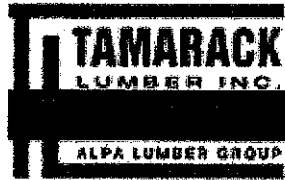


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# DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER  
 Builder: Greenpark  
 Project: Lamberts Lane Home Corp.  
 Location: CALEDON  
 Model: Brentwood 3A  
 Lot #:   
 Elevation: 3

Job Track: 50120  
 PlanLog: 200142  
 Layout ID: 400342  
 Ref #  
 Page: 1 of 2  
 Date: 04/30/2019  
 Designer: Brian Faneca  
 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          | 6/12  | 27-00-00 | 4-01-04  | 2 x 4          | 1-03-08<br>1-03-08        | 1-02-00<br>1-02-00           | 209.02<br>132.67  |                     |                    |
|         | 1          | T2<br>Hip                 | 6/12  | 27-00-00 | 5-01-04  | 2 x 4          | 1-03-08<br>1-03-08        | 1-02-00<br>1-02-00           | 109.31<br>68.83   |                     |                    |
|         | 1          | T3<br>Hip                 | 6/12  | 27-00-00 | 6-01-04  | 2 x 4          | 1-03-08<br>1-03-08        | 1-02-00<br>1-02-00           | 110.98<br>70.67   |                     |                    |
|         | 1          | T4<br>Hip                 | 6/12  | 27-00-00 | 7-01-04  | 2 x 4          | 1-03-08<br>1-03-08        | 1-02-00<br>1-02-00           | 112.6<br>70.67    |                     |                    |
|         | 11         | T5<br>Common              | 6/12  | 27-00-00 | 7-11-00  | 2 x 4          | 1-03-08<br>1-03-08        | 1-02-00<br>1-02-00           | 1251.35<br>788.33 |                     |                    |
|         | 1<br>2-ply | T6Z<br>Hip Girder         | 9/12  | 27-00-00 | 5-11-02  | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 271.8<br>174.00   |                     |                    |
|         | 2          | T7<br>Hip                 | 9/12  | 27-00-00 | 7-05-02  | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 249.14<br>157.67  |                     |                    |
|         | 3          | T8<br>Hip                 | 9/12  | 27-00-00 | 8-11-02  | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 385.47<br>248.00  |                     |                    |
|         | 3          | T31<br>Common             | 9/12  | 22-02-00 | 10-07-00 | 2 x 4          | 1-03-08                   | 1-06-04<br>3-00-04           | 305.98<br>189.50  |                     |                    |
|         | 1          | G31<br>GABLE              | 9/12  | 22-02-00 | 10-07-00 | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>3-00-04           | 118.64<br>76.50   |                     |                    |
|         | 1          | T32<br>Common             | 9/12  | 10-02-00 | 5-04-00  | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 44.38<br>29.50    |                     |                    |
|         | 3          | T32S<br>Roof Special      | 9/12  | 10-02-00 | 5-04-00  | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 156.34<br>110.00  |                     |                    |
|         | 9          | J1<br>Jack-Open           | 6/12  | 5-10-08  | 4-01-04  | 2 x 4          | 1-03-08                   | 1-02-00<br>4-01-04           | 151.15<br>98.00   |                     |                    |
|         | 2          | J2<br>Jack-Open<br>Girder | 6/12  | 1-09-07  | 2-00-12  | 2 x 4          | 1-03-08<br>4-01-01        | 1-02-00<br>2-00-12           | 23.16<br>14.67    |                     |                    |

**RECEIVED**  
 JUL 11 2019

TOWN OF CALEDON  
 BUILDING SECTION  
 FILE NO.



## DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER  
 Builder: Greenpark  
 Project: Lamberts Lane Home Corp.  
 Location: CALEDON  
 Model: Brentwood 3A  
 Lot #:   
 Elevation: 3

Job Track: 50120  
 PlanLog: 200142  
 Layout ID: 400342  
 Ref #  
 Page: 2 of 2  
 Date: 04/30/2019  
 Designer: Brian Faneca  
 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 |
|---------|------------|---------------------------|-------|---------|---------|--------|---------------------------|------------------------------|----------------|---------------------|--------------------|
|         | 2          | J3<br>Jack-Open           | 6/12  | 3-09-07 | 3-00-12 | 2 x 4  | 1-03-08<br>2-01-01        | 1-02-00<br>3-00-12           | 28.26<br>17.33 |                     |                    |
|         | 2          | J4<br>Jack-Open           | 6/12  | 1-09-07 | 2-00-12 | 2 x 4  | 1-03-08<br>1-01           | 1-02-00<br>2-00-12           | 14.04<br>9.33  |                     |                    |
|         | 2          | J5<br>Jack-Open           | 6/12  | 1-10-08 | 3-00-12 | 2 x 4  | 1-03-08<br>1-10-15        | 1-02-00<br>2-01-04           | 19.14<br>12.00 |                     |                    |
|         | 1          | J7<br>Jack-Open<br>Girder | 8/12  | 1-09-07 | 2-07-02 | 2 x 4  | 1-03-08<br>4-01-01        | 1-04-13<br>2-07-02           | 13.47<br>8.33  |                     |                    |
|         | 1          | J8<br>Jack-Open           | 9/12  | 5-10-08 | 4-04-05 | 2 x 4  | 1-03-08                   | 1-06-04<br>5-11-02           | 17.07<br>11.50 |                     |                    |
|         | 1          | J9<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           | 9.31<br>7.00   |                     |                    |
|         | 1          | J10<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           | 12.22<br>8.33  |                     |                    |
|         | 3          | J21<br>Jack-Open          | 7/12  | 5-01-08 | 4-01-00 | 2 x 4  | 1-03-08                   | 4-05<br>3-03-14              | 43.53<br>28.00 |                     |                    |
|         | 9          | J23<br>Jack-Open          | 12/12 | 2-05-08 | 4-01-15 | 2 x 4  | 1-03-08                   | 11-06<br>3-04-06             | 88.15<br>60.00 |                     |                    |

TOTAL # TRUSS= 64

TOTAL BFT OF ALL TRUSSES= 2388.83

BFT.

TOTAL WEIGHT OF ALL TRSSES 3744.54 LBS

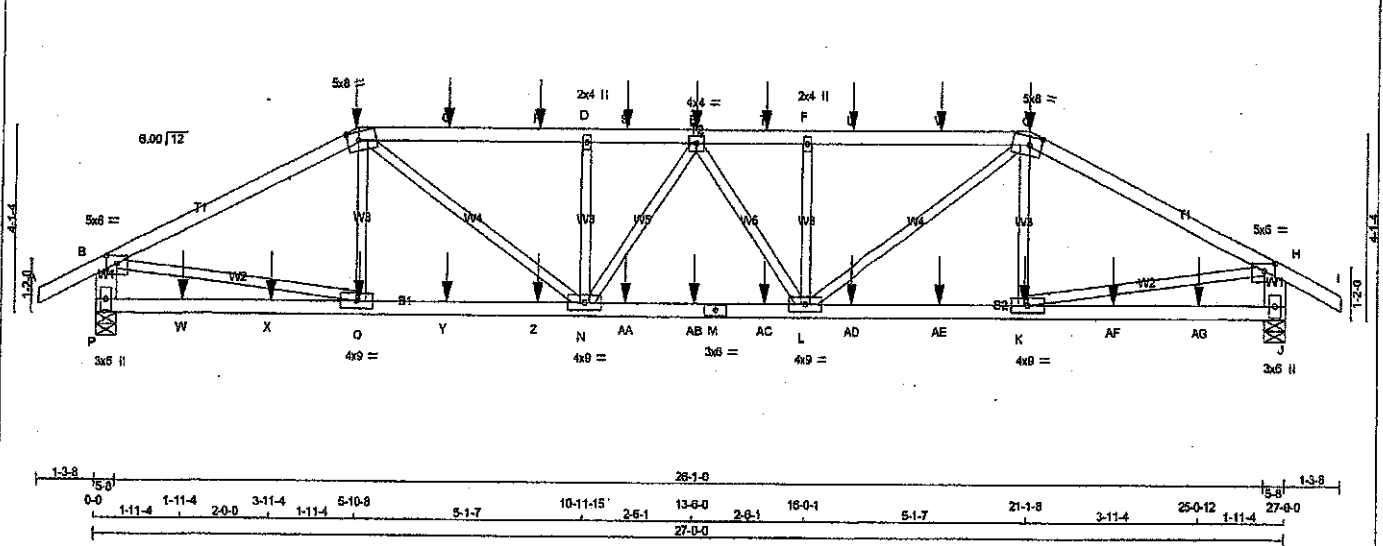
### HARDWARE

| QTY | TYPE     | MODEL    | LENGTH |
|-----|----------|----------|--------|
| 1   | Hardware | HGUS26-2 |        |
| 2   | Hardware | LJS26DS  |        |

TOTAL NUMBER OF ITEMS= 3

|                                 |            |          |     |              |          |
|---------------------------------|------------|----------|-----|--------------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY | PLY | JOB DESC.    | DRWG NO. |
| 200142-400307                   | T1         | 1        | 2   | Brentwood 3A |          |
| Tamarack Roof Truss, Burlington |            |          |     | TRUSS DESC.  |          |

Version 8.230 S Nov 17 2018 MITak Industries, Inc. Wed May 8 14:08:58 2019 Page 1  
ID: Vfg7WpQQXfxf6eSfxbzmZP9Hj3RU9bqJed0yb1dn0n3Kzsg2gRZUR3jCfny6zYmw  
Scale = 1/4" = 1'-0"



TOTAL WEIGHT = 2 X 107 = 213 lb

| LUMBER            | SIZE | LUMBER | DESCR. |
|-------------------|------|--------|--------|
| N. L. G. A. RULES |      |        |        |
| CHORDS            |      |        |        |
| A - C             | 2x4  | DRY    | No.2   |
| C - G             | 2x4  | DRY    | No.2   |
| G - I             | 2x4  | DRY    | No.2   |
| P - B             | 2x6  | DRY    | No.2   |
| J - H             | 2x6  | DRY    | No.2   |
| P - M             | 2x4  | DRY    | No.2   |
| M - J             | 2x4  | DRY    | No.2   |

ALL WEBS 2x3 DRY No.2  
EXCEPT  
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                                   | 12                   | SIDE (61.0) |
| C - G                                   | 12                   | SIDE (61.0) |
| G - I                                   | 12                   | SIDE (61.0) |
| P - B                                   | 12                   | TOP         |
| J - H                                   | 12                   | TOP         |
| BOTTOM CHORDS: (0.122"x3") SPIRAL NAILS |                      |             |
| P - M                                   | 12                   | SIDE (61.0) |
| M - J                                   | 12                   | SIDE (61.0) |
| WEBS: (0.122"x3") SPIRAL NAILS          |                      |             |
| 2x3                                     | 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 TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

| PLATES (table in inches) | W    | LEN | Y   | X         |
|--------------------------|------|-----|-----|-----------|
| JT TYPE PLATES           |      |     |     |           |
| B TMWV-p                 | MT20 | 5.0 | 8.0 | 2.00 2.75 |
| C TTMW-m                 | MT20 | 5.0 | 8.0 | 2.25 3.25 |
| D TMW-w                  | MT20 | 2.0 | 4.0 |           |
| E TMW-w                  | MT20 | 4.0 | 4.0 |           |
| F TMW-w                  | MT20 | 2.0 | 4.0 |           |
| G TTMW-m                 | MT20 | 5.0 | 8.0 | 2.25 3.25 |
| H TMWV-p                 | MT20 | 5.0 | 8.0 | 2.00 2.75 |
| J BMV1-p                 | MT20 | 3.0 | 6.0 |           |
| K BMWV-w                 | MT20 | 4.0 | 9.0 |           |
| L BMWV-w                 | MT20 | 4.0 | 9.0 |           |
| M BS-1                   | MT20 | 3.0 | 6.0 |           |
| N BMWV-w                 | MT20 | 4.0 | 9.0 |           |
| O BMWV-w                 | MT20 | 4.0 | 9.0 |           |
| P BMV1-p                 | MT20 | 3.0 | 6.0 |           |

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 |
| P        | 3235           | 0                | 3235  | 0    |
| J        | 3235           | 0                | 3235  | 0    |

| UNFACTORED REACTIONS | 1ST LCASE | MAX/MIN  | COMPONENT REACTIONS |
|----------------------|-----------|----------|---------------------|
|                      | JT        | COMBINED | SNOW                |
| P                    | 2420      | 1328 / 0 | 489 / 0             |
| J                    | 2420      | 1328 / 0 | 489 / 0             |

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

BRACING  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.63 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  | VERT. LOAD | LC1 | MAX   | CS1 (LC) | UNBRAC | LENGTH | FR-TO | MEMB. | MAX. FACTORED | FORCE | MAX  | CS1 (LC) |
|--------|-----------|---------------|--------|------------|-----|-------|----------|--------|--------|-------|-------|---------------|-------|------|----------|
| FR-TO  |           |               |        |            |     |       |          |        |        |       |       |               |       |      |          |
| A-B    | 0 / 31    | -102.1        | -102.1 | 0.07       | (1) | 10.00 | 0.03     | 0.03   | 0.03   | 0.03  | 0.03  | -177 / 254    | 0.03  | 0.03 | 0.03     |
| B-C    | -4807 / 0 | -102.1        | -102.1 | 0.53       | (1) | 4.00  | 0.28     | 0.28   | 0.28   | 0.28  | 0.28  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| C-Q    | -5772 / 0 | -102.1        | -102.1 | 0.47       | (1) | 3.63  | 0.11     | 0.11   | 0.11   | 0.11  | 0.11  | -844 / 0      | 0.11  | 0.11 | 0.11     |
| Q-R    | -5772 / 0 | -102.1        | -102.1 | 0.47       | (1) | 3.63  | 0.11     | 0.11   | 0.11   | 0.11  | 0.11  | -844 / 0      | 0.11  | 0.11 | 0.11     |
| R-D    | -5772 / 0 | -102.1        | -102.1 | 0.47       | (1) | 3.63  | 0.11     | 0.11   | 0.11   | 0.11  | 0.11  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| D-S    | -5772 / 0 | -102.1        | -102.1 | 0.39       | (1) | 3.66  | 0.03     | 0.03   | 0.03   | 0.03  | 0.03  | -177 / 254    | 0.03  | 0.03 | 0.03     |
| S-E    | -5772 / 0 | -102.1        | -102.1 | 0.39       | (1) | 3.66  | 0.03     | 0.03   | 0.03   | 0.03  | 0.03  | 0 / 4160      | 0.51  | 0.51 | 0.51     |
| E-T    | -5772 / 0 | -102.1        | -102.1 | 0.39       | (1) | 3.66  | 0.03     | 0.03   | 0.03   | 0.03  | 0.03  | 0 / 4160      | 0.51  | 0.51 | 0.51     |
| T-F    | -5772 / 0 | -102.1        | -102.1 | 0.39       | (1) | 3.66  | 0.03     | 0.03   | 0.03   | 0.03  | 0.03  | -78 / 0       | 0.01  | 0.01 | 0.01     |
| F-U    | -5772 / 0 | -102.1        | -102.1 | 0.47       | (1) | 3.63  | 0.03     | 0.03   | 0.03   | 0.03  | 0.03  | -78 / 0       | 0.01  | 0.01 | 0.01     |
| U-V    | -5772 / 0 | -102.1        | -102.1 | 0.47       | (1) | 3.63  | 0.03     | 0.03   | 0.03   | 0.03  | 0.03  | -78 / 0       | 0.01  | 0.01 | 0.01     |
| V-G    | -5772 / 0 | -102.1        | -102.1 | 0.47       | (1) | 3.63  | 0.03     | 0.03   | 0.03   | 0.03  | 0.03  | -78 / 0       | 0.01  | 0.01 | 0.01     |
| G-H    | -4807 / 0 | -102.1        | -102.1 | 0.53       | (1) | 4.00  | 0.28     | 0.28   | 0.28   | 0.28  | 0.28  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| H-I    | 0 / 31    | -102.1        | -102.1 | 0.07       | (1) | 10.00 | 0.03     | 0.03   | 0.03   | 0.03  | 0.03  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| P-B    | -3095 / 0 | 0.0           | 0.0    | 0.11       | (1) | 7.81  | 0.01     | 0.01   | 0.01   | 0.01  | 0.01  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| J-H    | -3095 / 0 | 0.0           | 0.0    | 0.11       | (1) | 7.81  | 0.01     | 0.01   | 0.01   | 0.01  | 0.01  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| P-W    | 0 / 0     | -38.5         | -38.5  | 0.20       | (3) | 10.00 | 0.00     | 0.00   | 0.00   | 0.00  | 0.00  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| W-X    | 0 / 0     | -38.5         | -38.5  | 0.20       | (3) | 10.00 | 0.00     | 0.00   | 0.00   | 0.00  | 0.00  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| X-O    | 0 / 0     | -38.5         | -38.5  | 0.20       | (3) | 10.00 | 0.00     | 0.00   | 0.00   | 0.00  | 0.00  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| O-Y    | 0 / 4113  | -38.5         | -38.5  | 0.51       | (2) | 10.00 | 0.00     | 0.00   | 0.00   | 0.00  | 0.00  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| Y-Z    | 0 / 4113  | -38.5         | -38.5  | 0.51       | (2) | 10.00 | 0.00     | 0.00   | 0.00   | 0.00  | 0.00  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| Z-AA   | 0 / 4113  | -38.5         | -38.5  | 0.51       | (2) | 10.00 | 0.00     | 0.00   | 0.00   | 0.00  | 0.00  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| AA-AB  | 0 / 5815  | -38.5         | -38.5  | 0.82       | (1) | 10.00 | 0.00     | 0.00   | 0.00   | 0.00  | 0.00  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| AB-M   | 0 / 5815  | -38.5         | -38.5  | 0.82       | (1) | 10.00 | 0.00     | 0.00   | 0.00   | 0.00  | 0.00  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| M-AC   | 0 / 5815  | -38.5         | -38.5  | 0.82       | (1) | 10.00 | 0.00     | 0.00   | 0.00   | 0.00  | 0.00  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| AC-L   | 0 / 5815  | -38.5         | -38.5  | 0.82       | (1) | 10.00 | 0.00     | 0.00   | 0.00   | 0.00  | 0.00  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| L-AD   | 0 / 4113  | -38.5         | -38.5  | 0.51       | (2) | 10.00 | 0.00     | 0.00   | 0.00   | 0.00  | 0.00  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| AD-AE  | 0 / 4113  | -38.5         | -38.5  | 0.51       | (2) | 10.00 | 0.00     | 0.00   | 0.00   | 0.00  | 0.00  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| AE-K   | 0 / 4113  | -38.5         | -38.5  | 0.51       | (2) | 10.00 | 0.00     | 0.00   | 0.00   | 0.00  | 0.00  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| K-AF   | 0 / 0     | -38.5         | -38.5  | 0.20       | (3) | 10.00 | 0.00     | 0.00   | 0.00   | 0.00  | 0.00  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| AF-AG  | 0 / 0     | -38.5         | -38.5  | 0.20       | (3) | 10.00 | 0.00     | 0.00   | 0.00   | 0.00  | 0.00  | 0 / 2086      | 0.28  | 0.28 | 0.28     |
| AG-J   | 0 / 0     | -38.5         | -38.5  | 0.20       | (3) | 10.00 | 0.00     | 0.00   | 0.00   | 0.00  | 0.00  | 0 / 2086      | 0.28  | 0.28 | 0.28     |

| FACTORED CONCENTRATED LOADS (LBS) | JT     | LOC. | LC1  | MAX- | MAX+ | FACE  | DIR. | TYPE  | HEEL | CONN. |
|-----------------------------------|--------|------|------|------|------|-------|------|-------|------|-------|
| C                                 | 5-10-8 | -409 | -409 | -    | -    | FRONT | VERT | TOTAL | -    | -     |
| E                                 | 13-5-0 | -123 | -123 | -    | -    | FRONT | VERT | TOTAL | -    | -     |
| G                                 | 21-1-8 | -409 | -409 | -    | -    | FRONT | VERT | TOTAL | -    | -     |

# DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.1 PSF  
DL = 5.0 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 2.00/12 MINIMUM

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

THIS TRUSS COMPLIES WITH:  
- PART 9 OF BCBC 2018, CBC 2012  
- CSA C88-08, CSA C88-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 6.4 P.S.F. RAIN LOAD) EQUALS 28.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = L/360 (0.90")  
CALCULATED VERT. DEFL. (LL) = L/999 (0.15")  
ALLOWABLE DEFL. (TL) = L/360 (0.90")  
CALCULATED VERT. DEFL. (TL) = L/999 (0.28")

CSI: TC=0.53/1.00 (B-C:1), BC=0.62/1.00 (L-A:1), WB=0.51/1.00 (B-O:1), SS=0.21/1.00 (F-G: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

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 1567 788 1987 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

GRIP = 0.90 (H) (INPUT = 0.90)  
SI METAL = 0.98 (M) (INPUT = 1.00)

DRWG NO. TAM T1910920  
STRUCTURAL  
COMPONENT ONLY

CONTINUED ON PAGE 2

|               |            |          |     |              |             |          |
|---------------|------------|----------|-----|--------------|-------------|----------|
| JOB NAME      | TRUSS NAME | QUANTITY | PLY | JOB DESC.    | TRUSS DESC. | DRWG NO. |
| 200142-400307 | T1         | 1        | 2   | Brentwood 3A |             |          |

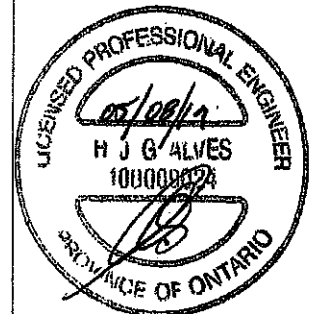
Tamarack Roof Truss, Burlington

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Wed May 8 14:06:59 2019 Page 2  
ID:Vftg?WpQQXf6eSfxbzMzZP9L-13RU9bgJeDoyb1dn0n3Kzsq2gRZUR3jKcinY6zlymw

| FACTORED CONCENTRATED LOADS (LBS) |         |      |      |      |       |      |       |      |       |
|-----------------------------------|---------|------|------|------|-------|------|-------|------|-------|
| JT                                | LOC.    | LC1  | MAX- | MAX+ | FACE  | DIR. | TYPE  | HEEL | CONN. |
| K                                 | 21-0-12 | -55  | -70  | —    | FRONT | VERT | TOTAL | —    | —     |
| O                                 | 5-11-4  | -55  | -70  | —    | FRONT | VERT | TOTAL | —    | —     |
| Q                                 | 7-11-4  | -123 | -123 | —    | FRONT | VERT | TOTAL | —    | —     |
| R                                 | 9-11-4  | -123 | -123 | —    | FRONT | VERT | TOTAL | —    | —     |
| S                                 | 11-11-4 | -123 | -123 | —    | FRONT | VERT | TOTAL | —    | —     |
| T                                 | 15-0-12 | -123 | -123 | —    | FRONT | VERT | TOTAL | —    | —     |
| U                                 | 17-0-12 | -123 | -123 | —    | FRONT | VERT | TOTAL | —    | —     |
| V                                 | 19-0-12 | -123 | -123 | —    | FRONT | VERT | TOTAL | —    | —     |
| W                                 | 1-11-4  | -55  | -74  | —    | FRONT | VERT | TOTAL | —    | —     |
| X                                 | 3-11-4  | -55  | -70  | —    | FRONT | VERT | TOTAL | —    | —     |
| Y                                 | 7-11-4  | -55  | -70  | —    | FRONT | VERT | TOTAL | —    | —     |
| Z                                 | 9-11-4  | -55  | -70  | —    | FRONT | VERT | TOTAL | —    | —     |
| AA                                | 11-11-4 | -55  | -70  | —    | FRONT | VERT | TOTAL | —    | —     |
| AB                                | 13-6-0  | -55  | -70  | —    | FRONT | VERT | TOTAL | —    | —     |
| AC                                | 15-0-12 | -55  | -70  | —    | FRONT | VERT | TOTAL | —    | —     |
| AD                                | 17-0-12 | -55  | -70  | —    | FRONT | VERT | TOTAL | —    | —     |
| AE                                | 19-0-12 | -55  | -70  | —    | FRONT | VERT | TOTAL | —    | —     |
| AF                                | 23-0-12 | -55  | -70  | —    | FRONT | VERT | TOTAL | —    | —     |
| AG                                | 25-0-12 | -55  | -74  | —    | FRONT | VERT | TOTAL | —    | —     |

**RECEIVED**  
JUL 11 2019

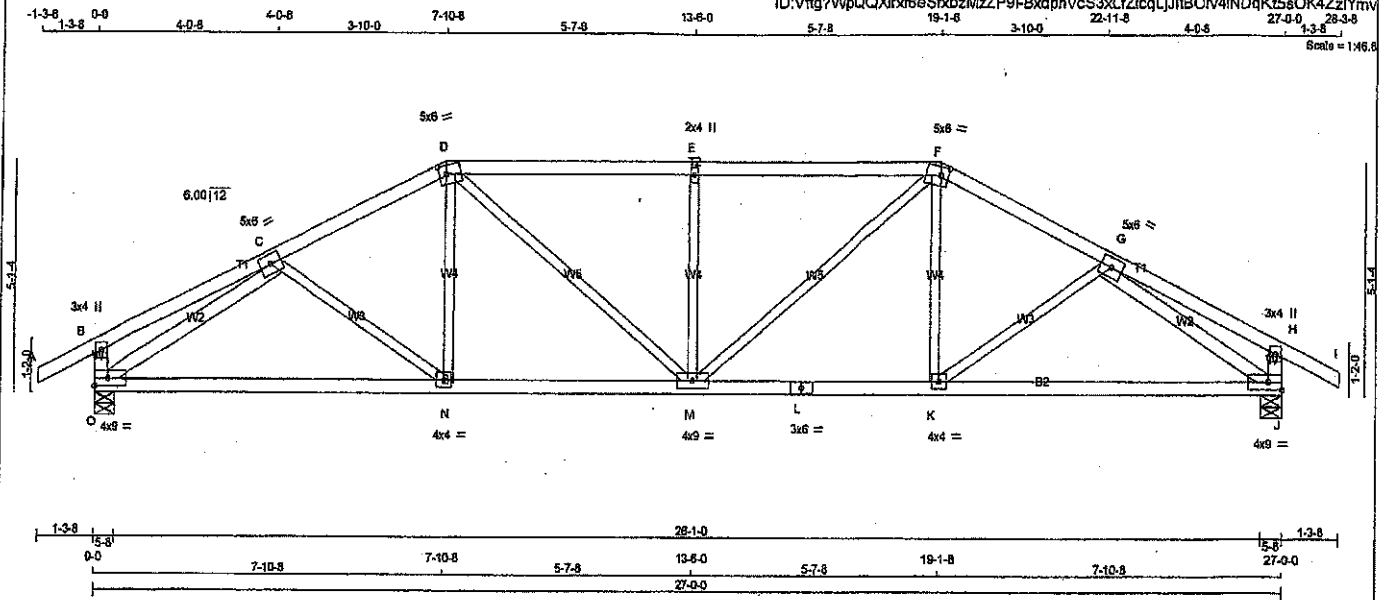
TOWN OF GALELON  
BUILDING SECTION  
FILE NO. \_\_\_\_\_



DWG NO. TAM 17710920  
STRUCTURAL  
COMPONENT ONLY 3/2

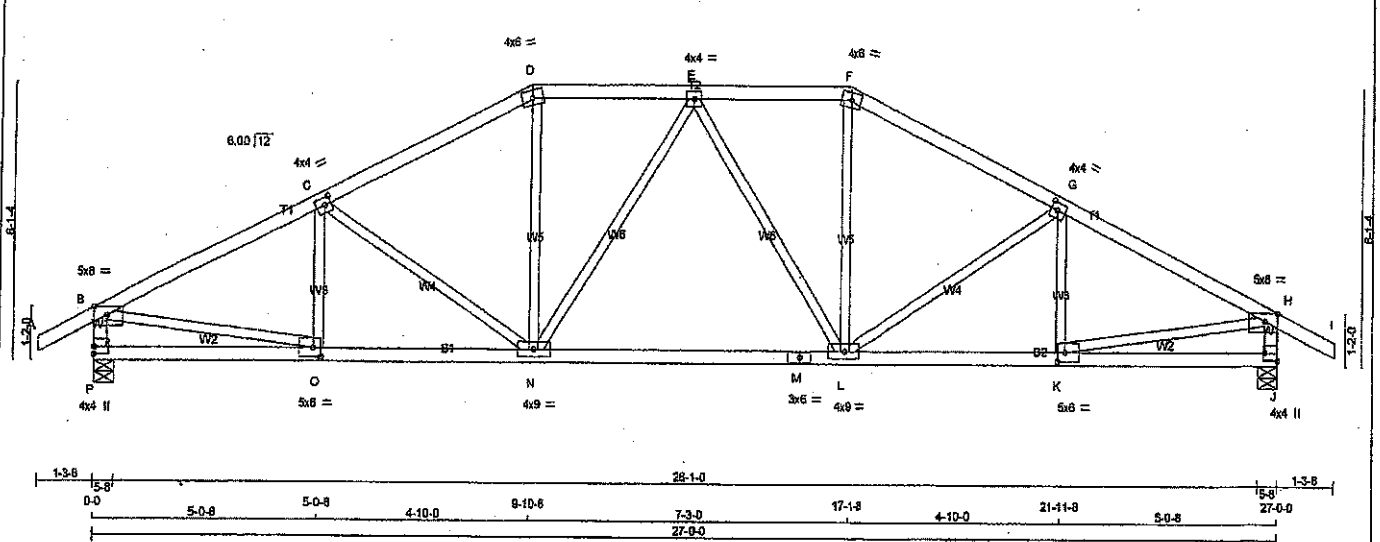
|                                  |                         |                      |                 |                                  |          |
|----------------------------------|-------------------------|----------------------|-----------------|----------------------------------|----------|
| JOB NAME<br><b>200142-400307</b> | TRUSS NAME<br><b>T2</b> | QUANTITY<br><b>1</b> | PLY<br><b>1</b> | JOB DESC.<br><b>Brentwood 3A</b> | DRWG NO. |
| Tamarack Roof Truss, Burlington  |                         |                      |                 | TRUSS DESC.                      |          |

Version 8.230 S Nov 17 2018 M Tek Industries, Inc. Wed May 6 14:07:00 2019 Page 1  
ID: Vtfg7WpQQXf8eSfxbzMzP9t-BxdphVcS3xLfZlqLJHIBOnv4INDqKt5aOK4ZzYmv



|                                  |                         |                      |                 |                                  |          |
|----------------------------------|-------------------------|----------------------|-----------------|----------------------------------|----------|
| JOB NAME<br><b>200142-400307</b> | TRUSS NAME<br><b>T3</b> | QUANTITY<br><b>1</b> | PLY<br><b>1</b> | JOB DESC.<br><b>Brentwood 3A</b> | DRWG NO. |
| Tamarack Roof Truss, Burlington  |                         |                      |                 | TRUSS DESC.                      |          |

Version 8.230 S Nov 17 2018 MiTek Industries, Inc. Wed May 8 14:07:01 2019 Page 1  
 ID: Vftg?WpQQXh6eS5xbzMZZP8t-g8BBurd4qFTVBVA0vRqXPOx2MU8tL10KW8uc?zYmu  
 1-3-8 0-0 5-0-8 5-0-8 4-10-0 9-10-8 3-7-8 13-6-0 3-7-8 17-1-8 4-10-0 21-11-8 5-0-8 27-0-0 28-3-8  
 Scale = 1/8" = 1'-0"



TOTAL WEIGHT = 111 lb (M/F)

| LUMBER                |      |        |        |
|-----------------------|------|--------|--------|
| N. L. G. A. RULES     | SIZE | LUMBER | DESCR. |
| CHORDS                |      |        |        |
| A - D                 | 2x4  | DRY    | No.2   |
| D - F                 | 2x4  | DRY    | No.2   |
| F - I                 | 2x4  | DRY    | No.2   |
| P - B                 | 2x4  | DRY    | No.2   |
| J - H                 | 2x4  | DRY    | No.2   |
| P - M                 | 2x4  | DRY    | No.2   |
| M - J                 | 2x4  | DRY    | No.2   |
| ALL WEBS              | 2x3  | DRY    | No.2   |
| EXCEPT                |      |        |        |
| DRY: SEASONED LUMBER. |      |        |        |

| PLATES (table in inches) |        |        |     |               |
|--------------------------|--------|--------|-----|---------------|
| JT                       | TYPE   | PLATES | W   | LEN Y X       |
| B                        | TMWV-p | MT20   | 5.0 | 8.0 Edge 3.50 |
| C                        | TMWW-t | MT20   | 4.0 | 4.0 2.00 1.75 |
| D                        | TTW-m  | MT20   | 4.0 | 6.0           |
| E                        | TMWW-t | MT20   | 4.0 | 4.0           |
| F                        | TTW-m  | MT20   | 4.0 | 6.0           |
| G                        | TMWW-t | MT20   | 4.0 | 4.0 2.00 1.75 |
| H                        | TMWV-p | MT20   | 5.0 | 8.0 Edge 3.50 |
| J                        | BMV1+p | MT20   | 4.0 | 4.0 2.00 Edge |
| K                        | BMWW-t | MT20   | 5.0 | 6.0 2.50 2.00 |
| L                        | BMWW-t | MT20   | 4.0 | 9.0           |
| M                        | BS-t   | MT20   | 3.0 | 6.0           |
| N                        | BMWW-t | MT20   | 4.0 | 9.0           |
| O                        | BMWW-t | MT20   | 5.0 | 6.0 2.50 2.00 |
| P                        | BMV1+p | MT20   | 4.0 | 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 |                | MAXIMUM FACTORED |                | INPUT |       | REQD |       |
|----------|----------------|------------------|----------------|-------|-------|------|-------|
| JT       | GROSS REACTION | JT               | GROSS REACTION | JT    | BRG   | JT   | BRG   |
| JT       | VERT           | JT               | DOWN           | JT    | IN-SX | JT   | IN-SX |
| P        | 2037           | P                | 2037           | P     | 5-8   | P    | 5-8   |
| J        | 2037           | J                | 2037           | J     | 5-8   | J    | 5-8   |

| UNFACTORED REACTIONS |          | MAX./MIN. COMPONENT REACTIONS |            |
|----------------------|----------|-------------------------------|------------|
| JT                   | COMBINED | JT                            | PERM. LIVE |
| P                    | 1514     | P                             | 0/0        |
| J                    | 1514     | J                             | 0/0        |

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

**BRACING**  
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.88 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) | MEMB. | FORCE (LBS) |
| FR-TO  | FROM TO     | FR-TO | FROM TO     |
| A-B    | 0/31        | O-C   | -221/84     |
| B-C    | -2983/0     | C-N   | -410/0      |
| C-D    | -2337/0     | N-D   | 0/698       |
| D-E    | -2078/0     | E-L   | -258/0      |
| E-F    | -2078/0     | F-L   | 0/698       |
| F-G    | -2337/0     | G-H   | -410/0      |
| G-H    | -2983/0     | H-I   | -221/84     |
| H-I    | 0/31        | I-K   | 0/2438      |
| I-K    | -1951/0     | K-H   | 0/2438      |
| K-H    | -1951/0     |       |             |

#### DESIGN CRITERIA

**SPECIFIED LOADS:**  
 TOP CH. LL = 28.1 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 2.00/12 MINIMUM

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 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.90")  
 CALCULATED VERT. DEFL.(LL) = 1/999 (0.13")  
 ALLOWABLE DEFL.(TL) = L/360 (0.90")  
 CALCULATED VERT. DEFL.(TL) = 1/999 (0.23")

CSI: TC=0.41/1.00 (G-H:1), BC=0.56/1.00 (N-O:1)  
 WB=0.56/1.00 (B-O:1), SS=0.22/1.00 (G-H: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

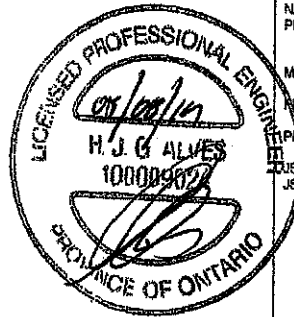
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

| NAIL VALUES |       | PLATE GRIP(DRY) |       | SHEAR SECTION |       |
|-------------|-------|-----------------|-------|---------------|-------|
| (PSI)       | (PLI) | (PSI)           | (PLI) | (PSI)         | (PLI) |
| MT20        | 618   | 354             | 1687  | 798           | 1687  |

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

GRIP=0.79 (K) (INPUT = 0.90)  
 JS METAL=0.65 (M) (INPUT = 1.00)



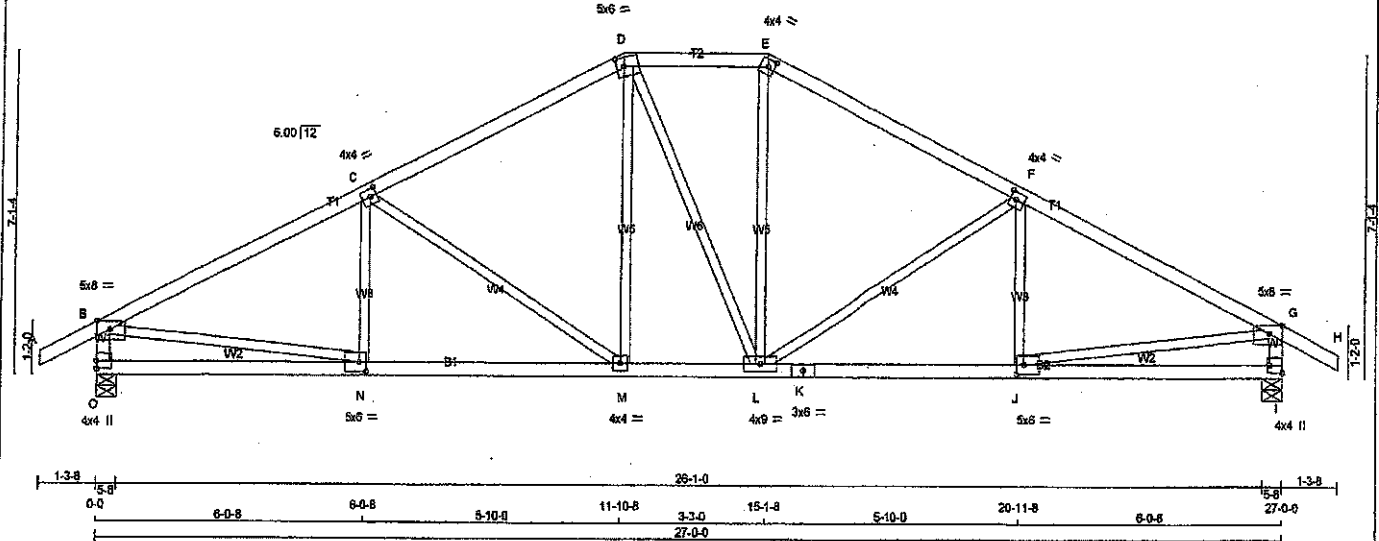
**RECEIVED**  
 JUL 1 2019

TOWN OF CALEDON  
 BUILDING SECTION  
 FILE NO.

DWG NO. TAM 779/0922  
 STRUCTURAL  
 COMPONENT ONLY

|                                  |                         |                      |                 |                                  |          |
|----------------------------------|-------------------------|----------------------|-----------------|----------------------------------|----------|
| JOB NAME<br><b>200142-400307</b> | TRUSS NAME<br><b>T4</b> | QUANTITY<br><b>1</b> | PLY<br><b>1</b> | JOB DESC.<br><b>Brentwood 3A</b> | DRWG NO. |
| Tamarack Roof Truss, Burlington  |                         |                      |                 | TRUSS DESC.                      |          |

Version 8.230 S Nov 17 2018 MITK Industries, Inc. Wed May 8 14:07:02 2019 Page 1  
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 Scale = 1:48.6



TOTAL WEIGHT = 113 lb  
 (M/F)

| LUMBER                |      |        |        |
|-----------------------|------|--------|--------|
| N.L. G.A. RULES       | SIZE | LUMBER | DESCR. |
| CHORDS                |      |        |        |
| A - D                 | 2x4  | DRY    | No.2   |
| D - E                 | 2x4  | DRY    | No.2   |
| E - H                 | 2x4  | DRY    | No.2   |
| O - B                 | 2x4  | DRY    | No.2   |
| I - G                 | 2x4  | DRY    | No.2   |
| O - K                 | 2x4  | DRY    | No.2   |
| K - I                 | 2x4  | DRY    | No.2   |
| ALL WEBS              | 2x3  | DRY    | No.2   |
| EXCEPT                |      |        |        |
| DRY: SEASONED LUMBER. |      |        |        |

| PLATES (table in inches) |         |        |     |     |           |
|--------------------------|---------|--------|-----|-----|-----------|
| JT                       | TYPE    | PLATES | W   | LEN | Y X       |
| B                        | TMVW-p  | MT20   | 5.0 | 8.0 | Edge 3.50 |
| C                        | TMWW-i  | MT20   | 4.0 | 4.0 | 2.00 1.75 |
| D                        | TTWW-m  | MT20   | 5.0 | 6.0 | 2.25 2.00 |
| E                        | TTW-h   | MT20   | 4.0 | 4.0 | 2.00 1.75 |
| F                        | TMWW-i  | MT20   | 4.0 | 4.0 | 2.00 1.75 |
| G                        | TMVW-p  | MT20   | 5.0 | 8.0 | Edge 3.50 |
| I                        | BMV1+p  | MT20   | 4.0 | 4.0 | 2.00 Edge |
| J                        | BMWW-i  | MT20   | 5.0 | 6.0 | 2.50 2.00 |
| K                        | BS-i    | MT20   | 3.0 | 6.0 |           |
| L                        | BMWWW-i | MT20   | 4.0 | 9.0 |           |
| M                        | BMWW-i  | MT20   | 4.0 | 4.0 |           |
| N                        | BMWW-i  | MT20   | 5.0 | 6.0 | 2.50 2.00 |
| O                        | BMV1+p  | MT20   | 4.0 | 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 | REQD |
|----------|------|----------------|------------------|-------|------|
| JT       | VERT | GROSS REACTION | GROSS REACTION   | BRG   | BRG  |
| O        | 2037 | 0              | 2037             | 0     | 5-8  |
| I        | 2037 | 0              | 2037             | 0     | 5-8  |

#### UNFACTORED REACTIONS

| JT | COMBINED | SNOW    | LIVE    | PERM.LIVE | WIND  | DEAD    | SOIL  |
|----|----------|---------|---------|-----------|-------|---------|-------|
| O  | 1514     | 863 / 0 | 284 / 0 | 0 / 0     | 0 / 0 | 387 / 0 | 0 / 0 |
| I  | 1514     | 863 / 0 | 284 / 0 | 0 / 0     | 0 / 0 | 387 / 0 | 0 / 0 |

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

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.63 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) | MEMB. | MAX. FACTORED FORCE (LBS) |
| FR-TO  |                           | FR-TO |                           |
| A-B    | 0 / 31                    | N-C   | -84 / 185                 |
| B-C    | -2694 / 0                 | C-M   | -682 / 0                  |
| C-D    | -2111 / 0                 | M-D   | 0 / 537                   |
| D-E    | -1888 / 0                 | D-L   | 0 / 4                     |
| E-F    | -2113 / 0                 | L-E   | 0 / 541                   |
| F-G    | -2693 / 0                 | J-F   | -689 / 0                  |
| G-H    | 0 / 31                    | J-F   | -681 / 183                |
| O-B    | -1942 / 0                 | B-N   | 0 / 2462                  |
| I-G    | -1942 / 0                 | J-G   | 0 / 2461                  |
| O-N    | 0 / 0                     |       |                           |
| N-M    | 0 / 2438                  |       |                           |
| M-L    | 0 / 1866                  |       |                           |
| L-K    | 0 / 2437                  |       |                           |
| K-J    | 0 / 2437                  |       |                           |
| J-I    | 0 / 0                     |       |                           |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
 TOP CH. LL = 28.1 PSF  
 DL = 8.0 PSF  
 BOT CH. LL = 10.5 PSF  
 DL = 7.0 PSF  
 TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN.CC

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

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 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 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.80")  
 CALCULATED VERT. DEFL.(LL) = 1 / 889 (0.12")  
 ALLOWABLE DEFL.(TL) = L/360 (0.90")  
 CALCULATED VERT. DEFL.(TL) = 1 / 899 (0.20")

CSI: TC=0.61/1.00 (B-C:1), BC=0.58/1.00 (M-N:2), WB=0.87/1.00 (C-M:1), SS=0.26/1.00 (F-G: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.

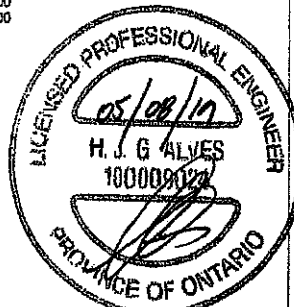
NAIL VALUES  
 PLATE GRIP(DRY) SHEAR SECTION  
 (PSI) (PLI) (PLI)  
 MAX MIN MAX MIN MAX MIN  
 MT20 618 354 1667 788 1987 1856

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

SI GRIP=0.84 (E) (INPUT = 0.90)  
 SI METAL=0.71 (K) (INPUT = 1.00)

DWG NO. TAM 17910923  
 STRUCTURAL  
 COMPONENT ONLY



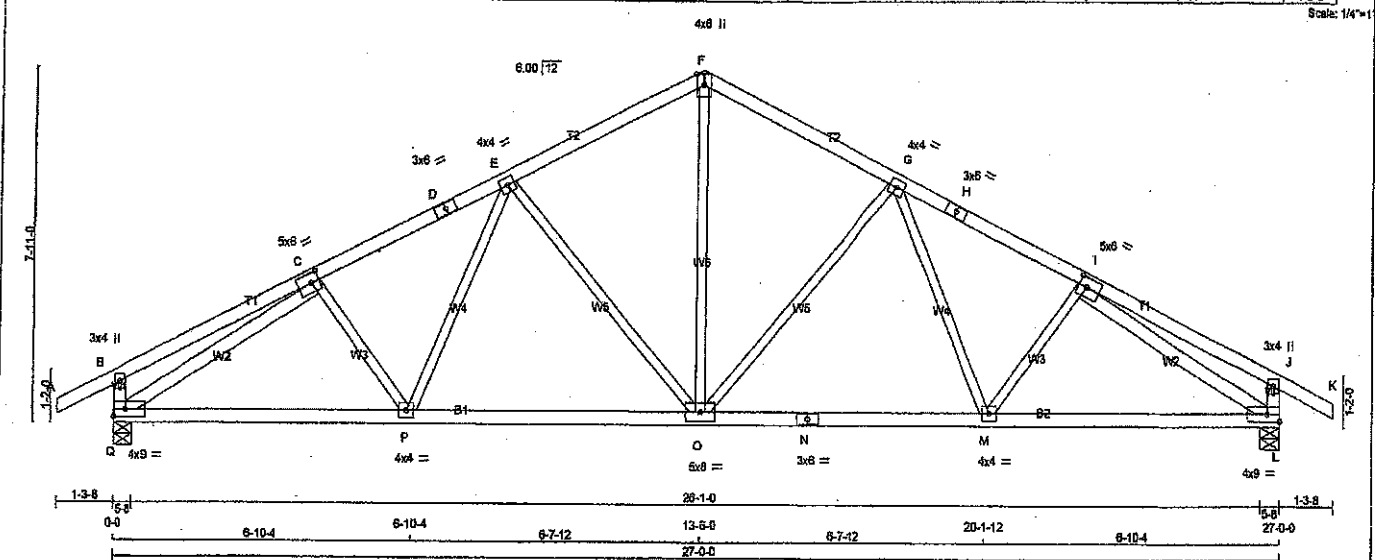
THIS STRUCTURE MUST BE  
 CONSTRUCTED TO MEET OR  
 EXCEED THE PROVISIONS OF  
 THE ONTARIO BUILDING CODE

**RECEIVED**  
 JUL 11 2019

TOWN OF CALEDON  
 BUILDING SECTION  
 FILE NO.

|                                  |                         |                       |                 |                                  |          |
|----------------------------------|-------------------------|-----------------------|-----------------|----------------------------------|----------|
| JOB NAME<br><b>200142-400307</b> | TRUSS NAME<br><b>T5</b> | QUANTITY<br><b>11</b> | PLY<br><b>1</b> | JOB DESC.<br><b>Brentwood 3A</b> | DRWG NO. |
| Tamarack Roof Truss, Burlington  |                         |                       |                 | TRUSS DESC.                      |          |

Version 8.230 S Nov 17 2018 MiTek Industries, Inc. Wed May 8 14:07:03 2019 Page 1  
 ID: Vfg?WpQQXmf8eSfxbzMP9I-cWJXxKMaJEQDKP0rs?Vp0QdHoUQ8VJngd?huzlYms  
 Scale: 1/4"=1'



TOTAL WEIGHT = 11 X 114 = 1254 lb

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

DRY: SEASONED LUMBER.

| PLATES (table ts in inches) | JT TYPE | PLATES | W   | LEN | Y    | X    |
|-----------------------------|---------|--------|-----|-----|------|------|
| B                           | TMV+p   | MT20   | 3.0 | 4.0 |      |      |
| C                           | TMVW-t  | MT20   | 5.0 | 6.0 | 2.50 | 2.25 |
| D                           | TS-t    | MT20   | 3.0 | 6.0 |      |      |
| E                           | TMVW-t  | MT20   | 4.0 | 4.0 |      |      |
| F                           | TTW+p   | MT20   | 4.0 | 6.0 | Edge |      |
| G                           | TMVW-t  | MT20   | 4.0 | 4.0 |      |      |
| H                           | TS-t    | MT20   | 3.0 | 6.0 |      |      |
| I                           | TMVW-t  | MT20   | 5.0 | 6.0 | 2.50 | 2.25 |
| J                           | TMV+p   | MT20   | 3.0 | 4.0 |      |      |
| L                           | BMVW-t  | MT20   | 4.0 | 9.0 | Edge |      |
| M                           | BMVW-t  | MT20   | 4.0 | 4.0 |      |      |
| N                           | BS-t    | MT20   | 3.0 | 6.0 |      |      |
| O                           | BMVW-t  | MT20   | 5.0 | 8.0 |      |      |
| P                           | BMVW-t  | MT20   | 4.0 | 4.0 |      |      |
| Q                           | BMVW-t  | MT20   | 4.0 | 9.0 | Edge |      |

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  | RECORD |
|----------|----------------|------------------|--------|--------|
|          | GROSS REACTION | GROSS REACTION   | BRG    | BRG    |
| JT       | VERT           | DOWN             | UPLIFT | IN-SX  |
| Q        | 2037           | 0                | 0      | 5-8    |
| L        | 2037           | 0                | 0      | 5-8    |

| UNFACTORED REACTIONS | 1ST LCASE | MAX MIN COMPONENT REACTIONS         |
|----------------------|-----------|-------------------------------------|
| JT                   | COMBINED  | SNOW LIVE PERM. LIVE WIND DEAD SOIL |
| Q                    | 1514      | 863/0 284/0 0/0 0/0 367/0 0/0       |
| L                    | 1514      | 863/0 284/0 0/0 0/0 367/0 0/0       |

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

**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.

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

| CHORDS | MEMB. | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. UNBRACED LENGTH (LC) | CS1 (LC) | MAX. FACTORED FORCE (LBS) | CS1 (LC) |
|--------|-------|---------------------------|---------------------------|---------------------------|----------|---------------------------|----------|
| FR-TO  | A-B   | 0/31                      | -102.1                    | -102.1                    | 0.13 (1) | 10.00                     | 0/1325   |
|        | B-C   | 0/17                      | -102.1                    | -102.1                    | 0.25 (1) | 10.00                     | 0/706/0  |
|        | C-D   | -2561/0                   | -102.1                    | -102.1                    | 0.30 (1) | 4.08                      | 0/380    |
|        | D-E   | -2561/0                   | -102.1                    | -102.1                    | 0.30 (1) | 4.08                      | 0/112    |
|        | E-F   | -1921/0                   | -102.1                    | -102.1                    | 0.28 (1) | 4.60                      | 0/706/0  |
|        | F-G   | -1921/0                   | -102.1                    | -102.1                    | 0.28 (1) | 4.60                      | 0/380    |
|        | G-H   | -2561/0                   | -102.1                    | -102.1                    | 0.30 (1) | 4.08                      | 0/112    |
|        | H-I   | -2561/0                   | -102.1                    | -102.1                    | 0.30 (1) | 4.08                      | 0/380    |
|        | I-J   | 0/17                      | -102.1                    | -102.1                    | 0.25 (1) | 10.00                     | 0/112    |
|        | J-K   | 0/31                      | -102.1                    | -102.1                    | 0.13 (1) | 10.00                     | 0/380    |
|        | Q-B   | -331/0                    | 0.0                       | 0.0                       | 0.03 (1) | 7.81                      | 0/380    |
|        | L-J   | -331/0                    | 0.0                       | 0.0                       | 0.03 (1) | 7.81                      | 0/380    |
|        | Q-P   | 0/2320                    | -38.5                     | -38.5                     | 0.82 (2) | 10.00                     | 0/380    |
|        | P-O   | 0/2158                    | -38.5                     | -38.5                     | 0.60 (2) | 10.00                     | 0/380    |
|        | O-N   | 0/2158                    | -38.5                     | -38.5                     | 0.60 (2) | 10.00                     | 0/380    |
|        | N-M   | 0/2158                    | -38.5                     | -38.5                     | 0.60 (2) | 10.00                     | 0/380    |
|        | M-L   | 0/2320                    | -38.5                     | -38.5                     | 0.82 (2) | 10.00                     | 0/380    |

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 29.1 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 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 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.50")  
 CALCULATED VERT. DEFL.(LL) = L/899 (0.11")  
 ALLOWABLE DEFL.(TL) = L/360 (0.50")  
 CALCULATED VERT. DEFL.(TL) = L/969 (0.19")

CS1: TC=0.30/1.00 (G-1), BC=0.62/1.00 (L-M-2), WB=1.00/1.00 (H-1), SS=0.19/1.00 (F-G-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.

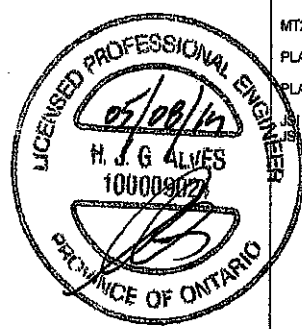
**NAIL VALUES**  
 PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
 MAX MIN MAX MIN MAX MIN  
 MT20 518 354 1887 788 1887 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JS GRIP= 0.85 (C) (INPUT = 0.90)  
 JS METAL= 0.77 (N) (INPUT = 1.00)

**RECEIVED**  
**JUL 11 2019**  
**TOWN OF SALEM**  
**BUILDING SECTION**  
**FILE NO**

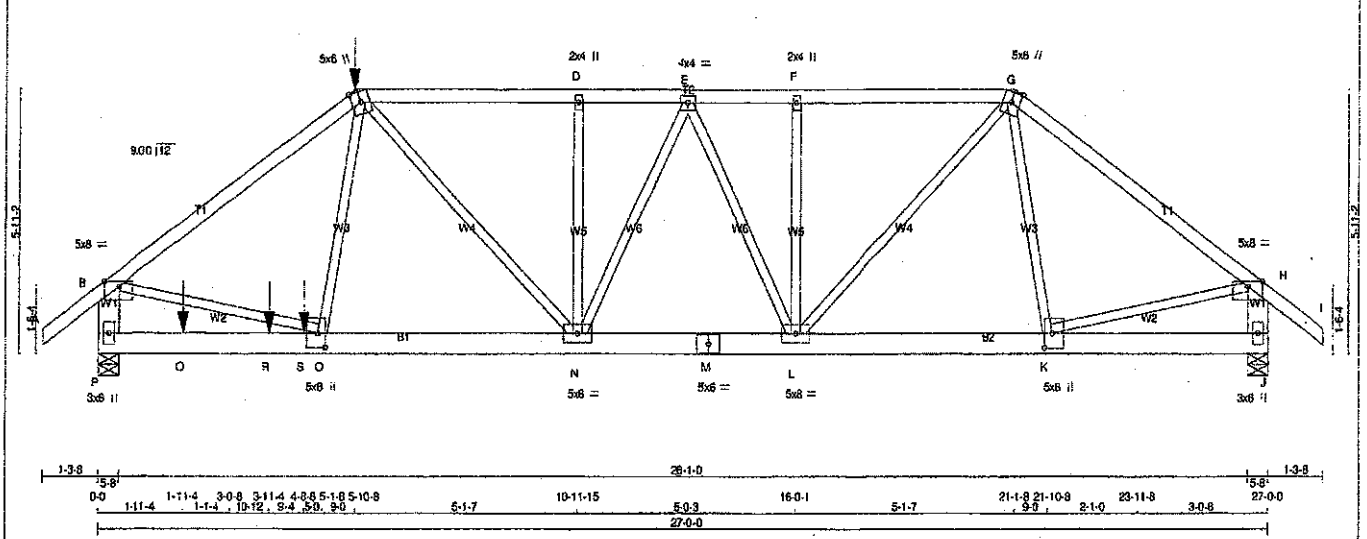


DRWG NO. TAM **72910924**  
 STRUCTURAL  
 COMPONENT ONLY

|                                 |            |             |     |                                                                                    |          |
|---------------------------------|------------|-------------|-----|------------------------------------------------------------------------------------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY    | PLY | JOB DESC.                                                                          | DRWG NO. |
| 200142-400342                   | T6Z        | 1           | 2   | Brentwood 3A                                                                       |          |
| Tamarack Roof Truss, Burlington |            | TRUSS DESC. |     | Version 8.300 S Apr 23 2019 Mitek Industries, Inc. Tue May 14 14:50:57 2019 Page 1 |          |

ID: Vltg?WpQQXf6SxbzMzZP9t-vvDlx8Cg7aWaPzEqYPMgMXG0ZelyNRq4zzGZZ

Scale = 1:45.7



| CHORDS | SIZE | LUMBER | DESCR. |
|--------|------|--------|--------|
| A - C  | 2x4  | DRY    | No.2   |
| C - G  | 2x4  | DRY    | No.2   |
| G - I  | 2x4  | DRY    | No.2   |
| P - B  | 2x6  | DRY    | No.2   |
| J - H  | 2x6  | DRY    | No.2   |
| P - M  | 2x6  | DRY    | No.2   |
| M - J  | 2x6  | DRY    | No.2   |

ALL WEBS 2x3 DRY No.2 SPF  
EXCEPT

DRY: SEASONED LUMBER.

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

| CHORDS #ROWS                            | SURFACE SPACING (IN) | LOAD (PLF)  |
|-----------------------------------------|----------------------|-------------|
| A - C                                   | 12                   | SIDE (81.0) |
| C - G                                   | 12                   | SIDE (81.0) |
| G - I                                   | 12                   | TOP         |
| P - B                                   | 12                   | TOP         |
| J - H                                   | 12                   | TOP         |
| BOTTOM CHORDS: (0.122"x3") SPIRAL NAILS |                      |             |
| P - M                                   | 12                   | SIDE (0.0)  |
| M - J                                   | 12                   | TOP         |
| WEBS: (0.122"x3") SPIRAL NAILS          |                      |             |
| O - C                                   | 6                    | SIDE (14.3) |
| 2x2                                     | 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) | W    | LEN | Y   | X         |
|-----------------------------|------|-----|-----|-----------|
| JT TYPE PLATES              |      |     |     |           |
| B TMWV-p                    | MT20 | 5.0 | 8.0 | Edge      |
| C TTWV-m                    | MT20 | 5.0 | 6.0 | Edge      |
| D TMWV-w                    | MT20 | 2.0 | 4.0 |           |
| E TMWV-l                    | MT20 | 4.0 | 4.0 |           |
| F TMWV-m                    | MT20 | 2.0 | 4.0 |           |
| G TTWV-m                    | MT20 | 5.0 | 6.0 | Edge      |
| H TMWV-p                    | MT20 | 5.0 | 8.0 | Edge      |
| J BMV1-p                    | MT20 | 3.0 | 6.0 |           |
| K BMWV-p                    | MT20 | 5.0 | 8.0 | 4.00 2.00 |
| L BMWV-w                    | MT20 | 5.0 | 8.0 |           |
| M BS-l                      | MT20 | 5.0 | 6.0 |           |
| N BMWV-l                    | MT20 | 5.0 | 8.0 |           |
| O BMWV-l                    | MT20 | 5.0 | 8.0 | 4.00 2.00 |
| P BMV1-p                    | MT20 | 3.0 | 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 | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT | REQD |
|----------|-------------------------|---------------------------------|-------|------|
| JT       | VERT                    | DOWN                            | BRG   | BRG  |
| P        | 3862                    | 0                               | 5-8   | 5-8  |
| J        | 2332                    | 0                               | 5-8   | 5-8  |

| UNFACTORED REACTIONS | 1ST LOASE | MAX/MIN COMPONENT REACTIONS                |
|----------------------|-----------|--------------------------------------------|
| JT                   | COMBINED  | SNOW LIVE PERM.LIVE WIND DEAD SOIL         |
| P                    | 3075      | 1769 / 0 584 / 0 0 / 0 0 / 0 741 / 0 0 / 0 |
| J                    | 1853      | 1072 / 0 338 / 0 0 / 0 0 / 0 445 / 0 0 / 0 |

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

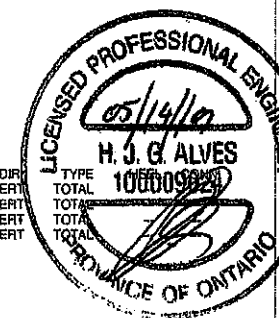
BRACING  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.19 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING  
TOTAL LOAD CASES: (4)

| CHORDS | MAX. FACTORED MEMB. FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. FACTORED CSI (LC) | UNBRAC LENGTH | WEBS  | MAX. FACTORED MEMB. FORCE (LBS) | MAX. FACTORED CSI (LC) |
|--------|---------------------------------|---------------------------|------------------------|---------------|-------|---------------------------------|------------------------|
| FR-TO  |                                 | FROM TO                   |                        |               | FR-TO |                                 |                        |
| A-B    | 0 / 42                          | -102.1 -102.1             | 0.08 (1)               | 10.00         | C-N   | 0 / 289                         | 0.04 (1)               |
| B-C    | -4186 / 0                       | -102.1 -102.1             | 0.55 (1)               | 4.19          | N-D   | -531 / 0                        | 0.14 (1)               |
| C-D    | -3349 / 0                       | -102.1 -102.1             | 0.23 (1)               | 4.88          | L-F   | -532 / 0                        | 0.14 (1)               |
| D-E    | -3349 / 0                       | -102.1 -102.1             | 0.21 (1)               | 4.88          | L-G   | 0 / 1547                        | 0.19 (1)               |
| E-F    | -2971 / 0                       | -102.1 -102.1             | 0.20 (1)               | 5.13          | N-E   | 0 / 428                         | 0.05 (1)               |
| F-G    | -2971 / 0                       | -102.1 -102.1             | 0.22 (1)               | 5.13          | E-L   | -489 / 0                        | 0.16 (1)               |
| G-H    | -2368 / 0                       | -102.1 -102.1             | 0.42 (1)               | 5.35          | O-C   | 0 / 1288                        | 0.18 (1)               |
| H-I    | 0 / 42                          | -102.1 -102.1             | 0.08 (1)               | 10.00         | O-D   | 0 / 3410                        | 0.42 (1)               |
| P-B    | -3665 / 0                       | 0.0 0.0                   | 0.13 (1)               | 7.35          | G-K   | -242 / 101                      | 0.07 (1)               |
| J-H    | -2273 / 0                       | 0.0 0.0                   | 0.08 (1)               | 7.81          | K-H   | 0 / 1937                        | 0.24 (1)               |
| P-O    | 0 / 0                           | -28.0 -28.0               | 0.17 (1)               | 10.00         |       |                                 |                        |
| Q-R    | 0 / 0                           | -28.0 -28.0               | 0.17 (1)               | 10.00         |       |                                 |                        |
| R-S    | 0 / 0                           | -28.0 -28.0               | 0.17 (1)               | 10.00         |       |                                 |                        |
| S-O    | 0 / 0                           | -28.0 -28.0               | 0.17 (1)               | 10.00         |       |                                 |                        |
| O-N    | 0 / 3154                        | -28.0 -28.0               | 0.33 (1)               | 10.00         |       |                                 |                        |
| N-M    | 0 / 3172                        | -28.0 -28.0               | 0.24 (1)               | 10.00         |       |                                 |                        |
| M-L    | 0 / 3172                        | -28.0 -28.0               | 0.24 (1)               | 10.00         |       |                                 |                        |
| L-K    | 0 / 1928                        | -28.0 -28.0               | 0.15 (1)               | 10.00         |       |                                 |                        |
| K-J    | 0 / 0                           | -28.0 -28.0               | 0.05 (3)               | 10.00         |       |                                 |                        |

| FACTORED CONCENTRATED LOADS (LBS) | JT     | LOC.  | LC1   | MAX. | MAX. | FACE | DIR  |
|-----------------------------------|--------|-------|-------|------|------|------|------|
| C                                 | 5-11-1 | -522  | -522  | --   | --   | BACK | VERT |
| Q                                 | 1-11-4 | -54   | -54   | --   | --   | BACK | VERT |
| R                                 | 3-11-4 | -54   | -54   | --   | --   | BACK | VERT |
| S                                 | 4-8-8  | -1769 | -1769 | --   | --   | BACK | VERT |



#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.1 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 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC2010

THIS DESIGN COMPLIES WITH:  
- PART 9 OF OBC 2012, ECBC 2012, ABC 2014  
- CSA 086-09  
- TPC 2011

65% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD  
EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.90")  
CALCULATED VERT. DEFL.(LL) = U/999 (0.06")  
ALLOWABLE DEFL.(TL) = L/360 (0.90")  
CALCULATED VERT. DEFL.(TL) = U/999 (0.10")

CSL: TC=0.55/1.00 (B-C-1), BC=0.33/1.00 (N-C-1),  
WB=0.42/1.00 (B-O-1), SS=0.80/1.00 (O-P-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 = 0.50

AUTOSOLVE HEELS OFF

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

| WAIL VALUES | PLATE GRIP (DRY) | SHEAR | SECTION |
|-------------|------------------|-------|---------|
| (PSI)       | (PLI)            | (PLI) |         |
| MAX         | MIN              | MAX   | MIN     |
| 618         | 354              | 1667  | 788     |
| 1987        | 1856             |       |         |

PLATE PLACEMENT TOL. = 0.250 inches

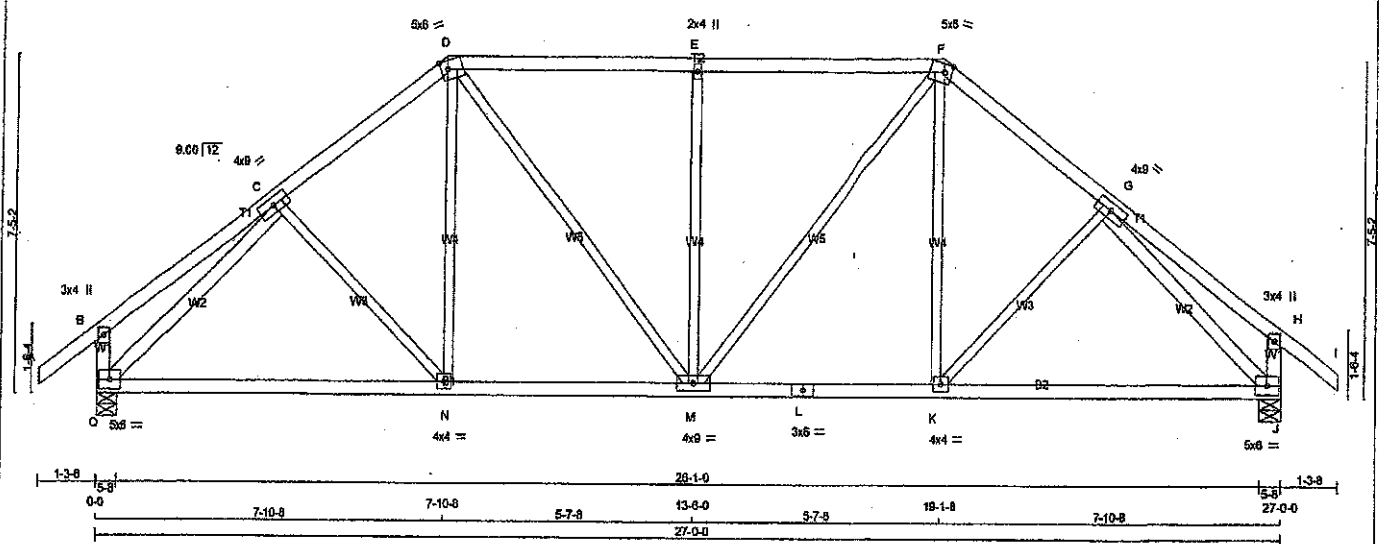
PLATE ROTATION TOL. = 5.0 Deg.

SI GRIP= 0.74 (K) (INPUT = 0.90)

SI METAL= 0.57 (O) (INPUT = 1.00)

Structural component only  
DWG# T-1911563

1-3-0 0-0 4-0-6 7-10-0 13-6-0 5-7-6 27-0-0 1-3-0  
1-3-0 4-0-6 3-10-0 5-7-6 13-6-0 27-0-0 1-3-0  
ID:Vrtg?WpQXfxf8eS5xbzP9l4isKXy?Ar52NvbaZNE11Zygh8rd2S0UMYDK2fYmr  
Scale: 1:48.0



[MIF]

| PLATES (table is in inches) |           |        |     |     |          |
|-----------------------------|-----------|--------|-----|-----|----------|
| JT                          | TYPE      | PLATES | W   | LEN | Y X      |
| B                           | TMMV+p    | MT20   | 3.0 | 4.0 |          |
| C                           | TMMWW-t   | MT20   | 4.0 | 9.0 |          |
| D                           | TTWW-W    | MT20   | 5.0 | 8.0 | Edge 200 |
| E                           | TMMV-W    | MT20   | 2.0 | 4.0 |          |
| F                           | TTWW-W    | MT20   | 5.0 | 8.0 | Edge 200 |
| G                           | TMMWW-t   | MT20   | 4.0 | 9.0 |          |
| H                           | TMMV-p    | MT20   | 3.0 | 4.0 |          |
| J                           | BMMWW-t   | MT20   | 5.0 | 6.0 |          |
| K                           | BMMWW-t   | MT20   | 4.0 | 4.0 |          |
| L                           | BS-t      | MT20   | 3.0 | 6.0 |          |
| M                           | BMMWWWW-t | MT20   | 4.0 | 9.0 |          |
| N                           | BSWW-t    | MT20   | 4.0 | 4.0 |          |
| O                           | BMMWW-t   | MT20   | 5.0 | 6.0 |          |

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

## BEARINGS

| JT | FACTORED GROSS REACTION |      | MAXIMUM FACTORED GROSS REACTION |      | INPUT BRG    | REQD BRG |
|----|-------------------------|------|---------------------------------|------|--------------|----------|
|    | VERT                    | HORZ | DOWN                            | HORZ | UPLIFT IN-SX | IN-SX    |
| O  | 2039                    | 0    | 2039                            | 0    | 0            | 5-8      |
| J  | 2039                    | 0    | 2039                            | 0    | 0            | 5-8      |

### UNFACTORED REACTIONS

| 1ST LGASE |          | MAX/MIN COMPONENT REACTIONS |         |           |       |         |       |
|-----------|----------|-----------------------------|---------|-----------|-------|---------|-------|
| JT        | COMBINED | SNOW                        | LIVE    | PERM.LIVE | WIND  | DEAD    | SOIL  |
| O         | 1515     | 664 / 0                     | 284 / 0 | 0 / 0     | 0 / 0 | 368 / 0 | 0 / 0 |
| J         | 1515     | 664 / 0                     | 284 / 0 | 0 / 0     | 0 / 0 | 368 / 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 = 4.42 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        |             |                  |                | WEBB          |       |               |                |
|---------------|-------------|------------------|----------------|---------------|-------|---------------|----------------|
| MAX. FACTORED |             | FACTORED         |                | MAX. FACTORED |       | MAX. FACTORED |                |
| MEMB.         | FORCE (LBS) | VERT. LOAD (LBS) | MAX. CSI (L.C) | MAX. UNBRAC   | MEMB. | FORCE (LBS)   | MAX. CSI (L.C) |
| FR-TO         |             | FROM TO          |                | LENGTH        | FR-TO |               |                |
| A-B           | 0/42        | -102.1 -102.1    | 0.14 (1)       | 10.00         | C-N   | -25/100       | 0.02 (3)       |
| B-C           | 0/27        | -102.1 -102.1    | 0.25 (1)       | 10.00         | N-D   | 0/390         | 0.09 (2)       |
| C-D           | -1927/0     | -102.1 -102.1    | 0.24 (1)       | 4.64          | D-M   | 0/535         | 0.12 (1)       |
| D-E           | -1854/0     | -102.1 -102.1    | 0.48 (1)       | 4.42          | M-E   | -700/0        | 0.69 (1)       |
| E-F           | -1854/0     | -102.1 -102.1    | 0.49 (1)       | 4.42          | F-F   | 0/535         | 0.12 (1)       |
| F-G           | -1927/0     | -102.1 -102.1    | 0.24 (1)       | 4.64          | K-G   | 0/390         | 0.09 (2)       |
| G-H           | 0/27        | -102.1 -102.1    | 0.25 (1)       | 10.00         | K-F   | -25/100       | 0.02 (3)       |
| H             | 0/42        | -102.1 -102.1    | 0.14 (1)       | 10.00         | C-C   | -2231/0       | 0.85 (1)       |
| C-B           | -288/0      | 0.0              | 0.0            | 0.03 (1)      | G-J   | -2231/0       | 0.85 (1)       |
| J-H           | -288/0      | 0.0              | 0.0            | 0.03 (1)      |       |               |                |
| C-N           | 0/1535      | -38.5            | -38.5          | 0.61 (2)      | 10.00 |               |                |
| N-M           | 0/1522      | -38.5            | -38.5          | 0.61 (2)      | 10.00 |               |                |
| M-L           | 0/1522      | -38.5            | -38.5          | 0.61 (2)      | 10.00 |               |                |
| L-K           | 0/1522      | -38.5            | -38.5          | 0.61 (2)      | 10.00 |               |                |
| K-J           | 0/1535      | -38.5            | -38.5          | 0.61 (2)      | 10.00 |               |                |

## DESIGN CRITERIA

**SPECIFIED LOADS:**

|              |      |      |     |
|--------------|------|------|-----|
| TOP CH.      | LL = | 29.1 | 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 2.00/12 MINIMUM

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 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 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.80")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.16")  
ALLOWABLE DEFL.(TL)= L/360 (0.90")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.27")

CSI: TC=0.48/1.00 (D-E:1), BC=0.61/1.00 (K-M:2)  
WB=0.85/1.00 (G-J:1), SSI=0.28/1.00 (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

## AUTOSOLVE HEELS OFF

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

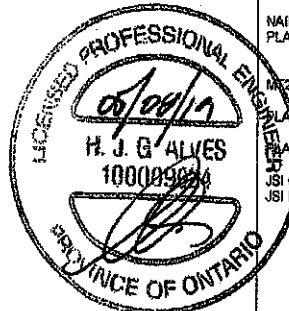
## NAIL VALUES

| PLATE | GRIP(DRY)<br>(PSI) |     | SHEAR<br>(PLI) |     | SECTION<br>(PLI) |      |
|-------|--------------------|-----|----------------|-----|------------------|------|
|       | MAX                | MIN | MAX            | MIN | MAX              | MIN  |
| MA20  | 818                | 354 | 1667           | 768 | 1987             | 1656 |

PLATE PLACEMENT TOL = 0.250 inches

DATE ROTATION TOL = 5.0 Deg.

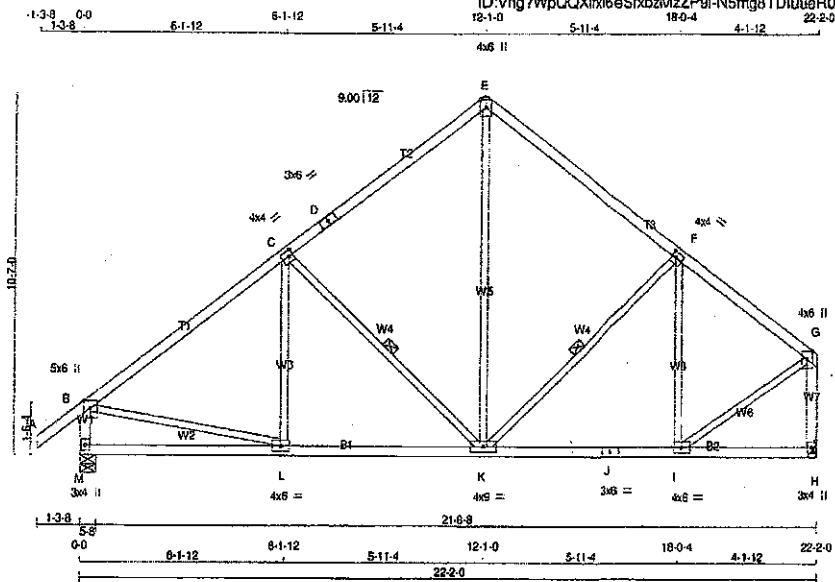
JSI GRIP= 0.87 (C) (INPUT = 0.80 )  
JSI METAL= 0.51 (L) (INPUT = 1.00 )



DWG NO. TAM **TA10926**  
STRUCTURAL  
CONCRETE ONLY

DWG NO. TAM 87910927  
STRUCTURAL  
COMPONENT ONLY

|                                  |                          |                      |                 |                                  |          |
|----------------------------------|--------------------------|----------------------|-----------------|----------------------------------|----------|
| JOB NAME<br><b>200142-400342</b> | TRUSS NAME<br><b>T31</b> | QUANTITY<br><b>3</b> | PLY<br><b>1</b> | JOB DESC.<br><b>Brentwood 3A</b> | DRWG NO. |
| Tamarack Roof Truss, Burlington  |                          |                      |                 | TRUSS DESC.                      |          |



TOTAL WEIGHT = 3 X 102 = 306 lb

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

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

| PLATES (table is in inches) |        |     |     |           |
|-----------------------------|--------|-----|-----|-----------|
| JT TYPE                     | PLATES | W   | LEN | Y X       |
| B TMWW+p                    | MT20   | 5.0 | 6.0 | Edge      |
| C TMWW-t                    | MT20   | 4.0 | 4.0 | 2.00 1.50 |
| D TS-t                      | MT20   | 3.0 | 6.0 |           |
| E TTWW+p                    | MT20   | 4.0 | 6.0 | Edge      |
| F TMWW-t                    | MT20   | 4.0 | 4.0 | 2.00 1.50 |
| G TMWW+p                    | MT20   | 4.0 | 6.0 | Edge      |
| H BMVt+p                    | MT20   | 3.0 | 4.0 |           |
| I BMWW-t                    | MT20   | 4.0 | 6.0 |           |
| J BS-t                      | MT20   | 3.0 | 6.0 |           |
| K BMWW-t                    | MT20   | 4.0 | 9.0 |           |
| L BMWW-t                    | MT20   | 4.0 | 6.0 |           |
| M BMVt+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 | DOWN     | GROSS REACTION   | BRG   | BRG        |
| M        | 1583           | 0        | 1583             | 0     | 5-8        |
| H        | 1442           | 0        | 1442             | 0     | MECHANICAL |

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

#### UNFACTORED REACTIONS

| JT | 1ST LGASE | SNOW    | LIVE    | PERM.LIVE | WIND  | DEAD    | SOIL  |
|----|-----------|---------|---------|-----------|-------|---------|-------|
| M  | 1261      | 724 / 0 | 233 / 0 | 0 / 0     | 0 / 0 | 305 / 0 | 0 / 0 |
| H  | 1185      | 844 / 0 | 233 / 0 | 0 / 0     | 0 / 0 | 289 / 0 | 0 / 0 |

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

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.75 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-K, F-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 FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. UNBRACED LENGTH (L) | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. UNBRACED LENGTH (L) |          |
| FR-TO  |                           |                           |                          | FR-TO |                           |                          |          |
| A-B    | 0 / 42                    | -102.1                    | 0.14 (1)                 | 10.00 | L-C                       | -45 / 220                | 0.05 (3) |
| B-C    | -1454 / 0                 | -102.1                    | 0.55 (1)                 | 4.75  | C-K                       | -565 / 0                 | 0.27 (1) |
| C-D    | -1022 / 0                 | -102.1                    | 0.50 (1)                 | 5.49  | K-E                       | 0 / 899                  | 0.18 (1) |
| D-E    | -1022 / 0                 | -102.1                    | 0.50 (1)                 | 5.49  | K-F                       | -179 / 0                 | 0.09 (1) |
| E-F    | -1011 / 0                 | -102.1                    | 0.44 (1)                 | 5.63  | F-F                       | -435 / 0                 | 0.26 (1) |
| F-G    | -1085 / 0                 | -102.1                    | 0.38 (1)                 | 5.58  | B-L                       | 0 / 1221                 | 0.27 (1) |
| M-B    | -1513 / 0                 | 0.0                       | 0.0 0.16 (1)             | 6.68  | 1-G                       | 0 / 1083                 | 0.24 (1) |
| H-G    | -1400 / 0                 | 0.0                       | 0.0 0.23 (1)             | 6.68  |                           |                          |          |
| M-L    | 0 / 0                     | -28.0                     | -28.0 0.26 (3)           | 10.00 |                           |                          |          |
| L-K    | 0 / 1199                  | -28.0                     | -28.0 0.38 (2)           | 10.00 |                           |                          |          |
| K-J    | 0 / 909                   | -28.0                     | -28.0 0.29 (2)           | 10.00 |                           |                          |          |
| J-I    | 0 / 909                   | -28.0                     | -28.0 0.29 (2)           | 10.00 |                           |                          |          |
| I-H    | 0 / 0                     | -28.0                     | -28.0 0.18 (3)           | 10.00 |                           |                          |          |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.1 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN GC

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

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

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = L/360 (0.74")  
CALCULATED VERT. DEFL. (LL) = L/999 (0.06")  
ALLOWABLE DEFL. (TL) = L/860 (0.74")  
CALCULATED VERT. DEFL. (TL) = L/999 (0.11")

CSI: TC=0.55/1.00 (B-C:1), BC=0.38/1.00 (K-L:2), WB=0.27/1.00 (B-L:1), 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 = 0.50

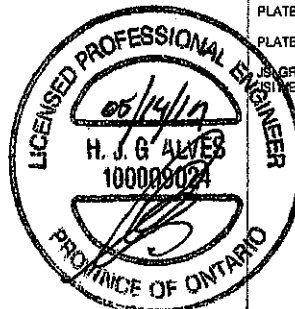
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
PLATE (GRIP/DRY) SHEAR SECTION (PSI) (PL) (PL)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1667 822 2284 1856

PLATE PLACEMENT TOL = 0.250 inches

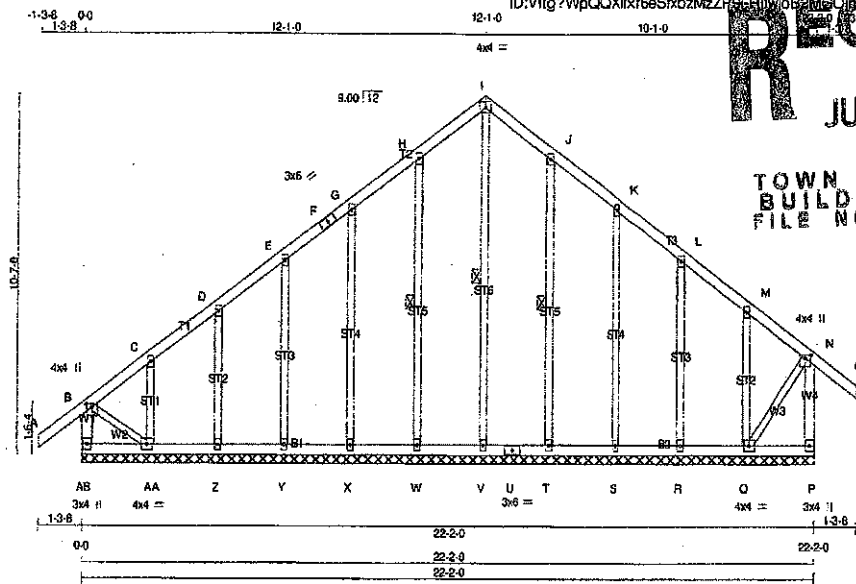
PLATE ROTATION TOL = 5.0 Deg.

GRIP = 0.89 (B) (INPUT = 0.90)  
SSI METAL = 0.32 (J) (INPUT = 1.00)



Structural component only  
DWG# T-1911564

|                                 |            |             |     |                                                                                    |          |
|---------------------------------|------------|-------------|-----|------------------------------------------------------------------------------------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY    | PLY | JOB DESC.                                                                          | DRWG NO. |
| 200142-400342                   | G31        | 1           | 1   | Brentwood 3A                                                                       |          |
| Tamarack Roof Truss, Burlington |            | TRUSS DESC. |     | Version 8.300 S Apr 23 2019 Mitek Industries, Inc. Tue May 14 14:50:56 2019 Page 1 |          |



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TOWN OF CALEDON  
BUILDING SECTION  
FILE NO. \_\_\_\_\_

TOTAL WEIGHT = 120 lb

| LUMBER            | CHORDS                | SIZE | LUMBER | DESCR. |
|-------------------|-----------------------|------|--------|--------|
| N. L. G. A. RULES | AB - B                | 2x4  | DRY    | No.2   |
|                   | A - F                 | 2x4  | DRY    | No.2   |
|                   | F - I                 | 2x4  | DRY    | No.2   |
|                   | I - O                 | 2x4  | DRY    | No.2   |
|                   | P - N                 | 2x4  | DRY    | No.2   |
|                   | AB - U                | 2x4  | DRY    | No.2   |
|                   | U - P                 | 2x4  | DRY    | No.2   |
|                   | ALL WEBS              | 2x3  | DRY    | No.2   |
|                   | ALL GABLE WEBS        | 2x3  | DRY    | No.2   |
|                   | DRY: SEASONED LUMBER. |      |        |        |

GABLE STUDS SPACED AT 2'-0.0 OC.

| 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, D, E, G, H, J, K, L, M   | TMVW+w  | MT20   | 2.0 | 4.0 |      |      |
| F                           | TS-I    | MT20   | 3.0 | 6.0 |      |      |
| I                           | TTW+p   | MT20   | 4.0 | 4.0 | 2.25 | 2.00 |
| N                           | TMVW+p  | MT20   | 4.0 | 4.0 | 1.00 | 2.00 |
| P                           | BMV1+p  | MT20   | 3.0 | 4.0 |      |      |
| Q                           | BMVW1-I | MT20   | 4.0 | 4.0 |      |      |
| R, S, T, V, W, X, Y, Z      | BMV1+w  | MT20   | 2.0 | 4.0 |      |      |
| U                           | BS-I    | MT20   | 3.0 | 6.0 |      |      |
| AA                          | BMVW1-I | MT20   | 4.0 | 4.0 |      |      |
| AB                          | BMV1+p  | MT20   | 3.0 | 4.0 |      |      |

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

BEARINGS  
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.  
THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.  
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

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.

1 LATERAL BRACE(S) AT 1/2 LENGTH OF I-V, H-W, J-T.

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 (PLF) | MAX. UNBRACED LENGTH (LC1) | MEMB.    | FORCE (LBS) | MAX. UNBRACED LENGTH (LC1) | MAX. FACTORED (LC) |
| FR-TO  |             | FROM TO          |                            | FR-TO    |             |                            |                    |
| AB-B   | -261 / 0    | 0.0              | 0.0                        | 0.03 (1) | 7.81        | V-I                        | -156 / 0           |
| A-B    | 0 / 42      | -102.1           | -102.1                     | 0.14 (1) | 10.00       | W-H                        | -232 / 0           |
| B-C    | -25 / 0     | -102.1           | -102.1                     | 0.08 (1) | 6.25        | X-G                        | -197 / 0           |
| C-D    | -32 / 0     | -102.1           | -102.1                     | 0.08 (1) | 6.25        | Y-E                        | -204 / 0           |
| D-E    | -23 / 0     | -102.1           | -102.1                     | 0.05 (1) | 6.25        | Z-D                        | -195 / 0           |
| E-F    | -20 / 0     | -102.1           | -102.1                     | 0.05 (1) | 6.25        | AA-C                       | -225 / 0           |
| F-G    | -20 / 0     | -102.1           | -102.1                     | 0.05 (1) | 6.25        | T-J                        | -232 / 0           |
| G-H    | -14 / 0     | -102.1           | -102.1                     | 0.03 (1) | 6.25        | S-K                        | -188 / 0           |
| H-I    | -25 / 0     | -102.1           | -102.1                     | 0.08 (1) | 6.25        | R-L                        | -197 / 0           |
| I-J    | -26 / 0     | -102.1           | -102.1                     | 0.08 (1) | 6.25        | Q-M                        | -226 / 0           |
| J-K    | -14 / 0     | -102.1           | -102.1                     | 0.05 (1) | 6.25        | C-N                        | 0 / 38             |
| K-L    | -19 / 0     | -102.1           | -102.1                     | 0.05 (1) | 6.25        | B-AA                       | 0 / 35             |
| L-M    | -26 / 0     | -102.1           | -102.1                     | 0.06 (1) | 6.25        |                            |                    |
| M-N    | -17 / 0     | -102.1           | -102.1                     | 0.06 (1) | 6.25        |                            |                    |
| N-O    | 0 / 42      | -102.1           | -102.1                     | 0.14 (1) | 10.00       |                            |                    |
| P-N    | -270 / 0    | 0.0              | 0.0                        | 0.04 (1) | 7.81        |                            |                    |
| AB-AA  | 0 / 0       | -28.0            | -28.0                      | 0.03 (3) | 10.00       |                            |                    |
| AA-Z   | 0 / 23      | -28.0            | -28.0                      | 0.03 (3) | 10.00       |                            |                    |
| Z-Y    | 0 / 19      | -28.0            | -28.0                      | 0.02 (3) | 10.00       |                            |                    |
| Y-X    | 0 / 18      | -28.0            | -28.0                      | 0.02 (3) | 10.00       |                            |                    |
| X-W    | 0 / 13      | -28.0            | -28.0                      | 0.02 (3) | 10.00       |                            |                    |
| W-V    | 0 / 11      | -28.0            | -28.0                      | 0.02 (3) | 10.00       |                            |                    |
| V-U    | 0 / 11      | -28.0            | -28.0                      | 0.02 (3) | 10.00       |                            |                    |
| U-T    | 0 / 11      | -28.0            | -28.0                      | 0.02 (3) | 10.00       |                            |                    |
| T-S    | 0 / 13      | -28.0            | -28.0                      | 0.02 (3) | 10.00       |                            |                    |
| S-R    | 0 / 16      | -28.0            | -28.0                      | 0.02 (3) | 10.00       |                            |                    |
| R-Q    | 0 / 19      | -28.0            | -28.0                      | 0.03 (3) | 10.00       |                            |                    |
| Q-P    | 0 / 0       | -28.0            | -28.0                      | 0.03 (3) | 10.00       |                            |                    |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.1 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

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2012, BCBC 2012, ABC 2014  
- CSA 086-09  
- TPC 2011

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.14/1.00 (A-B:1), BC=0.03/1.00 (Z-AA:3), WB=0.21/1.00 (K-S:1), SS=0.09/1.00 (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 = 0.50

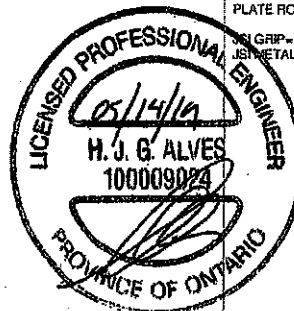
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
PLATE GRIP (DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1667 822 2284 1658

PLATE PLACEMENT TOL. = 0.250 inches

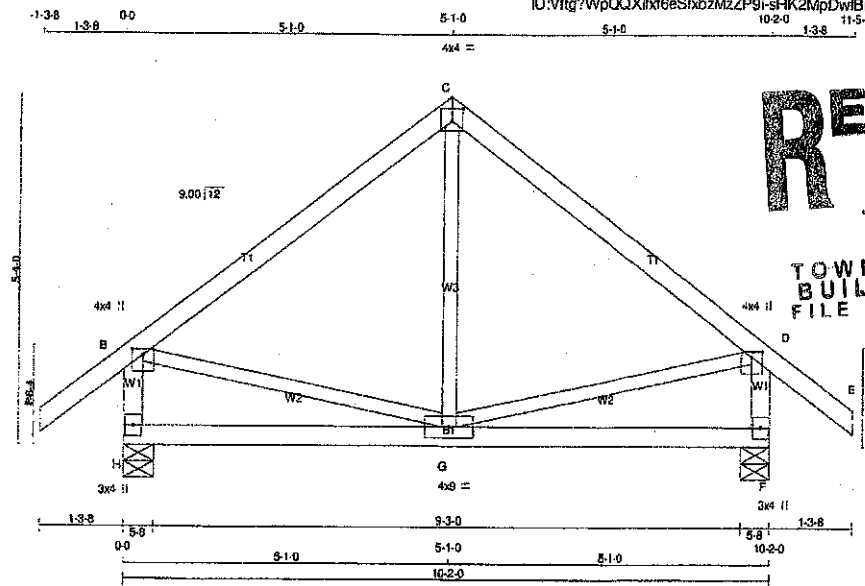
PLATE ROTATION TOL. = 5.0 Deg.

SL GRIP=0.49 (I) (INPUT = 0.90)  
JST METAL=0.05 (H) (INPUT = 1.00)



Structural component only  
DWG# T-1911562

|                                                                                    |            |          |     |              |          |
|------------------------------------------------------------------------------------|------------|----------|-----|--------------|----------|
| JOB NAME                                                                           | TRUSS NAME | QUANTITY | PLY | JOB DESC.    | DRWG NO. |
| 200142-400342                                                                      | T32        | 1        | 1   | Brentwood 3A |          |
| Tamarack Roof Truss, Burlington                                                    |            |          |     |              |          |
| Version 8.300 S Apr 23 2019 M/Tek Industries, Inc. Tue May 14 14:50:59 2019 Page 1 |            |          |     |              |          |
| ID: Vltg?WpQQXlxf6eSxbzmZP9I-shK2MpdWlBmieHOLxjbtknIK3knTdiFqIKx8rzGZ2g            |            |          |     |              |          |
| 10-2-0 10-2-0 10-2-0 10-2-0 10-2-0 10-2-0                                          |            |          |     |              |          |
| Scale = 1/32                                                                       |            |          |     |              |          |



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TOWN OF CALEDON  
BUILDING SECTION  
FILE NO

TOTAL WEIGHT = 44 lb

| LUMBER                | ALL L. G. A. RULES | CHORDS | SIZE | LUMBER | DESCR. |
|-----------------------|--------------------|--------|------|--------|--------|
| 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 in inches) | W   | LEN | Y    | X    |
|--------------------------|-----|-----|------|------|
| BT                       | 4.0 | 4.0 | 1.00 | 2.00 |
| C                        | 4.0 | 4.0 | 2.25 | 2.00 |
| D                        | 4.0 | 4.0 | 1.00 | 2.00 |
| F                        | 3.0 | 4.0 |      |      |
| G                        | 4.0 | 9.0 |      |      |
| H                        | 3.0 | 4.0 |      |      |

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

| BEARINGS       | FACTORED       | MAXIMUM FACTORED | INPUT | RECORD |
|----------------|----------------|------------------|-------|--------|
| GROSS REACTION | GROSS REACTION | BRG              | BRG   |        |
| JT VERT        | HORZ           | DOWN             | HORZ  | UPLIFT |
| H              | 802            | 0                | 802   | 0      |
| F              | 802            | 0                | 802   | 0      |

#### UNFACTORED REACTIONS

| 1ST LOAGE | MAX/MIN  | COMPONENT REACTIONS | WIND    | DEAD       | SOIL    |
|-----------|----------|---------------------|---------|------------|---------|
| JT        | COMBINED | SNOW                | LIVE    | PERM. LIVE |         |
| H         | 631      | 375 / 0             | 107 / 0 | 0 / 0      | 149 / 0 |
| F         | 631      | 375 / 0             | 107 / 0 | 0 / 0      | 149 / 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 = 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 | FACTORED                 | WIND     | DEAD                | SOIL              |
|--------|---------------|--------------------------|----------|---------------------|-------------------|
| MEMB.  | FORCE (LBS)   | VERT. LOAD LG1 MAX (PLF) | CS1 (LC) | UNBRAC LENGTH FR-TO | MEMB. FORCE (LBS) |
| A-B    | 0 / 42        | -102.1                   | -102.1   | 0.14 (1)            | 10.00             |
| B-C    | -441 / 0      | -102.1                   | -102.1   | 0.34 (1)            | 8.25              |
| C-D    | -441 / 0      | -102.1                   | -102.1   | 0.34 (1)            | 8.25              |
| D-E    | 0 / 42        | -102.1                   | -102.1   | 0.14 (1)            | 10.00             |
| H-B    | -748 / 0      | 0.0                      | 0.0      | 0.08 (1)            | 7.81              |
| F-D    | -748 / 0      | 0.0                      | 0.0      | 0.08 (1)            | 7.81              |
| H-G    | 0 / 0         | -28.0                    | -28.0    | 0.23 (3)            | 10.00             |
| G-F    | 0 / 0         | -28.0                    | -28.0    | 0.23 (3)            | 10.00             |

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

|              |               |
|--------------|---------------|
| TOP CH.      | LL = 28.1 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

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

##### THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPC 2011

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.34")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")  
ALLOWABLE DEFL.(TL) = L/360 (0.34")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.34/1.00 (C-D:1), BC=0.23/1.00 (G-H:3), WB=0.08/1.00 (B-G:1), SSI=0.16/1.00 (C-D: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 = 0.50

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

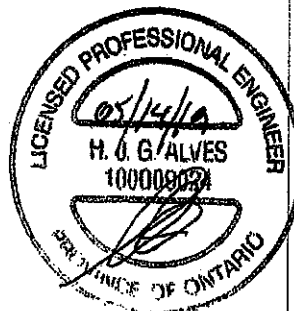
##### NAIL VALUES

| PLATE | GRIP(DRY) | SHEAR | SECTION |
|-------|-----------|-------|---------|
| (PSI) | (PL)      | (PL)  | (PL)    |
| MAX   | MIN       | MAX   | MIN     |
| MT20  | 618       | 354   | 1657    |
|       | 822       | 2284  | 1656    |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.69 (D) (INPUT = 0.90)  
JSI METAL= 0.18 (D) (INPUT = 1.00)

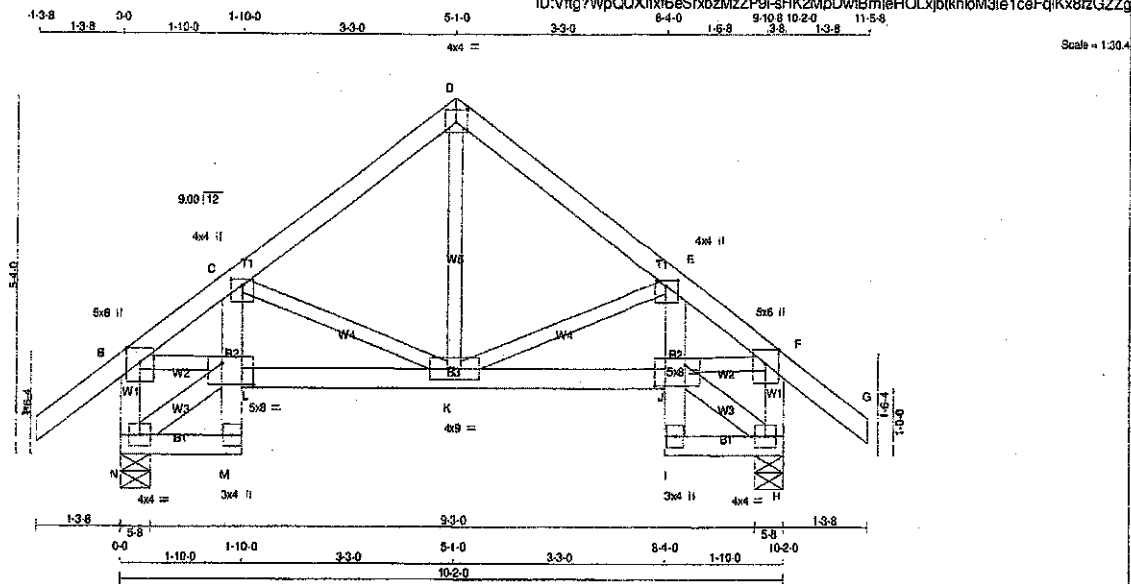


Structural component only  
DWG# T-1911565

|               |            |          |     |             |              |          |
|---------------|------------|----------|-----|-------------|--------------|----------|
| JOB NAME      | TRUSS NAME | QUANTITY | PLY | JOB DESC.   | Brentwood 3A | DRWG NO. |
| 200142-400342 | T32S       | 3        | 1   | TRUSS DESC. |              |          |

Tamarack Roof Truss, Burlington

Version 8.300 S Apr 23 2019 MITek Industries, Inc. Tue May 14 14:50:59 2019 Page 1  
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TOTAL WEIGHT = 3 X 52 = 156 lb  
(M/F)

| LUMBER            |        |      |        |
|-------------------|--------|------|--------|
| N. L. G. A. RULES | CHORDS | SIZE | LUMBER |
| A - D             | 2x4    | DRY  | No.2   |
| D - G             | 2x4    | DRY  | No.2   |
| N - B             | 2x4    | DRY  | No.2   |
| H - F             | 2x4    | DRY  | No.2   |
| N - M             | 2x4    | DRY  | No.2   |
| M - C             | 2x4    | DRY  | No.2   |
| L - J             | 2x4    | DRY  | No.2   |
| I - E             | 2x4    | DRY  | No.2   |
| I - H             | 2x4    | DRY  | No.2   |
| ALL WEBS          | 2x3    | DRY  | No.2   |
| EXCEPT            |        |      |        |
| N - L             | 2x4    | DRY  | No.2   |
| J - H             | 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 | Edge      |
| C                           | TMVW+p  | MT20   | 4.0 | 4.0 | 1.00 2.00 |
| D                           | TTW+p   | MT20   | 4.0 | 4.0 | 2.25 2.00 |
| E                           | TMVW+p  | MT20   | 4.0 | 4.0 | 1.00 2.00 |
| F                           | TMVW+p  | MT20   | 5.0 | 6.0 | Edge      |
| H                           | BMVW1-i | MT20   | 4.0 | 4.0 |           |
| I                           | BMVW+p  | MT20   | 3.0 | 4.0 |           |
| J                           | BMVW1-i | MT20   | 5.0 | 6.0 | 3.75 5.50 |
| K                           | BMVW1-i | MT20   | 4.0 | 4.0 |           |
| L                           | BMVW1-i | MT20   | 5.0 | 6.0 | 3.75 5.50 |
| M                           | BMVW+p  | MT20   | 3.0 | 4.0 |           |
| N                           | BMVW1-i | MT20   | 4.0 | 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  | REQD |     |
|----------|------|----------|----------------|------------------|------|--------|------|-----|
| JT       | VERT | HORZ     | GROSS REACTION | DOWN             | HORZ | UPLIFT | BRG  | BRG |
| N        | 802  | 0        | 802            | 0                | 0    | 5-8    | 5-8  | 5-8 |
| H        | 802  | 0        | 802            | 0                | 0    | 5-8    | 5-8  | 5-8 |

#### UNFACTORED REACTIONS

| JT | COMBINED | SNOW    | LIVE    | PERM. LIVE | WIND  | DEAD    | SOIL  |
|----|----------|---------|---------|------------|-------|---------|-------|
| N  | 631      | 375 / 0 | 107 / 0 | 0 / 0      | 0 / 0 | 149 / 0 | 0 / 0 |
| H  | 631      | 375 / 0 | 107 / 0 | 0 / 0      | 0 / 0 | 149 / 0 | 0 / 0 |

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

#### 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) | MAX.<br>CSI (LC) | MAX.<br>UNBRAC | MEMB. | MAX. FACTORED<br>FORCE<br>(LBS) | MAX.<br>CSI (LC) |
| FR-TO  |                                 | FROM TO                         |                  | LENGTH         | FR-TO |                                 |                  |
| A-B    | 0 / 42                          | -102.1                          | -102.1 0.14 (1)  | 10.00          | N-L   | -31 / 0                         | 0.00 (1)         |
| B-C    | -839 / 0                        | -102.1                          | -102.1 0.11 (1)  | 6.25           | J-H   | -31 / 0                         | 0.00 (1)         |
| C-D    | -519 / 0                        | -102.1                          | -102.1 0.15 (1)  | 6.25           | B-L   | 0 / 685                         | 0.15 (1)         |
| D-E    | -519 / 0                        | -102.1                          | -102.1 0.15 (1)  | 6.25           | J-F   | 0 / 685                         | 0.15 (1)         |
| E-F    | -839 / 0                        | -102.1                          | -102.1 0.11 (1)  | 6.25           | K-D   | 0 / 325                         | 0.07 (2)         |
| F-G    | 0 / 42                          | -102.1                          | -102.1 0.14 (1)  | 10.00          | C-K   | -307 / 0                        | 0.07 (1)         |
| G-H    | -762 / 0                        | 0.0                             | 0.0 0.08 (1)     | 7.81           | K-E   | -307 / 0                        | 0.07 (1)         |
| H-F    | -762 / 0                        | 0.0                             | 0.0 0.08 (1)     | 7.81           |       |                                 |                  |
| N-M    | 0 / 25                          | -28.0                           | -28.0 0.03 (3)   | 10.00          |       |                                 |                  |
| M-L    | 0 / 41                          | 0.0                             | 0.0 0.04 (1)     | 10.00          |       |                                 |                  |
| L-C    | 0 / 99                          | 0.0                             | 0.0 0.05 (1)     | 10.00          |       |                                 |                  |
| L-K    | 0 / 687                         | -28.0                           | -28.0 0.17 (2)   | 10.00          |       |                                 |                  |
| K-J    | 0 / 687                         | -28.0                           | -28.0 0.17 (2)   | 10.00          |       |                                 |                  |
| I-J    | 0 / 41                          | 0.0                             | 0.0 0.04 (1)     | 10.00          |       |                                 |                  |
| J-E    | 0 / 99                          | 0.0                             | 0.0 0.05 (1)     | 10.00          |       |                                 |                  |
| I-H    | 0 / 25                          | -28.0                           | -28.0 0.03 (3)   | 10.00          |       |                                 |                  |

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

TOP CH. LL = 29.1 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.6 PSF

##### SPACING = 24.0 IN. CC

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

##### THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2012, BCBC 2012, ABC 2014  
- CSA B86-09  
- TPC 2011

##### DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.34")  
CALCULATED VERT. DEFL.(LL) = L/989 (0.01")  
ALLOWABLE DEFL.(TL) = L/360 (0.34")  
CALCULATED VERT. DEFL.(TL) = L/989 (0.02")

CSI: TC=0.15/1.00 (D-E:1), BC=0.17/1.00 (J-K:2),  
WB=0.15/1.00 (F-J:1), SSI=0.12/1.00 (D-E: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 = 0.50

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 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

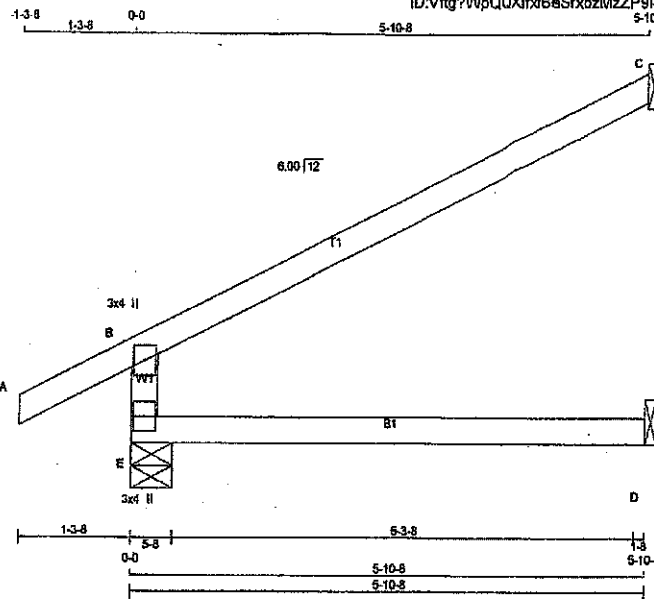
JSI GRIP = 0.58 (D) (INPUT = 0.90)  
JSI METAL = 0.17 (B) (INPUT = 1.00)

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



Structural component only  
DWG# T-1911566

|                                 |                  |               |          |                           |          |
|---------------------------------|------------------|---------------|----------|---------------------------|----------|
| JOB NAME<br>200142-400307       | TRUSS NAME<br>J1 | QUANTITY<br>9 | PLY<br>1 | JOB DESC.<br>Brentwood 3A | DRWG NO. |
| Tamarack Roof Truss, Burlington |                  |               |          | TRUSS DESC.               |          |



**RECEIVED**  
JUL 11 2019  
TOWN OF CALEDON  
BUILDING SECTION  
FILE NO.

| LUMBER          |         |        |        |
|-----------------|---------|--------|--------|
| N.L.G. A. RULES | SIZE    | 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

| JT | FACTORED GROSS REACTION |      | MAXIMUM FACTORED GROSS REACTION |      | INPUT BRG IN-SX | REQD BRG IN-SX |
|----|-------------------------|------|---------------------------------|------|-----------------|----------------|
|    | VERT                    | HORZ | DOWN                            | HORZ |                 |                |
| E  | 845                     | 0    | 845                             | 0    | 5-8             | 5-8            |
| C  | 225                     | 0    | 225                             | 0    | 1-8             | 1-8            |
| D  | 93                      | 0    | 119                             | 0    | 1-8             | 1-8            |

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

#### UNFACTORED REACTIONS

| JT | COMBINED | MAX/MIN COMPONENT REACTIONS |      |      |            | DEAD  | SOIL |
|----|----------|-----------------------------|------|------|------------|-------|------|
|    |          | 1ST CASE                    | SNOW | LIVE | PERM. LIVE |       |      |
| E  | 473      | 292/0                       | 72/0 | 0/0  | 0/0        | 109/0 | 0/0  |
| C  | 154      | 128/0                       | 0/0  | 0/0  | 0/0        | 28/0  | 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) E

#### 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)

| MEMB. | CHORDS                    |                           | WEBS                      |                           |
|-------|---------------------------|---------------------------|---------------------------|---------------------------|
|       | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) |
| E-B   | -514/0                    | 0.0                       | 0.0                       | 0.22 (3)                  |
| A-B   | 0/31                      | -102.1                    | -102.1                    | 0.13 (1)                  |
| B-C   | -34/0                     | -102.1                    | -102.1                    | 0.60 (1)                  |
| E-D   | 0/0                       | -38.5                     | -38.5                     | 0.22 (3)                  |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.1 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

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 2016, OBC 2012  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

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

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) =  $L/360$  (0.20")  
CALCULATED VERT. DEFL.(LL) =  $L/989$  (0.04")  
ALLOWABLE DEFL.(TL) =  $L/360$  (0.20")  
CALCULATED VERT. DEFL.(TL) =  $L/942$  (0.07")

CSI: TC=0.60/1.00 (B-C:1), BC=0.22/1.00 (D-E:3), WB=0.00/1.00 (n/a:0), SS=0.28/1.00 (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

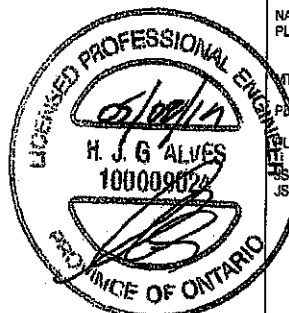
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

| NAIL VALUES |           |          |           |
|-------------|-----------|----------|-----------|
| PLATE       | GRIP(DRY) | SHEAR    | SECTION   |
| (PSI)       | (PLI)     | (PLI)    | (PLI)     |
| MT20        | MAX MIN   | MAX MIN  | MAX MIN   |
|             | 818 354   | 1667 788 | 1887 1655 |

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

CSI GRIP= 0.21 (E) (INPUT = 0.90)  
CSI METAL= 0.14 (B) (INPUT = 1.00)

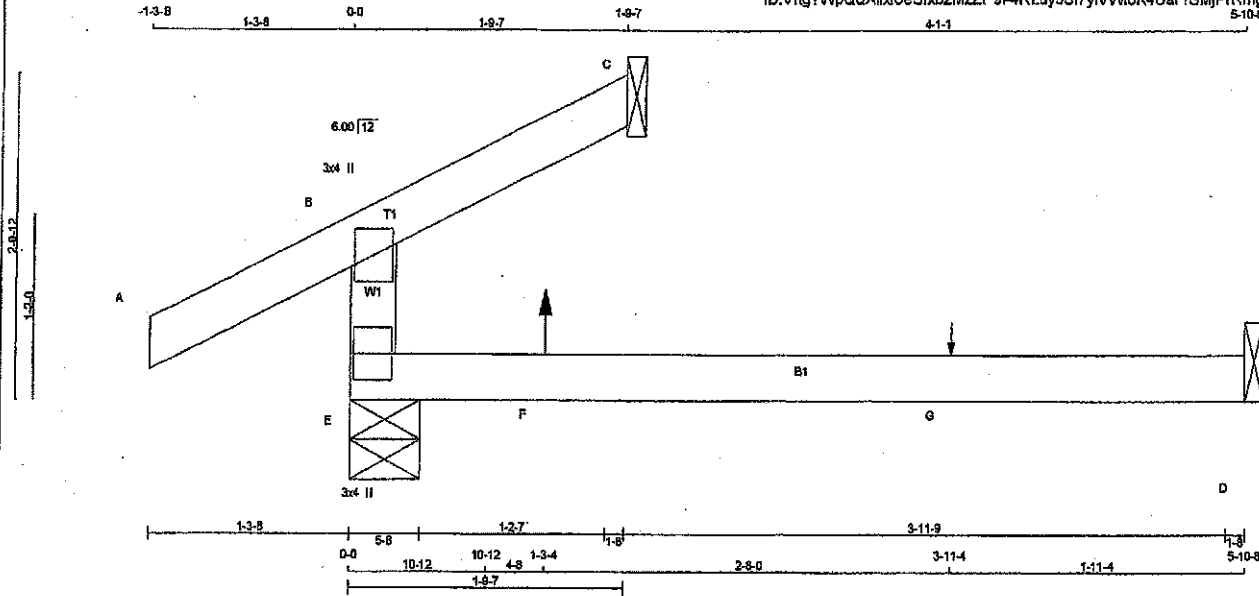


DRWG NO. TAM 179/0937  
STRUCTURAL  
CALCULATION ONLY

|                                 |            |          |     |              |          |
|---------------------------------|------------|----------|-----|--------------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY | PLY | JOB DESC.    | DRWG NO. |
| 200142-400307                   | J2         | 2        | 1   | Brentwood 3A |          |
| Tamarack Roof Truss, Burlington |            |          |     | TRUSS DESC.  |          |

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Wed May 8 14:08:47 2019 Page 1  
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Scale = 1:13.5



TOTAL WEIGHT = 2 X 12 = 23 lb [M]

#### 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* <sub>p</sub> | MT20   | 3.0 | 4.0 |   |   |
| E  | BMV* <sub>p</sub> | 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 | REQRD BRG |
|----------|-------------------------|---------------------------------|-----------|-----------|
| JT       | VERT                    | DOWN                            | UP        | IN-SX     |
| E        | 351                     | 0                               | 0         | 5-8       |
| C        | 95                      | 0                               | 0         | 1-8       |
| D        | 94                      | 0                               | 0         | 1-8       |

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

#### UNFACTORED REACTIONS

| JT | 1ST LCASE | SNOW    | LIVE   | PERM. LIVE | WIND  | DEAD   | SOIL  |
|----|-----------|---------|--------|------------|-------|--------|-------|
| E  | 258       | 155 / 0 | 42 / 0 | 0 / 0      | 0 / 0 | 81 / 0 | 0 / 0 |
| C  | 77        | 24 / 0  | 28 / 0 | 0 / 0      | 0 / 0 | 24 / 0 | 0 / 0 |
| D  | 86        | 0 / -2  | 53 / 0 | 0 / 0      | 0 / 0 | 35 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, 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: (7)

| MEMB. | CHORDS MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. LC1 MAX. (LC) | MAX. UNBRACED LENGTH FR-TO | WEBS MAX. FACTORED FORCE (LBS) | MAX. LC1 MAX. (LC) |
|-------|----------------------------------|---------------------------|--------------------|----------------------------|--------------------------------|--------------------|
| E-B   | -228 / 28                        | 0.0                       | 0.0                | 0.19 (2)                   | 7.81                           |                    |
| A-B   | 0 / 31                           | -102.1                    | -102.1             | 0.15 (1)                   | 10.00                          |                    |
| B-C   | 0 / 27                           | -102.1                    | -102.1             | 0.16 (3)                   | 10.00                          |                    |
| E-F   | 0 / 0                            | -38.5                     | -38.5              | 0.23 (3)                   | 10.00                          |                    |
| F-G   | 0 / 0                            | -38.5                     | -38.5              | 0.23 (3)                   | 10.00                          |                    |
| G-D   | 0 / 0                            | -38.5                     | -38.5              | 0.23 (3)                   | 10.00                          |                    |

#### FACTORED CONCENTRATED LOADS (LBS)

| JT | LOC.   | LC1 | MAX. | MAX+ | FACE  | DIR. | TYPE  | HEEL | CONN. |
|----|--------|-----|------|------|-------|------|-------|------|-------|
| F  | 1-3-4  | 8   | 1    | 13   | FRONT | VERT | TOTAL | -    | -     |
| G  | 3-11-4 | 1   | 1    | -    | FRONT | VERT | TOTAL | -    | -     |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 28.1 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, 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 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) =  $L/360$  (0.20")  
CALCULATED VERT. DEFL. (LL) =  $L/999$  (0.05")  
ALLOWABLE DEFL. (TL) =  $L/360$  (0.20")  
CALCULATED VERT. DEFL. (TL) =  $L/839$  (0.08")

CSF: TC=0.19/1.00 (B-E-2), BC=0.23/1.00 (D-E-3), WB=0.00/1.00 (n/a-0), SSI=0.14/1.00 (D-E-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

AUTOSOLVE RIGHT HEEL ONLY

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

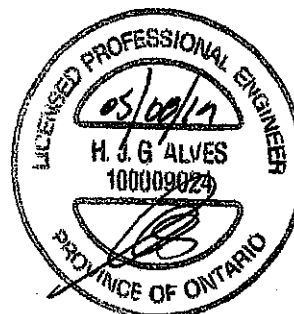
#### NAIL VALUES

| PLATE GRIP (DRY) | SHEAR (PS) | SECTION (PL) |
|------------------|------------|--------------|
| MAX              | MIN        | MAX          |
| MT20             | 616        | 354          |

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.10 (E) (INPUT = 0.90)  
JSI METAL = 0.06 (B) (INPUT = 1.00)

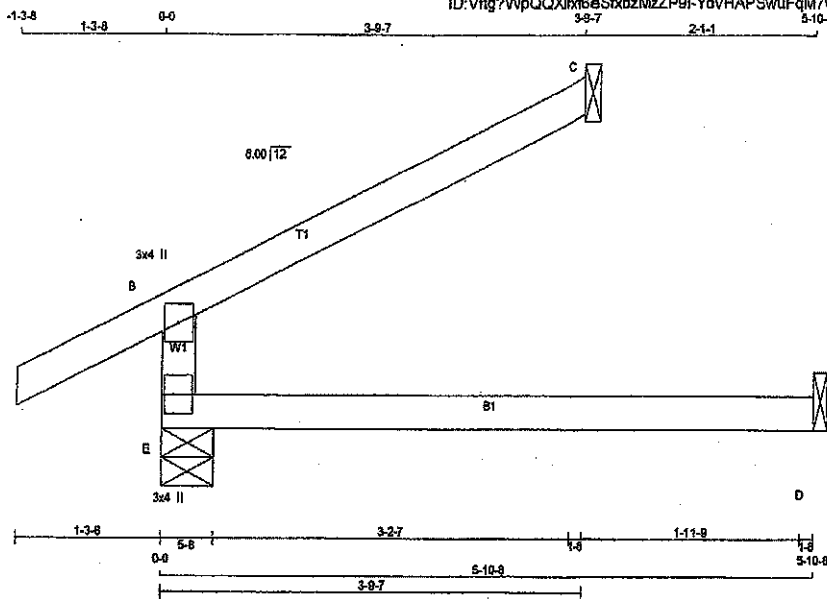


DRWG NO. TAM 8/14/2018  
STRUCTURAL  
CONSULTANT ONLY

|                                  |                         |                      |                 |                                  |          |
|----------------------------------|-------------------------|----------------------|-----------------|----------------------------------|----------|
| JOB NAME<br><b>200142-400307</b> | TRUSS NAME<br><b>J3</b> | QUANTITY<br><b>2</b> | PLY<br><b>1</b> | JOB DESC.<br><b>Brentwood 3A</b> | DRWG NO. |
| Tamarack Roof Truss, Burlington  |                         |                      |                 | TRUSS DESC.                      |          |

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Scale = 1:18.5

TOTAL WEIGHT = 2 X 14 = 28 lb

| LUMBER        |         |        |        |
|---------------|---------|--------|--------|
| N L G A RULES | SIZE    | 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 TMA+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

| BEARINGS |                | FACTORED |      | MAXIMUM FACTORED |      | INPUT   |       | RECORD |       |
|----------|----------------|----------|------|------------------|------|---------|-------|--------|-------|
| JT       | GROSS REACTION | VERT     | HORZ | DOWN             | HORZ | UP/LIFT | IN-SX | BRG    | IN-SX |
| E        | 513            | 0        | 513  | 0                | 0    | 5-8     | 5-8   |        |       |
| C        | 145            | 0        | 145  | 0                | 0    | 1-8     | 1-8   |        |       |
| D        | 93             | 0        | 119  | 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 |  |  |
| E         | 382      | 216/0                       | 72/0 | 0/0       | 0/0  | 83/0 | 0/0  |  |  |
| C         | 100      | 83/0                        | 0/0  | 0/0       | 0/0  | 17/0 | 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) E, 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)

| CHORDS |             | FACTORED |         | WEBS     |       | FACTORED    |      |
|--------|-------------|----------|---------|----------|-------|-------------|------|
| MEMB.  | FORCE (LBS) | VERT.    | LC1 MAX | MAX.     | MEMB. | FORCE (LBS) | MAX. |
| FR-TO  |             | FROM     | TO      | LENGTH   | FR-TO |             |      |
| E-B    | -380/0      | 0.0      | 0.0     | 0.21 (3) | 7.81  |             |      |
| A-B    | 0/31        | -102.1   | -102.1  | 0.13 (1) | 10.00 |             |      |
| B-C    | -22/0       | -102.1   | -102.1  | 0.25 (1) | 6.25  |             |      |
| E-D    | 0/0         | -38.5    | -38.5   | 0.21 (3) | 10.00 |             |      |

DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 28.1 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. CG

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, CBC 2012  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

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

(55 % OF 37.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = L/360 (0.20")  
CALCULATED VERT. DEFL. (LL) = L/889 (0.04")  
ALLOWABLE DEFL. (TL) = L/360 (0.20")  
CALCULATED VERT. DEFL. (TL) = L/942 (0.07")

CSI: TC=0.25/1.00 (B-C:1), BC=0.21/1.00 (D-E:3), WB=0.00/1.00 (N/A:D), SS=0.17/1.00 (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     |
| MT20  | 618        | 354   | 1687    |
|       | 788        | 1687  | 1656    |

PLATE PLACEMENT TOL = 0.250 inches

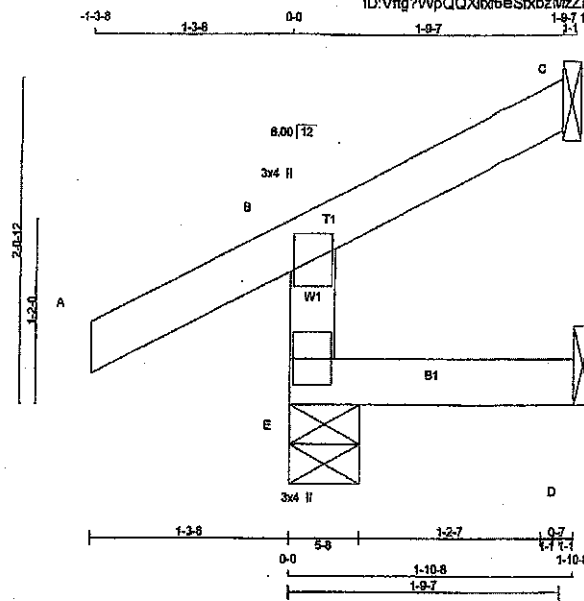
PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.16 (E) (INPUT = 0.90)  
JSI METAL= 0.11 (B) (INPUT = 1.00)



DRWG NO. TAM 17910939  
STRUCTURAL  
CONCRETEMENT ONLY

|                                 |            |             |     |              |          |
|---------------------------------|------------|-------------|-----|--------------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY    | PLY | JOB DESC.    | DRWG NO. |
| 200142-400307                   | J4         | 2           | 1   | Brentwood 3A |          |
| Tamarack Roof Truss, Burlington |            | TRUSS DESC. |     |              |          |



**RECEIVED**  
JUL 11 2019  
TOWN OF CALEDON  
BUILDING SECTION  
FILE NO.

TOTAL WEIGHT = 2 X 7 = 14 lb

#### LUMBER

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

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

| JT | FACTORED GROSS REACTION |      | MAXIMUM FACTORED GROSS REACTION |      | INPUT BRG IN-SX | REQD BRG IN-SX |
|----|-------------------------|------|---------------------------------|------|-----------------|----------------|
|    | VERT                    | HORZ | DOWN                            | HORZ |                 |                |
| E  | 318                     | 0    | 318                             | 0    | 5-8             | 5-8            |
| C  | 51                      | 0    | 51                              | 0    | 1-8             | 1-8            |
| D  | 24                      | 0    | 41                              | 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  
PROVIDE ANCHORAGE AT BEARING JOINT D FOR 150 LBS FACTORED UPLIFT

#### UNFACTORED REACTIONS

| 1ST LCASE |          | MAX/MIN COMPONENT REACTIONS |        |           |       |        |       |
|-----------|----------|-----------------------------|--------|-----------|-------|--------|-------|
| JT        | COMBINED | SNOW                        | LIVE   | PERM.LIVE | WIND  | DEAD   | SOIL  |
| E         | 228      | 180 / 0                     | 20 / 0 | 0 / 0     | 0 / 0 | 48 / 0 | 0 / 0 |
| C         | 36       | 27 / -21                    | 2 / 0  | 0 / 0     | 0 / 0 | 7 / 0  | 0 / 0 |
| D         | 24       | 0 / -8                      | 18 / 0 | 0 / 0     | 0 / 0 | 11 / 0 | 0 / 0 |

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

| MEMB. | CHORDS                    |                           | WEBS                      |                           |
|-------|---------------------------|---------------------------|---------------------------|---------------------------|
|       | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. FACTORED FORCE (LBS) | MAX. FACTORED FORCE (LBS) |
| FR-TO |                           | FROM TO                   |                           | FR-TO                     |
| E-B   | -270/0                    | 0.0 0.0 0.04 (5)          | 7.81                      |                           |
| A-B   | 0/31                      | -102.1 -102.1 0.13 (1)    | 10.00                     |                           |
| B-C   | -18/0                     | -102.1 -102.1 0.10 (1)    | 6.25                      |                           |
| E-D   | 0/0                       | -38.5 -38.5 0.04 (5)      | 10.00                     |                           |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 28.1 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 089-09, CSA 089-14  
- 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 29.1 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")

CS: TC=0.13/1.00 (A-B-1), BC=0.04/1.00 (D-E-5), WB=0.00/1.00 (W-B), SSI=0.10/1.00 (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

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) | (PL)       | (PL)  | (PL)               |
| MAX   | MIN        | MAX   | MIN                |
| MT20  | 618        | 354   | 1667 788 1987 1655 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

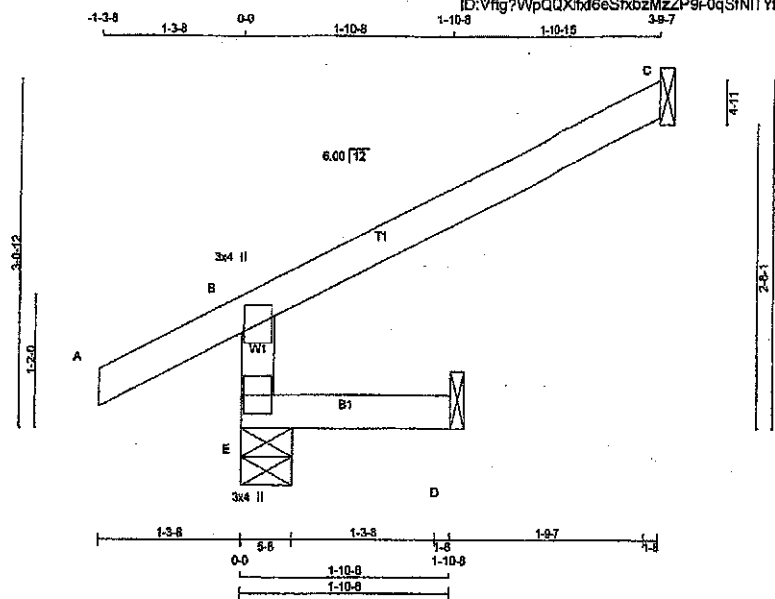
JSI GRIP= 0.11 (E) (INPUT = 0.90)  
JSI METAL= 0.07 (B) (INPUT = 1.00)



DWG NO. TAM 17410940  
STRUCTURAL  
CHECKED ONLY

|                                 |                  |               |          |                           |          |
|---------------------------------|------------------|---------------|----------|---------------------------|----------|
| JOB NAME<br>200142-400307       | TRUSS NAME<br>J5 | QUANTITY<br>2 | PLY<br>1 | JOB DESC.<br>Brentwood 3A | DRWG NO. |
| Tamarack Roof Truss, Burlington |                  |               |          | TRUSS DESC.               |          |

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TOTAL WEIGHT = 2 X 10 = 19 lb

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

DRY: SEASONED LUMBER.

| PLATES (table is in inches) |        |        |     |     |   |
|-----------------------------|--------|--------|-----|-----|---|
| JT                          | TYPE   | PLATES | W   | LEN | Y |
| B                           | TMV+p  | MT20   | 3.0 | 4.0 | X |
| E                           | BMV1+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 |
|----|-------------------------|------|---------------------------------|------|-----------|----------|
|    | VERT                    | HORZ | DOWN                            | HORZ |           |          |
| E  | 420                     | 0    | 420                             | 0    | 5-8       | 5-8      |
| C  | 145                     | 0    | 145                             | 0    | 1-8       | 1-8      |
| D  | 32                      | 0    | 41                              | 0    | 1-8       | 1-8      |

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

#### UNFACTORED REACTIONS

| JT | 1ST CASE |         | MAX/MIN. COMPONENT REACTIONS |            | WIND  | DEAD   | SOIL  |
|----|----------|---------|------------------------------|------------|-------|--------|-------|
|    | COMBINED | SNOW    | LIVE                         | PERM. LIVE |       |        |       |
| E  | 297      | 216 / 0 | 22 / 0                       | 0 / 0      | 0 / 0 | 59 / 0 | 0 / 0 |
| C  | 100      | 83 / 0  | 0 / 0                        | 0 / 0      | 0 / 0 | 17 / 0 | 0 / 0 |
| D  | 29       | 0 / 0   | 18 / 0                       | 0 / 0      | 0 / 0 | 12 / 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 = 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: (5)

| MEMB. | CHORDS                   |                           | WEBS                   |                           |
|-------|--------------------------|---------------------------|------------------------|---------------------------|
|       | MAX FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. MEMB. FORCE (LBS) | MAX. FACTORED FORCE (LBS) |
| FR-TO |                          | FROM TO                   |                        | LENGTH FR-TO              |
| E-B   | -380 / 0                 | 0.0                       | 0.0                    | 0.01 (3)                  |
| A-B   | 0 / 31                   | -102.1                    | -102.1                 | 0.13 (1)                  |
| B-C   | -22 / 0                  | -102.1                    | -102.1                 | 0.25 (1)                  |
| E-D   | 0 / 0                    | -38.5                     | -38.5                  | 0.03 (3)                  |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.1 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 BCBC 2018, OBC 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 29.1 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=0.25/1.00 (B-C:1), BC=0.03/1.00 (D-E:3), WB=0.00/1.00 (n/a:0), SS=0.17/1.00 (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.

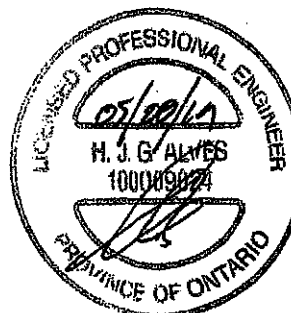
#### NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION  
(PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1687 788 1937 1656

PLATE PLACEMENT TOL = 0.250 inches

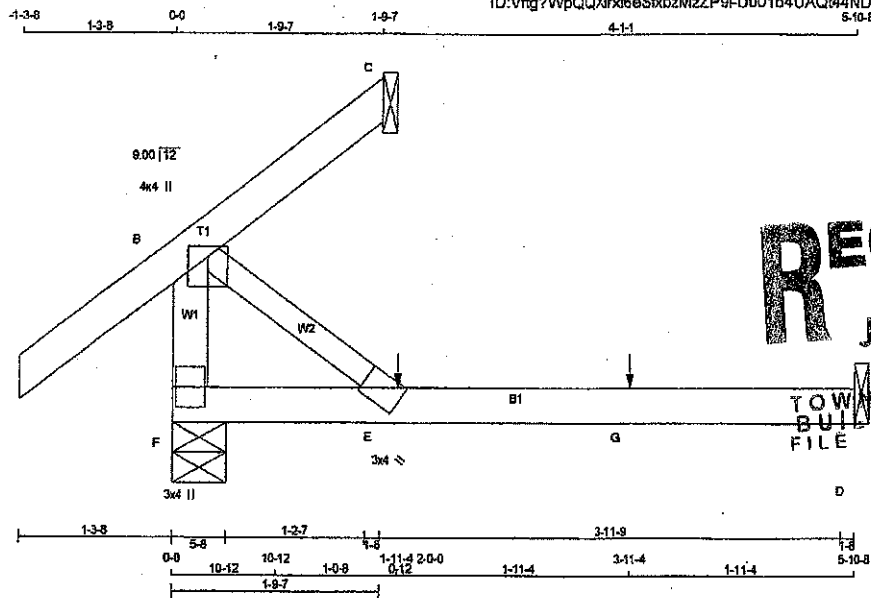
PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.16 (E) (INPUT = 0.80)  
JSI METAL= 0.11 (B) (INPUT = 1.00)



DRG NO. TAM 11910941  
STRUCTURAL  
QUANTITY ONLY

|                                                              |                  |               |          |                                                                                                                                                           |          |
|--------------------------------------------------------------|------------------|---------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| JOB NAME<br>200142-400307<br>Tamarack Roof Truss, Burlington | TRUSS NAME<br>J7 | QUANTITY<br>1 | PLY<br>1 | JOB DESC.<br>Brentwood 3A                                                                                                                                 | DRWG NO. |
| TRUSS DESC.                                                  |                  |               |          | Version 5.230 S Nov 17 2018 Mitek Industries, Inc. Wed May 8 14:06:50 2019 Page 1<br>ID:Vrtg?WpQQXfXfeSxbzMzZP9t-U001b4UAQM4Ndrmd7yT4_EA2R9IU0olzpk8ziYn3 |          |



TOTAL WEIGHT = 14 lb

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

| 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 2.00 1.25 |
| 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 REQD BRG |
| F        | 400 0                   | 400 0                           | 5-8            |
| C        | 37 0                    | 37 0                            | 1-8            |
| D        | 113 0                   | 144 0                           | 1-8            |

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

| UNFACTORED REACTIONS |          |           |                     |
|----------------------|----------|-----------|---------------------|
| JT                   | 1ST CASE | MAX / MIN | COMPONENT REACTIONS |
| F                    | 299      | 163 / 0   | 62 / 0              |
| C                    | 25       | 21 / 0    | 0 / 0               |
| D                    | 103      | 0 / 0     | 62 / 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)

| CHORDS |                           |                           |                                |
|--------|---------------------------|---------------------------|--------------------------------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. FACTORED COMB. LOAD (LC1) |
| FR-TO  | -286 / 0                  | 0.0                       | 0.03 (1)                       |
| F-B    | 0 / 42                    | -102.1                    | 0.15 (1)                       |
| B-C    | -33 / 0                   | -102.1                    | 0.15 (1)                       |
| F-E    | 0 / 0                     | -38.5                     | 0.27 (2)                       |
| E-G    | 0 / 0                     | -38.5                     | 0.32 (2)                       |
| G-D    | 0 / 0                     | -38.5                     | 0.32 (2)                       |

| FACTORED CONCENTRATED LOADS (LBS) |        |     |      |
|-----------------------------------|--------|-----|------|
| JT                                | LOC.   | LC1 | MAX. |
| E                                 | 1-11-4 | 1   | 1    |
| G                                 | 3-11-4 | 1   | 1    |



| DESIGN CRITERIA  |            |
|------------------|------------|
| SPECIFIED LOADS: |            |
| TOP CH. LL       | = 29.1 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, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2018, CBC 2012  
- CSA 068-09, 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 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = L/926 (0.08")  
ALLOWABLE DEFL.(TL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = L/555 (0.13")

CS: TC=0.15/1.00 (A-B:1), BC=0.32/1.00 (D-E:2), WB=0.00/1.00 (B-E:1), SS=0.12/1.00 (E-F:2)

DCL 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)       | (PL)      | (PL)  | (PL)    |
| MT20        | 618       | 354   | 1667    |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

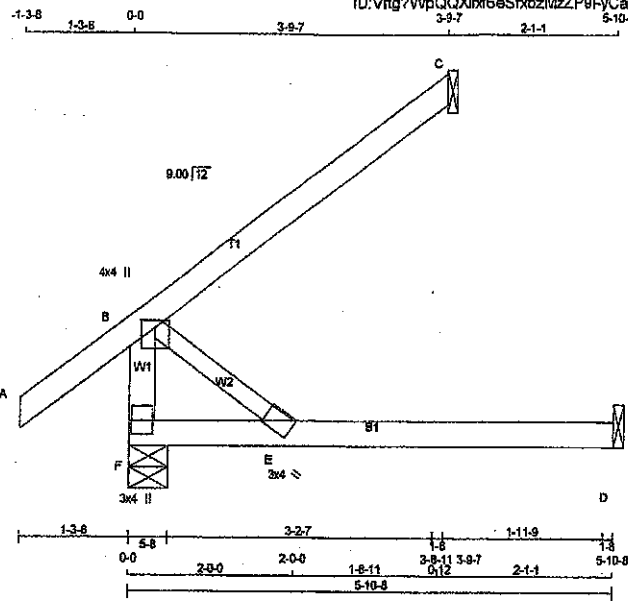
ISI GRIP= 0.23 (B) (INPUT = 0.90)

ISI METAL= 0.06 (B) (INPUT = 1.00)

ENG. NO. TAM 17410942  
STRUCTURAL  
OFFICE ONLY

|                                 |                  |               |          |                           |          |
|---------------------------------|------------------|---------------|----------|---------------------------|----------|
| JOB NAME<br>200142-400307       | TRUSS NAME<br>J8 | QUANTITY<br>1 | PLY<br>1 | JOB DESC.<br>Brentwood 3A | DRWG NO. |
| Tamarack Roof Truss, Burlington |                  |               |          | TRUSS DESC.               |          |

Version 8.230 S Nov 17 2018 MITek Industries, Inc. Wed May 8 14:08:51 2019 Page 1  
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Scale = 1/24.0

TOTAL WEIGHT = 17 lb

#### LUMBER

##### N.L.G.A. RULES

| CHORDS | SIZE | DRY | 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  
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   | 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

| JT | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQD BRG |
|----|-------------------------|---------------------------------|-----------|----------|
|    | VERT                    | DOWN                            | IN-SX     | IN-SX    |
| JT | 447                     | 447                             | 5-8       | 5-8      |
| C  | 193                     | 193                             | 1-8       | 1-8      |
| D  | 113                     | 144                             | 1-8       | 1-8      |

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

##### UNFACTORED REACTIONS

| JT | 1ST LCASE | SNOW  | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|----|-----------|-------|------|-----------|------|------|------|
| F  | 332       | 190/0 | 62/0 | 0/0       | 0/0  | 60/0 | 0/0  |
| C  | 138       | 110/0 | 0/0  | 0/0       | 0/0  | 23/0 | 0/0  |
| D  | 103       | 0/0   | 62/0 | 0/0       | 0/0  | 41/0 | 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 |                           |                           |        |               |               | WEBS  |                           |                           |     |               |               |
|--------|---------------------------|---------------------------|--------|---------------|---------------|-------|---------------------------|---------------------------|-----|---------------|---------------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | LC1    | MAX. CS1 (LC) | UNBRAC LENGTH | MEMB. | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | LC1 | MAX. CS1 (LC) | UNBRAC LENGTH |
| FR-TO  |                           | FROM TO                   |        |               |               | FR-TO |                           | FROM TO                   |     |               |               |
| F-B    | -334/0                    | 0.0                       | 0.0    | 0.03 (1)      | 7.81          | B-E   | 0/0                       | 0.0                       | 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  | 0.25 (3)      | 10.00         |       |                           |                           |     |               |               |
| E-D    | 0/0                       | -38.5                     | -38.5  | 0.30 (3)      | 10.00         |       |                           |                           |     |               |               |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.1 PSF  
CL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
CL = 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 BCBC 2018, OBC 2012  
- CSA 085-09, CSA 088-14  
- TPIC 2011, TPIC 2014

(55% OF 37.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = L/826 (0.08")  
ALLOWABLE DEFL.(TL) = L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = L/555 (0.13")

CS1: TC=0.25/1.00 (B-C:1), BC=0.30/1.00 (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

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 1656

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)

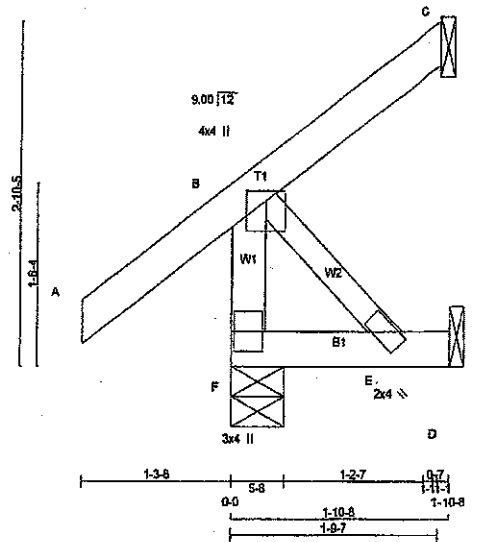


BY: T. TAM 7/11/0943  
STRUCTURAL  
CHECK ONLY

|                                 |            |          |     |              |          |
|---------------------------------|------------|----------|-----|--------------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY | PLY | JOB DESC.    | DRWG NO. |
| 200142-400307                   | J9         | 1        | 1   | Brentwood 3A |          |
| Tamarack Roof Truss, Burlington |            |          |     |              |          |

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Scale = 1:17.7



TOTAL WEIGHT = 9 lb

| 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) | W   | LEN | Y    | X    |
|-----------------------------|-----|-----|------|------|
| JT TYPE PLATES              | 4.0 | 4.0 | 1.00 | 2.00 |
| 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                    | DOWN                            | UP        | IN-SX    |
| F        | 323                     | 0                               | 0         | 5-8      |
| C        | 37                      | 0                               | 45        | 1-8      |
| D        | 36                      | 0                               | 0         | 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 | 1ST CASE | MAX./MIN. COMPONENT REACTIONS           |
|----------------------|----------|-----------------------------------------|
| JT                   | COMBINED | SNOW LIVE PERM. LIVE WIND DEAD SOIL     |
| F                    | 229      | 183 / 0 20 / 0 0 / 0 0 / 0 47 / 0 0 / 0 |
| C                    | 25       | 21 / -31 0 / 0 0 / 0 0 / 0 4 / 0 0 / 0  |
| D                    | 33       | 0 / 0 20 / 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 = 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: (5)

| CHORDS | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) | MAX. FACTORED VERT. LOAD LC1 (PLF) | MAX. FACTORED VERT. LOAD LC1 (PLF) | MAX. FACTORED VERT. LOAD LC1 (PLF) | MAX. FACTORED VERT. LOAD LC1 (PLF) | MAX. FACTORED VERT. LOAD LC1 (PLF) |
|--------|---------------------------|-------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| FR-TO  |                           |                               |                                    |                                    |                                    |                                    |                                    |
| F-B    | -288 / 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    | -33 / 0                   | -102.1                        | -102.1                             | 0.13 (1)                           | 8.25                               |                                    |                                    |
| 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

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.1 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 BCBC 2016, OBC 2012  
- CSA 086-08, CSA 086-14  
- TPIC 2011, TPIC 2014

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

(55 % OF 37.8 P.S.F. G.S.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.1 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")

CSF TC=0.14/1.00 (A-B:1), BC=0.03/1.00 (E-F:3), WB=0.00/1.00 (B-E:1), SS=0.09/1.00 (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

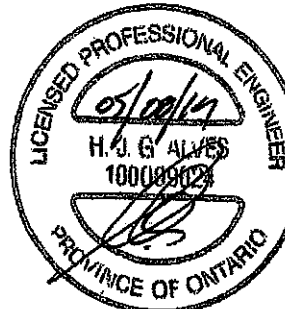
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

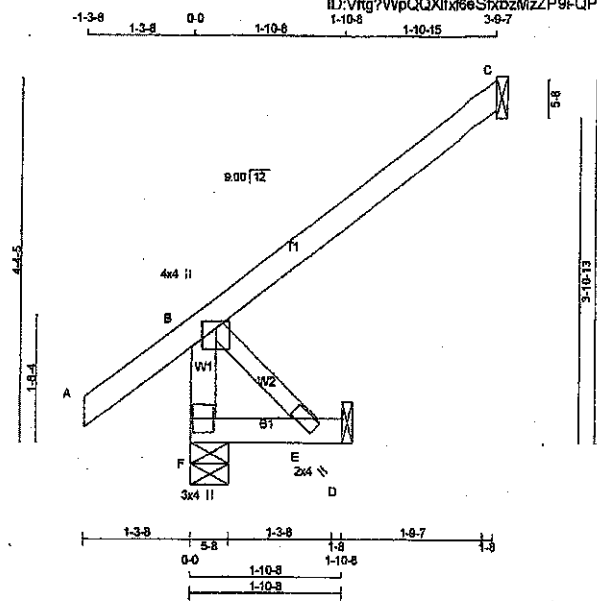
JSI GRIP= 0.23 (B) (INPUT = 0.90)  
JSI METAL= 0.05 (B) (INPUT = 1.00)



ONGAMA TAM 77910944  
STRUCTURAL  
ON. 10/10/2019 ONLY

|                                 |            |             |     |              |          |
|---------------------------------|------------|-------------|-----|--------------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY    | PLY | JOB DESC.    | DRWG NO. |
| 200142-400307                   | J10        | 1           | 1   | Brentwood 3A |          |
| Tamarack Roof Truss, Burlington |            | TRUSS DESC. |     |              |          |

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Scale = 1/25.0

TOTAL WEIGHT = 12 lb

| LUMBER                | SIZE | DRY | LUMBER | DESCR. |
|-----------------------|------|-----|--------|--------|
| N. L. G. A. RULES     |      |     |        |        |
| CHORDS                | 2x4  | DRY | No.2   | SPF    |
| 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) | W    | LEN | Y   | X         |
|-----------------------------|------|-----|-----|-----------|
| JT TYPE                     |      |     |     |           |
| 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

| FACTORED       | MAXIMUM FACTORED | INPUT | REGRD |
|----------------|------------------|-------|-------|
| GROSS REACTION | GROSS REACTION   | BRG   | BRG   |
| JT             | JT               | IN-SX | IN-SX |
| F              | 370              | 0     | 5-8   |
| C              | 183              | 0     | 1-8   |
| D              | 38               | 0     | 1-8   |

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

| UNFACTORED REACTIONS | MAX/MIN. COMPONENT REACTIONS | WIND       | DEAD | SOIL |
|----------------------|------------------------------|------------|------|------|
| JT                   | JT                           | PERM. LIVE |      |      |
| F                    | 262                          | 180/0      | 20/0 | 0/0  |
| C                    | 133                          | 110/0      | 0/0  | 0/0  |
| D                    | 33                           | 0/0        | 20/0 | 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              |
|-------------------|-------------------|
| MAX. FACTORED     | MAX. FACTORED     |
| MEMB. FORCE (LBS) | MEMB. FORCE (LBS) |
| FR-TO             | FR-TO             |
| F-B               | -334/0            |
| A-B               | 0/42              |
| B-C               | 0/0               |
| F-E               | 0/0               |
| E-D               | 0/0               |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 28.1 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

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

(55% OF 37.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUAL TO 28.1 PSF

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: TO=0.02/1.00 (B-C:1), BC=0.04/1.00 (E-F:3),  
WB=0.00/1.00 (B-E:1), SS=0.12/1.00 (B-C:1)

DO NOT LUMBER 100 NAIL CONNECTION  
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

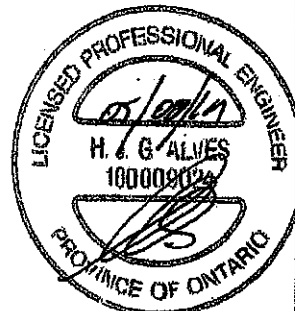
#### NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION  
(PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1667 768 1987 1858

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)

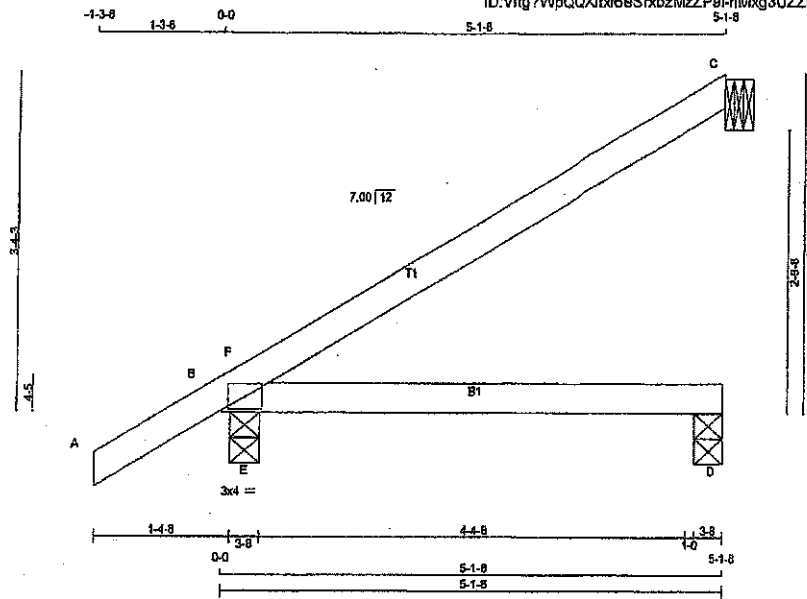


DR. ADAM 17910945  
STRUCTURAL  
CHECK ONLY

|                                 |            |             |     |              |          |
|---------------------------------|------------|-------------|-----|--------------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY    | PLY | JOB DESC.    | DRWG NO. |
| 200142-400307                   | J21        | 3           | 1   | Brentwood 3A |          |
| Tamarack Roof Truss, Burlington |            | TRUSS DESC. |     |              |          |

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Wed May 8 14:05:57 2019 Page 1  
ID: Vftg?WpQQXfM6eSfxbzMzZP8l-nMxg3UZZn0z4lIfGblbFymN2tqO0fcQPuAgTEzYmy

Scale = 1/210



TOTAL WEIGHT = 3 X 15 = 44 lb

| LUMBER            |      |        |        |
|-------------------|------|--------|--------|
| N. L. G. A. RULES | SIZE | LUMBER | DESCR. |
| 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 TMB1-I                    | MT20   | 3.0 | 4.0     |

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

| FACTORED       |      | MAXIMUM FACTORED |      | INPUT  |       | RECORD |  |
|----------------|------|------------------|------|--------|-------|--------|--|
| GROSS REACTION |      | GROSS REACTION   |      | BRG    |       | BRG    |  |
| JT VERT        | HORZ | DOWN             | HORZ | UPLIFT | IN-SX | IN-SX  |  |
| C 235          | 0    | 235              | 0    | 0      | 4-8   | 4-8    |  |
| D 126          | 0    | 138              | 0    | 0      | 3-8   | 3-8    |  |
| B 500          | 0    | 500              | 0    | 0      | 3-8   | 3-8    |  |

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

#### UNFACTORED REACTIONS

| 1ST LCASE |          | MAX./MIN. COMPONENT REACTIONS |        |            |       |        |       |
|-----------|----------|-------------------------------|--------|------------|-------|--------|-------|
| JT        | COMBINED | SNOW                          | LIVE   | PERM. LIVE | WIND  | DEAD   | SOIL  |
| C         | 164      | 128 / 0                       | 7 / 0  | 0 / 0      | 0 / 0 | 31 / 0 | 0 / 0 |
| D         | 105      | 23 / 0                        | 47 / 0 | 0 / 0      | 0 / 0 | 36 / 0 | 0 / 0 |
| B         | 365      | 228 / 0                       | 54 / 0 | 0 / 0      | 0 / 0 | 83 / 0 | 0 / 0 |

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

#### 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 |                           |                           |               | WEBS  |                           |               |          |
|--------|---------------------------|---------------------------|---------------|-------|---------------------------|---------------|----------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. CSI (LC) | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. CSI (LC) |          |
| FR-TO  |                           | FROM TO                   |               | FR-TO |                           |               |          |
| A-B    | -0 / 34                   | -102.1 -102.1             | 0.13 (1)      | 10.00 | E-F                       | -395 / 158    | 0.00 (1) |
| B-F    | -105 / 72                 | -102.1 -102.1             | 0.09 (3)      | 6.25  |                           |               |          |
| F-C    | -5 / 7                    | -102.1 -102.1             | 0.37 (1)      | 10.00 |                           |               |          |
| B-E    | 0 / 0                     | -38.5 -38.5               | 0.22 (1)      | 10.00 |                           |               |          |
| E-D    | 0 / 0                     | -38.5 -38.5               | 0.28 (1)      | 10.00 |                           |               |          |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.1 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 BCBC 2018, CBC 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 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = L/360 (0.19")  
CALCULATED VERT. DEFL. (LL) = L/899 (0.08")  
ALLOWABLE DEFL. (TL) = L/360 (0.19")  
CALCULATED VERT. DEFL. (TL) = L/590 (0.10")

CSI: TC=0.37/1.00 (C-F:1), BC=0.28/1.00 (D-E:1), WB=0.09/1.00 (E-F:1), SS=0.36/1.00 (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  | MAX MIN   |
| MT20    | 618 354    | 1687 788 | 1987 1656 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.37 (B) (INPUT = 0.90)  
JSI METAL= 0.09 (B) (INPUT = 1.00)

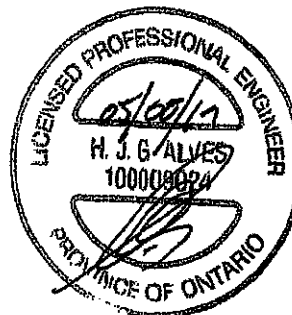


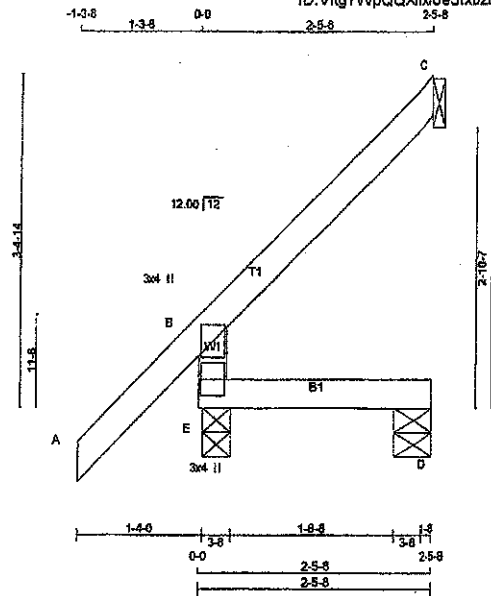
EXHIBIT 1A 1910951  
NATURAL  
CL. LATER ONLY

|                           |                   |               |          |                           |             |          |
|---------------------------|-------------------|---------------|----------|---------------------------|-------------|----------|
| JOB NAME<br>200142-400307 | TRUSS NAME<br>J23 | QUANTITY<br>9 | PLY<br>1 | JOB DESC.<br>Brentwood 3A | TRUSS DESC. | DRWG NO. |
|---------------------------|-------------------|---------------|----------|---------------------------|-------------|----------|

Tamarack Roof Truss, Burlington

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ID: Vrg7WpQQXIM6eSfxbzMzP9i-FZV2Gqa8YK5xKSSREIGqomJbHGEU6saeYVE7gzlYmx



Scale = 1/2\"/>

| LUMBER | N. L. G. A. RULES | CHORDS | SIZE | 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

| BEARINGS | FACTORED       | MAXIMUM FACTORED | INPUT | RECORD |
|----------|----------------|------------------|-------|--------|
|          | GROSS REACTION | GROSS REACTION   | BRG   | BRG    |
| JT       | VERT           | HORZ             | DOWN  | HORZ   |
| E        | 353            | 0                | 353   | 0      |
| C        | 94             | 0                | 94    | 0      |
| D        | 40             | 0                | 52    | 0      |

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

| UNFACTORED REACTIONS | 1ST LCASE | MAX./MIN. COMPONENT REACTIONS |
|----------------------|-----------|-------------------------------|
| JT                   | COMBINED  | SNOW                          |
| E                    | 255       | 170/0                         |
| C                    | 65        | 54/0                          |
| D                    | 37        | 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 = 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: (5)

| CHORDS | MAX. FACTORED | FACTORED       | WEBS         | MAX. FACTORED |
|--------|---------------|----------------|--------------|---------------|
| MEMB.  | FORCE         | VERT. LOAD LC1 | MEMB.        | FORCE         |
|        | (LBS)         | (PLF)          |              | (LBS)         |
| FR-TO  |               | FROM TO        | LENGTH FR-TO |               |
| E-B    | -299/0        | 0.0            | 0.0          | 0.03 (3)      |
| A-B    | 0/50          | -102.1         | -102.1       | 0.14 (1)      |
| B-C    | -22/0         | -102.1         | -102.1       | 0.10 (1)      |
| E-D    | 0/0           | -38.5          | -38.5        | 0.04 (3)      |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

# DESIGN CRITERIA

**SPECIFIED LOADS:**  
TOP CH. LL = 29.1 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 BCBC 2018, OBC 2012  
- CSA 089-09, CSA 085-14  
- 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 29.1 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:1), BC=0.04/1.00 (D-E:3),  
WB=0.00/1.00 (n/a:0), SS=0.09/1.00 (B-C: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

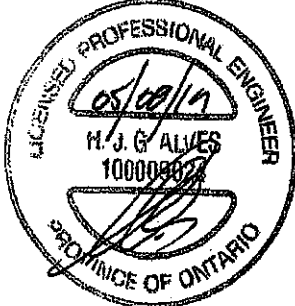
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

**NAIL VALUES**  
PLATE GRIP(DRY) SHEAR SECTION  
(PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 815 354 1667 788 1987 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 6.0 Deg.

JSI GRIP= 0.15 (B) (INPUT = 0.80)  
JSI METAL= 0.10 (B) (INPUT = 1.00)



EXPIRATION DATE 05/08/2023  
ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED  
DATE 05/08/2023 BY 100008822

Overview:

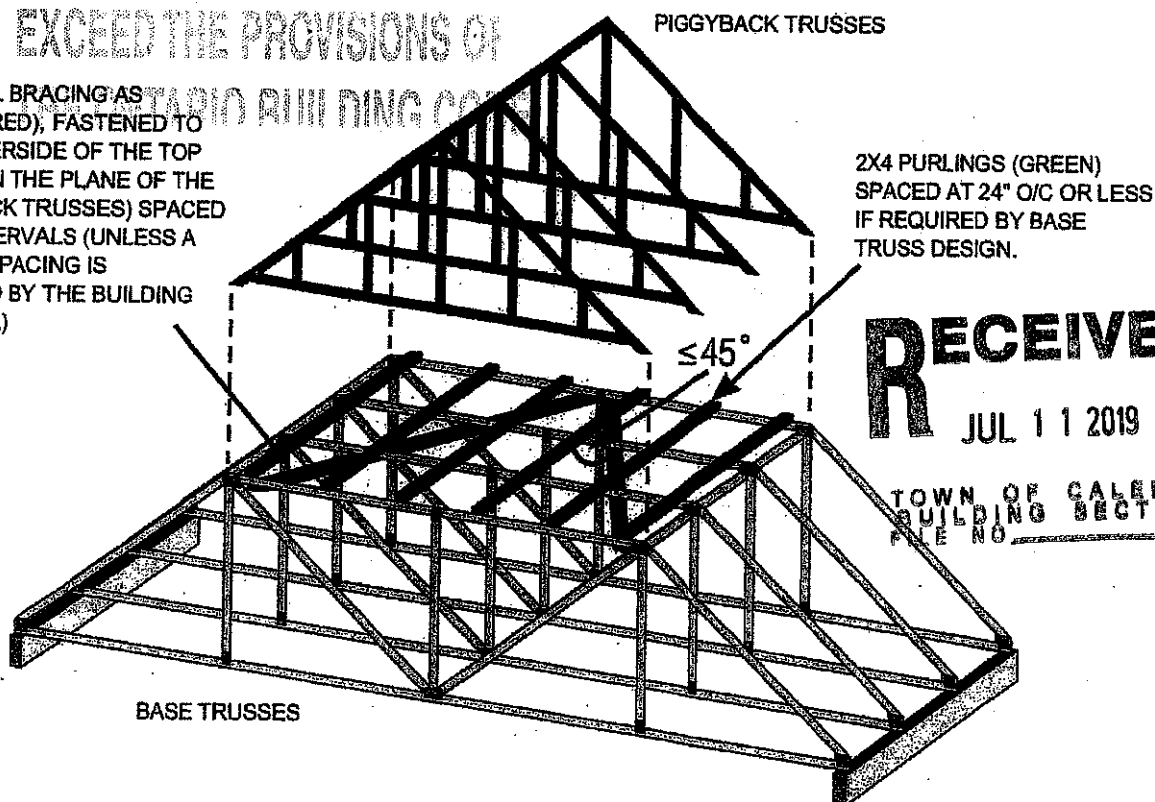
Where piggybacks are connected overtop of base trusses, 2x4 purlins must be first added to the flat portion of the base truss at a spacing no more than 24" o/c. These purlins not only provide support for the piggyback trusses above, but are required to laterally support the top chord of the base truss which will not have the sheathing directly connected to the flat portion of the base truss. This ensures the top chord, most often in compression, will not buckle laterally.

Further, the purlins in the plane of the flat portion require diagonal bracing to prevent lateral displacement of the purlins themselves where under certain conditions, the trusses may in fact all buckle in the same direction if this additional bracing is not added in the plane of the purlins.

Detail:

THIS STRUCTURE MUST BE  
CONSTRUCTED TO MEET OR  
EXCEED THE PROVISIONS OF

DIAGONAL BRACING AS  
SHOWN (RED), FASTENED TO  
THE UNDERSIDE OF THE TOP  
CHORD (IN THE PLANE OF THE  
PIGGYBACK TRUSSES) SPACED  
AT 10' INTERVALS (UNLESS A  
CLOSER SPACING IS  
REQUIRED BY THE BUILDING  
DESIGNER)



NOTE: THE SLOPED PORTION OF THE TOP  
CHORD OF THE BASE TRUSS AND PIGGYBACK  
TRUSS IN THIS SKETCH IS ASSUMED TO BE  
SHEATHED IN ACCORDANCE WITH THE OBC.

Disclaimer:

OWTFA Tech Notes are intended to provide guidance to the design community both within the membership as well as to third party designers who might benefit from the information. The details have been developed by the OWTFA technical committee and although there may be professional engineers involved in development, the information contained in the tech-note are not intended to be used without having a professional engineer review the information for a specific application. The OWTFA takes no responsibility with respect to the information provided but has developed this tech-note to offer guidance where it is not currently readily available.

# 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

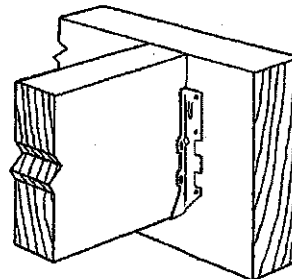
**Finish:** G90 galvanized

## Design:

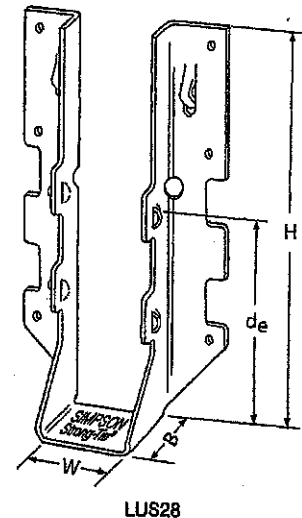
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

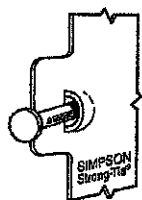


Typical LUS  
Installation

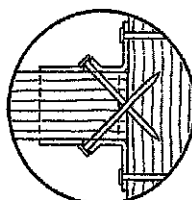


| Model No. | Ga. | Dimensions (in.) |       |       |                             | Fasteners |         | Factored Resistance (lb.)        |                                  |                                  |                                  |
|-----------|-----|------------------|-------|-------|-----------------------------|-----------|---------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|           |     | W                | H     | B     | d <sub>e</sub> <sup>1</sup> | Face      | Joist   | D.Fir-L                          |                                  | S-P-F                            |                                  |
|           |     |                  |       |       |                             |           |         | Uplift<br>(K <sub>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) |
| 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 1/8 | 1 3/4 | 3 3/8                       | (4) 10d   | (4) 10d | 1420                             | 2170                             | 1290                             | 1630                             |
| LUS26-2   | 18  | 3 1/8            | 4 1/8 | 2     | 4                           | (4) 16d   | (4) 16d | 1720                             | 2595                             | 1545                             | 1920                             |
| LUS26-3   | 18  | 4 1/8            | 4 1/8 | 2     | 3 1/4                       | (4) 16d   | (4) 16d | 1720                             | 2595                             | 1545                             | 2340                             |
| LUS28     | 18  | 1 1/8            | 6 1/8 | 1 3/4 | 3 3/8                       | (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 1/8            | 6 1/8 | 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 1/8            | 8 1/8 | 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.

**RECEIVED**  
JUL 11 2019

TOWN OF CALADON  
BUILDING SECTION  
FILE NO.



DESIGN

Printed on Recycled Paper from 100% post-consumer waste. Printed in the USA. © 2017 Simpson Strong-Tie Company. All rights reserved. LUS28-3, LUS210-3, LUS210-2, LUS210, LUS28-2, LUS26-3, LUS26-2, LUS26, LUS24-2, LUS24, LUS28, LUS26, LUS24.

(800) 999-5099  
strongtie.com

# 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:**

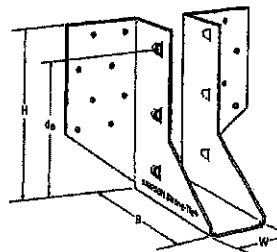
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

**Installation:**

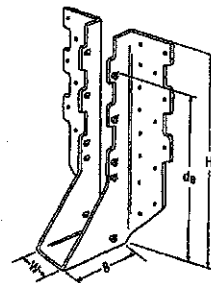
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

**Options:**

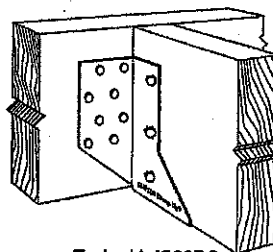
- See current catalogue for options



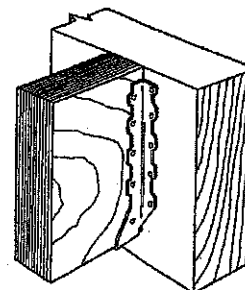
LJS26DS



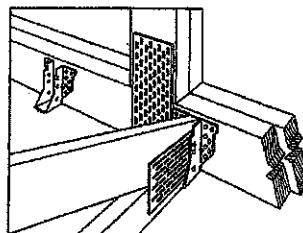
HUS210  
(HUS26, HUS28, similar)



Typical LJS26DS  
Installation



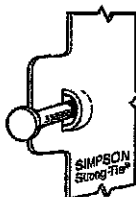
Typical HUS  
Installation



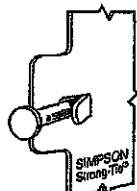
Typical HUS Installation  
(Truss Designer to provide fastener quantity for connecting multiple members together)

| Model No.  | Ga. | Dimensions (in.) |       |       |                             |          | Fasteners |  | Factored Resistance (lb.)        |                                  |                                  |                                  |
|------------|-----|------------------|-------|-------|-----------------------------|----------|-----------|--|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|            |     | W                | H     | B     | d <sub>e</sub> <sup>1</sup> | Face     | Joist     |  | D.Fir-L                          |                                  | S-P-F                            |                                  |
|            |     |                  |       |       |                             |          |           |  | Uplift<br>(K <sub>u</sub> =1.15) | Normal<br>(K <sub>u</sub> =1.00) | Uplift<br>(K <sub>u</sub> =1.15) | Normal<br>(K <sub>u</sub> =1.00) |
| LJS26DS    | 18  | 1 1/8            | 5     | 3 1/2 | 4 3/4                       | (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 3/4                       | (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                             |

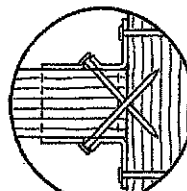
1. d<sub>e</sub> is the distance from the seat of the hanger to the highest joist nail.



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



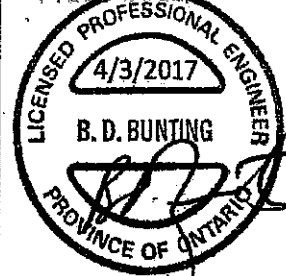
Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.

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BUILDING SECTION



DESIGN

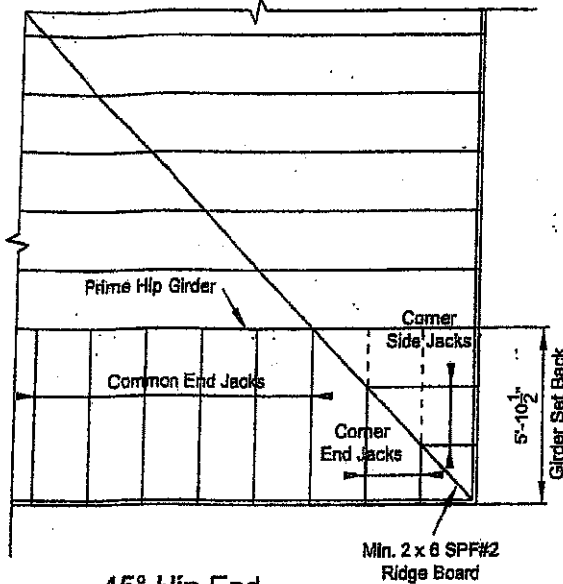
THE SIMPSON STRONG-TIE COMPANY  
1000 W. WASHINGTON ST.  
CHICAGO, IL 60607-4500  
USA

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(800) 999-5099  
strongtie.com



**45° Hip End**

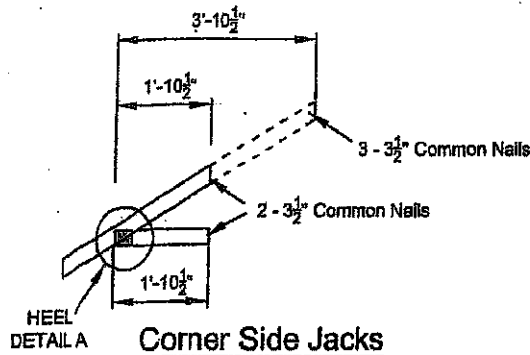
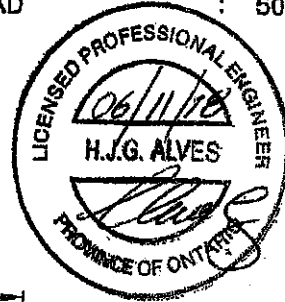
### LUMBER SPECIFICATION

TOP CHORD : 2 x 4 SPF#2  
 BOTTOM CHORD : 2 x 4 SPF#2  
 WEBS : 2 x 3 SPF#2  
 UNLESS OTHERWISE SHOWN

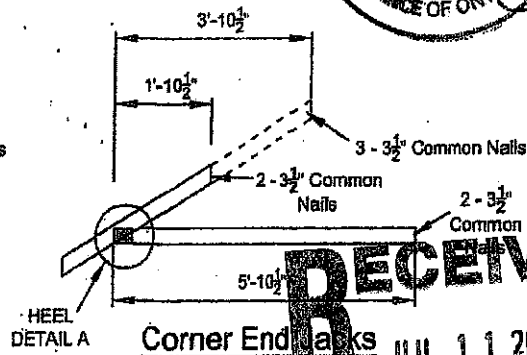
### DESIGN LOAD

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.

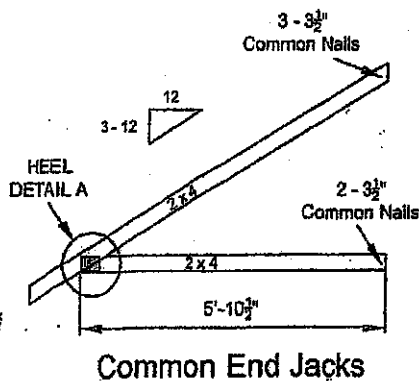
**TOTAL LOAD : 50.5 P.S.F**



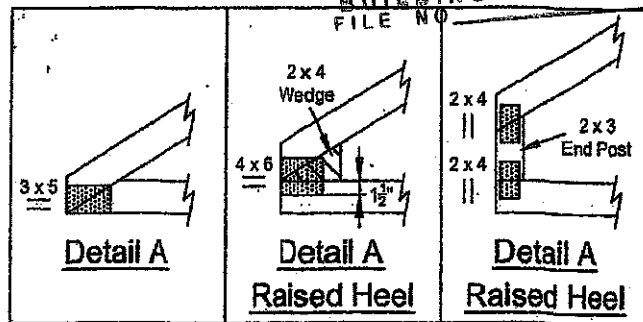
**Corner Side Jacks**



**Corner End Jacks**

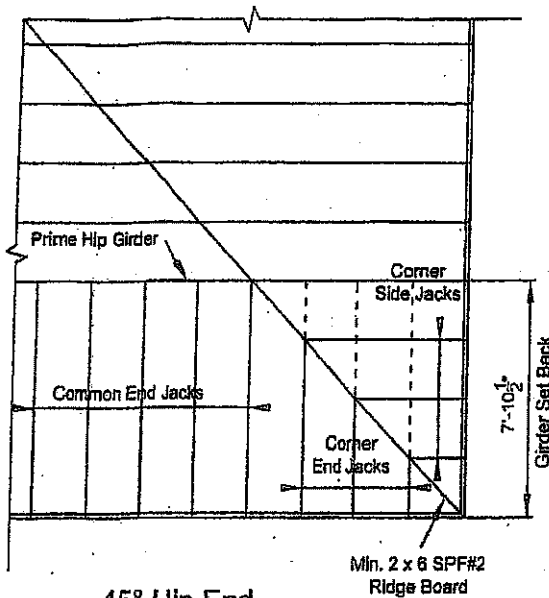


**Common End Jacks**



NOTE: DESIGN CONFORMS TO PART 9, O.B.C. 2012 (L.S.D. DESIGN)

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**45° Hip End**

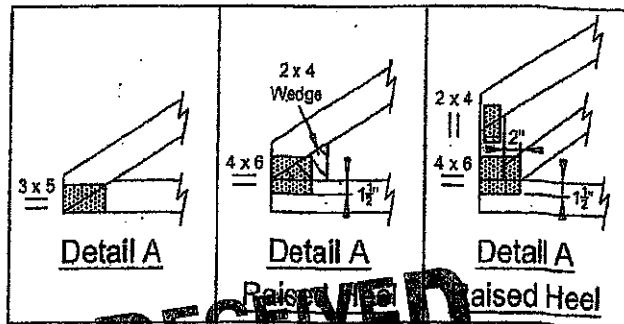
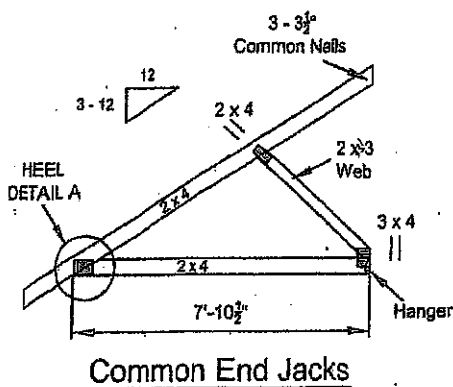
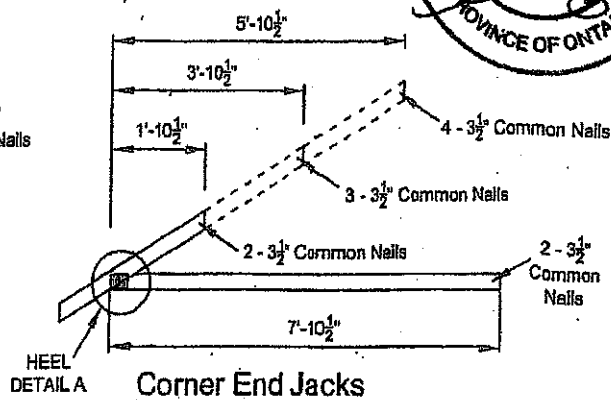
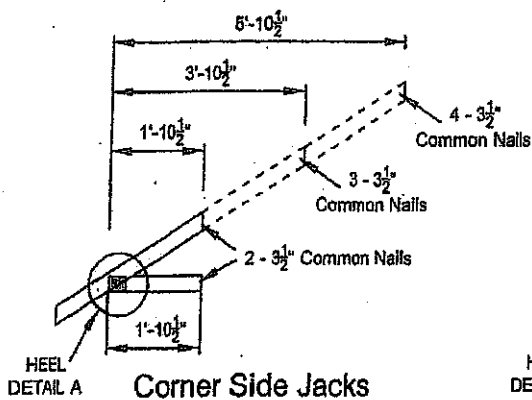
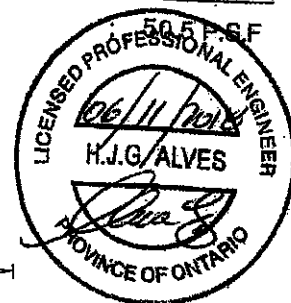
### LUMBER SPECIFICATION

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



NOTE: DESIGN CONFORMS TO PART 9, O.B.C. 2012 (L.S.D. DESIGN)

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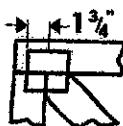
TOWN OF CALEDON

BUILDING SECTION

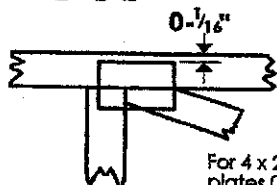
FILE NO.

## 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

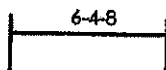


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

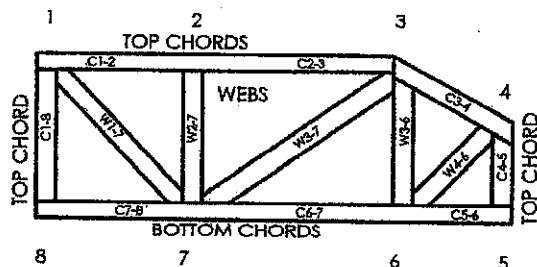
### Industry Standards:

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



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**  
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MiTek Engineering Reference Sheet: MJL-7473C rev. 10-08

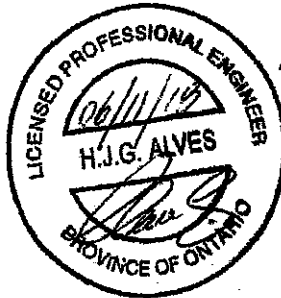
## General Safety Notes

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
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces that may require bracing, or alternative T, I, or Eliminator bracing should be considered.
3. Never exceed the design loading shown and never slack 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.

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BUILDING SECTION  
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## 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.

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

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T-1800213

Feb 09, 2018