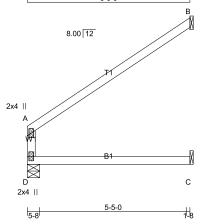


6-0-0

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Fri Jul 14 09:32:21 2023 Page 1 1B:3sur8DuMbbxFEOWsk3nNlizALn9-bl1q15GJ?DO8?0_TVNT4x0OaV6wbx7eLwc1PgiyyCQO

DRWG NO.

Scale = 1:42.5



TOTAL WEIGHT = 7 X 16 = 115 lb

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

PLATES (table is in inches)

| J١ | TYPE | PLATES | W | LEN | Υ | Х |
|----|--------|--------|-----|-----|---|---|
| Α | TMV+p | MT20 | 2.0 | 4.0 | | |
| D | BMV1+p | MT20 | 2.0 | 4.0 | | |

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

| | VIIIAGO | | | | | | |
|---|-----------------|---------|---------|------|--------|-------|-------|
| | FACTORED | | MAXIMUN | | INPUT | REQRD | |
| | GROSS RE | GROSS F | REACTIO | BRG | BRG | | |
| Т | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
|) | 413 | 0 | 413 | 0 | 0 | 5-8 | 1-8 |
| 3 | 324 | 0 | 324 | 0 | 0 | 1-8 | 1-8 |
|) | 89 | 0 | 89 | 0 | 0 | 1-8 | 1-8 |
| | | | | | | | |

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) B . C

UNFACTORED REACTIONS

| | 1ST LCASE | MAX./N | MAX./MIN. COMPONENT REACTIONS | | | | | | | |
|----|-----------|---------|-------------------------------|-----------|------|--------|------|--|--|--|
| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL | | | |
| D | 289 | 209 / 0 | 0/0 | 0/0 | 0/0 | 80 / 0 | 0/0 | | | |
| В | 222 | 186 / 0 | 0/0 | 0/0 | 0/0 | 36 / 0 | 0/0 | | | |
| С | 67 | 23 / 0 | 0/0 | 0/0 | 0/0 | 44 / 0 | 0/0 | | | |

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

D С

QUANTITY

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

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

LOADING TOTAL LOAD CASES: (4)

| | RDS | FACTORED | | | WE | B S MAX. FACTO | RED | |
|-------|----------|-----------------|----------|---------------|-------|-------------------|----------|--|
| MEMB. | | VERT. LOAD LC1 | MAX | MAX. | МЕМВ. | FORCE | MAX | |
| | (LBS) | (PLF) CS | SI (LC) | UNBRAC | | (LBS) | CSI (LC) | |
| FR-TO | | FROM TO | | LENGTH | FR-TO | | | |
| D- A | -393 / 0 | 0.0 0.0 0 | 0.24 (1) | 7.81 | | | | |
| A- B | -19 / 0 | -119.4 -119.4 (| 0.61 (1) | 6.25 | | | | |
| D- C | 0/0 | -18.2 -18.2 (| 0.30 (1) | 10.00 | | | | |

DESIGN CRITERIA

| SPECIFIED LOADS: | | | | | | | | |
|-------------------|-----|----|---|------|-----|--|--|--|
| TOP | CH. | LL | = | 34.8 | PSF | | | |
| | | DL | = | 6.0 | PSF | | | |
| BOT | CH. | LL | = | 0.0 | PSF | | | |
| | | DL | = | 7.3 | PSF | | | |
| TOTAL LOAD = 48.1 | | | | | | | | |

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH: - PART 9 OF BCBC 2018 , NBC-2019AE - PART 9 OF OBC 2012 (2019 AMENDMENT) - CSA 086-14

- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20") CALCULATED VERT. DEFL.(LL) = L/971 (0.07") ALLOWABLE DEFL.(TL)= L/360 (0.20") CALCULATED VERT. DEFL.(TL) = L/463 (0.16")

CSI: TC=0.61/0.97 (A-B:1) , BC=0.30/0.97 (C-D:1) , WB=0.00/0.97 (n/a:0) , SSI=0.25/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN 650 371 1747 788 1987 1873

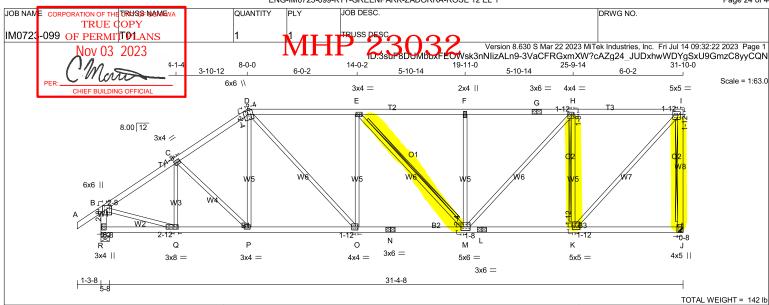
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.24 (A) (INPUT = 0.90) JSI METAL= 0.20 (A) (INPUT = 1.00)







| LUMBER | | | | |
|---------------|------|-----|--------|--------|
| N. L. G. A. R | ULES | | | |
| CHORDS | SIZE | | LUMBER | DESCR. |
| A - D | 2x4 | DRY | No.2 | SPF |
| D - G | 2x4 | DRY | No.2 | SPF |
| G - I | 2x4 | DRY | No.2 | SPF |
| J - I | 2x4 | DRY | No.2 | SPF |
| R - B | 2x4 | DRY | No.2 | SPF |
| R - N | 2x4 | DRY | No.2 | SPF |
| N - L | 2x4 | DRY | No.2 | SPF |
| L - J | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

| PLA | TES | (table is in inches) | |
|-----|------|----------------------|--|
| JT | TYPE | PLATES | |

| JT | TYPE | PLATES | W | LEN | Y X |
|----|---------|--------|-----|-----|-----------|
| В | TMVW+p | MT20 | 6.0 | 6.0 | Edge 2.50 |
| С | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 1.50 |
| D | TTWW+m | MT20 | 6.0 | 6.0 | 2.25 2.25 |
| Е | TMWW-t | MT20 | 3.0 | 4.0 | |
| F | TMW+w | MT20 | 2.0 | 4.0 | |
| G | TS-t | MT20 | 3.0 | 6.0 | |
| Н | TMWW-t | MT20 | 4.0 | 4.0 | 1.50 1.75 |
| 1 | TMVW-t | MT20 | 5.0 | 5.0 | 1.75 1.75 |
| J | BMV1+t | MT20 | 4.0 | 5.0 | Edge 0.50 |
| K | BMWW-t | MT20 | 5.0 | 5.0 | 1.75 1.75 |
| L | BS-t | MT20 | 3.0 | 6.0 | |
| M | BMWWW-t | MT20 | 5.0 | 6.0 | 2.25 1.50 |
| N | BS-t | MT20 | 3.0 | 6.0 | |
| 0 | BMWW-t | MT20 | 4.0 | 4.0 | 2.00 1.75 |
| Ρ | BMWW-t | MT20 | 3.0 | 4.0 | |
| Q | BMWW-t | MT20 | 3.0 | 8.0 | 1.50 2.75 |
| R | BMV1+p | MT20 | 3.0 | 4.0 | 2.00 0.50 |
| | | | | | |

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

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

| <u> </u> | 111100 | | | | | | |
|----------|-----------------|--------|---------|---------|--------|----------|-------|
| | FACTORED | | MAXIMUN | / FACTO | INPUT | REQRD | |
| | GROSS RE | ACTION | GROSS F | REACTIO | BRG | BRG | |
| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
| J | 2191 | 0 | 2191 | 0 | 0 | MECHANIC | CAL |
| R | 2355 | 0 | 2355 | 0 | 0 | 5-8 | 4-3 |
| | | | | | | | |

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

UNFACTORED REACTIONS

| | 1ST LCASE | MAX./N | MAX./MIN. COMPONENT REACTIONS | | | | | | | |
|----|-----------|----------|-------------------------------|-----------|------|---------|------|--|--|--|
| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL | | | |
| J | 1531 | 1108 / 0 | 0/0 | 0/0 | 0/0 | 423 / 0 | 0/0 | | | |
| R | 1643 | 1204 / 0 | 0/0 | 0/0 | 0/0 | 440 / 0 | 0/0 | | | |

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.08 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

2x4 DRY SPF No.2 T-BRACE AT I-J, E-M, H-K

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3"
COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

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

LOADING TOTAL LOAD CASES: (4)

| СН | ORDS | | WEBS | | | | | | |
|-------|-------------|----------|--------|----------|--------|-------|------------|----------|--|
| MA) | K. FACTORED | FACTO | RED | | | | MAX. FACTO | DRED | |
| MEMB. | FORCE | VERT. LC | AD LC | 1 MAX | MAX. | MEMB. | FORCE | MAX | |
| | (LBS) | (Pl | _F) | CSI (LC) | UNBRAC | | | CSI (LC) | |
| FR-TO | | FROM | TO | | LENGTH | FR-TO | | | |
| A- B | 0 / 45 | -119.4 | -119.4 | 0.16(1) | 10.00 | Q- C | -491 / 0 | 0.13 (1) | |
| B- C | -2507 / 0 | -119.4 | -119.4 | 0.42(1) | 3.91 | C-P | -88 / 0 | 0.04(1) | |
| C- D | -2495 / 0 | -119.4 | -119.4 | 0.41(1) | 3.92 | P- D | 0 / 160 | 0.04 (4) | |
| D- E | -2744 / 0 | -119.4 | -119.4 | 0.89(1) | 3.08 | D- O | 0 / 1018 | 0.23(1) | |
| E-F | -2584 / 0 | -119.4 | -119.4 | 0.85 (1) | 3.19 | 0- E | -632 / 0 | 0.48 (1) | |
| F- G | -2584 / 0 | | | 0.85 (1) | | E- M | -237 / 0 | 0.14 (1) | |
| G- H | -2584 / 0 | | | 0.85 (1) | | M- F | -650 / 0 | 0.49 (1) | |
| H- I | -1737 / 0 | -119.4 | -119.4 | 0.74 (1) | 3.94 | M- H | 0 / 1254 | 0.28 (1) | |
| J- I | -2147 / 0 | 0.0 | | 0.53 (1) | | K- H | -1738 / 0 | 0.55 (1) | |
| R-B | -2318 / 0 | 0.0 | 0.0 | 0.24 (1) | 5.53 | K-I | 0 / 2546 | 0.57 (1) | |
| | | | | | | B- Q | 0 / 2182 | 0.49 (1) | |
| R-Q | 0/0 | | | 0.07 (4) | | | | | |
| Q-P | 0 / 2110 | | | 0.40 (1) | | | | | |
| P-O | 0 / 2049 | | | 0.39 (1) | | | | | |
| O- N | 0 / 2745 | -18.2 | | 0.51 (1) | | | | | |
| N- M | 0 / 2745 | -18.2 | | 0.51 (1) | | | | | |
| M- L | 0 / 1737 | -18.2 | | 0.36 (1) | | | | | |
| L- K | 0 / 1737 | -18.2 | | 0.36 (1) | | | | | |
| K- J | 0/0 | -18.2 | -18.2 | 0.16(4) | 10.00 | | | | |

DESIGN CRITERIA

| SPEC | IFIED | LOAI | OS: | | |
|------|-------|------|-----|------|-----|
| TOP | CH. | LL | = | 34.8 | PSI |
| | | DL | = | 6.0 | PS |
| BOT | CH. | LL | = | 0.0 | PSI |
| | | DL | = | 7.3 | PSI |
| TOTA | L LO | AD | = | 48.1 | PSI |

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

 PART 9 OF BCBC 2018 . NBC-2019AE - PART 9 OF OBC 2012 (2019 AMENDMENT)

CSA 086-14 - TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.06") CALCULATED VERT. DEFL.(LL)= L/999 (0.15") ALLOWABLE DEFL.(TL)= L/360 (1.06") CALCULATED VERT. DEFL.(TL)= L/999 (0.26")

CSI: TC=0.89/0.97 (D-E:1) , BC=0.51/0.97 (M-O:1) , WB=0.57/0.97 (I-K:1) , SSI=0.34/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN MAX MIN MT20 650 371 1747 788 1987 1873

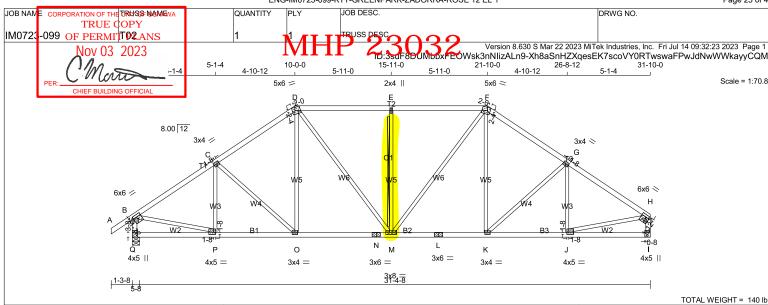
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (K) (INPUT = 0.90) JSI METAL= 0.83 (N) (INPUT = 1.00)







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

| PL | PLATES (table is in inches) | | | | | | | | | |
|----|-----------------------------|--------|-----|-----|------|------|--|--|--|--|
| JT | TYPE | PLATES | W | LEN | Υ | X | | | | |
| В | TMVW-t | MT20 | 6.0 | 6.0 | 1.75 | 3.00 | | | | |
| С | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 | | | | |
| D | TTWW-m | MT20 | 5.0 | 6.0 | 2.25 | 2.00 | | | | |
| Ε | TMW+w | MT20 | 2.0 | 4.0 | | | | | | |
| F | TTWW-m | MT20 | 5.0 | 6.0 | 2.25 | 2.00 | | | | |
| G | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 | | | | |
| Н | TMVW-t | MT20 | 6.0 | 6.0 | 1.75 | Edge | | | | |
| 1 | BMV1+t | MT20 | 4.0 | 5.0 | Edge | | | | | |
| J | BMWW-t | MT20 | 4.0 | 5.0 | 1.50 | 1.50 | | | | |
| K | BMWW-t | MT20 | 3.0 | 4.0 | | | | | | |
| L | BS-t | MT20 | 3.0 | 6.0 | | | | | | |
| M | BMWWW-t | MT20 | 3.0 | 8.0 | | | | | | |
| Ν | BS-t | MT20 | 3.0 | 6.0 | | | | | | |
| 0 | BMWW-t | MT20 | 3.0 | 4.0 | | | | | | |
| Ρ | BMWW-t | MT20 | 4.0 | 5.0 | 1.50 | 1.50 | | | | |
| Q | BMV1+t | MT20 | 4.0 | 5.0 | 3.50 | | | | | |

 $\ensuremath{\mathsf{Edge}}$ - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

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

| | 111100 | | | | | | |
|----|-----------------|--------|------------------|---------|--------|----------|-------|
| | FACTORED | | MAXIMUM FACTORED | | | INPUT | REQRD |
| | GROSS RE | ACTION | GROSS F | REACTIO | BRG | BRG | |
| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
| Q | 2355 | 0 | 2355 | 0 | 0 | 5-8 | 4-3 |
| | 2191 | 0 | 2191 | 0 | 0 | MECHANIC | CAL |
| | | | | | | | |

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

UNFACTORED REACTIONS

| | 151 LUASE | | VIIN. COMPO | <i>N</i> O | | | |
|----|-----------|----------|-------------|------------|------|---------|------|
| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| Q | 1643 | 1204 / 0 | 0/0 | 0/0 | 0/0 | 440 / 0 | 0/0 |
| 1 | 1531 | 1108 / 0 | 0/0 | 0/0 | 0/0 | 423 / 0 | 0/0 |

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.72 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

2x4 DRY SPF No.2 T-BRACE AT E-M

ASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3 COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

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

LOADING TOTAL LOAD CASES: (4)

| СН | ORDS | | WEBS | | | | | | |
|-------|-------------|----------|--------|----------|--------|-------|------------|----------|--|
| MAX | C. FACTORED | FACTOR | RED | | | | MAX. FACTO | DRED | |
| MEMB. | FORCE | VERT. LO | AD LC | 1 MAX | MAX. | MEMB. | FORCE | MAX | |
| | (LBS) | (PL | F) | CSI (LC) | UNBRAC | | (LBS) | CSI (LC) | |
| FR-TO | | FROM | TO | | LENGTH | FR-TO | | | |
| A- B | 0 / 45 | | | 0.16 (1) | | P- C | -368 / 0 | 0.13 (1) | |
| B- C | -2581 / 0 | -119.4 | -119.4 | 0.49 (1) | 3.80 | C-O | -323 / 0 | 0.27 (1) | |
| C- D | -2373 / 0 | | | 0.46 (1) | | O- D | 0 / 319 | 0.07 (1) | |
| D-E | -2313 / 0 | | | 0.62 (1) | | | 0 / 611 | 0.14 (1) | |
| E-F | -2313 / 0 | | | 0.62 (1) | | | -866 / 0 | 0.40 (1) | |
| F- G | -2373 / 0 | | | 0.46 (1) | | | 0 / 611 | 0.14 (1) | |
| G- H | -2581 / 0 | | | 0.49 (1) | | | 0 / 319 | 0.07 (1) | |
| Q-B | -2313 / 0 | 0.0 | | 0.24 (1) | | | -323 / 0 | 0.27 (1) | |
| I- H | -2149 / 0 | 0.0 | 0.0 | 0.22 (1) | 5.71 | J- G | -368 / 0 | 0.13 (1) | |
| | | | | | | | 0 / 2227 | 0.50 (1) | |
| Q-P | 0/0 | | | 0.10 (4) | | J- H | 0 / 2227 | 0.50 (1) | |
| P- 0 | 0 / 2179 | | | 0.41 (1) | | | | | |
| O- N | 0 / 1943 | | | 0.37 (1) | | | | | |
| N- M | 0 / 1943 | -18.2 | -18.2 | 0.37 (1) | 10.00 | | | | |
| M- L | 0 / 1943 | | | 0.37 (1) | | | | | |
| L- K | 0 / 1943 | -18.2 | -18.2 | 0.37 (1) | 10.00 | | | | |
| K- J | 0 / 2179 | -18.2 | -18.2 | 0.41 (1) | 10.00 | | | | |
| J- I | 0/0 | -18.2 | -18.2 | 0.10 (4) | 10.00 | | | | |
| | | | | | | | | | |



| SPECIFIED LOADS: | | | | | | | | | |
|------------------|------|------|------|-----|--|--|--|--|--|
| TOP | CH. | LL = | 34.8 | PSF | | | | | |
| | | DL = | 6.0 | PSF | | | | | |
| BOT | CH. | LL = | 0.0 | PSF | | | | | |
| | | DL = | 7.3 | PSF | | | | | |
| TOTA | L LO | AD = | 48.1 | PSF | | | | | |

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH: PART 9 OF BCBC 2018 . NBC-2019AE

- PART 9 OF OBC 2012 (2019 AMENDMENT) CSA 086-14

- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.06") CALCULATED VERT. DEFL.(LL)= L/999 (0.11") ALLOWABLE DEFL.(TL)= L/360 (1.06") CALCULATED VERT. DEFL.(TL)= L/999 (0.19")

CSI: TC=0.62/0.97 (D-E:1) , BC=0.41/0.97 (O-P:1) , WB=0.50/0.97 (H-J:1) , SSI=0.34/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN MAX MIN MT20 650 371 1747 788 1987 1873

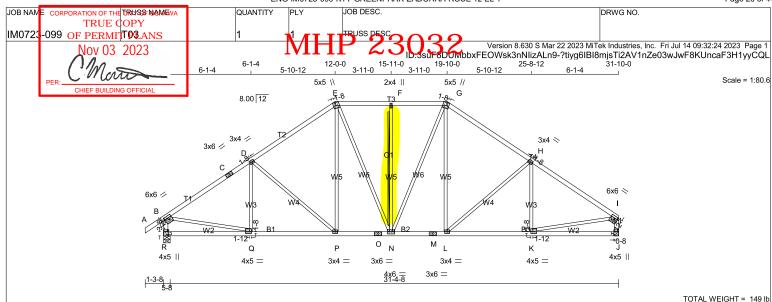
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90) JSI METAL= 0.68 (B) (INPUT = 1.00)







| LUMBER | | | | |
|---------------|------|-----|--------|--------|
| N. L. G. A. R | ULES | | | |
| CHORDS | SIZE | | LUMBER | DESCR. |
| A - C | 2x4 | DRY | No.2 | SPF |
| C - E | 2x4 | DRY | No.2 | SPF |
| E - G | 2x4 | DRY | No.2 | SPF |
| G - I | 2x4 | DRY | No.2 | SPF |
| R - B | 2x4 | DRY | No.2 | SPF |
| J - I | 2x4 | DRY | No.2 | SPF |
| R - O | 2x4 | DRY | No.2 | SPF |
| O - M | 2x4 | DRY | No.2 | SPF |
| M - J | 2x4 | DRY | No.2 | SPF |
| | | | | |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |
| EYCEDT | | | | |

PLATES (table is in inches)

| JΤ | TYPE | PLATES | W | LEN | Υ | Χ |
|----|---------|--------|-----|-----|------|------|
| В | TMVW-t | MT20 | 6.0 | 6.0 | 1.75 | 3.00 |
| С | TS-t | MT20 | 3.0 | 6.0 | | |
| D | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| Е | TTWW+m | MT20 | 5.0 | 5.0 | 2.50 | 1.50 |
| F | TMW+w | MT20 | 2.0 | 4.0 | | |
| G | TTWW+m | MT20 | 5.0 | 5.0 | 2.50 | 1.50 |
| Н | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 1 | TMVW-t | MT20 | 6.0 | 6.0 | 1.75 | Edge |
| J | BMV1+t | MT20 | 4.0 | 5.0 | Edge | 0.50 |
| K | BMWW-t | MT20 | 4.0 | 5.0 | 1.50 | 1.75 |
| L | BMWW-t | MT20 | 3.0 | 4.0 | | |
| M | BS-t | MT20 | 3.0 | 6.0 | | |
| N | BMWWW-t | MT20 | 4.0 | 6.0 | | |
| 0 | BS-t | MT20 | 3.0 | 6.0 | | |
| Ρ | BMWW-t | MT20 | 3.0 | 4.0 | | |
| Q | BMWW-t | MT20 | 4.0 | 5.0 | 1.50 | 1.75 |
| R | BMV1+t | MT20 | 4.0 | 5.0 | 3.50 | |

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

I.MATIJEVIC 100528832 NCE OF O JULY 14, 2023

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE 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

| | NII TOO | | | | | | |
|----|----------|--------|----------------|---------|--------|----------|-------|
| | FACTORED | | MAXIMUN | M FACTO | INPUT | REQRD | |
| | GROSS RE | ACTION | GROSS REACTION | | | BRG | BRG |
| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
| R | 2355 | 0 | 2355 | 0 | 0 | 5-8 | 4-3 |
| J | 2191 | 0 | 2191 | 0 | 0 | MECHANIC | CAL |
| | | | | | | | |

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

UNFACTORED REACTIONS

| | 1ST LCASE | MAX./N | MAX./MIN. COMPONENT REACTIONS | | | | | | | |
|----|-----------|----------|-------------------------------|-----------|------|---------|------|--|--|--|
| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL | | | |
| R | 1643 | 1204 / 0 | 0/0 | 0/0 | 0/0 | 440 / 0 | 0/0 | | | |
| J | 1531 | 1108 / 0 | 0/0 | 0/0 | 0/0 | 423 / 0 | 0/0 | | | |

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

BRACINGTOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.43 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

2x4 DRY SPF No.2 T-BRACE AT F-N

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3 COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

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

LOADING TOTAL LOAD CASES: (4)

| СН | ORDS | WEBS | | | | | | |
|-------|-------------|----------|--------|----------|--------|---------|-----------|----------|
| MAX | (. FACTORED | FACTO | RED | | | | MAX. FACT | ORED |
| MEMB. | FORCE | VERT. LC | OAD LC | 1 MAX | MAX. | MEMB. | FORCE | MAX |
| | (LBS) | (PI | _F) | CSI (LC) | UNBRAC |) | (LBS) | CSI (LC) |
| FR-TO | | FROM | TO | | LENGTH | I FR-TO | | |
| | 0 / 45 | | | | | | -270 / 37 | 0.12 (1) |
| B- C | -2609 / 0 | | | 0.73 (1) | | | -539 / 0 | 0.70(1) |
| C- D | -2609 / 0 | | | 0.73 (1) | | | 0 / 446 | 0.10 (1) |
| D- E | -2216 / 0 | | | 0.66 (1) | | | 0 / 334 | 0.08 (1) |
| E-F | -1938 / 0 | | | 0.26 (1) | | N- F | -559 / 0 | 0.37 (1) |
| F- G | -1938 / 0 | | | 0.26 (1) | | | 0 / 334 | 0.08 (1) |
| G- H | -2216 / 0 | | | 0.66 (1) | | | 0 / 446 | 0.10 (1) |
| H- I | -2610 / 0 | -119.4 | | 0.73 (1) | | L- H | -539 / 0 | 0.70 (1) |
| R-B | -2308 / 0 | 0.0 | 0.0 | 0.24 (1) | 5.54 | K- H | -270 / 37 | |
| J- I | -2144 / 0 | 0.0 | 0.0 | 0.22 (1) | 5.72 | | 0 / 2245 | |
| | | | | | | K- I | 0 / 2245 | 0.51 (1) |
| R-Q | 0/0 | -18.2 | -18.2 | 0.16 (4) | | | | |
| Q-P | 0 / 2210 | -18.2 | | 0.43 (1) | | | | |
| P- O | 0 / 1806 | -18.2 | | 0.34 (1) | | | | |
| O- N | 0 / 1806 | -18.2 | | 0.34 (1) | | | | |
| N- M | 0 / 1806 | -18.2 | | 0.34 (1) | | | | |
| M- L | 0 / 1806 | -18.2 | -18.2 | 0.34 (1) | 10.00 | | | |
| L- K | 0 / 2210 | -18.2 | | 0.43 (1) | | | | |
| K- J | 0/0 | -18.2 | -18.2 | 0.16 (4) | 10.00 | | | |

DESIGN CRITERIA

| SPEC | IFIED | LOAD | S: | | |
|------|-------|------|----|------|-----|
| TOP | CH. | LL : | = | 34.8 | PSF |
| | | DL : | = | 6.0 | PSF |
| BOT | CH. | LL : | = | 0.0 | PSF |
| | | DL : | = | 7.3 | PSF |
| TOTA | L LO | AD : | = | 48.1 | PSF |

SPACING = 24.0 IN. C/C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF **PART 9. NBCC 2015**

THIS DESIGN COMPLIES WITH:

 PART 9 OF BCBC 2018 . NBC-2019AE - PART 9 OF OBC 2012 (2019 AMENDMENT)

CSA 086-14 - TPIC 2014

ROOF LIVE LOAD

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED

ALLOWABLE DEFL.(LL)= L/360 (1.06") CALCULATED VERT. DEFL.(LL)= L/999 (0.10") ALLOWABLE DEFL.(TL)= L/360 (1.06") CALCULATED VERT. DEFL.(TL)= L/999 (0.18")

CSI: TC=0.73/0.97 (H-I:1) , BC=0.43/0.97 (K-L:1) , WB=0.70/0.97 (H-L:1) , SSI=0.29/1.00 (B-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)

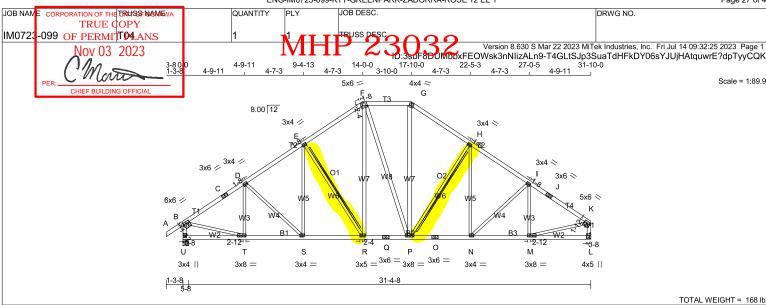
MAX MIN MAX MIN MAX MIN MAX MIN MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (Q) (INPUT = 0.90) JSI METAL= 0.69 (I) (INPUT = 1.00)





| LUMBER N. L. G. A. R | HEC | | | |
|-------------------------|------|-----|--------|--------|
| CHORDS | SIZE | | LUMBER | DESCR. |
| A - C | 2x4 | DRY | No.2 | SPF |
| C - F | 2x4 | DRY | No.2 | SPF |
| F - G | 2x4 | DRY | No.2 | SPF |
| G - J | 2x4 | DRY | No.2 | SPF |
| J - K | 2x4 | DRY | No.2 | SPF |
| U - B | 2x4 | DRY | No.2 | SPF |
| L - K | 2x4 | DRY | No.2 | SPF |
| U - Q | 2x4 | DRY | No.2 | SPF |
| Q - O | 2x4 | DRY | No.2 | SPF |
| O - L | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |
| R - F | 2x4 | DRY | No.2 | SPF |
| F - P | 2x4 | DRY | No.2 | SPF |
| P - G | 2x4 | DRY | No.2 | SPF |
| | | | | |

| PLATES | (table | is in | inches) | |
|--------|--------|-------|---------|--|
| | | | | |

| | TILO (lable l | 3 III IIICIIC3 | | | | |
|------|---------------|----------------|-----|-----|------|------|
| JT | TYPE | PLATES | W | LEN | Υ | Χ |
| В | TMVW-t | MT20 | 6.0 | 6.0 | 1.75 | 3.00 |
| С | TS-t | MT20 | 3.0 | 6.0 | | |
| D, E | Ξ, Η, Ι | | | | | |
| D | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| F | TTWW-m | MT20 | 5.0 | 6.0 | 2.25 | 1.50 |
| G | TTW-m | MT20 | 4.0 | 4.0 | | |
| J | TS-t | MT20 | 3.0 | 6.0 | | |
| K | TMVW-t | MT20 | 5.0 | 6.0 | 1.75 | Edge |
| L | BMV1+t | MT20 | 4.0 | 5.0 | Edge | 0.50 |
| M | BMWW-t | MT20 | 3.0 | 8.0 | 1.50 | 2.75 |
| N | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 0 | BS-t | MT20 | 3.0 | 6.0 | | |
| Ρ | BMWWW-t | MT20 | 3.0 | 8.0 | | |
| Q | BS-t | MT20 | 3.0 | 6.0 | | |
| R | BMWW-t | MT20 | 3.0 | 5.0 | 1.50 | 2.25 |
| S | BMWW-t | MT20 | 3.0 | 4.0 | | |
| Т | BMWW-t | MT20 | 3.0 | 8.0 | 1.50 | 2.75 |
| U | BMV1+p | MT20 | 3.0 | 4.0 | 2.00 | 0.50 |
| | | | | | | |

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



READ ALL NOTES ON THIS PAGE AND ON THE **ENGINEERING NOTES: TRUSSES. THE 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

| | NII TOO | | | | | | |
|----|----------|----------------|------------------|------|--------|----------|-------|
| | FACTORED | | MAXIMUM FACTORED | | | INPUT | REQRD |
| | GROSS RE | GROSS REACTION | | | BRG | BRG | |
| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
| U | 2355 | 0 | 2355 | 0 | 0 | 5-8 | 4-3 |
| L | 2191 | 0 | 2191 | 0 | 0 | MECHANIC | CAL |
| | | | | | | | |

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

UNFACTORED REACTIONS

| | 1ST LCASE | MAX./N | <u>иім. сомро</u> | NENT REACTION | NS . | | |
|----|-----------|----------|-------------------|---------------|------|---------|------|
| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| U | 1643 | 1204 / 0 | 0/0 | 0/0 | 0/0 | 440 / 0 | 0/0 |
| L | 1531 | 1108 / 0 | 0/0 | 0/0 | 0/0 | 423 / 0 | 0/0 |

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.91 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

2x4 DRY SPF No.2 T-BRACE AT E-R, H-P

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3' COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

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

LOADING TOTAL LOAD CASES: (4)

| C H O R D S W E B S MAX. FACTORED FACTORED MAX. FACTORED | | | | | | DED | | |
|---|-----------|--------|--------|----------|--------|------|----------|----------|
| | | | | | | | | |
| MEMB. | | | | | | | FORCE | MAX |
| | (LBS) | | | | UNBRAC | | (LBS) | CSI (LC) |
| FR-TO | | | | | LENGTH | | | |
| | 0 / 45 | | | 0.16 (1) | | T- D | | 0.12 (1) |
| B- C | -2556 / 0 | | | 0.42 (1) | | D-S | | 0.13 (1) |
| C- D | -2556 / 0 | -119.4 | -119.4 | 0.42(1) | 3.91 | S-E | 0 / 216 | 0.05(1) |
| D-E | -2419 / 0 | -119.4 | -119.4 | 0.36(1) | 4.07 | E-R | -683 / 0 | 0.40(1) |
| E-F | -2005 / 0 | -119.4 | -119.4 | 0.34 (1) | 4.41 | R-F | 0 / 645 | 0.10 (1) |
| F- G | -1652 / 0 | -119.4 | -119.4 | 0.26(1) | 4.86 | F-P | 0/4 | 0.00(1) |
| G- H | -2007 / 0 | -119.4 | -119.4 | 0.34 (1) | 4.41 | P-G | 0 / 650 | 0.10 (1) |
| H- I | -2419 / 0 | -119.4 | -119.4 | 0.36 (1) | 4.07 | P- H | -680 / 0 | 0.40 (1) |
| I- J | -2556 / 0 | | | 0.42(1) | | N- H | | 0.05 (1) |
| J- K | -2556 / 0 | | | 0.42 (1) | | N- I | -191 / 0 | 0.13 (1) |
| U-B | -2316 / 0 | | | 0.24 (1) | | M- I | -393 / 0 | 0.12 (1) |
| L-K | -2152 / 0 | | | 0.22 (1) | | | 0 / 2204 | 0.50 (1) |
| | | 0.0 | 0.0 | 0.22 (.) | 0 | | 0 / 2205 | 0.50 (1) |
| U- T | 0/0 | -18.2 | -18.2 | 0.09(4) | 10.00 | | 0.2200 | 0.00 (.) |
| T-S | 0 / 2151 | | | 0.38 (1) | | | | |
| S-R | 0 / 2012 | -18.2 | | 0.36 (1) | | | | |
| R-Q | 0 / 1651 | -18.2 | | 0.31 (1) | | | | |
| Q-P | 0 / 1651 | | | 0.31 (1) | | | | |
| P- 0 | 0 / 2011 | -18.2 | | 0.37 (1) | | | | |
| 0- N | | -18.2 | | | | | | |
| | | -18.2 | | | | | | |
| N- M | | | | | | | | |
| M- L | 0/0 | -18.2 | -18.2 | 0.09 (4) | 10.00 | | | |

DESIGN CRITERIA

| SPECIFIED LOADS: | | | | | | | | |
|------------------|------|----|---|------|-----|--|--|--|
| TOP | CH. | LL | = | 34.8 | PSF | | | |
| | | DL | = | 6.0 | PSF | | | |
| BOT | CH. | LL | = | 0.0 | PSF | | | |
| | | DL | = | 7.3 | PSF | | | |
| TOTA | L LO | AD | = | 48.1 | PSF | | | |

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

 PART 9 OF BCBC 2018 . NBC-2019AE - PART 9 OF OBC 2012 (2019 AMENDMENT)

CSA 086-14

- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.06") CALCULATED VERT. DEFL.(LL)= L/999 (0.10") ALLOWABLE DEFL.(TL)= L/360 (1.06") CALCULATED VERT. DEFL.(TL)= L/999 (0.18")

CSI: TC=0.42/0.97 (I-K:1) , BC=0.38/0.97 (M-N:1) , WB=0.50/0.97 (K-M:1) , SSI=0.22/1.00 (I-K:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN MAX MIN MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90) JSI METAL= 0.67 (B) (INPUT = 1.00)



3x5 ||

JOB DESC

Scale = 1:103.5



Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Fri Jul 14 09:32:26 2023 Page 1 D.k8Bartzj87dQ8jC9gNSa3d6z92M6-yGqj4oKRql0R5nsRHw3Fe35SI7b8cF044ukALvyyCQJ 26-4-11 <u>5-2-13</u> -3-8 0-0 1-3-8 15-11-0 21-1-13 5-2-13

8.00 12 4x4 / 4x4 <> 3x4 // 3x4 <> 3x6 // H 3x6 ♦ 6x6 > 6x6 // Р о R Q S L 3x6 = 3x4 = 4x5 || 4x5 = 3x4 = 3x6 = 4x5 = 4x5 ||

TOTAL WEIGHT = 152 lb

| LUMBER | | | | | | | | | |
|---------------|-----------------------|-----|--------|--------|--|--|--|--|--|
| N. L. G. A. R | ULES | | | | | | | | |
| CHORDS | SIZE | | LUMBER | DESCR. | | | | | |
| A - C | 2x4 | DRY | No.2 | SPF | | | | | |
| C - F | 2x4 | DRY | No.2 | SPF | | | | | |
| F - I | 2x4 | DRY | No.2 | SPF | | | | | |
| I - J | 2x4 | DRY | No.2 | SPF | | | | | |
| S - B | 2x4 | DRY | No.2 | SPF | | | | | |
| K - J | 2x4 | DRY | No.2 | SPF | | | | | |
| S - P | 2x4 | DRY | No.2 | SPF | | | | | |
| P - N | 2x4 | DRY | No.2 | SPF | | | | | |
| N - K | 2x4 | DRY | No.2 | SPF | | | | | |
| ALL WEBS | 2x3 | DRY | No.2 | SPF | | | | | |
| 0 - F | 2x4 | DRY | No.2 | SPF | | | | | |
| DRY: SEASO | DRY: SEASONED LUMBER. | | | | | | | | |

| PL/ | ATES (table i | s in inches) | | | | |
|-----|---------------|--------------|-----|-----|------|------|
| JT | TYPE | PLATES | W | LEN | Υ | Χ |
| В | TMVW-t | MT20 | 6.0 | 6.0 | 1.75 | 3.00 |
| С | TS-t | MT20 | 3.0 | 6.0 | | |
| D | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| Е | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| F | TTW+p | MT20 | 3.0 | 5.0 | 2.75 | 1.50 |
| G | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| Н | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 1 | TS-t | MT20 | 3.0 | 6.0 | | |
| J | TMVW-t | MT20 | 6.0 | 6.0 | 1.75 | Edge |
| K | BMV1+t | MT20 | 4.0 | 5.0 | Edge | 0.50 |
| L | BMWW-t | MT20 | 4.0 | 5.0 | 1.50 | 1.50 |
| M | BMWW-t | MT20 | 3.0 | 4.0 | | |
| Ν | BS-t | MT20 | 3.0 | 6.0 | | |
| 0 | BMWWW-t | MT20 | 4.0 | 8.0 | | |
| Ρ | BS-t | MT20 | 3.0 | 6.0 | | |
| Q | BMWW-t | MT20 | 3.0 | 4.0 | | |
| R | BMWW-t | MT20 | 4.0 | 5.0 | 1.50 | 1.50 |
| S | BMV1+t | MT20 | 4.0 | 5.0 | 3.50 | |

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



READ ALL NOTES ON THIS PAGE AND ON THE **ENGINEERING NOTES: TRUSSES. THE 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

₹₹84-₹

| <u> </u> | 111100 | | | | | | |
|----------|-----------------|--------|------------------|------|--------|----------|-------|
| | FACTORED | | MAXIMUM FACTORED | | | INPUT | REQRD |
| | GROSS RE | ACTION | GROSS REACTION | | | BRG | BRG |
| JΤ | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
| S | 2355 | 0 | 2355 | 0 | 0 | 5-8 | 4-3 |
| < | 2191 | 0 | 2191 | 0 | 0 | MECHANIC | CAL |
| | | | | | | | |

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

UNFACTORED REACTIONS

QUANTITY

| | 1ST LCASE | MAX./N | <u>иім. сомро</u> | NENT REACTION | NS . | | |
|----|-----------|----------|-------------------|---------------|------|---------|------|
| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| S | 1643 | 1204 / 0 | 0/0 | 0/0 | 0/0 | 440 / 0 | 0/0 |
| K | 1531 | 1108 / 0 | 0/0 | 0/0 | 0/0 | 423 / 0 | 0/0 |

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

1-3-8

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.74 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

2x4 DRY SPF No.2 T-BRACE AT G-O. E-O

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3' COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

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

LOADING TOTAL LOAD CASES: (4)

| | ORDS | FACTORED | | | WE | B S MAX. FACTO | ORED |
|-------|-----------|---------------|----------|--------|------|-------------------|----------|
| MEMB. | FORCE | VERT. LOAD LC | | MAX. | | FORCE | MAX |
| | (LBS) | (PLF) | | | | (LBS) | CSI (LC) |
| FR-TO | | FROM TO | | LENGTH | | | |
| A- B | 0 / 45 | -119.4 -119.4 | | | | 0 / 1489 | 0.24 (1) |
| B- C | -2584 / 0 | -119.4 -119.4 | | | 0- G | -821 / 0 | 0.63 (1) |
| C- D | -2584 / 0 | -119.4 -119.4 | | | | 0 / 305 | 0.07 (1) |
| D- E | -2331 / 0 | -119.4 -119.4 | | | M- H | -322 / 0 | 0.30(1) |
| E-F | -1831 / 0 | -119.4 -119.4 | | | L- H | -326 / 6 | 0.12 (1) |
| F- G | -1831 / 0 | -119.4 -119.4 | 0.44 (1) | 4.46 | E-O | -821 / 0 | 0.63(1) |
| G- H | -2331 / 0 | -119.4 -119.4 | | | Q-E | 0 / 305 | 0.07 (1) |
| H- I | -2584 / 0 | -119.4 -119.4 | 0.54 (1) | 3.74 | D- Q | -322 / 0 | 0.30(1) |
| l- J | -2584 / 0 | -119.4 -119.4 | | | R- D | -326 / 6 | 0.12 (1) |
| S-B | -2312 / 0 | 0.0 0.0 | 0.24 (1) | 5.54 | B- R | 0 / 2220 | 0.50(1) |
| K- J | -2148 / 0 | 0.0 0.0 | 0.22 (1) | 5.71 | L- J | 0 / 2220 | 0.50 (1) |
| S-R | 0/0 | -18.2 -18.2 | 0.12 (4) | 10.00 | | | |
| R-Q | 0 / 2178 | -18.2 -18.2 | 0.40(1) | 10.00 | | | |
| Q-P | 0 / 1938 | -18.2 -18.2 | 0.38(1) | 10.00 | | | |
| P- 0 | 0 / 1938 | -18.2 -18.2 | 0.38 (1) | 10.00 | | | |
| O-N | 0 / 1938 | -18.2 -18.2 | 0.38 (1) | 10.00 | | | |
| N- M | 0 / 1938 | -18.2 -18.2 | 0.38 (1) | 10.00 | | | |
| M- L | 0 / 2178 | -18.2 -18.2 | 0.40(1) | 10.00 | | | |
| L- K | 0/0 | -18.2 -18.2 | 0.12 (4) | 10.00 | | | |

DESIGN CRITERIA

| SPECIFIED LOADS: | | | | | | | | |
|------------------|------|----|---|------|----|--|--|--|
| TOP | CH. | LL | = | 34.8 | PS | | | |
| | | DL | = | 6.0 | PS | | | |
| BOT | CH. | LL | = | 0.0 | PS | | | |
| | | DL | = | 7.3 | PS | | | |
| TOTA | L LO | AD | = | 48.1 | PS | | | |

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH: - PART 9 OF BCBC 2018 , NBC-2019AE - PART 9 OF OBC 2012 (2019 AMENDMENT) - CSA 086-14

- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.06") CALCULATED VERT. DEFL.(LL) = L/999 (0.11") ALLOWABLE DEFL.(TL)= L/360 (1.06") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.19")

CSI: TC=0.54/0.97 (H-J:1) , BC=0.40/0.97 (L-M:1) , WB=0.63/0.97 (E-O:1) , SSI=0.25/1.00 (B-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

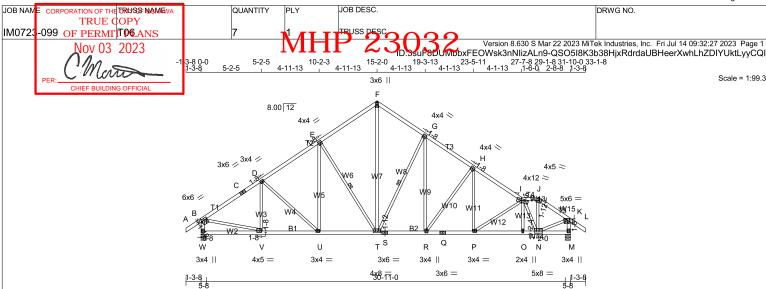
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90) JSI METAL= 0.68 (B) (INPUT = 1.00)





| LUMBER | | | | |
|---------------|------|-----|--------|--------|
| N. L. G. A. R | ULES | | | |
| CHORDS | SIZE | | LUMBER | DESCR. |
| A - C | 2x4 | DRY | No.2 | SPF |
| C - F | 2x4 | DRY | No.2 | SPF |
| F - I | 2x4 | DRY | No.2 | SPF |
| l - J | 2x4 | DRY | No.2 | SPF |
| J - L | 2x4 | DRY | No.2 | SPF |
| W - B | 2x4 | DRY | No.2 | SPF |
| M - K | 2x4 | DRY | No.2 | SPF |
| W - S | 2x4 | DRY | No.2 | SPF |
| S - Q | 2x4 | DRY | No.2 | SPF |
| Q - M | 2x4 | DRY | No.2 | SPF |
| | | | | |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |
| EXCEPT | | | | |
| T - F | 2x4 | DRY | No.2 | SPF |

| PL | PLATES (table is in inches) | | | | | | | | | | | |
|----|-----------------------------|--------|-----|------|------|------|--|--|--|--|--|--|
| JT | TYPE | PLATES | W | LEN | Υ | X | | | | | | |
| В | TMVW-t | MT20 | 6.0 | 6.0 | 1.75 | 3.00 | | | | | | |
| С | TS-t | MT20 | 3.0 | 6.0 | | | | | | | | |
| D | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 | | | | | | |
| | 3, H | | | | | | | | | | | |
| Е | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 | | | | | | |
| F | TTW+p | MT20 | 3.0 | 6.0 | | | | | | | | |
| 1 | TTWWW-m | MT20 | 4.0 | 12.0 | 2.00 | 5.00 | | | | | | |
| J | TTW-m | MT20 | 4.0 | 5.0 | 1.75 | 2.50 | | | | | | |
| K | TMVW-p | MT20 | 5.0 | 6.0 | 1.50 | 3.00 | | | | | | |
| М | BMV1+p | MT20 | 3.0 | 4.0 | 2.00 | | | | | | | |
| N | BMWWW-t | MT20 | 5.0 | 8.0 | 2.25 | 2.00 | | | | | | |
| 0 | BMW+w | MT20 | 2.0 | 4.0 | | | | | | | | |
| Р | BMWW-t | MT20 | 3.0 | 4.0 | | | | | | | | |
| Q | BS-t | MT20 | 3.0 | 6.0 | | | | | | | | |
| R | BMWW+t | MT20 | 3.0 | 4.0 | | | | | | | | |
| S | BS-t | MT20 | 3.0 | 6.0 | | | | | | | | |
| Т | BMWWW-t | MT20 | 4.0 | 8.0 | 1.75 | 4.00 | | | | | | |
| U | BMWW-t | MT20 | 3.0 | 4.0 | | | | | | | | |
| V | BMWW-t | MT20 | 4.0 | 5.0 | 1.50 | 1.50 | | | | | | |
| W | BMV1+p | MT20 | 3.0 | 4.0 | 2.00 | 0.50 | | | | | | |



READ ALL NOTES ON THIS PAGE AND ON THE **ENGINEERING NOTES: TRUSSES. THE 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

| DEA | KINGS | | | | | | |
|-----|-------------------------------|------|---------|---------|--------|-------|-------|
| | FACTORED | | MAXIMUI | M FACTO | INPUT | REQRD | |
| | GROSS REACTION GROSS REACTION | | | | | BRG | BRG |
| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
| W | 2355 | 0 | 2355 | 0 | 0 | 5-8 | 4-3 |
| М | 2355 | 0 | 2355 | 0 | 0 | 5-8 | 4-3 |
| | | | | | | | |

UNFACTORED REACTIONS

| | 1ST LCASE | MAX./I | MIN. COMPO | | | | |
|----|-----------|----------|------------|-----------|------|---------|------|
| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| W | 1643 | 1204 / 0 | 0/0 | 0/0 | 0/0 | 440 / 0 | 0/0 |
| M | 1643 | 1204 / 0 | 0/0 | 0/0 | 0/0 | 440 / 0 | 0/0 |

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

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.79 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF E-T, G-T. DBS = 20-0-0 . CBF = 124 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE (PER BRACE). FASTEN LATERAL BRACE(S) USING (0.122"X3") SPIRAL NAILS: 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.

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

LOADING TOTAL LOAD CASES: (4)

| СН | ORDS | | | | W E | BS | |
|-------|-------------|---------------|------------|--------|---------|------------|----------|
| MAX | C. FACTORED | FACTORED | | | | MAX. FACTO | RED |
| MEMB. | FORCE | VERT. LOAD LO | | | | FORCE | MAX |
| | (LBS) | (PLF) | | UNBRAC | 2 | (LBS) | CSI (LC) |
| FR-TO | | FROM TO | | LENGTH | I FR-TO | | |
| A- B | 0 / 45 | -119.4 -119.4 | 4 0.16 (1) | 10.00 | V- D | -351 / 0 | 0.12(1) |
| B- C | -2575 / 0 | -119.4 -119.4 | 4 0.49 (1) | 3.81 | D- U | -273 / 0 | 0.23(1) |
| C- D | -2575 / 0 | -119.4 -119.4 | 4 0.49 (1) | 3.81 | U- E | 0 / 268 | 0.06(1) |
| D- E | -2367 / 0 | -119.4 -119.4 | 4 0.41 (1) | 4.05 | E- T | -763 / 0 | 0.46(1) |
| E-F | -1905 / 0 | -119.4 -119.4 | 4 0.40 (1) | 4.43 | T- F | 0 / 1636 | 0.26(1) |
| F- G | -1900 / 0 | -119.4 -119.4 | 4 0.27 (1) | 4.59 | T- G | -995 / 0 | 0.62 (1) |
| G- H | -2403 / 0 | -119.4 -119.4 | | | R- G | 0 / 644 | 0.14 (1) |
| H- I | -2888 / 0 | -119.4 -119.4 | | | R- H | -725 / 0 | 0.68 (1) |
| I- J | -1938 / 0 | -119.4 -119.4 | | | P- H | 0 / 320 | 0.07 (1) |
| J- K | -2290 / 0 | -119.4 -119.4 | | | P- I | -389 / 0 | 0.17 (1) |
| K-L | 0 / 45 | -119.4 -119.4 | | | | 0 / 47 | 0.02 (4) |
| W-B | -2314 / 0 | | 0.24 (1) | | | -1867 / 0 | 0.37 (1) |
| M-K | -2333 / 0 | 0.0 | 0.24 (1) | 5.52 | N- J | 0 / 1027 | 0.23 (1) |
| | | | | | B- V | | 0.50 (1) |
| W-V | 0/0 | | 2 0.11 (4) | | N- K | 0 / 2036 | 0.46 (1) |
| V- U | 0 / 2169 | | 2 0.39 (1) | | | | |
| U- T | 0 / 1968 | | 2 0.38 (1) | | | | |
| T-S | 0 / 1999 | | 2 0.39 (1) | | | | |
| S-R | 0 / 1999 | | 2 0.39 (1) | | | | |
| R-Q | 0 / 2429 | | 2 0.43 (1) | | | | |
| Q-P | 0 / 2429 | | 2 0.43 (1) | | | | |
| P- 0 | 0 / 2748 | | 2 0.51 (1) | | | | |
| O- N | 0 / 2748 | | 2 0.49 (1) | | | | |
| N- M | 0/0 | -18.2 -18.3 | 2 0.03 (4) | 10.00 | | | |
| | | | | | | | |

DESIGN CRITERIA

SPECIFIED LOADS PSF PSF PSF TOP CH. 0.0 7.3 LL TOTAL LOAD 48.1 PSF

SPACING = 24.0 IN. C/C

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

TOTAL WEIGHT = 7 X 161 = 1127 lb

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF

PART 9. NBCC 2015 THIS DESIGN COMPLIES WITH:

 PART 9 OF BCBC 2018 . NBC-2019AE - PART 9 OF OBC 2012 (2019 AMENDMENT)

CSA 086-14 - TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.06") CALCULATED VERT. DEFL.(LL)= L/999 (0.13") ALLOWABLE DEFL.(TL)= L/360 (1.06") CALCULATED VERT. DEFL.(TL)= L/999 (0.23")

CSI: TC=0.49/0.97 (B-D:1), BC=0.51/0.97 (O-P:1) , WB=0.68/0.97 (H-R:1) , SSI=0.24/1.00 (B-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MAX MIN

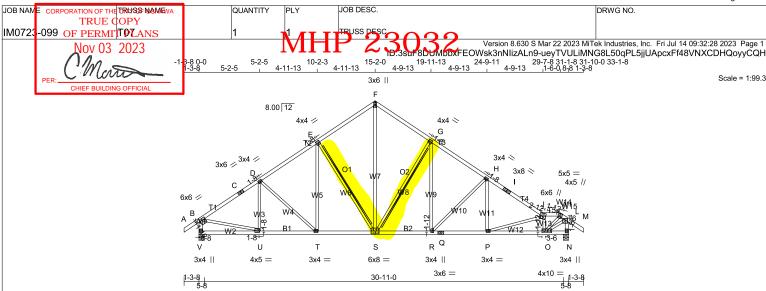
650 371 1747 788 1987 1873 PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90)

JSI METAL= 0.94 (I) (INPUT = 1.00)





| LUMBER | | | | |
|---------------|------|-----|--------|--------|
| N. L. G. A. R | ULES | | | |
| CHORDS | SIZE | | LUMBER | DESCR. |
| A - C | 2x4 | DRY | No.2 | SPF |
| C - F | 2x4 | DRY | No.2 | SPF |
| F - I | 2x4 | DRY | No.2 | SPF |
| l - J | 2x4 | DRY | No.2 | SPF |
| J - K | 2x4 | DRY | No.2 | SPF |
| K - M | 2x4 | DRY | No.2 | SPF |
| V - B | 2x4 | DRY | No.2 | SPF |
| N - L | 2x4 | DRY | No.2 | SPF |
| V - S | 2x4 | DRY | No.2 | SPF |
| S - Q | 2x4 | DRY | No.2 | SPF |
| Q - N | 2x4 | DRY | No.2 | SPF |
| | | | | |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |
| EXCEPT | | | | |
| S - F | 2x4 | DRY | No.2 | SPF |
| | | | | |

BMWW+t

BMW/W_t

BMV1+p

BSWWW-I BMWW-t

| PL/ | ATES (table | is in inches) | | | | |
|-----|-------------|---------------|-----|------|------|------|
| JT | TYPE | PLATES | W | LEN | Υ | Χ |
| В | TMVW-t | MT20 | 6.0 | 6.0 | 1.75 | 3.00 |
| С | TS-t | MT20 | 3.0 | 6.0 | | |
| D | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| Е | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| F | TTW+p | MT20 | 3.0 | 6.0 | | |
| G | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| Н | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 1 | TS-t | MT20 | 3.0 | 8.0 | | |
| J | TTWW+m | MT20 | 6.0 | 6.0 | 3.00 | 2.75 |
| K | TTW+m | MT20 | 4.0 | 5.0 | Edge | 1.75 |
| L | TMVW-p | MT20 | 5.0 | 5.0 | 1.50 | 2.50 |
| N | BMV1+p | MT20 | 3.0 | 4.0 | 2.00 | |
| 0 | BMWWW-t | MT20 | 4.0 | 10.0 | 1.75 | 3.25 |
| Ρ | BMWW-t | MT20 | 3.0 | 4.0 | | |

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

3.0 4.0

6.0 8.0 4.0

4.0 5.0

MT20

MT20 MT20

MT20

1.75 1.50

1.50 1.50 2.00 0.50



READ ALL NOTES ON THIS PAGE AND ON THE **ENGINEERING NOTES: TRUSSES. THE 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**

| DEAD | <u>SEARINGS</u> | | | | | | | | | | | | |
|------|-----------------|--------|---------|---------|--------|-------|-------|--|--|--|--|--|--|
| | FACTORED | | MAXIMUN | / FACTO | INPUT | REQRD | | | | | | | |
| | GROSS RE | ACTION | GROSS F | REACTIO | BRG | BRG | | | | | | | |
| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX | | | | | | |
| V | 2352 | 0 | 2352 | 0 | 0 | 5-8 | 4-2 | | | | | | |
| N | 2359 | 0 | 2359 | 0 | 0 | 5-8 | 4-3 | | | | | | |
| | | | | | | | | | | | | | |

UNFACTORED REACTIONS

| | 1ST LCASE | MAX./ | MIN. COMPON | IENT REACTION | NS | | |
|----|-----------|----------|-------------|---------------|------|---------|------|
| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| V | 1641 | 1202 / 0 | 0/0 | 0/0 | 0/0 | 439 / 0 | 0/0 |
| N | 1646 | 1206 / 0 | 0/0 | 0/0 | 0/0 | 440 / 0 | 0/0 |

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

BRACINGTOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.56 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

2x4 DRY SPF No.2 T-BRACE AT E-S, G-S

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER

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

LOADING TOTAL LOAD CASES: (4)

| СН | ORDS | | WEBS | | | | | |
|-------|-------------|---------------|------------|-------|------|------------|----------|--|
| MAX | (. FACTORED | FACTORED | | | | MAX. FACTO | RED | |
| MEMB. | FORCE | VERT. LOAD LO | C1 MAX | MAX. | MEMB | . FORCE | MAX | |
| | (LBS) | (PLF) | CSI (LC) | | | | CSI (LC) | |
| FR-TO | | FROM TO | | | | | | |
| A- B | 0 / 45 | -119.4 -119.4 | | | | -353 / 0 | 0.12 (1) | |
| B- C | -2570 / 0 | -119.4 -119.4 | | | | -270 / 0 | 0.23 (1) | |
| C- D | -2570 / 0 | -119.4 -119.4 | | | | | 0.06(1) | |
| D- E | -2363 / 0 | -119.4 -119.4 | 4 0.41 (1) | 4.05 | E-S | -774 / 0 | 0.53(1) | |
| E-F | -1894 / 0 | -119.4 -119.4 | 4 0.40 (1) | 4.44 | S-F | 0 / 1593 | 0.26(1) | |
| F-G | -1893 / 0 | -119.4 -119.4 | | | S- G | -1008 / 0 | 0.70(1) | |
| G- H | -2490 / 0 | -119.4 -119.4 | 4 0.39 (1) | 3.99 | R- G | 0 / 580 | 0.13 (1) | |
| H- I | -3045 / 0 | -119.4 -119.4 | | | R- H | | 0.59(1) | |
| I- J | -3045 / 0 | -119.4 -119.4 | | | | 0 / 174 | 0.04 (4) | |
| J- K | -2372 / 0 | -119.4 -119.4 | | | P- J | -238 / 0 | 0.11 (1) | |
| K-L | -1979 / 0 | -119.4 -119.4 | | | O- J | -1993 / 0 | | |
| | 0 / 45 | | | | 0- K | 0 / 1367 | 0.31 (1) | |
| V- B | -2310 / 0 | 0.0 0.0 | 0.24 (1) | 5.54 | B- U | 0 / 2211 | 0.50(1) | |
| N- L | -2333 / 0 | 0.0 | 0.24 (1) | 5.52 | O-L | 0 / 1797 | 0.40 (1) | |
| | | | | | | | | |
| V- U | | -18.2 -18.3 | | | | | | |
| U- T | 0 / 2164 | | | | | | | |
| T-S | 0 / 1965 | -18.2 -18.3 | | | | | | |
| S-R | 0 / 2071 | | 2 0.39 (1) | | | | | |
| R-Q | 0 / 2563 | -18.2 -18.3 | | | | | | |
| Q-P | 0 / 2563 | -18.2 -18.3 | 2 0.45 (1) | 10.00 | | | | |
| P- O | 0 / 2789 | -18.2 -18.3 | 2 0.52 (1) | 10.00 | | | | |
| O- N | 0/0 | -18.2 -18.3 | 2 0.05 (4) | 10.00 | | | | |
| | | | | | | | | |

DESIGN CRITERIA

SPECIFIED LOADS 34.8 6.0 PSF PSF PSF TOP CH. 0.0 7.3 LL TOTAL LOAD 48.1

SPACING = 24.0 IN. C/C

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

TOTAL WEIGHT = 155 lb

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

THIS DESIGN COMPLIES WITH: - PART 9 OF BCBC 2018 , NBC-2019AE - PART 9 OF OBC 2012 (2019 AMENDMENT)

CSA 086-14

- TPIC 2014

DESIGN ASSUMPTIONS OVERHANG NOT TO BE ALTERED OR CUT

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED

ALLOWABLE DEFL.(LL)= L/360 (1.06") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.13") ALLOWABLE DEFL.(TL)= L/360 (1.06") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.23")

CSI: TC=0.49/0.97 (B-D:1) , BC=0.52/0.97 (O-P:1) , WB=0.70/0.97 (G-S:1) , SSI=0.24/1.00 (B-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

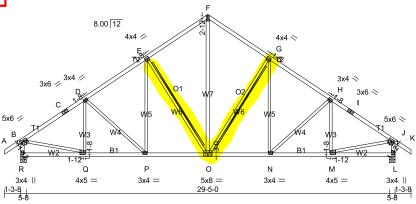
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90) JSI METAL= 0.72 (Q) (INPUT = 1.00)



Scale = 1:93.3





TOTAL WEIGHT = 2 X 147 = 294 lb

| LUMBER | | | | |
|---------------|------|-----|--------|--------|
| N. L. G. A. R | ULES | | | |
| CHORDS | SIZE | | LUMBER | DESCR. |
| A - C | 2x4 | DRY | No.2 | SPF |
| C - F | 2x4 | DRY | No.2 | SPF |
| F - I | 2x4 | DRY | No.2 | SPF |
| I - K | 2x4 | DRY | No.2 | SPF |
| R - B | 2x4 | DRY | No.2 | SPF |
| L - J | 2x4 | DRY | No.2 | SPF |
| R - O | 2x4 | DRY | No.2 | SPF |
| 0 - L | 2x4 | DRY | No.2 | SPF |
| | | | | |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |
| EXCEPT | | | | |
| 0 - F | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

PLATES (table is in inches)

RMWW-t

BMWW-t

BMWW-t

BMV1+p

| JI | IIFE | FLATES | vv | LEIN | 1 | ^ |
|----|--------|--------|-----|------|------|------|
| В | TMVW-t | MT20 | 5.0 | 6.0 | 1.75 | 3.00 |
| С | TS-t | MT20 | 3.0 | 6.0 | | |
| D | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| Е | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| F | TTW+p | MT20 | 3.0 | 5.0 | 2.75 | 1.50 |
| G | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| Н | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 1 | TS-t | MT20 | 3.0 | 6.0 | | |
| J | TMVW-t | MT20 | 5.0 | 6.0 | 1.75 | 3.00 |
| L | BMV1+p | MT20 | 3.0 | 4.0 | | |
| M | BMWW-t | MT20 | 4.0 | 5.0 | 1.50 | 1.75 |
| | | | | | | |

MT20

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER FACTORED GROSS REACTION VERT HORZ R 2252

5.0 4.0 8.0 4.0 4.0 MT20 3.0 5.0 3.0 MT20 MT20 3.00 4.00 1.50 1.75

I FN Y 1.50 1.75 UNFACTORED REACTIONS

2252

MAXIMUM FACTORED

GROSS REACTION DOWN HORZ L

0

MAX./MIN. COMPONENT REACTIONS SNOW LIVE 0/0 SOIL 0/0 COMBINED WIND DEAD 1151 / 0 0/0 0/0 420 / 0 1151 / 0 0/0 0/0 420 / 0 0/0

0

REQRD

BRG IN-SX

3-13

BRG

5-8

UPLIFT IN-SX

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

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.92 FT.

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

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

2x4 DRY SPF No.2 T-BRACE AT G-O, E-O

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER

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

LOADING TOTAL LOAD CASES: (4)

| | ORDS . FACTORED | EACTORED | | | | WE | B S MAX. FACTO | DED |
|-------|--------------------|-------------|-----|----------|----------------|------|-------------------|-----------------|
| MEMB. | FORCE (LBS) | VERT. LOAD | LC1 | | MAX. UNBRAC | | FORCE | MAX CSI (LC) |
| FR-TO | () | FROM TO | | | | | | |
| A-B | 0 / 45 | -119.4 -119 | 9.4 | 0.16(1) | 10.00 | 0- F | 0 / 1405 | 0.23(1) |
| B- C | -2433 / 0 | -119.4 -119 | 9.4 | 0.48 (1) | 3.92 | | -786 / 0 | 0.54(1) |
| C- D | -2433 / 0 | -119.4 -119 | | | | N- G | 0 / 295 | 0.07 (1) |
| D- E | -2208 / 0 | -119.4 -119 | 9.4 | 0.40 (1) | 4.17 | N- H | -291 / 0 | 0.24 (1) |
| E-F | -1732 / 0 | -119.4 -119 | | | | M- H | -329 / 0 | 0.11 (1) |
| F- G | -1732 / 0 | -119.4 -119 | | | | E-O | -786 / 0 | 0.54 (1) |
| G- H | -2208 / 0 | -119.4 -119 | | | | | 0 / 295 | 0.07 (1) |
| H- I | -2433 / 0 | -119.4 -119 | | | | | -291 / 0 | 0.24 (1) |
| I- J | -2433 / 0 | -119.4 -119 | | | | Q- D | -329 / 0 | 0.11 (1) |
| J- K | 0 / 45 | -119.4 -119 | | | | | 0 / 2095 | 0.47 (1) |
| | -2210 / 0 | | | 0.23 (1) | | M- J | 0 / 2095 | 0.47 (1) |
| L- J | -2210 / 0 | 0.0 | 0.0 | 0.23 (1) | 5.65 | | | |
| R-Q | 0/0 | -18.2 -18 | 3.2 | 0.10 (4) | 10.00 | | | |
| Q-P | 0 / 2051 | -18.2 -18 | 3.2 | 0.38 (1) | 10.00 | | | |
| P-O | 0 / 1836 | | | 0.35 (1) | | | | |
| O- N | 0 / 1836 | -18.2 -18 | | | | | | |
| N- M | 0 / 2051 | | | 0.38 (1) | | | | |
| M- L | 0/0 | -18.2 -18 | 3.2 | 0.10 (4) | 10.00 | | | |

DESIGN CRITERIA

SPECIFIED LOADS 34.8 6.0 TOP CH. 0.0 7.3 PSF LL TOTAL LOAD 48.1 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH: - PART 9 OF BCBC 2018 , NBC-2019AE - PART 9 OF OBC 2012 (2019 AMENDMENT) CSA 086-14

- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.01")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.01") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.18")

CSI: TC=0.48/0.97 (H-J:1) , BC=0.38/0.97 (M-N:1) , WB=0.54/0.97 (G-O:1) , SSI=0.24/1.00 (H-J:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN 650 371 1747 788 1987 1873

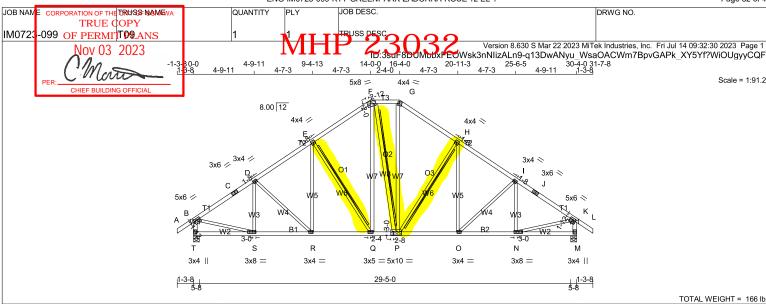
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (J) (INPUT = 0.90) JSI METAL= 0.64 (B) (INPUT = 1.00)







| LUMBER | | | | |
|---------------|------|-----|--------|--------|
| N. L. G. A. R | ULES | | | |
| CHORDS | SIZE | | LUMBER | DESCR. |
| A - C | 2x4 | DRY | No.2 | SPF |
| C - F | 2x4 | DRY | No.2 | SPF |
| F - G | 2x4 | DRY | No.2 | SPF |
| G - J | 2x4 | DRY | No.2 | SPF |
| J - L | 2x4 | DRY | No.2 | SPF |
| T - B | 2x4 | DRY | No.2 | SPF |
| M - K | 2x4 | DRY | No.2 | SPF |
| T - P | 2x4 | DRY | No.2 | SPF |
| P - M | 2x4 | DRY | No.2 | SPF |
| | | | | |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |
| EXCEPT | | | | |
| Q - F | 2x4 | DRY | No.2 | SPF |
| F - P | 2x4 | DRY | No.2 | SPF |
| P - G | 2x4 | DRY | No.2 | SPF |
| | | | | |

| PL | PLATES (table is in inches) | | | | | | | | |
|----|-----------------------------|--------|-----|------|------|------|--|--|--|
| JT | TYPE | PLATES | W | LEN | Υ | Χ | | | |
| В | TMVW-t | MT20 | 5.0 | 6.0 | 1.75 | 3.00 | | | |
| С | TS-t | MT20 | 3.0 | 6.0 | | | | | |
| D | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 | | | |
| Ε | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 | | | |
| F | TTWW-m | MT20 | 5.0 | 8.0 | 2.00 | 2.75 | | | |
| G | TTW-m | MT20 | 4.0 | 4.0 | | | | | |
| Н | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 | | | |
| 1 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 | | | |
| J | TS-t | MT20 | 3.0 | 6.0 | | | | | |
| K | TMVW-t | MT20 | 5.0 | 6.0 | 1.75 | 3.00 | | | |
| М | BMV1+p | MT20 | 3.0 | 4.0 | | | | | |
| Ν | BMWW-t | MT20 | 3.0 | 8.0 | 1.50 | 3.00 | | | |
| 0 | BMWW-t | MT20 | 3.0 | 4.0 | | | | | |
| Ρ | BSWWW-I | MT20 | 5.0 | 10.0 | 3.00 | 2.50 | | | |
| Q | BMWW-t | MT20 | 3.0 | 5.0 | 1.50 | 2.25 | | | |
| R | BMWW-t | MT20 | 3.0 | 4.0 | | | | | |
| S | BMWW-t | MT20 | 3.0 | 8.0 | 1.50 | 3.00 | | | |
| Т | BMV1+p | MT20 | 3.0 | 4.0 | | | | | |

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

| DEAD | KINGS | | | | | | |
|------|-----------------|--------|---------|---------|--------|-------|-------|
| | FACTOR | ED | MAXIMUN | / FACTO | INPUT | REQRD | |
| | GROSS RE | ACTION | GROSS F | REACTIO | BRG | BRG | |
| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
| Т | 2252 | 0 | 2252 | 0 | 0 | 5-8 | 3-13 |
| M | 2252 | 0 | 2252 | 0 | 0 | 5-8 | 3-13 |
| | | | | | | | |

UNFACTORED REACTIONS

| | 1ST LCASE | MAX./ | MIN. COMPON | IENT REACTION | NS . | | |
|----|-----------|----------|-------------|---------------|------|---------|------|
| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| T | 1571 | 1151 / 0 | 0/0 | 0/0 | 0/0 | 420 / 0 | 0/0 |
| M | 1571 | 1151 / 0 | 0/0 | 0/0 | 0/0 | 420 / 0 | 0/0 |

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.01 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

2x4 DRY SPF No.2 T-BRACE AT E-Q, F-P, H-P

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 9<mark>0% OF WEB LENGTH.</mark>

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

LOADING TOTAL LOAD CASES: (4)

| | CHORDS | | | | | WE | BS | |
|------|---------------|-----------|--------|----------|--------|-------|------------|----------|
| N | MAX. FACTORED | FACTOR | ED | | | | MAX. FACTO | RED |
| MEN | 1B. FORCE | VERT. LOA | AD LC1 | MAX | MAX. | MEMB. | FORCE | MAX |
| | (LBS) | (PLF | -) (| CSI (LC) | UNBRAC | | (LBS) | CSI (LC) |
| FR-T | | FROM | ГО | | LENGTH | FR-TO | | |
| A- B | 0 / 45 | -119.4 - | 119.4 | 0.16(1) | 10.00 | S-D | -368 / 0 | 0.12(1) |
| B- C | -2417 / 0 | -119.4 - | 119.4 | 0.41(1) | 4.01 | D-R | -212 / 0 | 0.15(1) |
| C- E | -2417 / 0 | -119.4 - | 119.4 | 0.41(1) | 4.01 | R-E | 0 / 232 | 0.05(1) |
| D- E | -2261 / 0 | -119.4 - | 119.4 | 0.35(1) | 4.20 | E-Q | -696 / 0 | 0.41(1) |
| E-F | -1838 / 0 | -119.4 - | 119.4 | 0.33(1) | 4.58 | Q-F | 0 / 654 | 0.11 (1) |
| F- G | | | | 0.11 (1) | | | -13 / 0 | 0.01 (4) |
| G- F | | | | 0.33(1) | | | 0 / 641 | 0.10 (1) |
| H- I | -2262 / 0 | | | 0.35(1) | | P- H | -701 / 0 | 0.41 (1) |
| I- J | -2417 / 0 | -119.4 - | 119.4 | 0.41 (1) | | O- H | 0 / 239 | 0.05 (1) |
| J- K | -2417 / 0 | -119.4 - | 119.4 | 0.41 (1) | 4.02 | O- I | -211 / 0 | 0.15 (1) |
| K-L | | | | 0.16 (1) | | N- I | -370 / 0 | 0.12 (1) |
| T- B | | | | | | | 0 / 2086 | 0.47 (1) |
| M- H | (-2212 / 0 | 0.0 | 0.0 | 0.23 (1) | 5.65 | N-K | 0 / 2086 | 0.47 (1) |
| 1 | | | | | | | | |
| T- S | | | | 0.09 (4) | | | | |
| S-F | | | | 0.36 (1) | | | | |
| R- 0 | | | | 0.34 (1) | | | | |
| Q-F | | | | 0.27 (1) | | | | |
| P- C | | | | 0.35 (1) | | | | |
| 0-1 | | | | 0.37 (1) | | | | |
| N- N | 4 0/0 | -18.2 | -18.2 | 0.09 (4) | 10.00 | | | |
| | | | | | | | | |

DESIGN CRITERIA

SPECIFIED LOADS 34.8 6.0 PSF PSF PSF TOP CH. 0.0 7.3 LL TOTAL LOAD 48.1

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH: PART 9 OF BCBC 2018 . NBC-2019AE

- PART 9 OF OBC 2012 (2019 AMENDMENT) CSA 086-14 - TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.01") CALCULATED VERT. DEFL.(LL)= L/ 999 (0.09") ALLOWABLE DEFL.(TL)= L/360 (1.01") CALCULATED VERT. DEFL.(TL)= L/ 999 (0.17")

CSI: TC=0.41/0.97 (B-D:1) , BC=0.37/0.97 (N-O:1) , WB=0.47/0.97 (B-S:1) , SSI=0.22/1.00 (B-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN MAX MIN MT20 650 371 1747 788 1987 1873

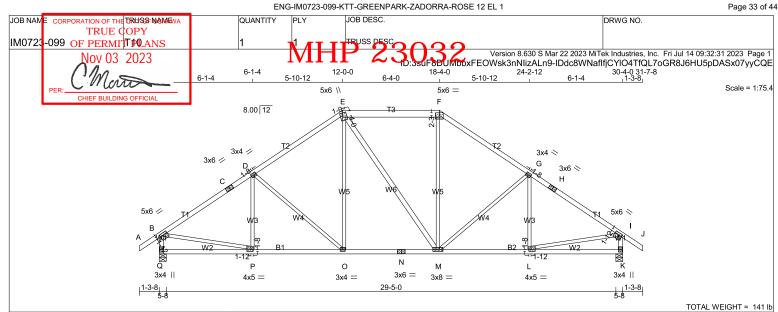
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90) JSI METAL= 0.63 (B) (INPUT = 1.00)







| LUMBER | | | | |
|---------------|------|-----|--------|--------|
| N. L. G. A. R | ULES | | | |
| CHORDS | SIZE | | LUMBER | DESCR. |
| A - C | 2x4 | DRY | No.2 | SPF |
| C - E | 2x4 | DRY | No.2 | SPF |
| E - F | 2x6 | DRY | No.2 | SPF |
| F - H | 2x4 | DRY | No.2 | SPF |
| H - J | 2x4 | DRY | No.2 | SPF |
| Q - B | 2x4 | DRY | No.2 | SPF |
| K - I | 2x4 | DRY | No.2 | SPF |
| Q - N | 2x4 | DRY | No.2 | SPF |
| N - K | 2x4 | DRY | No.2 | SPF |
| | | | | |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |
| EXCEPT | | | | |
| E - M | 2x4 | DRY | No.2 | SPF |
| | | | | |

| PLATES (table is in inches) | |
|-----------------------------|--|
|-----------------------------|--|

| JT | TYPE | PLATES | W | LEN | Υ | X |
|----|---------|--------|-----|-----|------|------|
| В | TMVW-t | MT20 | 5.0 | 6.0 | 1.75 | 3.00 |
| С | TS-t | MT20 | 3.0 | 6.0 | | |
| D | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| Е | TTWW+m | MT20 | 5.0 | 6.0 | 4.00 | 1.00 |
| F | TTW-I | MT20 | 5.0 | 6.0 | 2.25 | 3.00 |
| G | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| Н | TS-t | MT20 | 3.0 | 6.0 | | |
| 1 | TMVW-t | MT20 | 5.0 | 6.0 | 1.75 | 3.00 |
| K | BMV1+p | MT20 | 3.0 | 4.0 | | |
| L | BMWW-t | MT20 | 4.0 | 5.0 | 1.50 | 1.75 |
| M | BMWWW-t | MT20 | 3.0 | 8.0 | | |
| N | BS-t | MT20 | 3.0 | 6.0 | | |
| 0 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| Ρ | BMWW-t | MT20 | 4.0 | 5.0 | 1.50 | 1.75 |
| Q | BMV1+p | MT20 | 3.0 | 4.0 | | |

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

| | FACTOR | ED | MAXIMUN | / FACTO | INPUT | REQRD | |
|----|-----------------|--------|---------|---------|--------|-------|-------|
| | GROSS RE | ACTION | GROSS F | REACTIO | BRG | BRG | |
| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
| Q | 2252 | 0 | 2252 | 0 | 0 | 5-8 | 3-13 |
| K | 2252 | 0 | 2252 | 0 | 0 | 5-8 | 3-13 |
| | | | | | | | |

UNFACTORED REACTIONS

| | 1ST LCASE | MAX./N | IIN. COMPO | NENT REACTION | NS | | |
|----|-----------|----------|------------|---------------|------|---------|------|
| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| Q | 1571 | 1151 / 0 | 0/0 | 0/0 | 0/0 | 420 / 0 | 0/0 |
| K | 1571 | 1151 / 0 | 0/0 | 0/0 | 0/0 | 420 / 0 | 0/0 |

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

BRACINGTOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.54 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

LOADING TOTAL LOAD CASES: (4)

CHODDC

| С Н | ORDS | | | | | W E | BS | |
|-------|-------------|------------|------|----------|--------|-------|------------|----------|
| MAX | (. FACTORED | FACTORE | D | | | | MAX. FACTO | RED |
| MEMB. | FORCE | VERT. LOAI | DLC1 | MAX | MAX. | MEMB. | FORCE | MAX |
| | (LBS) | (PLF) |) (| CSI (LC) | UNBRAC | ; | (LBS) | CSI (LC) |
| FR-TO | | FROM T | 0 | | LENGTH | FR-TO | | |
| A- B | 0 / 45 | -119.4 -1 | 19.4 | 0.16(1) | 10.00 | P- D | -251 / 39 | 0.11(1) |
| B- C | -2462 / 0 | -119.4 -1 | 19.4 | 0.71 (1) | 3.54 | D- O | -546 / 0 | 0.71 (1) |
| C- D | -2462 / 0 | -119.4 -1 | 19.4 | 0.71 (1) | 3.54 | 0- E | 0 / 465 | 0.10 (1) |
| D- E | -2056 / 0 | -119.4 -1 | 19.4 | 0.64(1) | 3.91 | E- M | 0/1 | 0.00(1) |
| E-F | -1680 / 0 | -119.4 -1 | 19.4 | 0.32(1) | 5.66 | M-F | 0 / 466 | 0.10(1) |
| F-G | -2057 / 0 | -119.4 -1 | 19.4 | 0.64 (1) | 3.91 | M- G | -544 / 0 | 0.71 (1) |
| G- H | -2462 / 0 | -119.4 -1 | 19.4 | 0.71(1) | 3.54 | L- G | -252 / 38 | 0.11 (1) |
| H- I | -2462 / 0 | -119.4 -1 | 19.4 | 0.71(1) | 3.54 | B-P | 0 / 2120 | 0.48 (1) |
| I- J | 0 / 45 | -119.4 -1 | 19.4 | 0.16(1) | 10.00 | L- I | 0 / 2120 | 0.48 (1) |
| Q-B | -2205 / 0 | 0.0 | 0.0 | 0.23(1) | 5.65 | | | |
| K- I | -2204 / 0 | 0.0 | 0.0 | 0.23(1) | 5.65 | | | |
| | | | | | | | | |
| Q-P | | -18.2 - | | | | | | |
| P- 0 | 0 / 2088 | -18.2 - | 18.2 | 0.40 (1) | 10.00 | | | |
| O- N | 0 / 1679 | | | 0.35 (1) | | | | |
| N- M | | -18.2 - | | | | | | |
| M-L | | -18.2 - | | | | | | |
| L-K | 0/0 | -18.2 - | 18.2 | 0.15 (4) | 10.00 | | | |
| | | | | | | | | |
| | | | | | | | | |

DESIGN CRITERIA

| SPEC | IFIED | LOAI | DS: | | |
|------|-------|------|-----|------|-----|
| TOP | CH. | LL | = | 34.8 | PSI |
| | | DL | = | 6.0 | PSI |
| BOT | CH. | LL | = | 0.0 | PSI |
| | | DL | = | 7.3 | PSI |
| TOTA | L LO | AD | = | 48.1 | PSI |

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH: PART 9 OF BCBC 2018 . NBC-2019AE

- PART 9 OF OBC 2012 (2019 AMENDMENT)

CSA 086-14

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.01")
CALCULATED VERT. DEFL.(LL)= L/999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (1.01")
CALCULATED VERT. DEFL.(TL) = L/999 (0.17")

CSI: TC=0.71/0.97 (B-D:1) , BC=0.41/0.97 (L-M:1) , WB=0.71/0.97 (D-O:1) , SSI=0.29/1.00 (G-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN MAX MIN MT20 650 371 1747 788 1987 1873

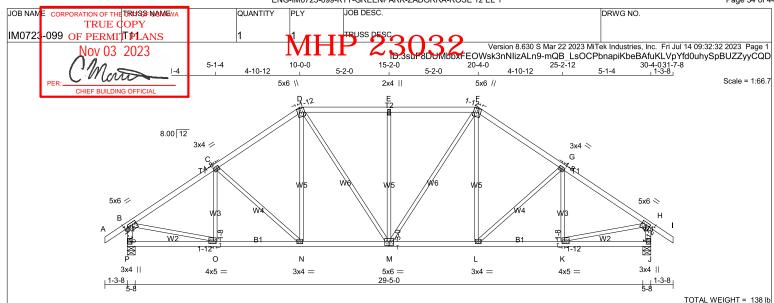
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90) JSI METAL= 0.66 (B) (INPUT = 1.00)







| LUMBER | | | | |
|--------------------|------|-----|--------|--------|
| N. L. G. A. R | ULES | | | |
| CHORDS | SIZE | | LUMBER | DESCR. |
| A - D | 2x4 | DRY | No.2 | SPF |
| D - F | 2x4 | DRY | No.2 | SPF |
| F - I | 2x4 | DRY | No.2 | SPF |
| P - B | 2x4 | DRY | No.2 | SPF |
| J - H | 2x4 | DRY | No.2 | SPF |
| P - M | 2x4 | DRY | No.2 | SPF |
| M - J | 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 |
|----|---------|--------|-----|-----|-----------|
| В | TMVW-t | MT20 | 5.0 | 6.0 | 1.75 3.00 |
| C | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 1.50 |
| D | TTWW+m | MT20 | 5.0 | 6.0 | Edge 1.75 |
| Е | TMW+w | MT20 | 2.0 | 4.0 | • |
| F | TTWW+m | MT20 | 5.0 | 6.0 | Edge 1.75 |
| G | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 1.50 |
| Н | TMVW-t | MT20 | 5.0 | 6.0 | 1.75 3.00 |
| J | BMV1+p | MT20 | 3.0 | 4.0 | |
| K | BMWW-t | MT20 | 4.0 | 5.0 | 1.50 1.75 |
| L | BMWW-t | MT20 | 3.0 | 4.0 | |
| M | BSWWW-I | MT20 | 5.0 | 6.0 | 3.00 3.00 |
| N | BMWW-t | MT20 | 3.0 | 4.0 | |
| 0 | BMWW-t | MT20 | 4.0 | 5.0 | 1.50 1.75 |
| Ρ | BMV1+p | MT20 | 3.0 | 4.0 | |
| | | | | | |

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

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

| | FACTO | RED | MAXIMUM FACTORED | | | INPUT | REQRD |
|----|----------|---------|------------------|---------|--------|-------|-------|
| | GROSS RE | EACTION | GROSS | REACTIO | N | BRG | BRG |
| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
| Ρ | 2252 | 0 | 2252 | 0 | 0 | 5-8 | 3-13 |
| J | 2252 | 0 | 2252 | 0 | 0 | 5-8 | 3-13 |
| | | | | | | | |

UNFACTORED REACTIONS

| ı | | 1ST LCASE | MAX./ | MIN. COMPON | NENT REACTION | NS . | | |
|---|----|-----------|----------|-------------|---------------|------|---------|------|
| ı | JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| ı | Ρ | 1571 | 1151 / 0 | 0/0 | 0/0 | 0/0 | 420 / 0 | 0/0 |
| ı | J | 1571 | 1151 / 0 | 0/0 | 0/0 | 0/0 | 420 / 0 | 0/0 |

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.90 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

LOADING TOTAL LOAD CASES: (4)

| СН | ORDS | | | | | W E | BS | |
|-------|-------------|----------|--------|----------|--------|-------|------------|----------|
| MAX | (. FACTORED | FACTO | RED | | | | MAX. FACTO | RED |
| MEMB. | FORCE | VERT. LC | AD LC | 1 MAX | MAX. | MEMB. | FORCE | MAX |
| | (LBS) | (PI | _F) · | CSI (LC) | UNBRAC | ; | (LBS) | CSI (LC) |
| FR-TO | | FROM | TO | | LENGTH | FR-TO | | |
| A- B | 0 / 45 | -119.4 | -119.4 | 0.16(1) | 10.00 | O- C | -343 / 0 | 0.12(1) |
| B- C | -2440 / 0 | -119.4 | -119.4 | 0.48 (1) | 3.90 | C-N | -344 / 0 | 0.29(1) |
| C- D | -2213 / 0 | -119.4 | -119.4 | 0.45 (1) | 4.09 | N- D | 0 / 335 | 0.08 (1) |
| D- E | -2085 / 0 | -119.4 | -119.4 | 0.46(1) | 4.16 | D- M | 0 / 496 | 0.11 (1) |
| E-F | -2085 / 0 | -119.4 | -119.4 | 0.46(1) | 4.16 | M- E | -752 / 0 | 0.94(1) |
| F- G | -2213 / 0 | -119.4 | -119.4 | 0.45(1) | 4.09 | M-F | 0 / 496 | 0.11 (1) |
| G- H | -2440 / 0 | -119.4 | -119.4 | 0.48 (1) | 3.90 | L- F | 0 / 335 | 0.08(1) |
| H- I | 0 / 45 | -119.4 | -119.4 | 0.16(1) | 10.00 | L- G | -344 / 0 | 0.29(1) |
| P-B | -2210 / 0 | 0.0 | 0.0 | 0.23(1) | 5.65 | K- G | -343 / 0 | 0.12(1) |
| J- H | -2210 / 0 | 0.0 | 0.0 | 0.23(1) | 5.65 | B-O | 0 / 2108 | 0.47(1) |
| | | | | | | K- H | 0 / 2108 | 0.47 (1) |
| P- 0 | 0/0 | -18.2 | -18.2 | 0.10 (4) | 10.00 | | | |
| O- N | 0 / 2062 | -18.2 | -18.2 | 0.39(1) | 10.00 | | | |
| N- M | 0 / 1810 | -18.2 | -18.2 | 0.35(1) | 10.00 | | | |
| M- L | 0 / 1810 | -18.2 | -18.2 | 0.35(1) | 10.00 | | | |
| L- K | 0 / 2062 | -18.2 | -18.2 | 0.39 (1) | 10.00 | | | |
| K- J | 0/0 | -18.2 | -18.2 | 0.10 (4) | 10.00 | | | |
| | | | | | | | | |

DESIGN CRITERIA

| SPEC | IFIED | LOAI | OS: | | |
|------|-------|------|-----|------|-----|
| TOP | CH. | LL | = | 34.8 | PSF |
| | | DL | = | 6.0 | PSI |
| BOT | CH. | LL | = | 0.0 | PSI |
| | | DL | = | 7.3 | PSI |
| TOTA | L LO | AD | = | 48.1 | PSI |

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018 . NBC-2019AE - PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14 - TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.01")
CALCULATED VERT. DEFL.(LL)= L/999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.01")
CALCULATED VERT. DEFL.(TL) = L/999 (0.17")

CSI: TC=0.48/0.97 (G-H:1) , BC=0.39/0.97 (K-L:1) , WB=0.94/0.97 (E-M:1) , SSI=0.30/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN MAX MIN MT20 650 371 1747 788 1987 1873

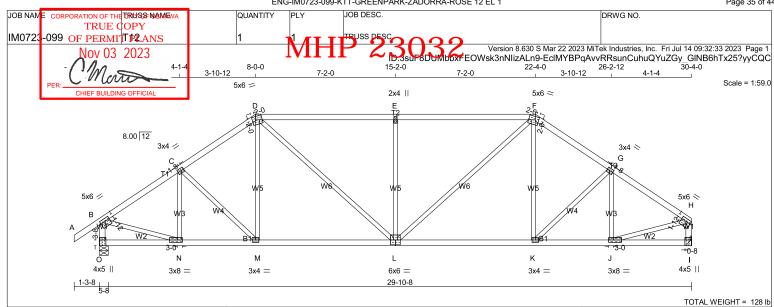
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (H) (INPUT = 0.90) JSI METAL= 0.64 (B) (INPUT = 1.00)







| LUMBER | | | | |
|---------------|------|-----|--------|--------|
| N. L. G. A. R | ULES | | | |
| CHORDS | SIZE | | LUMBER | DESCR. |
| A - D | 2x4 | DRY | No.2 | SPF |
| D - F | 2x4 | DRY | No.2 | SPF |
| F - H | 2x4 | DRY | No.2 | SPF |
| O - B | 2x4 | DRY | No.2 | SPF |
| I - H | 2x4 | DRY | No.2 | SPF |
| 0 - L | 2x4 | DRY | No.2 | SPF |
| L - I | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

PLATES (table is in inches)

| JT | TYPE | PLATES | W | LEN | Υ | Χ |
|----|---------|--------|-----|-----|------|------|
| В | TMVW-t | MT20 | 5.0 | 6.0 | 1.75 | 3.00 |
| С | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| D | TTWW-m | MT20 | 5.0 | 6.0 | 2.00 | 2.00 |
| Ε | TMW+w | MT20 | 2.0 | 4.0 | | |
| F | TTWW-m | MT20 | 5.0 | 6.0 | 2.00 | 2.00 |
| G | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| Н | TMVW-t | MT20 | 5.0 | 6.0 | 1.75 | Edge |
| 1 | BMV1+t | MT20 | 4.0 | 5.0 | Edge | 0.50 |
| J | BMWW-t | MT20 | 3.0 | 8.0 | 1.50 | 3.00 |
| K | BMWW-t | MT20 | 3.0 | 4.0 | | |
| L | BSWWW-I | MT20 | 6.0 | 6.0 | | |
| M | BMWW-t | MT20 | 3.0 | 4.0 | | |
| N | BMWW-t | MT20 | 3.0 | 8.0 | 1.50 | 3.00 |
| 0 | BMV1+t | MT20 | 4.0 | 5.0 | 3.50 | |

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

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

| DEAL | KINGS | | | | | | |
|------|----------|----------------|------------------|------|--------|----------|-------|
| | FACTOR | RED | MAXIMUM FACTORED | | | INPUT | REQRD |
| | GROSS RE | GROSS REACTION | | | BRG | BRG | |
| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
| 0 | 2252 | 0 | 2252 | 0 | 0 | 5-8 | 3-13 |
| l | 2088 | 0 | 2088 | 0 | 0 | MECHANIC | CAL |
| | | | | | | | |

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

UNFACTORED REACTIONS

| | 1ST LCASE | MAX./N | <u>/IIN. COMPO</u> | NENT REACTION | NS . | | |
|----|-----------|----------|--------------------|---------------|------|---------|------|
| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| 0 | 1571 | 1151 / 0 | 0/0 | 0/0 | 0/0 | 420 / 0 | 0/0 |
| I | 1459 | 1056 / 0 | 0/0 | 0/0 | 0/0 | 403 / 0 | 0/0 |

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.66 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

LOADING TOTAL LOAD CASES: (4)

| CH | CHORDS WEBS | | | | | | |
|-------|-------------|------------|-------------|---------|-------|------------|----------|
| MAX | K. FACTORED | FACTORE |) | | | MAX. FACTO | DRED |
| MEMB. | FORCE | VERT. LOAD | LC1 MAX | MAX. | MEMB. | FORCE | MAX |
| | (LBS) | (PLF) | CSI (LC |) UNBRA | 0 | (LBS) | CSI (LC) |
| FR-TO | | FROM TO | | LENGTH | FR-TO | | |
| A- B | 0 / 45 | -119.4 -11 | 9.4 0.16 (1 |) 10.00 | N- C | -475 / 0 | 0.12(1) |
| B- C | -2371 / 0 | -119.4 -11 | 9.4 0.31 (1 |) 4.16 | C- M | -101 / 0 | 0.05(1) |
| C- D | -2348 / 0 | -119.4 -11 | 9.4 0.30 (|) 4.17 | M- D | 0 / 204 | 0.05 (4) |
| D-E | -2574 / 0 | -119.4 -11 | 9.4 0.94 (* |) 2.66 | D- L | 0 / 868 | 0.20(1) |
| E-F | -2574 / 0 | -119.4 -11 | 9.4 0.94 (|) 2.66 | L- E | -1054 / 0 | 0.80(1) |
| F- G | -2348 / 0 | -119.4 -11 | 9.4 0.30 (|) 4.17 | L- F | 0 / 868 | 0.20(1) |
| G- H | -2371 / 0 | -119.4 -11 | 9.4 0.31 (1 |) 4.16 | K-F | 0 / 204 | 0.05(4) |
| O-B | -2213 / 0 | 0.0 | 0.0 0.23 (|) 5.65 | K- G | -101 / 0 | 0.05(1) |
| I- H | -2049 / 0 | 0.0 | 0.0 0.21 (1 | 5.83 | J- G | -475 / 0 | 0.12(1) |
| | | | | | B- N | 0 / 2065 | 0.46 (1) |
| O- N | 0/0 | -18.2 -1 | 8.2 0.08 (4 | 10.00 | J- H | 0 / 2065 | 0.46 (1) |
| N- M | 0 / 1997 | -18.2 -1 | 8.2 0.43 (1 |) 10.00 | | | |
| M- L | 0 / 1927 | -18.2 -1 | 8.2 0.42 (1 |) 10.00 | | | |
| L-K | 0 / 1927 | | 8.2 0.42 (1 | | | | |
| K- J | 0 / 1997 | -18.2 -1 | 8.2 0.43 (1 |) 10.00 | | | |
| J-I | 0/0 | -18.2 -1 | 8.2 0.08 (4 |) 10.00 | | | |

DESIGN CRITERIA

| SPECIFIED LOADS: | | | | | | | | |
|------------------|------|------|------|-----|--|--|--|--|
| TOP | CH. | LL = | 34.8 | PSF | | | | |
| | | DL = | 6.0 | PSF | | | | |
| BOT | CH. | LL = | 0.0 | PSF | | | | |
| | | DL = | 7.3 | PSF | | | | |
| TOTA | L LO | AD = | 48.1 | PSF | | | | |

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH: PART 9 OF BCBC 2018 . NBC-2019AE

- PART 9 OF OBC 2012 (2019 AMENDMENT)

CSA 086-14 - TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.01") CALCULATED VERT. DEFL.(LL)= L/ 999 (0.11") ALLOWABLE DEFL.(TL)= L/360 (1.01") CALCULATED VERT. DEFL.(TL)= L/ 999 (0.24")

CSI: TC=0.94/0.97 (D-E:1) , BC=0.43/0.97 (M-N:1) , WB=0.80/0.97 (E-L:1) , SSI=0.42/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN MAX MIN MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90) JSI METAL= 0.63 (L) (INPUT = 1.00)



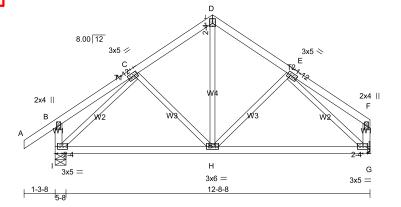


3x4 ||

JOB DESC



Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Fri Jul 14 09:32:34 2023 Page 1 HD:3sdF8DUMD0xFEOWsk3nNlizALn9-joJkmXQTxD1l30TzlcC7zlQvdLM3UxWFv7gbdRyyCQB -1-3-8 0-0 1-3-8 1 6-7-0 9-9-4 13-2-0 Scale: 1/4"=1



TOTAL WEIGHT = 3 X 56 = 167 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

| JΤ | TYPE | PLATES | W | LEN | Υ | Χ |
|----|---------|--------|-----|-----|------|------|
| В | TMV+p | MT20 | 2.0 | 4.0 | | |
| С | TMWW-t | MT20 | 3.0 | 5.0 | 1.50 | 1.75 |
| D | TTW+p | MT20 | 3.0 | 4.0 | 2.25 | 1.50 |
| Е | TMWW-t | MT20 | 3.0 | 5.0 | 1.50 | 1.75 |
| F | TMV+p | MT20 | 2.0 | 4.0 | | |
| G | BMVW1-t | MT20 | 3.0 | 5.0 | 1.50 | 2.25 |
| Н | BMWWW-t | MT20 | 3.0 | 6.0 | | |
| 1 | BMVW1-t | MT20 | 3.0 | 5.0 | 1.50 | 2.25 |
| | | | | | | |

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

| BEAL | RINGS | | | | | | |
|------|----------|--------|------------------|------|--------|----------|-------|
| | FACTORED | | MAXIMUM FACTORED | | | INPUT | REQRD |
| | GROSS RE | ACTION | GROSS REACTION | | | BRG | BRG |
| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
| | 1070 | 0 | 1070 | 0 | 0 | 5-8 | 1-8 |
| G | 906 | 0 | 906 | 0 | 0 | MECHANIC | CAL |
| | | | | | | | |

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

UNFACTORED REACTIONS

| | 1ST LCASE | MAX./N | MAX./MIN. COMPONENT REACTIONS | | | | | | | |
|----|-----------|---------|-------------------------------|-----------|------|---------|------|--|--|--|
| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL | | | |
| 1 | 745 | 554 / 0 | 0/0 | 0/0 | 0/0 | 192 / 0 | 0/0 | | | |
| G | 633 | 458 / 0 | 0/0 | 0/0 | 0/0 | 175 / 0 | 0/0 | | | |

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

QUANTITY

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

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

LOADING TOTAL LOAD CASES: (4)

| СНС | DRDS | | | | WEBS | | | |
|-------|----------|----------|--------|----------|--------|-------|------------|----------|
| MAX. | FACTORED | FACTO | RED | | | | MAX. FACTO | RED |
| MEMB. | FORCE | VERT. LC | AD LC1 | MAX | MAX. | MEMB | . FORCE | MAX |
| | (LBS) | (Pl | _F) (| CSI (LC) | UNBRAC | ; | (LBS) | CSI (LC) |
| FR-TO | | FROM | TO | | LENGTH | FR-TO | | |
| A- B | 0 / 45 | -119.4 | -119.4 | 0.16(1) | 10.00 | H- D | 0 / 442 | 0.10(1) |
| B- C | 0 / 25 | -119.4 | -119.4 | 0.20(1) | 10.00 | H- E | -210 / 0 | 0.07(1) |
| C- D | -700 / 0 | | | 0.16(1) | | C- H | -210 / 0 | 0.07(1) |
| D- E | -700 / 0 | -119.4 | -119.4 | 0.16(1) | 6.25 | I- C | -1003 / 0 | 0.34(1) |
| E-F | 0 / 24 | -119.4 | -119.4 | 0.20(1) | 10.00 | E- G | -1003 / 0 | 0.34(1) |
| I- B | -316 / 0 | 0.0 | 0.0 | 0.03(1) | 7.81 | | | |
| G-F | -152 / 0 | 0.0 | 0.0 | 0.02(1) | 7.81 | | | |
| | | | | | | | | |
| I- H | 0 / 711 | | | 0.27 (4) | | | | |
| H- G | 0 / 711 | -18.2 | -18.2 | 0.27 (4) | 10.00 | | | |



DRWG NO.

| SPECIFIED LOADS: | | | | | | | | |
|------------------|------|----|---|------|----|--|--|--|
| TOP | CH. | LL | = | 34.8 | PS | | | |
| | | DL | = | 6.0 | PS | | | |
| BOT | CH. | LL | = | 0.0 | PS | | | |
| | | DL | = | 7.3 | PS | | | |
| TOTA | L LO | AD | = | 48.1 | PS | | | |

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH: - PART 9 OF BCBC 2018 , NBC-2019AE - PART 9 OF OBC 2012 (2019 AMENDMENT) - CSA 086-14

- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.44")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.44") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.20/0.97 (B-C:1) , BC=0.27/0.97 (H-I:4) , WB=0.34/0.97 (C-I:1) , SSI=0.16/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

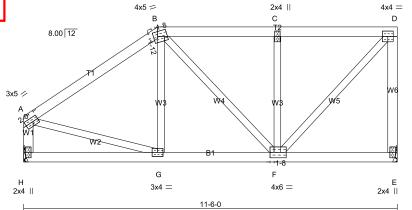
JSI GRIP= 0.90 (G) (INPUT = 0.90) JSI METAL= 0.27 (E) (INPUT = 1.00)







Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Fri Jul 14 09:32:34 2023 Page 1 ID:3suF6DUM6bxFEOWsk3nNlizALn9-joJkmXQTxD1l30TzlcC7zlQt6LPJU__Fv7gbdRyyCQB 7-9-12 11-6-0 3-8-4 Scale = 1:35.4



TOTAL WEIGHT = 50 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

| JT | TYPE | PLATES | W | LEN | Υ | Χ |
|----|---------|--------|-----|-----|------|------|
| Α | TMVW-t | MT20 | 3.0 | 5.0 | 1.50 | 2.00 |
| В | TTWW-m | MT20 | 4.0 | 5.0 | 1.75 | 1.50 |
| С | TMW+w | MT20 | 2.0 | 4.0 | | |
| D | TMVW-t | MT20 | 4.0 | 4.0 | | |
| Ε | BMV1+p | MT20 | 2.0 | 4.0 | | |
| F | BMWWW-t | MT20 | 4.0 | 6.0 | 2.00 | 1.50 |
| G | BMWW-t | MT20 | 3.0 | 4.0 | | |
| Н | BMV1+p | MT20 | 2.0 | 4.0 | | |

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

| BEA | <u>rings</u> | | | | | | |
|-----|--------------|--------|------------------|------|--------|----------|-------|
| | FACTOR | ED | MAXIMUM FACTORED | | | INPUT | REQRD |
| | GROSS RE | ACTION | GROSS REACTION | | | BRG | BRG |
| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
| E | 792 | 0 | 792 | 0 | 0 | MECHANIC | CAL |
| Н | 792 | 0 | 792 | 0 | 0 | MECHANIC | CAL |
| | | | | | | | |

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

UNFACTORED REACTIONS

| | 151 LCASE | IVIA./I | VIIN. COMPO | NEINT REACTION | VO | | |
|----|-----------|---------|-------------|----------------|------|---------|------|
| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| Ε | 553 | 400 / 0 | 0/0 | 0/0 | 0/0 | 153 / 0 | 0/0 |
| Н | 553 | 400 / 0 | 0/0 | 0/0 | 0/0 | 153 / 0 | 0/0 |

BRACING

QUANTITY

4-1-8

0-0

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

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

LOADING TOTAL LOAD CASES: (4)

| RDS | WEBS | | | | | | | |
|----------|--|---|---|---|---|---|---|---|
| FACTORED | FACTOR | ED | | | | MAX. FACTO | RED | |
| FORCE | VERT. LOA | AD LC1 | MAX | MAX. | MEMB. | FORCE | MAX | |
| (LBS) | (PLF | =) (| CSI (LC) | UNBRAC | ; | (LBS) | CSI (LC) | |
| | FROM | ГО | | LENGTH | FR-TO | | | |
| -667 / 0 | -119.4 - | 119.4 | 0.36(1) | 6.25 | G-B | -60 / 50 | 0.02(4) | |
| -565 / 0 | -119.4 - | 119.4 | 0.26(1) | 6.25 | B- F | -8 / 19 | 0.00(1) | |
| -566 / 0 | | | | | F- C | -540 / 0 | 0.14 (1) | |
| -761 / 0 | 0.0 | 0.0 | 0.20(1) | 7.81 | F- D | 0 / 819 | 0.18 (1) | |
| -759 / 0 | 0.0 | 0.0 | 0.08(1) | 7.81 | A- G | 0 / 572 | 0.13 (1) | |
| | | | | | | | | |
| 0/0 | -18.2 | -18.2 | 0.07(4) | 10.00 | | | | |
| 0 / 553 | -18.2 | -18.2 | 0.12(1) | 10.00 | | | | |
| 0/0 | -18.2 | -18.2 | 0.05(4) | 10.00 | | | | |
| | FACTORED FORCE (LBS) -667 / 0 -565 / 0 -566 / 0 -761 / 0 -759 / 0 0 / 0 0 / 553 | FACTORED FACTOR FACTOR (LBS) VERT. Lo/2 (PLF FROM 119.4 566 / 0 119.4 761 / 0 0.0 (-759 / 0 0.0 (-759 / 0 0.553 (-18.2) | FACTORED FACTORED FORCE (LBS) (PLF) | FACTORED FORCE FORCE VERT. LOAD LC1 MAX (LBS) (PLF) CSI (LC) FROM TO -119.4 -119.4 0.36 (1) -566 / 0 -119.4 -119.4 0.26 (1) -761 / 0 0.0 0.0 0.20 (1) -759 / 0 0.0 0.0 0.0 (1) 0 0/553 -18.2 -18.2 0.12 (1) | FACTORED FACTORED FORCE (LBS) VERT. LOAD LCT MAX MAX. (LBS) (PLF) CSI (LC) UNBRAC (LBGTH -119.4 -119.4 0.26 (1) 6.25 -566 / 0 -119.4 -119.4 0.26 (1) 6.25 -761 / 0 0.0 0.0 0.02 (1) 7.81 -759 / 0 0.0 0.0 0.08 (1) 7.81 0.7553 -18.2 -18.2 0.12 (1) 10.00 | FACTORED FORCE (LBS) FACTORED VERT. LOAD LC1 MAX MAM. MBMB. (LBS) (PLF) CSI (LC) UNDRAC -667 / 0 -119.4 -119.4 0.36 (1) 6.25 G-B -5665 / 0 -119.4 -119.4 0.26 (1) 6.25 B-F -566 / 0 -119.4 -119.4 0.26 (1) 6.25 F- C -761 / 0 0.0 0.0 0.20 (1) 7.81 F- D -759 / 0 0.0 0.0 0.08 (1) 7.81 A- G 0 / 0 -18.2 -18.2 0.07 (4) 10.00 0.00 0.05 (1) 10.00 0.00 | FACTORED FORCE (LBS) FACTORED VERT. LOAD LC1 MAX MAX. MEMB. (PLF) MAX. MEMB. CSI (LC) MAX. MEMB. UNBRAC LENGTH FR.TO MAX. FACTORED (LBS) -667 / 0 -5667 / 0 -5665 / 0 -5666 / 0 -761 / 0 -761 / 0 -761 / 0 0 / 0 0 / 553 -119.4 -119.4 0.36 (1) 6.25 G- B -60 / 50 -26 (1) 6.25 B- F -8 / 19 -26 (1) 6.25 F- C -540 / 0 -26 (1) 6.25 F- C -540 / 0 -27 (1) 7.81 F- D 0 / 819 -27 (2) 7.81 F- D 0 / 572 0 / 0 0 / 572 -18.2 -18.2 0.07 (4) 10.00 0 / 553 -10.00 -18.2 -18.2 0.12 (1) 10.00 | FACTORED FACTORED FACTORED FACTORED FORCE FORCE |

DESIGN CRITERIA

DRWG NO.

| SPECIFIED LOADS: | | | | | | | | |
|-----------------------|-----|----|---|------|-----|--|--|--|
| TOP | CH. | LL | = | 34.8 | PSF | | | |
| | | DL | = | 6.0 | PSF | | | |
| BOT | CH. | LL | = | 0.0 | PSF | | | |
| | | DL | = | 7.3 | PSF | | | |
| TOTAL LOAD = 48.1 PSF | | | | | | | | |

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH: - PART 9 OF BCBC 2018, NBC-2019AE - PART 9 OF OBC 2012 (2019 AMENDMENT)

CSA 086-14 - TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.38")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.38")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.36/0.97 (A-B:1) , BC=0.12/0.97 (F-G:1) , WB=0.18/0.97 (D-F:1) , SSI=0.21/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN MAX MIN MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (G) (INPUT = 0.90) JSI METAL= 0.23 (A) (INPUT = 1.00)



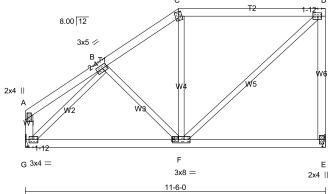




Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Fri Jul 14 09:32:35 2023 Page 1 ID:9suP8DUMbxFEOWsk3nNlizALn9-B?t6ztR5iW99gA2AJJjMWzz?xljFCPIP8nQ9AuyyCQA

0-0 5-10-8 11-6-0 5-7-8 3x4 \\ 3x4 =C D

Scale = 1:44.1



TOTAL WEIGHT = 50 lb

| LUMBER | | | | |
|---------------|------|-----|--------|--------|
| N. L. G. A. R | ULES | | | |
| CHORDS | SIZE | | LUMBER | DESCR. |
| A - C | 2x4 | DRY | No.2 | SPF |
| C - D | 2x4 | DRY | No.2 | SPF |
| E - D | 2x4 | DRY | No.2 | SPF |
| G - A | 2x4 | DRY | No.2 | SPF |
| G - E | 2x4 | DRY | No.2 | SPF |
| | | | | |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |
| EXCEPT | | | | |
| | | | | |

DRY: SEASONED LUMBER.

| PLATES (| table | is | in | inches) |
|----------|-------|----|----|---------|
| | | | | |

| JT | TYPE | PLATES | W | LEN | Υ | Χ | |
|----|---------|--------|-----|-----|------|------|--|
| Α | TMV+p | MT20 | 2.0 | 4.0 | | | |
| В | TMWW-t | MT20 | 3.0 | 5.0 | 1.50 | 2.25 | |
| С | TTW+m | MT20 | 3.0 | 4.0 | | | |
| D | TMVW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.75 | |
| Ε | BMV1+p | MT20 | 2.0 | 4.0 | | | |
| F | BMWWW-t | MT20 | 3.0 | 8.0 | | | |
| G | BMVW1-t | MT20 | 3.0 | 4.0 | 1.50 | 1.75 | |
| | | | | | | | |

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

| <u>BEA</u> | RINGS | | | | | | |
|------------|----------|---------|---------|---------|--------|----------|-------|
| | FACTO | RED | MAXIMU | M FACTO | INPUT | REQRE | |
| | GROSS RE | EACTION | GROSS I | REACTIO | BRG | BRG | |
| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
| Ε | 792 | 0 | 792 | 0 | 0 | MECHANIC | CAL |
| G | 792 | 0 | 792 | 0 | 0 | MECHANIC | CAL |
| | | | | | | | |

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

UNFACTORED REACTIONS

| | 1ST LCASE | MAX./N | MAX./MIN. COMPONENT REACTIONS | | | | | | | |
|----|-----------|---------|-------------------------------|-----------|------|---------|------|--|--|--|
| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL | | | |
| E | 553 | 400 / 0 | 0/0 | 0/0 | 0/0 | 153 / 0 | 0/0 | | | |
| G | 553 | 400 / 0 | 0/0 | 0/0 | 0/0 | 153 / 0 | 0/0 | | | |

BRACING

QUANTITY

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

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

LOADING TOTAL LOAD CASES: (4)

| СНО | DRDS | WEBS | | | | | | | |
|-------|----------|----------|--------|----------|---------------|-------|------------|----------|--|
| MAX. | FACTORED | FACTO | RED | | | | MAX. FACTO | DRED | |
| МЕМВ. | FORCE | VERT. LO | AD LC | 1 MAX | MAX. | MEMB. | FORCE | MAX | |
| | (LBS) | (PL | F) | CSI (LC) | UNBRAC | | (LBS) | CSI (LC) | |
| FR-TO | | FROM | TO | | LENGTH | FR-TO | | | |
| A-B | 0 / 22 | -119.4 | -119.4 | 0.16(1) | 10.00 | B- F | -182 / 0 | 0.06(1) | |
| B- C | -580 / 0 | -119.4 | -119.4 | 0.13(1) | 6.25 | F- C | -162 / 25 | 0.07(1) | |
| C- D | -460 / 0 | -119.4 | -119.4 | 0.49(1) | 6.25 | F- D | 0 / 622 | 0.14(1) | |
| E- D | -753 / 0 | 0.0 | 0.0 | 0.37(1) | 7.81 | G-B | -853 / 0 | 0.24(1) | |
| G- A | -135 / 0 | 0.0 | 0.0 | 0.01(1) | 7.81 | | | | |
| | | | | | | | | | |
| G-F | 0 / 592 | -18.2 | -18.2 | 0.21(4) | 10.00 | | | | |
| F-E | 0/0 | -18.2 | -18.2 | 0.17 (4) | 10.00 | | | | |



DRWG NO.

| SPECIFIED LOADS: | | | | | | | | |
|-----------------------|-----|----|---|------|-----|--|--|--|
| TOP | CH. | LL | = | 34.8 | PSF | | | |
| | | DL | = | 6.0 | PSF | | | |
| BOT | CH. | LL | = | 0.0 | PSF | | | |
| | | DL | = | 7.3 | PSF | | | |
| TOTAL LOAD = 48.1 PSF | | | | | | | | |

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH: PART 9 OF BCBC 2018 . NBC-2019AE - PART 9 OF OBC 2012 (2019 AMENDMENT)

CSA 086-14 - TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.38")
CALCULATED VERT. DEFL.(LL)= L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.38")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.49/0.97 (C-D:1) , BC=0.21/0.97 (F-G:4) , WB=0.24/0.97 (B-G:1) , SSI=0.26/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN MAX MIN

MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

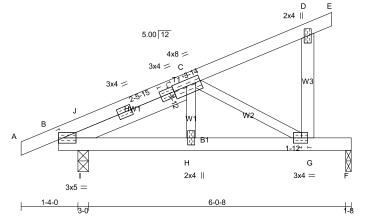
JSI GRIP= 0.90 (G) (INPUT = 0.90) JSI METAL= 0.23 (B) (INPUT = 1.00)







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TOTAL WEIGHT = 5 X 27 = 134 lb

| LUMBER | | | | | | | | | |
|-------------------|---------|-------|--------|--------|--|--|--|--|--|
| N. L. G. A. RULES | | | | | | | | | |
| CHORDS | SIZE | | LUMBER | DESCR. | | | | | |
| A - E | 2x4 | DRY | No.2 | SPF | | | | | |
| G - D | 2x4 | DRY | No.2 | SPF | | | | | |
| B - F | 2x4 | DRY | No.2 | SPF | | | | | |
| | | | | | | | | | |
| REINFORC | ING MEN | IBERS | | | | | | | |
| HW1 | 2x4 | DRY | No.2 | SPF | | | | | |
| | | | | | | | | | |
| ALL WEBS | 2x3 | DRY | No.2 | SPF | | | | | |
| DRY: SEAS | ONEDII | IMBER | | | | | | | |

PLATES (table is in inches)

| JT | TYPE | PLATES | ٧ | ٧ | LEN | Υ | Χ |
|----|----------|--------|---|----|-----|------|-------|
| В | TMBR1-I | MT20 | 3 | .0 | 5.0 | | Edge |
| В | RT-t | MT20 | 3 | 0. | 4.0 | | |
| В | RT-t | MT20 | 3 | 0. | 4.0 | 1.50 | 30.00 |
| С | TMWWR*-I | MT20 | 4 | 0. | 8.0 | 1.75 | 4.00 |
| D | TMV+p | MT20 | 2 | 0. | 4.0 | | |
| G | BMVW-t | MT20 | 3 | 0. | 4.0 | 1.50 | 1.75 |
| Н | BMW+w | MT20 | 2 | .0 | 4.0 | | |

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

| IMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED B | Υ |
|---|---|
| BUILDING DESIGNER | |
| FARINGS | |

| | FACTORED GROSS REACTION | | MAXIMUN GROSS F | | INPUT BRG | REQRD BRG | |
|----|----------------------------|------|--------------------|------|--------------|--------------|-------|
| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
| В | 585 | 0 | 585 | 0 | 0 | 3-0 | 1-8 |
| F | 425 | 0 | 425 | 0 | 0 | 1-8 | 1-8 |
| | | | | | | | |

UNFACTORED REACTIONS

QUANTITY

| | 1ST LCASE | MAX./N | MAX./MIN. COMPONENT REACTIONS | | | | | | | |
|----|-----------|---------|-------------------------------|-----------|------|---------|------|--|--|--|
| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL | | | |
| В | 407 | 304 / 0 | 0/0 | 0/0 | 0/0 | 103 / 0 | 0/0 | | | |
| F | 298 | 211 / 0 | 0/0 | 0/0 | 0/0 | 87 / 0 | 0/0 | | | |

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

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

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

LOADING TOTAL LOAD CASES: (4)

| CHC | RDS | WEBS | | | | | | |
|-------|----------|---------------|------------|--------|---------|------------|----------|--|
| MAX. | FACTORED | FACTORED | | | | MAX. FACTO | RED | |
| MEMB. | FORCE | VERT. LOAD LO | C1 MAX | MAX. | MEMB. | FORCE | MAX | |
| | (LBS) | (PLF) | CSI (LC) | UNBRAC |) | (LBS) | CSI (LC) | |
| FR-TO | | FROM TO | | LENGTH | I FR-TO | | | |
| A-B | 0/8 | -119.4 -119.4 | 4 0.07 (1) | 10.00 | H- C | 0 / 246 | 0.06(1) | |
| B- J | -747 / 0 | -119.4 -119.4 | 4 0.07 (1) | 6.25 | C-G | -711 / 0 | 0.14(1) | |
| J- C | -675 / 0 | -119.4 -119.4 | 4 0.04 (1) | 6.25 | l- J | -25 / 19 | 0.00(1) | |
| C- D | -10 / 0 | -119.4 -119.4 | 4 0.11 (1) | 6.25 | | | | |
| D- E | -11 / 0 | -119.4 -119.4 | 4 0.01 (1) | 6.25 | | | | |
| G- D | -201 / 0 | 0.0 0.0 | 0.03(1) | 7.81 | | | | |
| | | | | | | | | |
| B- I | 0 / 626 | -18.2 -18.3 | 2 0.11 (1) | 10.00 | | | | |
| I- H | 0 / 626 | -18.2 -18.3 | 2 0.22 (1) | 10.00 | | | | |
| H- G | 0 / 626 | -18.2 -18.3 | 2 0.60 (1) | 10.00 | | | | |
| G- F | 0/0 | -18.2 -18.3 | 2 0.50 (1) | 10.00 | | | | |
| | | | | | | | | |

DESIGN CRITERIA

DRWG NO.

| SPECIFIED LOADS: | | | | | | | | |
|------------------|------|----|---|------|-----|--|--|--|
| TOP | CH. | LL | = | 34.8 | PSF | | | |
| | | DL | = | 6.0 | PSF | | | |
| BOT | CH. | LL | = | 0.0 | PSF | | | |
| | | DL | = | 7.3 | PSF | | | |
| TOTA | J IO | AD | = | 48 1 | PSF | | | |

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH: - PART 9 OF BCBC 2018 , NBC-2019AE - PART 9 OF OBC 2012 (2019 AMENDMENT) - CSA 086-14

- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.23") CALCULATED VERT. DEFL.(LL) = L/999 (0.06") ALLOWABLE DEFL.(TL)= L/360 (0.23") CALCULATED VERT. DEFL.(TL) = L/848 (0.10")

CSI: TC=0.11/0.97 (C-D:1) , BC=0.60/0.97 (G-H:1) , WB=0.14/0.97 (C-G:1) , SSI=0.33/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (C) (INPUT = 0.90) JSI METAL= 0.21 (G) (INPUT = 1.00)





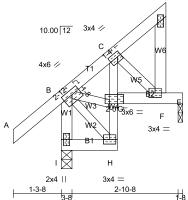


Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Fri Jul 14 09:32:36 2023 Page 1 D.3suF6DUMbbxFEOWsk3nNlizALn9-fBRVBDRjTqH0lJdMt0Eb2AWFf94jxvqYNR9iiKyyCQ9

DRWG NO.

2-10-0 3-3-8 5-8 2-10-0 2x4 || D

Scale = 1:31.2



| TOTAL WEIGHT = | $4 \times 19 = 76 \text{ lb}$ |
|----------------|-------------------------------|
| | [M |

| ULES | | | |
|------|--|--|---|
| SIZE | | LUMBER | DESCR. |
| 2x4 | DRY | No.2 | SPF |
| 2x4 | DRY | No.2 | SPF |
| 2x4 | DRY | No.2 | SPF |
| 2x4 | DRY | No.2 | SPF |
| 2x4 | DRY | No.2 | SPF |
| 2x3 | DRY | No.2 | SPF |
| | SIZE 2x4 2x4 2x4 2x4 2x4 2x4 | SIZE 2x4 DRY 2x4 DRY 2x4 DRY 2x4 DRY 2x4 DRY 2x4 DRY | SIZE LUMBER 2x4 DRY No.2 2x4 DRY No.2 |

DRY: SEASONED LUMBER.

PLATES (table is in inches)

| JΤ | TYPE | PLATES | W | LEN | Υ | Χ | |
|----|---------|--------|-----|-----|------|------|--|
| В | TMVWW-t | MT20 | 4.0 | 6.0 | 1.50 | 2.75 | |
| С | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.25 | |
| D | TMV+p | MT20 | 2.0 | 4.0 | | | |
| F | BMVW-t | MT20 | 3.0 | 4.0 | | | |
| G | BWMW*-I | MT20 | 3.0 | 6.0 | | 2.00 | |
| Н | BMWW-t | MT20 | 3.0 | 4.0 | | | |
| 1 | BMV1+p | MT20 | 2.0 | 4.0 | | | |
| | | | | | | | |

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

| DEAL | VIIIAGO | | | | | | |
|------|-----------------|---------|---------|---------|--------|-------|-------|
| | FACTORED | | MAXIMUN | / FACTO | INPUT | REQRD | |
| | GROSS RE | GROSS F | REACTIO | BRG | BRG | | |
| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
| l | 424 | 0 | 424 | 0 | 0 | 3-8 | 1-8 |
| E | 142 | 0 | 172 | 0 | 0 | 1-8 | 1-8 |
| | | | | | | | |

UNFACTORED REACTIONS

QUANTITY

| | 1ST LCASE | MAX./I | иім. СОМРОІ | | | | |
|----|-----------|----------|-------------|-----------|------|--------|------|
| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| 1 | 293 | 229 / 0 | 0/0 | 0/0 | 0/0 | 64 / 0 | 0/0 |
| Ε | 100 | 85 / -20 | 0/0 | 0/0 | 0/0 | 36 / 0 | 0/0 |

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

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

MAX. UNBRACED INTERIOR CHORD LENGTH = 10.00 FT

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

LOADING TOTAL LOAD CASES: (7)

| CHC | CHORDS | | | | WEBS | | | | | |
|-------|-----------|-----------|-------|----------|--------|---------|------------|----------|--|--|
| MAX. | FACTORED | FACTOR | ED | | | | MAX. FACTO | RED | | |
| MEMB. | FORCE | VERT. LOA | D LC1 | MAX | MAX. | MEMB. | FORCE | MAX | | |
| | (LBS) | (PLF | :) (| CSI (LC) | UNBRAC |) | (LBS) | CSI (LC) | | |
| FR-TO | | FROM T | O | | LENGTH | I FR-TO | | | | |
| A- B | 0 / 53 | -119.4 - | 119.4 | 0.17 (5) | 10.00 | B- G | -44 / 152 | 0.03 (6) | | |
| B- C | -198 / 0 | -119.4 - | 119.4 | 0.16 (5) | 6.25 | H- G | 0 / 15 | 0.01 (6) | | |
| C- D | -9 / 11 | -119.4 - | 119.4 | 0.04(1) | 10.00 | G-C | 0 / 71 | 0.02 (6) | | |
| F- D | -86 / 0 | 0.0 | 0.0 | 0.01(1) | 7.81 | B- H | -2/2 | 0.00(6) | | |
| I- B | -411 / 0 | 0.0 | 0.0 | 0.04(1) | 7.81 | C-F | -199 / 62 | 0.03 (6) | | |
| | | | | | | | | | | |
| I- H | 0/0 | -18.2 | -18.2 | 0.01(4) | 10.00 | | | | | |
| G- F | -47 / 150 | -18.2 | -18.2 | 0.13 (6) | 6.25 | | | | | |
| F-E | 0/0 | -18.2 | -18.2 | 0.10 (6) | 10.00 | | | | | |
| | | | | | | | | | | |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.

DESIGN CRITERIA

| SPEC | IFIED | LOAI | OS: | | |
|-------------------|-------|------|-----|------|-----|
| TOP | CH. | LL | = | 34.8 | PSF |
| | | DL | = | 6.0 | PSI |
| BOT | CH. | LL | = | 0.0 | PSF |
| | | DL | = | 7.3 | PSI |
| TOTAL LOAD = 48.1 | | | | | PSF |

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH: - PART 9 OF BCBC 2018 , NBC-2019AE - PART 9 OF OBC 2012 (2019 AMENDMENT)

- CSA 086-14 - TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 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=0.17/0.97 (A-B:5) , BC=0.13/0.97 (F-G:6) , WB=0.03/0.97 (B-G:6) , SSI=0.13/1.00 (E-F:6)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.36 (G) (INPUT = 0.90) JSI METAL= 0.09 (I) (INPUT = 1.00)



