | -38.5                     | -38.5 0.21 (3)         |       |                           |                        |  |

RECEIVED  
 AUG 28 2019

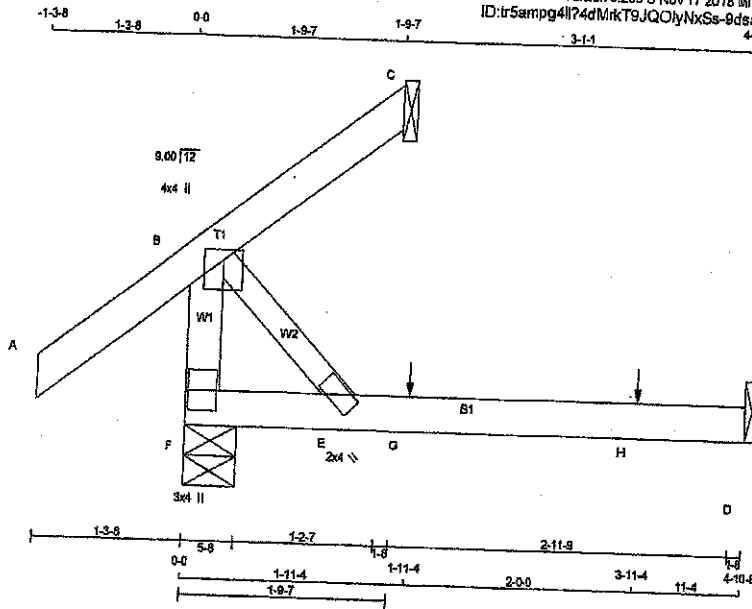
TOWN OF CALEDON  
 BUILDING SECTION  
 FILE NO.



ENGINEER TAM 77905565  
 STRUCTURAL  
 CALCULATIONS ONLY

|                                                              |                  |               |          |                         |             |          |
|--------------------------------------------------------------|------------------|---------------|----------|-------------------------|-------------|----------|
| JOB NAME<br>200172-400371<br>Tamarack Roof Truss, Burlington | TRUSS NAME<br>J7 | QUANTITY<br>2 | PLY<br>1 | JOB DESC.<br>Preston 11 | TRUSS DESC. | DRWG NO. |
|--------------------------------------------------------------|------------------|---------------|----------|-------------------------|-------------|----------|

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Mon Mar 18 20:52:40 2019 Page 1  
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Scale = 1:17.7

**LUMBER**

| N.L.G.A. RULES        | SIZE | LUMBER   |
|-----------------------|------|----------|
| CHORDS                | 2x4  | DRY No.2 |
| F - B                 | 2x4  | DRY No.2 |
| A - C                 | 2x4  | DRY No.2 |
| F - D                 | 2x4  | DRY No.2 |
| ALL WEBS              | 2x3  | DRY No.2 |
| DRY: SEASONED LUMBER. |      |          |

**PLATES (Table is in inches)**

| JT | TYPE   | PLATES | W   | LEN | Y    | X    |
|----|--------|--------|-----|-----|------|------|
| B  | TMVW+p | MT20   | 4.0 | 4.0 | 1.00 | 2.00 |
| E  | BMV+w  | MT20   | 2.0 | 4.0 |      |      |
| F  | BMV1+p | MT20   | 3.0 | 4.0 |      |      |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

**BEARINGS**

| JT | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG IN-SX | RECORD BRG IN-SX |
|----|-------------------------|---------------------------------|-----------------|------------------|
| F  | 380                     | 380                             | 5-8             | 5-8              |
| C  | 37                      | 37                              | 1-8             | 1-8              |
| D  | 84                      | 119                             | 1-8             | 1-8              |

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX/MIN. COMPONENT REACTIONS | PERM. LIVE | WIND | DEAD | SOIL |
|----|--------------------|------------------------------|------------|------|------|------|
| F  | 282                | 163/0                        | 51/0       | 0/0  | 68/0 | 0/0  |
| C  | 25                 | 21/0                         | 0/0        | 0/0  | 4/0  | 0/0  |
| D  | 65                 | 0/0                          | 51/0       | 0/0  | 34/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

| MEMB. | CHORDS                    |                  | FACTORED      |                           | WEBS                            |                        |
|-------|---------------------------|------------------|---------------|---------------------------|---------------------------------|------------------------|
|       | MAX. FACTORED FORCE (LBS) | VERT. LOAD (LBS) | LC1 MAX (LBS) | MAX. UNBRACED LENGTH (FT) | MEMB. MAX. FACTORED FORCE (LBS) | MAX. FACTORED CSI (LC) |
| F-B   | -268/0                    | 0.0              | 0.0           | 0.03 (1)                  | 7.81                            | 0.00 (1)               |
| A-B   | 0/42                      | -102.1           | -102.1        | 0.15 (1)                  | 10.00                           |                        |
| B-C   | -33/0                     | -102.1           | -102.1        | 0.15 (1)                  | 8.25                            |                        |
| F-E   | 0/0                       | -38.5            | -38.5         | 0.17 (2)                  | 10.00                           |                        |
| E-G   | 0/0                       | -38.5            | -38.5         | 0.22 (2)                  | 10.00                           |                        |
| G-H   | 0/0                       | -38.5            | -38.5         | 0.22 (2)                  | 10.00                           |                        |
| H-D   | 0/0                       | -38.5            | -38.5         | 0.22 (2)                  | 10.00                           |                        |

FACTORED CONCENTRATED LOADS (LBS)

| JT | LOC.   | LC1 | MAX. | MAX+ | FACE | DIR. | TYPE  | HEEL | CONN. |
|----|--------|-----|------|------|------|------|-------|------|-------|
| G  | 1-11-4 | 1   | 1    |      | BACK | VERT | TOTAL |      |       |
| H  | 3-11-4 | 1   | 1    |      | BACK | VERT | TOTAL |      |       |

TOTAL WEIGHT = 2 X 13 = 25 lb

**DESIGN CRITERIA**

**SPECIFIED LOADS:**

|            |           |     |
|------------|-----------|-----|
| TOP CH.    | LL = 29.0 | PSF |
| DL         | = 6.0     | PSF |
| BOT CH.    | LL = 10.5 | PSF |
| DL         | = 7.0     | PSF |
| TOTAL LOAD | = 62.5    | PSF |

SPACING = 24.0 IN. G/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2015, OBC 2012  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

**DESIGN ASSUMPTIONS**

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(58 % OF 37.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(LL) = 1/899 (0.04")  
ALLOWABLE DEFL.(TL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(TL) = 1/971 (0.06")

CSI: TO=0.15/1.00 (A-B:1), 60=0.22/1.00 (D-E:2),  
WB=0.09/1.00 (B-E:1), SB=0.10/1.00 (E-F:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00  
COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION  
(PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 510 354 1657 769 1987 1656

PLATE PLACEMENT TOL = 0.250 inches

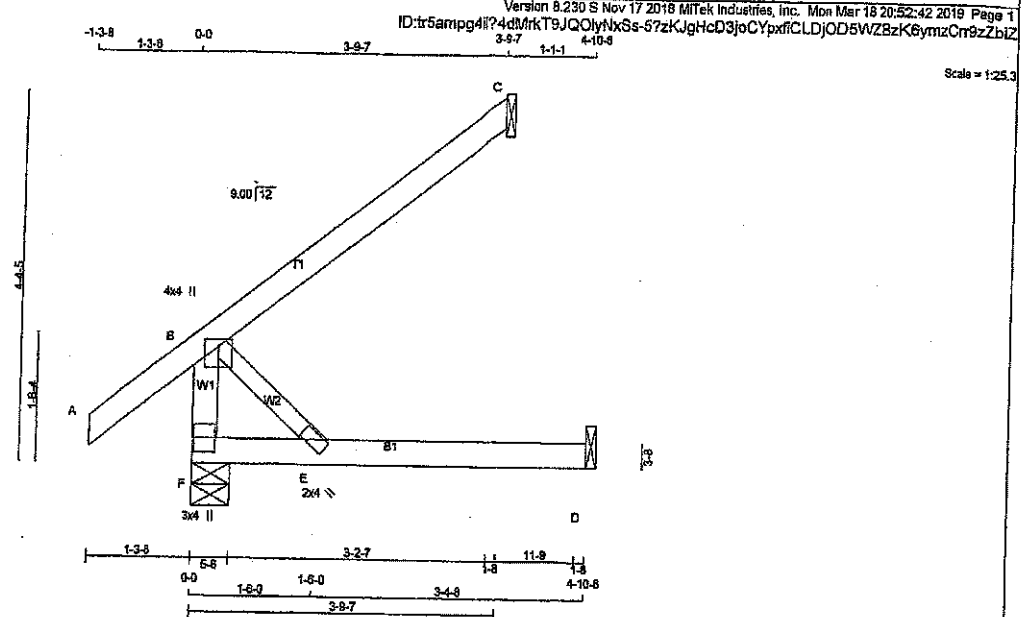
PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.23 (B) (INPUT = 0.80)  
JSI METAL= 0.08 (B) (INPUT = 1.00)



ENGINEER: IAM 77905566  
STRUCTURAL  
CHECK: JERRY ONLY

|                                 |                  |               |          |                         |          |
|---------------------------------|------------------|---------------|----------|-------------------------|----------|
| JOB NAME<br>200172-400371       | TRUSS NAME<br>J8 | QUANTITY<br>2 | PLY<br>1 | JOB DESC.<br>Preston 11 | DRWG NO. |
| Tamarack Roof Truss, Burlington |                  | TRUSS DESC.   |          |                         |          |



| LUMBER                | N. L. G. A. RULES | CHORDS | SIZE | LUMBER | DESCR. |
|-----------------------|-------------------|--------|------|--------|--------|
| F - B                 | 2x4               | DRY    | No.2 | SPF    |        |
| A - C                 | 2x4               | DRY    | No.2 | SPF    |        |
| F - D                 | 2x4               | DRY    | No.2 | SPF    |        |
| ALL WEBS              | 2x3               | DRY    | No.2 | SPF    |        |
| DRY: SEASONED LUMBER. |                   |        |      |        |        |

| PLATES (table is in inches) | JT TYPE | PLATES | W   | LEN | Y    | X    |
|-----------------------------|---------|--------|-----|-----|------|------|
| B                           | TMVW+p  | MT20   | 4.0 | 4.0 | 1.00 | 2.00 |
| E                           | BMVW+p  | MT20   | 2.0 | 4.0 |      |      |
| F                           | BMV1+p  | MT20   | 3.0 | 4.0 |      |      |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQD BRG |
|----------|-------------------------|---------------------------------|-----------|----------|
| JT       | VERT                    | HORZ                            | DOWN      | HORZ     |
| F        | 428                     | 0                               | 428       | 0        |
| C        | 193                     | 0                               | 193       | 0        |
| D        | 94                      | 0                               | 119       | 0        |

SEE MITEK STANDARD DETAIL 837821H FOR CONNECTION TO JOINT(S) C, D

#### UNFACTORED REACTIONS

| 1ST LOASE | SNOW     | LIVE  | PERMLIVE | WIND | DEAD | SOIL |
|-----------|----------|-------|----------|------|------|------|
| JT        | COMBINED |       |          |      |      |      |
| F         | 315      | 190/0 | 51/0     | 0/0  | 73/0 | 0/0  |
| C         | 133      | 110/0 | 0/0      | 0/0  | 23/0 | 0/0  |
| D         | 85       | 0/0   | 51/0     | 0/0  | 34/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PL) | MAX. UNBRACED LENGTH (LC) | WEBS  | MAX. FACTORED FORCE (LBS) | MAX. UNBRACED LENGTH (LC) |
|--------|---------------------------|--------------------------|---------------------------|-------|---------------------------|---------------------------|
| MEMB.  |                           |                          |                           | MEMB. |                           |                           |
| FR-TO  |                           | FROM TO                  |                           | FR-TO |                           |                           |
| F-B    | -334/0                    | 0.0                      | 0.0 (3)                   | 7.81  | 0/0                       | 0.00 (1)                  |
| A-B    | 0/42                      | -102.1                   | -102.1 (1)                | 10.00 |                           |                           |
| B-C    | 0/0                       | -102.1                   | -102.1 (1)                | 10.00 |                           |                           |
| F-E    | 0/0                       | -38.5                    | -38.5 (3)                 | 10.00 |                           |                           |
| E-D    | 0/0                       | -38.5                    | -38.5 (3)                 | 10.00 |                           |                           |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 28.0 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2010, CBC 2012  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) =  $L/360$  (0.18")  
CALCULATED VERT. DEFL.(LL) =  $L/989$  (0.04")  
ALLOWABLE DEFL.(TL) =  $L/360$  (0.18")  
CALCULATED VERT. DEFL.(TL) =  $L/671$  (0.08")

CSI: TC=0.25/1.00 (B-C-1), SC=0.21/1.00 (D-E-3),  
WB=0.00/1.00 (B-E-1), SS=0.12/1.00 (B-C-1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

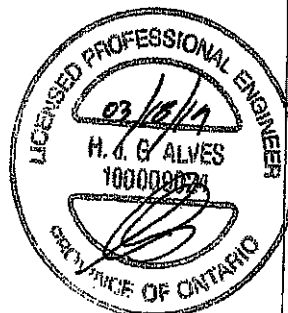
#### NAIL VALUES

| PLATE | GRIP(DRY) | SHEAR | SECTION |
|-------|-----------|-------|---------|
| (PSI) | (PLI)     | (PLI) |         |
| MAX   | MIN       | MAX   | MIN     |
| MT20  | 818       | 354   | 1857    |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 6.0 Deg.

JSI GRIP= 0.27 (B) (INPUT = 0.90)  
JSI METAL= 0.07 (B) (INPUT = 1.00)

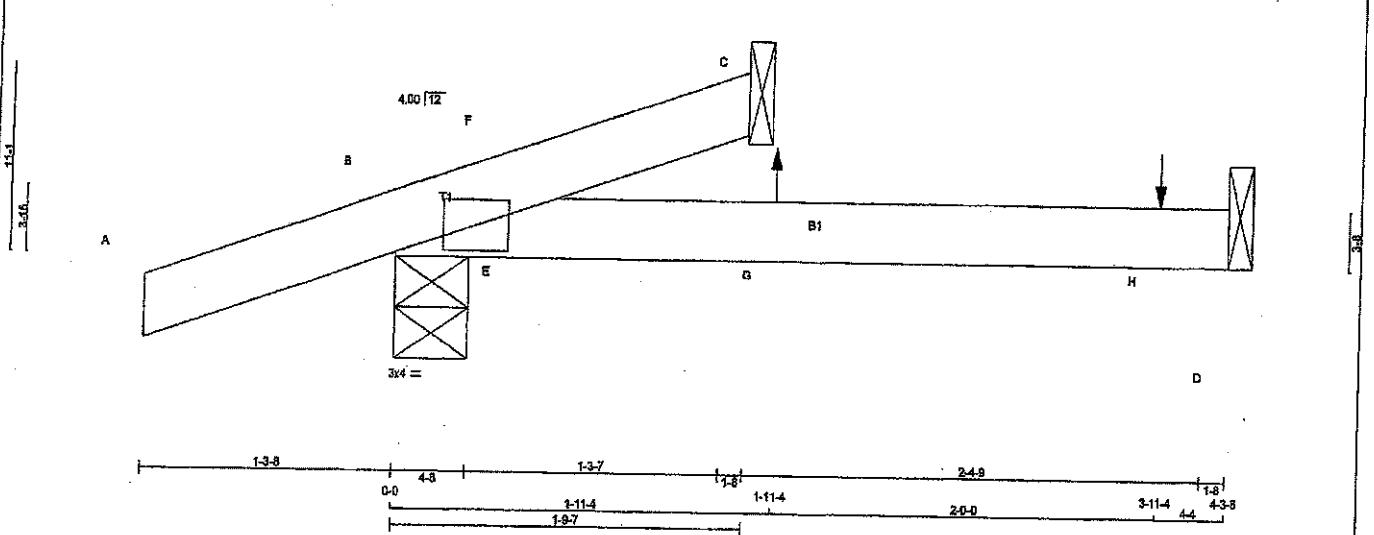


DESIGNED BY TAM 17905557  
STRUCTURAL  
COLD CHAMBER



|                                 |            |             |     |            |          |
|---------------------------------|------------|-------------|-----|------------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY    | PLY | JOB DESC.  | DRWG NO. |
| 200172-400371                   | J10        | 1           | 1   | Preston 11 |          |
| Tamarack Roof Truss, Burlington |            | TRUSS DESC. |     |            |          |

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Mon Mar 18 20:52:45 2019 Page 1  
ID:tr5ampg4il74dMkT9JQOIyNxSs-VafTyIKUV\_5M37XVKqm2rMO1JdTAhsOSxRVSuzZbWV  
Scale = 1:10.5



|               |        |        |      |
|---------------|--------|--------|------|
| LUMBER        | DESCR. | SPF    | SPF  |
| N L G A RULES |        |        |      |
| CHORDS        | SIZE   | LUMBER |      |
| A - C         | 2x4    | DRY    | No.2 |
| B - D         | 2x4    | DRY    | No.2 |

DRY, SEASONED LUMBER.

PLATES (table is in inches)

|          |        |     |     |   |   |
|----------|--------|-----|-----|---|---|
| JT TYPE  | PLATES | W   | LEN | Y | X |
| B TMS1-I | MT20   | 3.0 | 4.0 |   |   |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| JT | FACTORED GROSS REACTION |      | MAXIMUM FACTORED GROSS REACTION |             | INPUT BRG IN-SX | REQD BRG IN-SX |
|----|-------------------------|------|---------------------------------|-------------|-----------------|----------------|
|    | VERT                    | HORZ | DOWN                            | HORZ UPLIFT |                 |                |
| C  | 103                     | 0    | 103                             | 0           | 1-8             | 1-8            |
| B  | 329                     | 0    | 329                             | 0           | 4-8             | 4-8            |
| D  | 151                     | 0    | 151                             | 0           | 1-8             | 1-8            |

SEE MITEK STANDARD DETAIL 937821H FOR CONNECTION TO JOINT(S) C, D

#### UNFACTORED REACTIONS

| JT | 1ST LOASE |         | MAX/MIN. COMPONENT REACTIONS |           | WIND  | DEAD   | SOIL  |
|----|-----------|---------|------------------------------|-----------|-------|--------|-------|
|    | COMBINED  | SNOW    | LIVE                         | PERM.LIVE |       |        |       |
| C  | 82        | 29 / 0  | 28 / 0                       | 0 / 0     | 0 / 0 | 25 / 0 | 0 / 0 |
| B  | 238       | 157 / 0 | 29 / 0                       | 0 / 0     | 0 / 0 | 52 / 0 | 0 / 0 |
| D  | 118       | 48 / -5 | 36 / 0                       | 0 / 0     | 0 / 0 | 34 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) C, B

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (7)

| MEMB. | MAX. FACTORED FORCE (LBS) | FACTORED         |                   | WEBS                       |                   | MAX. FACTORED FORCE (LBS) | MAX. FACTORED CSI (LC) |
|-------|---------------------------|------------------|-------------------|----------------------------|-------------------|---------------------------|------------------------|
|       |                           | VERT. LOAD (PLF) | LC1 MAX. CSI (LC) | MAX. UNBRACED LENGTH FR-TO | MEMB. FORCE (LBS) |                           |                        |
| FR-TO |                           |                  |                   |                            |                   |                           |                        |
| A-B   | 0 / 20                    | -102.1           | -102.1 0.14 (1)   | 10.00                      | 0 / 217           | 0.00 (1)                  |                        |
| B-F   | -83 / 0                   | -102.1           | -102.1 0.14 (1)   | 6.25                       |                   |                           |                        |
| F-C   | 0 / 21                    | -102.1           | -102.1 0.12 (3)   | 10.00                      |                   |                           |                        |
| B-E   | 0 / 0                     | -38.5            | -38.5 0.08 (2)    | 10.00                      |                   |                           |                        |
| E-G   | 0 / 0                     | -38.5            | -38.5 0.11 (2)    | 10.00                      |                   |                           |                        |
| G-H   | 0 / 0                     | -38.5            | -38.5 0.11 (2)    | 10.00                      |                   |                           |                        |
| H-D   | 0 / 0                     | -38.5            | -38.5 0.11 (2)    | 10.00                      |                   |                           |                        |

#### FACTORED CONCENTRATED LOADS (LBS)

| JT | LOC.   | LC1  | MAX- | MAX+ | FACE  | DIR. | TYPE  | HEEL | CONN. |
|----|--------|------|------|------|-------|------|-------|------|-------|
| G  | 1-11.4 | 8    | 1    | 25   | FRONT | VERT | TOTAL |      |       |
| H  | 3-11.4 | -107 | -107 |      | FRONT | VERT | TOTAL |      |       |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN./C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2018, CBC 2012  
- CSA 086-08, CSA 086-14  
- TPIC 2011, TPIC 2014

DESIGN ASSUMPTIONS  
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 37.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.10")  
CALCULATED VERT. DEFL.(LL) = 1/999 (0.01")  
ALLOWABLE DEFL.(TL) = L/500 (0.15")  
CALCULATED VERT. DEFL.(TL) = 1/999 (0.02")

CSI: TC=0.14/1.00 (A-B:1), BC=0.11/1.00 (D-E:2), WB=0.00/1.00 (E-F:1), SS=0.21/1.00 (B-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00  
COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

#### NAIL VALUES

| PLATE   | GRIP(DRY) | SHEAR    | SECTION   |
|---------|-----------|----------|-----------|
| (PBI)   | (PLI)     | (PLI)    | (PLI)     |
| MAX MIN | MAX MIN   | MAX MIN  | MAX MIN   |
| MT20    | 618 354   | 1857 788 | 1987 1855 |

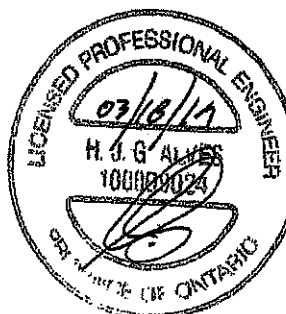
PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.14 (B) (INPUT = 0.90)  
JSI METAL= 0.04 (B) (INPUT = 1.00)

RECEIVED  
AUG 28 2019

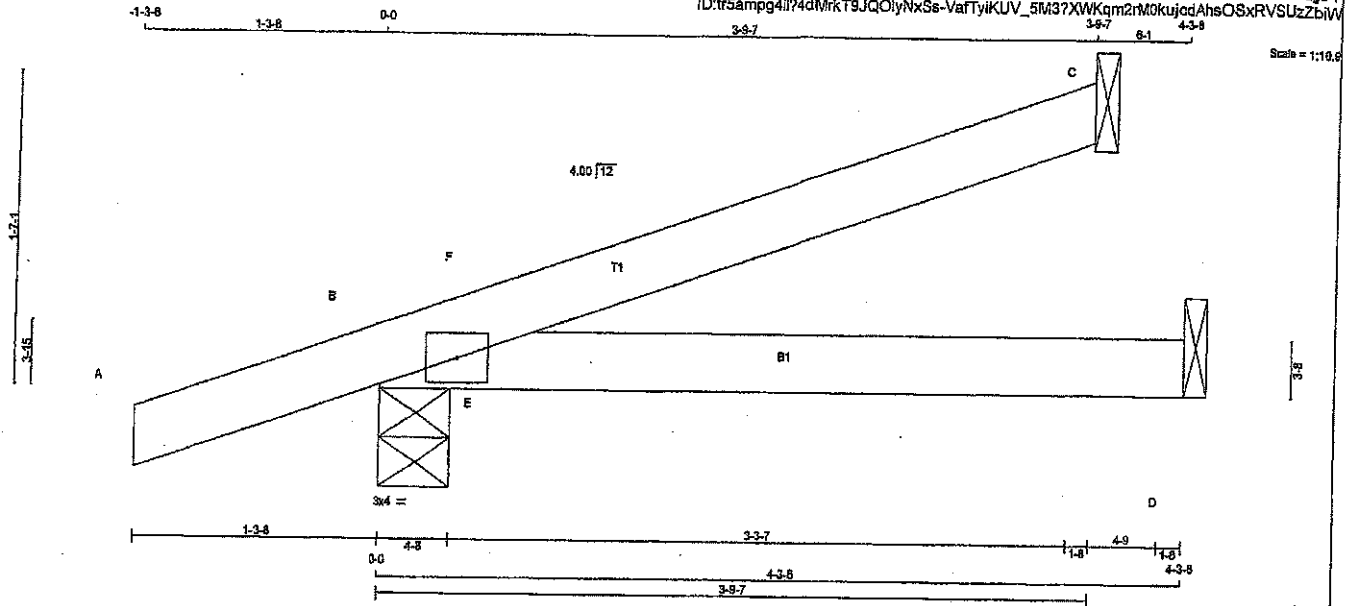
TOWN OF CALEDON  
BUILDING SECTION  
FILE NO.



ENGINEER TAM 11905553  
CONSULTANT  
C.C. ENGINEERING

|                                 |                   |               |          |                         |          |
|---------------------------------|-------------------|---------------|----------|-------------------------|----------|
| JOB NAME<br>200172-400371       | TRUSS NAME<br>J11 | QUANTITY<br>1 | PLY<br>1 | JOB DESC.<br>Preston 11 | DRWG NO. |
| Tamarack Roof Truss, Burlington |                   |               |          | TRUSS DESC.             |          |

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Mon Mar 18 20:52:45 2019 Page 1  
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| LUMBER         |         |        |        |
|----------------|---------|--------|--------|
| N.L.G.A. RULES | SIZE    | LUMBER | DESCR. |
| CHORDS         |         |        | SPF    |
| A - C          | 2x4 DRY | No.2   | SPF    |
| B - D          | 2x4 DRY | No.2   | SPF    |

DRY: SEASONED LUMBER.

| PLATES (table is in inches) |        |     |     |   |
|-----------------------------|--------|-----|-----|---|
| JT TYPE                     | PLATES | W   | LEN | Y |
| B                           | TM20   | 3.0 | 4.0 | X |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS |      | FACTORED       |       | MAXIMUM FACTORED |       | INPUT |       | REQD |       |
|----------|------|----------------|-------|------------------|-------|-------|-------|------|-------|
| JT       | VERT | GROSS REACTION | HORIZ | GROSS REACTION   | HORIZ | BRG   | IN-SX | BRG  | IN-SX |
| C        | 179  | 0              | 179   | 0                | 0     | 1-8   | 1-8   | 1-8  | 1-8   |
| B        | 414  | 0              | 414   | 0                | 0     | 4-8   | 4-8   | 4-8  | 4-8   |
| D        | 95   | 0              | 108   | 0                | 0     | 1-8   | 1-8   | 1-8  | 1-8   |

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

#### UNFACTORED REACTIONS

| 1ST CASE |          | MAX/MIN. COMPONENT REACTIONS |      |
|----------|----------|------------------------------|------|
| JT       | COMBINED | SNOW                         | LIVE |
| C        | 126      | 92/0                         | 9/0  |
| B        | 302      | 190/0                        | 44/0 |
| D        | 61       | 15/0                         | 37/0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) C, B

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS |             | FACTORED   |         | WEBS     |             | FACTORED             |               |
|--------|-------------|------------|---------|----------|-------------|----------------------|---------------|
| MEMB.  | FORCE (LBS) | VERT. LOAD | LC1 MAX | MEMB.    | FORCE (LBS) | MAX. UNBRACED LENGTH | MAX. FACTORED |
| FR-TO  |             |            |         | FR-TO    |             |                      |               |
| A-B    | 0/20        | -102.1     | -102.1  | 0.13 (1) | 10.00       | E-F                  | -91/100       |
| B-F    | -39/0       | -102.1     | -102.1  | 0.10 (3) | 8.25        |                      | 0.00 (1)      |
| F-C    | 0/7         | -102.1     | -102.1  | 0.21 (1) | 10.00       |                      |               |
| B-E    | 0/0         | -38.5      | -38.5   | 0.12 (1) | 10.00       |                      |               |
| E-D    | 0/0         | -38.5      | -38.5   | 0.16 (1) | 10.00       |                      |               |

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

|            |            |
|------------|------------|
| TOP CH. LL | = 28.0 PSF |
| DL         | = 8.0 PSF  |
| BOT CH. LL | = 10.5 PSF |
| DL         | = 7.0 PSF  |
| TOTAL LOAD | = 52.5 PSF |

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF NBCC 2010, NBC 2012  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.10")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")  
ALLOWABLE DEFL.(TL) = L/360 (0.10")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.21/1.00 (C-F:1), BC=0.16/1.00 (D-E:1), WB=0.00/1.00 (E-F:1), SS=0.13/1.00 (C-F:1)

COL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

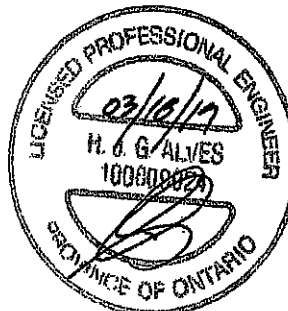
#### NAIL VALUES

| PLATE GRIP(DRY) | SHEAR                      | SECTION |
|-----------------|----------------------------|---------|
| (PSI)           | (PLI)                      | (PLI)   |
| MAX MIN         | MAX MIN                    | MAX MIN |
| MT20            | 619 354 1667 789 1987 1656 |         |

PLATE PLACEMENT TOL. = 0.250 inches

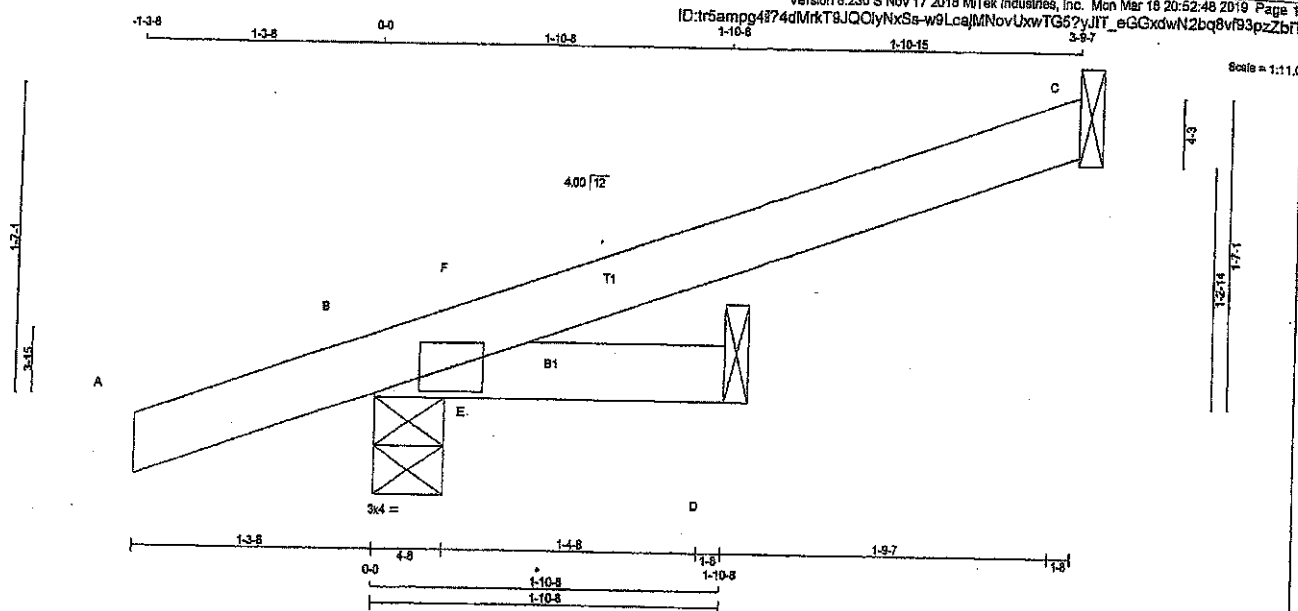
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.23 (B) (INPUT = 0.80)  
JSI METAL= 0.06 (B) (INPUT = 1.00)



ENGINEER TAM 71905560  
STRUCTURAL  
(S) 2019-03-18





| LUMBER            |      |          |        |
|-------------------|------|----------|--------|
| N. L. G. A. RULES |      |          |        |
| CHORDS            | SIZE | LUMBER   | DESCR. |
| A - C             | 2x4  | DRY No.2 | SPF    |
| B - D             | 2x4  | DRY No.2 | SPF    |

DRY: SEASONED LUMBER.

**PLATES** (table ls in inches)

| JT | TYPE   | PLATES | W   | LEN | Y | X |
|----|--------|--------|-----|-----|---|---|
| B  | TMB1-I | MT20   | 3.0 | 4.0 |   |   |

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY**

|    | FACTORED<br>GROSS REACTION |      | MAXIMUM FACTORED<br>GROSS REACTION |      |        | INPUT<br>BRG | REQD<br>BRG |
|----|----------------------------|------|------------------------------------|------|--------|--------------|-------------|
|    | VERT                       | HORZ | DOWN                               | HORZ | UPLIFT | IN-SX        | IN-SX       |
| JT | 145                        | 0    | 145                                | 0    | 0      | 1-8          | 1-8         |
| C  | 317                        | 0    | 317                                | 0    | 0      | 4-8          | 4-8         |
| D  | 133                        | 0    | 133                                | 0    | 0      | 1-8          | 1-8         |

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

| UNFACTORED REACTIONS |           |                               |        |            |       |        |       |
|----------------------|-----------|-------------------------------|--------|------------|-------|--------|-------|
| JT                   | 1ST LOASE | MAX. MIN. COMPONENT REACTIONS |        |            |       |        |       |
|                      | COMBINED  | SNOW                          | LIVE   | PERM. LIVE | WIND  | DEAD   | SOIL  |
| C                    | 103       | 82 / 0                        | 1 / 0  | 0 / 0      | 0 / 0 | 18 / 0 | 0 / 0 |
| B                    | 226       | 159 / 0                       | 21 / 0 | 0 / 0      | 0 / 0 | 47 / 0 | 0 / 0 |
| D                    | 99        | 57 / 0                        | 18 / 0 | 0 / 0      | 0 / 0 | 24 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, D

## BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY  
APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

**TOTAL LOAD CASES: (5)**

| CHORDS |                           |                           |                  | WEBS               |       |                           |              |
|--------|---------------------------|---------------------------|------------------|--------------------|-------|---------------------------|--------------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | LG1 MAX CSI (LC) | MAX. UNBRAC LENGTH | MEMB. | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
| FR-TO  |                           | FROM TO                   |                  |                    | FR-TO |                           |              |
| A-B    | 0/20                      | -102.1 -102.1             | 0.13 (1)         | 10.00              | E-F   | -208/0                    | 0.00 (1)     |
| B-F    | 0/31                      | -102.1 -102.1             | 0.08 (1)         | 10.00              |       |                           |              |
| F-C    | -5/0                      | -102.1 -102.1             | 0.14 (1)         | 10.00              |       |                           |              |
| B-E    | 0/0                       | -38.5 -38.5               | 0.19 (1)         | 10.00              |       |                           |              |
| E-D    | 0/0                       | -38.5 -38.5               | 0.19 (1)         | 10.00              |       |                           |              |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

### DESIGN CRITERIA

**SPECIFIED LOADS:**

|            |      |      |     |
|------------|------|------|-----|
| TOP CH.    | LL = | 20.0 | PSF |
|            | DL = | 6.0  | PSF |
| BOT CH.    | LL = | 10.5 | PSF |
|            | DL = | 7.0  | PSF |
| TOTAL LOAD | =    | 52.5 | PSF |

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL  
OR SMALL BUILDING REQUIREMENTS OF  
PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF ECBC 2018, OEC 2012  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)=  $L/360$  (0.19")  
 CALCULATED VERT. DEFL.(LL) =  $L/899$  (0.01")  
 ALLOWABLE DEFL.(TL)=  $L/360$  (0.18")  
 CALCULATED VERT. DEFL.(TL) =  $L/899$  (0.01")

CSI: TC=0.14/1.00 (C-F:1), BC=0.19/1.00 (B-E:1),  
WB=0.00/1.00 (E-F:1), SS=0.19/1.00 (B-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

## NAIL VALUES

| PLATE | GRIP(DRY) |     | SHEAR |     | SECTION |      |
|-------|-----------|-----|-------|-----|---------|------|
|       | (PSI)     |     | (PLI) |     | (PLI)   |      |
|       | MAX       | MIN | MAX   | MIN | MAX     | MIN  |
| MT20  | 618       | 354 | 1867  | 788 | 1987    | 1856 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

```
ISI GRIP= 0.19 (B) (INPUT = 0.90 )
ISI METAL= 0.05 (B) (INPUT = 1.00 )
```

OFFICIAL FILE 77905562  
CENTRAL  
RECORDS DIVISION





isDesign™

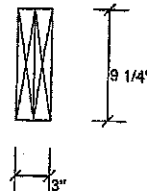
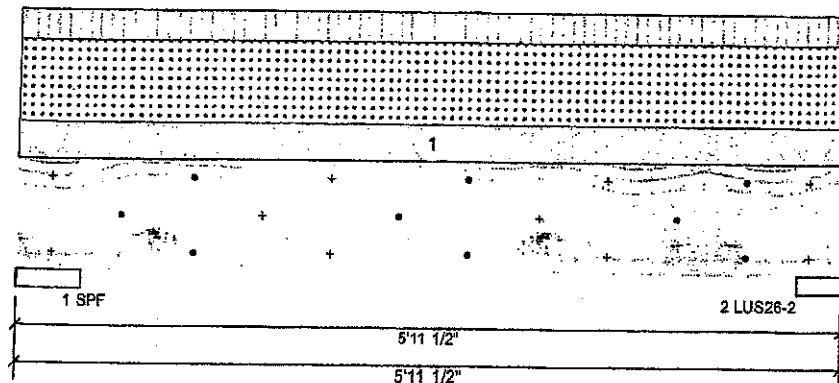
Client:  
Project:  
Address:

Date: 3/18/2019  
Designer:  
Job Name: 200172  
Project #:

Page 1 of 4

**BM1 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED**

Level: Level



### Member Information

|                     |        |                |                    |
|---------------------|--------|----------------|--------------------|
| Type:               | Girder | Application:   | Roof (Residential) |
| Piles:              | 2      | Slope:         | 0/12               |
| Moisture Condition: | Dry    | Design Method: | LSD                |
| Deflection LL:      | 360    | Building Code: | NBCC 2015          |
| Deflection TL:      | 360    | Load Sharing:  | No                 |
| Importance:         | Normal | Deck:          | Not Checked        |
|                     |        | Vibration:     | Not Checked        |

### Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1   | 192  | 237  | 529  | 0    |
| 2   | 184  | 228  | 506  | 0    |

### Bearings and Factored Reactions

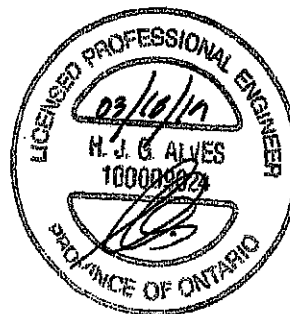
| Bearing     | Length | Cap. React | D/L lb    | Total | Ld. Case | Ld. Comb.        |
|-------------|--------|------------|-----------|-------|----------|------------------|
| 1 - SPF     | 5.500" | 13%        | 297 / 986 | 1282  | L        | 1.25D+1.5S<br>+L |
| 2 - LUS26-2 | 4.000" | 17%        | 284 / 945 | 1229  | L        | 1.25D+1.5S<br>+L |

### Analysis Results

| Analysis     | Actual         | Location | Allowed       | Capacity    | Comb.      | Case |
|--------------|----------------|----------|---------------|-------------|------------|------|
| Moment       | 1475 ft-lb     | 3' 1/2"  | 8039 ft-lb    | 0.244 (24%) | 1.25D+1.5S | L    |
| Unbraced     | 1475 ft-lb     | 3' 1/2"  | 5210 ft-lb    | 0.283 (28%) | 1.25D+1.5S | L    |
| Shear        | 1115 lb        | 1'2"     | 3984 lb       | 0.280 (28%) | 1.25D+1.5S | L    |
| LL Defl inch | 0.013 (L/4774) | 3' 1/2"  | 0.176 (L/360) | 0.080 (8%)  | S+0.5L     | L    |
| TL Defl inch | 0.018 (L/3460) | 3' 1/2"  | 0.176 (L/360) | 0.100 (10%) | D+S+0.5L   | L    |

### Design Notes

- 1 Fasten all piles using 3 rows of Pneumatic Gun Nail (.120x3.25") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Nail from opposite sides as indicated by + and • symbols.
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.



DRWG NO. TAM 17405584  
STRUCTURAL  
COMPONENT ONLY 1/2

| ID | Load Type | Location | Trib Width | Side      | Dead   | Live     | Snow   | Wind  | Comments |
|----|-----------|----------|------------|-----------|--------|----------|--------|-------|----------|
| 1  | Uniform   |          | 6-0-0      | Near Face | 13 PSF | 10.5 PSF | 29 PSF | 0 PSF |          |

### Manufacturer Info

Tamarack Roof Trusses  
3289 North Service Rd., ON  
Canada  
L7N3G2  
(905) 335-1115



This design is valid until 12/31/2021



isDesign™

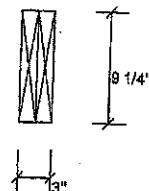
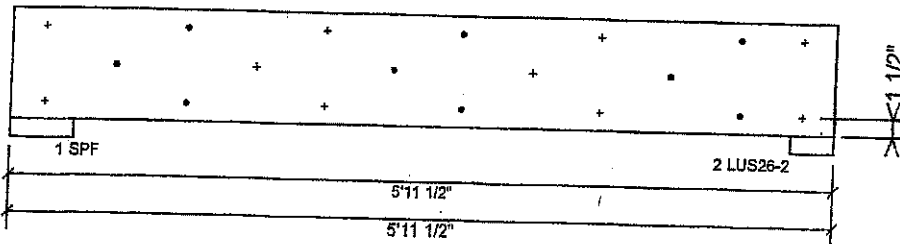
Client:  
Project:  
Address:

Date: 3/18/2019  
Designer:  
Job Name: 200172  
Project #:

Page 2 of 4

BM1 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED

Level: Level



### Multi-Ply Analysis

Fasten all plies using 3 rows of Pneumatic Gun Nail (.120x3.25") at 12" o.c. Maximum end distance not to exceed 6"

|                          |              |
|--------------------------|--------------|
| Capacity                 | 62.0 %       |
| Load                     | 210.8 PLF    |
| Yield Limit per Foot     | 340.0 PLF    |
| Yield Limit per Fastener | 113.3 lb.    |
| Yield Mode               | g            |
| Edge Distance            | 1 1/2"       |
| Min. End Distance        | 3"           |
| Load Combination         | 1.25D+1.5S+L |
| Duration Factor          | 1.00         |



DWG NO. TAM T1905564  
STRUCTURAL  
COMPONENT ONLY 7/2

|                   |                                                                                           |
|-------------------|-------------------------------------------------------------------------------------------|
| Manufacturer Info | Tamarack Roof Trusses<br>3268 North Service Rd., ON<br>Canada<br>L7N3G2<br>(905) 335-1115 |
|                   | <b>TAMARACK</b><br>LUMBER INC<br>ALPS LUMBER GROUP                                        |



## Face-Mount Hangers LUCZ/LU/U/HU/HUC

### Standard Joist Hangers

LUCZ concealed flange hanger available for 2x6, 2x8, 2x10 and 2x12 lumber. Ideal for end of ledger/header or post conditions, the LUCZ also provides cleaner lines for exposed conditions such as overhead decks.

See Hanger tables on pp. 134–140. See Hanger Options on p. 126 for hanger modifications, which may result in reduced resistances.

LU — Value engineered for strength and economy. Precision-formed — engineered for installation ease and design value.

U — The standard U hanger provides flexibility of joist to header installation. Versatile fastener selection with tested factored resistances.

HU/HUC — Most models have triangle and round holes. To achieve maximum resistances, fill both round and triangle holes with common nails. These heavy-duty connectors are designed for schools and other structures requiring additional strength, longevity and safety factors.

**Material:** See tables on pp. 134–140

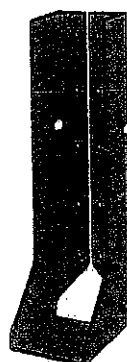
**Finish:** Galvanized. Some products available in ZMAX® coating.

#### Installation:

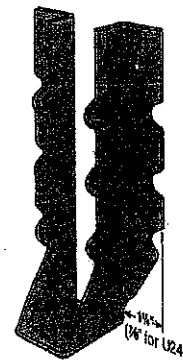
- Use all specified fasteners; see General Notes.
- HU — Can be installed filling round holes only, or filling round and triangle holes for maximum values.
- Joists sloped up to 1/4:12 achieve tabulated values.
- For installations to masonry or concrete see p. 333–334.
- HU hangers can be welded to a steel member. Refer to technical bulletin T-C-HU-HUC-W at [strongtie.com](http://strongtie.com).

#### Options:

- HU hangers available with the header flanges turned in for 2 1/8" width and larger, with no reduction in resistances — order HUC hanger.
- HU only — rough beam sizes available by special order.
- See p. 140 for stocked U hanger rough sizes tables. Rough sizes are not available in 8x.
- Also see LUS and HUS series.



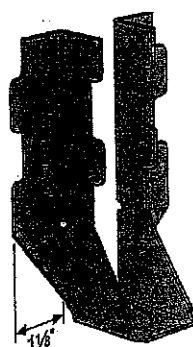
**LUC210Z**  
(LUC26Z similar)



**U210**



**HUC412**  
Concealed flanges

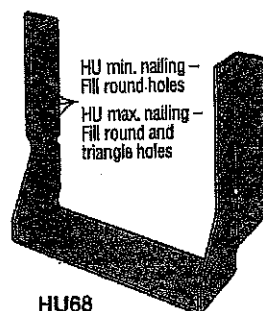


**LU28L**  
(except LU roughs)



**HU214**  
Projection seat on most models for maximum bearing and section economy.

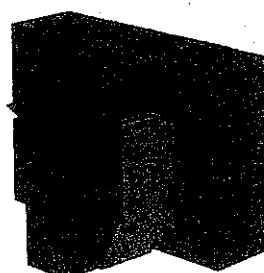
Model configurations may differ from those shown. Some HU models do not have triangle holes. Contact Simpson Strong-Tie.



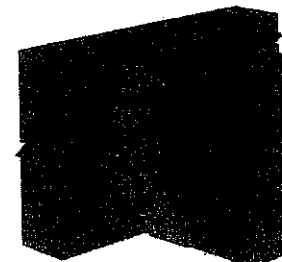
**HU68**



Typical LUCZ Installation



Typical HU Installation



Typical LU28L Installation

## Face-Mount Hangers — Solid Sawn Lumber

SIMPSON

Strong-Tie®

These products are available with additional corrosion protection. For more information, see p. 24.

These products are approved for installation with the Strong-Drive® SD Connector screw. See pp. 32–34 for more information.

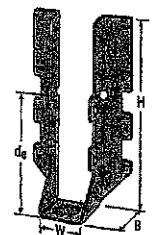
## Solid Sawn Joist Hangers

| Joist Size         | Model No. | Ga.     | Dimensions (in.) |       |       |                             | Fasteners |                  |                  | Factored Resistance            |                                |                                |                                | Installed Cost Index |  |
|--------------------|-----------|---------|------------------|-------|-------|-----------------------------|-----------|------------------|------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|----------------------|--|
|                    |           |         | W                | H     | B     | d <sub>e</sub> <sup>a</sup> | Min./Max. | Header           | Joist            | D-Fir-L                        |                                | S-P-F                          |                                |                      |  |
|                    |           |         |                  |       |       |                             |           |                  |                  | Uplift                         | Normal                         | Uplift                         | Normal                         |                      |  |
|                    |           |         |                  |       |       |                             |           |                  |                  | (K <sub>D</sub> = 1.15)<br>lb. | (K <sub>D</sub> = 1.00)<br>lb. | (K <sub>D</sub> = 1.15)<br>lb. | (K <sub>D</sub> = 1.00)<br>lb. |                      |  |
| Sawn Lumber Sizes  |           |         |                  |       |       |                             |           |                  |                  |                                |                                |                                |                                |                      |  |
| 2x4                | LU24L     | 22      | 1 1/8            | 3 1/2 | 1 1/2 | 2 1/4                       | —         | (4) 10d          | (2) 10d x 1 1/2" | 360                            | 1020                           | 320                            | 725                            | Lowest               |  |
|                    | LUS24     | 18      | 1 1/8            | 3 1/2 | 1 3/4 | 2 1/4                       | —         | (4) 10d          | (2) 10d          | 710                            | 1825                           | 645                            | 1155                           | +11%                 |  |
|                    |           |         |                  |       |       |                             |           |                  |                  | 3.36                           | 7.23                           | 2.67                           | 5.14                           |                      |  |
|                    |           |         |                  |       |       |                             |           |                  |                  | 450                            | 1340                           | 355                            | 1030                           |                      |  |
| U24                | 16        | 1 1/8   | 3 1/2            | 1 1/2 | 1 3/4 | —                           | (4) 10d   | (2) 10d x 1 1/2" | 490              | 1525                           | 450                            | 1080                           | +90%                           |                      |  |
| HU26               | 14        | 1 1/8   | 3 1/2            | 2 1/4 | 1 1/2 | —                           | (4) 16d   | (2) 10d x 1 1/2" | 2.15             | 5.76                           | 2.00                           | 4.80                           | +490%                          |                      |  |
| DBL 2x4            | LUS24-2   | 18      | 3 1/2            | 3 1/2 | 2     | 1 3/4                       | —         | (4) 16d          | (2) 16d          | 835                            | 2020                           | 590                            | 1435                           | Lowest               |  |
|                    | U24-2     | 16      | 3 1/2            | 3     | 2     | 1 3/4                       | —         | (4) 10d          | (2) 10d          | 480                            | 1340                           | 445                            | 1030                           | +59%                 |  |
|                    |           |         |                  |       |       |                             |           |                  |                  | 2.71                           | 5.39                           | 2.62                           | 6.38                           |                      |  |
|                    |           |         |                  |       |       |                             |           |                  |                  | 525                            | 1710                           | 490                            | 1585                           |                      |  |
| HU24-2/<br>HUC24-2 | 14        | 3 1/2   | 3 1/2            | 2 1/2 | 2 1/4 | —                           | (4) 16d   | (2) 10d          | 2.18             | 5.95                           | 2.18                           | 7.05                           | +244%                          |                      |  |
| 2x6                | LU26L     | 22      | 1 1/8            | 5     | 1 1/2 | 4 1/4                       | —         | (6) 10d          | (4) 10d x 1 1/2" | 720                            | 1605                           | 645                            | 1140                           | Lowest               |  |
|                    | LUS26     | 18      | 1 1/8            | 4 1/4 | 1 1/2 | 3 3/4                       | —         | (4) 10d          | (4) 10d          | 1420                           | 2170                           | 1290                           | 1630                           | +10%                 |  |
|                    |           |         |                  |       |       |                             |           |                  |                  | 6.82                           | 15.5                           | 5.74                           | 7.25                           |                      |  |
|                    |           |         |                  |       |       |                             |           |                  |                  | 895                            | 2005                           | 780                            | 1860                           |                      |  |
|                    | U26       | 16      | 1 1/8            | 4 1/4 | 2     | 3 1/4                       | —         | (6) 10d          | (4) 10d x 1 1/2" | 830                            | 1605                           | 710                            | 1140                           | +70%                 |  |
| LUC26Z             | 18        | 1 1/8   | 4 1/4            | 1 1/2 | 4     | —                           | (6) 10d   | (4) 10d x 1 1/2" | 2.35             | 6.1                            | 3.16                           | 5.07                           | +74%                           |                      |  |
| HUS26              | 16        | 1 1/8   | 5 1/2            | 3     | 3 1/4 | —                           | (14) 16d  | (6) 16d          | 2705             | 4940                           | 2065                           | 3875                           | +320%                          |                      |  |
| DBL 2x6            | LU26-2L   | 20      | 3 1/2            | 5     | 1 1/2 | 4 1/4                       | —         | (6) 10d          | (4) 10d x 1 1/2" | 760                            | 1605                           | 680                            | 1140                           | Lowest               |  |
|                    | LUS26-2   | 18      | 3 1/2            | 4 1/4 | 2     | 4 1/4                       | —         | (4) 16d          | (4) 16d          | 1720                           | 2595                           | 1545                           | 1920                           | +24%                 |  |
|                    |           |         |                  |       |       |                             |           |                  |                  | 6.87                           | 15.54                          | 6.87                           | 15.54                          |                      |  |
|                    |           |         |                  |       |       |                             |           |                  |                  | 960                            | 2675                           | 890                            | 2475                           |                      |  |
|                    | U26-2     | 16      | 3 1/2            | 5     | 2     | 3 1/4                       | —         | (8) 10d          | (4) 10d          | 1055                           | 3420                           | 980                            | 2845                           | +124%                |  |
| HU26-2/<br>HUC26-2 | 14        | 3 1/2   | 5 1/2            | 2 1/2 | 5     | Min.                        | (8) 16d   | (4) 10d          | 4.36             | 12.66                          | 4.36                           | 12.66                          | +358%                          |                      |  |
| Max.               | (12) 16d  | (6) 10d | 6.54             | 13.95 | 6.54  | 13.95                       | +372%     |                  |                  |                                |                                |                                |                                |                      |  |
| TPL 2x6            | LUS26-3   | 18      | 4 1/4            | 4 1/4 | 2     | 3 3/4                       | —         | (4) 16d          | (4) 16d          | 1720                           | 2595                           | 1545                           | 2340                           | Lowest               |  |
|                    | U26-3     | 16      | 4 1/4            | 4 1/4 | 2     | 3 1/4                       | —         | (8) 10d          | (4) 10d          | 960                            | 2675                           | 890                            | 2475                           | +87%                 |  |
|                    |           |         |                  |       |       |                             |           |                  |                  | 3.71                           | 11.90                          | 3.96                           | 11.01                          |                      |  |
|                    |           |         |                  |       |       |                             |           |                  |                  | 1055                           | 3420                           | 980                            | 2845                           |                      |  |
| HU26-3/<br>HUC26-3 | 14        | 4 1/4   | 4 1/4            | 2 1/2 | 5     | Min.                        | (8) 16d   | (4) 10d          | 4.36             | 12.66                          | 4.36                           | 12.66                          | +193%                          |                      |  |
| Max.               | (12) 16d  | (6) 10d | 6.54             | 13.95 | 6.54  | 13.95                       | +198%     |                  |                  |                                |                                |                                |                                |                      |  |

1. 10d common nails may be used instead of the specified 16d nails at 0.83 of the tabulated value.
2. Factored uplift resistances have been increased 15% for earthquake or wind loading with no further increase allowed. Reduce by 15% for standard term loading such as in cantilever construction.
3. Min. nailing quantity and factored resistances — fill all round holes; max. nailing quantity and factored resistances — fill all round and triangle holes.

4. D-Fir-L factored resistances can be used for most LVL. Verify with manufacturer prior to selecting hanger.
5. See p. 28 for hangers with reduced capacity due to installation with different nails.
6. d<sub>e</sub> is the distance from the bearing seat to the top joist nail.
7. Nails: 16d = 0.162" dia. x 3 1/2" long, 10d = 0.148" dia. x 3" long, 10d x 1 1/2" = 0.148" dia. x 1 1/2" long. See pp. 27–28 for other nail sizes and information.

\*Hangers do not have an Installed Cost Index.



# TECHNICAL BULLETIN

## HGUS – Double Shear Joist Hangers

**SIMPSON**  
**Strong-Tie**

All HGUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

**MATERIAL:** 12 gauge

**FINISH:** G90 galvanized

### DESIGN:

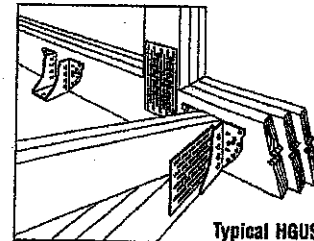
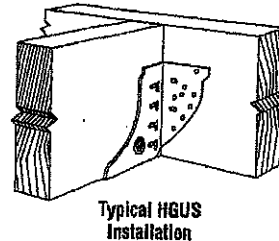
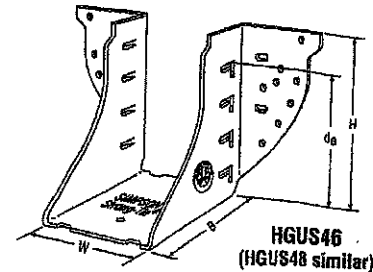
- Factored resistances are in accordance with CSA O86-14
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

### INSTALLATION:

- Use all specified fasteners
- Nails: 16d = 0.162" dia x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

### OPTIONS:

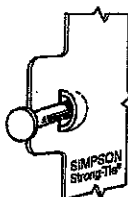
- See current catalogue for options



Typical HGUS Installation  
(Truss Designer to provide fastener quantity for connecting multiple members together)

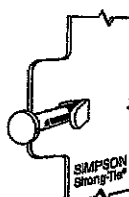
| Model No.   | Ga | Dimensions (in) |     |   |                | Fasteners |        | Factored Resistance (lbs)        |                                  |                                  |                                  |
|-------------|----|-----------------|-----|---|----------------|-----------|--------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|             |    | W               | H   | B | d <sub>g</sub> | Face      | Joist  | D-Fir-L                          |                                  | S-P-F                            |                                  |
|             |    |                 |     |   |                |           |        | Uplift<br>(K <sub>u</sub> =1.15) | Normal<br>(K <sub>n</sub> =1.00) | Uplift<br>(K <sub>u</sub> =1.15) | Normal<br>(K <sub>n</sub> =1.00) |
| HGUS48      | 12 | 3%              | 7%  | 4 | 6½             | 36-16d    | 12-16d | 8070                             | 12980                            | 4310                             | 9215                             |
| HGUS410     | 12 | 3%              | 9   | 4 | 8½             | 48-16d    | 16-16d | 8840                             | 14645                            | 4855                             | 10400                            |
| HGUS412     | 12 | 3%              | 10½ | 4 | 10½            | 58-16d    | 20-16d | 7640                             | 14995                            | 5425                             | 10645                            |
| HGUS414     | 12 | 3%              | 12½ | 4 | 11½            | 66-16d    | 22-16d | 10130                            | 16400                            | 7195                             | 11645                            |
| HGUS5.50/8  | 12 | 5%              | 6%  | 4 | 6%             | 36-16d    | 12-16d | 6070                             | 12980                            | 4310                             | 9215                             |
| HGUS5.50/10 | 12 | 5%              | 8%  | 4 | 8%             | 48-16d    | 16-16d | 6840                             | 14645                            | 4855                             | 10400                            |
| HGUS5.50/12 | 12 | 5%              | 10% | 4 | 10%            | 58-16d    | 20-16d | 7640                             | 14995                            | 5425                             | 10645                            |
| HGUS5.50/14 | 12 | 5%              | 12% | 4 | 11%            | 66-16d    | 22-16d | 10130                            | 16400                            | 7195                             | 11645                            |
| HGUS7.25/8  | 12 | 7%              | 7½  | 4 | 6½             | 36-16d    | 12-16d | 6070                             | 12980                            | 4310                             | 9215                             |
| HGUS7.25/10 | 12 | 7%              | 8%  | 4 | 8½             | 48-16d    | 16-16d | 6840                             | 15760                            | 4855                             | 11190                            |
| HGUS7.25/12 | 12 | 7%              | 10% | 4 | 10½            | 58-16d    | 20-16d | 7640                             | 16110                            | 5425                             | 11435                            |
| HGUS7.25/14 | 12 | 7%              | 12% | 4 | 11½            | 66-16d    | 22-16d | 10130                            | 18200                            | 7195                             | 12920                            |

1. d<sub>g</sub> is the distance from the seat of the hanger to the highest joist nail.

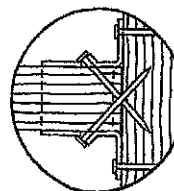


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

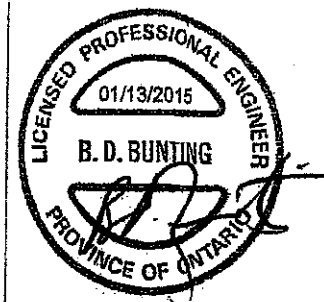
U.S. Patent  
5,603,580



Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.



This technical bulletin is effective until December 31, 2016, and reflects information available as of January 1, 2015. This information is updated periodically and should not be relied upon after December 31, 2016; contact Simpson Strong-Tie for current information and limited warranty or see [www.strongtie.com](http://www.strongtie.com).

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T-SPECOSHGUS15 1/15 exd. 12/16

800-999-5099  
[www.strongtie.com](http://www.strongtie.com)

# TECHNICAL BULLETIN

## HUS/LJS - Double Shear Joist Hangers

**SIMPSON**  
**Strong-Tie**

All hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

**MATERIAL:** See table

**FINISH:** G90 galvanized

### DESIGN:

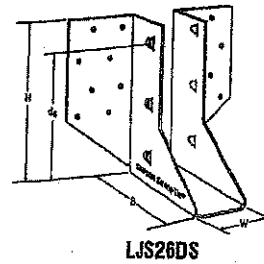
- Factored resistances are in accordance with CSA O86-14
- Uplift resistances have been increased 15%. No further increase is permitted
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

### INSTALLATION:

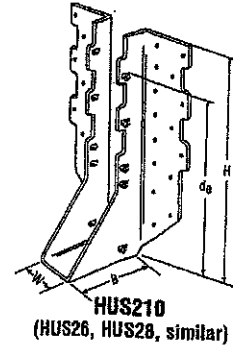
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

### OPTIONS:

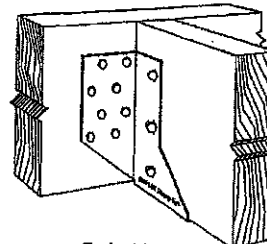
- See current catalogue for options



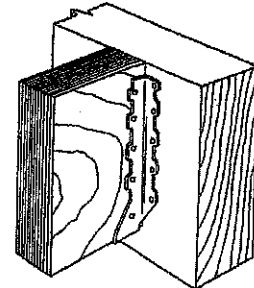
LJS26DS



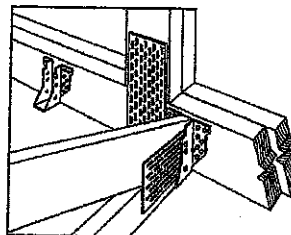
HUS210  
(HUS26, HUS28, similar)



Typical LJS26DS  
Installation



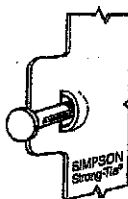
Typical HUS  
Installation



Typical HUS Installation  
(Truss Designer to provide fastener  
quantity for connecting multiple  
members together)

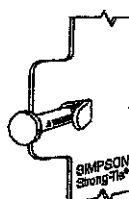
| Model No.  | Ga | Dimensions (in) |       |       |                             | Fasteners |        | Factored Resistance (lbs)        |                                  |                                  |                                  |
|------------|----|-----------------|-------|-------|-----------------------------|-----------|--------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|            |    | W               | H     | B     | d <sub>g</sub> <sup>1</sup> | Face      | Joist  | D.Fir-L                          |                                  | S-P-F                            |                                  |
|            |    |                 |       |       |                             |           |        | Uplift<br>(K <sub>u</sub> =1.15) | Normal<br>(K <sub>n</sub> =1.00) | Uplift<br>(K <sub>u</sub> =1.15) | Normal<br>(K <sub>n</sub> =1.00) |
| LJS26DS    | 18 | 1 1/8           | 5     | 3 1/2 | 4 3/8                       | 16-16d    | 6-16d  | 2055                             | 4265                             | 1460                             | 4115                             |
| HUS26      | 16 | 1 1/8           | 5 1/2 | 3     | 3 1/8                       | 14-16d    | 6-16d  | 2705                             | 4940                             | 2065                             | 3875                             |
| HUS28      | 16 | 1 1/8           | 7 1/2 | 3     | 6 1/2                       | 22-16d    | 8-16d  | 3605                             | 5365                             | 2675                             | 4345                             |
| HUS210     | 16 | 1 1/8           | 9 1/2 | 3     | 7 1/2                       | 30-16d    | 10-16d | 4505                             | 5795                             | 4010                             | 4740                             |
| HUS1.81/10 | 16 | 1 1/8           | 9     | 3     | 8                           | 30-16d    | 10-16d | 4505                             | 6450                             | 4010                             | 5200                             |

1. d<sub>g</sub> is the distance from the seat of the hanger to the highest joist nail.

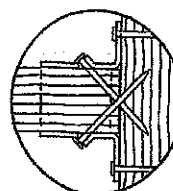


Double  
Shear  
Nailing  
prevents tabs  
breaking off  
(available on  
some models).

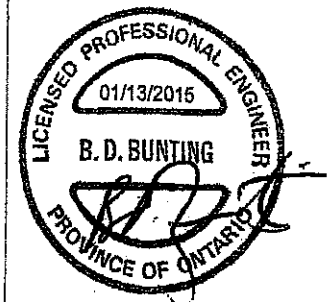
U.S. Patent  
5,603,580



Double  
Shear  
Nailing  
Side  
View. Do  
not bend  
tab back.



Double  
Shear  
Nailing  
Top View.



**LIMIT  
STATES  
DESIGN**

This technical bulletin is effective until December 31, 2016, and reflects information available as of January 1, 2015. This information is updated periodically and should not be relied upon after December 31, 2016. Contact Simpson Strong-Tie for current information and limited warranty or see [www.strongtie.com](http://www.strongtie.com).

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T-SPECHUS15 1/15 exp. 12/16

800-999-5099  
[www.strongtie.com](http://www.strongtie.com)

# LUS - Double Shear Joist Hangers

**SIMPSON**  
**Strong-Tie**

All LUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections.

**Material:** 18 gauge

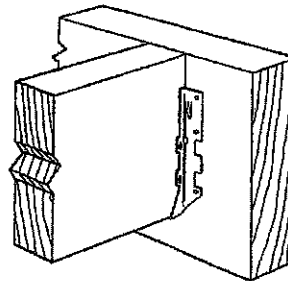
**Finish:** G90 galvanized

## Design:

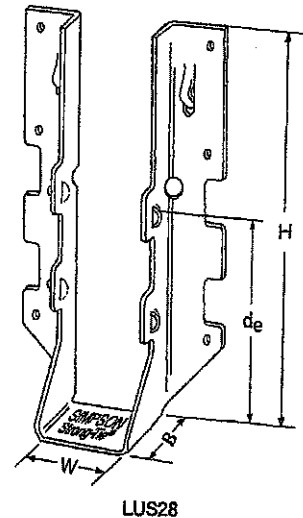
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

## Installation:

- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

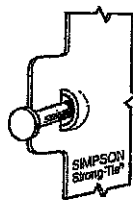


Typical LUS Installation

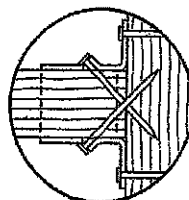


| Model No. | Ga. | Dimensions (in.) |       |       |                             | Fasteners |         | Factored Resistance (lb.)        |                                  |                                  |                                  |
|-----------|-----|------------------|-------|-------|-----------------------------|-----------|---------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|           |     | W                | H     | B     | d <sub>e</sub> <sup>1</sup> | Face      | Joist   | D.Fir-L                          |                                  | S-P-F                            |                                  |
|           |     |                  |       |       |                             |           |         | Uplift<br>(K <sub>o</sub> =1.15) | Normal<br>(K <sub>o</sub> =1.00) | Uplift<br>(K <sub>o</sub> =1.15) | Normal<br>(K <sub>o</sub> =1.00) |
| LUS24     | 18  | 1 1/8            | 3 1/8 | 1 3/4 | 1 1/8                       | (4) 10d   | (2) 10d | 710                              | 1630                             | 645                              | 1155                             |
| LUS24-2   | 18  | 3 1/8            | 3 1/8 | 2     | 1 1/8                       | (4) 16d   | (2) 16d | 835                              | 2020                             | 590                              | 1435                             |
| LUS26     | 18  | 1 1/8            | 4 3/8 | 1 3/4 | 3 1/8                       | (4) 10d   | (4) 10d | 1420                             | 2170                             | 1290                             | 1630                             |
| LUS26-2   | 18  | 3 1/8            | 4 3/8 | 2     | 4                           | (4) 16d   | (4) 16d | 1720                             | 2595                             | 1545                             | 1920                             |
| LUS26-3   | 18  | 4 3/8            | 4 3/8 | 2     | 3 1/4                       | (4) 16d   | (4) 16d | 1720                             | 2595                             | 1545                             | 2340                             |
| LUS28     | 18  | 1 1/8            | 6 3/8 | 1 3/4 | 3 3/4                       | (6) 10d   | (6) 10d | 1420                             | 2520                             | 1290                             | 1790                             |
| LUS28-2   | 18  | 3 1/8            | 7     | 2     | 4                           | (6) 16d   | (4) 16d | 1720                             | 3325                             | 1545                             | 2575                             |
| LUS28-3   | 18  | 4 3/8            | 6 1/4 | 2     | 3 1/4                       | (6) 16d   | (4) 16d | 1720                             | 3325                             | 1545                             | 2375                             |
| LUS210    | 18  | 1 1/8            | 7 1/8 | 1 3/4 | 3 3/8                       | (8) 10d   | (4) 10d | 1420                             | 2785                             | 1290                             | 2210                             |
| LUS210-2  | 18  | 3 1/8            | 9     | 2     | 6                           | (8) 16d   | (6) 16d | 2580                             | 4500                             | 2320                             | 3195                             |
| LUS210-3  | 18  | 4 3/8            | 8 3/8 | 2     | 5 1/4                       | (8) 16d   | (6) 16d | 2580                             | 3345                             | 2320                             | 2375                             |

1. d<sub>e</sub> is the distance from the seat of the hanger to the highest joist nail.



Dome Double Shear Nailing prevents tabs breaking off (available on some models).  
U.S. Patent 5,603,580



Double Shear Nailing Top View.



(800) 999-5099  
strongtie.com



## Alves Engineering Services Inc.

5208 Easton road  
Burlington, Ontario L7L 6N6  
(289) 259 5455

### RESPONSABILITIES

- 1-Alves Engineering Services Inc. is responsible for the design of trusses as individual components
- 2-It is the responsibility of others to ascertain that the design loads utilized on this drawing meet or exceed the actual dead load imposed by the structure and the live load imposed by the local building code or the authorities having jurisdictions.
- 3- All dimensions are to be verified by owner, contractor, architect or other authority before manufacture.
- 4- Alves Engineering Services Inc. bears no responsibility for the erection of the trusses. Persons erecting trusses are cautioned to seek professional advice regarding temporary and permanent bracing system. Bracing shown on Alves Engineering Services Inc. drawings is specified for the truss as a single component and forms an integral part of the truss design, but is not meant to represent the only required bracing for that truss when trusses are installed in a series of trusses forming a roof truss system.
- 5- It is the manufactures responsibility to ensure that the trusses are manufactured in conformance with Alves Engineering Services Inc. specifications outlined below.

### SPECIFICATIONS

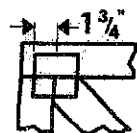
- 1-Truss components sealed by Alves Engineering Services Inc. conform to the relevant sections of the current Building Code of Ontario and Canada (part 4 or part 9) or the current Canadian code for Farm Buildings in accordance with the application specified on the sealed truss component drawing. All truss component design procedures must conform to the current design standard issued by the truss plate institute of Canada (TPIC). All lumber and nailing stresses to conform to the current CSA wood design standard identified on the current Building Code and TPIC.
- 2- Lumber is to be the sizes and grade specified on the truss drawing.
- 3- Moist content of lumber is not to exceed 19% in service unless otherwise specified.
- 4- Plates shall be applied to both faces of the each truss joint and shall be positioned as shown on the truss drawings
- 5- Lumber used on manufacture of trusses is not to be treated with chemicals unless otherwise specified on the truss drawings.
- 6- The top chord is assumed to be continuously laterally braced by the roof sheathing or purlins at intervals specified on the truss drawing but not exceeding 24" c/c for (part 9) and not exceeding 48" for (part 4 or farm design)
- 7- When rigid ceiling is not attached directly to the bottom chord, lateral bracing is required and it should not exceed more than 3m or 10' intervals.
- 8-Refer to Mitek sheet MII7473C REV.10-08 attached for information on symbols, numbering system and General Safety notes.

T-1800218

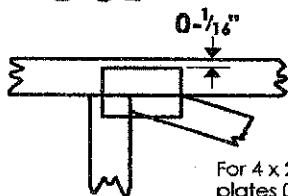
Feb 09, 2018

## Symbols

### PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths or mm. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0-1/4" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

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

### PLATE SIZE

4 x 4

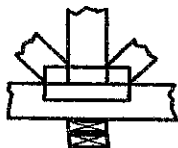
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

### LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T, I or Eliminator bracing if indicated.

### BEARING



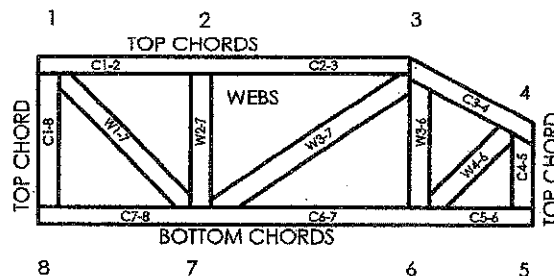
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

### Industry Standards:

- TPIC: Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses
- DSB-89: Design Standard for Bracing.
- BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

## Numbering System

6-4-8 dimensions shown in ft-in-sixteenths or mm (Drawings not to scale)



**JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.**

**CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.**

### PRODUCT CODE APPROVALS

CCMC Reports:

11996-L, 10319-L, 13270-L, 12691-R

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**MiTek**  
POWER TO PERFORM.™

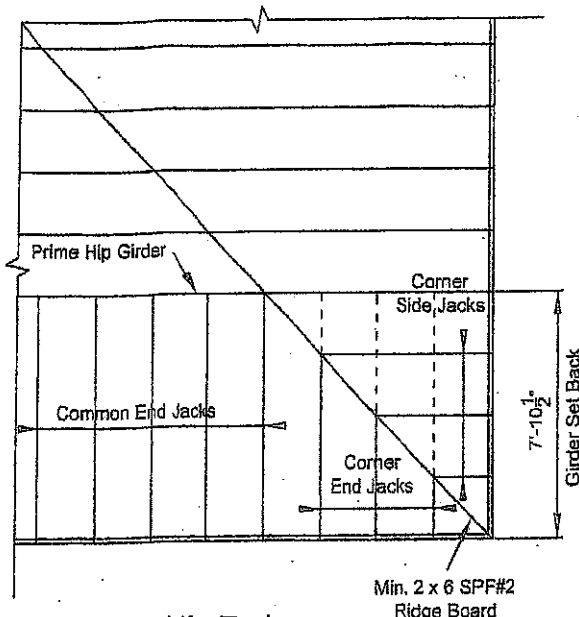
MiTek Engineering Reference Sheet: Mil-7473C rev. 10-'08



## General Safety Notes

**Failure to Follow Could Cause Property Damage or Personal Injury**

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T, I, or Eliminator bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by TPIC.
7. Design assumes trusses will be suitably protected from the environment in accord with TPIC.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with TPIC Quality Criteria.



**45° Hip End**

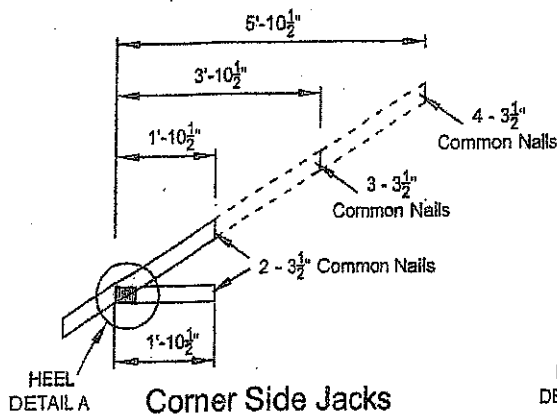
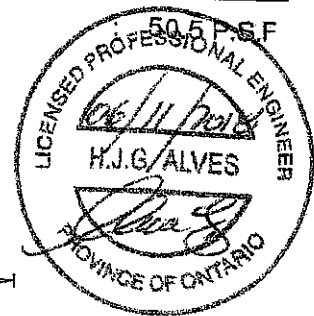
## LUMBER SPECIFICATION

TOP CHORD : 2 x 4 SPF#2  
 BOTTOM CHORD : 2 x 4 SPF#2  
 WEBS : 2 x 3 SPF#2  
 UNLESS OTHERWISE SHOWN

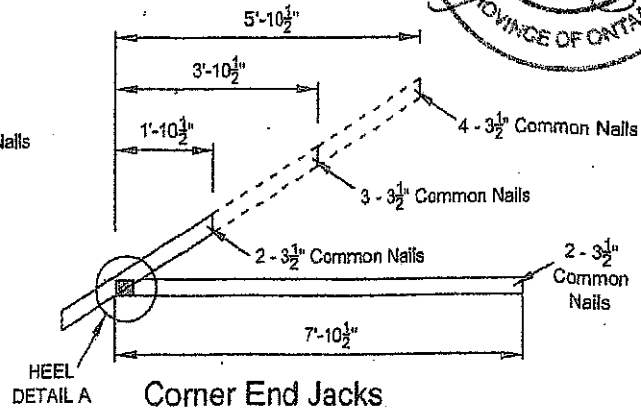
## DESIGN LOAD

TOP CHORD SNOW LOAD : 40.5 P.S.F.  
 TOP CHORD DEAD LOAD : 3.0 P.S.F.  
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.  
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.

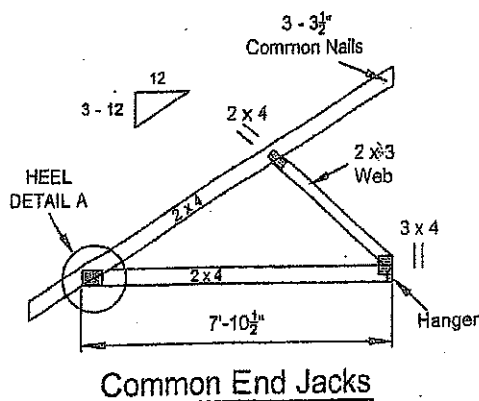
TOTAL LOAD



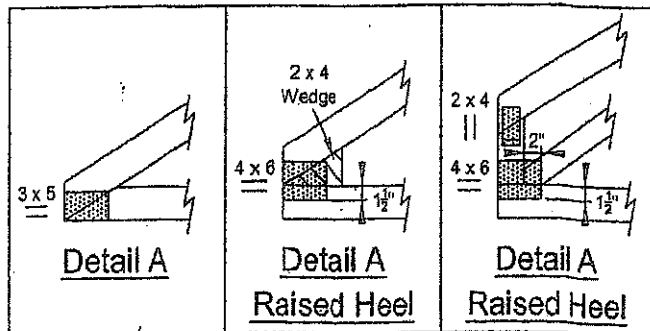
**Corner Side Jacks**



**Corner End Jacks**

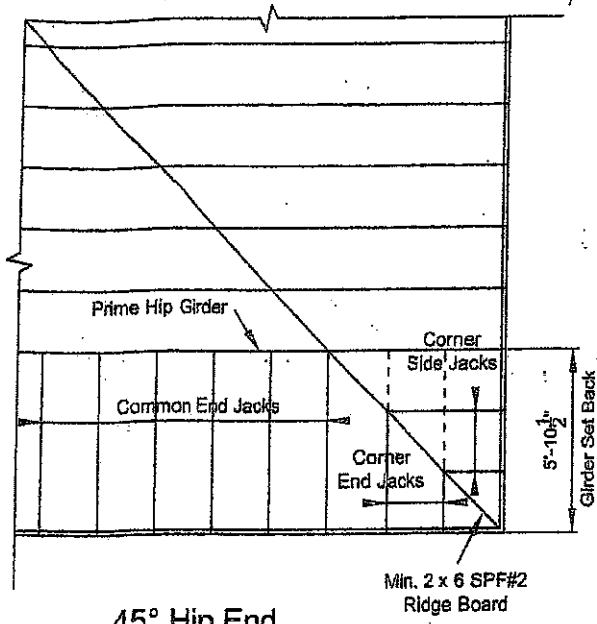


**Common End Jacks**



NOTE: DESIGN CONFORMS TO PART 9, O.B.C. 2012 (L.S.D. DESIGN)

T-1800217



45° Hip End

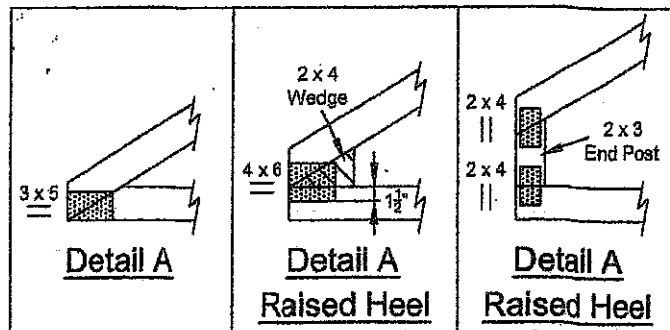
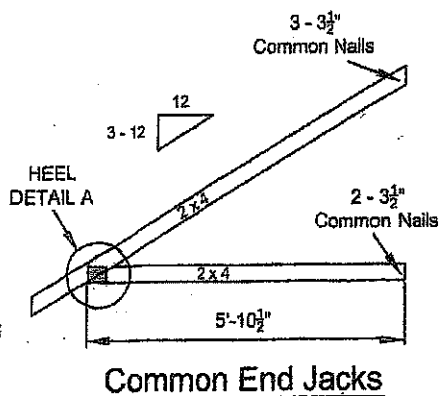
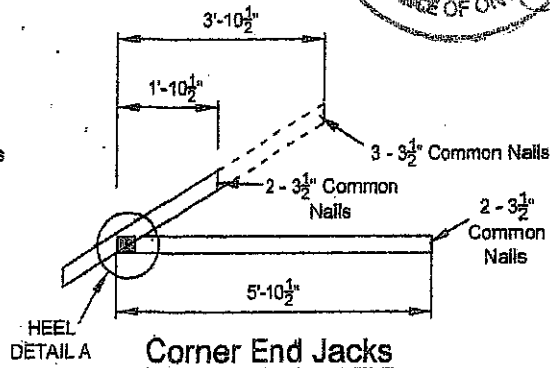
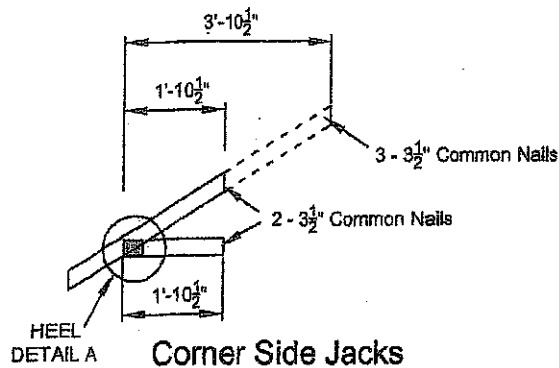
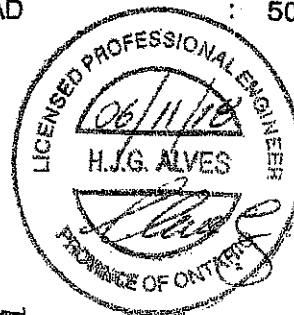
LUMBER SPECIFICATION

TOP CHORD : 2 x 4 SPF#2  
 BOTTOM CHORD : 2 x 4 SPF#2  
 WEBS : 2 x 3 SPF#2  
 UNLESS OTHERWISE SHOWN

DESIGN LOAD

TOP CHORD SNOW LOAD : 40.5 P.S.F.  
 TOP CHORD DEAD LOAD : 3.0 P.S.F.  
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.  
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.

TOTAL LOAD : 50.5 P.S.F



NOTE: DESIGN CONFORMS TO PART 9, O.B.C. 2012 (L.S.D. DESIGN)

T-1800216