

ENGINEERING NOTE PAGE (ENP-1)  
**PLEASE READ PRIOR TO INSTALLATION**

Lot 38R

NE0818-100  
GREENPARK-MINNISALE  
HOMES-HEMLOCK 4 EL 1

### **RESPONSIBILITIES**

THIS DESIGN IS FOR AN INDIVIDUAL BUILDING COMPONENT AND HAS BEEN BASED ON INFORMATION PROVIDED BY THE DESIGN OFFICE OF KOTT LUMBER. THE UNDERSIGNED ENGINEER DISCLAIMS ANY RESPONSIBILITY FOR DAMAGES AS A RESULT OF FAULTY OR INCORRECT INFORMATION, SPECIFICATION AND/OR DESIGNS FURNISHED TO THE ENGINEER. THE UNDERSIGNED ENGINEER IS ONLY RESPONSIBLE FOR THE STRUCTURAL INTEGRITY OF THIS BUILDING COMPONENT FOR THE CONDITIONS AND LOADS SHOWN ON THIS DRAWING. THE STRUCTURAL INTEGRITY OF THE BUILDING AND THE VERIFICATION OF THE DIMENSIONS AND THE DESIGN LOADS USED ARE THE RESPONSIBILITY OF THE BUILDING DESIGNER.

TRUSSES ARE DESIGNED IN CONFORMANCE WITH THE RELEVANT SECTIONS OF THE NATIONAL BUILDING CODE OF CANADA OR THE CANADIAN CODE FOR FARM BUILDINGS, WHICHEVER APPLIES TO THE BUILDING TYPE INDICATED ON THE DRAWING

IT IS THE RESPONSIBILITY OF KOTT LUMBER TO ENSURE THAT TRUSSES ARE MANUFACTURED IN CONFORMANCE WITH THESE DESIGNS AND WITH THE SPECIFICATIONS OUTLINED BELOW. THE UNDERSIGNED ENGINEER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

### **USE AND OCCUPANCY**

- The building is of the type indicated on the drawing

### **LOADING**

- The truss loading intensity and distribution as well as load transfer mechanism is that indicated on the drawing
- No buildings, trees, parapets or other projections higher than the roof for which the trusses are used are located within a distance less than ten (10) times the difference in height, or five metres (16 ft) whichever is greater, unless the drawing indicates that the snow drifting has been taken into account

### **HANDLING, INSTALLATION AND BRACING**

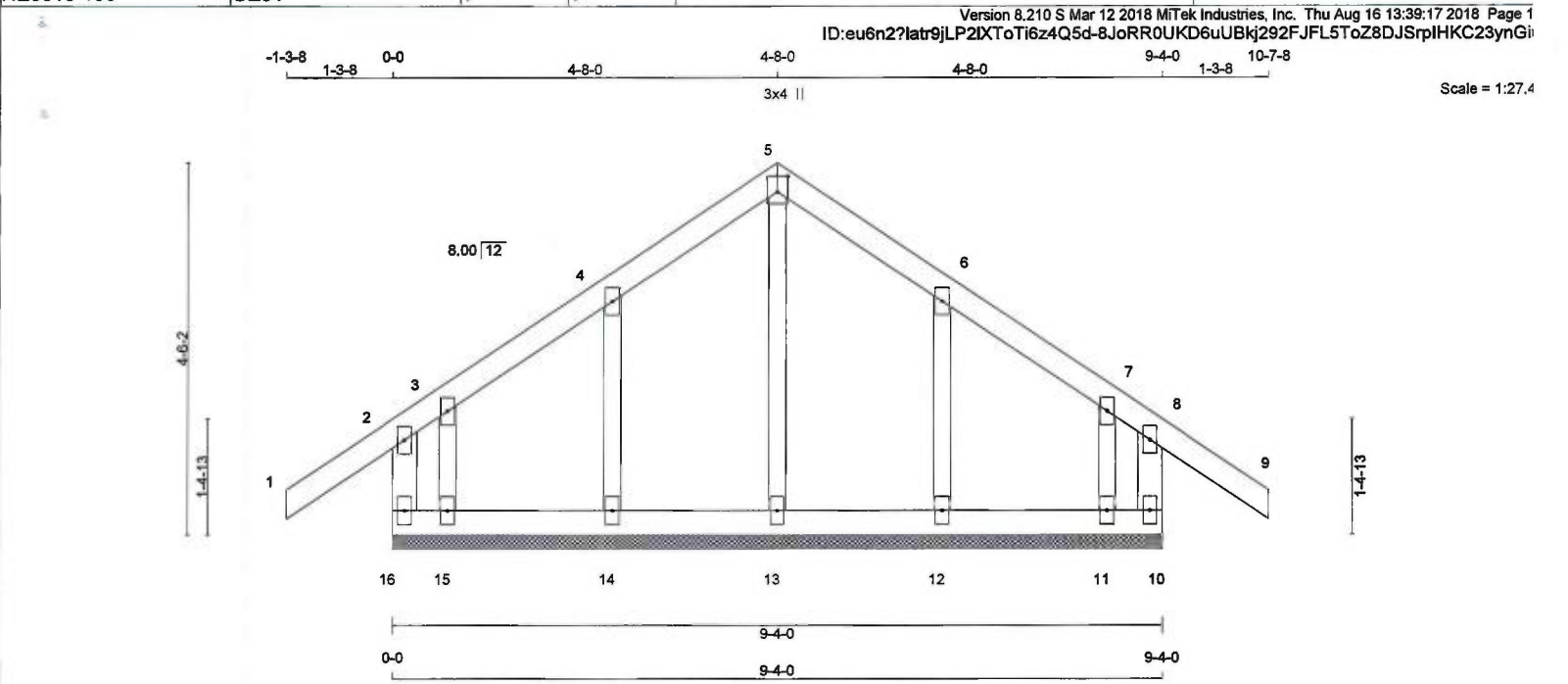
- The trusses must be handled and installed by a qualified professional as per the supplied document titled *Information for Truss Installers* and the BCSI-B1 and BCSI-B3 Summary Sheets
- The compression chords are laterally braced by continuous rigid diaphragm sheathing or as specified on the drawing
- Temporary and permanent bracing must be installed as indicated on the truss drawing and according to the BCSI-B1 and BCSI-B3 Summary Sheets. Bracing for the lateral stability of the truss is to be provided by the building designer
- **It is recommended that a Professional Engineer's advice be obtained for the bracing of trusses spanning more than 12.37m (40'-7")**

### **SUPPORTS**

- The trusses are to be supported at the bearing points indicated and anchored to the supports where considered necessary by the designer of the overall structure
- Bearing sizes shown are the minimum required to prevent crushing of the truss members and do not necessarily take into account stability of the overall building structure
- Elevation of bearings must be carefully checked and shimmed to alignment for solid bearings
- Adequate wood truss bearing is the responsibility of the building designer.

### **DIMENSIONS**

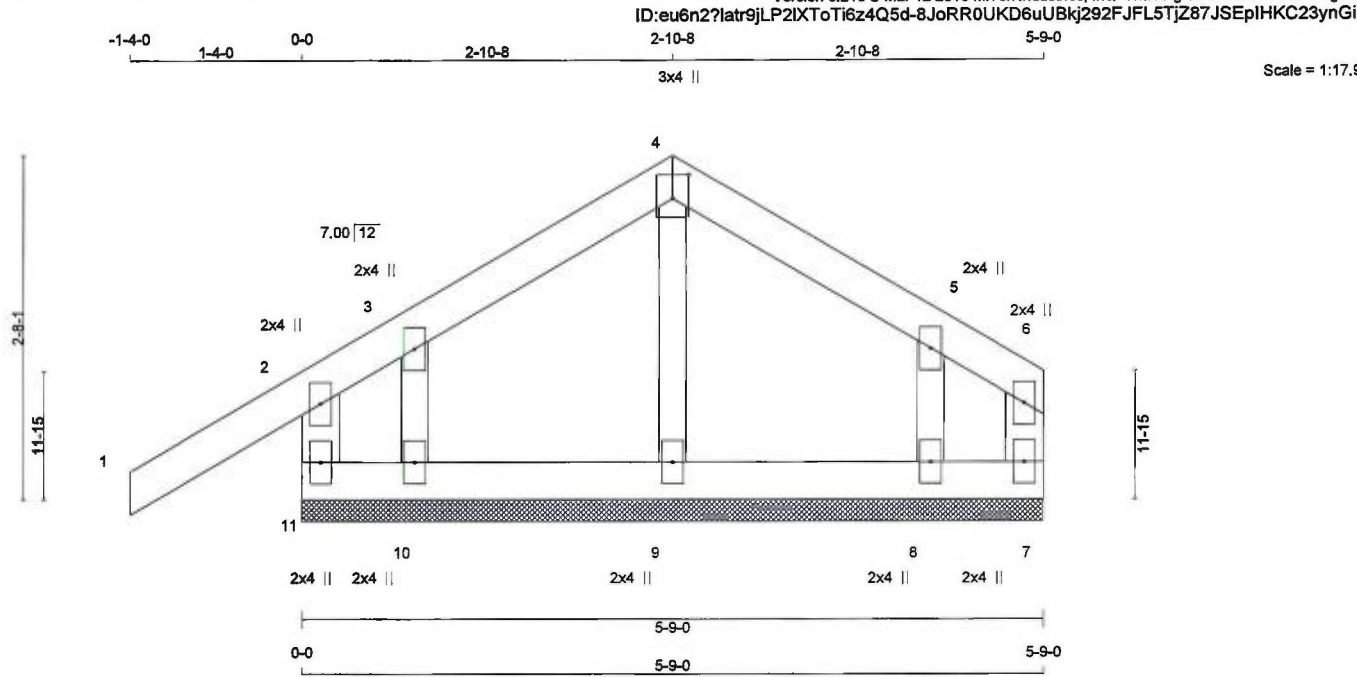
- Geometry of the truss and dimensions indicated on the drawing are identical to those of the installed truss.



|                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>LUMBER</b><br>N. L. G. A. RULES<br>CHORDS SIZE LUMBER<br>16 - 2 2x4 DRY No.2<br>1 - 5 2x4 DRY No.2<br>5 - 9 2x4 DRY No.2<br>10 - 8 2x4 DRY No.2<br>16 - 10 2x4 DRY No.2<br><br>ALL WEBS 2x3 DRY No.2<br>ALL GABLE WEBS 2x3 DRY No.2<br>DRY: SEASONED LUMBER.<br><br>GABLE STUDS SPACED AT 2'-0" OC. |  | <b>DESCR.</b><br>SPF<br>SPF<br>SPF<br>SPF<br>SPF<br><br>SPF<br>SPF<br><br>SPF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | <b>DESIGN CRITERIA</b><br><br>SPECIFIED LOADS:<br>TOP CH. LL = 23.3 PSF<br>DL = 3.0 PSF<br>BOT CH. LL = 0.0 PSF<br>DL = 7.0 PSF<br>TOTAL LOAD = 33.3 PSF<br><br>SPACING = 24.0 IN./C/C<br><br>THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010<br><br>THIS DESIGN COMPLIES WITH:<br>- PART 9 OF OBC 2012, BCBC 2012, ABC 2014<br>- CSA 086-09<br>- TPIC 2011<br><br>DESIGN ASSUMPTIONS<br>- OVERHANG NOT TO BE ALTERED OR CUT OFF.<br><br>(55% OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD<br><br>CSI: TC=0.10/1.00 (8-9:1), BC=0.01/1.00 (13-14:4), WB=0.06/1.00 (5-13:1), SSI=0.07/1.00 (8-9:1)<br><br>DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10<br><br>COMPANION LIVE LOAD FACTOR = 0.50<br><br>TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .<br><br>NAIL VALUES<br>PLATE GRIP(DRY) SHEAR SECTION<br>(PSI) (PLI) (PLI)<br>MAX MIN MAX MIN MAX MIN<br>MT20 618 354 1667 822 2284 1656<br><br>PLATE PLACEMENT TOL. = 0.250 inches<br><br>PLATE ROTATION TOL. = 5.0 Deg.<br><br>JSI GRIP= 0.13 (5) (INPUT = 0.90 )<br>JSI METAL= 0.06 (5) (INPUT = 1.00 ) |  |
| <b>PLATES (table is in inches)</b><br>JT TYPE PLATES W LEN Y X<br>2 TMV+p MT20 2.0 4.0<br>3 4, 6, 7<br>3 TMW+w MT20 2.0 4.0<br>5 TTW+p MT20 3.0 4.0 2.25 1.50<br>8 TMV+p MT20 2.0 4.0<br>10 BMV1+p MT20 2.0 4.0<br>11, 12, 13, 14, 15<br>11 BMW1+w MT20 2.0 4.0<br>16 BMV1+p MT20 2.0 4.0              |  | <b>DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER</b><br><b>BEARINGS</b><br><br>THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.<br><br>THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.<br><br>BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)<br><br><b>BRACING</b><br>TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.<br>MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.<br><br>ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED. |  | <b>LOADING</b><br>TOTAL LOAD CASES: (4)<br><br>CHORDS<br>MEMB. MAX. FACTORED FORCE (LBS) VERT. LOAD (PLF) MAX. FACTORED CS1 (LC) UNBRAC LENGTH<br>FR-TO<br>16-2 -176 / 0 0.0 0.0 0.03 (1) 7.81<br>1-2 0 / 29 -77.4 -77.4 0.10 (1) 10.00<br>2-3 -11 / 0 -77.4 -77.4 0.07 (1) 6.25<br>3-4 0 / 27 -77.4 -77.4 0.04 (1) 10.00<br>4-5 0 / 28 -77.4 -77.4 0.04 (1) 10.00<br>5-6 0 / 28 -77.4 -77.4 0.04 (1) 10.00<br>6-7 0 / 27 -77.4 -77.4 0.04 (1) 10.00<br>7-8 -11 / 0 -77.4 -77.4 0.07 (1) 6.25<br>8-9 0 / 29 -77.4 -77.4 0.10 (1) 10.00<br>10-8 -176 / 0 0.0 0.0 0.03 (1) 7.81<br><br>16-15 -18 / 0 -17.5 -17.5 0.01 (4) 6.25<br>15-14 -20 / 0 -17.5 -17.5 0.01 (4) 6.25<br>14-13 -24 / 0 -17.5 -17.5 0.01 (4) 6.25<br>13-12 -24 / 0 -17.5 -17.5 0.01 (4) 6.25<br>12-11 -20 / 0 -17.5 -17.5 0.01 (4) 6.25<br>11-10 -18 / 0 -17.5 -17.5 0.01 (4) 6.25<br><br>WEBS<br>MEMB. MAX. FACTORED FORCE (LBS) MAX. FACTORED CS1 (LC)<br>FR-TO<br>13-5 -189 / 0 0.06 (1)<br>14-4 -164 / 0 0.03 (1)<br>15-3 -33 / 0 0.00 (1)<br>12-6 -164 / 0 0.03 (1)<br>11-7 -33 / 0 0.00 (1)                                                                                                                                                                     |  |

READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





| LUMBER                          |      |     |      |  | LUMBER |     | DESCR. |     |
|---------------------------------|------|-----|------|--|--------|-----|--------|-----|
| N. L. G. A. RULES               |      |     |      |  |        |     |        |     |
| CHORDS                          | SIZE |     |      |  |        |     |        |     |
| 11 - 2                          | 2x4  | DRY | No.2 |  |        |     | SPF    |     |
| 1 - 4                           | 2x4  | DRY | No.2 |  |        |     | SPF    |     |
| 4 - 6                           | 2x4  | DRY | No.2 |  |        |     | SPF    |     |
| 7 - 6                           | 2x4  | DRY | No.2 |  |        |     | SPF    |     |
| 11 - 7                          | 2x4  | DRY | No.2 |  |        |     | SPF    |     |
| ALL WEBS                        |      |     |      |  | 2x3    | DRY | No.2   | SPF |
| ALL GABLE WEBS                  |      |     |      |  | 2x3    | DRY | No.2   | SPF |
| DRY: SEASONED LUMBER.           |      |     |      |  |        |     |        |     |
| GABLE STUDS SPACED AT 2'-0" OC. |      |     |      |  |        |     |        |     |

| PLATES (table is in inches) |        |        |     |     |           |
|-----------------------------|--------|--------|-----|-----|-----------|
| JT                          | TYPE   | PLATES | W   | LEN | Y X       |
| 2                           | TMV+p  | MT20   | 2.0 | 4.0 |           |
| 3                           | TMW+w  | MT20   | 2.0 | 4.0 |           |
| 4                           | TTW+p  | MT20   | 3.0 | 4.0 | 2.25 1.50 |
| 5                           | TMW+w  | MT20   | 2.0 | 4.0 |           |
| 6                           | TMV+p  | MT20   | 2.0 | 4.0 |           |
| 7                           | BMV1+p | MT20   | 2.0 | 4.0 |           |
| 8, 9, 10                    |        |        |     |     |           |
| 8                           | BMW1+w | MT20   | 2.0 | 4.0 |           |
| 11                          | BMV1+p | MT20   | 2.0 | 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.

PROVIDE ANCHORAGE AT BEARING JOINT 7 FOR 150 LBS. FACTORED UPLIFT 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 = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

| CHORDS |                           |                  |                | WEBS  |                           |               |               |
|--------|---------------------------|------------------|----------------|-------|---------------------------|---------------|---------------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | VERT. LOAD (PLF) | MAX. LC1 (LC)  | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. LC1 (LC) | UNBRAC LENGTH |
| FR-TO  |                           |                  |                | FR-TO |                           |               |               |
| 11-2   | -182 / 0                  | 0.0              | 0.0 0.03 (1)   | 7.81  | 9-4                       | -190 / 0      | 0.03 (1)      |
| 1-2    | 0 / 27                    | -77.4            | -77.4 0.11 (1) | 10.00 | 10-3                      | -52 / 0       | 0.01 (1)      |
| 2-3    | -11 / 0                   | -77.4            | -77.4 0.07 (1) | 6.25  | 8-5                       | -130 / 0      | 0.02 (1)      |
| 3-4    | 0 / 21                    | -77.4            | -77.4 0.05 (1) | 10.00 |                           |               |               |
| 4-5    | 0 / 20                    | -77.4            | -77.4 0.04 (1) | 10.00 |                           |               |               |
| 5-6    | 0 / 22                    | -77.4            | -77.4 0.03 (1) | 10.00 |                           |               |               |
| 7-6    | 0 / 0                     | 0.0              | 0.0 0.00 (1)   | 10.00 |                           |               |               |
| 11-10  | -11 / 0                   | -17.5            | -17.5 0.02 (1) | 6.25  |                           |               |               |
| 10-9   | -15 / 0                   | -17.5            | -17.5 0.02 (4) | 6.25  |                           |               |               |
| 9-8    | -15 / 0                   | -17.5            | -17.5 0.02 (4) | 6.25  |                           |               |               |
| 8-7    | -7 / 0                    | -17.5            | -17.5 0.01 (4) | 10.00 |                           |               |               |

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 23.3 PSF  
DL = 3.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 33.3 PSF

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

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

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

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

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.11/1.00 (1-2:1) , BC=0.02/1.00 (10-11:1) , WB=0.03/1.00 (4-9:1) , SSI=0.07/1.00 (1-2:1)

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 (PSI) | SECTION (PLI) | (PLI)     |
|             | MAX MIN               | MAX MIN       | MAX MIN   |
| MT20        | 618 354               | 1667 822      | 2284 1656 |

PLATE PLACEMENT TOL. = 0.250 inches

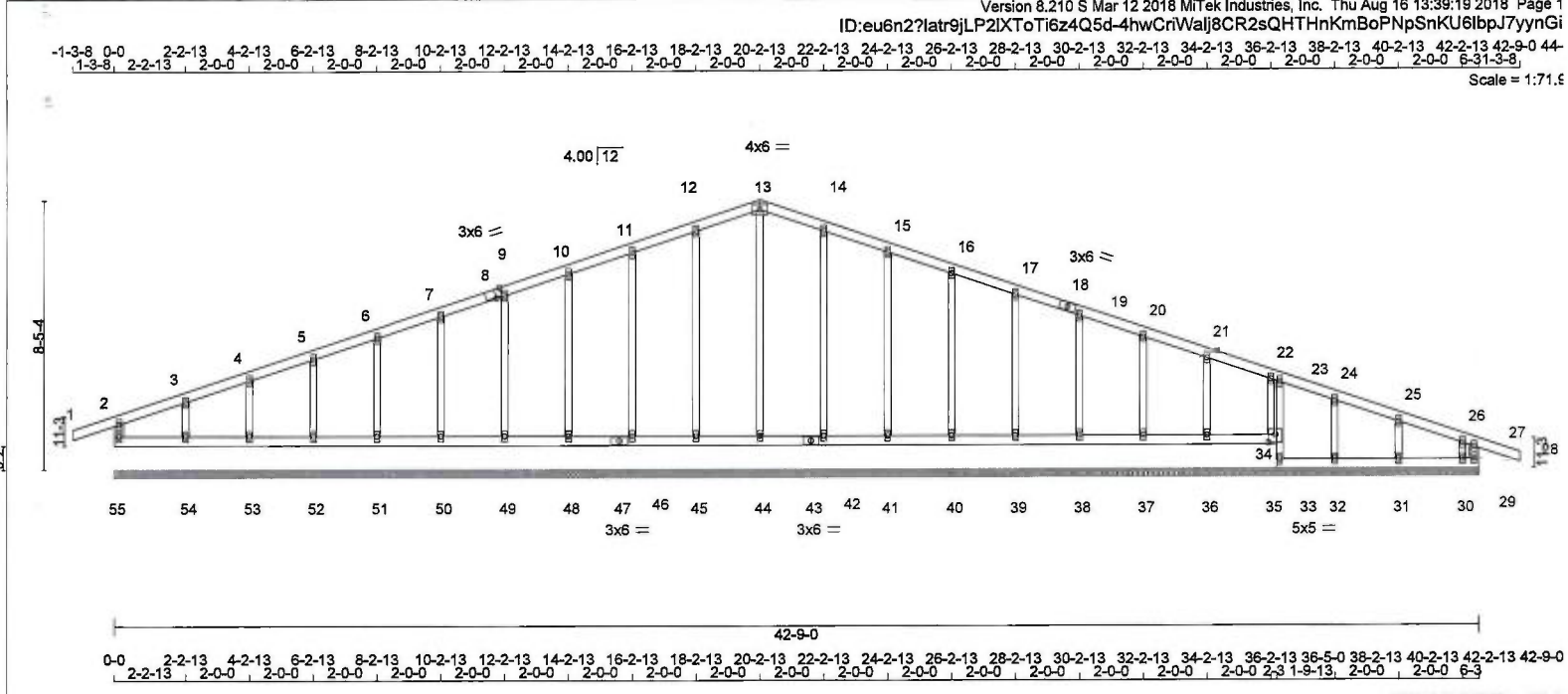
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.12 (4) (INPUT = 0.90 )  
JSI METAL= 0.07 (4) (INPUT = 1.00 )



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| LUMBER                          |      |        |        |     |
|---------------------------------|------|--------|--------|-----|
| N. L. G. A. RULES               |      |        |        |     |
| CHORDS                          | SIZE | LUMBER | DESCR. |     |
| 1 - 8                           | 2x4  | DRY    | No.2   | SPF |
| 8 - 13                          | 2x4  | DRY    | No.2   | SPF |
| 13 - 18                         | 2x4  | DRY    | No.2   | SPF |
| 18 - 28                         | 2x4  | DRY    | No.2   | SPF |
| 55 - 2                          | 2x4  | DRY    | No.2   | SPF |
| 29 - 27                         | 2x4  | DRY    | No.2   | SPF |
| 55 - 47                         | 2x4  | DRY    | No.2   | SPF |
| 47 - 43                         | 2x4  | DRY    | No.2   | SPF |
| 43 - 34                         | 2x4  | DRY    | No.2   | SPF |
| 33 - 23                         | 2x3  | DRY    | No.2   | SPF |
| 33 - 29                         | 2x4  | DRY    | No.2   | SPF |
| ALL WEBS 2x3 DRY No.2 SPF       |      |        |        |     |
| ALL GABLE WEBS 2x3 DRY No.2 SPF |      |        |        |     |
| DRY: SEASONED LUMBER.           |      |        |        |     |
| GABLE STUDS SPACED AT 2'-0" OC. |      |        |        |     |

| PLATES (table is in inches)                                                    |        |     |     |           |
|--------------------------------------------------------------------------------|--------|-----|-----|-----------|
| JT TYPE                                                                        | PLATES | W   | LEN | Y X       |
| 2, 23, 27                                                                      |        |     |     |           |
| 2 TMV+p                                                                        | MT20   | 2.0 | 4.0 |           |
| 3, 4, 5, 6, 7, 9, 10, 11, 12, 14, 15, 16, 17, 19, 20, 21, 22, 24, 25, 28       |        |     |     |           |
| 3 TMW+w                                                                        | MT20   | 2.0 | 4.0 |           |
| 8 TS-t                                                                         | MT20   | 3.0 | 6.0 | Edge 2.25 |
| 13 TTW-p                                                                       | MT20   | 4.0 | 6.0 |           |
| 18 TS-t                                                                        | MT20   | 3.0 | 6.0 |           |
| 29, 33, 55                                                                     |        |     |     |           |
| 29 BMV1+p                                                                      | MT20   | 2.0 | 4.0 |           |
| 30, 31, 32, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 48, 49, 50, 51, 52, 53, 54 |        |     |     |           |
| 30 BMW1+w                                                                      | MT20   | 2.0 | 4.0 |           |
| 34                                                                             |        |     |     |           |
| 34 BVMW1-t                                                                     | MT20   | 5.0 | 5.0 | 3.00 2.50 |
| 35                                                                             |        |     |     |           |
| 43 BS-t                                                                        | MT20   | 3.0 | 6.0 |           |
| 47 BS-t                                                                        | MT20   | 3.0 | 6.0 |           |
| Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.              |        |     |     |           |



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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.  
BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S): 55, 44, 45, 46, 48, 49, 50, 51, 52, 53, 54, 42, 41, 40, 39, 38, 37, 36, 35  
PROVIDE ANCHORAGE AT BEARING JOINT 30 FOR 150 LBS. FACTORED UPLIFT 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 = 7.81 FT OR RIGID CEILING DIRECTLY APPLIED.  
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING  
TOTAL LOAD CASES: (4)

| CHORDS |                           |                      |                           | WEBS  |                           |                           |                           |
|--------|---------------------------|----------------------|---------------------------|-------|---------------------------|---------------------------|---------------------------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | VERT. LOAD LC1 (PLF) | MAX. UNBRACED LENGTH (FT) | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. UNBRACED LENGTH (FT) | MAX. FACTORED FORCE (LBS) |
| FR-TO  |                           | FROM TO              |                           | FR-TO |                           |                           |                           |
| 1-2    | 0 / 16                    | -77.4 -77.4 0.10 (1) | 10.00                     | 44-13 | -161 / 0                  |                           | 0.17 (1)                  |
| 2-3    | -17 / 0                   | -77.4 -77.4 0.04 (1) | 6.25                      | 45-12 | -157 / 0                  |                           | 0.13 (1)                  |
| 3-4    | -11 / 0                   | -77.4 -77.4 0.04 (1) | 6.25                      | 46-11 | -154 / 0                  |                           | 0.10 (1)                  |
| 4-5    | -5 / 0                    | -77.4 -77.4 0.04 (1) | 10.00                     | 48-10 | -154 / 0                  |                           | 0.08 (1)                  |
| 5-6    | -4 / 0                    | -77.4 -77.4 0.04 (1) | 10.00                     | 49-9  | -154 / 0                  |                           | 0.06 (1)                  |
| 6-7    | -2 / 0                    | -77.4 -77.4 0.04 (1) | 10.00                     | 50-7  | -154 / 0                  |                           | 0.04 (1)                  |
| 7-8    | -1 / 0                    | -77.4 -77.4 0.04 (1) | 10.00                     | 51-6  | -154 / 0                  |                           | 0.03 (1)                  |
| 8-9    | -1 / 0                    | -77.4 -77.4 0.04 (1) | 10.00                     | 52-5  | -154 / 0                  |                           | 0.03 (1)                  |
| 9-10   | -1 / 2                    | -77.4 -77.4 0.04 (1) | 10.00                     | 53-4  | -152 / 0                  |                           | 0.02 (1)                  |
| 10-11  | -1 / 3                    | -77.4 -77.4 0.04 (1) | 10.00                     | 54-3  | -159 / 0                  |                           | 0.02 (1)                  |
| 11-12  | 0 / 5                     | -77.4 -77.4 0.04 (1) | 10.00                     | 42-14 | -157 / 0                  |                           | 0.13 (1)                  |
| 12-13  | 0 / 6                     | -77.4 -77.4 0.04 (1) | 10.00                     | 41-15 | -154 / 0                  |                           | 0.10 (1)                  |
| 13-14  | 0 / 6                     | -77.4 -77.4 0.04 (1) | 10.00                     | 40-16 | -154 / 0                  |                           | 0.08 (1)                  |
| 14-15  | 0 / 5                     | -77.4 -77.4 0.04 (1) | 10.00                     | 39-17 | -154 / 0                  |                           | 0.06 (1)                  |
| 15-16  | -1 / 3                    | -77.4 -77.4 0.04 (1) | 10.00                     | 38-19 | -154 / 0                  |                           | 0.04 (1)                  |
| 16-17  | -1 / 2                    | -77.4 -77.4 0.04 (1) | 10.00                     | 37-20 | -154 / 0                  |                           | 0.03 (1)                  |
| 17-18  | -1 / 0                    | -77.4 -77.4 0.04 (1) | 10.00                     | 36-21 | -157 / 0                  |                           | 0.03 (1)                  |
| 18-19  | -1 / 0                    | -77.4 -77.4 0.04 (1) | 10.00                     | 35-22 | -95 / 0                   |                           | 0.01 (1)                  |
| 19-20  | -2 / 0                    | -77.4 -77.4 0.04 (1) | 10.00                     | 32-24 | -142 / 0                  |                           | 0.02 (1)                  |
| 20-21  | -4 / 0                    | -77.4 -77.4 0.04 (1) | 10.00                     | 31-25 | -162 / 0                  |                           | 0.02 (1)                  |
| 21-22  | -6 / 0                    | -77.4 -77.4 0.04 (1) | 10.00                     | 30-26 | 0 / 2                     |                           | 0.00 (4)                  |
| 22-23  | -6 / 0                    | -77.4 -77.4 0.03 (1) | 10.00                     |       |                           |                           |                           |
| 23-24  | -9 / 0                    | -77.4 -77.4 0.03 (1) | 10.00                     |       |                           |                           |                           |
| 24-25  | -12 / 0                   | -77.4 -77.4 0.04 (1) | 6.25                      |       |                           |                           |                           |
| 25-26  | -15 / 0                   | -77.4 -77.4 0.04 (1) | 6.25                      |       |                           |                           |                           |
| 26-27  | -45 / 0                   | -77.4 -77.4 0.08 (1) | 6.25                      |       |                           |                           |                           |
| 27-28  | 0 / 16                    | -77.4 -77.4 0.10 (1) | 10.00                     |       |                           |                           |                           |
| 55-2   | -195 / 0                  | 0.0 0.0 0.01 (4)     | 7.81                      |       |                           |                           |                           |
| 29-27  | -217 / 0                  | 0.0 0.0 0.03 (1)     | 7.81                      |       |                           |                           |                           |
| 55-54  | 0 / 15                    | -17.5 -17.5 0.02 (4) | 10.00                     |       |                           |                           |                           |
| 54-53  | 0 / 10                    | -17.5 -17.5 0.02 (4) | 10.00                     |       |                           |                           |                           |
| 53-52  | 0 / 6                     | -17.5 -17.5 0.01 (4) | 10.00                     |       |                           |                           |                           |
| 52-51  | 0 / 4                     | -17.5 -17.5 0.01 (4) | 10.00                     |       |                           |                           |                           |
| 51-50  | 0 / 1                     | -17.5 -17.5 0.01 (4) | 10.00                     |       |                           |                           |                           |
| 50-49  | 0 / 1                     | -17.5 -17.5 0.01 (4) | 10.00                     |       |                           |                           |                           |
| 49-48  | -2 / 1                    | -17.5 -17.5 0.01 (4) | 10.00                     |       |                           |                           |                           |
| 48-47  | -3 / 0                    | -17.5 -17.5 0.01 (4) | 10.00                     |       |                           |                           |                           |
| 47-46  | -3 / 0                    | -17.5 -17.5 0.01 (4) | 10.00                     |       |                           |                           |                           |
| 46-45  | -4 / 0                    | -17.5 -17.5 0.01 (4) | 10.00                     |       |                           |                           |                           |
| 45-44  | -5 / 0                    | -17.5 -17.5 0.01 (4) | 10.00                     |       |                           |                           |                           |
| 44-43  | -5 / 0                    | -17.5 -17.5 0.01 (4) | 10.00                     |       |                           |                           |                           |
| 43-42  | -5 / 0                    | -17.5 -17.5 0.01 (4) | 10.00                     |       |                           |                           |                           |

DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 23.3 PSF  
DL = 3.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 33.3 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 OBC 2012, BCSC 2012, ABC 2014  
- CSA 086-09  
- TPIC 2011

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

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.10/1.00 (27-28:1), BC=0.03/1.00 (28-30:1), WB=0.17/1.00 (13-44:1), SSI=0.08/1.00 (26-27:1)

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 (PSI) | SECTION (PLI) | SECTION (PLI)      |
|                 |             | 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= 0.47 (33) (INPUT = 0.90 )  
JSI METAL= 0.05 (27) (INPUT = 1.00 )

CONTINUED ON PAGE 2



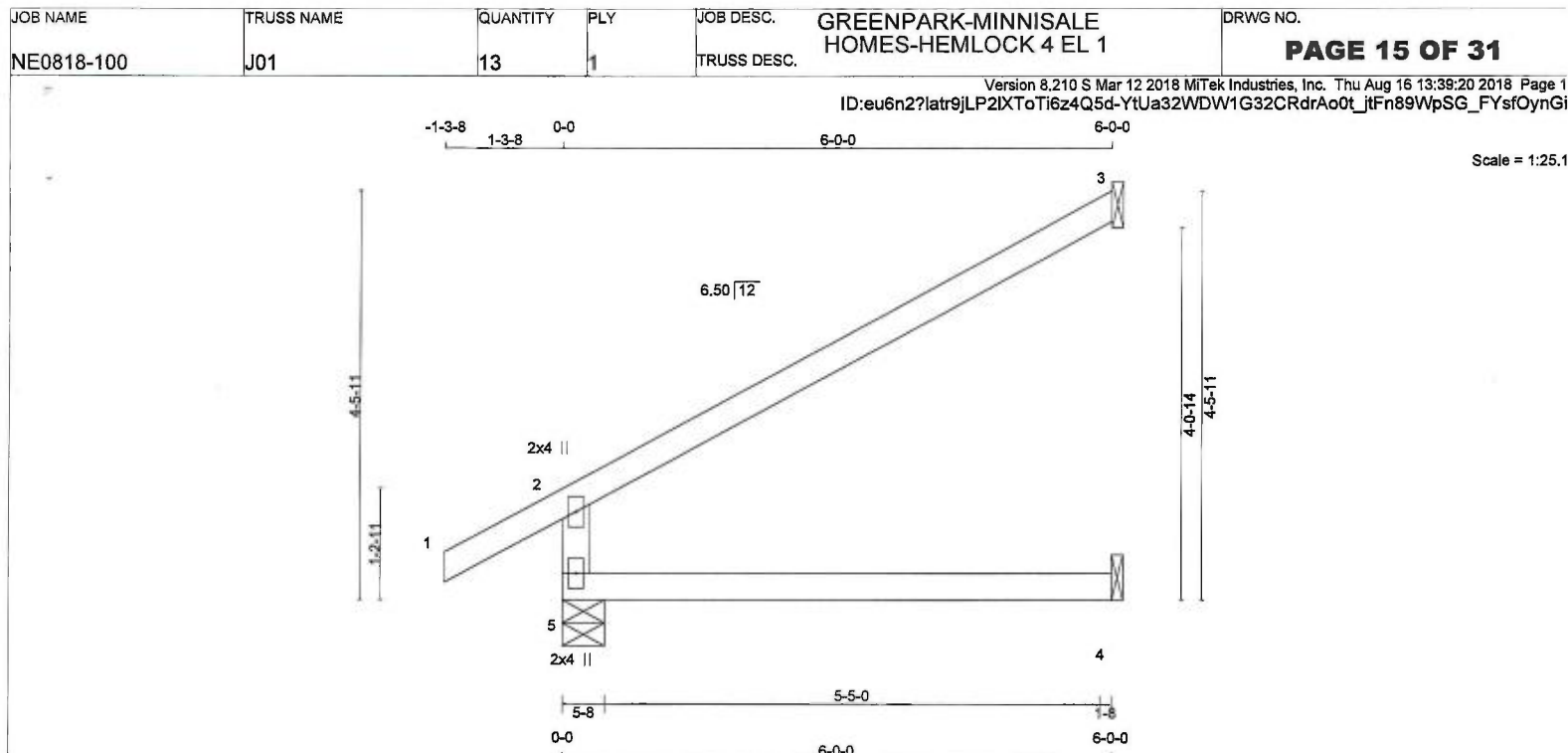
**LOADING**

TOTAL LOAD CASES: (4)

| C H O R D S |                           |                           |                  | W E B S            |             |                           |               |
|-------------|---------------------------|---------------------------|------------------|--------------------|-------------|---------------------------|---------------|
| MEMB.       | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX. CSI (LC) |
| 42-41       | -4 / 0                    | -17.5                     | -17.5 0.01 (4)   | 10.00              |             |                           |               |
| 41-40       | -3 / 0                    | -17.5                     | -17.5 0.01 (4)   | 10.00              |             |                           |               |
| 40-39       | -2 / 1                    | -17.5                     | -17.5 0.01 (4)   | 10.00              |             |                           |               |
| 39-38       | 0 / 1                     | -17.5                     | -17.5 0.01 (4)   | 10.00              |             |                           |               |
| 38-37       | 0 / 1                     | -17.5                     | -17.5 0.01 (4)   | 10.00              |             |                           |               |
| 37-36       | 0 / 4                     | -17.5                     | -17.5 0.01 (4)   | 10.00              |             |                           |               |
| 36-35       | 0 / 6                     | -17.5                     | -17.5 0.01 (4)   | 10.00              |             |                           |               |
| 35-34       | 0 / 8                     | -17.5                     | -17.5 0.01 (4)   | 10.00              |             |                           |               |
| 33-34       | -40 / 7                   | 0.0                       | 0.0 0.01 (1)     | 7.81               |             |                           |               |
| 34-23       | -65 / 0                   | 0.0                       | 0.0 0.01 (1)     | 7.81               |             |                           |               |
| 33-32       | 0 / 8                     | -17.5                     | -17.5 0.01 (4)   | 10.00              |             |                           |               |
| 32-31       | 0 / 11                    | -17.5                     | -17.5 0.02 (4)   | 10.00              |             |                           |               |
| 31-30       | 0 / 16                    | -17.5                     | -17.5 0.02 (4)   | 10.00              |             |                           |               |
| 30-29       | 0 / 16                    | -17.5                     | -17.5 0.03 (1)   | 10.00              |             |                           |               |

READ ALL NOTES ON THIS PAGE AND ON  
ENGINEERING NOTE PAGE ENP-1. THIS  
NOTE PAGE IS AN INTEGRAL PART OF  
THIS DRAWING AS IT CONTAINS  
SPECIFICATIONS AND CRITERIA USED IN  
THE DESIGN OF THIS COMPONENT.





**LUMBER**  
N. L. G. A. RULES  
CHORDS SIZE LUMBER DESCR.

|       |     |     |      |     |
|-------|-----|-----|------|-----|
| 5 - 2 | 2x4 | DRY | No.2 | SPF |
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 5 - 4 | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE   | PLATES | W   | LEN | Y | X |
|----|--------|--------|-----|-----|---|---|
| 2  | TMV+p  | MT20   | 2.0 | 4.0 |   |   |
| 5  | BMV1+p | MT20   | 2.0 | 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 | REQRD BRG |
|----|-------------------------|---------------------------------|-----------|-----------|
| 5  | 457                     | 0                               | 5-8       | 5-8       |
| 3  | 174                     | 0                               | 1-8       | 1-8       |
| 4  | 43                      | 0                               | 1-8       | 1-8       |

SEE MITEK STANDARD DETAIL B37579H FOR CONNECTION TO JOINT(S) 3, 4

**UNFACTORED REACTIONS**

| JT | 1ST CASE | MAX/MIN. COMPONENT REACTIONS |
|----|----------|------------------------------|
| 5  | 318      | 238 / 0                      |
| 3  | 118      | 105 / 0                      |
| 4  | 35       | 0 / 0                        |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 5

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

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

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

| MEMB. | CHORDS                    |                           |                    |                            | WEBS              |                           |                            |                   |
|-------|---------------------------|---------------------------|--------------------|----------------------------|-------------------|---------------------------|----------------------------|-------------------|
|       | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. LOAD LC1 (LC) | MAX. UNBRACED LENGTH FR-TO | MEMB. FORCE (LBS) | MAX. FACTORED FORCE (LBS) | MAX. UNBRACED LENGTH FR-TO | MEMB. FORCE (LBS) |
| 5-2   | -395 / 0                  | 0.0                       | 0.0                | 0.13 (4)                   | 7.81              |                           |                            |                   |
| 1-2   | 0 / 25                    | -77.4                     | -77.4              | 0.10 (1)                   | 10.00             |                           |                            |                   |
| 2-3   | -28 / 0                   | -77.4                     | -77.4              | 0.47 (1)                   | 6.25              |                           |                            |                   |
| 5-4   | 0 / 0                     | -17.5                     | -17.5              | 0.13 (4)                   | 10.00             |                           |                            |                   |

TOTAL WEIGHT = 13 X 17 = 225 lb [M]

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 23.3 PSF  
DL = 3.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 33.3 PSF

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

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

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

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

(55% OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.47/1.00 (2-3:1), BC=0.13/1.00 (4-5:4), WB=0.00/1.00 (n/a:0), SSI=0.20/1.00 (2-3:1)

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 1656

PLATE PLACEMENT TOL. = 0.250 inches

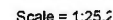
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.23 (2) (INPUT = 0.90)  
JSI METAL= 0.09 (2) (INPUT = 1.00)



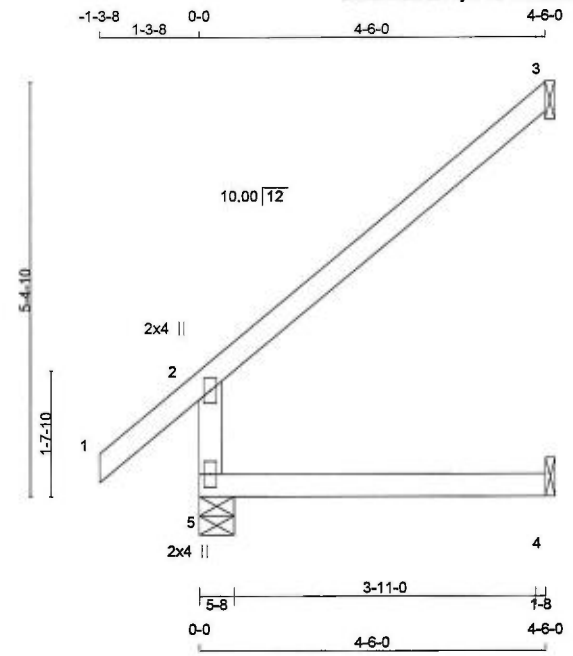
**READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.**





[MIF]





| LUMBER            |      |        |        |
|-------------------|------|--------|--------|
| N. L. G. A. RULES | SIZE | LUMBER | DESCR. |
| CHORDS            |      |        |        |
| 5 - 2             | 2x4  | DRY    | No.2   |
| 1 - 3             | 2x4  | DRY    | No.2   |
| 5 - 4             | 2x4  | DRY    | No.2   |

DRY: SEASONED LUMBER.

| PLATES (table is in inches) |        |        |     |     |     |
|-----------------------------|--------|--------|-----|-----|-----|
| JT                          | TYPE   | PLATES | W   | LEN | Y X |
| 2                           | TMV+p  | MT20   | 2.0 | 4.0 |     |
| 5                           | BMV1+p | MT20   | 2.0 | 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 | REQRD BRG |        |       |       |
|          | VERT                    | HORZ                            | DOWN      | HORZ      | UPLIFT | IN-SX | IN-SX |
| 5        | 369                     | 0                               | 369       | 0         | 0      | 5-8   | 5-8   |
| 3        | 131                     | 0                               | 131       | 0         | 0      | 1-8   | 1-8   |
| 4        | 34                      | 0                               | 38        | 0         | 0      | 1-8   | 1-8   |

SEE MITEK STANDARD DETAIL B37579H FOR CONNECTION TO JOINT(S) 3, 4

| UNFACTORED REACTIONS |           |         |       |           |       |        |       |
|----------------------|-----------|---------|-------|-----------|-------|--------|-------|
| JT                   | 1ST LCASE | SNOW    | LIVE  | PERM.LIVE | WIND  | DEAD   | SOIL  |
| 5                    | 256       | 195 / 0 | 0 / 0 | 0 / 0     | 0 / 0 | 61 / 0 | 0 / 0 |
| 3                    | 89        | 79 / 0  | 0 / 0 | 0 / 0     | 0 / 0 | 10 / 0 | 0 / 0 |
| 4                    | 27        | 0 / 0   | 0 / 0 | 0 / 0     | 0 / 0 | 27 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 5, 3

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

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

| LOADING               |                           |                           |                                |          |                           |                                |  |
|-----------------------|---------------------------|---------------------------|--------------------------------|----------|---------------------------|--------------------------------|--|
| TOTAL LOAD CASES: (4) |                           |                           |                                |          |                           |                                |  |
| CHORDS                |                           |                           |                                | WEBS     |                           |                                |  |
| MEMB.                 | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. FACTORED VERT. LOAD (LC1) | MEMB.    | MAX. FACTORED FORCE (LBS) | MAX. FACTORED VERT. LOAD (LC1) |  |
| FR-TO                 |                           | FROM                      | TO                             | FR-TO    |                           |                                |  |
| 5-2                   | -325 / 0                  | 0.0                       | 0.0                            | 0.06 (4) | 7.81                      |                                |  |
| 1-2                   | 0 / 34                    | -77.4                     | -77.4                          | 0.11 (1) | 10.00                     |                                |  |
| 2-3                   | -28 / 0                   | -77.4                     | -77.4                          | 0.27 (1) | 6.25                      |                                |  |
| 5-4                   | 0 / 0                     | -17.5                     | -17.5                          | 0.08 (4) | 10.00                     |                                |  |

TOTAL WEIGHT = 2 X 15 = 31 lb

DESIGN CRITERIA

| SPECIFIED LOADS: |    |            |
|------------------|----|------------|
| TOP CH.          | LL | = 23.3 PSF |
|                  | DL | = 3.0 PSF  |
| BOT CH.          | LL | = 0.0 PSF  |
|                  | DL | = 7.0 PSF  |
| TOTAL LOAD       |    | = 33.3 PSF |

SPACING = 24.0 IN. C/C

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

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

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

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 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 (0.01")

CSI: TC=0.27/1.00 (2-3:1), BC=0.08/1.00 (4-5:4), WB=0.00/1.00 (n/a:0), SSI=0.13/1.00 (2-3:1)

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   |
| MT20        | 618       | 354   | 1667    | 822     | 2284 1656 |

PLATE PLACEMENT TOL. = 0.250 inches

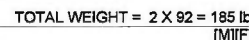
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.23 (2) (INPUT = 0.90 )  
JSI METAL= 0.09 (2) (INPUT = 1.00 )



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





SPF  
SPF  
SPF  
SPF  
SPF  
SPF

SPF

| JT | FACTORED<br>GROSS REACTION |      | MAXIMUM FACTORED<br>GROSS REACTION |      | INPUT<br>BRG | REQRD<br>BRG |
|----|----------------------------|------|------------------------------------|------|--------------|--------------|
|    | VERT                       | HORZ | DOWN                               | HORZ | IN-SX        | IN-SX        |
| 13 | 1154                       | 0    | 1154                               | 0    | 5-8          | 5-8          |
| 8  | 1154                       | 0    | 1154                               | 0    | 5-8          | 5-8          |

| 1ST LCASE |          | MAX./MIN. COMPONENT REACTIONS |       |           |       |         |       |
|-----------|----------|-------------------------------|-------|-----------|-------|---------|-------|
| JT        | COMBINED | SNOW                          | LIVE  | PERM.LIVE | WIND  | DEAD    | SOIL  |
| 13        | 807      | 578 / 0                       | 0 / 0 | 0 / 0     | 0 / 0 | 229 / 0 | 0 / 0 |
| 8         | 807      | 578 / 0                       | 0 / 0 | 0 / 0     | 0 / 0 | 229 / 0 | 0 / 0 |

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.53 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY  
APPLIED.

**TOTAL LOAD CASES: (4)**

| C H O R D S |                                 |                                 |                        |                          | W E B S |                                 |                 |          |  |
|-------------|---------------------------------|---------------------------------|------------------------|--------------------------|---------|---------------------------------|-----------------|----------|--|
| MEMB.       | MAX. FACTORED<br>FORCE<br>(LBS) | FACTORED<br>VERT. LOAD<br>(PLF) | LC1<br>MAX<br>CSI (LC) | MAX.<br>UNBRAC<br>LENGTH | MEMB.   | MAX. FACTORED<br>FORCE<br>(LBS) | MAX<br>CSI (LC) |          |  |
| FR-TO       |                                 | FROM TO                         |                        |                          | FR-TO   |                                 |                 |          |  |
| 1-2         | 0 / 29                          | -77.4                           | -77.4                  | 0.10 (1)                 | 10.00   | 12-3                            | -36 / 85        | 0.03 (4) |  |
| 2-3         | -1090 / 0                       | -77.4                           | -77.4                  | 0.42 (1)                 | 5.53    | 3-11                            | 0 / 347         | 0.08 (1) |  |
| 3-4         | -1140 / 0                       | -77.4                           | -77.4                  | 0.24 (1)                 | 5.68    | 11-4                            | -453 / 0        | 0.21 (1) |  |
| 4-5         | -1140 / 0                       | -77.4                           | -77.4                  | 0.24 (1)                 | 5.68    | 11-5                            | 0 / 347         | 0.08 (1) |  |
| 5-6         | -1090 / 0                       | -77.4                           | -77.4                  | 0.42 (1)                 | 5.53    | 9-5                             | -36 / 85        | 0.03 (4) |  |
| 6-7         | 0 / 29                          | -77.4                           | -77.4                  | 0.10 (1)                 | 10.00   | 2-12                            | 0 / 919         | 0.21 (1) |  |
| 13-2        | -1108 / 0                       | 0.0                             | 0.0                    | 0.11 (1)                 | 7.52    | 9-6                             | 0 / 919         | 0.21 (1) |  |
| 8-6         | -1108 / 0                       | 0.0                             | 0.0                    | 0.11 (1)                 | 7.52    |                                 |                 |          |  |
| 13-12       | 0 / 0                           | -17.5                           | -17.5                  | 0.15 (4)                 | 10.00   |                                 |                 |          |  |
| 12-11       | 0 / 906                         | -17.5                           | -17.5                  | 0.23 (1)                 | 10.00   |                                 |                 |          |  |
| 11-10       | 0 / 906                         | -17.5                           | -17.5                  | 0.23 (1)                 | 10.00   |                                 |                 |          |  |
| 10-9        | 0 / 906                         | -17.5                           | -17.5                  | 0.23 (1)                 | 10.00   |                                 |                 |          |  |
| 9-8         | 0 / 0                           | -17.5                           | -17.5                  | 0.15 (4)                 | 10.00   |                                 |                 |          |  |

**SPECIFIED LOADS:**

|              |      |      |     |
|--------------|------|------|-----|
| TOP CH.      | LL = | 23.3 | PSF |
|              | DL = | 3.0  | PSF |
| BOT CH.      | LL = | 0.0  | PSF |
|              | DL = | 7.0  | PSF |
| TOTAL LOAD = |      | 33.3 | PSF |

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

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

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.74")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")  
ALLOWABLE DEFL.(TL)= L/360 (0.74")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.42/1.00 (2-3:1), BC=0.23/1.00 (11-12:1)  
WB=0.21/1.00 (4-11:1), SSI=0.18/1.00 (3-4:1)

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.

| PLATE | GRIP(DRY) |       | SHEAR |       | SECTION |       |
|-------|-----------|-------|-------|-------|---------|-------|
|       | (PSI)     | (PSI) | (PLI) | (PLI) | (PLI)   | (PLI) |
|       | MAX       | MIN   | MAX   | MIN   | MAX     | MIN   |
| MT20  | 618       | 354   | 1667  | 822   | 2284    | 1656  |

PLATE PLACEMENT TOL. = 0.250 inches

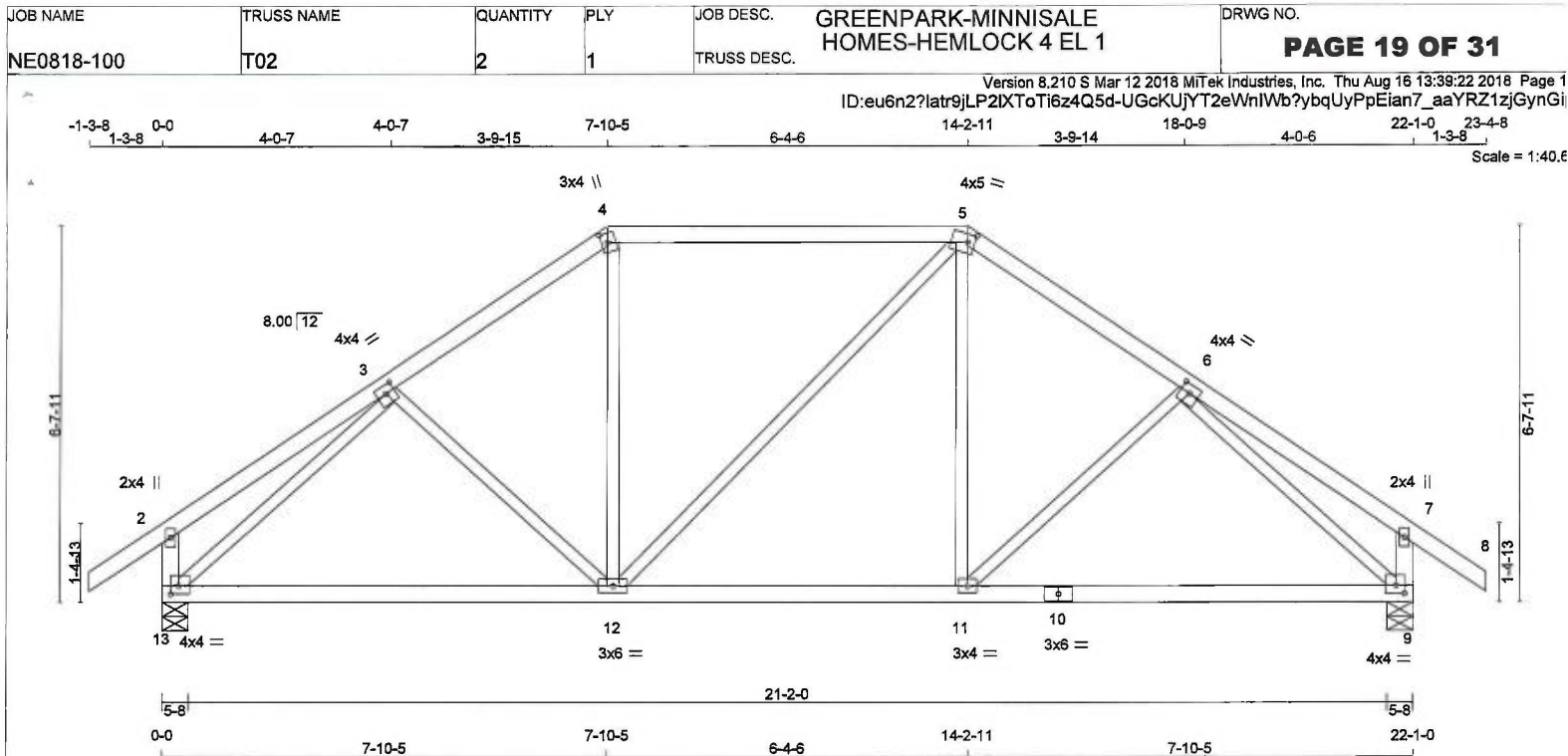
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (12) (INPUT = 0.90 )  
JSI METAL= 0.38 (2) (INPUT = 1.00 )



**READ ALL NOTES ON THIS PAGE AND ON  
ENGINEERING NOTE PAGE ENP-1. THIS  
NOTE PAGE IS AN INTEGRAL PART OF  
THIS DRAWING AS IT CONTAINS  
SPECIFICATIONS AND CRITERIA USED IN  
THE DESIGN OF THIS COMPONENT.**





| LUMBER          |      |     |      | N. L. G. A. RULES |     |
|-----------------|------|-----|------|-------------------|-----|
| CHORDS          | SIZE | DRY | NO.2 | DESCR.            | SPF |
| 1 - 4           | 2x4  | DRY | No.2 | SPF               |     |
| 4 - 5           | 2x4  | DRY | No.2 | SPF               |     |
| 5 - 8           | 2x4  | DRY | No.2 | SPF               |     |
| 13 - 2          | 2x4  | DRY | No.2 | SPF               |     |
| 9 - 7           | 2x4  | DRY | No.2 | SPF               |     |
| 13 - 10         | 2x4  | DRY | No.2 | SPF               |     |
| 10 - 9          | 2x4  | DRY | No.2 | SPF               |     |
| ALL WEBS EXCEPT | 2x3  | DRY | No.2 | SPF               |     |

| PLATES (table is in inches) |         |        |     |     |           |
|-----------------------------|---------|--------|-----|-----|-----------|
| JT                          | TYPE    | PLATES | W   | LEN | Y X       |
| 2                           | TMV+p   | MT20   | 2.0 | 4.0 |           |
| 3                           | TMWW-t  | MT20   | 4.0 | 4.0 | 1.75 2.00 |
| 4                           | TTW+m   | MT20   | 3.0 | 4.0 | 2.00 1.25 |
| 5                           | TTWW-m  | MT20   | 4.0 | 5.0 | 1.75 1.50 |
| 6                           | TMWW-t  | MT20   | 4.0 | 4.0 | 1.75 2.00 |
| 7                           | TMV+p   | MT20   | 2.0 | 4.0 |           |
| 9                           | BMVW1-t | MT20   | 4.0 | 4.0 | 1.75 1.75 |
| 10                          | BS-t    | MT20   | 3.0 | 6.0 |           |
| 11                          | BMWW-t  | MT20   | 3.0 | 4.0 |           |
| 12                          | BMWW-t  | MT20   | 3.0 | 6.0 |           |
| 13                          | BMVW1-t | MT20   | 4.0 | 4.0 | 1.75 1.75 |

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

| FACTORED GROSS REACTION |      | MAXIMUM FACTORED GROSS REACTION |      | INPUT BRG |        | REQD BRG |       |
|-------------------------|------|---------------------------------|------|-----------|--------|----------|-------|
| JT                      | VERT | HORZ                            | DOWN | HORZ      | UPLIFT | IN-SX    | IN-SX |
| 13                      | 1154 | 0                               | 1154 | 0         | 0      | 5-8      | 5-8   |
| 9                       | 1154 | 0                               | 1154 | 0         | 0      | 5-8      | 5-8   |

| UNFACTORED REACTIONS |          | 1ST LCASE |       | MAX/MIN. COMPONENT REACTIONS |       | SNOW    |       | LIVE |          | PERM. LIVE |       | WIND       |       | DEAD    |       | SOIL |          |
|----------------------|----------|-----------|-------|------------------------------|-------|---------|-------|------|----------|------------|-------|------------|-------|---------|-------|------|----------|
| JT                   | COMBINED | SNOW      | LIVE  | PERM. LIVE                   | WIND  | DEAD    | SOIL  | JT   | COMBINED | SNOW       | LIVE  | PERM. LIVE | WIND  | DEAD    | SOIL  | JT   | COMBINED |
| 13                   | 807      | 578 / 0   | 0 / 0 | 0 / 0                        | 0 / 0 | 229 / 0 | 0 / 0 | 13   | 807      | 578 / 0    | 0 / 0 | 0 / 0      | 0 / 0 | 229 / 0 | 0 / 0 | 13   | 807      |
| 9                    | 807      | 578 / 0   | 0 / 0 | 0 / 0                        | 0 / 0 | 229 / 0 | 0 / 0 | 9    | 807      | 578 / 0    | 0 / 0 | 0 / 0      | 0 / 0 | 229 / 0 | 0 / 0 | 9    | 807      |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 13, 9

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.99 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.                     |                                     | WEBS  |                           |
|---------|---------------------------|-----------------------|-------------------------------------|------------------------------|-------|---------------------------|-------------------------------------|-------|---------------------------|
| MEMB.   | MAX. FACTORED FORCE (LBS) | VERT. LOAD (PLF)      | MAX. FACTORED VERT. LOAD (LC1) (LC) | MAX. UNBRACED LENGTH (FR-TO) | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. FACTORED VERT. LOAD (LC1) (LC) | MEMB. | MAX. FACTORED FORCE (LBS) |
| FR-TO   |                           |                       |                                     |                              | FR-TO |                           |                                     | FR-TO |                           |
| 1-2     | 0 / 29                    | -77.4                 | -77.4 0.10 (1)                      | 10.00                        | 3-12  | -103 / 23                 | 0.05 (1)                            | 10.00 | -103 / 23                 |
| 2-3     | 0 / 19                    | -77.4                 | -77.4 0.19 (1)                      | 10.00                        | 12-4  | 0 / 204                   | 0.05 (4)                            | 10.00 | 0 / 204                   |
| 3-4     | -1041 / 0                 | -77.4                 | -77.4 0.15 (1)                      | 5.99                         | 12-5  | 0 / 0                     | 0.00 (1)                            | 5.99  | 0 / 0                     |
| 4-5     | -852 / 0                  | -77.4                 | -77.4 0.41 (1)                      | 6.04                         | 11-5  | 0 / 204                   | 0.05 (4)                            | 6.04  | 0 / 204                   |
| 5-6     | -1040 / 0                 | -77.4                 | -77.4 0.15 (1)                      | 5.99                         | 11-6  | -103 / 23                 | 0.05 (1)                            | 5.99  | -103 / 23                 |
| 6-7     | 0 / 19                    | -77.4                 | -77.4 0.19 (1)                      | 10.00                        | 13-3  | -1271 / 0                 | 0.60 (1)                            | 10.00 | -1271 / 0                 |
| 7-8     | 0 / 29                    | -77.4                 | -77.4 0.10 (1)                      | 10.00                        | 6-9   | -1270 / 0                 | 0.60 (1)                            | 10.00 | -1270 / 0                 |
| 13-2    | -224 / 0                  | 0.0                   | 0.0 0.02 (1)                        | 7.81                         |       |                           |                                     |       |                           |
| 9-7     | -224 / 0                  | 0.0                   | 0.0 0.02 (1)                        | 7.81                         |       |                           |                                     |       |                           |
| 13-12   | 0 / 925                   | -17.5                 | -17.5 0.29 (4)                      | 10.00                        |       |                           |                                     |       |                           |
| 12-11   | 0 / 852                   | -17.5                 | -17.5 0.28 (4)                      | 10.00                        |       |                           |                                     |       |                           |
| 11-10   | 0 / 925                   | -17.5                 | -17.5 0.29 (4)                      | 10.00                        |       |                           |                                     |       |                           |
| 10-9    | 0 / 925                   | -17.5                 | -17.5 0.29 (4)                      | 10.00                        |       |                           |                                     |       |                           |

| DESIGN CRITERIA       |  |
|-----------------------|--|
| SPECIFIED LOADS:      |  |
| TOP CH. LL = 23.3 PSF |  |
| DL = 3.0 PSF          |  |
| BOT CH. LL = 0.0 PSF  |  |
| DL = 7.0 PSF          |  |
| TOTAL LOAD = 33.3 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, NBC 2010

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

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.74")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")  
ALLOWABLE DEFL.(TL)= L/360 (0.74")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.13")

CSI: TC=0.41/1.00 (4-5:1), BC=0.29/1.00 (9-11:4), WB=0.60/1.00 (3-13:1), SSI=0.19/1.00 (4-5:1)

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 1656     |             |

PLATE PLACEMENT TOL. = 0.250 inches

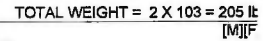
PLATE ROTATION TOL. = 5.0 Deg.

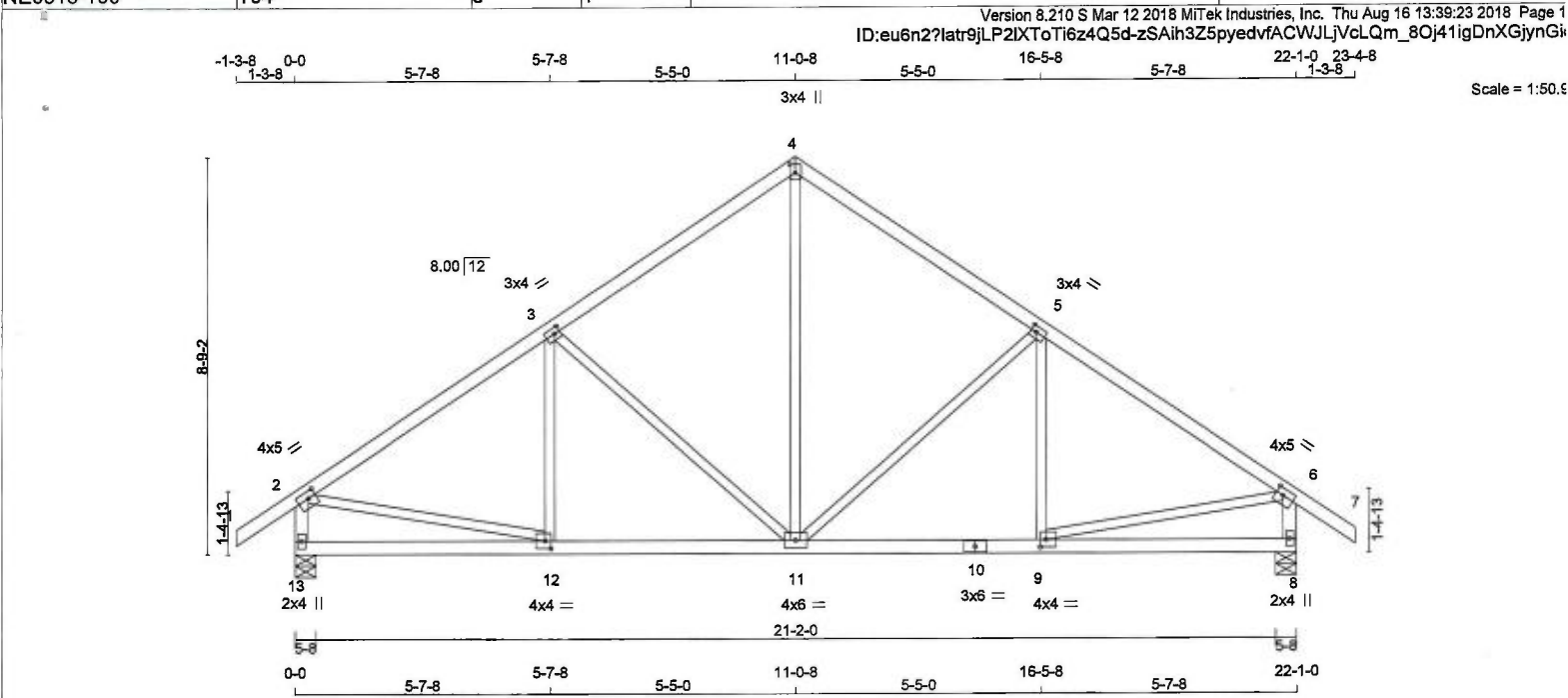
JSI GRIP= 0.89 (3) (INPUT = 0.90 )  
JSI METAL= 0.46 (3) (INPUT = 1.00 )

**READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.**



Scale = 1:45.5





|                                                                                                                                                                                                                                                               |  |                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                         |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>LUMBER</b><br>N. L. G. A. RULES<br>CHORDS SIZE<br>1 - 4 2x4 DRY No.2<br>4 - 7 2x4 DRY No.2<br>13 - 2 2x4 DRY No.2<br>8 - 6 2x4 DRY No.2<br>13 - 10 2x4 DRY No.2<br>10 - 8 2x4 DRY No.2<br><br>ALL WEBS 2x3 DRY No.2<br>EXCEPT<br><br>DRY: SEASONED LUMBER. |  | <b>DESCR.</b><br>SPF<br>SPF<br>SPF<br>SPF<br>SPF<br>SPF<br><br>SPF |  | <b>PLATES (table is in inches)</b><br>JT TYPE PLATES W LEN Y X<br>2 TMVW-t MT20 4.0 5.0 1.75 2.00<br>3 TMWW-t MT20 3.0 4.0 1.50 1.50<br>4 TTW+p MT20 3.0 4.0 2.25 1.50<br>5 TMVW-t MT20 3.0 4.0 1.50 1.50<br>6 TMVW-t MT20 4.0 5.0 1.75 2.00<br>8 BMV1+p MT20 2.0 4.0<br>9 BMWW-t MT20 4.0 4.0 2.00 1.50<br>10 BS-t MT20 3.0 6.0<br>11 BMWW-t MT20 4.0 6.0<br>12 BMWW-t MT20 4.0 4.0 2.00 1.50<br>13 BMV1+p MT20 2.0 4.0 |  | <b>BEARINGS</b><br>FACTORED GROSS REACTION<br>JT VERT HORZ<br>13 1154 0<br>8 1154 0<br><br>MAXIMUM FACTORED GROSS REACTION<br>DOWN HORZ UPLIFT<br>13 1154 0 0<br>8 1154 0 0<br><br>INPUT BRG IN-SX<br>5-8 5-8 5-8<br><br>REQRD BRG IN-SX<br>5-8 5-8 5-8 |  | <b>DESIGN CRITERIA</b><br><br>SPECIFIED LOADS:<br>TOP CH. LL = 23.3 PSF<br>DL = 3.0 PSF<br>BOT CH. LL = 0.0 PSF<br>DL = 7.0 PSF<br>TOTAL LOAD = 33.3 PSF<br><br>SPACING = 24.0 IN. C/C<br><br>THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010<br><br>THIS DESIGN COMPLIES WITH:<br>- PART 9 OF OBC 2012, BCBC 2012, ABC 2014<br>- CSA 086-09<br>- TPIC 2011<br><br>(55% OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD<br><br>ALLOWABLE DEFL.(LL)= L/360 (0.74")<br>CALCULATED VERT. DEFL.(LL) = L/999 (0.03")<br>ALLOWABLE DEFL.(TL)= L/360 (0.74")<br>CALCULATED VERT. DEFL.(TL) = L/999 (0.07")<br><br>CSI: TC=0.33/1.00 (2-3:1) , BC=0.22/1.00 (11-12:1) , WB=0.39/1.00 (3-11:1) , SSI=0.17/1.00 (2-3:1)<br><br>DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10<br>COMP=1.10 SHEAR=1.10 TENS=1.10<br><br>COMPANION LIVE LOAD FACTOR = 0.50<br><br>TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .<br><br>NAIL VALUES<br>PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)<br>MAX MIN MAX MIN MAX MIN<br>MT20 618 354 1667 822 2284 1656<br><br>PLATE PLACEMENT TOL = 0.250 inches<br><br>PLATE ROTATION TOL = 5.0 Deg.<br><br>JSI GRIP= 0.82 (9) (INPUT = 0.90 )<br>JSI METAL= 0.40 (6) (INPUT = 1.00 ) |  | <b>UNFACTORED REACTIONS</b><br>1ST LCASE MAX/MIN. COMPONENT REACTIONS<br>JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL<br>13 807 578 / 0 0 / 0 0 / 0 0 / 0 229 / 0 0 / 0<br>8 807 578 / 0 0 / 0 0 / 0 0 / 0 229 / 0 0 / 0<br><br>BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 13, 8<br><br><b>BRACING</b><br>TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.55 FT.<br>MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.<br><br>ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.<br><br><b>LOADING</b><br>TOTAL LOAD CASES: (4)<br><br>CHORDS<br>MEMB. MAX. FACTORED FORCE (LBS) VERT. LOAD (PLF) MAX. UNBRACED LENGTH (LC) FROM TO<br>FR-TO<br>1-2 0 / 29 -77.4 -77.4 0.10 (1) 10.00 11-4 0 / 605 0.14 (1)<br>2-3 -1147 / 0 -77.4 -77.4 0.33 (1) 5.55 11-5 -386 / 0 0.39 (1)<br>3-4 -858 / 0 -77.4 -77.4 0.31 (1) 6.20 9-5 -81 / 68 0.03 (1)<br>4-5 -858 / 0 -77.4 -77.4 0.31 (1) 6.20 3-11 -386 / 0 0.39 (1)<br>5-6 -1147 / 0 -77.4 -77.4 0.33 (1) 5.55 12-3 -81 / 68 0.03 (1)<br>6-7 0 / 29 -77.4 -77.4 0.10 (1) 10.00 2-12 0 / 995 0.22 (1)<br>13-2 -1113 / 0 0.0 0.0 0.11 (1) 7.51 9-6 0 / 995 0.22 (1)<br>8-6 -1113 / 0 0.0 0.0 0.11 (1) 7.51<br><br>13-12 0 / 0 -17.5 -17.5 0.13 (4) 10.00<br>12-11 0 / 977 -17.5 -17.5 0.22 (1) 10.00<br>11-10 0 / 977 -17.5 -17.5 0.22 (1) 10.00<br>10-9 0 / 977 -17.5 -17.5 0.22 (1) 10.00<br>9-8 0 / 0 -17.5 -17.5 0.13 (4) 10.00<br><br>WEBS<br>MEMB. MAX. FACTORED FORCE (LBS) MAX. UNBRACED LENGTH (LC) FROM TO<br>FR-TO<br>11-4 0 / 605 0.14 (1)<br>11-5 -386 / 0 0.39 (1)<br>9-5 -81 / 68 0.03 (1)<br>3-11 -386 / 0 0.39 (1)<br>12-3 -81 / 68 0.03 (1)<br>2-12 0 / 995 0.22 (1)<br>9-6 0 / 995 0.22 (1) |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

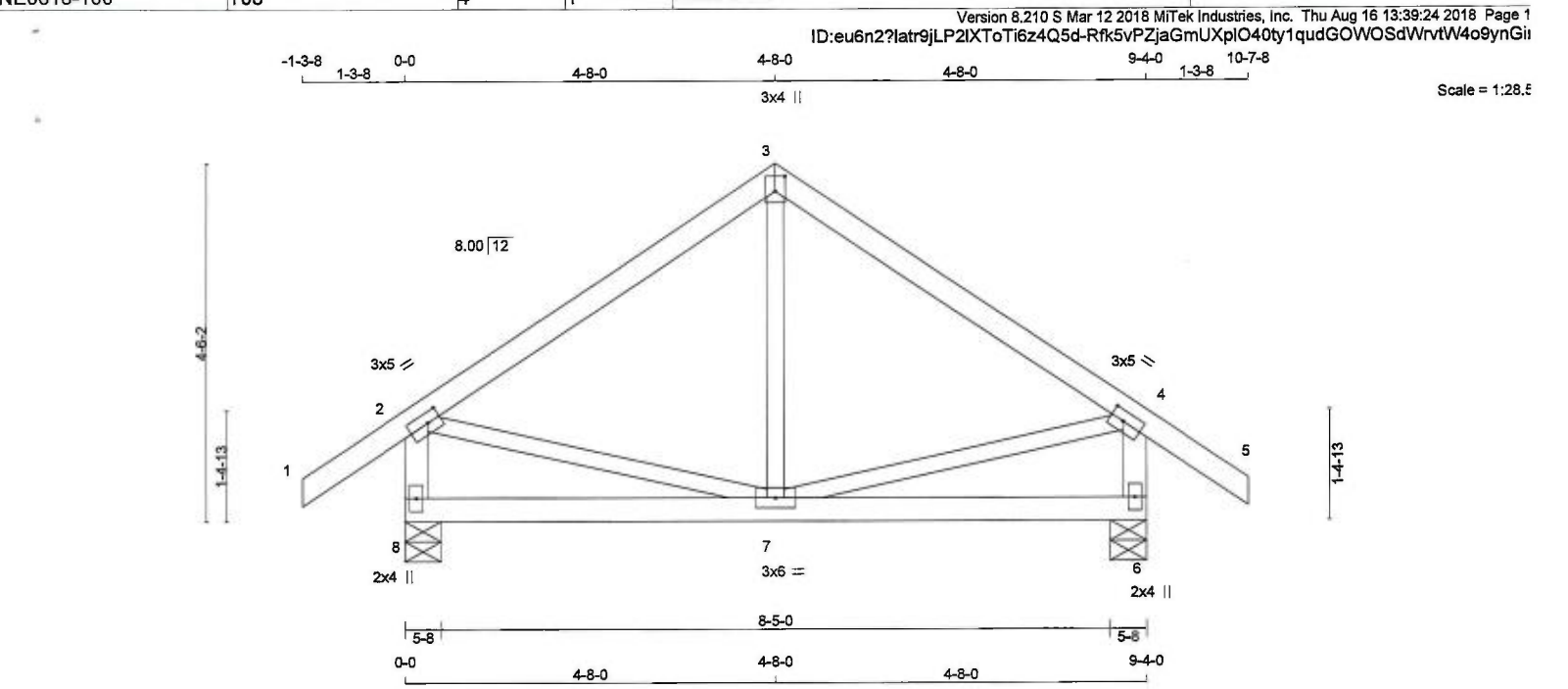
LICENSED PROFESSIONAL ENGINEER

N.A. EL-MASRI

Aug 16, 2018

READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

KOTT



**LUMBER**  
N. L. G. A. RULES  
CHORDS SIZE LUMBER DESCR.

|                 |     |     |      |     |
|-----------------|-----|-----|------|-----|
| 1 - 3           | 2x4 | DRY | No.2 | SPF |
| 3 - 5           | 2x4 | DRY | No.2 | SPF |
| 8 - 2           | 2x4 | DRY | No.2 | SPF |
| 6 - 4           | 2x4 | DRY | No.2 | SPF |
| 8 - 6           | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**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                 | JT VERT                         | JT VERT   | JT VERT   |
| 8 549                   | 0 549                           | 0 5-8     | 5-8       |
| 6 549                   | 0 549                           | 0 5-8     | 5-8       |

**UNFACTORED REACTIONS**

| 1ST LCASE   | MAX/MIN. SNOW | LIVE        | PERM.LIVE   | WIND        | DEAD        | SOIL        |
|-------------|---------------|-------------|-------------|-------------|-------------|-------------|
| JT COMBINED | JT COMBINED   | JT COMBINED | JT COMBINED | JT COMBINED | JT COMBINED | JT COMBINED |
| 8 383       | 281 / 0       | 0 / 0       | 0 / 0       | 0 / 0       | 102 / 0     | 0 / 0       |
| 6 383       | 281 / 0       | 0 / 0       | 0 / 0       | 0 / 0       | 102 / 0     | 0 / 0       |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 8, 6

**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. LOAD LC1 (PLF) | MAX. LOAD LC2 (PLF) | MAX. LOAD LC3 (PLF) | MAX. LOAD LC4 (PLF) | MAX. LOAD LC5 (PLF) | MAX. LOAD LC6 (PLF) | MAX. LOAD LC7 (PLF) | MAX. LOAD LC8 (PLF) | MAX. LOAD LC9 (PLF) | MAX. LOAD LC10 (PLF) | MAX. LOAD LC11 (PLF) | MAX. LOAD LC12 (PLF) | MAX. LOAD LC13 (PLF) | MAX. LOAD LC14 (PLF) | MAX. LOAD LC15 (PLF) | MAX. LOAD LC16 (PLF) | MAX. LOAD LC17 (PLF) | MAX. LOAD LC18 (PLF) | MAX. LOAD LC19 (PLF) | MAX. LOAD LC20 (PLF) | MAX. LOAD LC21 (PLF) | MAX. LOAD LC22 (PLF) | MAX. LOAD LC23 (PLF) | MAX. LOAD LC24 (PLF) | MAX. LOAD LC25 (PLF) | MAX. LOAD LC26 (PLF) | MAX. LOAD LC27 (PLF) | MAX. LOAD LC28 (PLF) | MAX. LOAD LC29 (PLF) | MAX. LOAD LC30 (PLF) | MAX. LOAD LC31 (PLF) | MAX. LOAD LC32 (PLF) | MAX. LOAD LC33 (PLF) | MAX. LOAD LC34 (PLF) | MAX. LOAD LC35 (PLF) | MAX. LOAD LC36 (PLF) | MAX. LOAD LC37 (PLF) | MAX. LOAD LC38 (PLF) | MAX. LOAD LC39 (PLF) | MAX. LOAD LC40 (PLF) | MAX. LOAD LC41 (PLF) | MAX. LOAD LC42 (PLF) | MAX. LOAD LC43 (PLF) | MAX. LOAD LC44 (PLF) | MAX. LOAD LC45 (PLF) | MAX. LOAD LC46 (PLF) | MAX. LOAD LC47 (PLF) | MAX. LOAD LC48 (PLF) | MAX. LOAD LC49 (PLF) | MAX. LOAD LC50 (PLF) | MAX. LOAD LC51 (PLF) | MAX. LOAD LC52 (PLF) | MAX. LOAD LC53 (PLF) | MAX. LOAD LC54 (PLF) | MAX. LOAD LC55 (PLF) | MAX. LOAD LC56 (PLF) | MAX. LOAD LC57 (PLF) | MAX. LOAD LC58 (PLF) | MAX. LOAD LC59 (PLF) | MAX. LOAD LC60 (PLF) | MAX. LOAD LC61 (PLF) | MAX. LOAD LC62 (PLF) | MAX. LOAD LC63 (PLF) | MAX. LOAD LC64 (PLF) | MAX. LOAD LC65 (PLF) | MAX. LOAD LC66 (PLF) | MAX. LOAD LC67 (PLF) | MAX. LOAD LC68 (PLF) | MAX. LOAD LC69 (PLF) | MAX. LOAD LC70 (PLF) | MAX. LOAD LC71 (PLF) | MAX. LOAD LC72 (PLF) | MAX. LOAD LC73 (PLF) | MAX. LOAD LC74 (PLF) | MAX. LOAD LC75 (PLF) | MAX. LOAD LC76 (PLF) | MAX. LOAD LC77 (PLF) | MAX. LOAD LC78 (PLF) | MAX. LOAD LC79 (PLF) | MAX. LOAD LC80 (PLF) | MAX. LOAD LC81 (PLF) | MAX. LOAD LC82 (PLF) | MAX. LOAD LC83 (PLF) | MAX. LOAD LC84 (PLF) | MAX. LOAD LC85 (PLF) | MAX. LOAD LC86 (PLF) | MAX. LOAD LC87 (PLF) | MAX. LOAD LC88 (PLF) | MAX. LOAD LC89 (PLF) | MAX. LOAD LC90 (PLF) | MAX. LOAD LC91 (PLF) | MAX. LOAD LC92 (PLF) | MAX. LOAD LC93 (PLF) | MAX. LOAD LC94 (PLF) | MAX. LOAD LC95 (PLF) | MAX. LOAD LC96 (PLF) | MAX. LOAD LC97 (PLF) | MAX. LOAD LC98 (PLF) | MAX. LOAD LC99 (PLF) | MAX. LOAD LC100 (PLF) |
|--------|-------|---------------------------|---------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-----------------------|
|--------|-------|---------------------------|---------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-----------------------|

**DESIGN CRITERIA**

**SPECIFIED LOADS:**

|            |    |   |      |     |
|------------|----|---|------|-----|
| TOP CH.    | LL | = | 23.3 | PSF |
|            | DL | = | 3.0  | PSF |
| BOT CH.    | LL | = | 0.0  | PSF |
|            | DL | = | 7.0  | PSF |
| TOTAL LOAD |    | = | 33.3 | PSF |

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

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

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

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.31")  
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")  
ALLOWABLE DEFL.(TL)= L/360 (0.31")  
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.22/1.00 (2-3:1) , BC=0.11/1.00 (7-8:4) , WB=0.06/1.00 (2-7:1) , SSI=0.12/1.00 (2-3:1)

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**

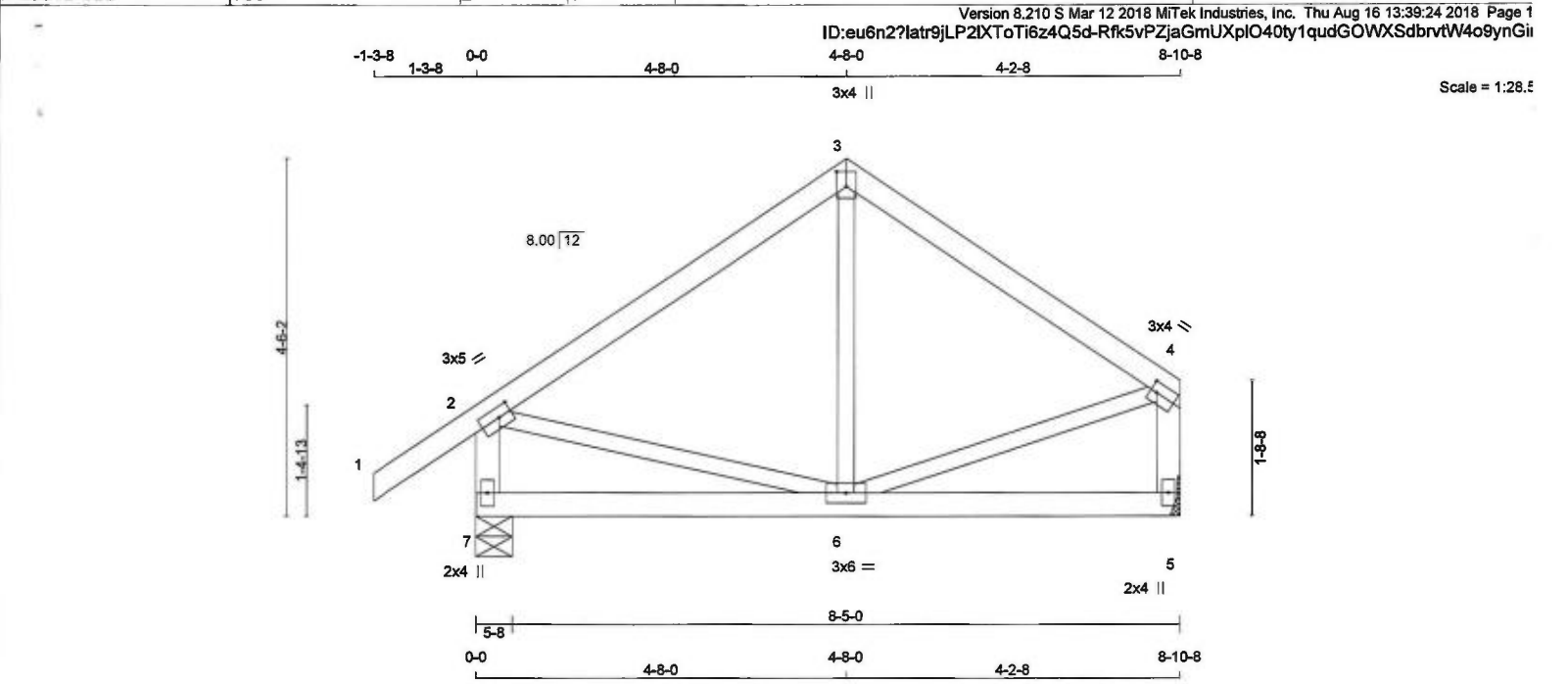
| PLATE | GRIP(DRY) | SHEAR | SECTION |
|-------|-----------|-------|---------|
|       | (PSI)     | (PLI) | (PLI)   |
| MAX   | MIN       | MAX   | MIN     |
| MT20  | 618       | 354   | 1667    |
|       | 822       | 2284  | 1656    |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.48 (7) (INPUT = 0.90 )  
JSI METAL= 0.14 (4) (INPUT = 1.00 )

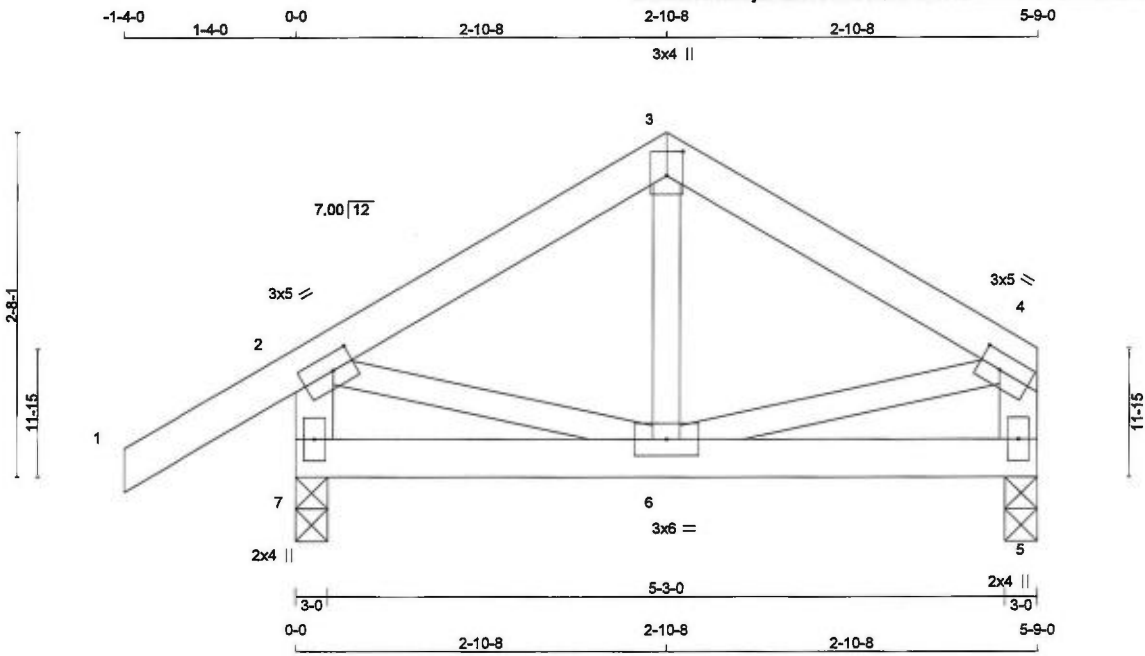
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>LUMBER</b><br>N. L. G. A. RULES<br>CHORDS SIZE LUMBER<br>1 - 3 2x4 DRY No.2<br>3 - 4 2x4 DRY No.2<br>7 - 2 2x4 DRY No.2<br>5 - 4 2x4 DRY No.2<br>7 - 5 2x4 DRY No.2<br><br>ALL WEBS 2x3 DRY No.2<br>EXCEPT<br><br>DRY: SEASONED LUMBER.                                                                                                                                                                                                           |  | <b>DESCR.</b><br>SPF<br>SPF<br>SPF<br>SPF<br>SPF<br><br>SPF                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | <b>PLATES (table is in inches)</b><br>JT TYPE PLATES W LEN Y X<br>2 TMVW-t MT20 3.0 5.0 1.50 2.00<br>3 TTW+p MT20 3.0 4.0 2.25 1.50<br>4 TMVW-t MT20 3.0 4.0 1.50 1.00<br>5 BMV1+p MT20 2.0 4.0<br>6 BMVWW-t MT20 3.0 6.0<br>7 BMV1+p MT20 2.0 4.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| <b>DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER</b><br><b>BEARINGS</b><br>FACTORED GROSS REACTION<br>JT VERT HORZ<br>7 527 0<br>5 421 0<br>MAXIMUM FACTORED GROSS REACTION<br>DOWN HORZ UPLIFT<br>527 0 0<br>421 0 0<br>INPUT BRG IN-SX<br>5-8 5-8<br>REQRD BRG IN-SX<br>5-8 5-8<br>MECHANICAL<br><br>A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 5 TO RESIST THE MAX FACTORED REACTIONS. |  | <b>UNFACTORED REACTIONS</b><br>1ST LCASE MAX/MIN COMPONENT REACTIONS<br>JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL<br>7 368 271 / 0 0 / 0 0 / 0 97 / 0 0 / 0<br>5 295 207 / 0 0 / 0 0 / 0 89 / 0 0 / 0<br><br>BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7<br><br><b>BRACING</b><br>TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.<br>MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.<br><br>ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. |  | <b>LOADING</b><br>TOTAL LOAD CASES: (4)<br><br>CHORDS<br>MEMB. MAX. FACTORED FORCE (LBS) VERT. LOAD (PLF) LC1 MAX CSI (LC) UNBRAC LENGTH FR-TO<br>1-2 0 / 29 -77.4 -77.4 0.10 (1) 10.00 6-3 -35 / 65 0.02 (4)<br>2-3 -278 / 0 -77.4 -77.4 0.22 (1) 6.25 2-6 0 / 238 0.05 (1)<br>3-4 -278 / 0 -77.4 -77.4 0.18 (1) 6.25 6-4 0 / 244 0.05 (1)<br>7-2 -495 / 0 0.0 0.0 0.05 (1) 7.81<br>5-4 -393 / 0 0.0 0.0 0.04 (1) 7.81<br><br>7-6 0 / 0 -17.5 -17.5 0.10 (4) 10.00<br>6-5 0 / 0 -17.5 -17.5 0.10 (4) 10.00<br><br>WEBS<br>MEMB. MAX. FACTORED FORCE (LBS) MAX CSI (LC)<br>DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10<br>COMP=1.10 SHEAR=1.10 TENS= 1.10<br><br>COMPANION LIVE LOAD FACTOR = 0.50<br><br>TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .<br><br>NAIL VALUES<br>PLATE GRIP(DRY) SHEAR SECTION<br>(PSI) (PLI) (PLI)<br>MAX MIN MAX MIN MAX MIN<br>MT20 618 354 1667 822 2284 1656<br><br>PLATE PLACEMENT TOL. = 0.250 inches<br><br>PLATE ROTATION TOL. = 5.0 Deg.<br><br>JSI GRIP= 0.79 (4) (INPUT = 0.90 )<br>JSI METAL= 0.14 (4) (INPUT = 1.00 ) |  |

READ ALL NOTES ON THIS PAGE AND ON  
ENGINEERING NOTE PAGE ENP-1. THIS  
NOTE PAGE IS AN INTEGRAL PART OF  
THIS DRAWING AS IT CONTAINS  
SPECIFICATIONS AND CRITERIA USED IN  
THE DESIGN OF THIS COMPONENT.





**LUMBER**  
N. L. G. A. RULES  
CHORDS SIZE LUMBER DESCR.

|       |     |     |      |     |
|-------|-----|-----|------|-----|
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 3 - 4 | 2x4 | DRY | No.2 | SPF |
| 7 - 2 | 2x4 | DRY | No.2 | SPF |
| 5 - 4 | 2x4 | DRY | No.2 | SPF |
| 7 - 5 | 2x4 | DRY | No.2 | SPF |

ALL WEBS 2x3 DRY No.2 SPF  
EXCEPT

**PLATES (table is in inches)**

| JT | TYPE    | PLATES | W   | LEN | Y    | X    |
|----|---------|--------|-----|-----|------|------|
| 2  | TMVW-t  | MT20   | 3.0 | 5.0 | 1.50 | 2.00 |
| 3  | TTW+p   | MT20   | 3.0 | 4.0 | 2.25 | 1.50 |
| 4  | TMVW-t  | MT20   | 3.0 | 5.0 | 1.50 | 2.00 |
| 5  | BMV1+p  | MT20   | 2.0 | 4.0 |      |      |
| 6  | BMVWW-t | MT20   | 3.0 | 6.0 |      |      |
| 7  | BMV1+p  | MT20   | 2.0 | 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 | REQRD BRG |
|----|-------------------------|---------------------------------|-----------|-----------|
| 7  | 382                     | 382                             | 3-0       | 3-0       |
| 5  | 273                     | 273                             | 3-0       | 3-0       |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE | MAX/MIN. COMPONENT REACTIONS | PERM. LIVE | WIND  | DEAD   | SOIL  |
|----|-----------|------------------------------|------------|-------|--------|-------|
| 7  | 265       | 199 / 0                      | 0 / 0      | 0 / 0 | 66 / 0 | 0 / 0 |
| 5  | 191       | 134 / 0                      | 0 / 0      | 0 / 0 | 57 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7, 5

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

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

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

| MEMB. | CHORDS MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | LC1 MAX. CSI (LC) | MAX. UNBRACED LENGTH | MEMB. | WEBS MAX. FACTORED FORCE (LBS) | MAX. CSI (LC) |
|-------|----------------------------------|---------------------------|-------------------|----------------------|-------|--------------------------------|---------------|
| FR-TO |                                  | FROM TO                   |                   |                      | FR-TO |                                |               |
| 1-2   | 0 / 27                           | -77.4 -77.4               | 0.11 (1)          | 10.00                | 6-3   | -22 / 42                       | 0.01 (4)      |
| 2-3   | -199 / 0                         | -77.4 -77.4               | 0.11 (1)          | 6.25                 | 2-6   | 0 / 177                        | 0.04 (1)      |
| 3-4   | -199 / 0                         | -77.4 -77.4               | 0.11 (1)          | 6.25                 | 6-4   | 0 / 177                        | 0.04 (1)      |
| 7-2   | -361 / 0                         | 0.0 0.0                   | 0.04 (1)          | 7.81                 |       |                                |               |
| 5-4   | -252 / 0                         | 0.0 0.0                   | 0.03 (1)          | 7.81                 |       |                                |               |
| 7-6   | 0 / 0                            | -17.5 -17.5               | 0.04 (4)          | 10.00                |       |                                |               |
| 6-5   | 0 / 0                            | -17.5 -17.5               | 0.04 (4)          | 10.00                |       |                                |               |

**DESIGN CRITERIA**

**SPECIFIED LOADS:**

|            |               |
|------------|---------------|
| TOP CH.    | LL = 23.3 PSF |
|            | DL = 3.0 PSF  |
| BOT CH.    | LL = 0.0 PSF  |
|            | DL = 7.0 PSF  |
| TOTAL LOAD | = 33.3 PSF    |

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

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

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

(55% OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 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=0.11/1.00 (2-3:1), BC=0.04/1.00 (5-6:4),  
WB=0.04/1.00 (4-6:1), SSI=0.07/1.00 (2-3:1)

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 (PSI) | SECTION (PLI) |
|-------|-----------|-------------|---------------|
|       | MAX       | MIN         | MAX MIN       |
| MT20  | 618       | 354         | 1667 822      |
|       |           |             | 2284 1656     |

PLATE PLACEMENT TOL. = 0.250 inches

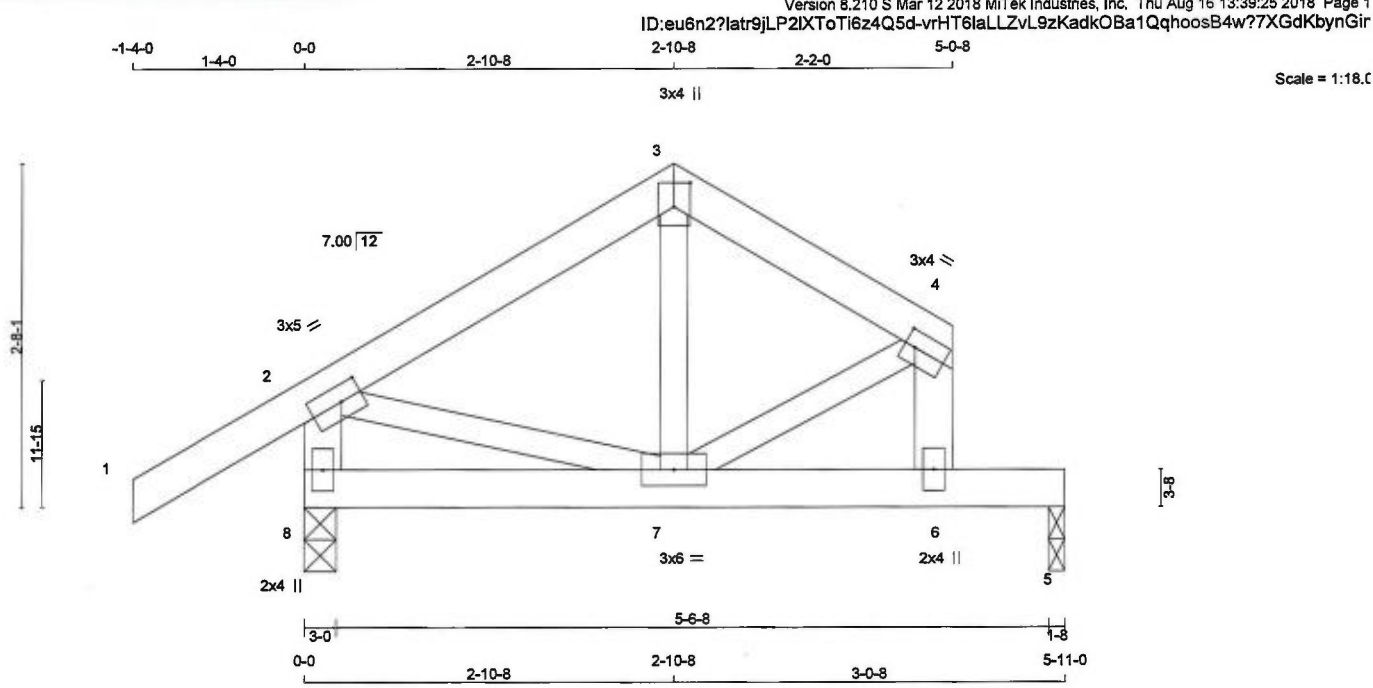
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.33 (6) (INPUT = 0.90 )  
JSI METAL= 0.09 (4) (INPUT = 1.00 )



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





| LUMBER            |        |      |        |
|-------------------|--------|------|--------|
| N. L. G. A. RULES | CHORDS | SIZE | LUMBER |
| 1 - 3             | 2x4    | DRY  | No.2   |
| 3 - 4             | 2x4    | DRY  | No.2   |
| 8 - 2             | 2x4    | DRY  | No.2   |
| 6 - 4             | 2x4    | DRY  | No.2   |
| 8 - 5             | 2x4    | DRY  | No.2   |
| ALL WEBS EXCEPT   | 2x3    | DRY  | No.2   |

DRY: SEASONED LUMBER.

| PLATES (table is in inches) |         |        |     |     |           |
|-----------------------------|---------|--------|-----|-----|-----------|
| JT                          | TYPE    | PLATES | W   | LEN | Y X       |
| 2                           | TMVV-t  | MT20   | 3.0 | 5.0 | 1.50 2.00 |
| 3                           | TTW+p   | MT20   | 3.0 | 4.0 | 2.25 1.50 |
| 4                           | TMVV-t  | MT20   | 3.0 | 4.0 | 1.50 1.00 |
| 6                           | BMV+p   | MT20   | 2.0 | 4.0 |           |
| 7                           | BMVVV-t | MT20   | 3.0 | 6.0 |           |
| 8                           | BMV1+p  | MT20   | 2.0 | 4.0 |           |

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

| FACTORED<br>GROSS REACTION |      | MAXIMUM FACTORED<br>GROSS REACTION |      | INPUT<br>BRG | REQRD<br>BRG |       |       |
|----------------------------|------|------------------------------------|------|--------------|--------------|-------|-------|
| JT                         | VERT | HORZ                               | DOWN | HORZ         | UPLIFT       | IN-SX | IN-SX |
| 8                          | 389  | 0                                  | 389  | 0            | 0            | 3-0   | 3-0   |
| 5                          | 281  | 0                                  | 281  | 0            | 0            | 1-8   | 1-8   |

| UNFACTORED REACTIONS |           |                               |      |           |      |      |      |
|----------------------|-----------|-------------------------------|------|-----------|------|------|------|
| JT                   | 1ST LCASE | MAX./MIN. COMPONENT REACTIONS |      |           |      |      |      |
|                      | COMBINED  | SNOW                          | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| 8                    | 271       | 203/0                         | 0/0  | 0/0       | 0/0  | 68/0 | 0/0  |
| 5                    | 197       | 138/0                         | 0/0  | 0/0       | 0/0  | 59/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 8, 5

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

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

| LOADING               |                           |                           |               |                      |       |                           |               |                      |  |
|-----------------------|---------------------------|---------------------------|---------------|----------------------|-------|---------------------------|---------------|----------------------|--|
| TOTAL LOAD CASES: (4) |                           |                           |               |                      |       |                           |               |                      |  |
| CHORDS                |                           |                           |               |                      | WEBS  |                           |               |                      |  |
| MEMB.                 | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. LC1 (LC) | MAX. UNBRACED LENGTH | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. LC1 (LC) | MAX. UNBRACED LENGTH |  |
| FR-TO                 |                           | FROM TO                   |               |                      | FR-TO |                           |               |                      |  |
| 1-2                   | 0 / 27                    | -77.4 -77.4               | 0.11 (1)      | 10.00                | 7-3   | 0 / 53                    | 0.02 (4)      |                      |  |
| 2-3                   | -230 / 0                  | -77.4 -77.4               | 0.11 (1)      | 6.25                 | 2-7   | 0 / 204                   | 0.05 (1)      |                      |  |
| 3-4                   | -230 / 0                  | -77.4 -77.4               | 0.06 (1)      | 6.25                 | 7-4   | 0 / 222                   | 0.05 (1)      |                      |  |
| 8-2                   | -383 / 0                  | 0.0 0.0                   | 0.04 (1)      | 7.81                 |       |                           |               |                      |  |
| 6-4                   | -300 / 0                  | 0.0 0.0                   | 0.03 (1)      | 7.81                 |       |                           |               |                      |  |
| 8-7                   | 0 / 0                     | -17.5 -17.5               | 0.07 (1)      | 10.00                |       |                           |               |                      |  |
| 7-6                   | 0 / 0                     | -17.5 -17.5               | 0.28 (1)      | 10.00                |       |                           |               |                      |  |
| 6-5                   | 0 / 0                     | -94.9 -94.9               | 0.28 (1)      | 10.00                |       |                           |               |                      |  |

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 23.3 PSF  
DL = 3.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 33.3 PSF

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

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

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

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")  
ALLOWABLE DEFL.(TL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.11/1.00 (2-3:1), BC=0.28/1.00 (6-7:1), WB=0.05/1.00 (4-7:1), SSI=0.22/1.00 (5-6:1)

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     |
| MT20        | 618       | 354   | 1667    |
|             | 822       | 2284  | 1656    |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

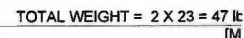
JSI GRIP= 0.76 (4) (INPUT = 0.90 )  
JSI METAL= 0.10 (2) (INPUT = 1.00 )



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



Scale = 1:22.5



## BEARINGS

| BEARINGS |                            |      | MAXIMUM FACTORED |      |        | INPUT | REQRD |
|----------|----------------------------|------|------------------|------|--------|-------|-------|
| JT       | FACTORED<br>GROSS REACTION |      | GROSS REACTION   |      |        | BRG   | BRG   |
|          | VERT                       | HORZ | DOWN             | HORZ | UPLIFT | IN-SX | IN-SX |
| 6        | 384                        | 0    | 384              | 0    | 0      | 3-0   | 3-0   |
| 4        | 218                        | 0    | 218              | 0    | 0      | 1-8   | 1-8   |

### UNFACTORED REACTIONS

| 1ST LCASE |          | MAX./MIN. COMPONENT REACTIONS |      |           |      |      |      |
|-----------|----------|-------------------------------|------|-----------|------|------|------|
| JT        | COMBINED | SNOW                          | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| 6         | 268      | 200/0                         | 0/0  | 0/0       | 0/0  | 67/0 | 0/0  |
| 4         | 154      | 100/0                         | 0/0  | 0/0       | 0/0  | 54/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO 2 OR BETTER AT JOINT(S) 6. 4

## 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

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

| CHORDS |                           |                           |                  |                    | WEBS  |                           |              |  |  |
|--------|---------------------------|---------------------------|------------------|--------------------|-------|---------------------------|--------------|--|--|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | MEMB. | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |  |  |
| FR-TO  |                           | FROM TO                   |                  |                    | FR-TO |                           |              |  |  |
| 1-2    | 0 / 27                    | -77.4                     | -77.4 0.11 (1)   | 10.00              | 2-5   | 0 / 0                     | 0.00 (1)     |  |  |
| 2-3    | 0 / 0                     | -77.4                     | -77.4 0.33 (1)   | 10.00              |       |                           |              |  |  |
| 5-3    | -195 / 0                  | 0.0                       | 0.0 0.05 (1)     | 7.81               |       |                           |              |  |  |
| 6-2    | -304 / 0                  | 0.0                       | 0.0 0.03 (1)     | 7.81               |       |                           |              |  |  |
| 6-5    | 0 / 0                     | -17.5                     | -17.5 0.25 (1)   | 10.00              |       |                           |              |  |  |
| 5-4    | 0 / 0                     | -17.5                     | -17.5 0.25 (1)   | 10.00              |       |                           |              |  |  |

## DESIGN CRITERIA

SPECIFIED LOADS:

|              |      |      |     |
|--------------|------|------|-----|
| TOP CH.      | LL = | 23.3 | PSF |
|              | DL = | 3.0  | PSF |
| BOT CH.      | LL = | 0.0  | PSF |
|              | DL = | 7.0  | PSF |
| TOTAL LOAD = |      | 33.3 | PSF |

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

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

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

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 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/555 (0.13")

CSI: TC=0.33/1.00 (2-3:1), BC=0.25/1.00 (5-6:1), WB=0.00/1.00 (2-5:1), SSI=0.17/1.00 (4-5:1)

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    | 1656 |

PLATE PLACEMENT TOL. = 0.250 inches

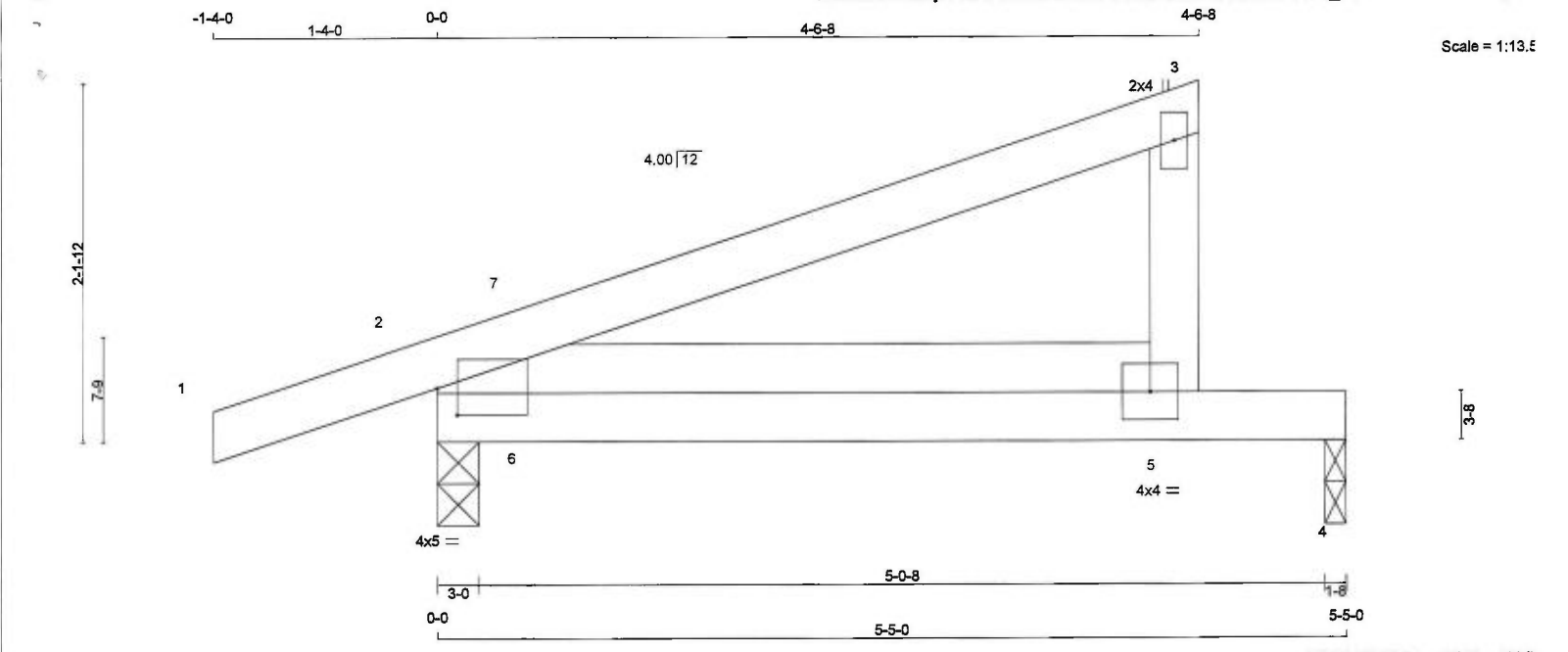
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.26 (2) (INPUT = 0.90 )  
JSI METAL= 0.06 (6) (INPUT = 1.00 )



**READ ALL NOTES ON THIS PAGE AND ON  
ENGINEERING NOTE PAGE ENP-1. THIS  
NOTE PAGE IS AN INTEGRAL PART OF  
THIS DRAWING AS IT CONTAINS  
SPECIFICATIONS AND CRITERIA USED IN  
THE DESIGN OF THIS COMPONENT.**





LUMBER

N. L. G. A. RULES

CHORDS

SIZE

1 - 3

2x4

DRY

No.2

5 - 3

2x4

DRY

No.2

2 - 4

2x4

DRY

No.2

REINFORCING MEMBERS

HW1

2x4

DRY

No.2

DRY: SEASONED LUMBER.

DESCR.

SPF

SPF

SPF

SPF

2

7

1

6

5

4

4x5 =

2x4

4x4 =

3-0

5-0-8

1-8

5-5-0

5-5-0

0-0

5-5-0

TOTAL WEIGHT = 5 X 20 = 100 lb

[M]

| DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER |  |                |      |                  |      |        |       |       |  |
|-----------------------------------------------------------------------------------------------|--|----------------|------|------------------|------|--------|-------|-------|--|
| BEARINGS                                                                                      |  |                |      |                  |      |        |       |       |  |
|                                                                                               |  | FACTORED       |      | MAXIMUM FACTORED |      | INPUT  |       | REQRD |  |
|                                                                                               |  | GROSS REACTION |      | GROSS REACTION   |      | BRG    |       | BRG   |  |
| JT                                                                                            |  | VERT           | HORZ | DOWN             | HORZ | UPLIFT | IN-SX | IN-SX |  |
| 2                                                                                             |  | 358            | 0    | 358              | 0    | 0      | 3-0   | 3-0   |  |
| 4                                                                                             |  | 195            | 0    | 195              | 0    | 0      | 1-8   | 1-8   |  |

| UNFACTORED REACTIONS |  |           |         |                               |           |       |        |       |  |
|----------------------|--|-----------|---------|-------------------------------|-----------|-------|--------|-------|--|
|                      |  | 1ST LCASE |         | MAX./MIN. COMPONENT REACTIONS |           |       |        |       |  |
| JT                   |  | COMBINED  | SNOW    | LIVE                          | PERM.LIVE | WIND  | DEAD   | SOIL  |  |
| 2                    |  | 249       | 187 / 0 | 0 / 0                         | 0 / 0     | 0 / 0 | 62 / 0 | 0 / 0 |  |
| 4                    |  | 138       | 89 / 0  | 0 / 0                         | 0 / 0     | 0 / 0 | 49 / 0 | 0 / 0 |  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 2, 4

PLATES (table is in inches)

JT

TYPE

PLATES

W

LEN

Y

X

2

TMBMW1-I

MT20

4.0

5.0

2.00

1.50

3

TMV+p

MT20

2.0

4.0

5

BMVW-t

MT20

4.0

4.0

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

VERT.

LOAD

LC1

MAX

CS1

LC

FACTORED

FROM

TO

FR-TO

1-2

0 / 5

-77.4

-77.4

0.10

(1)

10.00

5-7

-550 / 0

0.11

(1)

2-7

-617 / 0

-77.4

-77.4

0.12

(1)

6.25

6-7

0 / 209

0.00

(1)

7-3

0 / 4

-77.4

-77.4

0.15

(1)

10.00

5-3

-135 / 0

0.0

0.0

0.02

(1)

7.81

WEBS

MEMB.

MAX. FACTORED

FORCE

VERT.

LOAD

LC1

MAX

CS1

LC

FACTORED

FROM

TO

FR-TO

1-2

0 / 5

-77.4

-77.4

0.10

(1)

10.00

5-7

-550 / 0

0.11

(1)

2-7

-617 / 0

-77.4

-77.4

0.12

(1)

6.25

6-7

0 / 209

0.00

(1)

7-3

0 / 4

-77.4

-77.4

0.15

(1)

10.00

5-3

-135 / 0

0.0

0.0

0.02

(1)

7.81

2-6

0 / 535

-17.5

-17.5

0.17

(1)

10.00

6-5

0 / 535

-17.5

-17.5

0.34

(1)

10.00

5-4

0 / 0

-17.5

-17.5

0.26

(1)

10.00

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.

LL

=

23.3

PSF

DL

=

3.0

PSF

BOT CH.

LL

=

0.0

PSF

DL

=

7.0

PSF

TOTAL LOAD

=

33.3

PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, BCBC 2012, ABC 2014

- CSA 086-09

- TPIC 2011

(55% OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")

CALCULATED VERT. DEFL.(LL) = L/999 (0.04")

ALLOWABLE DEFL.(TL)= L/360 (0.19")

CALCULATED VERT. DEFL.(TL) = L/882 (0.07")

CSI: TC=0.15/1.00 (3-7:1), BC=0.34/1.00 (5-6:1), WB=0.11/1.00 (5-7:1), SSI=0.15/1.00 (4-5:1)

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

1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.53 (5) (INPUT = 0.90 )

JSI METAL= 0.20 (5) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER

N.A. EL-MASRI

Aug 16, 2018

PROVING OF ONTARIO

READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

KOTT

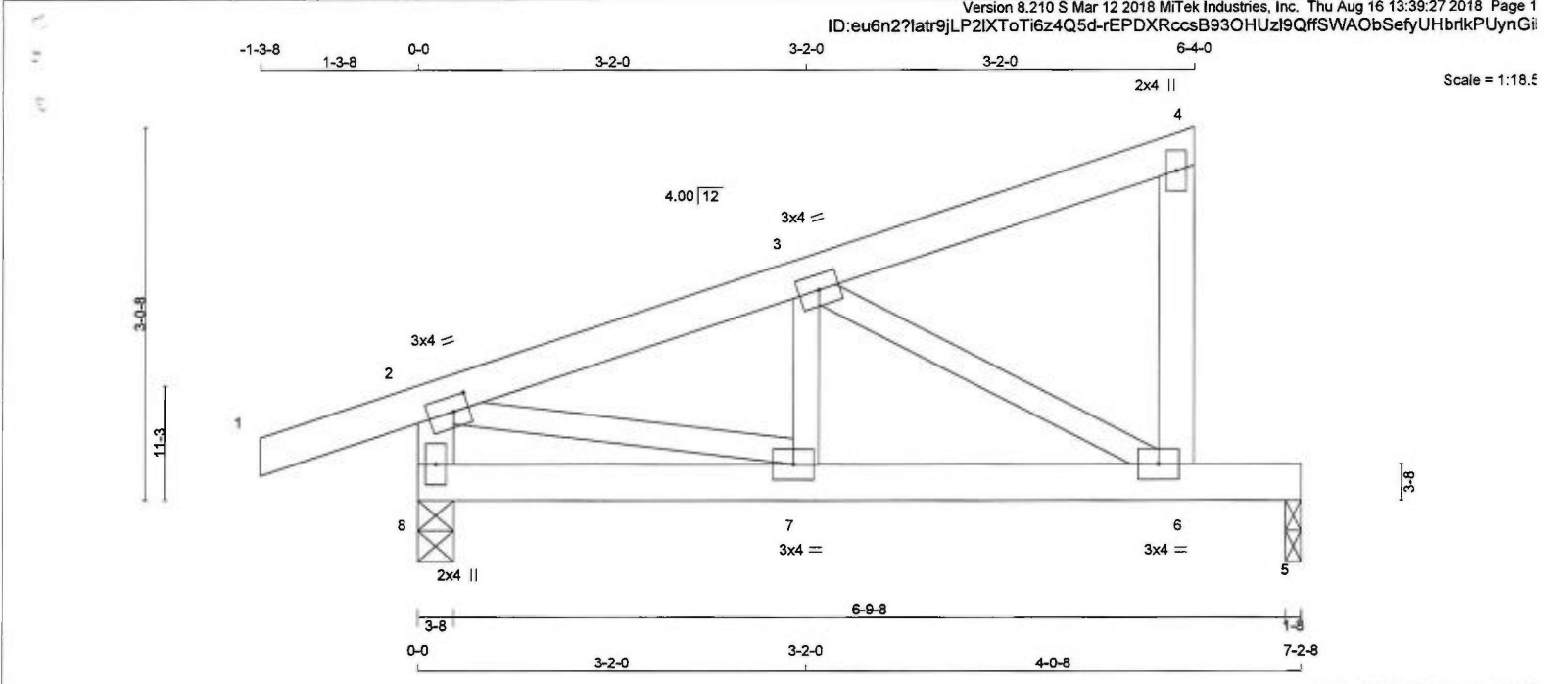


DRY: SEASONED LUMBER.



|       |           |       |       |             |       |
|-------|-----------|-------|-------|-------------|-------|
| 25-24 | 0 / 0     | -17.5 | -17.5 | 0.17 (4)    | 10.00 |
| 24-23 | 0 / 3296  | -17.5 | -17.5 | 0.61 (1)    | 10.00 |
| 23-22 | 0 / 2794  | -17.5 | -17.5 | 0.53 (1)    | 10.00 |
| 22-21 | 0 / 2794  | -17.5 | -17.5 | 0.53 (1)    | 10.00 |
| 21-20 | 0 / 2161  | -17.5 | -17.5 | 0.43 (1)    | 10.00 |
| 20-19 | 0 / 2161  | -17.5 | -17.5 | 0.43 (1)    | 10.00 |
| 19-18 | 0 / 1731  | -17.5 | -17.5 | 0.33 (1)    | 10.00 |
| 18-17 | -1039 / 0 | -17.5 | -17.5 | 0.10 (4)    | 6.09  |
| 16-17 | 0 / 18    | 0.0   | 0.0   | 0.05 (1)    | 4.78  |
| 17-10 | -2289 / 0 | 0.0   | 0.0   | 0.19-19 (1) | 10.00 |
| 16-15 | -20 / 0   | -17.5 | -17.5 | 0.04 (4)    | 6.25  |
| 15-14 | 0 / 0     | -17.5 | -17.5 | 0.05 (4)    | 10.00 |

JSI GRIP= 0.89 (18) (INPUT = 0.90 )  
JSI METAL= 0.82 (24) (INPUT = 1.00 )



**LUMBER**  
N. L. G. A. RULES  
CHORDS SIZE LUMBER  
1 - 4 2x4 DRY No.2  
6 - 4 2x4 DRY No.2  
8 - 2 2x4 DRY No.2  
8 - 5 2x4 DRY No.2  
ALL WEBS 2x3 DRY No.2  
EXCEPT  
DRY: SEASONED LUMBER.

**DESCR.**  
SPF  
SPF  
SPF  
SPF  
SPF  
SPF

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

| JT | FACTORED GROSS REACTION |      | MAXIMUM FACTORED GROSS REACTION |      | INPUT BRG | REQRD BRG |
|----|-------------------------|------|---------------------------------|------|-----------|-----------|
|    | VERT                    | HORZ | DOWN                            | HORZ |           |           |
| 8  | 441                     | 0    | 441                             | 0    | 0         | 3-8       |
| 5  | 278                     | 0    | 278                             | 0    | 0         | 1-8       |

  
**UNFACTORED REACTIONS**

| JT | 1ST LCASE |         | MAX./MIN. COMPONENT REACTIONS |           | WIND  | DEAD   | SOIL  |
|----|-----------|---------|-------------------------------|-----------|-------|--------|-------|
|    | COMBINED  | SNOW    | LIVE                          | PERM.LIVE |       |        |       |
| 8  | 307       | 228 / 0 | 0 / 0                         | 0 / 0     | 0 / 0 | 80 / 0 | 0 / 0 |
| 5  | 197       | 130 / 0 | 0 / 0                         | 0 / 0     | 0 / 0 | 67 / 0 | 0 / 0 |

  
**BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 8, 5**  
**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.

**DESIGN CRITERIA**  
**SPECIFIED LOADS:**  
TOP CH. LL = 23.3 PSF  
DL = 3.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 33.3 PSF  
  
**SPACING = 24.0 IN. C/C**  
  
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010  
  
THIS DESIGN COMPLIES WITH:  
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014  
- CSA 086-09  
- TPIC 2011  
  
(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD  
  
ALLOWABLE DEFL.(LL)= L/360 (0.24")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")  
ALLOWABLE DEFL.(TL)= L/360 (0.24")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")  
  
CSI: TC=0.10/1.00 (1-2:1), BC=0.39/1.00 (8-7:1), WB=0.11/1.00 (3-6:1), SSI=0.22/1.00 (5-6:1)  
  
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 1656  
  
PLATE PLACEMENT TOL. = 0.250 inches  
  
PLATE ROTATION TOL. = 5.0 Deg.  
  
JSI GRIP= 0.88 (2) (INPUT = 0.90 )  
JSI METAL= 0.20 (2) (INPUT = 1.00 )

**PLATES (table is in inches)**

| JT | TYPE   | PLATES | W   | LEN | Y    | X    |
|----|--------|--------|-----|-----|------|------|
| 2  | TMVV-t | MT20   | 3.0 | 4.0 | 1.50 | 1.50 |
| 3  | TMVV-t | MT20   | 3.0 | 4.0 |      |      |
| 4  | TMV+p  | MT20   | 2.0 | 4.0 |      |      |
| 6  | BMVV-t | MT20   | 3.0 | 4.0 |      |      |
| 7  | BMVV-t | MT20   | 3.0 | 4.0 |      |      |
| 8  | BMV1+p | MT20   | 2.0 | 4.0 |      |      |

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

| MEMB. | CHORDS                    |                  | FACTORED |           | MAX. UNBRAC LENGTH | MEMB. | WEBS                      |           |
|-------|---------------------------|------------------|----------|-----------|--------------------|-------|---------------------------|-----------|
|       | MAX. FACTORED FORCE (LBS) | VERT. LOAD (PLF) | LC1      | MAX. (LC) |                    |       | MAX. FACTORED FORCE (LBS) | MAX. (LC) |
| FR-TO |                           | FROM             | TO       |           |                    | FR-TO |                           |           |
| 1-2   | 0 / 16                    | -77.4            | -77.4    | 0.10 (1)  | 10.00              | 7-3   | 0 / 83                    | 0.03 (4)  |
| 2-3   | -455 / 0                  | -77.4            | -77.4    | 0.09 (1)  | 6.25               | 3-6   | -498 / 0                  | 0.11 (1)  |
| 3-4   | -8 / 0                    | -77.4            | -77.4    | 0.09 (1)  | 10.00              | 2-7   | 0 / 448                   | 0.10 (1)  |
| 6-4   | -96 / 0                   | 0.0              | 0.0      | 0.01 (1)  | 7.81               |       |                           |           |
| 8-2   | -434 / 0                  | 0.0              | 0.0      | 0.04 (1)  | 7.81               |       |                           |           |
| 8-7   | 0 / 0                     | -17.5            | -17.5    | 0.09 (1)  | 10.00              |       |                           |           |
| 7-6   | 0 / 439                   | -17.5            | -17.5    | 0.39 (1)  | 10.00              |       |                           |           |
| 6-5   | 0 / 0                     | -17.5            | -17.5    | 0.32 (1)  | 10.00              |       |                           |           |

Aug 16, 2018

READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



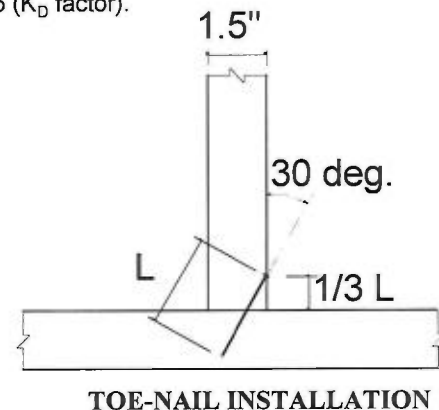
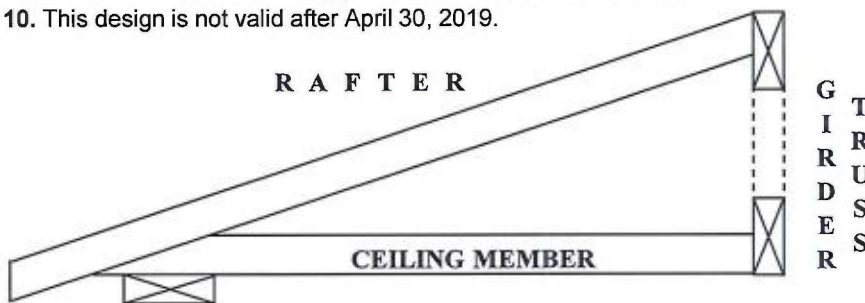
## BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B37579H1

| NAIL TYPE      | LENGTH<br>(IN) | DIAMETER<br>(IN) | NAIL LATERAL CAPACITY (LB) |        |
|----------------|----------------|------------------|----------------------------|--------|
|                |                |                  | S-P-F                      | D. FIR |
| COMMON<br>WIRE | 3.00           | 0.144            | 132                        | 147    |
|                | 3.25           | 0.144            | 132                        | 147    |
|                | 3.50           | 0.160            | 159                        | 177    |

## NOTES:

1. Rafter and ceiling members may be anchored to top and bottom chords of girder truss by toe-nailing rafter and ceiling members to girder chords provided the reaction does not exceed the lateral capacities in the table. Hangers (specified by others) are required for reactions higher than the maximum toe-nail capacity. Reactions are based on factored loads.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor  $J_A$  in CSA O86-09, section 10.9.4.1.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in tables below.
5. Nail values in table are based on the following relative lumber densities:  $G = 0.42$  (SPF),  $G = 0.49$  (D. Fir).
6. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of  $30^\circ$  to the grain of the member (See next page for nailing on bearing plate).
7. For loads due to **wind** the nail lateral capacity in this table may be multiplied by 1.15 ( $K_D$  factor).
8. Lumber must be dry ( < 19% moisture content ) at the time of nail installation.
9. Nail values in this table comply with CSA O86-09, section 10.9.4
10. This design is not valid after April 30, 2019.



| Nail type      | Common wire                 | Common spiral | Common wire           |
|----------------|-----------------------------|---------------|-----------------------|
| Nail dia. (in) | 0.160                       | 0.152         | 0.144                 |
|                | ( 3.5" nail )               |               | ( 3" and 3.25" nail ) |
| LUMBER SIZE    | MAXIMUM NUMBER OF TOE-NAILS |               |                       |
| 2X4 SPF        | 2                           | 2             | 3                     |
| 2X4 D. Fir     | 2                           | 2             | 2                     |
| 2X6 SPF        | 4                           | 4             | 4                     |
| 2X6 D. Fir     | 3                           | 3             | 3                     |



MiTek Canada Inc  
100 Industrial Rd.  
Bradford, Ontario L3Z 3G7

PEO  
Certificate No. 10889485



April 26, 2017

## BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B37579H2

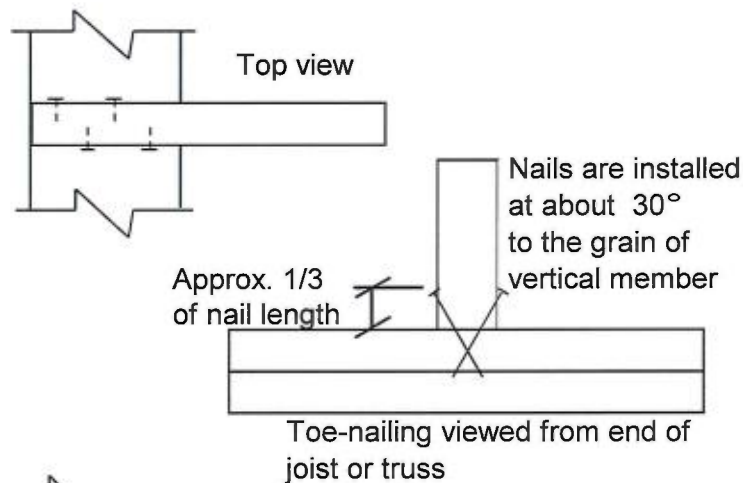
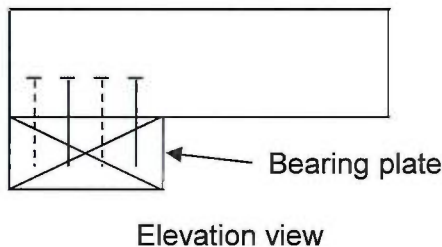
| NAIL TYPE | LENGTH<br>(IN) | DIAMETER<br>(IN) | NAIL WITHDRAWAL CAPACITY (LB) |        |
|-----------|----------------|------------------|-------------------------------|--------|
|           |                |                  | S-P-F                         | D. FIR |
| COMMON    | 3.00           | 0.144            | 30                            | 42     |
| WIRE      | 3.25           | 0.144            | 32                            | 45     |
|           | 3.50           | 0.160            | 38                            | 52     |

Note: If using truss with D. Fir lumber and S-P-F bearing plate, use values in table for S-P-F.

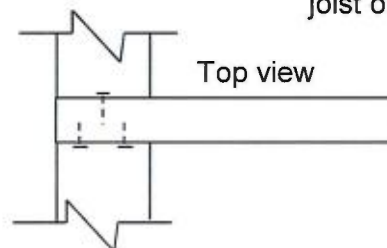
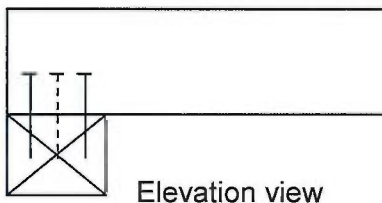
## NOTES:

1. Truss chord, rafter, or ceiling members may be anchored to bearing plate by toe-nails, provided that the actual factored uplift force due to **wind or earthquake** load does not exceed the withdrawal capacities in the table. Hangers (specified by others) are required for uplift forces that are higher than the maximum toe-nail withdrawal capacity.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor  $J_A$  in CSA O86-09, section 10.9.5.2.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in table above.
5. Nail values in table are based on the following relative lumber densities:  $G = 0.42$ (SPF),  $G = 0.49$ (D. Fir).
6. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of  $30^\circ$  to the grain of the member (See drawing on detail B37579H1).
7. Lumber must be dry ( < 19% moisture content ) at the time of nail installation.
8. Nail values in this table comply with CSA O86-09, section 10.9.5
9. This design is not valid after April 30, 2019

## Toe-nailing on 2x6 Bearing Plate



## Toe-nailing on 2x4 Bearing Plate

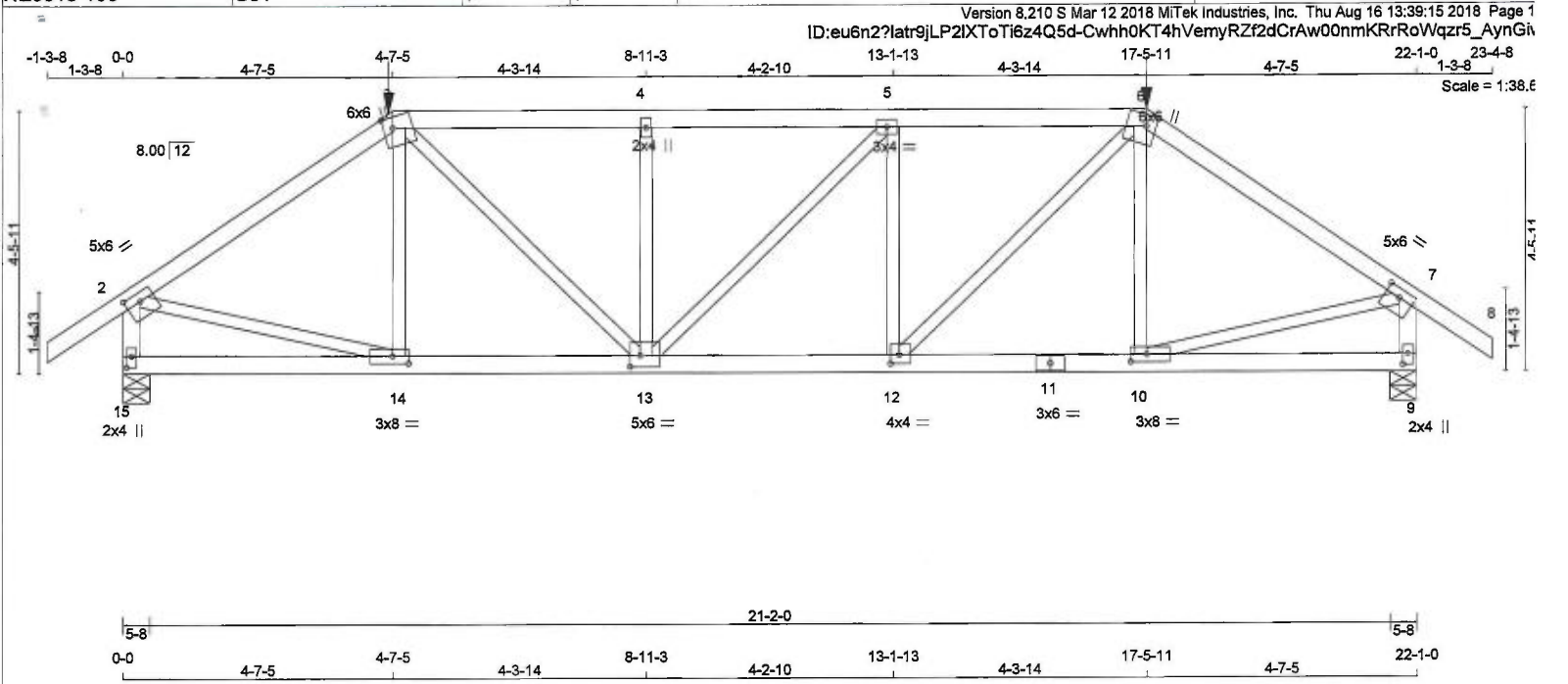


**MiTek**®  
MiTek Canada Inc  
100 Industrial Rd.  
Bradford, Ontario L3Z 3G7

PEO  
Certificate No. 10889485



April 26, 2017



**LUMBER**  
N. L. G. A. RULES  
CHORDS SIZE  
1 - 3 2x4 DRY No.2  
3 - 6 2x4 DRY No.2  
6 - 8 2x4 DRY No.2  
15 - 2 2x4 DRY No.2  
9 - 7 2x4 DRY No.2  
15 - 11 2x4 DRY No.2  
11 - 9 2x4 DRY No.2  
  
ALL WEBS 2x3 DRY No.2  
EXCEPT  
  
DRY: SEASONED LUMBER.

**DESCR.**  
SPF  
SPF  
SPF  
SPF  
SPF  
SPF  
SPF  
  
SPF

**DESIGN CRITERIA**  
  
SPECIFIED LOADS:  
TOP CH. LL = 23.3 PSF  
DL = 3.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 33.3 PSF  
  
SPACING = 24.0 IN. C/C  
  
LOADING IN FLAT SECTION BASED ON A  
SLOPE OF 2.00/12 MINIMUM  
  
GIRDER TYPE: CPrimeHip  
SIDE SETBACK = 4'-7-5  
END SETBACK = 6'-0-0  
END WALL WIDTH = 5'-8  
CORNER FRAMING TYPE: CONVENTIONAL  
END JACK TYPE: CONVENTIONAL  
APPLIED TO FRONT SIDE  
- ADDTL LOADS BASED ON 55 % OF GSL.  
  
THIS TRUSS IS DESIGNED FOR RESIDENTIAL  
OR SMALL BUILDING REQUIREMENTS OF  
PART 9, NBCC 2010  
  
THIS DESIGN COMPLIES WITH:  
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014  
- CSA 086-09  
- TPIC 2011  
  
(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F.  
RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED  
ROOF LIVE LOAD  
  
ALLOWABLE DEFL.(LL)= L/360 (0.74")  
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.09")  
ALLOWABLE DEFL.(TL)= L/360 (0.74")  
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.17")  
  
CSI: TC=0.52/1.00 (5-6:1) , BC=0.55/1.00 (12-13:1)  
WB=0.48/1.00 (2-14:1) , SSI=0.32/1.00 (5-6:1)  
  
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  
  
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

**BEARINGS**  
FACTORED GROSS REACTION  
JT VERT HORZ  
15 2033 0  
9 2033 0  
  
MAXIMUM FACTORED GROSS REACTION  
DOWN HORZ  
2033 0  
2033 0  
  
INPUT BRG UPLIFT IN-SX  
0 0 0  
5-8 5-8  
  
REQRD BRG IN-SX  
5-8 5-8  
  
**UNFACTORED REACTIONS**  
1ST LCASE MAX/MIN. COMPONENT REACTIONS  
JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL  
15 1425 1004 / 0 0 / 0 0 / 0 0 / 0 421 / 0 0 / 0  
9 1425 1004 / 0 0 / 0 0 / 0 0 / 0 421 / 0 0 / 0  
  
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 15, 9  
  
**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.61 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) VERT. LOAD (PLF) MAX FACTORED VERT. LOAD (PLF) MAX FACTORED VERT. LOAD (PLF) MAX FACTORED VERT. LOAD (PLF)  
FR-TO FROM TO LENGTH FR-TO FROM TO LENGTH  
1-2 0 / 29 -77.4 -77.4 0.11 (1) 10.00 14-3 -259 / 65 0.08 (1)  
2-3 -2255 / 0 -77.4 -77.4 0.45 (1) 4.08 3-13 0 / 1152 0.29 (1)  
3-4 -2697 / 0 -145.9 -145.9 0.51 (1) 3.63 13-4 -669 / 0 0.21 (1)  
4-5 -2697 / 0 -145.9 -145.9 0.52 (1) 3.62 13-5 -4 / 0 0.00 (1)  
5-6 -2700 / 0 -145.9 -145.9 0.52 (1) 3.61 12-5 -670 / 0 0.21 (1)  
6-7 -2255 / 0 -77.4 -77.4 0.45 (1) 4.08 12-6 0 / 1157 0.29 (1)  
7-8 0 / 29 -77.4 -77.4 0.11 (1) 10.00 10-6 -261 / 65 0.08 (1)  
15-2 -1969 / 0 0.0 0.0 0.22 (1) 5.95 2-14 0 / 1922 0.48 (1)  
9-7 -1968 / 0 0.0 0.0 0.22 (1) 5.96 10-7 0 / 1922 0.48 (1)  
  
15-14 0 / 0 -33.0 -33.0 0.18 (4) 10.00  
14-13 0 / 1867 -33.0 -33.0 0.43 (1) 10.00  
13-12 0 / 2700 -33.0 -33.0 0.55 (1) 10.00  
12-11 0 / 1867 -33.0 -33.0 0.43 (1) 10.00  
11-10 0 / 1867 -33.0 -33.0 0.43 (1) 10.00  
10-9 0 / 0 -33.0 -33.0 0.18 (4) 10.00  
  
FACTORED CONCENTRATED LOADS (LBS)  
JT LOC. LC1 MAX- MAX+ FACE DIR. TYPE  
3 4-7-5 -267 -267 - FRONT VERT TOTAL  
6 17-5-11 -267 -267 - FRONT VERT TOTAL

**PLATES (table is in inches)**  
JT TYPE PLATES W LEN Y X  
2 TMVW-t MT20 5.0 6.0 1.75 3.00  
3 TTWW+m MT20 6.0 6.0 2.25 2.00  
4 TMW+w MT20 2.0 4.0  
5 TMVW-t MT20 3.0 4.0  
6 TTWW+m MT20 6.0 6.0 2.25 2.00  
7 TMVW-t MT20 5.0 6.0 1.75 3.00  
9 BMV1+p MT20 2.0 4.0 2.25 1.00  
10 BMWW-t MT20 3.0 8.0 1.50 3.25  
11 BS-t MT20 3.0 6.0  
12 BMWW-t MT20 4.0 4.0 1.75 1.75  
13 BMWWW-t MT20 5.0 6.0 2.25 2.00  
14 BMWW-t MT20 3.0 8.0 1.50 3.25  
15 BMV1+p MT20 2.0 4.0 2.25 1.00  
  
**HANGERS NOTES**  
1) SPECIAL HANGER(S) OR CONNECTION(S)  
REQUIRED TO SUPPORT CONCENTRATED  
LOAD(S) 267.4 lbs FACTORED DOWN AT  
17-5-11, AND 267.4 lbs FACTORED DOWN AT  
4-7-5 ON TOP CHORD. DESIGN FOR  
UNSPECIFIED CONNECTION(S) IS DELEGATED  
TO THE BUILDING DESIGNER.

**READ ALL NOTES ON THIS PAGE AND ON  
ENGINEERING NOTE PAGE ENP-1. THIS  
NOTE PAGE IS AN INTEGRAL PART OF  
THIS DRAWING AS IT CONTAINS  
SPECIFICATIONS AND CRITERIA USED IN  
THE DESIGN OF THIS COMPONENT.**



PLATE PLACEMENT TOL. = 0.250 inches  
PLATE ROTATION TOL. = 5.0 Deg.  
JSI GRIP= 0.89 (14) (INPUT = 0.90 )  
JSI METAL= 0.60 (2) (INPUT = 1.00 )

READ ALL NOTES ON THIS PAGE AND ON  
ENGINEERING NOTE PAGE ENP-1. THIS  
NOTE PAGE IS AN INTEGRAL PART OF  
THIS DRAWING AS IT CONTAINS  
SPECIFICATIONS AND CRITERIA USED IN  
THE DESIGN OF THIS COMPONENT.





**HANGERS NOTES**  
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 555.7 lbs FACTORED DOWN AT 5-10-12 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

| CHORDS |                           |                           |                  | WEBS               |       |                           |              |
|--------|---------------------------|---------------------------|------------------|--------------------|-------|---------------------------|--------------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | MEMB. | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
| FR-TO  |                           | FROM TO                   |                  |                    | FR-TO |                           |              |
| 1-2    | 0 / 29                    | -77.4                     | -77.4 0.11 (1)   | 10.00              | 12-3  | -151 / 32                 | 0.03 (1)     |
| 2-3    | -1900 / 0                 | -116.8                    | -116.8 0.21 (1)  | 4.64               | 3-11  | -233 / 0                  | 0.07 (1)     |
| 3-4    | -1747 / 0                 | -116.8                    | -116.8 0.20 (1)  | 4.82               | 11-4  | 0 / 957                   | 0.24 (1)     |
| 4-5    | -1322 / 0                 | -77.4                     | -77.4 0.14 (1)   | 5.44               | 4-10  | -272 / 0                  | 0.15 (1)     |
| 5-6    | -1588 / 0                 | -77.4                     | -77.4 0.13 (1)   | 5.08               | 10-5  | 0 / 678                   | 0.17 (1)     |
| 6-7    | -1642 / 0                 | -77.4                     | -77.4 0.14 (1)   | 5.02               | 10-6  | -98 / 0                   | 0.03 (1)     |
| 13-2   | -1832 / 0                 | 0.0                       | 0.0 0.20 (1)     | 6.13               | 9-6   | -166 / 0                  | 0.03 (1)     |
| 8-7    | -1459 / 0                 | 0.0                       | 0.0 0.16 (1)     | 6.73               | 2-12  | 0 / 1677                  | 0.42 (1)     |
|        |                           |                           |                  |                    | 9-7   | 0 / 1446                  | 0.36 (1)     |
| 13-12  | 0 / 0                     | -110.4                    | -110.4 0.09 (1)  | 10.00              |       |                           |              |
| 12-11  | 0 / 1597                  | -110.4                    | -110.4 0.29 (1)  | 10.00              |       |                           |              |
| 11-10  | 0 / 1454                  | -101.5                    | -101.5 0.27 (1)  | 10.00              |       |                           |              |
| 10-9   | 0 / 1376                  | -101.5                    | -101.5 0.26 (1)  | 10.00              |       |                           |              |
| 9-8    | 0 / 0                     | -101.5                    | -101.5 0.09 (1)  | 10.00              |       |                           |              |





**KOTT**

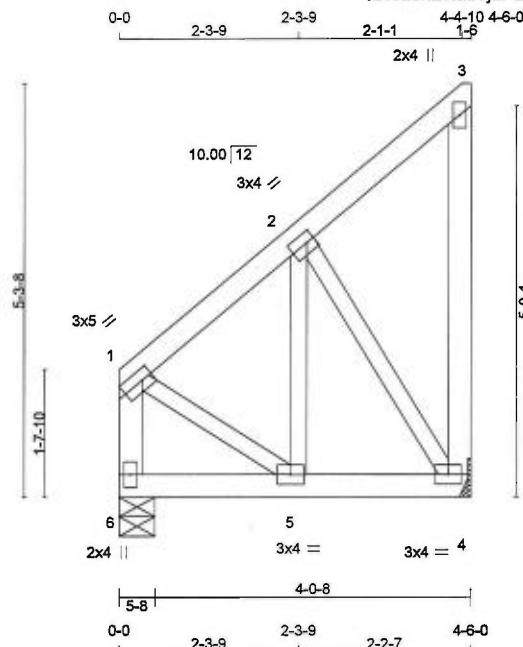
CSI: TC=0.21/1.00 (2-3:1) , BC=0.29/1.00 (11-12:1)  
, WB=0.42/1.00 (2-12:1) , SSI=0.15/1.00 (2-3:1)  
  
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00  
COMP=1.00 SHEAR=1.00 TENS= 1.00  
  
COMPANION LIVE LOAD FACTOR = 0.50  
  
TRUSS PLATE MANUFACTURER IS NOT  
RESPONSIBLE FOR QUALITY CONTROL IN  
THE TRUSS 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= 0.90 (2) (INPUT = 0.90 )  
JSI METAL= 0.48 (12) (INPUT = 1.00 )

READ ALL NOTES ON THIS PAGE AND ON  
ENGINEERING NOTE PAGE ENP-1. THIS  
NOTE PAGE IS AN INTEGRAL PART OF  
THIS DRAWING AS IT CONTAINS  
SPECIFICATIONS AND CRITERIA USED IN  
THE DESIGN OF THIS COMPONENT.





Scale = 1:29.5

TOTAL WEIGHT = 26 lb

| LUMBER            |        |      |        | DESCR. |              |
|-------------------|--------|------|--------|--------|--------------|
| N. L. G. A. RULES | CHORDS | SIZE | LUMBER |        |              |
| 1 - 3             | 2x4    | DRY  | No.2   | SPF    |              |
| 4 - 3             | 2x4    | DRY  | No.2   | SPF    |              |
| 6 - 1             | 2x4    | DRY  | No.2   | SPF    |              |
| 6 - 4             | 2x4    | DRY  | No.2   | SPF    |              |
| ALL WEBS EXCEPT   |        |      |        | 2x3    | DRY No.2 SPF |

DRY: SEASONED LUMBER.

#### PLATES (table is in inches)

| JT | TYPE    | PLATES | W   | LEN | Y    | X    |
|----|---------|--------|-----|-----|------|------|
| 1  | TMVW-t  | MT20   | 3.0 | 5.0 | 1.50 | 1.75 |
| 2  | TMVW-t  | MT20   | 3.0 | 4.0 | 1.50 | 1.25 |
| 3  | TMV+p   | MT20   | 2.0 | 4.0 |      |      |
| 4  | BMVW1-t | MT20   | 3.0 | 4.0 |      |      |
| 5  | BMVW-t  | MT20   | 3.0 | 4.0 |      |      |
| 6  | BMV1+p  | MT20   | 2.0 | 4.0 |      |      |

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

| FACTORED GROSS REACTION |      | MAXIMUM FACTORED GROSS REACTION |      | INPUT BRG |        | REQRD BRG  |       |
|-------------------------|------|---------------------------------|------|-----------|--------|------------|-------|
| JT                      | VERT | HORZ                            | DOWN | HORZ      | UPLIFT | IN-SX      | IN-SX |
| 4                       | 556  | 0                               | 556  | 0         | 0      | MECHANICAL |       |
| 6                       | 556  | 0                               | 556  | 0         | 0      | 5-8        | 5-8   |

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 4 TO RESIST THE MAX FACTORED REACTIONS.

#### UNFACTORED REACTIONS

| 1ST LCASE |          | MAX./MIN. COMPONENT REACTIONS |       |           |       |         |       |  |
|-----------|----------|-------------------------------|-------|-----------|-------|---------|-------|--|
| JT        | COMBINED | SNOW                          | LIVE  | PERM.LIVE | WIND  | DEAD    | SOIL  |  |
| 4         | 390      | 273 / 0                       | 0 / 0 | 0 / 0     | 0 / 0 | 117 / 0 | 0 / 0 |  |
| 6         | 390      | 273 / 0                       | 0 / 0 | 0 / 0     | 0 / 0 | 117 / 0 | 0 / 0 |  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 6

#### BRACING

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

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

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS |                           |                           |                            | WEBS  |                           |                           |                            |
|--------|---------------------------|---------------------------|----------------------------|-------|---------------------------|---------------------------|----------------------------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. FACTORED LC1 MAX (LC) | MEMB. | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. FACTORED LC1 MAX (LC) |
| FR-TO  |                           | FROM                      | TO                         | FR-TO |                           | FROM                      | TO                         |
| 1-2    | -296 / 0                  | -77.4                     | -77.4 0.07 (1)             | 6-25  | 5-2                       | 0 / 329                   | 0.08 (1)                   |
| 2-3    | -13 / 0                   | -77.4                     | -77.4 0.07 (1)             | 6-25  | 2-4                       | -418 / 0                  | 0.11 (1)                   |
| 4-3    | -65 / 0                   | 0.0                       | 0.0 0.03 (1)               | 7.81  | 1-5                       | 0 / 272                   | 0.07 (1)                   |
| 6-1    | -401 / 0                  | 0.0                       | 0.0 0.05 (1)               | 7.81  |                           |                           |                            |
| 6-5    | 0 / 0                     | -169.7                    | -169.7 0.14 (1)            | 10.00 |                           |                           |                            |
| 5-4    | 0 / 236                   | -169.7                    | -169.7 0.18 (1)            | 10.00 |                           |                           |                            |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 23.3 PSF  
DL = 3.0 PSF  
BOT CH. LL = 0.0 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder  
START DISTANCE = 0-0  
START SPAN CARRIED = 8-10-8  
END DISTANCE = 4-6-0  
END SPAN CARRIED = 8-10-8  
END WALL WIDTH = 5-8  
APPLIED TO FRONT SIDE OF BOTTOM CHORD.  
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 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 (0.01")

CSI: TC=0.07/1.00 (1-2:1), BC=0.18/1.00 (4-5:1), WB=0.11/1.00 (2-4:1), SSI=0.20/1.00 (5-6:1)

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

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.

CONTINUED ON PAGE 2



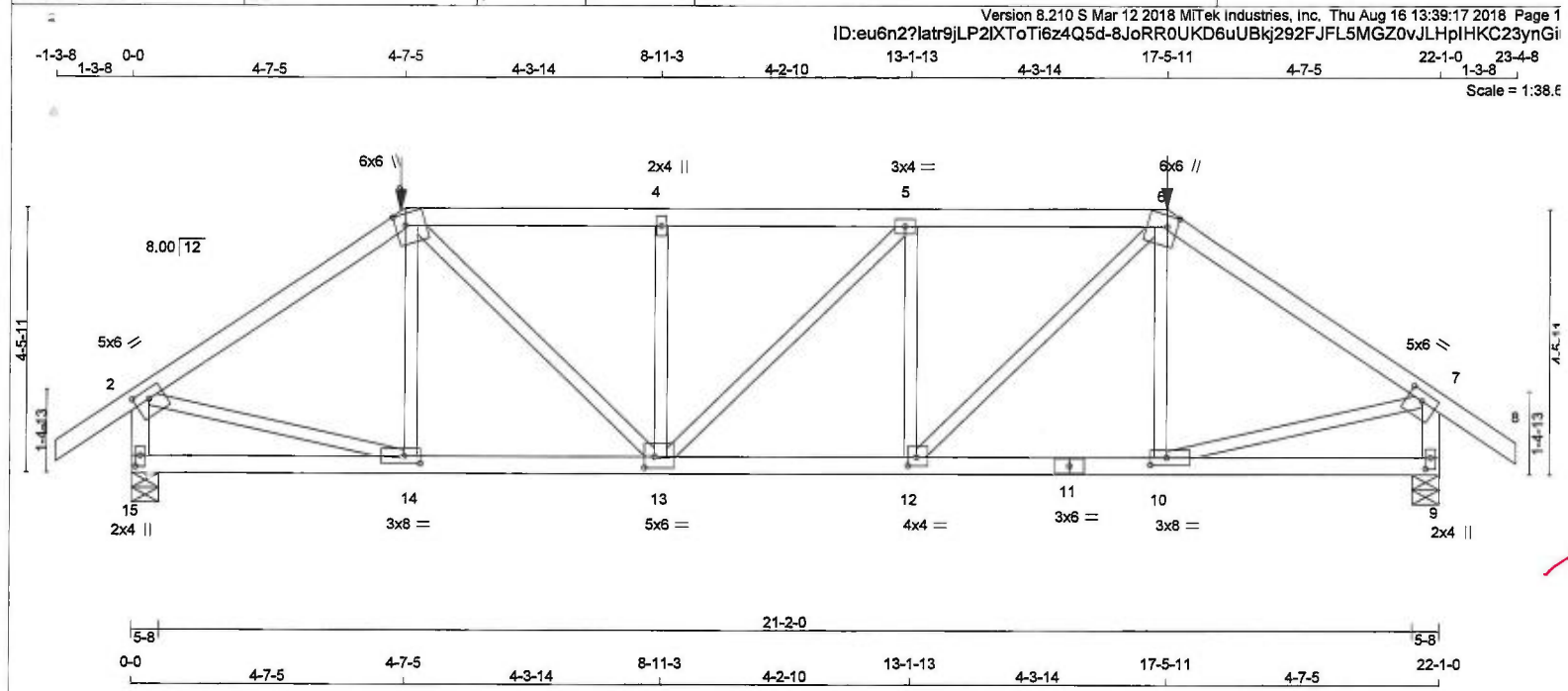
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



JSI GRIP= 0.66 (5) (INPUT = 0.90 )  
JSI METAL= 0.12 (5) (INPUT = 1.00 )

READ ALL NOTES ON THIS PAGE AND ON  
ENGINEERING NOTE PAGE ENP-1. THIS  
NOTE PAGE IS AN INTEGRAL PART OF  
THIS DRAWING AS IT CONTAINS  
SPECIFICATIONS AND CRITERIA USED IN  
THE DESIGN OF THIS COMPONENT.





| LUMBER                |   |    |  | N. L. G. A. RULES     |     |      |     | CHORDS                |   |    |  | SIZE                  |     |      |     | LUMBER                |   |    |  | DESCR.                |     |      |     |
|-----------------------|---|----|--|-----------------------|-----|------|-----|-----------------------|---|----|--|-----------------------|-----|------|-----|-----------------------|---|----|--|-----------------------|-----|------|-----|
| 1                     | - | 3  |  | 2x4                   | DRY | No.2 | SPF | 1                     | - | 3  |  | 2x4                   | DRY | No.2 | SPF | 1                     | - | 3  |  | 2x4                   | DRY | No.2 | SPF |
| 3                     | - | 6  |  | 2x4                   | DRY | No.2 | SPF | 3                     | - | 6  |  | 2x4                   | DRY | No.2 | SPF | 3                     | - | 6  |  | 2x4                   | DRY | No.2 | SPF |
| 6                     | - | 8  |  | 2x4                   | DRY | No.2 | SPF | 6                     | - | 8  |  | 2x4                   | DRY | No.2 | SPF | 6                     | - | 8  |  | 2x4                   | DRY | No.2 | SPF |
| 15                    | - | 2  |  | 2x4                   | DRY | No.2 | SPF | 15                    | - | 2  |  | 2x4                   | DRY | No.2 | SPF | 15                    | - | 2  |  | 2x4                   | DRY | No.2 | SPF |
| 9                     | - | 7  |  | 2x4                   | DRY | No.2 | SPF | 9                     | - | 7  |  | 2x4                   | DRY | No.2 | SPF | 9                     | - | 7  |  | 2x4                   | DRY | No.2 | SPF |
| 15                    | - | 11 |  | 2x4                   | DRY | No.2 | SPF | 15                    | - | 11 |  | 2x4                   | DRY | No.2 | SPF | 15                    | - | 11 |  | 2x4                   | DRY | No.2 | SPF |
| 11                    | - | 9  |  | 2x4                   | DRY | No.2 | SPF | 11                    | - | 9  |  | 2x4                   | DRY | No.2 | SPF | 11                    | - | 9  |  | 2x4                   | DRY | No.2 | SPF |
| ALL WEBS EXCEPT       |   |    |  | 2x3                   | DRY | No.2 | SPF | ALL WEBS EXCEPT       |   |    |  | 2x3                   | DRY | No.2 | SPF | ALL WEBS EXCEPT       |   |    |  | 2x3                   | DRY | No.2 | SPF |
| DRY: SEASONED LUMBER. |   |    |  | DRY: SEASONED LUMBER. |     |      |     | DRY: SEASONED LUMBER. |   |    |  | DRY: SEASONED LUMBER. |     |      |     | DRY: SEASONED LUMBER. |   |    |  | DRY: SEASONED LUMBER. |     |      |     |

| PLATES (table is in inches) |         |        |     |     |      |      |  |  |  |
|-----------------------------|---------|--------|-----|-----|------|------|--|--|--|
| JT                          | TYPE    | PLATES | W   | LEN | Y    | X    |  |  |  |
| 2                           | TMVW-t  | MT20   | 5.0 | 6.0 | 1.75 | 3.00 |  |  |  |
| 3                           | TTWW+m  | MT20   | 6.0 | 6.0 | 2.25 | 2.00 |  |  |  |
| 4                           | TMW+w   | MT20   | 2.0 | 4.0 |      |      |  |  |  |
| 5                           | TMWW-t  | MT20   | 3.0 | 4.0 |      |      |  |  |  |
| 6                           | TTWW+m  | MT20   | 6.0 | 6.0 | 2.25 | 2.00 |  |  |  |
| 7                           | TMVW-t  | MT20   | 5.0 | 6.0 | 1.75 | 3.00 |  |  |  |
| 9                           | BMV1+p  | MT20   | 2.0 | 4.0 | 2.25 | 1.00 |  |  |  |
| 10                          | BMWW-t  | MT20   | 3.0 | 8.0 | 1.50 | 3.25 |  |  |  |
| 11                          | BS-t    | MT20   | 3.0 | 6.0 |      |      |  |  |  |
| 12                          | BMWW-t  | MT20   | 4.0 | 4.0 | 1.75 | 1.75 |  |  |  |
| 13                          | BMWWW-t | MT20   | 5.0 | 6.0 | 2.25 | 2.00 |  |  |  |
| 14                          | BMWW-t  | MT20   | 3.0 | 8.0 | 1.50 | 3.25 |  |  |  |
| 15                          | BMV1+p  | MT20   | 2.0 | 4.0 | 2.25 | 1.00 |  |  |  |

**HANGERS NOTES**  
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 267.4 lbs FACTORED DOWN AT 17-5-11, AND 267.4 lbs FACTORED DOWN AT 4-7-5 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

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

| BEARINGS |  | FACTORED       |      | MAXIMUM FACTORED |      | INPUT  |       | REQD  |  |
|----------|--|----------------|------|------------------|------|--------|-------|-------|--|
|          |  | GROSS REACTION |      | GROSS REACTION   |      | BRG    |       | BRG   |  |
| JT       |  | VERT           | HORZ | DOWN             | HORZ | UPLIFT | IN-SX | IN-SX |  |
| 15       |  | 2033           | 0    | 2033             | 0    | 0      | 5-8   | 5-8   |  |
| 9        |  | 2033           | 0    | 2033             | 0    | 0      | 5-8   | 5-8   |  |

| UNFACTORED REACTIONS |  | 1ST LCASE |          | MAX/MIN |           | COMPONENT REACTIONS |         |
|----------------------|--|-----------|----------|---------|-----------|---------------------|---------|
| JT                   |  | COMBINED  | SNOW     | LIVE    | PERM.LIVE | WIND                | DEAD    |
| 15                   |  | 1425      | 1004 / 0 | 0 / 0   | 0 / 0     | 0 / 0               | 421 / 0 |
| 9                    |  | 1425      | 1004 / 0 | 0 / 0   | 0 / 0     | 0 / 0               | 421 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 15, 9

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.61 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         | VERT. LOAD | MEMB. | MAX. FACTORED | FORCE    | MAX.     |
|        | (LBS)         | (PLF)         | LC1 MAX    |       | (LBS)         | (LBS)    | CSI (LC) |
| FR-TO  |               | FROM TO       | CSI (LC)   | FR-TO |               |          |          |
| 1-2    | 0 / 29        | -77.4 -77.4   | 0.11 (1)   | 10-13 | -259 / 65     | 0.08 (1) |          |
| 2-3    | -2255 / 0     | -77.4 -77.4   | 0.45 (1)   | 4-8   | 0 / 1152      | 0.29 (1) |          |
| 3-4    | -2697 / 0     | -145.9 -145.9 | 0.51 (1)   | 3-6   | -669 / 0      | 0.21 (1) |          |
| 4-5    | -2697 / 0     | -145.9 -145.9 | 0.52 (1)   | 3-5   | -4 / 0        | 0.00 (1) |          |
| 5-6    | -2700 / 0     | -145.9 -145.9 | 0.52 (1)   | 3-1   | -670 / 0      | 0.21 (1) |          |
| 6-7    | -2255 / 0     | -77.4 -77.4   | 0.45 (1)   | 4-8   | 12-6          | 0 / 1157 | 0.29 (1) |
| 7-8    | 0 / 29        | -77.4 -77.4   | 0.11 (1)   | 10-10 | -261 / 65     | 0.08 (1) |          |
| 15-2   | -1969 / 0     | 0.0 0.0       | 0.22 (1)   | 5-95  | 2-14          | 0 / 1922 | 0.48 (1) |
| 9-7    | -1968 / 0     | 0.0 0.0       | 0.22 (1)   | 5-96  | 10-7          | 0 / 1922 | 0.48 (1) |
| 15-14  | 0 / 0         | -33.0 -33.0   | 0.18 (4)   | 10-10 |               |          |          |
| 14-13  | 0 / 1867      | -33.0 -33.0   | 0.43 (1)   | 10-10 |               |          |          |
| 13-12  | 0 / 2700      | -33.0 -33.0   | 0.55 (1)   | 10-10 |               |          |          |
| 12-11  | 0 / 1867      | -33.0 -33.0   | 0.43 (1)   | 10-10 |               |          |          |
| 11-10  | 0 / 1867      | -33.0 -33.0   | 0.43 (1)   | 10-10 |               |          |          |
| 10-9   | 0 / 0         | -33.0 -33.0   | 0.18 (4)   | 10-10 |               |          |          |

| FACTORED CONCENTRATED LOADS (LBS) |         |      |      |      |       |      |       |
|-----------------------------------|---------|------|------|------|-------|------|-------|
| JT                                | LOC.    | LC1  | MAX- | MAX+ | FACE  | DIR. | TYPE  |
| 3                                 | 4-7-5   | -267 | -267 | -    | FRONT | VERT | TOTAL |
| 6                                 | 17-5-11 | -267 | -267 | -    | FRONT | VERT | TOTAL |

TOTAL WEIGHT = 92 lb [M]

| DESIGN CRITERIA  |            |
|------------------|------------|
| SPECIFIED LOADS: |            |
| TOP CH. LL       | = 23.3 PSF |
| DL               | = 3.0 PSF  |
| BOT CH. LL       | = 0.0 PSF  |
| DL               | = 7.0 PSF  |
| TOTAL LOAD       | = 33.3 PSF |

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip  
SIDE SETBACK = 4-7-5  
END SETBACK = 6-0-0  
END WALL WIDTH = 5-8  
CORNER FRAMING TYPE: CONVENTIONAL  
END JACK TYPE: CONVENTIONAL  
APPLIED TO FRONT SIDE  
- ADD'L LOADS BASED ON 55 % OF GSL.

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

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

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.74")  
CALCULATED VERT. DEFL.(LL)= L/999 (0.09")  
ALLOWABLE DEFL.(TL)= L/360 (0.74")  
CALCULATED VERT. DEFL.(TL)= L/999 (0.17")

CSI: TC=0.52/1.00 (5-6:1), BC=0.55/1.00 (12-13:1), WB=0.48/1.00 (2-14:1), SSI=0.32/1.00 (5-6:1)

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

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

| NAIL VALUES |           |         |                    |
|-------------|-----------|---------|--------------------|
| PLATE       | GRIP(DRY) | SHEAR   | SECTION            |
| (PSI)       | (PLI)     | (PLI)   | (PLI)              |
| MAX MIN     | MAX MIN   | MAX MIN | MAX MIN            |
| MT20        | 618       | 354     | 1667 822 2284 1666 |

CONTINUED ON PAGE 2

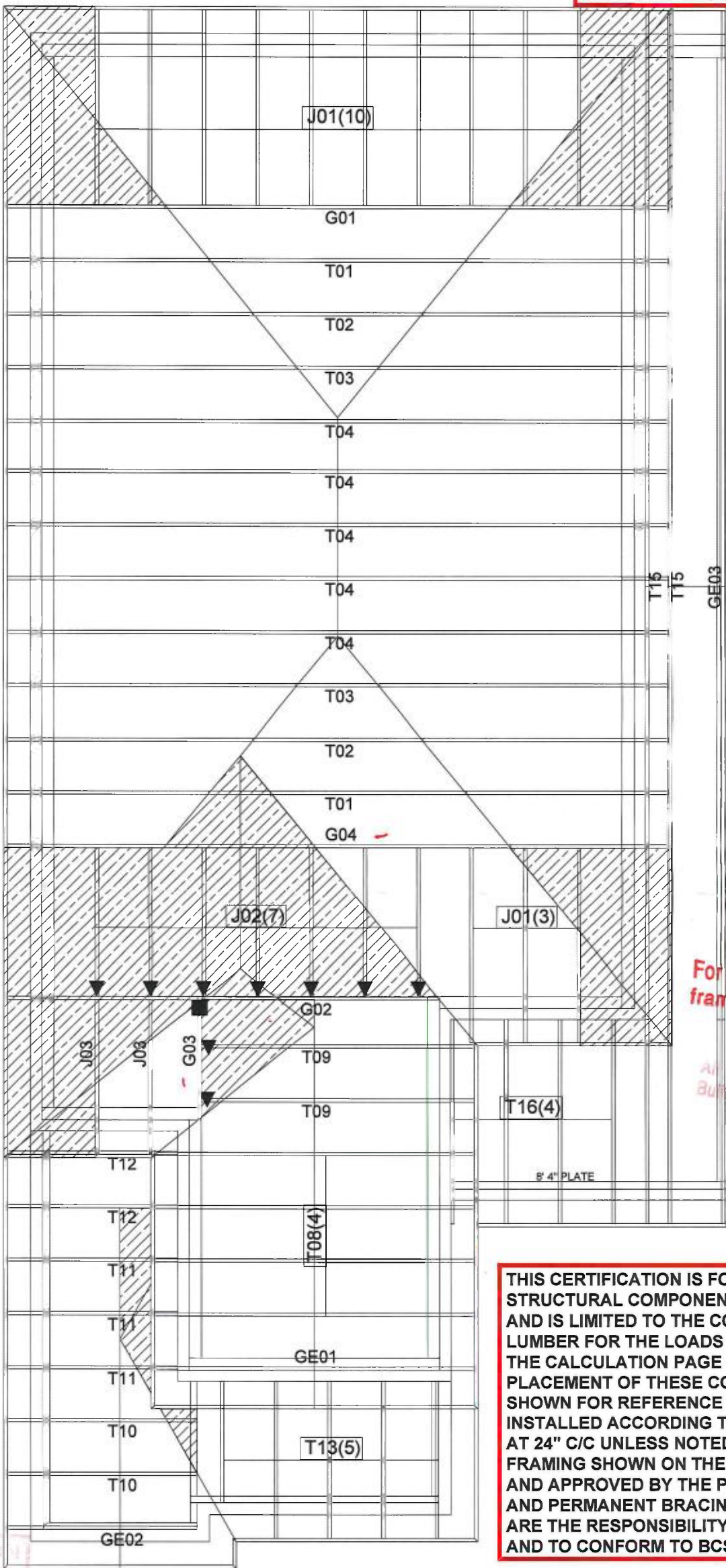


PLATE PLACEMENT TOL = 0.250 inches  
PLATE ROTATION TOL = 5.0 Deg.  
JSI GRIP= 0.89 (14) (INPUT = 0.90 )  
JSI METAL= 0.60 (2) (INPUT = 1.00 )

**READ ALL NOTES ON THIS PAGE AND ON  
ENGINEERING NOTE PAGE ENP-1. THIS  
NOTE PAGE IS AN INTEGRAL PART OF  
THIS DRAWING AS IT CONTAINS  
SPECIFICATIONS AND CRITERIA USED IN  
THE DESIGN OF THIS COMPONENT.**



READ ALL NOTES ON THIS PAGE AND ON  
ENGINEERING NOTE PAGE ENP-1. THIS  
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SPECIFICATIONS AND CRITERIA USED IN  
THE DESIGN OF THIS COMPONENT.



For conventional framing roof / ceilings  
framing shall conform to OBC.9.23

All work shall conform to the Ontario  
Building Code O. Reg. 332/12 as amended

THIS CERTIFICATION IS FOR THE ENGINEERING REVIEW OF  
STRUCTURAL COMPONENTS SHOWN ON THIS DRAWING  
AND IS LIMITED TO THE COMPONENTS SUPPLIED BY KOTT  
LUMBER FOR THE LOADS AND CONDITIONS SHOWN ON  
THE CALCULATION PAGE OF EACH COMPONENT. THE  
PLACEMENT OF THESE COMPONENTS ON THIS LAYOUT IS  
SHOWN FOR REFERENCE ONLY. ROOF TRUSSES MUST BE  
INSTALLED ACCORDING TO MANUFACTURER'S GUIDELINES  
AT 24" C/C UNLESS NOTED OTHERWISE. CONVENTIONAL  
FRAMING SHOWN ON THE LAYOUT MUST BE DESIGNED  
AND APPROVED BY THE PROJECT ENGINEER. TEMPORARY  
AND PERMANENT BRACINGS OF THE ROOF AND BUILDING  
ARE THE RESPONSIBILITY OF THE PROJECT ENGINEER  
AND TO CONFORM TO BCSI GUIDELINES.

CITY OF BRAMPTON  
BUILDING DIVISION  
REVIEWED  
FEB 07 2019  
BY  
MARY FRETTE

19-440 024.000.00RR

Architectural Drawing Info:  
Date: JULY 23, 2018  
Project number: 18012  
Model: HEMLOCK 4



**CONVENTIONAL  
FRAMING BY OTHERS**  
ALL CONVENTIONAL FRAMING TO CONFORM WITH  
PART 9 OF THE O.B.C.  
ROOF RAFTERS THAT CROSS MEET OVER TRUSSES  
TO BE 2x4 S.P.F. @ 24" O/C WITH A 2x4 VERTICAL  
POST TO THE TRUSS UNDERNEATH EACH CROSS  
POINT. VERTICAL POST LONGER THAN 8' TO HAVE  
LATERAL BRACING SO THAT THE DISTANCE BETWEEN  
END POINT AND BETWEEN ROWS OF BRACING  
DOES NOT EXCEED 6'.  
SIZE AND LOCATION OF CONVENTIONAL FRAMING  
IS APPROXIMATE. ALL AREAS MAY NOT BE SHOWN.  
REFER TO ARCHITECTURAL PLANS FOR DETAILS.

**HANGER LEGEND:**  
▼ LUS24  
■ LJS26DS  
● HGUS26  
✕ HGUS26-2

**DESIGN CRITERIA**  
SPECIFIED LOADS:  
TOP CH. LL = 23.3 PSF  
DL = 3 PSF  
BOT CH. LL = 0 PSF  
DL = 7 PSF  
TOTAL LOAD = 33.3 PSF  
SPACING = 24" O/C.  
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR  
SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010  
THIS DESIGN COMPLIES WITH:  
- PART 9 OF OBC 2012, CBC 2012, ABC 2014  
- CSA 086-09  
- TPIC 2011

Model: **HEMLOCK 4 EL 1**  
Customer: **GREENPARK**  
Project: **MINNISALE HOMES**  
Location: **BRAMPTON**  
Date: **6/20/2018** Drawn by: **BB**  
*LOT 38R*