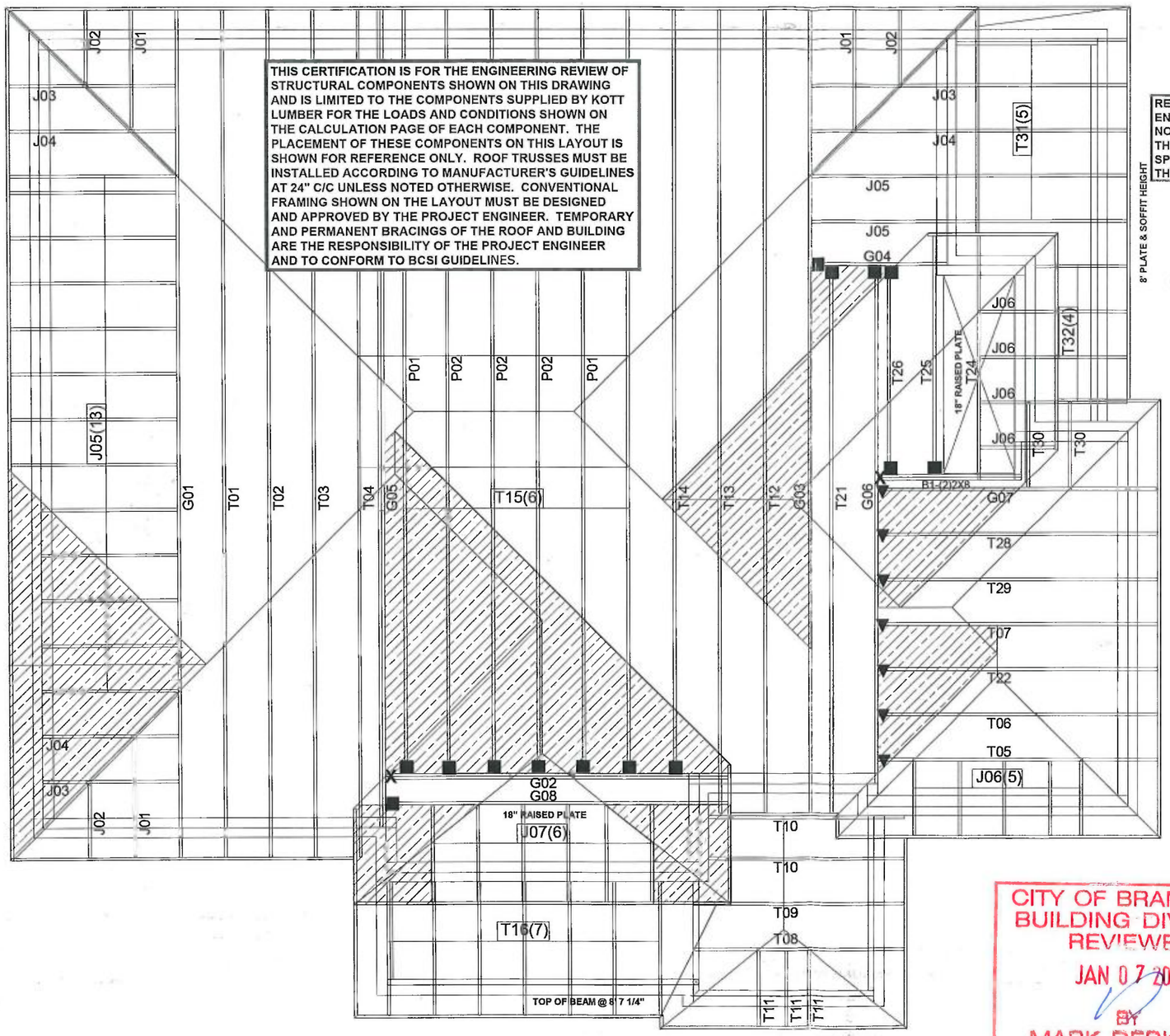



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018
NE0818-083

KOTT

DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3 PSF
BOT CH. LL = 0 PSF
DL = 7 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24" O/C.

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

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

HANGER LEGEND:

▼ LUS24 ■ LJS26DS
● HGUS26 X HGUS26-2

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

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

CITY OF BRAMPTON
BUILDING DIVISION
REVIEWED
JAN 07 2019
BY
MARK DERKSEN

CONVENTIONAL FRAMING BY OTHERS

SIZE AND LOCATION OF CONVENTIONAL FRAMING IS APPROXIMATE. ALL AREAS MAY NOT BE SHOWN. REFER TO ARCHITECTURAL PLANS FOR DETAILS.

ALL CONVENTIONAL FRAMING TO CONFORM WITH PART 9 OF THE O.B.C
ROOF RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 2x4 S.P.F. @ 24"O/C WITH A 2x4 VERTICAL POST TO THE TRUSS UNDERNEATH EACH CROSS POINT. VERTICAL POST LONGER THAN 6' TO HAVE LATERAL BRACING SO THAT THE DISTANCE BETWEEN END POINT AND BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'. ROOF TRUSSES

18-410956000000RR
LOT 1

Model: GRANDBROOKE 12 EL 2
Customer: GREENPARK
Project: MINNISALE HOMES
Location: BRAMPTON
Date: 6/21/2018 Drawn by: BB

Architectural Drawing Info:
Date: JULY, 2018
Project number:
Model: GRANDBROOKE 12

KOTT

ENGINEERING NOTE PAGE (ENP-1)

**PLEASE READ PRIOR TO INSTALLATION**

NE0818-083
GREENPARK-MINNISALE HOMES-
GRANDBROOKE 12 EL 2 LOT 1

## *RESPONSIBILITIES*

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

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

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

### *USE AND OCCUPANCY*

- The building is of the type indicated on the drawing

### *LOADING*

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

### *HANDLING, INSTALLATION AND BRACING*

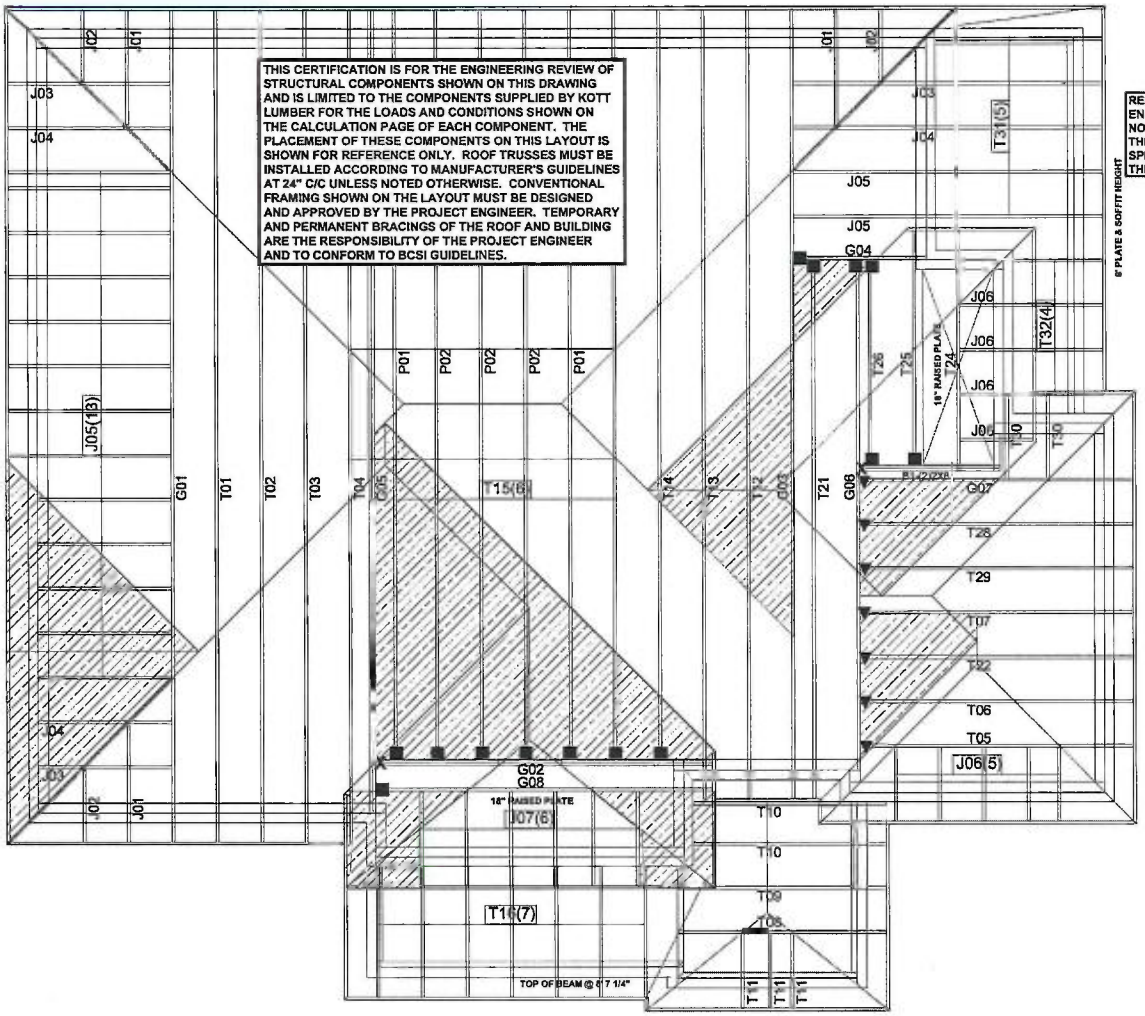
- The trusses must be handled and installed by a qualified professional as per the supplied document titled *Information for Truss Installers* and the BCSI-B1 and BCSI-B3 Summary Sheets
- The compression chords are laterally braced by continuous rigid diaphragm sheathing or as specified on the drawing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

### *SUPPORTS*

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

### *DIMENSIONS*

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




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

N.A. EL-MASRI
LICENSED PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO
Aug 15, 2018
NE0818-083

KOTT

DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3 PSF
BOT CH. LL = 0 PSF
DL = 7 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24" O/C.

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

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

## HANGER LEGEND:

▼ LUS24 ■ LJS26DS
● HGUS26 X HGUS26-2

CONVENTIONAL FRAMING BY OTHERS

SIZE AND LOCATION OF CONVENTIONAL FRAMING IS APPROXIMATE. ALL AREAS MAY NOT BE SHOWN. REFER TO ARCHITECTURAL PLANS FOR DETAILS.

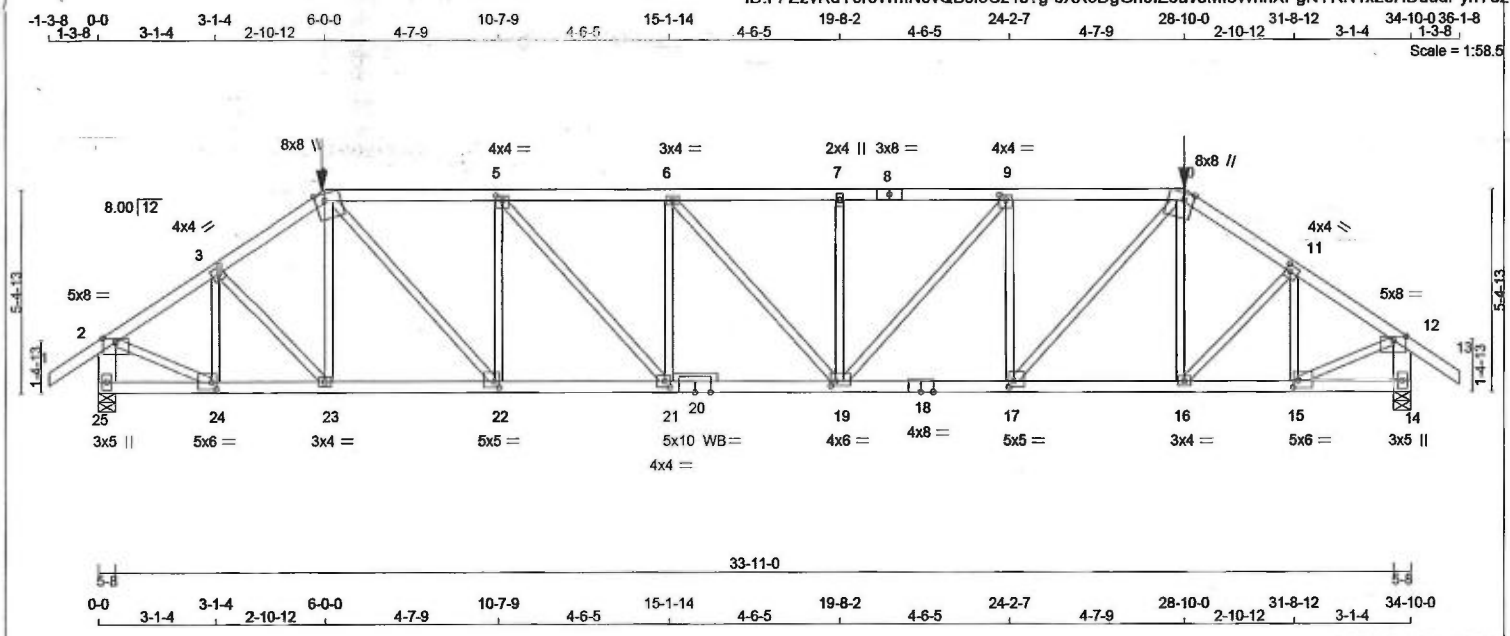
ALL CONVENTIONAL FRAMING TO CONFORM WITH PART 9 OF THE O.B.C
ROOF RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 2x4 S.P.F. @ 24"O/C WITH A 2x4 VERTICAL POST TO THE TRUSS UNDERNEATH EACH CROSS POINT. VERTICAL POST LONGER THAN 6' TO HAVE LATERAL BRACING SO THAT THE DISTANCE BETWEEN END POINT AND BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'.

Model: **GRANDBROOKE 12 EL 2**
Customer: GREENPARK
Project: MINNISALE HOMES
Location: BRAMPTON
Date: 6/21/2018 Drawn by: BB

Architectural Drawing Info:
Date: JULY, 2018
Project number:
Model: GRANDBROOKE 12

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | G01 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 3 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:40 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-0XX6DgGn9IZ0av3MI3WhnXPgNYRN1x2eHDuddPynYez




TOTAL WEIGHT = 157 lb (M)

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 4 | 2x4 | DRY | 2100F 1.8E | SPF |
| 4 - 8 | 2x4 | DRY | 2100F 1.8E | SPF |
| 8 - 10 | 2x4 | DRY | 2100F 1.8E | SPF |
| 10 - 13 | 2x4 | DRY | 2100F 1.8E | SPF |
| 25 - 2 | 2x6 | DRY | No.2 | SPF |
| 14 - 12 | 2x6 | DRY | No.2 | SPF |
| 25 - 20 | 2x4 | DRY | 2100F 1.8E | SPF |
| 20 - 18 | 2x4 | DRY | 2100F 1.8E | SPF |
| 18 - 14 | 2x4 | DRY | 2100F 1.8E | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMVW-p | MT20 | 5.0 | 8.0 | 1.25 | 4.00 |
| 3 | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| 4 | TTWW+m | MT20 | 8.0 | 8.0 | Edge | 3.00 |
| 5 | TMWW-t | MT20 | 4.0 | 4.0 | 1.50 | 2.00 |
| 6 | TMWW-t | MT20 | 3.0 | 4.0 | | |
| 7 | TMW+w | MT20 | 2.0 | 4.0 | | |
| 8 | TS-t | MT20 | 3.0 | 8.0 | | |
| 9 | TMWW-t | MT20 | 4.0 | 4.0 | 1.50 | 2.00 |
| 10 | TTWW+m | MT20 | 8.0 | 8.0 | Edge | 3.00 |
| 11 | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| 12 | TMVW-p | MT20 | 5.0 | 8.0 | 1.25 | 4.00 |
| 14 | BMV1+p | MT20 | 3.0 | 5.0 | | |
| 15 | BMWW-t | MT20 | 5.0 | 6.0 | 2.25 | 1.50 |
| 16 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 17 | BMWW-t | MT20 | 5.0 | 5.0 | 2.00 | 1.50 |
| 18 | BS-t | MT20 | 4.0 | 8.0 | | |
| 19 | BMWWW-t | MT20 | 4.0 | 6.0 | 1.50 | 1.50 |
| 20 | BS-t | MT20 | 5.0 | 10.0 | | |
| 21 | BMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| 22 | BMWW-t | MT20 | 5.0 | 5.0 | 2.00 | 1.50 |
| 23 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 24 | BMWW-t | MT20 | 5.0 | 6.0 | 2.25 | 1.50 |
| 25 | BMV1+p | MT20 | 3.0 | 5.0 | | |


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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 25 | 3158 | 0 | 3158 | 0 | 0 | 5-8 | 5-8 |
| 14 | 3158 | 0 | 3158 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 25 | 2216 | 1555 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 660 / 0 | 0 / 0 |
| 14 | 2216 | 1555 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 660 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 25, 14

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.34 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

| CHORDS MEMB. | FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. | FORCE (LBS) | MAX. FACTORED MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|---|
| FR-TO | | | | | | | FR-TO | | |
| 1- 2 | 0 / 29 | -77.4 | -77.4 | 0.07 (1) | 10.00 | | 24- 3 | -917 / 0 | 0.20 (1) |
| 2- 3 | -3420 / 0 | -77.4 | -77.4 | 0.13 (1) | 4.52 | | 3-23 | 0 / 535 | 0.13 (1) |
| 3- 4 | -3892 / 0 | -77.4 | -77.4 | 0.13 (1) | 4.28 | | 23- 4 | -237 / 53 | 0.11 (1) |
| 4- 5 | -4735 / 0 | -145.9 | -145.9 | 0.46 (1) | 3.60 | | 4-22 | 0 / 2257 | 0.56 (1) |
| 5- 6 | -5436 / 0 | -145.9 | -145.9 | 0.51 (1) | 3.34 | | 22- 5 | -1524 / 0 | 0.69 (1) |
| 6- 7 | -5432 / 0 | -145.9 | -145.9 | 0.42 (1) | 3.45 | | 5-21 | 0 / 1056 | 0.26 (1) |
| 7- 8 | -5432 / 0 | -145.9 | -145.9 | 0.51 (1) | 3.34 | | 21- 6 | -641 / 0 | 0.29 (1) |
| 8- 9 | -5432 / 0 | -145.9 | -145.9 | 0.51 (1) | 3.34 | | 6-19 | -5 / 0 | 0.00 (1) |
| 9-10 | -4736 / 0 | -145.9 | -145.9 | 0.47 (1) | 3.60 | | 19- 7 | -638 / 0 | 0.29 (1) |
| 10-11 | -3892 / 0 | -77.4 | -77.4 | 0.13 (1) | 4.28 | | 19- 9 | 0 / 1050 | 0.26 (1) |
| 11-12 | -3420 / 0 | -77.4 | -77.4 | 0.13 (1) | 4.52 | | 17- 9 | -1522 / 0 | 0.68 (1) |
| 12-13 | 0 / 29 | -77.4 | -77.4 | 0.07 (1) | 10.00 | | 17-10 | 0 / 2259 | 0.56 (1) |
| 25- 2 | -3104 / 0 | 0.0 | 0.0 | 0.23 (1) | 5.95 | | 16-10 | -238 / 53 | 0.11 (1) |
| 14-12 | -3104 / 0 | 0.0 | 0.0 | 0.23 (1) | 5.95 | | 16-11 | 0 / 535 | 0.13 (1) |
| | | | | | | | 15-11 | -917 / 0 | 0.20 (1) |
| 25-24 | 0 / 0 | -33.0 | -33.0 | 0.05 (4) | 10.00 | | 2-24 | 0 / 3021 | 0.75 (1) |
| 24-23 | 0 / 2853 | -33.0 | -33.0 | 0.29 (1) | 10.00 | | 15-12 | 0 / 3021 | 0.75 (1) |
| 23-22 | 0 / 3217 | -33.0 | -33.0 | 0.32 (1) | 10.00 | | | | |
| 22-21 | 0 / 4735 | -33.0 | -33.0 | 0.44 (1) | 10.00 | | | | |
| 21-20 | 0 / 5436 | -33.0 | -33.0 | 0.50 (1) | 10.00 | | | | |
| 20-19 | 0 / 5436 | -33.0 | -33.0 | 0.50 (1) | 10.00 | | | | |
| 19-18 | 0 / 4736 | -33.0 | -33.0 | 0.44 (1) | 10.00 | | | | |
| 18-17 | 0 / 4736 | -33.0 | -33.0 | 0.44 (1) | 10.00 | | | | |
| 17-16 | 0 / 3217 | -33.0 | -33.0 | 0.32 (1) | 10.00 | | | | |
| 16-15 | 0 / 2853 | -33.0 | -33.0 | 0.29 (1) | 10.00 | | | | |
| 15-14 | 0 / 0 | -33.0 | -33.0 | 0.05 (4) | 10.00 | | | | |

FACTORED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE |
|---|---|---|---|---|---|---|---|
| 4 | 6-0-0 | -348 | -348 | — | FRONT | VERT | TOTAL |
| 10 | 28-10-0 | -348 | -348 | — | FRONT | VERT | TOTAL |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.16")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.25")
ALLOWABLE DEFL.(TL)= L/360 (1.16")
CALCULATED VERT. DEFL.(TL) = L/ 936 (0.45")

CSI: TC=0.51/1.00 (7-9:1) , BC=0.50/1.00 (19-21:1) , WB=0.75/1.00 (12-15:1) , SSI=0.34/1.00 (9-10:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

CONTINUED ON PAGE 2

KOTT

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

WB - INDICATES BLOCKING REQUIRED

**HANGERS NOTES**

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 348.1 lbs FACTORED DOWN AT 28-10-0, AND 348.1 lbs FACTORED DOWN AT 6-0-0 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (12) (INPUT = 0.90 )
JSI METAL= 0.96 (20) (INPUT = 1.00 )

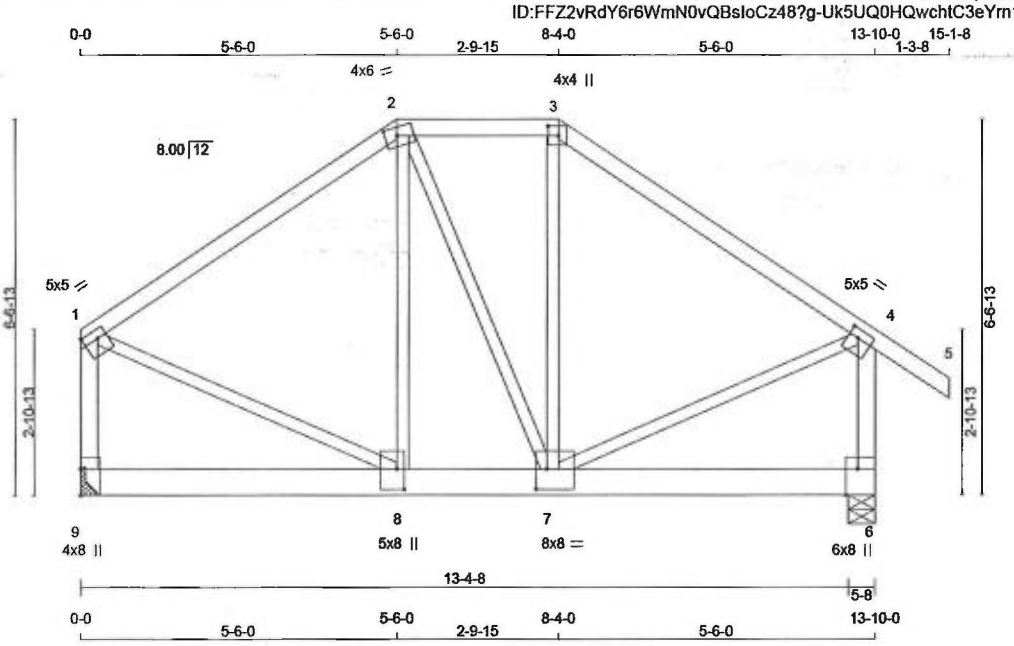
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 | DRWG NO. |
|---|---|---|---|---|---|---|
| NE0818-083 | G02 | 1 | 2 | TRUSS DESC. | | **PAGE 5 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:41 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-Uk5UQ0HQwchtC3eYrn1wJlxtcygsmT2oWteBArynYey




TOTAL WEIGHT = 2 X 74 = 149 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 2 | 2x4 | DRY | No.2 | SPF |
| 2 - 3 | 2x4 | DRY | No.2 | SPF |
| 3 - 5 | 2x4 | DRY | No.2 | SPF |
| 9 - 1 | 2x4 | DRY | No.2 | SPF |
| 6 - 4 | 2x4 | DRY | No.2 | SPF |
| 9 - 6 | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

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

| CHORDS #ROWS | | SURFACE SPACING (IN) | LOAD(PLF) |
|---|---|---|---|
| TOP CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| 1- 2 | 1 | 12 | TOP |
| 2- 3 | 1 | 12 | TOP |
| 3- 5 | 1 | 12 | TOP |
| 9- 1 | 1 | 12 | TOP |
| 6- 4 | 1 | 12 | TOP |
| BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| 9- 6 | 2 | 6 | SIDE(355.7) |
| WEBS : (0.122"X3") SPIRAL NAILS | | | |
| 2x3 | 1 | 6 | |

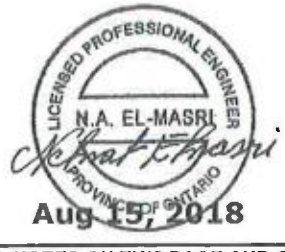
NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 1 | TMVW-I | MT20 | 5.0 | 5.0 | 1.75 | Edge |




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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 9 | 5577 | 0 | 5577 | 0 | 0 | MECHANICAL | |
| 6 | 5683 | 0 | 5683 | 0 | 0 | 5-8 | 5-8 |

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 9 TO RESIST THE MAX FACTORED REACTIONS.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 9 | 3914 | 2738 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 1176 / 0 | 0 / 0 |
| 6 | 3986 | 2802 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 1184 / 0 | 0 / 0 |

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

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.49 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 1- 2 | -3905 / 0 | -77.4 | -77.4 | 0.35 (1) | 4.50 | 8- 2 | 0 / 1801 | 0.22 (1) |
| 2- 3 | -3297 / 0 | -77.4 | -77.4 | 0.09 (1) | 5.06 | 2- 7 | 0 / 53 | 0.01 (1) |
| 3- 4 | -3930 / 0 | -77.4 | -77.4 | 0.35 (1) | 4.49 | 7- 3 | 0 / 1864 | 0.23 (1) |
| 4- 5 | 0 / 29 | -77.4 | -77.4 | 0.06 (1) | 10.00 | 1- 8 | 0 / 3552 | 0.44 (1) |
| 9- 1 | -3830 / 0 | 0.0 | 0.0 | 0.29 (1) | 6.03 | 7- 4 | 0 / 3575 | 0.44 (1) |
| 6- 4 | -3959 / 0 | 0.0 | 0.0 | 0.30 (1) | 5.94 | | | |
| 9- 8 | 0 / 0 | -729.0 | -729.0 | 0.77 (1) | 10.00 | | | |
| 8- 7 | 0 / 3275 | -729.0 | -729.0 | 0.87 (1) | 10.00 | | | |
| 7- 6 | 0 / 0 | -729.0 | -729.0 | 0.75 (1) | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 32-5-8
END DISTANCE = 13-10-0
END SPAN CARRIED = 32-5-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.46")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (0.46")
CALCULATED VERT. DEFL.(TL) = L/ 867 (0.19")

CSI: TC=0.35/1.00 (3-4:1) , BC=0.87/1.00 (7-8:1) , WB=0.44/1.00 (4-7:1) , SSI=0.78/1.00 (6-7:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

CONTINUED ON PAGE 2

KOTT

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TTWW-m | MT20 | 4.0 | 6.0 | 1.75 | 2.50 |
| 3 | TTW+p | MT20 | 4.0 | 4.0 | 2.00 | 2.25 |
| 4 | TMVW-t | MT20 | 5.0 | 5.0 | 1.75 | 2.00 |
| 6 | BMV1+t | MT20 | 6.0 | 8.0 | Edge | 2.50 |
| 7 | BMWWW-t | MT20 | 8.0 | 8.0 | 4.25 | 2.25 |
| 8 | BMWW+t | MT20 | 5.0 | 8.0 | 4.25 | 1.50 |
| 9 | BMV1+t | MT20 | 4.0 | 8.0 | 5.50 | |

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (4) (INPUT = 0.90 )
JSI METAL= 0.62 (4) (INPUT = 1.00 )

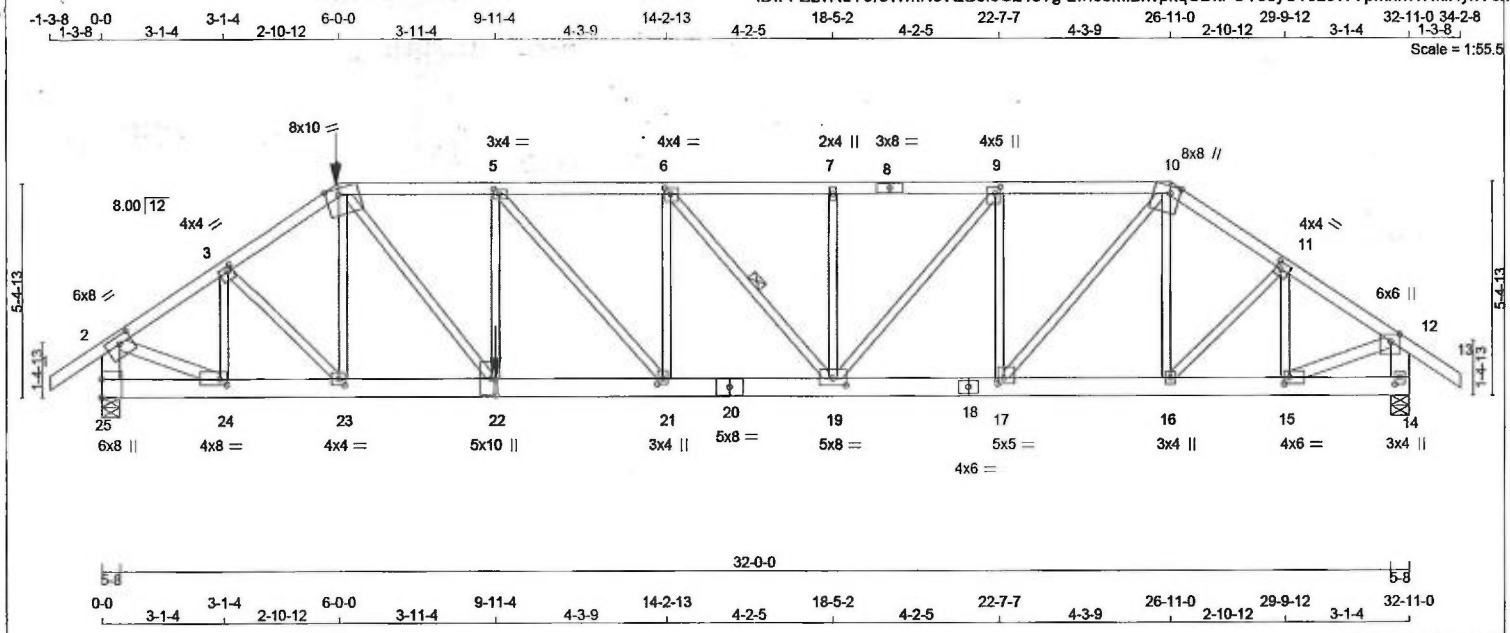
**READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.**

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | G03 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 7 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:42 2018 Page 1

ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-zwfseMI2hvpkqCDkPUY9syU?cL6WVpmxkWNkiHynYex




TOTAL WEIGHT = 171 lb [M]

**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 4 | 2x4 | DRY | No.2 | SPF |
| 4 - 8 | 2x4 | DRY | 2100F 1.8E | SPF |
| 8 - 10 | 2x4 | DRY | 2100F 1.8E | SPF |
| 10 - 13 | 2x4 | DRY | No.2 | SPF |
| 25 - 2 | 2x6 | DRY | No.2 | SPF |
| 14 - 12 | 2x6 | DRY | No.2 | SPF |
| 25 - 20 | 2x6 | DRY | 2100F 1.8E | SPF |
| 20 - 18 | 2x6 | DRY | 2100F 1.8E | SPF |
| 18 - 14 | 2x6 | DRY | 2100F 1.8E | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |
| 2 - 24 | 2x4 | DRY | No.2 | SPF |
| 15 - 12 | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMVW-t | MT20 | 6.0 | 8.0 | 2.25 | 3.75 |
| 3 | TMWW-t | MT20 | 4.0 | 4.0 | 1.50 | 1.25 |
| 4 | TTWW-m | MT20 | 8.0 | 10.0 | Edge | 4.00 |
| 5 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.75 |
| 6 | TMWW-t | MT20 | 4.0 | 4.0 | 1.75 | 1.75 |
| 7 | TMW+w | MT20 | 2.0 | 4.0 | | |
| 8 | TS-t | MT20 | 3.0 | 8.0 | | |
| 9 | TMWW+t | MT20 | 4.0 | 5.0 | 2.00 | 1.50 |
| 10 | TTWW+m | MT20 | 8.0 | 8.0 | Edge | 3.00 |
| 11 | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| 12 | TMVW+p | MT20 | 6.0 | 6.0 | 2.25 | 2.75 |
| 14 | BMV1+p | MT20 | 3.0 | 4.0 | 2.25 | 1.50 |
| 15 | BMWW-t | MT20 | 4.0 | 6.0 | 2.00 | 1.50 |
| 16 | BMWW+t | MT20 | 3.0 | 4.0 | | |
| 17 | BMWW-t | MT20 | 5.0 | 5.0 | 1.75 | 1.75 |
| 18 | BS-t | MT20 | 4.0 | 6.0 | | |
| 19 | BMWWW-t | MT20 | 5.0 | 8.0 | 2.25 | 4.00 |
| 20 | BS-t | MT20 | 5.0 | 8.0 | | |
| 21 | BMWW+t | MT20 | 3.0 | 4.0 | 1.75 | 1.50 |
| 22 | BMWW+t | MT20 | 5.0 | 10.0 | 5.00 | 1.50 |
| 23 | BMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.75 |
| 24 | BMWW-t | MT20 | 4.0 | 8.0 | 1.75 | 2.00 |
| 25 | BMV1+t | MT20 | 6.0 | 8.0 | 5.50 | |


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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 25 | 4309 | 0 | 4309 | 0 | 0 | 5-8 | 5-8 |
| 14 | 2694 | 0 | 2694 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 25 | 3023 | 2117 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 906 / 0 | 0 / 0 |
| 14 | 1887 | 1337 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 550 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 25, 14

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.52 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 6-19. DBS = 20-0-0 . CBF = 169 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)

| CHORDS MEMB. | FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|---|
| 1-2 | | 0 / 29 | -77.4 | -77.4 | 0.11 (1) | 10.00 | |
| 2-3 | | -4853 / 0 | -77.4 | -77.4 | 0.44 (1) | 2.84 | |
| 3-4 | | -5649 / 0 | -77.4 | -77.4 | 0.53 (1) | 2.52 | |
| 4-5 | | -6822 / 0 | -145.9 | -145.9 | 0.49 (1) | 3.01 | |
| 5-6 | | -6344 / 0 | -77.4 | -77.4 | 0.38 (1) | 3.27 | |
| 6-7 | | -5477 / 0 | -77.4 | -77.4 | 0.27 (1) | 3.59 | |
| 7-8 | | -5477 / 0 | -77.4 | -77.4 | 0.30 (1) | 3.56 | |
| 8-9 | | -5477 / 0 | -77.4 | -77.4 | 0.30 (1) | 3.56 | |
| 9-10 | | -4324 / 0 | -77.4 | -77.4 | 0.24 (1) | 4.00 | |
| 10-11 | | -3358 / 0 | -77.4 | -77.4 | 0.26 (1) | 3.59 | |
| 11-12 | | -2945 / 0 | -77.4 | -77.4 | 0.23 (1) | 3.85 | |
| 12-13 | | 0 / 29 | -77.4 | -77.4 | 0.11 (1) | 10.00 | |
| 25-2 | | -4205 / 0 | 0.0 | 0.0 | 0.30 (1) | 5.20 | |
| 14-12 | | -2635 / 0 | 0.0 | 0.0 | 0.19 (1) | 6.36 | |
| 25-24 | | 0 / 0 | -33.0 | -33.0 | 0.06 (1) | 10.00 | |
| 24-23 | | 0 / 4046 | -33.0 | -33.0 | 0.28 (1) | 10.00 | |
| 23-22 | | 0 / 4674 | -33.0 | -33.0 | 0.35 (1) | 10.00 | |
| 22-21 | | 0 / 6822 | -17.5 | -17.5 | 0.46 (1) | 10.00 | |
| 21-20 | | 0 / 6344 | -17.5 | -17.5 | 0.37 (1) | 10.00 | |
| 20-19 | | 0 / 6344 | -17.5 | -17.5 | 0.37 (1) | 10.00 | |
| 19-18 | | 0 / 4324 | -17.5 | -17.5 | 0.27 (1) | 10.00 | |
| 18-17 | | 0 / 4324 | -17.5 | -17.5 | 0.27 (1) | 10.00 | |
| 17-16 | | 0 / 2773 | -17.5 | -17.5 | 0.18 (1) | 10.00 | |
| 16-15 | | 0 / 2460 | -17.5 | -17.5 | 0.17 (1) | 10.00 | |
| 15-14 | | 0 / 0 | -17.5 | -17.5 | 0.04 (1) | 10.00 | |

| WEBS MEMB. | FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|
| 24-3 | | -1363 / 0 | 0.28 (1) |
| 3-23 | | 0 / 907 | 0.22 (1) |
| 23-4 | | -310 / 22 | 0.13 (1) |
| 4-22 | | 0 / 3477 | 0.86 (1) |
| 22-5 | | 0 / 118 | 0.04 (4) |
| 5-21 | | -736 / 0 | 0.58 (1) |
| 21-6 | | 0 / 717 | 0.18 (1) |
| 6-19 | | -1354 / 0 | 0.41 (1) |
| 19-7 | | -311 / 0 | 0.13 (1) |
| 19-9 | | 0 / 1799 | 0.45 (1) |
| 17-9 | | -1735 / 0 | 0.73 (1) |
| 17-10 | | 0 / 2382 | 0.59 (1) |
| 16-10 | | -184 / 0 | 0.08 (1) |
| 16-11 | | 0 / 454 | 0.11 (1) |
| 15-11 | | -826 / 0 | 0.17 (1) |
| 2-24 | | 0 / 4249 | 0.75 (1) |
| 15-12 | | 0 / 2584 | 0.46 (1) |

FACTORED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE |
|---|---|---|---|---|---|---|---|
| 4 | 6-0-0 | -348 | -348 | --- | FRONT | VERT | TOTAL |
| 22 | 9-11-4 | -2895 | -2895 | --- | FRONT | VERT | TOTAL |

**DESIGN CRITERIA**

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

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

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

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 6-0-0
END SETBACK = 6-0-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDT'L LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 9-11-4 OF SPAN MEASURED FROM THE LEFT.

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.10")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.23")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/ 963 (0.41")

CSI: TC=0.53/1.00 (3-4:1) , BC=0.46/1.00 (21-22:1) , WB=0.86/1.00 (4-22:1) , SSI=0.28/1.00 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

CONTINUED ON PAGE 2

KOTT

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

**HANGERS NOTES**

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 348.1 lbs FACTORED DOWN AT 6-0-0 ON TOP CHORD, AND 2895.4 lbs FACTORED DOWN AT 9-11-4 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

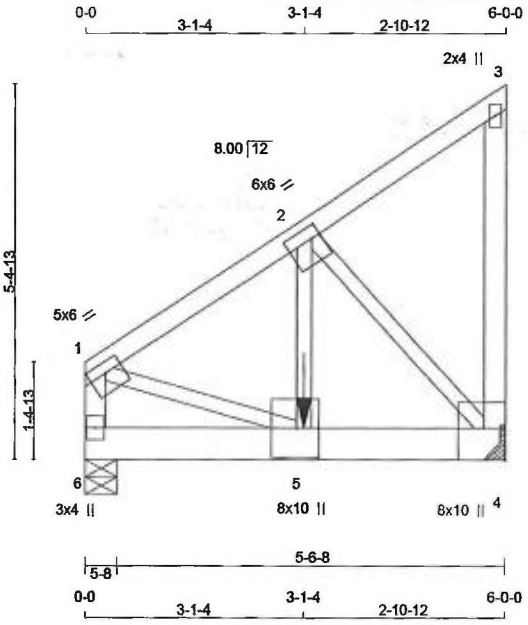
JSI GRIP= 0.90 (19) (INPUT = 0.90 )
JSI METAL= 0.99 (20) (INPUT = 1.00 )

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

KOTT

| TRUSS NAME | QUANTITY | PLY | JOB DESC. | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 | DRWG NO. |
|---|---|---|---|---|---|
| G04 | 1 | 1 | TRUSS DESC. | | **PAGE 9 OF 56** |






TOTAL WEIGHT = 33 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 6 - 1 | 2x4 | DRY | No.2 | SPF |
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 4 - 3 | 2x4 | DRY | No.2 | SPF |
| 6 - 4 | 2x6 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 1 | TMVW-t | MT20 | 5.0 | 6.0 | 1.75 | Edge |
| 2 | TMWW-t | MT20 | 6.0 | 6.0 | 2.00 | 1.50 |
| 3 | TMV+p | MT20 | 2.0 | 4.0 | | |
| 4 | BMVW1+t | MT20 | 8.0 | 10.0 | 5.50 | Edge |
| 5 | BMWW+t | MT20 | 8.0 | 10.0 | 5.00 | 3.75 |
| 6 | BMV1+p | MT20 | 3.0 | 4.0 | | |

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

**HANGERS NOTES**
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 2718.7 lbs FACTORED DOWN AT 3-1-4 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 6 | 2330 | 0 | 2330 | 0 | 0 | 5-8 | 5-8 |
| 4 | 2895 | 0 | 2895 | 0 | 0 | MECHANICAL | |

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

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 6 | 1635 | 1144 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 491 / 0 | 0 / 0 |
| 4 | 2032 | 1421 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 610 / 0 | 0 / 0 |

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

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.28 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 6- 1 | -2050 / 0 | 0.0 | 0.0 | 0.23 (1) | 5.85 | 1- 5 | 0 / 2069 | 0.51 (1) |
| 1- 2 | -2359 / 0 | -77.4 | -77.4 | 0.19 (1) | 4.28 | 5- 2 | 0 / 3134 | 0.78 (1) |
| 2- 3 | -10 / 0 | -77.4 | -77.4 | 0.09 (1) | 10.00 | 2- 4 | -2869 / 0 | 0.83 (1) |
| 4- 3 | -95 / 0 | 0.0 | 0.0 | 0.04 (1) | 7.81 | | | |
| 6- 5 | 0 / 0 | -188.9 | -188.9 | 0.15 (1) | 10.00 | | | |
| 5- 4 | 0 / 1970 | -502.7 | -502.7 | 0.63 (1) | 10.00 | | | |

FACTORED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE |
|---|---|---|---|---|---|---|---|
| 5 | 3-1-4 | -2719 | -2719 | --- | FRONT | VERT | TOTAL |

**DESIGN CRITERIA**

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

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

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

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 9-2-12
END DISTANCE = 3-1-4
END SPAN CARRIED = 9-2-12
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CStdGirder
START DISTANCE = 3-1-4
START SPAN CARRIED = 22-11-0
END DISTANCE = 6-0-0
END SPAN CARRIED = 22-11-0
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL.

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.23/1.00 (1-6:1) , BC=0.63/1.00 (4-5:1) , WB=0.83/1.00 (2-4:1) , SSI=0.49/1.00 (4-5:1)

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

CONTINUED ON PAGE 2

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (2) (INPUT = 0.90 )
JSI METAL= 0.61 (1) (INPUT = 1.00 )

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

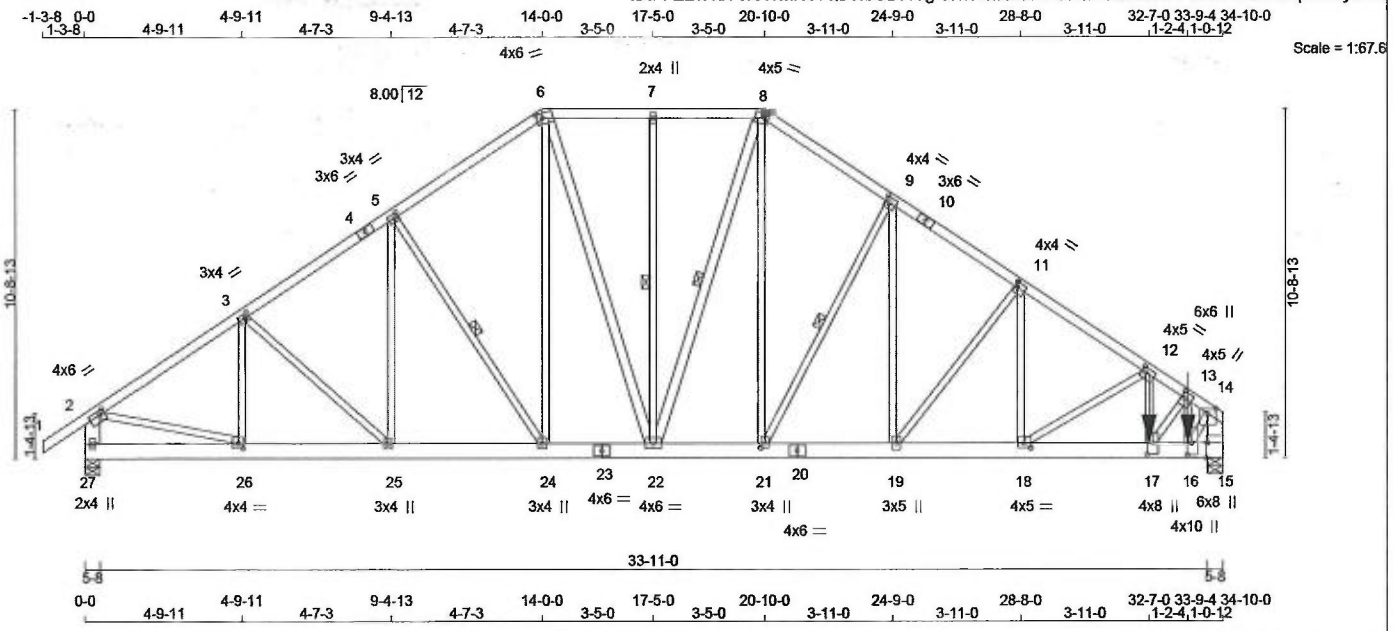
KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | G05 | 1 | 2 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 | **PAGE 11 OF 56** |

TRUSS DESC.

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:44 2018 Page 1

ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-vJnc32JIDX3S3WM7XvbdxNZPe9mUzkUECqsrmAynYey




TOTAL WEIGHT = 2 X 216 = 433 lb [M]

**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 4 | 2x4 | DRY | No.2 | SPF |
| 4 - 6 | 2x4 | DRY | No.2 | SPF |
| 6 - 8 | 2x4 | DRY | No.2 | SPF |
| 8 - 10 | 2x4 | DRY | No.2 | SPF |
| 10 - 14 | 2x4 | DRY | No.2 | SPF |
| 27 - 2 | 2x6 | DRY | No.2 | SPF |
| 15 - 14 | 2x6 | DRY | No.2 | SPF |
| 27 - 23 | 2x6 | DRY | No.2 | SPF |
| 23 - 20 | 2x6 | DRY | No.2 | SPF |
| 20 - 15 | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |
| 6 - 22 | 2x4 | DRY | No.2 | SPF |
| 22 - 8 | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

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

| CHORDS #ROWS | SURFACE SPACING (IN) | | LOAD(PLF) |
|---|---|---|---|
| TOP CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| 1- 4 | 1 | 12 | TOP |
| 4- 6 | 1 | 12 | TOP |
| 6- 8 | 1 | 12 | TOP |
| 8- 10 | 1 | 12 | TOP |
| 10- 14 | 1 | 12 | TOP |
| 27- 2 | 2 | 12 | TOP |
| 15- 14 | 2 | 12 | TOP |
| BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS | | | |
| 27- 23 | 2 | 12 | TOP |
| 23- 20 | 2 | 12 | TOP |
| 20- 15 | 2 | 12 | SIDE(0.0) |
| WEBS : (0.122"X3") SPIRAL NAILS | | | |
| 2x3 | 1 | 6 | |
| 2x4 | 1 | 6 | |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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


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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 27 | 2142 | 0 | 2142 | 0 | 0 | 5-8 | 5-8 |
| 15 | 7626 | 0 | 7626 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 27 | 1501 | 1064 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 438 / 0 | 0 / 0 |
| 15 | 5352 | 3744 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 1608 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 27, 15

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.39 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 5-24, 7-22, 8-22, 9-21. DBS = 20-0-0 . CBF = 182 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE (PER BRACE). FASTEN LATERAL BRACE(S) TO EACH PLY 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)

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| 1- 2 | 0 / 29 | -77.4 | -77.4 | 0.06 (1) | | 10.00 |
| 2- 3 | -2505 / 0 | -77.4 | -77.4 | 0.16 (1) | | 5.57 |
| 3- 4 | -2500 / 0 | -77.4 | -77.4 | 0.16 (1) | | 5.57 |
| 4- 5 | -2500 / 0 | -77.4 | -77.4 | 0.16 (1) | | 5.57 |
| 5- 6 | -2251 / 0 | -77.4 | -77.4 | 0.15 (1) | | 5.80 |
| 6- 7 | -2051 / 0 | -77.4 | -77.4 | 0.09 (1) | | 6.07 |
| 7- 8 | -2051 / 0 | -77.4 | -77.4 | 0.09 (1) | | 6.07 |
| 8- 9 | -2541 / 0 | -77.4 | -77.4 | 0.11 (1) | | 5.58 |
| 9-10 | -3329 / 0 | -77.4 | -77.4 | 0.13 (1) | | 5.01 |
| 10-11 | -3329 / 0 | -77.4 | -77.4 | 0.13 (1) | | 5.01 |
| 11-12 | -4597 / 0 | -77.4 | -77.4 | 0.16 (1) | | 4.37 |
| 12-13 | -7332 / 0 | -77.4 | -77.4 | 0.30 (1) | | 3.39 |
| 13-14 | -5630 / 0 | -77.4 | -77.4 | 0.23 (1) | | 3.90 |
| 27- 2 | -2094 / 0 | 0.0 | 0.0 | 0.07 (1) | | 7.81 |
| 15-14 | -7600 / 0 | 0.0 | 0.0 | 0.27 (1) | | 5.44 |
| 27-26 | 0 / 0 | -17.5 | -17.5 | 0.03 (4) | | 10.00 |
| 26-25 | 0 / 2100 | -17.5 | -17.5 | 0.16 (1) | | 10.00 |
| 25-24 | 0 / 2080 | -17.5 | -17.5 | 0.15 (1) | | 10.00 |
| 24-23 | 0 / 1858 | -17.5 | -17.5 | 0.15 (1) | | 10.00 |
| 23-22 | 0 / 1858 | -17.5 | -17.5 | 0.15 (1) | | 10.00 |
| 22-21 | 0 / 2111 | -17.5 | -17.5 | 0.17 (1) | | 10.00 |
| 21-20 | 0 / 2771 | -17.5 | -17.5 | 0.21 (1) | | 10.00 |
| 20-19 | 0 / 2771 | -17.5 | -17.5 | 0.21 (1) | | 10.00 |
| 19-18 | 0 / 3833 | -17.5 | -17.5 | 0.28 (1) | | 10.00 |
| 18-17 | 0 / 6178 | -17.5 | -17.5 | 0.62 (1) | | 10.00 |
| 17-16 | 0 / 4610 | -17.5 | -17.5 | 0.52 (1) | | 10.00 |
| 16-15 | 0 / 0 | -17.5 | -17.5 | 0.01 (1) | | 10.00 |

| WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| 26- 3 | -367 / 0 | 0.06 (1) |
| 3-25 | -26 / 0 | 0.01 (1) |
| 25- 5 | 0 / 105 | 0.02 (4) |
| 5-24 | -416 / 0 | 0.11 (1) |
| 24- 6 | 0 / 400 | 0.05 (1) |
| 6-22 | 0 / 616 | 0.05 (1) |
| 22- 7 | -303 / 0 | 0.12 (1) |
| 22- 8 | -190 / 0 | 0.06 (1) |
| 21- 8 | 0 / 1350 | 0.17 (1) |
| 21- 9 | -1459 / 0 | 0.38 (1) |
| 19- 9 | 0 / 1400 | 0.17 (1) |
| 19-11 | -1744 / 0 | 0.64 (1) |
| 18-11 | 0 / 1776 | 0.22 (1) |
| 18-12 | -2781 / 0 | 0.50 (1) |
| 17-12 | 0 / 2711 | 0.34 (1) |
| 17-13 | 0 / 2742 | 0.34 (1) |
| 16-13 | -3054 / 0 | 0.25 (1) |
| 2-26 | 0 / 2144 | 0.27 (1) |
| 16-14 | 0 / 6321 | 0.78 (1) |

**DESIGN CRITERIA**

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

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

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

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

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.16")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (1.16")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.12")

CSI: TC=0.30/1.00 (12-13:1) , BC=0.62/1.00 (17-18:1) , WB=0.78/1.00 (14-16:1) , SSI=0.16/1.00 (16-17:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

CONTINUED ON PAGE 2

KOTT

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMVW-t | MT20 | 4.0 | 6.0 | 1.50 | 1.75 |
| 3 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 4 | TS-t | MT20 | 3.0 | 6.0 | | |
| 5 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 6 | TTWW-m | MT20 | 4.0 | 6.0 | 1.75 | 2.00 |
| 7 | TMW+w | MT20 | 2.0 | 4.0 | | |
| 8 | TTWW-m | MT20 | 4.0 | 5.0 | 1.75 | 1.50 |
| 9 | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| 10 | TS-t | MT20 | 3.0 | 6.0 | | |
| 11 | TMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.00 |
| 12 | TMWW-t | MT20 | 4.0 | 5.0 | 1.75 | 1.50 |
| 13 | TMWW+t | MT20 | 4.0 | 5.0 | 2.25 | 1.25 |
| 14 | TMVW+p | MT20 | 6.0 | 6.0 | 1.75 | 3.00 |
| 15 | BMV1+t | MT20 | 6.0 | 8.0 | Edge | 0.50 |
| 16 | BMWW+t | MT20 | 4.0 | 10.0 | 4.50 | 1.50 |
| 17 | BMWW+t | MT20 | 4.0 | 8.0 | 4.25 | 2.00 |
| 18 | BMWW-t | MT20 | 4.0 | 5.0 | 1.75 | 2.50 |
| 19 | BMWW+t | MT20 | 3.0 | 5.0 | | |
| 20 | BS-t | MT20 | 4.0 | 6.0 | | |
| 21 | BMWW+t | MT20 | 3.0 | 4.0 | 1.75 | 1.50 |
| 22 | BMWWW-t | MT20 | 4.0 | 6.0 | | |
| 23 | BS-t | MT20 | 4.0 | 6.0 | | |
| 24 | BMWW+t | MT20 | 3.0 | 4.0 | | |
| 25 | BMWW+t | MT20 | 3.0 | 4.0 | | |
| 26 | BMWW-t | MT20 | 4.0 | 4.0 | 1.75 | 1.75 |
| 27 | BMV1+p | MT20 | 2.0 | 4.0 | | |

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

**HANGERS NOTES**

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 5577.0 lbs FACTORED DOWN AT 32-7-0, AND 780.8 lbs FACTORED DOWN AT 33-9-4 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

FACTORED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE |
|---|---|---|---|---|---|---|---|
| 16 | 33-9-4 | -781 | -781 | --- | FRONT | VERT | TOTAL |
| 17 | 32-7-0 | -5577 | -5577 | --- | FRONT | VERT | TOTAL |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

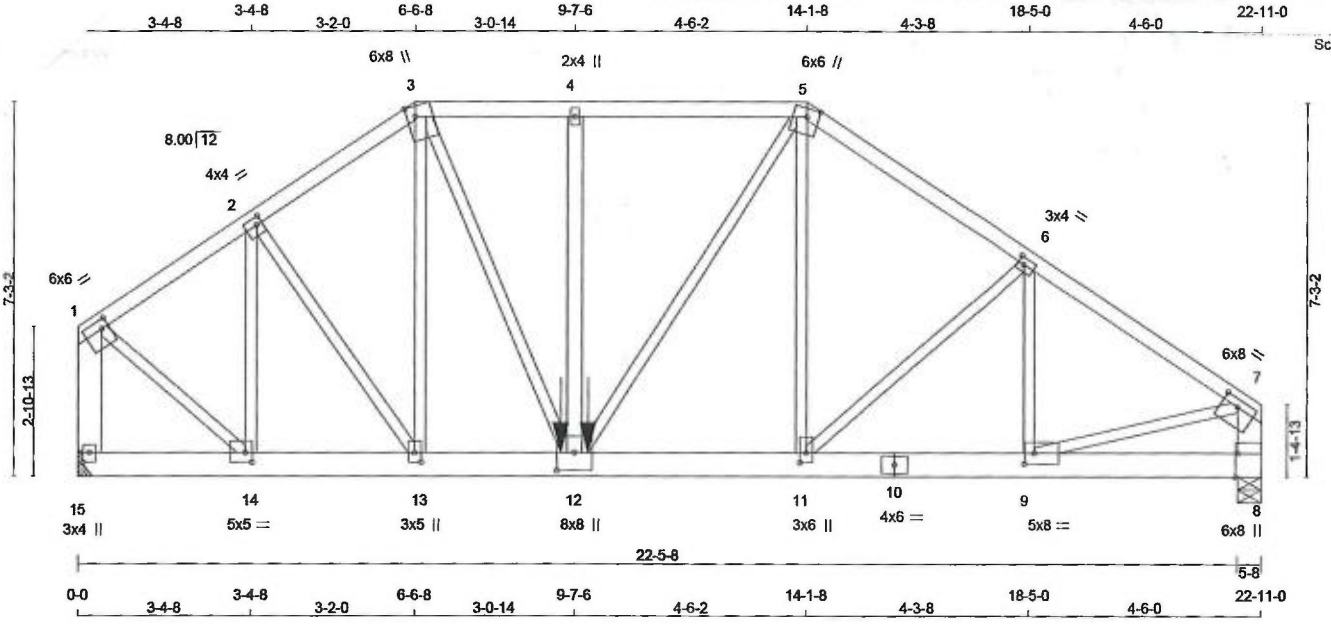
JSI GRIP= 0.89 (16) (INPUT = 0.90 )
JSI METAL= 0.75 (16) (INPUT = 1.00 )

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

KOTT

| TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|
| G06 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 | PAGE 13 OF 56 |
| | | | TRUSS DESC. | |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:45 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-NVL?GOKw_qBIhgxJ4c6sUb6VyZ44i9NNQUcOJcynYeu




TOTAL WEIGHT = 129 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 3 - 5 | 2x4 | DRY | No.2 | SPF |
| 5 - 7 | 2x4 | DRY | No.2 | SPF |
| 15 - 1 | 2x6 | DRY | No.2 | SPF |
| 8 - 7 | 2x6 | DRY | No.2 | SPF |
| 15 - 10 | 2x6 | DRY | No.2 | SPF |
| 10 - 8 | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |
| 12 - 4 | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 1 | TMVW-t | MT20 | 6.0 | 6.0 | 2.00 | 1.75 |
| 2 | TMWW-t | MT20 | 4.0 | 4.0 | 1.75 | 1.25 |
| 3 | TTWW+m | MT20 | 6.0 | 8.0 | Edge | 2.00 |
| 4 | TMW+w | MT20 | 2.0 | 4.0 | | |
| 5 | TTWW+m | MT20 | 6.0 | 6.0 | 2.00 | 2.75 |
| 6 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 7 | TMVW-t | MT20 | 6.0 | 8.0 | 1.75 | 3.75 |
| 8 | BMV1+t | MT20 | 6.0 | 8.0 | Edge | 0.50 |
| 9 | BMWW-t | MT20 | 5.0 | 8.0 | 2.50 | 2.25 |
| 10 | BS-t | MT20 | 4.0 | 6.0 | | |
| 11 | BMWW+t | MT20 | 3.0 | 6.0 | 2.25 | 1.50 |
| 12 | BMWWW+t | MT20 | 8.0 | 8.0 | 4.25 | 4.00 |
| 13 | BMWW+t | MT20 | 3.0 | 5.0 | 2.25 | 1.50 |
| 14 | BMWW-t | MT20 | 5.0 | 5.0 | 2.25 | 1.50 |
| 15 | BMV1+p | MT20 | 3.0 | 4.0 | 2.25 | 1.50 |

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

**HANGERS NOTES**
1)


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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 15 | 2718 | 0 | 2718 | 0 | 0 | MECHANICAL | |
| 8 | 3620 | 0 | 3620 | 0 | 0 | 5-8 | 5-8 |

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 15 TO RESIST THE MAX FACTORED REACTIONS.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | SNOW | LIVE | PERM.LIVE | MAX./MIN. COMPONENT REACTIONS WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 15 | 1908 | 1335 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 573 / 0 | 0 / 0 |
| 8 | 2540 | 1777 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 763 / 0 | 0 / 0 |

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

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.03 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC | MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|---|
| 1-2 | -2192 / 0 | -77.4 | -77.4 | 0.22 | (1) | 4.38 | 14-2 | -1324 / 0 | 0.50 (1) |
| 2-3 | -2799 / 0 | -77.4 | -77.4 | 0.26 | (1) | 3.90 | 2-13 | 0 / 835 | 0.21 (1) |
| 3-4 | -3185 / 0 | -77.4 | -77.4 | 0.31 | (1) | 3.60 | 13-3 | -616 / 0 | 0.55 (1) |
| 4-5 | -3185 / 0 | -77.4 | -77.4 | 0.40 | (1) | 3.55 | 3-12 | 0 / 2166 | 0.54 (1) |
| 5-6 | -3624 / 0 | -77.4 | -77.4 | 0.49 | (1) | 3.28 | 12-4 | -331 / 0 | 0.21 (1) |
| 6-7 | -4103 / 0 | -77.4 | -77.4 | 0.58 | (1) | 3.03 | 12-5 | 0 / 307 | 0.08 (1) |
| 15-1 | -2686 / 0 | 0.0 | 0.0 | 0.27 | (1) | 6.32 | 11-5 | 0 / 1459 | 0.36 (1) |
| 8-7 | -3187 / 0 | 0.0 | 0.0 | 0.23 | (1) | 5.88 | 11-6 | -588 / 0 | 0.36 (1) |
| | | | | | | | 9-6 | 0 / 267 | 0.07 (1) |
| 15-14 | 0 / 0 | -17.5 | -17.5 | 0.02 | (4) | 10.00 | 1-14 | 0 / 2285 | 0.57 (1) |
| 14-13 | 0 / 1837 | -17.5 | -17.5 | 0.28 | (1) | 10.00 | 9-7 | 0 / 3512 | 0.87 (1) |
| 13-12 | 0 / 2301 | -17.5 | -17.5 | 0.35 | (1) | 10.00 | | | |
| 12-11 | 0 / 3017 | -221.1 | -221.1 | 0.67 | (1) | 10.00 | | | |
| 11-10 | 0 / 3429 | -221.1 | -221.1 | 0.73 | (1) | 10.00 | | | |
| 10-9 | 0 / 3429 | -221.1 | -221.1 | 0.73 | (1) | 10.00 | | | |
| 9-8 | 0 / 0 | -221.1 | -221.1 | 0.31 | (1) | 10.00 | | | |

FACTORED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE |
|---|---|---|---|---|---|---|---|
| 12 | 9-10-8 | -524 | -524 | --- | FRONT | VERT | TOTAL |
| 12 | 9-4-4 | -932 | -932 | --- | FRONT | VERT | TOTAL |

**DESIGN CRITERIA**

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

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

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

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

GIRDER TYPE: CStdGirder
START DISTANCE = 9-10-8
START SPAN CARRIED = 11-0-8
END DISTANCE = 22-11-0
END SPAN CARRIED = 11-0-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL. (DEFINED BY USER)

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.76")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (0.76")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.19")

CSI: TC=0.58/1.00 (6-7:1) , BC=0.73/1.00 (9-11:1) , WB=0.87/1.00 (7-9:1) , SSI=0.37/1.00 (8-9:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

CONTINUED ON PAGE 2

KOTT

**HANGERS NOTES**

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 524.4 lbs FACTORED DOWN AT 9-10-8, AND 931.9 lbs FACTORED DOWN AT 9-4-4 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

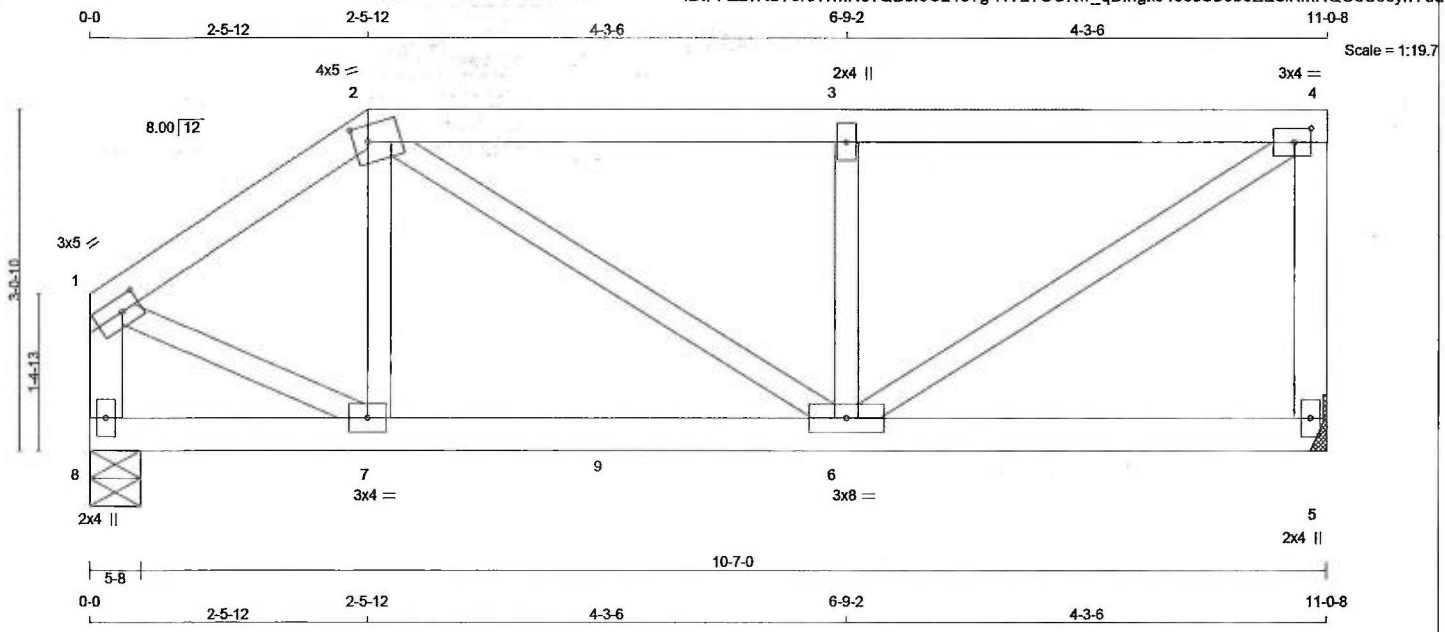
JSI GRIP= 0.89 (5) (INPUT = 0.90 )
JSI METAL= 0.86 (10) (INPUT = 1.00 )

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | G07 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 | **PAGE 15 OF 56** |
| | | | | TRUSS DESC. | |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:45 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-NVL?GOKw_qBIhgxJ4c6sUb6b5ZEeiKMNQUcOJcynYeu




TOTAL WEIGHT = 43 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 2 | 2x4 | DRY | No.2 | SPF |
| 2 - 4 | 2x4 | DRY | No.2 | SPF |
| 5 - 4 | 2x4 | DRY | No.2 | SPF |
| 8 - 1 | 2x4 | DRY | No.2 | SPF |
| 8 - 5 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 1 | TMVW-t | MT20 | 3.0 | 5.0 | 1.50 | 2.00 |
| 2 | TTWW-m | MT20 | 4.0 | 5.0 | 1.75 | 1.50 |
| 3 | TMW+w | MT20 | 2.0 | 4.0 | | |
| 4 | TMVW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.75 |
| 5 | BMV1+p | MT20 | 2.0 | 4.0 | | |
| 6 | BMWWW-t | MT20 | 3.0 | 8.0 | | |
| 7 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 8 | BMV1+p | MT20 | 2.0 | 4.0 | | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 5 | 524 | 0 | 524 | 0 | 0 | MECHANICAL | |
| 8 | 526 | 0 | 526 | 0 | 0 | 5-8 | 5-8 |

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 5 TO RESIST THE MAX FACTORED REACTIONS.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 5 | 368 | 257 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 111 / 0 | 0 / 0 |
| 8 | 369 | 258 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 111 / 0 | 0 / 0 |

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

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

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | WEBS MAX. UNBRAC LENGTH | MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 1-2 | -457 / 0 | -77.4 | -77.4 | 0.09 (1) | 6.25 | 7- 2 | -91 / 22 | 0.02 (1) |
| 2-3 | -565 / 0 | -77.4 | -77.4 | 0.26 (1) | 6.25 | 2- 6 | 0 / 225 | 0.06 (1) |
| 3-4 | -565 / 0 | -77.4 | -77.4 | 0.26 (1) | 6.25 | 6- 3 | -406 / 0 | 0.08 (1) |
| 5-4 | -492 / 0 | 0.0 | 0.0 | 0.08 (1) | 7.81 | 6- 4 | 0 / 673 | 0.17 (1) |
| 8-1 | -510 / 0 | 0.0 | 0.0 | 0.06 (1) | 7.81 | 1- 7 | 0 / 411 | 0.10 (1) |
| 8-7 | 0 / 0 | -18.0 | -18.0 | 0.05 (4) | 10.00 | | | |
| 7-9 | 0 / 376 | -18.0 | -18.0 | 0.11 (4) | 10.00 | | | |
| 9-6 | 0 / 376 | -17.5 | -17.5 | 0.11 (4) | 10.00 | | | |
| 6-5 | 0 / 0 | -17.5 | -17.5 | 0.08 (4) | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 2-5-12
END DISTANCE = 4-8-0
END SPAN CARRIED = 2-5-12
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL. (DEFINED BY USER)

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.37")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.37")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.26/1.00 (3-4:1) , BC=0.11/1.00 (6-7:4) , WB=0.17/1.00 (4-6:1) , SSI=0.18/1.00 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

CONTINUED ON PAGE 2

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

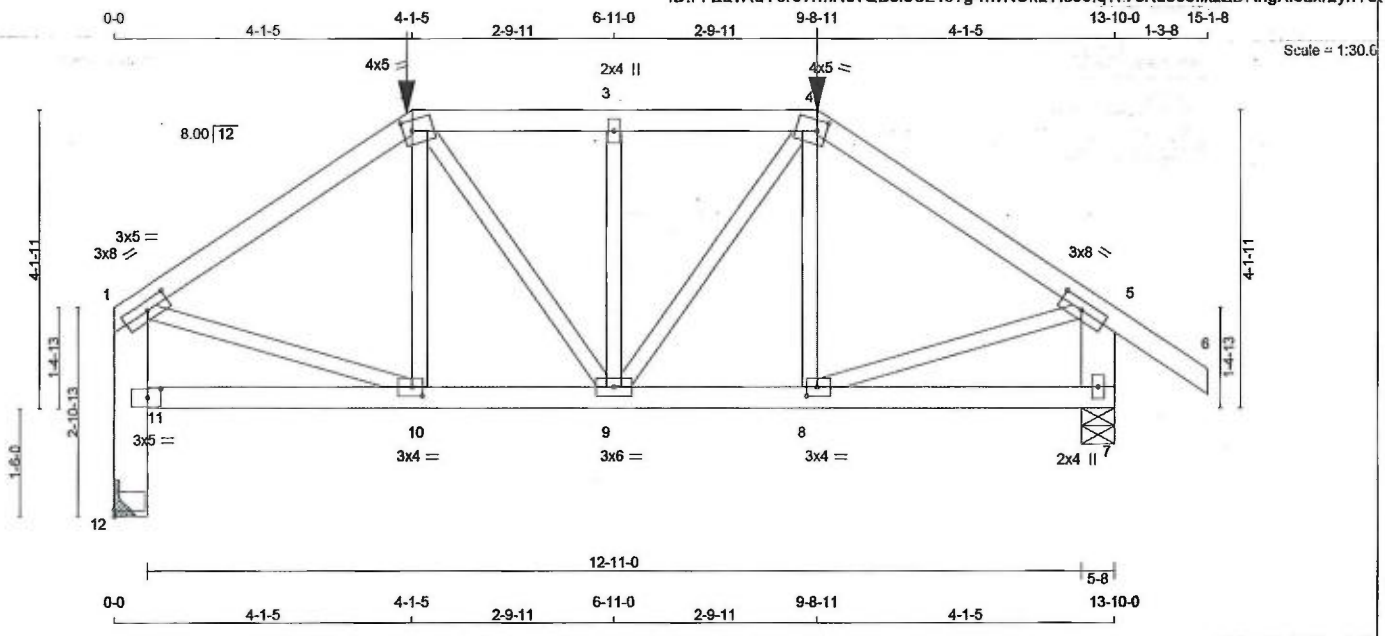
JSI GRIP= 0.84 (4) (INPUT = 0.90 )
JSI METAL= 0.21 (4) (INPUT = 1.00 )

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | G08 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | PAGE 17 OF 56 |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:46 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsIoCz48?g-rhvNUkLYl8J9IqWVeKd50oflkzZDRngXf8Lxr2ynYet




TOTAL WEIGHT = 64 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 2 | 2x4 | DRY | No.2 | SPF |
| 2 - 4 | 2x4 | DRY | No.2 | SPF |
| 4 - 6 | 2x4 | DRY | No.2 | SPF |
| 12 - 1 | 2x6 | DRY | No.2 | SPF |
| 7 - 5 | 2x6 | DRY | No.2 | SPF |
| 11 - 7 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 1 | TMVW-t | MT20 | 3.0 | 8.0 | 1.50 | 3.75 |
| 2 | TTWW-m | MT20 | 4.0 | 5.0 | 1.75 | 1.50 |
| 3 | TMW+w | MT20 | 2.0 | 4.0 | | |
| 4 | TTWW-m | MT20 | 4.0 | 5.0 | 1.75 | 1.50 |
| 5 | TMVW-t | MT20 | 3.0 | 8.0 | 1.50 | 3.75 |
| 7 | BMV1+p | MT20 | 2.0 | 4.0 | | |
| 8 | BMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.75 |
| 9 | BMWWW-t | MT20 | 3.0 | 6.0 | | |
| 10 | BMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.75 |
| 11 | BVM-I | MT20 | 3.0 | 5.0 | 1.50 | 2.25 |
| 12 | EBSP+t | MT20 | 3.0 | 5.0 | | 1.00 |

**HANGERS NOTES**
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 79.5 lbs FACTORED DOWN AT 9-8-11, AND 79.5 lbs FACTORED DOWN AT 4-1-5 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.


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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| 7 | 888 | 0 | 888 | 0 | 0 | 5-8 | 5-8 |
| 12 | 781 | 0 | 781 | 0 | 0 | MECHANICAL | |

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 12 TO RESIST THE MAX FACTORED REACTIONS.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 7 | 620 | 452 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 168 / 0 | 0 / 0 |
| 12 | 548 | 388 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 160 / 0 | 0 / 0 |

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

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

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|---|
| 1-2 | -763 / 0 | -77.4 | -77.4 | 0.26 (1) | 6.25 | 10-2 | -74 / 51 | 0.02 (1) | |
| 2-3 | -749 / 0 | -87.8 | -87.8 | 0.12 (1) | 6.25 | 2-9 | 0 / 198 | 0.05 (1) | |
| 3-4 | -749 / 0 | -87.8 | -87.8 | 0.12 (1) | 6.25 | 9-3 | -291 / 0 | 0.08 (1) | |
| 4-5 | -763 / 0 | -77.4 | -77.4 | 0.26 (1) | 6.25 | 9-4 | 0 / 198 | 0.05 (1) | |
| 5-6 | 0 / 29 | -77.4 | -77.4 | 0.11 (1) | 10.00 | 8-4 | -74 / 51 | 0.02 (1) | |
| 12-11 | -781 / 0 | 0.0 | 0.0 | 0.06 (1) | 7.81 | 1-10 | 0 / 655 | 0.16 (1) | |
| 11-1 | -746 / 0 | 0.0 | 0.0 | 0.05 (1) | 7.81 | 8-5 | 0 / 655 | 0.16 (1) | |
| 7-5 | -853 / 0 | 0.0 | 0.0 | 0.06 (1) | 7.81 | | | | |
| 11-10 | 0 / 0 | -19.9 | -19.9 | 0.08 (4) | 10.00 | | | | |
| 10-9 | 0 / 632 | -19.9 | -19.9 | 0.16 (1) | 10.00 | | | | |
| 9-8 | 0 / 632 | -19.9 | -19.9 | 0.16 (1) | 10.00 | | | | |
| 8-7 | 0 / 0 | -19.9 | -19.9 | 0.08 (4) | 10.00 | | | | |

FACTORED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE |
|---|---|---|---|---|---|---|---|
| 2 | 4-1-5 | -79 | -79 | --- | FRONT | VERT | TOTAL |
| 4 | 9-8-11 | -79 | -79 | --- | FRONT | VERT | TOTAL |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 4-1-5
END SETBACK = 3-0-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDT'L LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.46")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.46")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.26/1.00 (1-2:1) , BC=0.16/1.00 (9-10:1) , WB=0.16/1.00 (1-10:1) , SSI=0.13/1.00 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

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

CONTINUED ON PAGE 2

KOTT

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

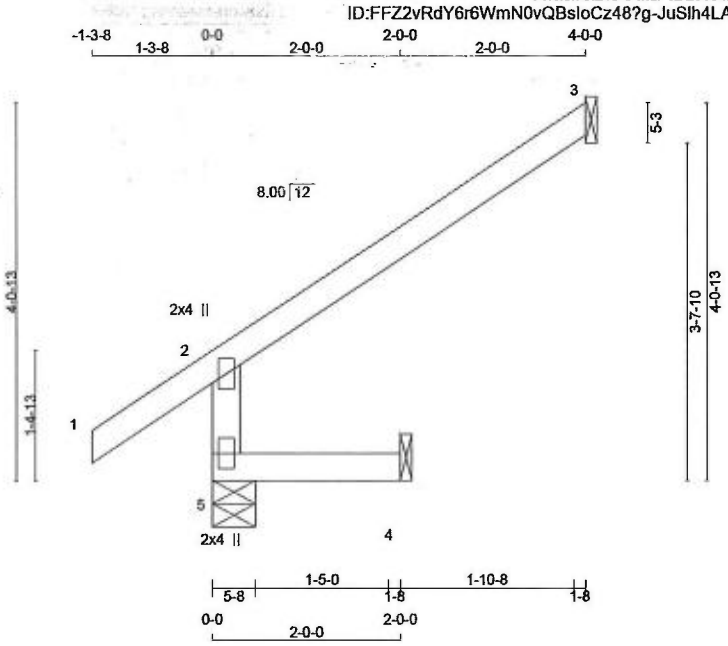
JSI GRIP= 0.81 (10) (INPUT = 0.90 )
JSI METAL= 0.24 (10) (INPUT = 1.00 )

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | J01 | 3 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 19 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:47 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-JuSlh4LAWSR0w_5iC18KZ0BxlMxdAGRguo5VNVynYes




TOTAL WEIGHT = 3 X 11 = 33 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 5 - 2 | 2x4 | DRY | No.2 | SPF |
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 5 - 4 | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES** (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMV+p | MT20 | 2.0 | 4.0 | | |
| 5 | BMV1+p | MT20 | 2.0 | 4.0 | | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 5 | 319 | 0 | 319 | 0 | 0 | 5-8 | 5-8 |
| 3 | 116 | 0 | 116 | 0 | 0 | 1-8 | 1-8 |
| 4 | 16 | 0 | 18 | 0 | 0 | 1-8 | 1-8 |

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

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 5 | 219 | 180 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 39 / 0 | 0 / 0 |
| 3 | 79 | 70 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 9 / 0 | 0 / 0 |
| 4 | 13 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 13 / 0 | 0 / 0 |

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

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

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | WEBS MAX. UNBRAC LENGTH FR-TO | MEMB. | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 5-2 | -299 / 0 | 0.0 | 0.0 | 0.01 (4) | 7.81 | | | |
| 1-2 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 | | | |
| 2-3 | -21 / 0 | -77.4 | -77.4 | 0.21 (1) | 6.25 | | | |
| 5-4 | 0 / 0 | -17.5 | -17.5 | 0.02 (4) | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

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

CSI: TC=0.21/1.00 (2-3:1) , BC=0.02/1.00 (4-5:4) , WB=0.00/1.00 (n/a:0) , SSI=0.13/1.00 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.19 (2) (INPUT = 0.90 )
JSI METAL= 0.07 (2) (INPUT = 1.00 )

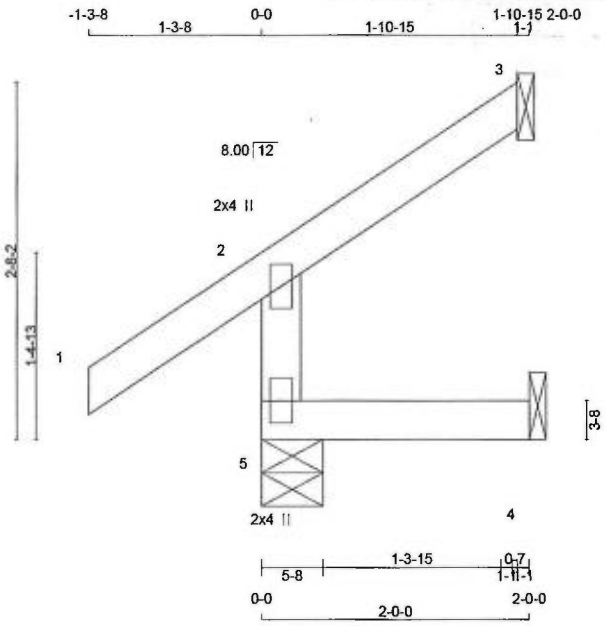
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 | DRWG NO. |
|---|---|---|---|---|---|---|
| NE0818-083 | J02 | 3 | 1 | TRUSS DESC. | | **PAGE 20 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:48 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-n407uPMpHlatY7gumlfZ6Dk8jmGdvjhq7Sq2wxynYe




TOTAL WEIGHT = 3 X 8 = 24 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 5 - 2 | 2x4 | DRY | No.2 | SPF |
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 5 - 4 | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN Y | X |
|---|---|---|---|---|---|
| 2 | TMV+p | MT20 | 2.0 | 4.0 | |
| 5 | BMV1+p | MT20 | 2.0 | 4.0 | |

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

**BEARINGS**

| | FACTORED GROSS REACTION | | MAXIMUM FACTORED GROSS REACTION | | | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
| 5 | 235 | 0 | 235 | 0 | 0 | 5-8 | 5-8 |
| 3 | 43 | 0 | 43 | 0 | -21 | 1-8 | 1-8 |
| 4 | 10 | 0 | 18 | 0 | 0 | 1-8 | 1-8 |

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

PROVIDE ANCHORAGE AT BEARING JOINT 3 FOR 150 LBS FACTORED UPLIFT

**UNFACTORED REACTIONS**

| | 1ST LCASE | MAX./MIN. COMPONENT REACTIONS | | | | | |
|---|---|---|---|---|---|---|---|
| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| 5 | 162 | 131 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 31 / 0 | 0 / 0 |
| 3 | 30 | 25 / -16 | 0 / 0 | 0 / 0 | 0 / 0 | 4 / 0 | 0 / 0 |
| 4 | 9 | 0 / -7 | 0 / 0 | 0 / 0 | 0 / 0 | 13 / 0 | 0 / 0 |

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

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

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

**LOADING**
TOTAL LOAD CASES: (5)

| CHORDS | | | | | | WEBS | | | |
|---|---|---|---|---|---|---|---|---|---|
| MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
| 5- 2 | -211 / 0 | 0.0 | 0.0 | 0.03 (5) | 7.81 | | | |
| 1- 2 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 | | | |
| 2- 3 | -17 / 0 | -77.4 | -77.4 | 0.08 (1) | 6.25 | | | |
| 5- 4 | 0 / 0 | -17.5 | -17.5 | 0.03 (5) | 10.00 | | | |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

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

CSI: TC=0.10/1.00 (1-2:1) , BC=0.03/1.00 (4-5:5) , WB=0.00/1.00 (n/a:0) , SSI=0.07/1.00 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.14 (2) (INPUT = 0.90 )
JSI METAL= 0.05 (2) (INPUT = 1.00 )

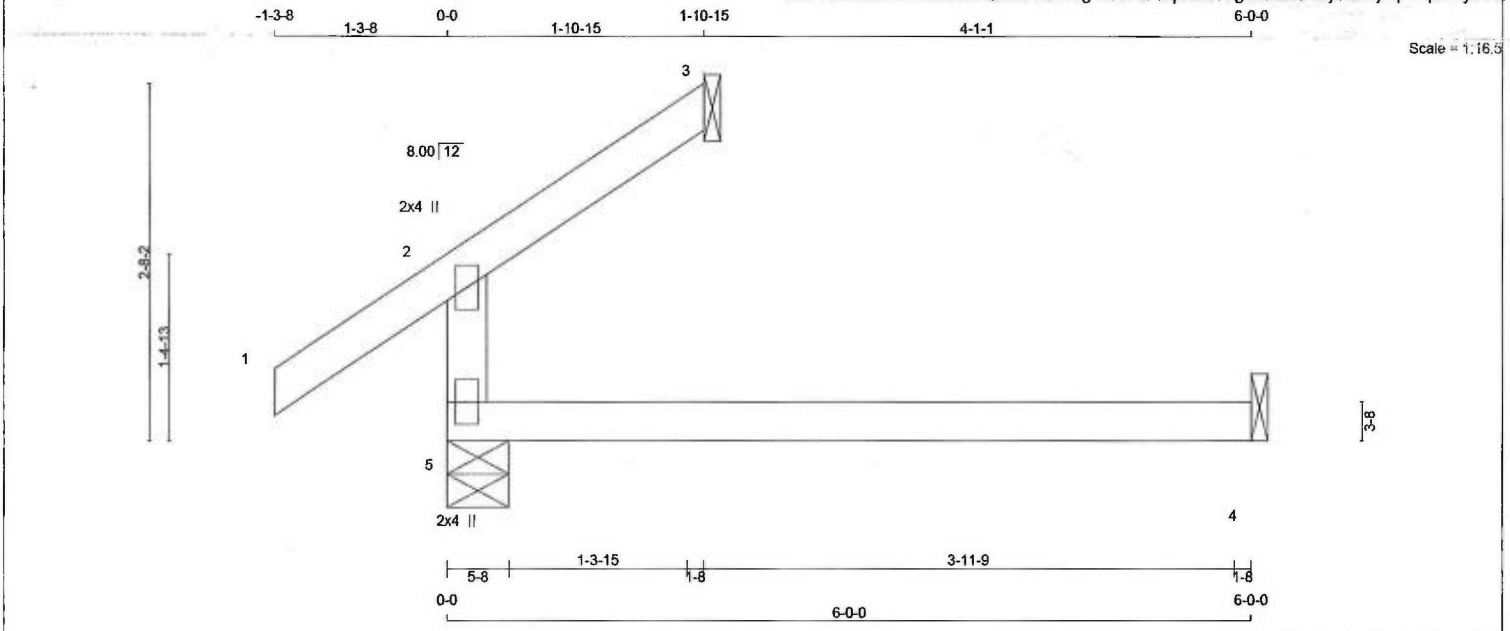
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | J03 | 3 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 21 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:48 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-n407uPMpHlaIY7gumlfZ6Dk8jmExvjhq7Sq2wxynYer




TOTAL WEIGHT = 3 X 13 = 38 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 5 - 2 | 2x4 | DRY | No.2 | SPF |
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 5 - 4 | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN Y | X |
|---|---|---|---|---|---|
| 2 | TMV+p | MT20 | 2.0 | 4.0 | |
| 5 | BMV1+p | MT20 | 2.0 | 4.0 | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 5 | 253 | 0 | 253 | 0 | 0 | 5-8 | 5-8 |
| 3 | 61 | 0 | 61 | 0 | 0 | 1-8 | 1-8 |
| 4 | 44 | 0 | 51 | 0 | 0 | 1-8 | 1-8 |

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

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 5 | 177 | 130 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 47 / 0 | 0 / 0 |
| 3 | 44 | 24 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 20 / 0 | 0 / 0 |
| 4 | 36 | 0 / -1 | 0 / 0 | 0 / 0 | 0 / 0 | 36 / 0 | 0 / 0 |

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

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

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 5- 2 | -193 / 0 | 0.0 | 0.0 | 0.10 (4) | 7.81 | | | |
| 1- 2 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 | | | |
| 2- 3 | -7 / 11 | -77.4 | -77.4 | 0.08 (4) | 10.00 | | | |
| 5- 4 | 0 / 0 | -17.5 | -17.5 | 0.14 (4) | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.10/1.00 (1-2:1) , BC=0.14/1.00 (4-5:4) , WB=0.00/1.00 (n/a:0) , SSI=0.08/1.00 (4-5:4)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.12 (2) (INPUT = 0.90 )
JSI METAL= 0.05 (2) (INPUT = 1.00 )

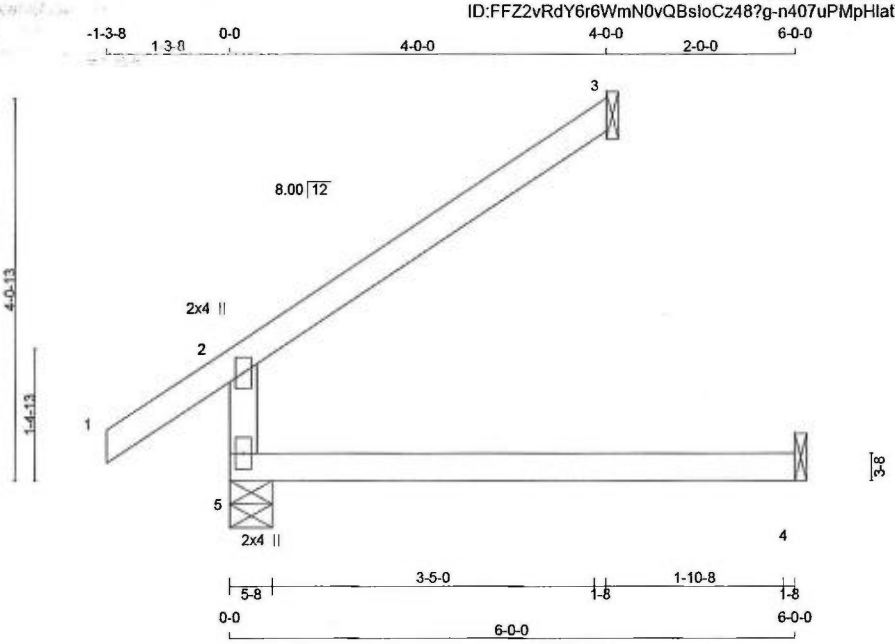
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | J04 | 3 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 22 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:48 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsIoCz48?g-n407uPMpHlatY7gumlfZ6Dk62mE5vjhq7Sq2wxynYer




TOTAL WEIGHT = 3 X 15 = 46 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 5 - 2 | 2x4 | DRY | No.2 | SPF |
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 5 - 4 | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN Y | X |
|---|---|---|---|---|---|
| 2 | TMV+p | MT20 | 2.0 | 4.0 | |
| 5 | BMV1+p | MT20 | 2.0 | 4.0 | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 5 | 361 | 0 | 361 | 0 | 0 | 5-8 | 5-8 |
| 3 | 116 | 0 | 116 | 0 | 0 | 1-8 | 1-8 |
| 4 | 44 | 0 | 49 | 0 | 0 | 1-8 | 1-8 |

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

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 5 | 252 | 180 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 72 / 0 | 0 / 0 |
| 3 | 79 | 70 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 9 / 0 | 0 / 0 |
| 4 | 35 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 35 / 0 | 0 / 0 |

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

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

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 5- 2 | -299 / 0 | 0.0 | 0.0 | 0.12 (4) | 7.81 | | | |
| 1- 2 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 | | | |
| 2- 3 | -21 / 0 | -77.4 | -77.4 | 0.21 (1) | 6.25 | | | |
| 5- 4 | 0 / 0 | -17.5 | -17.5 | 0.13 (4) | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

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

CSI: TC=0.21/1.00 (2-3:1) , BC=0.13/1.00 (4-5:4) , WB=0.00/1.00 (n/a:0) , SSI=0.13/1.00 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.19 (2) (INPUT = 0.90 )
JSI METAL= 0.07 (2) (INPUT = 1.00 )

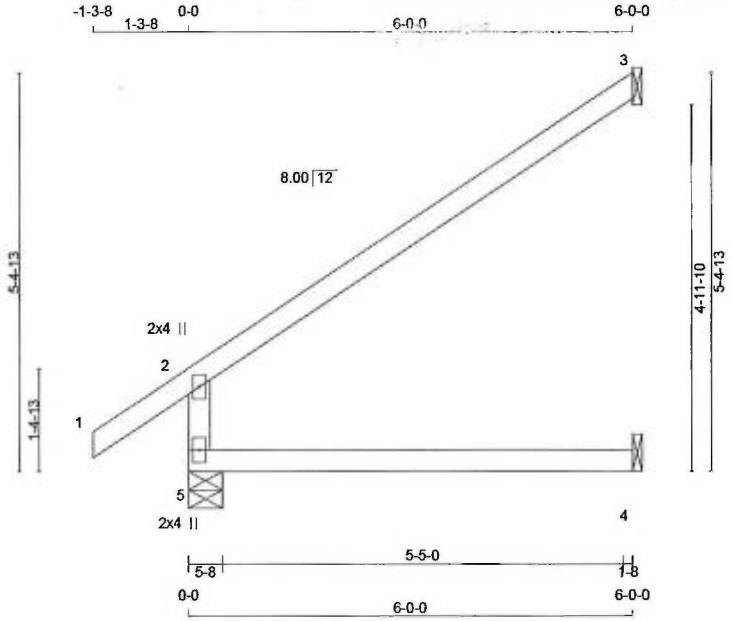
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | J05 | 15 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 23 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:49 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsIoCz48?g-FGaV6INR13ik9HF4JSAoeRHCgAaKeAxzL6acSNynYeq




TOTAL WEIGHT = 15 X 18 = 272 lb (M)

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 5 - 2 | 2x4 | DRY | No.2 | SPF |
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 5 - 4 | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN Y | X |
|---|---|---|---|---|---|
| 2 | TMV+p | MT20 | 2.0 | 4.0 | |
| 5 | BMV1+p | MT20 | 2.0 | 4.0 | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 5 | 457 | 0 | 457 | 0 | 0 | 5-8 | 5-8 |
| 3 | 174 | 0 | 174 | 0 | 0 | 1-8 | 1-8 |
| 4 | 44 | 0 | 49 | 0 | 0 | 1-8 | 1-8 |

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

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 5 | 318 | 239 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 80 / 0 | 0 / 0 |
| 3 | 118 | 105 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 14 / 0 | 0 / 0 |
| 4 | 35 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 35 / 0 | 0 / 0 |

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

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

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | WEBS MAX. UNBRAC LENGTH | MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 5- 2 | -396 / 0 | 0.0 | 0.0 | 0.12 (4) | 7.81 | | | |
| 1- 2 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 | | | |
| 2- 3 | -32 / 0 | -77.4 | -77.4 | 0.47 (1) | 6.25 | | | |
| 5- 4 | 0 / 0 | -17.5 | -17.5 | 0.13 (4) | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

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

CSI: TC=0.47/1.00 (2-3:1) , BC=0.13/1.00 (4-5:4) , WB=0.00/1.00 (n/a:0) , SSI=0.19/1.00 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.25 (2) (INPUT = 0.90 )
JSI METAL= 0.10 (2) (INPUT = 1.00 )

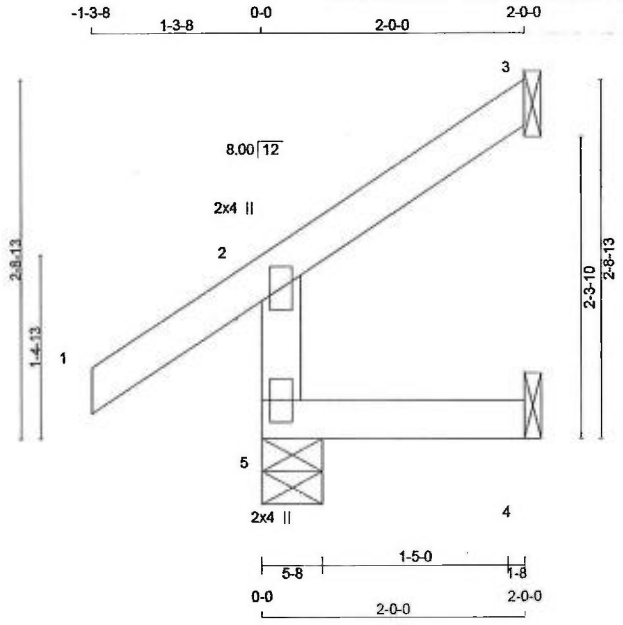
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | J06 | 9 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | PAGE 24 OF 56 |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:49 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-FGaV6INR13ik9HF4JSAoeRHITAc5eAxzL6acSNynYeq




TOTAL WEIGHT = 9 X 8 = 73 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 5 - 2 | 2x4 | DRY | No.2 | SPF |
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 5 - 4 | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN Y | X |
|---|---|---|---|---|---|
| 2 | TMV+p | MT20 | 2.0 | 4.0 | |
| 5 | BMV1+p | MT20 | 2.0 | 4.0 | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 5 | 222 | 0 | 222 | 0 | 0 | 5-8 | 5-8 |
| 3 | 59 | 0 | 59 | 0 | 0 | 1-8 | 1-8 |
| 4 | 16 | 0 | 18 | 0 | 0 | 1-8 | 1-8 |

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

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 5 | 153 | 122 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 31 / 0 | 0 / 0 |
| 3 | 40 | 35 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 5 / 0 | 0 / 0 |
| 4 | 13 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 13 / 0 | 0 / 0 |

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

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

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

**LOADING**
TOTAL LOAD CASES: (5)

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | WEBS MAX. UNBRAC LENGTH | MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 5- 2 | -202 / 0 | 0.0 | 0.0 | 0.01 (4) | 7.81 | | | |
| 1- 2 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 | | | |
| 2- 3 | -10 / 0 | -77.4 | -77.4 | 0.05 (1) | 6.25 | | | |
| 5- 4 | 0 / 0 | -17.5 | -17.5 | 0.02 (4) | 10.00 | | | |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

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

CSI: TC=0.10/1.00 (1-2:1) , BC=0.02/1.00 (4-5:4) , WB=0.00/1.00 (n/a:0) , SSI=0.07/1.00 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.13 (2) (INPUT = 0.90 )
JSI METAL= 0.05 (2) (INPUT = 1.00 )

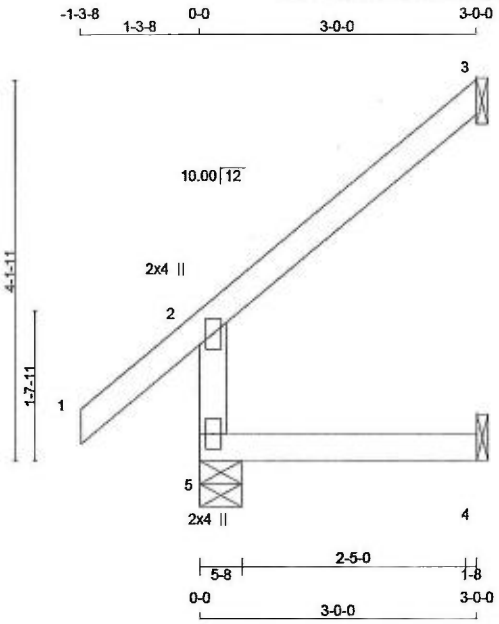
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | J07 | 6 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 25 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:49 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-FGaV6lNR13ik9HF4JSAoeRHIFAcneAxzL6acSNynYeq




TOTAL WEIGHT = 6 X 11 = 69 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 5 - 2 | 2x4 | DRY | No.2 | SPF |
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 5 - 4 | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMV+p | MT20 | 2.0 | 4.0 | | |
| 5 | BMV1+p | MT20 | 2.0 | 4.0 | | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 5 | 281 | 0 | 281 | 0 | 0 | 5-8 | 5-8 |
| 3 | 87 | 0 | 87 | 0 | 0 | 1-8 | 1-8 |
| 4 | 23 | 0 | 26 | 0 | 0 | 1-8 | 1-8 |

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

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 5 | 195 | 152 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 43 / 0 | 0 / 0 |
| 3 | 59 | 53 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 7 / 0 | 0 / 0 |
| 4 | 19 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 19 / 0 | 0 / 0 |

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

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

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

**LOADING**
TOTAL LOAD CASES: (5)

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 5- 2 | -252 / 0 | 0.0 | 0.0 | 0.02 (4) | 7.81 | | | |
| 1- 2 | 0 / 34 | -77.4 | -77.4 | 0.11 (1) | 10.00 | | | |
| 2- 3 | -18 / 0 | -77.4 | -77.4 | 0.12 (1) | 6.25 | | | |
| 5- 4 | 0 / 0 | -17.5 | -17.5 | 0.04 (4) | 10.00 | | | |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

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

CSI: TC=0.12/1.00 (2-3:1) , BC=0.04/1.00 (4-5:4) , WB=0.00/1.00 (n/a:0) , SSI=0.09/1.00 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (2) (INPUT = 0.90 )
JSI METAL= 0.07 (2) (INPUT = 1.00 )

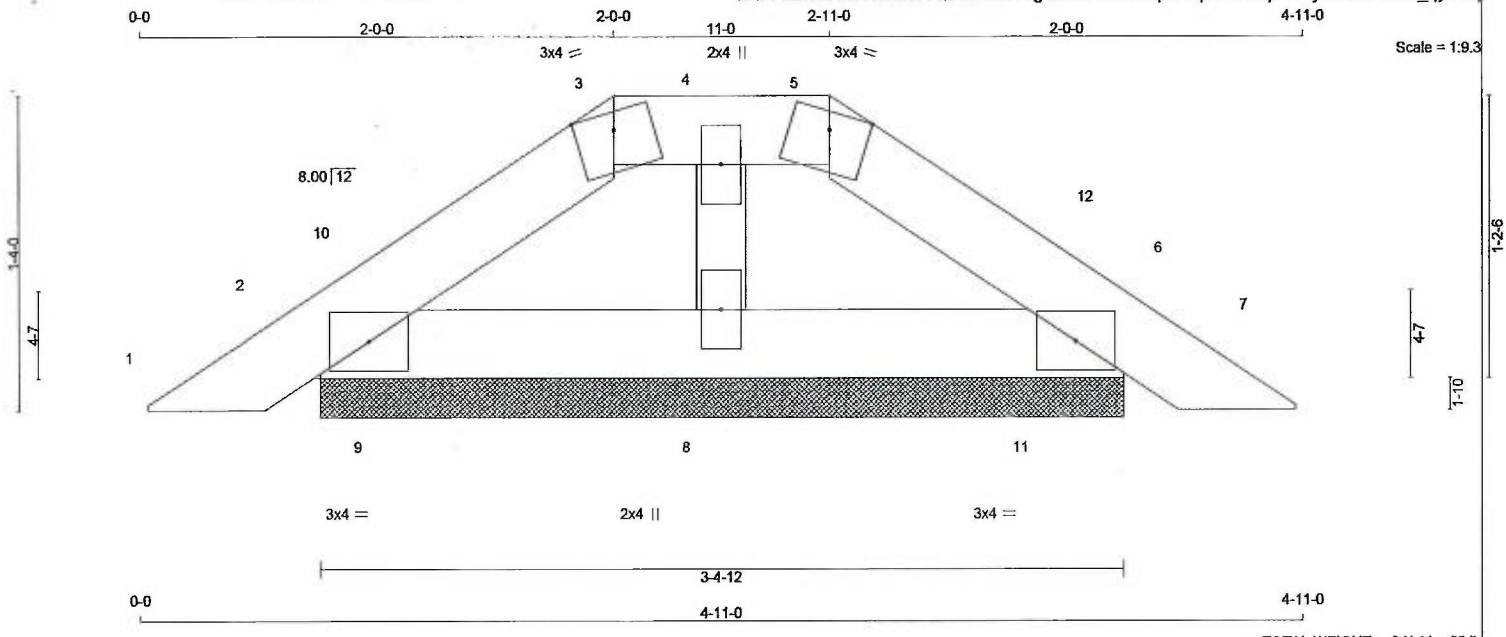
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | P01 | 2 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 26 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:50 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-kT8uJ5O3oNqbnRqHtAi1BepUSayENd?7amJ9_qynYe




TOTAL WEIGHT = 2 X 11 = 22 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 3 - 5 | 2x4 | DRY | No.2 | SPF |
| 5 - 7 | 2x4 | DRY | No.2 | SPF |
| 2 - 6 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMB1-I | MT20 | 3.0 | 4.0 | | |
| 3 | TT-m | MT20 | 3.0 | 4.0 | Edge | |
| 4 | TMW+w | MT20 | 2.0 | 4.0 | | |
| 5 | TT-m | MT20 | 3.0 | 4.0 | Edge | |
| 6 | TMB1-I | MT20 | 3.0 | 4.0 | | |
| 8 | BMW1+w | MT20 | 2.0 | 4.0 | | |

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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 2 | 138 | 0 | 138 | 0 | 0 | 3-4-12 | 3-4-12 |
| 6 | 138 | 0 | 138 | 0 | 0 | 3-4-12 | 3-4-12 |
| 8 | 147 | 0 | 147 | 0 | 0 | 3-4-12 | 3-4-12 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 2 | 96 | 76 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 20 / 0 | 0 / 0 |
| 6 | 96 | 76 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 20 / 0 | 0 / 0 |
| 8 | 104 | 68 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 36 / 0 | 0 / 0 |

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

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

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC | MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|---|
| 1- 2 | 0 / 13 | -77.4 | -77.4 | | 0.02 (1) | 10.00 | 8- 4 | -92 / 0 | 0.01 (1) |
| 2-10 | -56 / 0 | -77.4 | -77.4 | | 0.00 (4) | 6.25 | 9-10 | -35 / 6 | 0.00 (1) |
| 10- 3 | -48 / 0 | -77.4 | -77.4 | | 0.01 (1) | 6.25 | 11-12 | -35 / 6 | 0.00 (1) |
| 3- 4 | -39 / 0 | -77.4 | -77.4 | | 0.02 (1) | 6.25 | | | |
| 4- 5 | -39 / 0 | -77.4 | -77.4 | | 0.02 (1) | 6.25 | | | |
| 5-12 | -48 / 0 | -77.4 | -77.4 | | 0.01 (1) | 6.25 | | | |
| 12- 6 | -56 / 0 | -77.4 | -77.4 | | 0.00 (4) | 6.25 | | | |
| 6- 7 | 0 / 13 | -77.4 | -77.4 | | 0.02 (1) | 10.00 | | | |
| 2- 9 | 0 / 40 | -17.5 | -17.5 | | 0.02 (1) | 10.00 | | | |
| 9- 8 | 0 / 40 | -17.5 | -17.5 | | 0.02 (1) | 10.00 | | | |
| 8-11 | 0 / 40 | -17.5 | -17.5 | | 0.02 (1) | 10.00 | | | |
| 11- 6 | 0 / 40 | -17.5 | -17.5 | | 0.02 (1) | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

CSI: TC=0.02/1.00 (6-7:1) , BC=0.02/1.00 (8-9:1) , WB=0.01/1.00 (4-8:1) , SSI=0.04/1.00 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.10 (2) (INPUT = 0.90 )
JSI METAL= 0.03 (2) (INPUT = 1.00 )

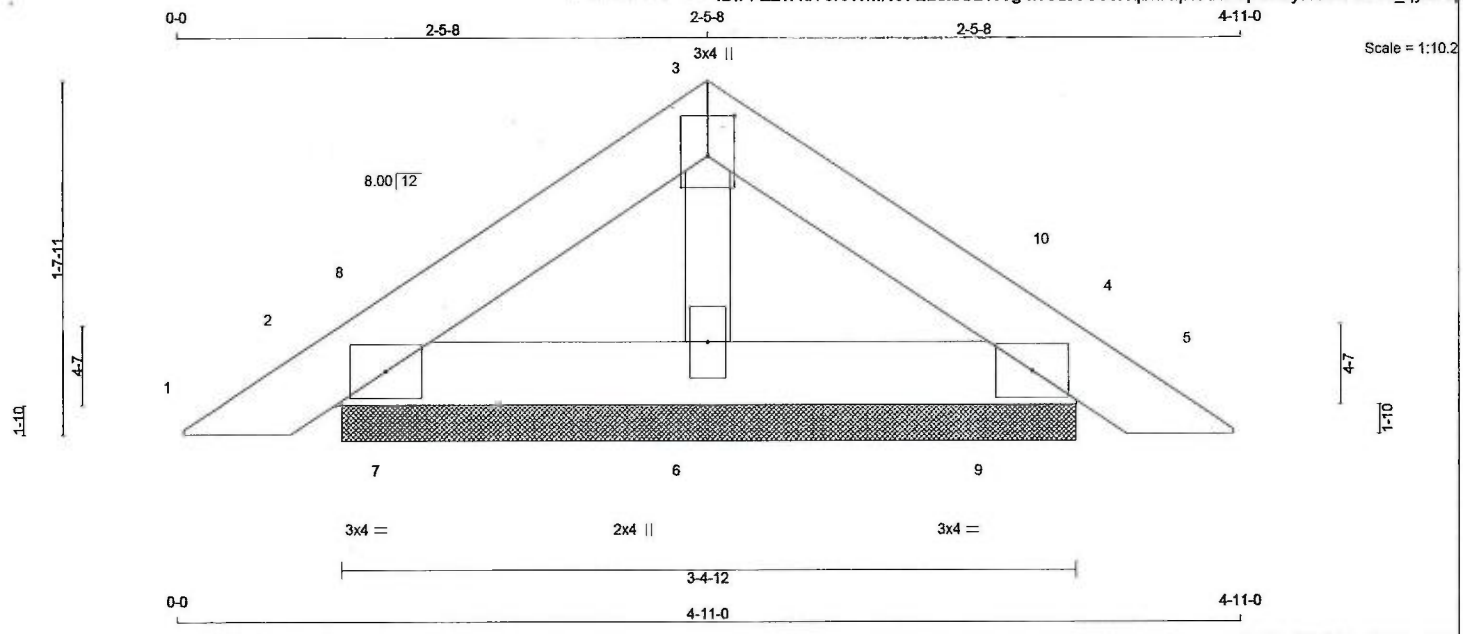
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
APPROVED PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | P02 | 3 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 27 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:50 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-kT8uJ5O3oNqbnRqHtAi1BepUSay7Nd27amJ9_qynYep




TOTAL WEIGHT = 3 X 11 = 34 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 3 - 5 | 2x4 | DRY | No.2 | SPF |
| 2 - 4 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMB1-I | MT20 | 3.0 | 4.0 | | |
| 3 | TTW+p | MT20 | 3.0 | 4.0 | 2.25 | 1.50 |
| 4 | TMB1-I | MT20 | 3.0 | 4.0 | | |
| 6 | BMW1+w | MT20 | 2.0 | 4.0 | | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 2 | 140 | 0 | 140 | 0 | 0 | 3-4-12 | 3-4-12 |
| 4 | 140 | 0 | 140 | 0 | 0 | 3-4-12 | 3-4-12 |
| 6 | 144 | 0 | 144 | 0 | 0 | 3-4-12 | 3-4-12 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 2 | 97 | 77 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 20 / 0 | 0 / 0 |
| 4 | 97 | 77 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 20 / 0 | 0 / 0 |
| 6 | 102 | 66 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 35 / 0 | 0 / 0 |

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

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

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 1- 2 | 0 / 13 | -77.4 | -77.4 | 0.02 (1) | 10.00 | 6- 3 | -68 / 0 | 0.01 (1) |
| 2- 8 | -29 / 0 | -77.4 | -77.4 | 0.00 (1) | 6.25 | 7- 8 | -73 / 0 | 0.00 (1) |
| 8- 3 | -34 / 0 | -77.4 | -77.4 | 0.02 (1) | 6.25 | 9-10 | -73 / 0 | 0.00 (1) |
| 3-10 | -34 / 0 | -77.4 | -77.4 | 0.02 (1) | 6.25 | | | |
| 10- 4 | -29 / 0 | -77.4 | -77.4 | 0.00 (1) | 6.25 | | | |
| 4- 5 | 0 / 13 | -77.4 | -77.4 | 0.02 (1) | 10.00 | | | |
| 2- 7 | 0 / 27 | -17.5 | -17.5 | 0.03 (1) | 10.00 | | | |
| 7- 6 | 0 / 27 | -17.5 | -17.5 | 0.03 (1) | 10.00 | | | |
| 6- 9 | 0 / 27 | -17.5 | -17.5 | 0.03 (1) | 10.00 | | | |
| 9- 4 | 0 / 27 | -17.5 | -17.5 | 0.03 (1) | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

CSI: TC=0.02/1.00 (1-2:1) , BC=0.03/1.00 (6-9:1) , WB=0.01/1.00 (3-6:1) , SSI=0.05/1.00 (4-9:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.11 (4) (INPUT = 0.90 )
JSI METAL= 0.02 (4) (INPUT = 1.00 )

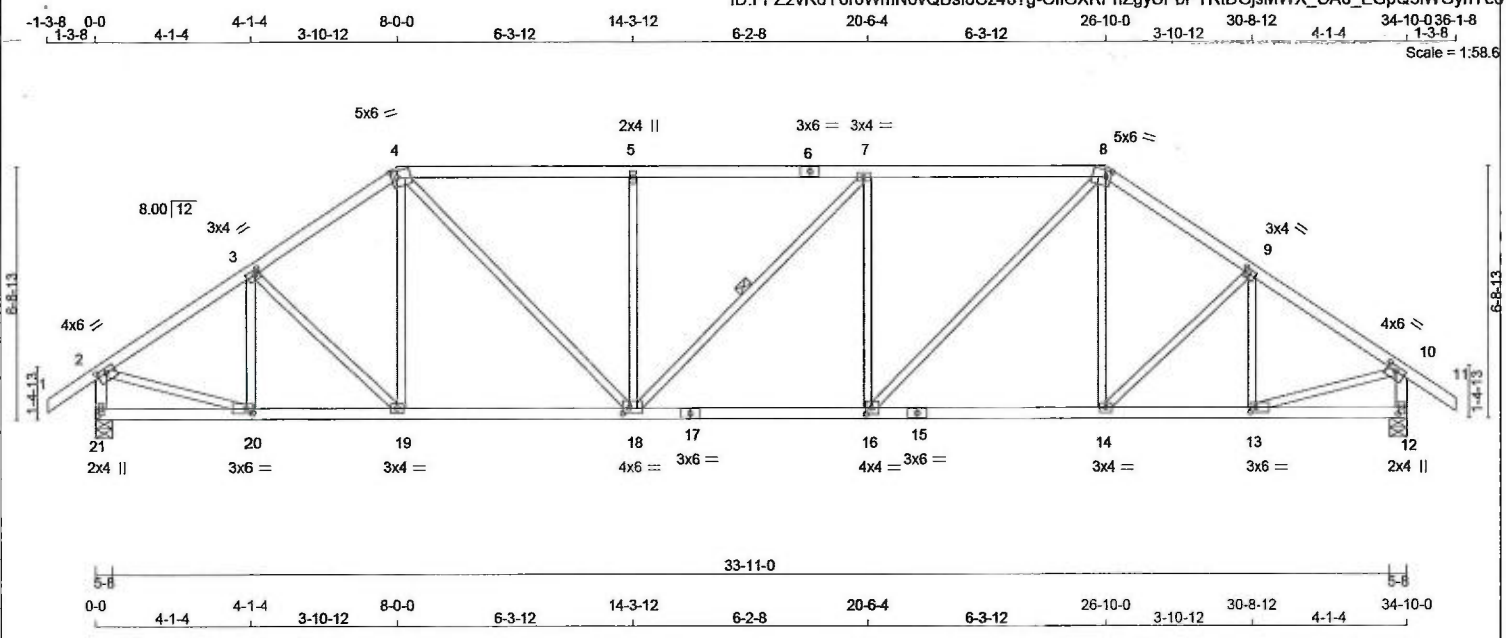
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T01 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 28 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:51 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-CfiGXRPhZgySPbPTRtDGjsMWX_CA6_EGpQ3iWGynYeo




TOTAL WEIGHT = 151 lb

[M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 4 | 2x4 | DRY | No.2 | SPF |
| 4 - 6 | 2x4 | DRY | No.2 | SPF |
| 6 - 8 | 2x4 | DRY | No.2 | SPF |
| 8 - 11 | 2x4 | DRY | No.2 | SPF |
| 21 - 2 | 2x4 | DRY | No.2 | SPF |
| 12 - 10 | 2x4 | DRY | No.2 | SPF |
| 21 - 17 | 2x4 | DRY | No.2 | SPF |
| 17 - 15 | 2x4 | DRY | No.2 | SPF |
| 15 - 12 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMVW-t | MT20 | 4.0 | 6.0 | 1.50 | 3.00 |
| 3 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 4 | TTWW-m | MT20 | 5.0 | 6.0 | 2.00 | 1.75 |
| 5 | TMW+w | MT20 | 2.0 | 4.0 | | |
| 6 | TS-t | MT20 | 3.0 | 6.0 | | |
| 7 | TMWW-t | MT20 | 3.0 | 4.0 | | |
| 8 | TTWW-m | MT20 | 5.0 | 6.0 | 2.00 | 1.75 |
| 9 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 10 | TMVW-t | MT20 | 4.0 | 6.0 | 1.50 | 3.00 |
| 12 | BMV1+p | MT20 | 2.0 | 4.0 | 2.25 | 1.00 |
| 13 | BMWW-t | MT20 | 3.0 | 6.0 | 1.50 | 1.75 |
| 14 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 15 | BS-t | MT20 | 3.0 | 6.0 | | |
| 16 | BMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.75 |
| 17 | BS-t | MT20 | 3.0 | 6.0 | | |
| 18 | BMWWW-t | MT20 | 4.0 | 6.0 | 1.75 | 2.00 |
| 19 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 20 | BMWW-t | MT20 | 3.0 | 6.0 | 1.50 | 1.75 |
| 21 | BMV1+p | MT20 | 2.0 | 4.0 | 2.25 | 1.00 |


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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 21 | 1758 | 0 | 1758 | 0 | 0 | 5-8 | 5-8 |
| 12 | 1758 | 0 | 1758 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 21 | 1232 | 875 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 357 / 0 | 0 / 0 |
| 12 | 1232 | 875 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 357 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 21, 12

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 7-18. DBS = 20-0-0 . CBF = 0 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)

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| 1- 2 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 |
| 2- 3 | -1911 / 0 | -77.4 | -77.4 | 0.26 (1) | 4.63 |
| 3- 4 | -1934 / 0 | -77.4 | -77.4 | 0.25 (1) | 4.60 |
| 4- 5 | -2215 / 0 | -77.4 | -77.4 | 0.57 (1) | 4.02 |
| 5- 6 | -2215 / 0 | -77.4 | -77.4 | 0.57 (1) | 4.01 |
| 6- 7 | -2215 / 0 | -77.4 | -77.4 | 0.57 (1) | 4.01 |
| 7- 8 | -2216 / 0 | -77.4 | -77.4 | 0.58 (1) | 4.00 |
| 8- 9 | -1934 / 0 | -77.4 | -77.4 | 0.25 (1) | 4.60 |
| 9-10 | -1911 / 0 | -77.4 | -77.4 | 0.26 (1) | 4.63 |
| 10-11 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 |
| 21- 2 | -1724 / 0 | 0.0 | 0.0 | 0.18 (1) | 6.34 |
| 12-10 | -1724 / 0 | 0.0 | 0.0 | 0.18 (1) | 6.34 |
| 21-20 | 0 / 0 | -17.5 | -17.5 | 0.06 (4) | 10.00 |
| 20-19 | 0 / 1605 | -17.5 | -17.5 | 0.32 (1) | 10.00 |
| 19-18 | 0 / 1592 | -17.5 | -17.5 | 0.32 (1) | 10.00 |
| 18-17 | 0 / 2216 | -17.5 | -17.5 | 0.43 (1) | 10.00 |
| 17-16 | 0 / 2216 | -17.5 | -17.5 | 0.43 (1) | 10.00 |
| 16-15 | 0 / 1592 | -17.5 | -17.5 | 0.33 (1) | 10.00 |
| 15-14 | 0 / 1592 | -17.5 | -17.5 | 0.33 (1) | 10.00 |
| 14-13 | 0 / 1605 | -17.5 | -17.5 | 0.32 (1) | 10.00 |
| 13-12 | 0 / 0 | -17.5 | -17.5 | 0.06 (4) | 10.00 |

| WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| 20- 3 | -360 / 0 | 0.09 (1) |
| 3-19 | -21 / 4 | 0.01 (1) |
| 19- 4 | 0 / 114 | 0.04 (4) |
| 4-18 | 0 / 889 | 0.20 (1) |
| 18- 5 | -525 / 0 | 0.40 (1) |
| 18- 7 | -2 / 0 | 0.00 (1) |
| 16- 7 | -525 / 0 | 0.40 (1) |
| 16- 8 | 0 / 891 | 0.20 (1) |
| 14- 8 | 0 / 113 | 0.04 (4) |
| 14- 9 | -21 / 4 | 0.01 (1) |
| 13- 9 | -360 / 0 | 0.09 (1) |
| 2-20 | 0 / 1660 | 0.37 (1) |
| 13-10 | 0 / 1660 | 0.37 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.16")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.12")
ALLOWABLE DEFL.(TL)= L/360 (1.16")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.21")

CSI: TC=0.58/1.00 (7-8:1) , BC=0.43/1.00 (16-18:1) , WB=0.40/1.00 (7-16:1) , SSI=0.23/1.00 (7-8:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

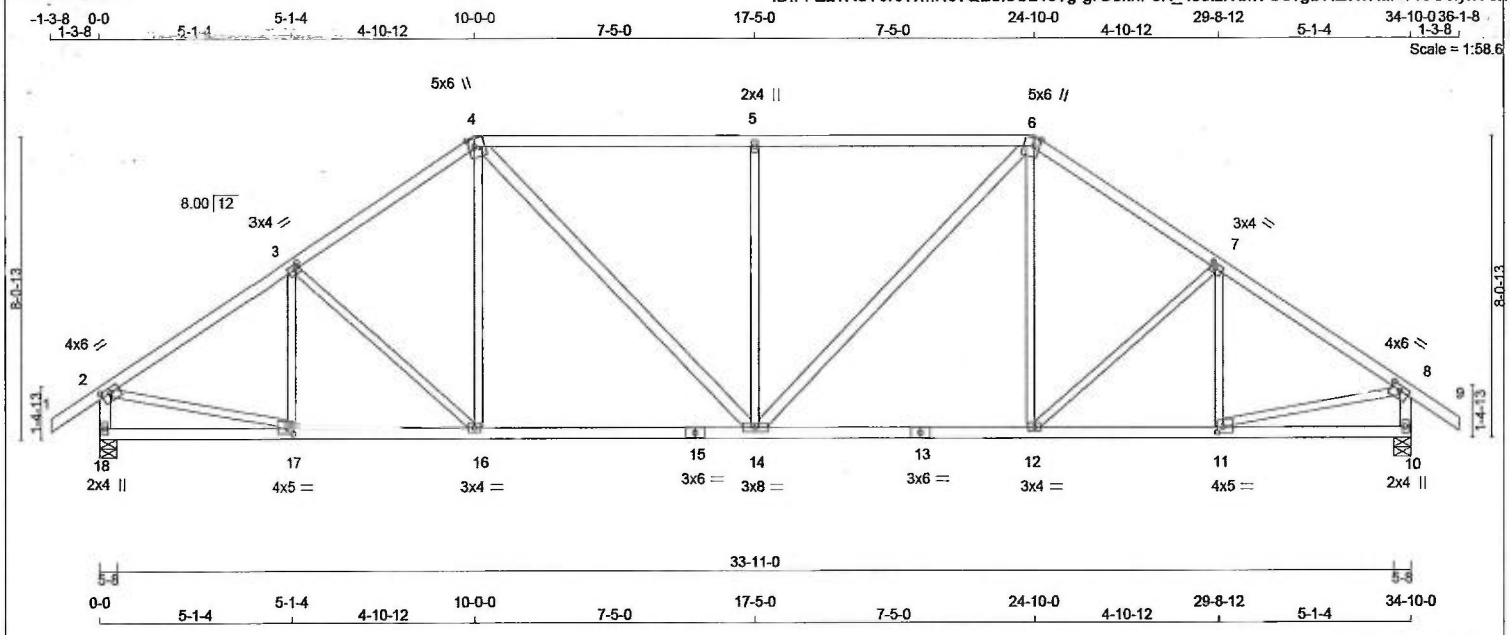
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (13) (INPUT = 0.90 )
JSI METAL= 0.58 (17) (INPUT = 1.00 )

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T02 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | PAGE 29 OF 56 |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:52 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-grGeknPJK_4J0lzf?bkVG3vgDNZWrKuP14oG3iynYen




TOTAL WEIGHT = 157 lb [M][F]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 4 | 2x4 | DRY | No.2 | SPF |
| 4 - 6 | 2x4 | DRY | No.2 | SPF |
| 6 - 9 | 2x4 | DRY | No.2 | SPF |
| 18 - 2 | 2x4 | DRY | No.2 | SPF |
| 10 - 8 | 2x4 | DRY | No.2 | SPF |
| 18 - 15 | 2x4 | DRY | No.2 | SPF |
| 15 - 13 | 2x4 | DRY | No.2 | SPF |
| 13 - 10 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |
| 4 - 14 | 2x4 | DRY | No.2 | SPF |
| 14 - 6 | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMVW-t | MT20 | 4.0 | 6.0 | 1.50 | 3.00 |
| 3 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 4 | TTWW+m | MT20 | 5.0 | 6.0 | Edge | 1.75 |
| 5 | TMW+w | MT20 | 2.0 | 4.0 | | |
| 6 | TTWW+m | MT20 | 5.0 | 6.0 | Edge | 1.75 |
| 7 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 8 | TMVW-t | MT20 | 4.0 | 6.0 | 1.50 | 3.00 |
| 10 | BMV1+p | MT20 | 2.0 | 4.0 | | |
| 11 | BMWW-t | MT20 | 4.0 | 5.0 | 1.75 | 1.75 |
| 12 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 13 | BS-t | MT20 | 3.0 | 6.0 | | |
| 14 | BMWWW-t | MT20 | 3.0 | 8.0 | | |
| 15 | BS-t | MT20 | 3.0 | 6.0 | | |
| 16 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 17 | BMWW-t | MT20 | 4.0 | 5.0 | 1.75 | 1.75 |
| 18 | BMV1+p | MT20 | 2.0 | 4.0 | | |

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


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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 18 | 1758 | 0 | 1758 | 0 | 0 | 5-8 | 5-8 |
| 10 | 1758 | 0 | 1758 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 18 | 1232 | 875 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 357 / 0 | 0 / 0 |
| 10 | 1232 | 875 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 357 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 18, 10

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

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| 1- 2 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 |
| 2- 3 | -1972 / 0 | -77.4 | -77.4 | 0.31 (1) | 4.53 |
| 3- 4 | -1858 / 0 | -77.4 | -77.4 | 0.30 (1) | 4.65 |
| 4- 5 | -1927 / 0 | -77.4 | -77.4 | 0.65 (1) | 4.08 |
| 5- 6 | -1927 / 0 | -77.4 | -77.4 | 0.65 (1) | 4.08 |
| 6- 7 | -1858 / 0 | -77.4 | -77.4 | 0.30 (1) | 4.65 |
| 7- 8 | -1972 / 0 | -77.4 | -77.4 | 0.31 (1) | 4.53 |
| 8- 9 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 |
| 18- 2 | -1718 / 0 | 0.0 | 0.0 | 0.18 (1) | 6.35 |
| 10- 8 | -1718 / 0 | 0.0 | 0.0 | 0.18 (1) | 6.35 |
| 18-17 | 0 / 0 | -17.5 | -17.5 | 0.09 (4) | 10.00 |
| 17-16 | 0 / 1661 | -17.5 | -17.5 | 0.35 (1) | 10.00 |
| 16-15 | 0 / 1526 | -17.5 | -17.5 | 0.35 (1) | 10.00 |
| 15-14 | 0 / 1526 | -17.5 | -17.5 | 0.35 (1) | 10.00 |
| 14-13 | 0 / 1526 | -17.5 | -17.5 | 0.35 (1) | 10.00 |
| 13-12 | 0 / 1526 | -17.5 | -17.5 | 0.35 (1) | 10.00 |
| 12-11 | 0 / 1661 | -17.5 | -17.5 | 0.35 (1) | 10.00 |
| 11-10 | 0 / 0 | -17.5 | -17.5 | 0.09 (4) | 10.00 |

| WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| 17- 3 | -265 / 0 | 0.09 (1) |
| 3-16 | -186 / 0 | 0.15 (1) |
| 16- 4 | 0 / 236 | 0.05 (1) |
| 4-14 | 0 / 581 | 0.09 (1) |
| 14- 5 | -706 / 0 | 0.88 (1) |
| 14- 6 | 0 / 581 | 0.09 (1) |
| 12- 6 | 0 / 236 | 0.05 (1) |
| 12- 7 | -186 / 0 | 0.15 (1) |
| 11- 7 | -265 / 0 | 0.09 (1) |
| 2-17 | 0 / 1698 | 0.38 (1) |
| 11- 8 | 0 / 1698 | 0.38 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.16")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (1.16")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.19")

CSI: TC=0.65/1.00 (4-5:1) , BC=0.35/1.00 (12-14:1) , WB=0.88/1.00 (5-14:1) , SSI=0.28/1.00 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

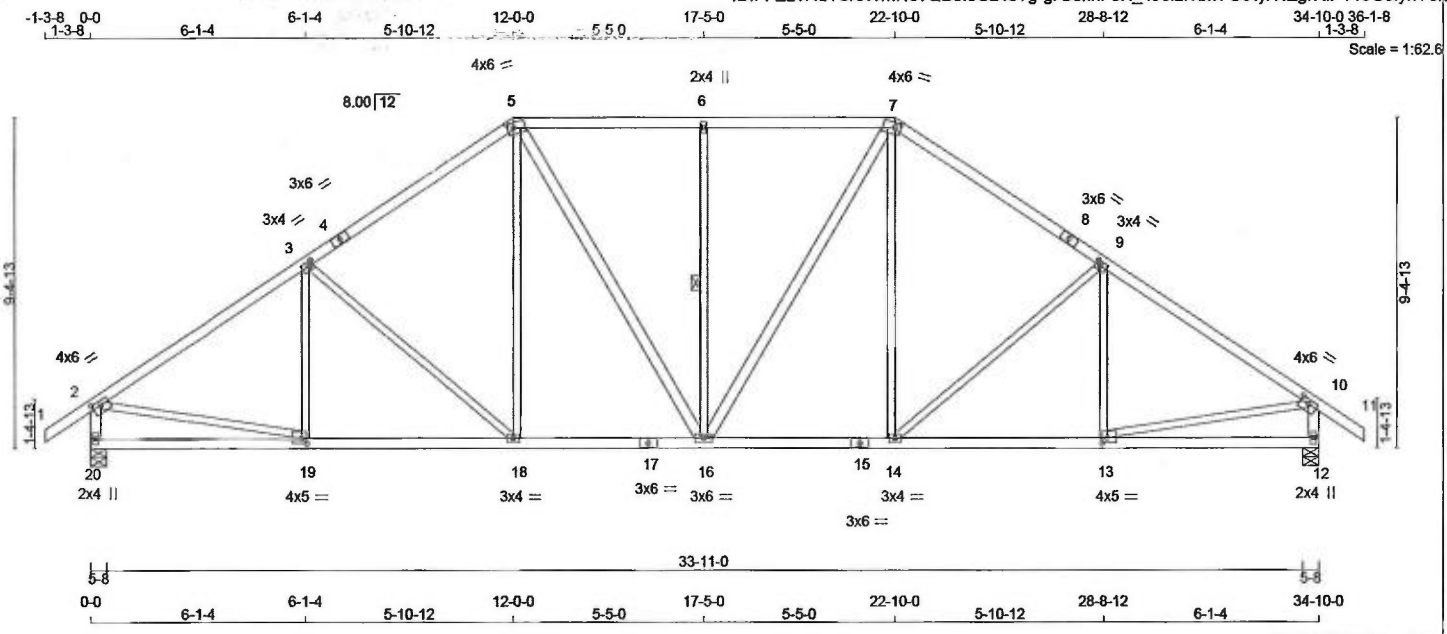
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (10) (INPUT = 0.90 )
JSI METAL= 0.53 (2) (INPUT = 1.00 )

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T03 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 30 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:52 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsIoCz48?g-grGeknPJK_4J0lzf?bkVG3vj7NZgrRlP14oG3iynYen




TOTAL WEIGHT = 166 lb

[M][F]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 4 | 2x4 | DRY | No.2 | SPF |
| 4 - 5 | 2x4 | DRY | No.2 | SPF |
| 5 - 7 | 2x4 | DRY | No.2 | SPF |
| 7 - 8 | 2x4 | DRY | No.2 | SPF |
| 8 - 11 | 2x4 | DRY | No.2 | SPF |
| 20 - 2 | 2x4 | DRY | No.2 | SPF |
| 12 - 10 | 2x4 | DRY | No.2 | SPF |
| 20 - 17 | 2x4 | DRY | No.2 | SPF |
| 17 - 15 | 2x4 | DRY | No.2 | SPF |
| 15 - 12 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |
| 5 - 16 | 2x4 | DRY | No.2 | SPF |
| 16 - 7 | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMVW-t | MT20 | 4.0 | 6.0 | 1.50 | 3.00 |
| 3 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 4 | TS-t | MT20 | 3.0 | 6.0 | | |
| 5 | TTWW-m | MT20 | 4.0 | 6.0 | 1.75 | 2.00 |
| 6 | TMW+w | MT20 | 2.0 | 4.0 | | |
| 7 | TTWW-m | MT20 | 4.0 | 6.0 | 1.75 | 2.00 |
| 8 | TS-t | MT20 | 3.0 | 6.0 | | |
| 9 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 10 | TMVW-t | MT20 | 4.0 | 6.0 | 1.50 | 3.00 |
| 12 | BMV1+p | MT20 | 2.0 | 4.0 | | |
| 13 | BMWW-t | MT20 | 4.0 | 5.0 | 1.75 | 1.75 |
| 14 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 15 | BS-t | MT20 | 3.0 | 6.0 | | |
| 16 | BMWWW-t | MT20 | 3.0 | 6.0 | | |
| 17 | BS-t | MT20 | 3.0 | 6.0 | | |
| 18 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 19 | BMWW-t | MT20 | 4.0 | 5.0 | 1.75 | 1.75 |
| 20 | BMV1+p | MT20 | 2.0 | 4.0 | | |


Aug 15, 2018

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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 20 | 1758 | 0 | 1758 | 0 | 0 | 5-8 | 5-8 |
| 12 | 1758 | 0 | 1758 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 20 | 1232 | 875 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 357 / 0 | 0 / 0 |
| 12 | 1232 | 875 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 357 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 20, 12

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.34 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 6-16. DBS = 20-0-0 . CBF = 64 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)

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC | MAX CSI | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|---|
| 1- 2 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | | 10.00 | 19- 3 | -183 / 47 | 0.08 (1) |
| 2- 3 | -2002 / 0 | -77.4 | -77.4 | 0.46 (1) | | 4.34 | 3-18 | -343 / 0 | 0.44 (1) |
| 3- 4 | -1753 / 0 | -77.4 | -77.4 | 0.42 (1) | | 4.61 | 18- 5 | 0 / 322 | 0.07 (1) |
| 4- 5 | -1753 / 0 | -77.4 | -77.4 | 0.42 (1) | | 4.61 | 5-16 | 0 / 350 | 0.06 (1) |
| 5- 6 | -1613 / 0 | -77.4 | -77.4 | 0.32 (1) | | 4.87 | 16- 6 | -511 / 0 | 0.30 (1) |
| 6- 7 | -1613 / 0 | -77.4 | -77.4 | 0.32 (1) | | 4.87 | 16- 7 | 0 / 350 | 0.06 (1) |
| 7- 8 | -1753 / 0 | -77.4 | -77.4 | 0.42 (1) | | 4.61 | 14- 7 | 0 / 322 | 0.07 (1) |
| 8- 9 | -1753 / 0 | -77.4 | -77.4 | 0.42 (1) | | 4.61 | 14- 9 | -343 / 0 | 0.44 (1) |
| 9-10 | -2002 / 0 | -77.4 | -77.4 | 0.46 (1) | | 4.34 | 13- 9 | -183 / 47 | 0.08 (1) |
| 10-11 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | | 10.00 | 2-19 | 0 / 1717 | 0.39 (1) |
| 20- 2 | -1714 / 0 | 0.0 | 0.0 | 0.18 (1) | | 6.36 | 13-10 | 0 / 1717 | 0.39 (1) |
| 12-10 | -1714 / 0 | 0.0 | 0.0 | 0.18 (1) | | 6.36 | | | |
| 20-19 | 0 / 0 | -17.5 | -17.5 | 0.15 (4) | | 10.00 | | | |
| 19-18 | 0 / 1691 | -17.5 | -17.5 | 0.34 (1) | | 10.00 | | | |
| 18-17 | 0 / 1434 | -17.5 | -17.5 | 0.29 (1) | | 10.00 | | | |
| 17-16 | 0 / 1434 | -17.5 | -17.5 | 0.29 (1) | | 10.00 | | | |
| 16-15 | 0 / 1434 | -17.5 | -17.5 | 0.29 (1) | | 10.00 | | | |
| 15-14 | 0 / 1434 | -17.5 | -17.5 | 0.29 (1) | | 10.00 | | | |
| 14-13 | 0 / 1691 | -17.5 | -17.5 | 0.34 (1) | | 10.00 | | | |
| 13-12 | 0 / 0 | -17.5 | -17.5 | 0.15 (4) | | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.16")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (1.16")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.15")

CSI: TC=0.46/1.00 (9-10:1) , BC=0.34/1.00 (13-14:1) , WB=0.44/1.00 (9-14:1) , SSI=0.20/1.00 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

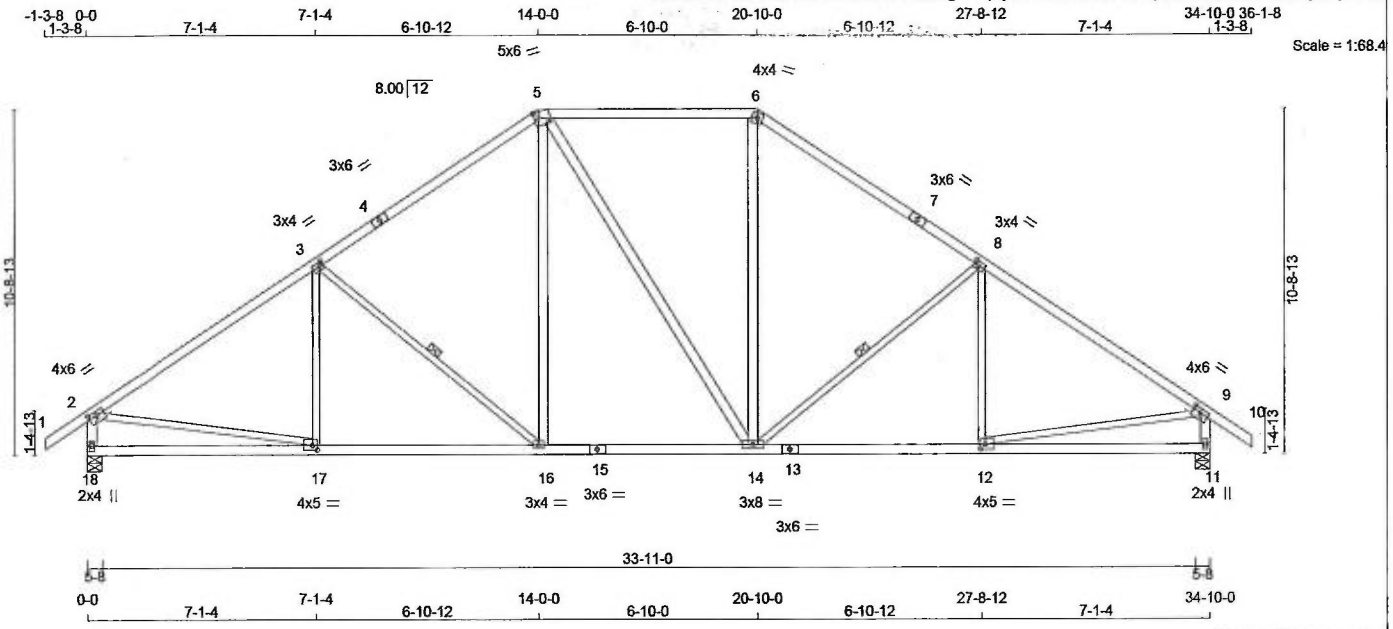
JSI GRIP= 0.90 (5) (INPUT = 0.90 )
JSI METAL= 0.55 (2) (INPUT = 1.00 )

CONTINUED ON PAGE 2

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T04 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 31 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:53 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-81q0y7Qx5ICAevYrYIFkpHRrnnvKauuZGkYpb8ynYem




TOTAL WEIGHT = 163 lb [M][F]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 4 | 2x4 | DRY | No.2 | SPF |
| 4 - 5 | 2x4 | DRY | No.2 | SPF |
| 5 - 6 | 2x4 | DRY | No.2 | SPF |
| 6 - 7 | 2x4 | DRY | No.2 | SPF |
| 7 - 10 | 2x4 | DRY | No.2 | SPF |
| 18 - 2 | 2x4 | DRY | No.2 | SPF |
| 11 - 9 | 2x4 | DRY | No.2 | SPF |
| 18 - 15 | 2x4 | DRY | No.2 | SPF |
| 15 - 13 | 2x4 | DRY | No.2 | SPF |
| 13 - 11 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |
| 16 - 5 | 2x4 | DRY | No.2 | SPF |
| 5 - 14 | 2x4 | DRY | No.2 | SPF |
| 14 - 6 | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in Inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMVW-t | MT20 | 4.0 | 6.0 | 1.50 | 3.00 |
| 3 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 4 | TS-t | MT20 | 3.0 | 6.0 | | |
| 5 | TTWW-m | MT20 | 5.0 | 6.0 | 2.25 | 1.50 |
| 6 | TTW-m | MT20 | 4.0 | 4.0 | | |
| 7 | TS-t | MT20 | 3.0 | 6.0 | | |
| 8 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 9 | TMVW-t | MT20 | 4.0 | 6.0 | 1.50 | 3.00 |
| 11 | BMV1+p | MT20 | 2.0 | 4.0 | | |
| 12 | BMWW-t | MT20 | 4.0 | 5.0 | 1.75 | 1.75 |
| 13 | BS-t | MT20 | 3.0 | 6.0 | | |
| 14 | BMWWW-t | MT20 | 3.0 | 8.0 | | |
| 15 | BS-t | MT20 | 3.0 | 6.0 | | |
| 16 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 17 | BMWW-t | MT20 | 4.0 | 5.0 | 1.75 | 1.75 |
| 18 | BMV1+p | MT20 | 2.0 | 4.0 | | |


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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 18 | 1758 | 0 | 1758 | 0 | 0 | 5-8 | 5-8 |
| 11 | 1758 | 0 | 1758 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 18 | 1232 | 875 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 357 / 0 | 0 / 0 |
| 11 | 1232 | 875 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 357 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 18, 11

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.09 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 3-16, 8-14. DBS = 20-0-0 . CBF = 60 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)

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) FROM | TO | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| 1- 2 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 |
| 2- 3 | -2007 / 0 | -77.4 | -77.4 | 0.66 (1) | 4.09 |
| 3- 4 | -1634 / 0 | -77.4 | -77.4 | 0.59 (1) | 4.50 |
| 4- 5 | -1634 / 0 | -77.4 | -77.4 | 0.59 (1) | 4.50 |
| 5- 6 | -1334 / 0 | -77.4 | -77.4 | 0.50 (1) | 4.97 |
| 6- 7 | -1634 / 0 | -77.4 | -77.4 | 0.59 (1) | 4.50 |
| 7- 8 | -1634 / 0 | -77.4 | -77.4 | 0.59 (1) | 4.50 |
| 8- 9 | -2007 / 0 | -77.4 | -77.4 | 0.66 (1) | 4.09 |
| 9-10 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 |
| 18- 2 | -1707 / 0 | 0.0 | 0.0 | 0.18 (1) | 6.36 |
| 11- 9 | -1707 / 0 | 0.0 | 0.0 | 0.18 (1) | 6.36 |
| 18-17 | 0 / 0 | -17.5 | -17.5 | 0.21 (4) | 10.00 |
| 17-16 | 0 / 1700 | -17.5 | -17.5 | 0.38 (1) | 10.00 |
| 16-15 | 0 / 1333 | -17.5 | -17.5 | 0.30 (1) | 10.00 |
| 15-14 | 0 / 1333 | -17.5 | -17.5 | 0.30 (1) | 10.00 |
| 14-13 | 0 / 1700 | -17.5 | -17.5 | 0.38 (1) | 10.00 |
| 13-12 | 0 / 1700 | -17.5 | -17.5 | 0.38 (1) | 10.00 |
| 12-11 | 0 / 0 | -17.5 | -17.5 | 0.21 (4) | 10.00 |

| WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| 17- 3 | -121 / 81 | 0.07 (1) |
| 3-16 | -483 / 0 | 0.28 (1) |
| 16- 5 | 0 / 423 | 0.07 (1) |
| 5-14 | 0 / 0 | 0.00 (1) |
| 14- 6 | 0 / 424 | 0.07 (1) |
| 14- 8 | -483 / 0 | 0.28 (1) |
| 12- 8 | -122 / 81 | 0.07 (1) |
| 2-17 | 0 / 1719 | 0.39 (1) |
| 12- 9 | 0 / 1719 | 0.39 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.16")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (1.16")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.16")

CSI: TC=0.66/1.00 (2-3:1) , BC=0.38/1.00 (16-17:1) , WB=0.39/1.00 (2-17:1) , SSI=0.22/1.00 (8-9:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

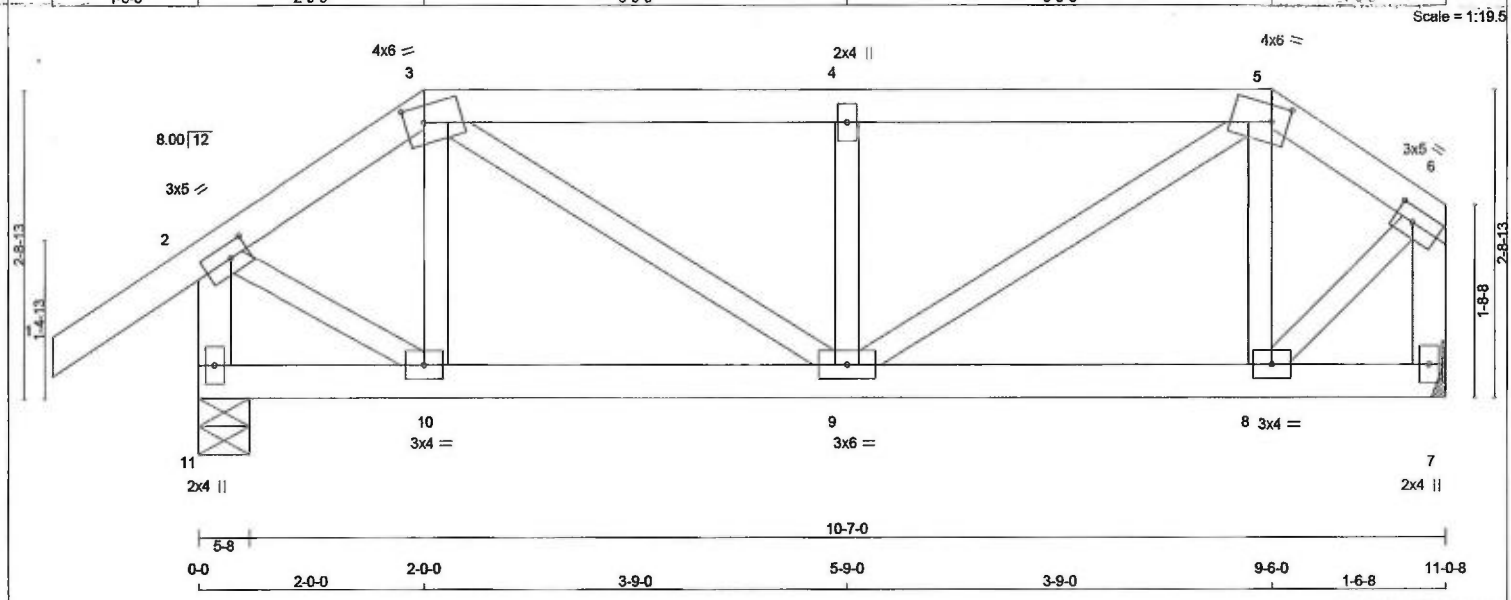
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (18) (INPUT = 0.90 )
JSI METAL= 0.55 (2) (INPUT = 1.00 )

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T05 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | PAGE 32 OF 56 |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:54 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-cEOO9TRZsbK1G2726?mzLU_86BIFJQjiVOHN7bynYe




TOTAL WEIGHT = 46 lb [M]

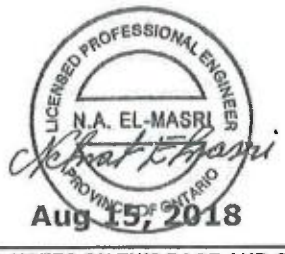
**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 3 - 5 | 2x4 | DRY | No.2 | SPF |
| 5 - 6 | 2x4 | DRY | No.2 | SPF |
| 11 - 2 | 2x4 | DRY | No.2 | SPF |
| 7 - 6 | 2x4 | DRY | No.2 | SPF |
| 11 - 7 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in Inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMVW-t | MT20 | 3.0 | 5.0 | 1.50 | 2.00 |
| 3 | TTWW-m | MT20 | 4.0 | 6.0 | 1.75 | 2.00 |
| 4 | TMW+w | MT20 | 2.0 | 4.0 | | |
| 5 | TTWW-m | MT20 | 4.0 | 6.0 | 1.75 | 1.75 |
| 6 | TMVW-t | MT20 | 3.0 | 5.0 | 1.50 | 2.00 |
| 7 | BMV1+p | MT20 | 2.0 | 4.0 | | |
| 8 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 9 | BMWWW-t | MT20 | 3.0 | 6.0 | | |
| 10 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 11 | BMV1+p | MT20 | 2.0 | 4.0 | | |




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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| 11 | 630 | 0 | 630 | 0 | 0 | 5-8 | 5-8 |
| 7 | 524 | 0 | 524 | 0 | 0 | MECHANICAL | |

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 7 TO RESIST THE MAX FACTORED REACTIONS.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 11 | 440 | 321 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 119 / 0 | 0 / 0 |
| 7 | 368 | 257 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 110 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 11

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

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 1- 2 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 | 10- 3 | -127 / 6 | 0.02 (1) |
| 2- 3 | -443 / 0 | -77.4 | -77.4 | 0.05 (1) | 6.25 | 3- 9 | 0 / 336 | 0.08 (1) |
| 3- 4 | -643 / 0 | -77.4 | -77.4 | 0.17 (1) | 6.25 | 9- 4 | -350 / 0 | 0.06 (1) |
| 4- 5 | -643 / 0 | -77.4 | -77.4 | 0.17 (1) | 6.25 | 9- 5 | 0 / 415 | 0.09 (1) |
| 5- 6 | -367 / 0 | -77.4 | -77.4 | 0.03 (1) | 6.25 | 8- 5 | -195 / 0 | 0.03 (1) |
| 11- 2 | -620 / 0 | 0.0 | 0.0 | 0.06 (1) | 7.81 | 2-10 | 0 / 413 | 0.09 (1) |
| 7- 6 | -521 / 0 | 0.0 | 0.0 | 0.06 (1) | 7.81 | 8- 6 | 0 / 397 | 0.09 (1) |
| 11-10 | 0 / 0 | -17.5 | -17.5 | 0.04 (4) | 10.00 | | | |
| 10- 9 | 0 / 362 | -17.5 | -17.5 | 0.08 (1) | 10.00 | | | |
| 9- 8 | 0 / 295 | -17.5 | -17.5 | 0.07 (1) | 10.00 | | | |
| 8- 7 | 0 / 0 | -17.5 | -17.5 | 0.03 (4) | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.37")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.37")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.17/1.00 (4-5:1) , BC=0.08/1.00 (9-10:1) , WB=0.09/1.00 (5-9:1) , SSI=0.14/1.00 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

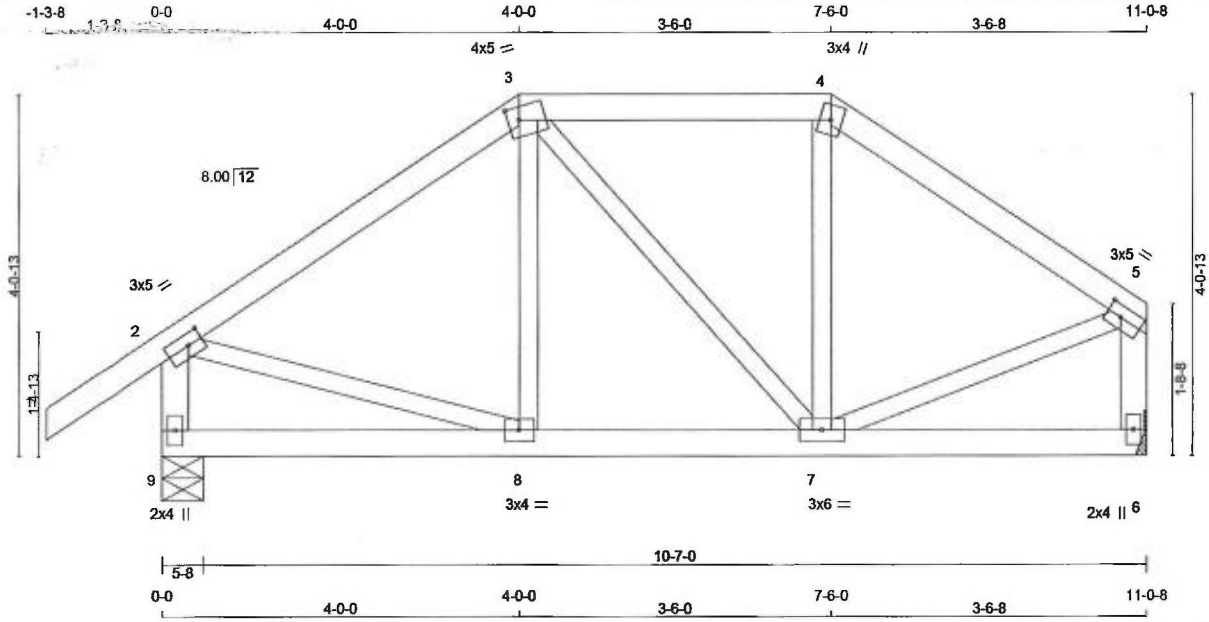
JSI GRIP= 0.84 (6) (INPUT = 0.90 )
JSI METAL= 0.16 (2) (INPUT = 1.00 )

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T06 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 33 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:54 2018 Page 1

ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-cEOO9TRZsbK1G2726?mzLU_8JBI8JQsiVOHN7bynYe




TOTAL WEIGHT = 47 lb

[M][F]

**LUMBER**

N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 3 - 4 | 2x4 | DRY | No.2 | SPF |
| 4 - 5 | 2x4 | DRY | No.2 | SPF |
| 9 - 2 | 2x4 | DRY | No.2 | SPF |
| 6 - 5 | 2x4 | DRY | No.2 | SPF |
| 9 - 6 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMVW-t | MT20 | 3.0 | 5.0 | 1.50 | 2.00 |
| 3 | TTWW-m | MT20 | 4.0 | 5.0 | 1.75 | 1.50 |
| 4 | TTW+m | MT20 | 3.0 | 4.0 | | |
| 5 | TMVW-t | MT20 | 3.0 | 5.0 | 1.50 | 2.00 |
| 6 | BMV1+p | MT20 | 2.0 | 4.0 | | |
| 7 | BMWWW-t | MT20 | 3.0 | 6.0 | | |
| 8 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 9 | BMV1+p | MT20 | 2.0 | 4.0 | | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| 9 | 630 | 0 | 630 | 0 | 0 | 5-8 | 5-8 |
| 6 | 524 | 0 | 524 | 0 | 0 | MECHANICAL | |

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 6 TO RESIST THE MAX FACTORED REACTIONS.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 9 | 440 | 321 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 119 / 0 | 0 / 0 |
| 6 | 368 | 257 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 110 / 0 | 0 / 0 |

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

**BRACING**

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

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

**LOADING**

TOTAL LOAD CASES: (4)

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 1-2 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 | 8-3 | -24 / 52 | 0.02 (4) |
| 2-3 | -437 / 0 | -77.4 | -77.4 | 0.16 (1) | 6.25 | 3-7 | -32 / 0 | 0.01 (1) |
| 3-4 | -341 / 0 | -77.4 | -77.4 | 0.12 (1) | 6.25 | 7-4 | -43 / 41 | 0.01 (4) |
| 4-5 | -412 / 0 | -77.4 | -77.4 | 0.13 (1) | 6.25 | 2-8 | 0 / 375 | 0.08 (1) |
| 9-2 | -599 / 0 | 0.0 | 0.0 | 0.06 (1) | 7.81 | 7-5 | 0 / 366 | 0.08 (1) |
| 6-5 | -496 / 0 | 0.0 | 0.0 | 0.05 (1) | 7.81 | | | |
| 9-8 | 0 / 0 | -17.5 | -17.5 | 0.06 (4) | 10.00 | | | |
| 8-7 | 0 / 362 | -17.5 | -17.5 | 0.09 (1) | 10.00 | | | |
| 7-6 | 0 / 0 | -17.5 | -17.5 | 0.05 (4) | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.37")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.37")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.16/1.00 (2-3:1) , BC=0.09/1.00 (7-8:1) , WB=0.08/1.00 (2-8:1) , SSI=0.11/1.00 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.67 (7) (INPUT = 0.90 )
JSI METAL= 0.17 (2) (INPUT = 1.00 )

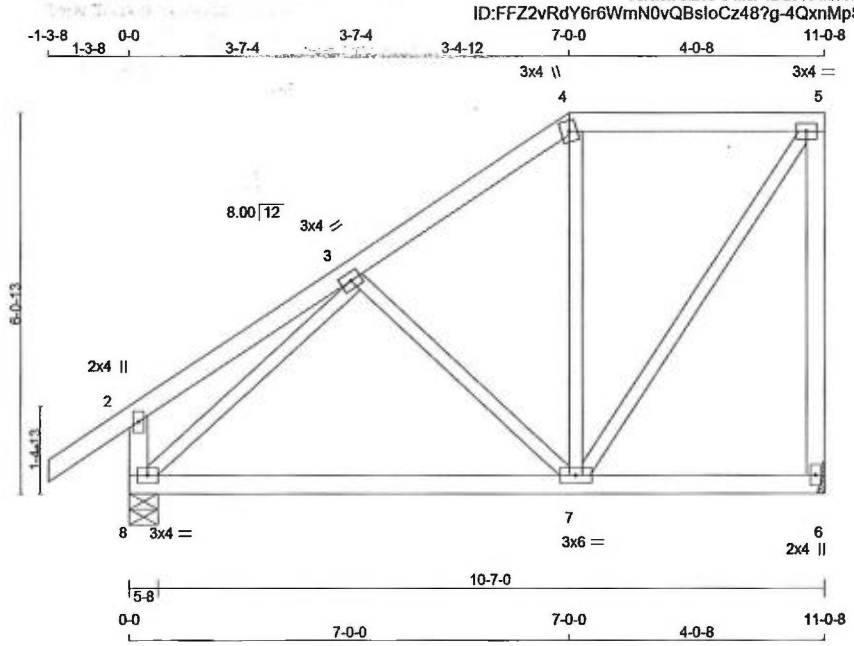
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 | DRWG NO. |
|---|---|---|---|---|---|---|
| NE0818-083 | T07 | 1 | 1 | TRUSS DESC. | | **PAGE 34 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:55 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-4QxnMpSCdvSutCiEgjHCuiXGxbcR2rlsk21wf1ynYek




Scale = 1:35.1

TOTAL WEIGHT = 53 lb [M][F]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 4 | 2x4 | DRY | No.2 | SPF |
| 4 - 5 | 2x4 | DRY | No.2 | SPF |
| 6 - 5 | 2x4 | DRY | No.2 | SPF |
| 8 - 2 | 2x4 | DRY | No.2 | SPF |
| 8 - 6 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in Inches)**

| JT | TYPE | PLATES | W | LEN Y | X |
|---|---|---|---|---|---|
| 2 | TMV+p | MT20 | 2.0 | 4.0 | |
| 3 | TMWW-t | MT20 | 3.0 | 4.0 | |
| 4 | TTW+m | MT20 | 3.0 | 4.0 | |
| 5 | TMVW-t | MT20 | 3.0 | 4.0 | |
| 6 | BMV1+p | MT20 | 2.0 | 4.0 | |
| 7 | BMWWW-t | MT20 | 3.0 | 6.0 | |
| 8 | BMVW1-t | MT20 | 3.0 | 4.0 | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| 6 | 524 | 0 | 524 | 0 | 0 | MECHANICAL | |
| 8 | 630 | 0 | 630 | 0 | 0 | 5-8 | 5-8 |

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 6 TO RESIST THE MAX FACTORED REACTIONS.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 6 | 368 | 257 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 110 / 0 | 0 / 0 |
| 8 | 440 | 321 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 119 / 0 | 0 / 0 |

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

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

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 1-2 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 | 3-7 | -187 / 0 | 0.08 (1) |
| 2-3 | 0 / 18 | -77.4 | -77.4 | 0.15 (1) | 10.00 | 7-4 | -98 / 27 | 0.06 (1) |
| 3-4 | -310 / 0 | -77.4 | -77.4 | 0.12 (1) | 6.25 | 7-5 | 0 / 427 | 0.10 (1) |
| 4-5 | -241 / 0 | -77.4 | -77.4 | 0.16 (1) | 6.25 | 8-3 | -529 / 0 | 0.20 (1) |
| 6-5 | -509 / 0 | 0.0 | 0.0 | 0.36 (1) | 7.81 | | | |
| 8-2 | -209 / 0 | 0.0 | 0.0 | 0.02 (1) | 7.81 | | | |
| 8-7 | 0 / 378 | -17.5 | -17.5 | 0.21 (4) | 10.00 | | | |
| 7-6 | 0 / 0 | -17.5 | -17.5 | 0.19 (4) | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.37")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.37")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.36/1.00 (5-6:1) , BC=0.21/1.00 (7-8:4) , WB=0.20/1.00 (3-8:1) , SSI=0.12/1.00 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (7) (INPUT = 0.90 )
JSI METAL= 0.18 (3) (INPUT = 1.00 )

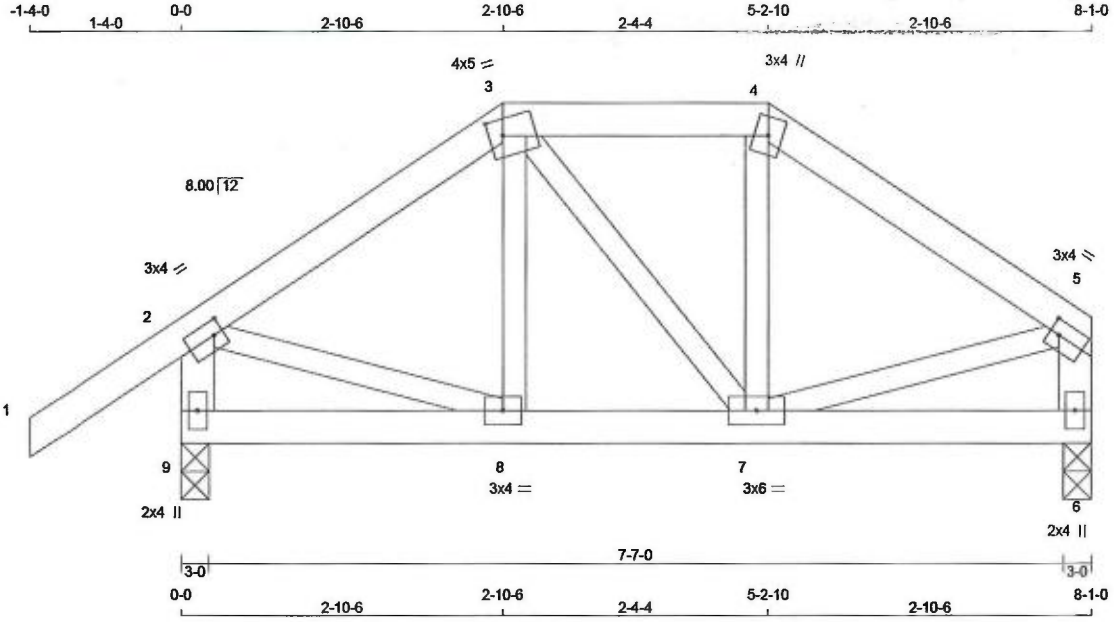
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T08 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 35 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:55 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-4QxnMpSCdvSutCiEgjHCuiXKrbfv2uTsk21wf1ynYek




TOTAL WEIGHT = 34 lb

[M][F]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 3 - 4 | 2x4 | DRY | No.2 | SPF |
| 4 - 5 | 2x4 | DRY | No.2 | SPF |
| 9 - 2 | 2x4 | DRY | No.2 | SPF |
| 6 - 5 | 2x4 | DRY | No.2 | SPF |
| 9 - 6 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMVW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.00 |
| 3 | TTWW-m | MT20 | 4.0 | 5.0 | 1.75 | 1.50 |
| 4 | TTW+m | MT20 | 3.0 | 4.0 | | |
| 5 | TMVW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.00 |
| 6 | BMV1+p | MT20 | 2.0 | 4.0 | | |
| 7 | BMWWW-t | MT20 | 3.0 | 6.0 | | |
| 8 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 9 | BMV1+p | MT20 | 2.0 | 4.0 | | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 9 | 493 | 0 | 493 | 0 | 0 | 3-0 | 3-0 |
| 6 | 383 | 0 | 383 | 0 | 0 | 3-0 | 3-0 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 9 | 343 | 254 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 89 / 0 | 0 / 0 |
| 6 | 269 | 188 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 81 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 9, 6

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

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC | MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|---|
| 1- 2 | 0 / 30 | -77.4 | -77.4 | 0.11 (1) | 10.00 | 8- 3 | -24 / 32 | 0.01 (4) | |
| 2- 3 | -320 / 0 | -77.4 | -77.4 | 0.08 (1) | 6.25 | 3- 7 | 0 / 0 | 0.00 (1) | |
| 3- 4 | -264 / 0 | -77.4 | -77.4 | 0.06 (1) | 6.25 | 7- 4 | -24 / 33 | 0.01 (4) | |
| 4- 5 | -319 / 0 | -77.4 | -77.4 | 0.08 (1) | 6.25 | 2- 8 | 0 / 275 | 0.06 (1) | |
| 9- 2 | -470 / 0 | 0.0 | 0.0 | 0.05 (1) | 7.81 | 7- 5 | 0 / 275 | 0.06 (1) | |
| 6- 5 | -360 / 0 | 0.0 | 0.0 | 0.04 (1) | 7.81 | | | | |
| 9- 8 | 0 / 0 | -17.5 | -17.5 | 0.03 (4) | 10.00 | | | | |
| 8- 7 | 0 / 264 | -17.5 | -17.5 | 0.05 (1) | 10.00 | | | | |
| 7- 6 | 0 / 0 | -17.5 | -17.5 | 0.03 (4) | 10.00 | | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.27")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.27")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.11/1.00 (1-2:1) , BC=0.05/1.00 (7-8:1) , WB=0.06/1.00 (2-8:1) , SSI=0.07/1.00 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (2) (INPUT = 0.90 )
JSI METAL= 0.17 (2) (INPUT = 1.00 )

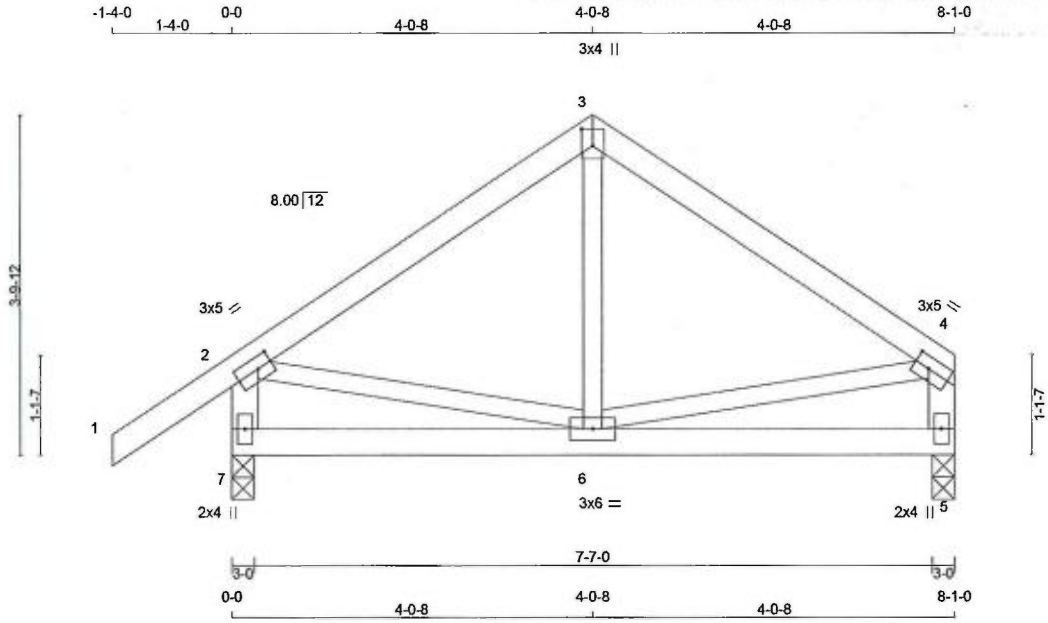
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 | DRWG NO. |
|---|---|---|---|---|---|---|
| NE0818-083 | T09 | 1 | 1 | TRUSS DESC. | | **PAGE 36 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:56 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsIoCz48?g-YcV9a9SqODaIVMHQEQoRQv3Un?_InLs?yimTCTynYej




TOTAL WEIGHT = 33 lb

[M][F]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 3 - 4 | 2x4 | DRY | No.2 | SPF |
| 7 - 2 | 2x4 | DRY | No.2 | SPF |
| 5 - 4 | 2x4 | DRY | No.2 | SPF |
| 7 - 5 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 7 | 493 | 0 | 493 | 0 | 0 | 3-0 | 3-0 |
| 5 | 383 | 0 | 383 | 0 | 0 | 3-0 | 3-0 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 7 | 343 | 254 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 89 / 0 | 0 / 0 |
| 5 | 269 | 188 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 81 / 0 | 0 / 0 |

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

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

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 1- 2 | 0 / 30 | -77.4 | -77.4 | 0.11 (1) | 10.00 | 6- 3 | -5 / 68 | 0.02 (4) |
| 2- 3 | -277 / 0 | -77.4 | -77.4 | 0.16 (1) | 6.25 | 2- 6 | 0 / 235 | 0.05 (1) |
| 3- 4 | -277 / 0 | -77.4 | -77.4 | 0.16 (1) | 6.25 | 6- 4 | 0 / 235 | 0.05 (1) |
| 7- 2 | -465 / 0 | 0.0 | 0.0 | 0.05 (1) | 7.81 | | | |
| 5- 4 | -356 / 0 | 0.0 | 0.0 | 0.04 (1) | 7.81 | | | |
| 7- 6 | 0 / 0 | -17.5 | -17.5 | 0.08 (4) | 10.00 | | | |
| 6- 5 | 0 / 0 | -17.5 | -17.5 | 0.08 (4) | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.27")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.27")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.16/1.00 (3-4:1) , BC=0.08/1.00 (6-7:4) , WB=0.05/1.00 (2-6:1) , SSI=0.10/1.00 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.51 (6) (INPUT = 0.90 )
JSI METAL= 0.13 (4) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
**Aug 15, 2018**

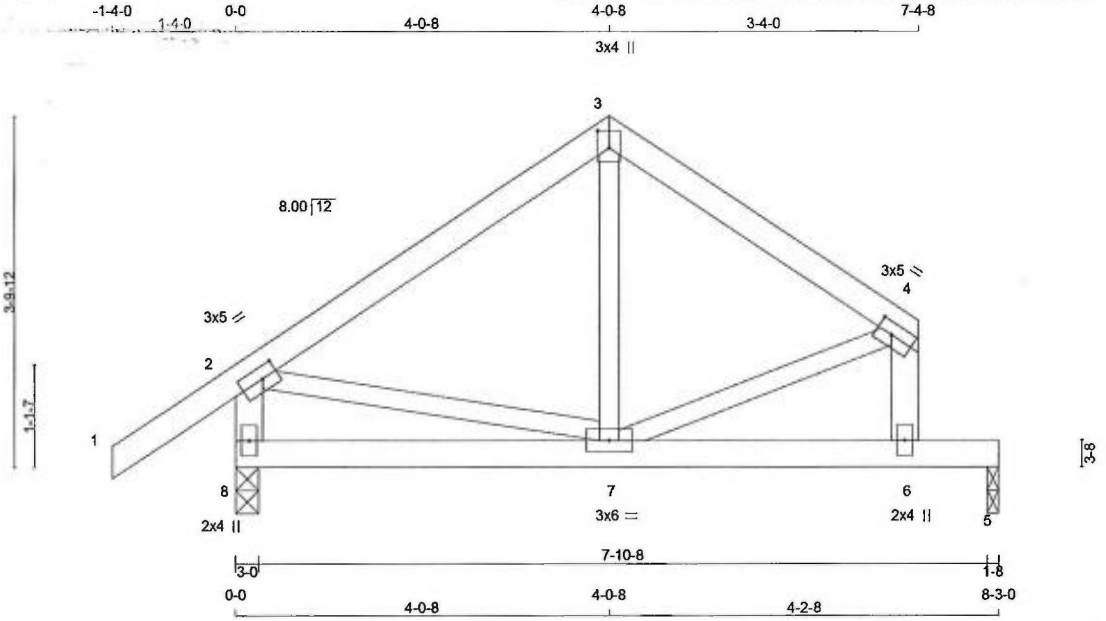
**READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.**

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T10 | 2 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 37 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:56 2018 Page 1

ID:FFZ2vRdY6r6WmN0vQBsIoCz48?g-YcV9a9SqODalVMHQEQoRQv3Tu?vUnLi?yimTCTynYe




TOTAL WEIGHT = 2 X 32 = 64 lb

[M]

**LUMBER**

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMVW-t | MT20 | 3.0 | 5.0 | 1.50 | 2.00 |
| 3 | TTW+p | MT20 | 3.0 | 4.0 | 2.25 | 1.50 |
| 4 | TMVW-t | MT20 | 3.0 | 5.0 | 1.50 | 2.00 |
| 6 | BMV+p | MT20 | 2.0 | 4.0 | | |
| 7 | BMWWW-t | MT20 | 3.0 | 6.0 | | |
| 8 | BMV1+p | MT20 | 2.0 | 4.0 | | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 8 | 501 | 0 | 501 | 0 | 0 | 3-0 | 3-0 |
| 5 | 391 | 0 | 391 | 0 | 0 | 1-8 | 1-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 8 | 349 | 258 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 91 / 0 | 0 / 0 |
| 5 | 275 | 192 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 83 / 0 | 0 / 0 |

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

**BRACING**

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

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

**LOADING**

TOTAL LOAD CASES: (4)

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 1-2 | 0 / 30 | -77.4 | -77.4 | 0.11 (1) | 10.00 | 7-3 | 0 / 80 | 0.03 (4) |
| 2-3 | -309 / 0 | -77.4 | -77.4 | 0.22 (1) | 6.25 | 2-7 | 0 / 261 | 0.06 (1) |
| 3-4 | -311 / 0 | -77.4 | -77.4 | 0.15 (1) | 6.25 | 7-4 | 0 / 279 | 0.06 (1) |
| 8-2 | -486 / 0 | 0.0 | 0.0 | 0.05 (1) | 7.81 | | | |
| 6-4 | -405 / 0 | 0.0 | 0.0 | 0.04 (1) | 7.81 | | | |
| 8-7 | 0 / 0 | -17.5 | -17.5 | 0.12 (1) | 10.00 | | | |
| 7-6 | 0 / 0 | -17.5 | -17.5 | 0.42 (1) | 10.00 | | | |
| 6-5 | 0 / 0 | -94.9 | -94.9 | 0.42 (1) | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.28")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.28")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.22/1.00 (2-3:1) , BC=0.42/1.00 (5-6:1) , WB=0.06/1.00 (4-7:1) , SSI=0.31/1.00 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.57 (7) (INPUT = 0.90 )
JSI METAL= 0.14 (2) (INPUT = 1.00 )

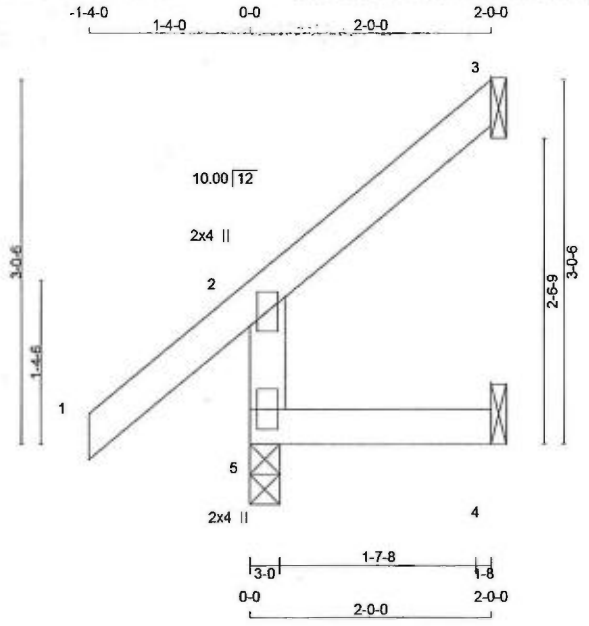
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T11 | 3 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 38 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:56 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-YcV9a9SqODalVMHQEQoRQv3VZ??knLg?yimTCTynYe




TOTAL WEIGHT = 3 X 9 = 26 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 5 - 2 | 2x4 | DRY | No.2 | SPF |
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 5 - 4 | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN Y | X |
|---|---|---|---|---|---|
| 2 | TMV+p | MT20 | 2.0 | 4.0 | |
| 5 | BMV1+p | MT20 | 2.0 | 4.0 | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 5 | 226 | 0 | 226 | 0 | 0 | 3-0 | 3-0 |
| 3 | 58 | 0 | 58 | 0 | 0 | 1-8 | 1-8 |
| 4 | 16 | 0 | 18 | 0 | 0 | 1-8 | 1-8 |

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

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 5 | 156 | 124 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 31 / 0 | 0 / 0 |
| 3 | 40 | 35 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 5 / 0 | 0 / 0 |
| 4 | 13 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 13 / 0 | 0 / 0 |

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

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

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

**LOADING**
TOTAL LOAD CASES: (5)

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC | MAX CSI | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|---|
| 5- 2 | -207 / 0 | 0.0 | 0.0 | 0 | 0.01 (4) | 7.81 | | | |
| 1- 2 | 0 / 35 | -77.4 | -77.4 | 0 | 0.11 (1) | 10.00 | | | |
| 2- 3 | -12 / 0 | -77.4 | -77.4 | 0 | 0.05 (1) | 6.25 | | | |
| 5- 4 | 0 / 0 | -17.5 | -17.5 | 0 | 0.02 (4) | 10.00 | | | |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

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

CSI: TC=0.11/1.00 (1-2:1) , BC=0.02/1.00 (4-5:4) , WB=0.00/1.00 (n/a:0) , SSI=0.07/1.00 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.15 (2) (INPUT = 0.90 )
JSI METAL= 0.06 (2) (INPUT = 1.00 )

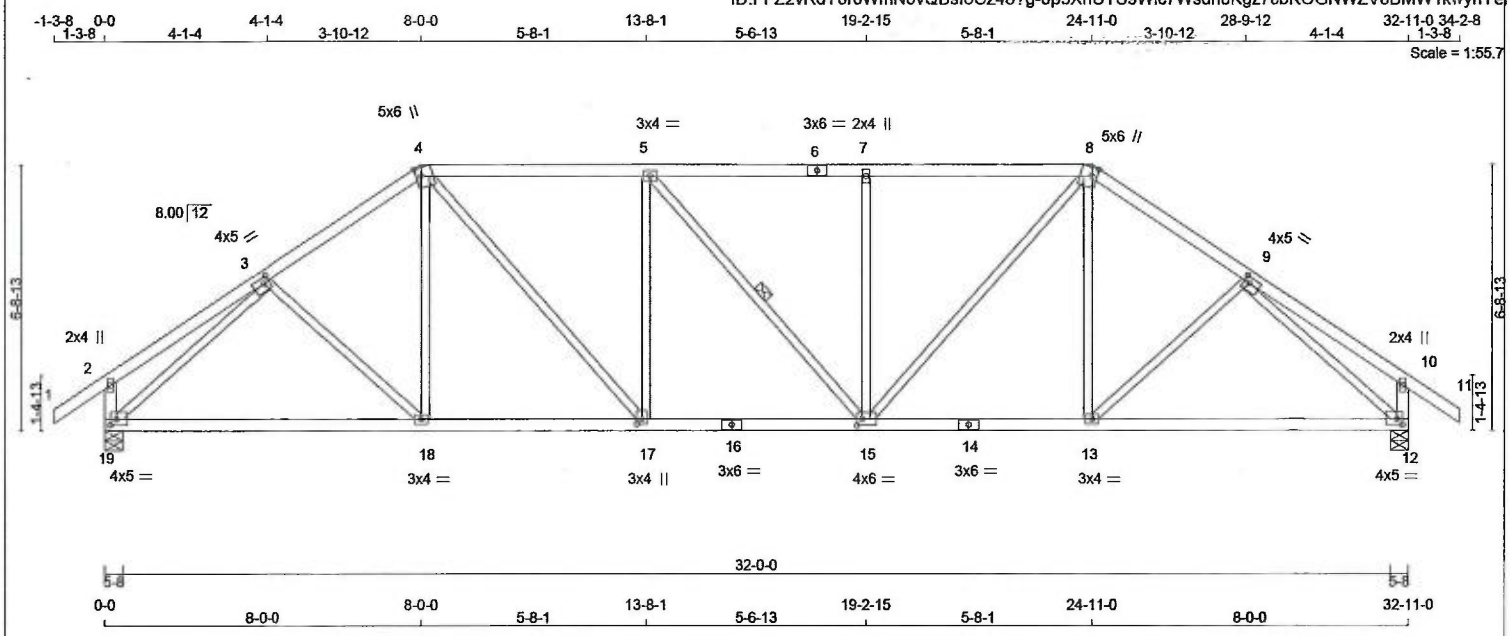
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T12 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2<br>TRUSS DESC. | **PAGE 39 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:57 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-0p3XnUTS9Wic7Wsdn8Kgz7cbKOGNWZV8BMW1kwynYe




TOTAL WEIGHT = 142 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 4 | 2x4 | DRY | No.2 | SPF |
| 4 - 6 | 2x4 | DRY | No.2 | SPF |
| 6 - 8 | 2x4 | DRY | No.2 | SPF |
| 8 - 11 | 2x4 | DRY | No.2 | SPF |
| 19 - 2 | 2x4 | DRY | No.2 | SPF |
| 12 - 10 | 2x4 | DRY | No.2 | SPF |
| 19 - 16 | 2x4 | DRY | No.2 | SPF |
| 16 - 14 | 2x4 | DRY | No.2 | SPF |
| 14 - 12 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table Is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMV+p | MT20 | 2.0 | 4.0 | | |
| 3 | TMWW-t | MT20 | 4.0 | 5.0 | 1.75 | 1.75 |
| 4 | TTWW+m | MT20 | 5.0 | 6.0 | 2.50 | 1.50 |
| 5 | TMWW-t | MT20 | 3.0 | 4.0 | | |
| 6 | TS-t | MT20 | 3.0 | 6.0 | | |
| 7 | TMW+w | MT20 | 2.0 | 4.0 | | |
| 8 | TTWW+m | MT20 | 5.0 | 6.0 | 2.50 | 1.50 |
| 9 | TMWW-t | MT20 | 4.0 | 5.0 | 1.75 | 1.75 |
| 10 | TMV+p | MT20 | 2.0 | 4.0 | | |
| 12 | BMVW1-t | MT20 | 4.0 | 5.0 | 1.75 | 1.75 |
| 13 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 14 | BS-t | MT20 | 3.0 | 6.0 | | |
| 15 | BMWWW-t | MT20 | 4.0 | 6.0 | 2.00 | 1.50 |
| 16 | BS-t | MT20 | 3.0 | 6.0 | | |
| 17 | BMWW+t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 18 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 19 | BMVW1-t | MT20 | 4.0 | 5.0 | 1.75 | 1.75 |


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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 19 | 1667 | 0 | 1667 | 0 | 0 | 5-8 | 5-8 |
| 12 | 1667 | 0 | 1667 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 19 | 1168 | 830 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 337 / 0 | 0 / 0 |
| 12 | 1168 | 830 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 337 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 19, 12

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.36 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 5-15. DBS = 20-0-0 . CBF = 0 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)

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| 1- 2 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 |
| 2- 3 | 0 / 18 | -77.4 | -77.4 | 0.18 (1) | 10.00 |
| 3- 4 | -1806 / 0 | -77.4 | -77.4 | 0.24 (1) | 4.75 |
| 4- 5 | -1978 / 0 | -77.4 | -77.4 | 0.43 (1) | 4.36 |
| 5- 6 | -1977 / 0 | -77.4 | -77.4 | 0.43 (1) | 4.36 |
| 6- 7 | -1977 / 0 | -77.4 | -77.4 | 0.43 (1) | 4.36 |
| 7- 8 | -1977 / 0 | -77.4 | -77.4 | 0.43 (1) | 4.37 |
| 8- 9 | -1806 / 0 | -77.4 | -77.4 | 0.24 (1) | 4.75 |
| 9-10 | 0 / 18 | -77.4 | -77.4 | 0.18 (1) | 10.00 |
| 10-11 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 |
| 19- 2 | -227 / 0 | 0.0 | 0.0 | 0.02 (1) | 7.81 |
| 12-10 | -227 / 0 | 0.0 | 0.0 | 0.02 (1) | 7.81 |
| 19-18 | 0 / 1474 | -17.5 | -17.5 | 0.37 (1) | 10.00 |
| 18-17 | 0 / 1487 | -17.5 | -17.5 | 0.37 (1) | 10.00 |
| 17-16 | 0 / 1978 | -17.5 | -17.5 | 0.37 (1) | 10.00 |
| 16-15 | 0 / 1978 | -17.5 | -17.5 | 0.37 (1) | 10.00 |
| 15-14 | 0 / 1487 | -17.5 | -17.5 | 0.37 (1) | 10.00 |
| 14-13 | 0 / 1487 | -17.5 | -17.5 | 0.37 (1) | 10.00 |
| 13-12 | 0 / 1474 | -17.5 | -17.5 | 0.37 (1) | 10.00 |

| WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| 3-18 | 0 / 60 | 0.02 (4) |
| 18- 4 | 0 / 134 | 0.04 (4) |
| 4-17 | 0 / 742 | 0.17 (1) |
| 17- 5 | -471 / 0 | 0.36 (1) |
| 5-15 | -2 / 0 | 0.00 (1) |
| 15- 7 | -470 / 0 | 0.36 (1) |
| 15- 8 | 0 / 740 | 0.17 (1) |
| 13- 8 | 0 / 135 | 0.04 (4) |
| 13- 9 | 0 / 60 | 0.02 (4) |
| 19- 3 | -2020 / 0 | 0.99 (1) |
| 9-12 | -2020 / 0 | 0.99 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.10")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.19")

CSI: TC=0.43/1.00 (4-5:1) , BC=0.37/1.00 (15-17:1) , WB=0.99/1.00 (9-12:1) , SSI=0.20/1.00 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

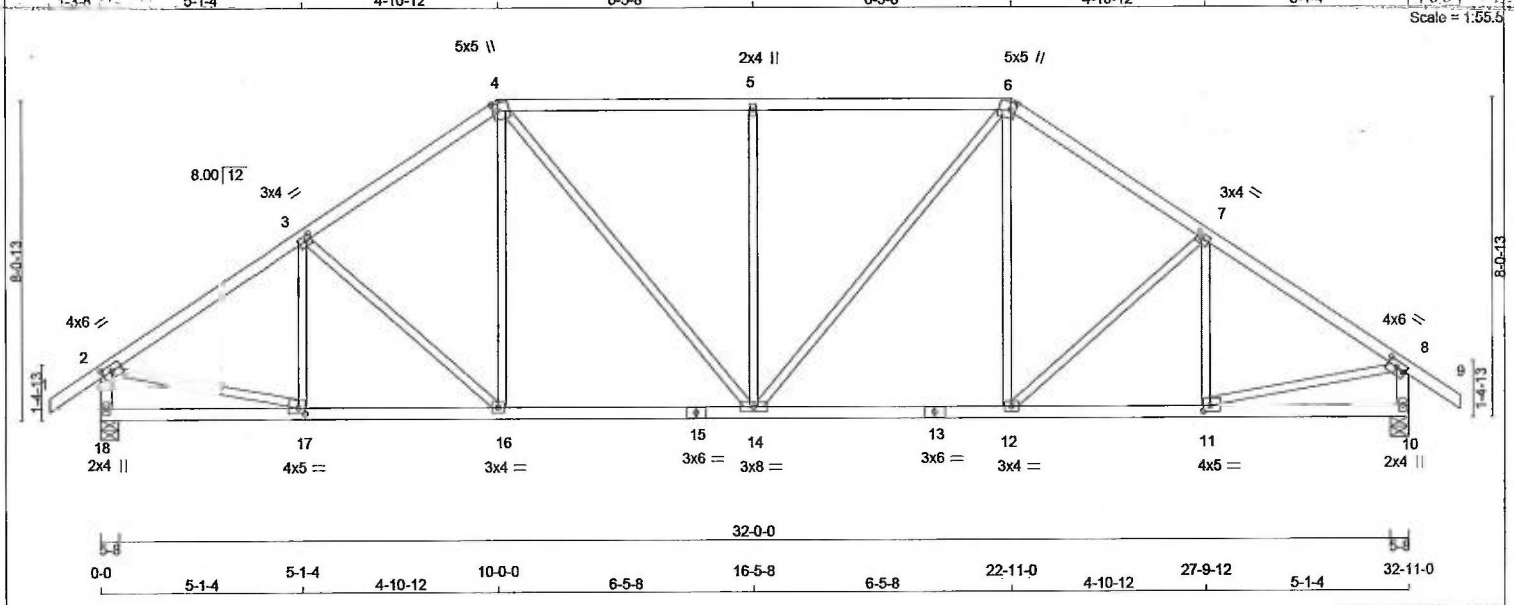
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (12) (INPUT = 0.90 )
JSI METAL= 0.60 (9) (INPUT = 1.00 )

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T13 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 40 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:58 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-V?dv?qU4wqqSkgRpLrrvVK8lWodXF4ClQ0FaGMynYeh




TOTAL WEIGHT = 145 lb

[M][F]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 4 | 2x4 | DRY | No.2 | SPF |
| 4 - 6 | 2x4 | DRY | No.2 | SPF |
| 6 - 9 | 2x4 | DRY | No.2 | SPF |
| 18 - 2 | 2x4 | DRY | No.2 | SPF |
| 10 - 8 | 2x4 | DRY | No.2 | SPF |
| 18 - 15 | 2x4 | DRY | No.2 | SPF |
| 15 - 13 | 2x4 | DRY | No.2 | SPF |
| 13 - 10 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMVW-t | MT20 | 4.0 | 6.0 | 1.75 | 3.00 |
| 3 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 4 | TTWW+m | MT20 | 5.0 | 5.0 | 2.25 | 1.50 |
| 5 | TMW+w | MT20 | 2.0 | 4.0 | | |
| 6 | TTWW+m | MT20 | 5.0 | 5.0 | 2.25 | 1.50 |
| 7 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 8 | TMVW-t | MT20 | 4.0 | 6.0 | 1.75 | 3.00 |
| 10 | BMV1+p | MT20 | 2.0 | 4.0 | | |
| 11 | BMWW-t | MT20 | 4.0 | 5.0 | 1.75 | 2.00 |
| 12 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 13 | BS-t | MT20 | 3.0 | 6.0 | | |
| 14 | BMWWW-t | MT20 | 3.0 | 8.0 | | |
| 15 | BS-t | MT20 | 3.0 | 6.0 | | |
| 16 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 17 | BMWW-t | MT20 | 4.0 | 5.0 | 1.75 | 2.00 |
| 18 | BMV1+p | MT20 | 2.0 | 4.0 | | |


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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 18 | 1667 | 0 | 1667 | 0 | 0 | 5-8 | 5-8 |
| 10 | 1667 | 0 | 1667 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 18 | 1168 | 830 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 337 / 0 | 0 / 0 |
| 10 | 1168 | 830 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 337 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 18, 10

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.57 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

| CHORDS MEMB. | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|---|
| FR-TO | | | | | | |
| 1-2 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 | |
| 2-3 | -1849 / 0 | -77.4 | -77.4 | 0.30 (1) | 4.66 | |
| 3-4 | -1716 / 0 | -77.4 | -77.4 | 0.29 (1) | 4.81 | |
| 4-5 | -1710 / 0 | -77.4 | -77.4 | 0.47 (1) | 4.57 | |
| 5-6 | -1710 / 0 | -77.4 | -77.4 | 0.47 (1) | 4.57 | |
| 6-7 | -1716 / 0 | -77.4 | -77.4 | 0.29 (1) | 4.81 | |
| 7-8 | -1849 / 0 | -77.4 | -77.4 | 0.30 (1) | 4.66 | |
| 8-9 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 | |
| 18-2 | -1628 / 0 | 0.0 | 0.0 | 0.17 (1) | 6.48 | |
| 10-8 | -1628 / 0 | 0.0 | 0.0 | 0.17 (1) | 6.48 | |
| 18-17 | 0 / 0 | -17.5 | -17.5 | 0.09 (4) | 10.00 | |
| 17-16 | 0 / 1559 | -17.5 | -17.5 | 0.32 (1) | 10.00 | |
| 16-15 | 0 / 1407 | -17.5 | -17.5 | 0.30 (1) | 10.00 | |
| 15-14 | 0 / 1407 | -17.5 | -17.5 | 0.30 (1) | 10.00 | |
| 14-13 | 0 / 1407 | -17.5 | -17.5 | 0.30 (1) | 10.00 | |
| 13-12 | 0 / 1407 | -17.5 | -17.5 | 0.30 (1) | 10.00 | |
| 12-11 | 0 / 1559 | -17.5 | -17.5 | 0.32 (1) | 10.00 | |
| 11-10 | 0 / 0 | -17.5 | -17.5 | 0.09 (4) | 10.00 | |

| WEBS MEMB. | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| 17-3 | -240 / 10 | 0.08 (1) |
| 3-16 | -208 / 0 | 0.17 (1) |
| 16-4 | 0 / 241 | 0.05 (1) |
| 4-14 | 0 / 473 | 0.11 (1) |
| 14-5 | -613 / 0 | 0.77 (1) |
| 14-6 | 0 / 473 | 0.11 (1) |
| 12-6 | 0 / 241 | 0.05 (1) |
| 12-7 | -208 / 0 | 0.17 (1) |
| 11-7 | -240 / 10 | 0.08 (1) |
| 2-17 | 0 / 1593 | 0.36 (1) |
| 11-8 | 0 / 1593 | 0.36 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.10")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.15")

CSI: TC=0.47/1.00 (4-5:1) , BC=0.32/1.00 (16-17:1) , WB=0.77/1.00 (5-14:1) , SSI=0.24/1.00 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

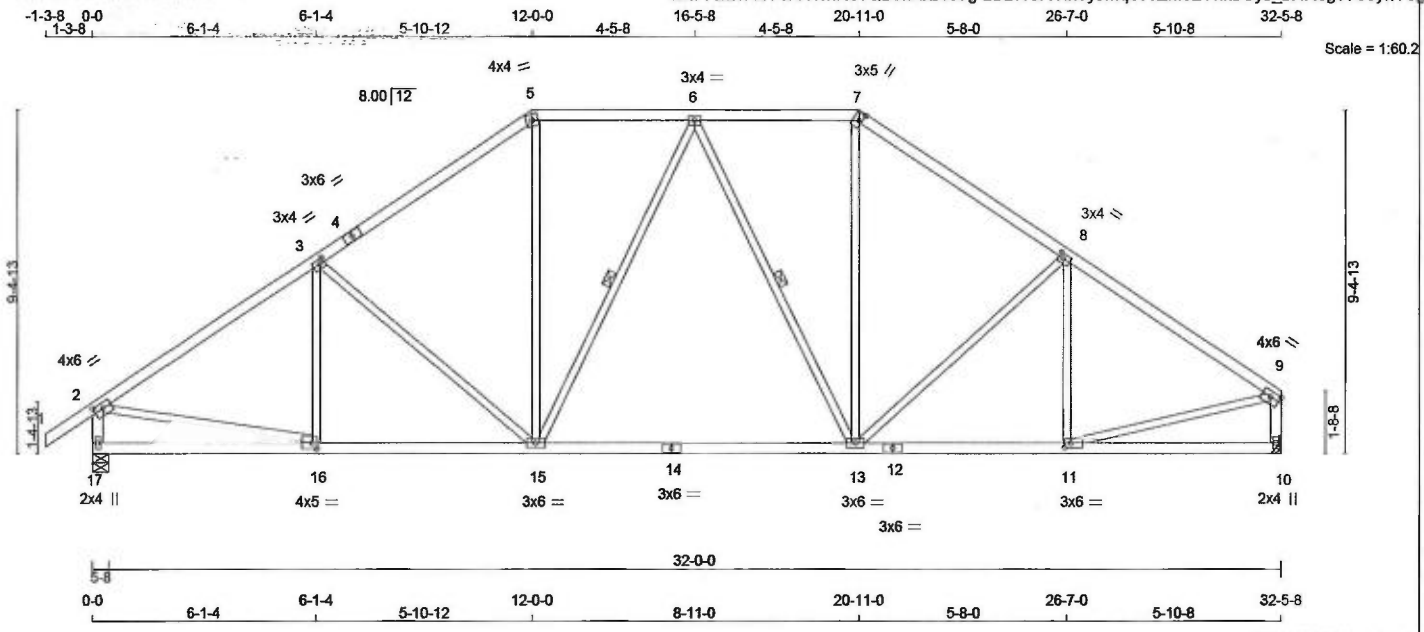
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (8) (INPUT = 0.90 )
JSI METAL= 0.50 (8) (INPUT = 1.00 )

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T14 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC | PAGE 41 OF 56 |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:59 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-zBBHCAVih8yJMq0?vZM82YhxbCys_bHReg?7ooynYe




TOTAL WEIGHT = 144 lb [M][F]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 4 | 2x4 | DRY | No.2 | SPF |
| 4 - 5 | 2x4 | DRY | No.2 | SPF |
| 5 - 7 | 2x4 | DRY | No.2 | SPF |
| 7 - 9 | 2x4 | DRY | No.2 | SPF |
| 17 - 2 | 2x4 | DRY | No.2 | SPF |
| 10 - 9 | 2x4 | DRY | No.2 | SPF |
| 17 - 14 | 2x4 | DRY | No.2 | SPF |
| 14 - 12 | 2x4 | DRY | No.2 | SPF |
| 12 - 10 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table Is In Inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMVW-t | MT20 | 4.0 | 6.0 | 1.75 | 3.00 |
| 3 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 4 | TS-t | MT20 | 3.0 | 6.0 | | |
| 5 | TTW-m | MT20 | 4.0 | 4.0 | | |
| 6 | TMWW-t | MT20 | 3.0 | 4.0 | | |
| 7 | TTW+h | MT20 | 3.0 | 5.0 | 2.50 | 1.00 |
| 8 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 9 | TMVW-t | MT20 | 4.0 | 6.0 | 1.75 | Edge |
| 10 | BMV1+p | MT20 | 2.0 | 4.0 | | |
| 11 | BMWW-t | MT20 | 3.0 | 6.0 | 1.50 | 2.00 |
| 12 | BS-t | MT20 | 3.0 | 6.0 | | |
| 13 | BMWWW-t | MT20 | 3.0 | 6.0 | | |
| 14 | BS-t | MT20 | 3.0 | 6.0 | | |
| 15 | BMWWW-t | MT20 | 3.0 | 6.0 | | |
| 16 | BMWW-t | MT20 | 4.0 | 5.0 | 2.00 | 1.50 |
| 17 | BMV1+p | MT20 | 2.0 | 4.0 | | |

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


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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| 17 | 1646 | 0 | 1646 | 0 | 0 | 5-8 | 5-8 |
| 10 | 1540 | 0 | 1540 | 0 | 0 | MECHANICAL | |

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 10 TO RESIST THE MAX FACTORED REACTIONS.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 17 | 1153 | 820 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 333 / 0 | 0 / 0 |
| 10 | 1080 | 756 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 325 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 17

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

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

1 - 1x4 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 6-15, 6-13. DBS = 20-0-0 . CBF = 32 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)

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 1- 2 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 | 16- 3 | -170 / 41 | 0.08 (1) |
| 2- 3 | -1839 / 0 | -77.4 | -77.4 | 0.45 (1) | 4.50 | 3-15 | -353 / 0 | 0.46 (1) |
| 3- 4 | -1580 / 0 | -77.4 | -77.4 | 0.41 (1) | 4.82 | 15- 5 | 0 / 553 | 0.12 (1) |
| 4- 5 | -1580 / 0 | -77.4 | -77.4 | 0.41 (1) | 4.82 | 15- 6 | -206 / 0 | 0.15 (1) |
| 5- 6 | -1293 / 0 | -77.4 | -77.4 | 0.21 (1) | 5.46 | 6-13 | -255 / 0 | 0.19 (1) |
| 6- 7 | -1272 / 0 | -77.4 | -77.4 | 0.21 (1) | 5.49 | 13- 7 | 0 / 546 | 0.12 (1) |
| 7- 8 | -1554 / 0 | -77.4 | -77.4 | 0.38 (1) | 4.89 | 13- 8 | -267 / 0 | 0.34 (1) |
| 8- 9 | -1729 / 0 | -77.4 | -77.4 | 0.40 (1) | 4.67 | 11- 8 | -245 / 14 | 0.12 (1) |
| 17- 2 | -1599 / 0 | 0.0 | 0.0 | 0.16 (1) | 6.53 | 2-16 | 0 / 1579 | 0.36 (1) |
| 10- 9 | -1495 / 0 | 0.0 | 0.0 | 0.16 (1) | 6.71 | 11- 9 | 0 / 1503 | 0.34 (1) |
| 17-16 | 0 / 0 | -17.5 | -17.5 | 0.13 (4) | 10.00 | | | |
| 16-15 | 0 / 1555 | -17.5 | -17.5 | 0.37 (1) | 10.00 | | | |
| 15-14 | 0 / 1382 | -17.5 | -17.5 | 0.35 (1) | 10.00 | | | |
| 14-13 | 0 / 1382 | -17.5 | -17.5 | 0.35 (1) | 10.00 | | | |
| 13-12 | 0 / 1463 | -17.5 | -17.5 | 0.36 (1) | 10.00 | | | |
| 12-11 | 0 / 1463 | -17.5 | -17.5 | 0.36 (1) | 10.00 | | | |
| 11-10 | 0 / 0 | -17.5 | -17.5 | 0.13 (4) | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.08")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (1.08")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.21")

CSI: TC=0.45/1.00 (2-3:1) , BC=0.37/1.00 (15-16:1) , WB=0.46/1.00 (3-15:1) , SSI=0.19/1.00 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

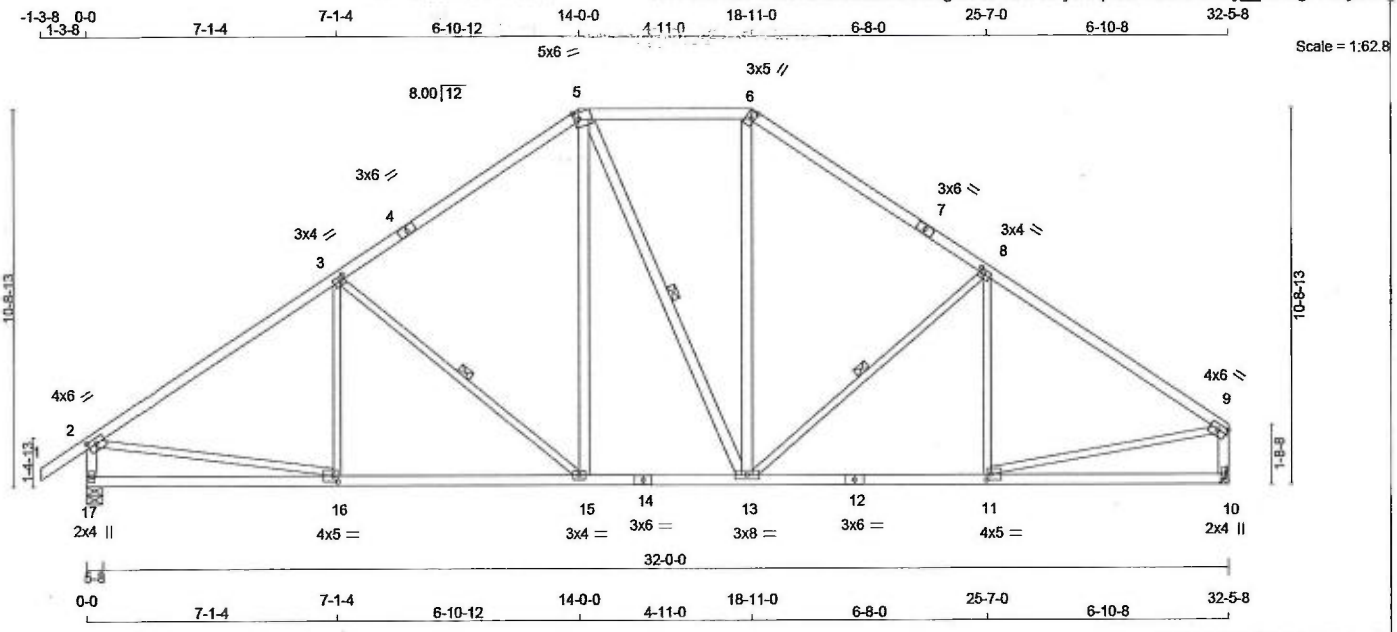
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (7) (INPUT = 0.90 )
JSI METAL= 0.51 (14) (INPUT = 1.00 )

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T15 | 6 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 42 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:14:59 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-zBBHCAVih8yJMq0?vZM82YhudCy__dtReg?7ooynYeg




| -1-3-8 | 0-0 | 7-1-4 | 7-1-4 | 6-10-12 | 14-0-0 | 4-11-0 | 18-11-0 | 6-8-0 | 25-7-0 | 6-10-8 | 32-5-8 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-3-8 | | | | | | | | | | | |

TOTAL WEIGHT = 6 X 155 = 931 lb

[M][F]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 4 | 2x4 | DRY | No.2 | SPF |
| 4 - 5 | 2x4 | DRY | No.2 | SPF |
| 5 - 6 | 2x4 | DRY | No.2 | SPF |
| 6 - 7 | 2x4 | DRY | No.2 | SPF |
| 7 - 9 | 2x4 | DRY | No.2 | SPF |
| 17 - 2 | 2x4 | DRY | No.2 | SPF |
| 10 - 9 | 2x4 | DRY | No.2 | SPF |
| 17 - 14 | 2x4 | DRY | No.2 | SPF |
| 14 - 12 | 2x4 | DRY | No.2 | SPF |
| 12 - 10 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |
| 15 - 5 | 2x4 | DRY | No.2 | SPF |
| 5 - 13 | 2x4 | DRY | No.2 | SPF |
| 13 - 6 | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMVW-t | MT20 | 4.0 | 6.0 | 1.75 | 3.00 |
| 3 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 4 | TS-t | MT20 | 3.0 | 6.0 | | |
| 5 | TTWW-m | MT20 | 5.0 | 6.0 | 2.25 | 1.50 |
| 6 | TTW+h | MT20 | 3.0 | 5.0 | 2.50 | 1.00 |
| 7 | TS-t | MT20 | 3.0 | 6.0 | | |
| 8 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 9 | TMVW-t | MT20 | 4.0 | 6.0 | 1.75 | Edge |
| 10 | BMV1+p | MT20 | 2.0 | 4.0 | | |
| 11 | BMWW-t | MT20 | 4.0 | 5.0 | 2.00 | 1.50 |
| 12 | BS-t | MT20 | 3.0 | 6.0 | | |
| 13 | BMWWW-t | MT20 | 3.0 | 8.0 | | |
| 14 | BS-t | MT20 | 3.0 | 6.0 | | |
| 15 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 16 | BMWW-t | MT20 | 4.0 | 5.0 | 2.00 | 1.50 |
| 17 | BMV1+p | MT20 | 2.0 | 4.0 | | |

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


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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| 17 | 1646 | 0 | 1646 | 0 | 0 | 5-8 | 5-8 |
| 10 | 1540 | 0 | 1540 | 0 | 0 | MECHANICAL | |

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 10 TO RESIST THE MAX FACTORED REACTIONS.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 17 | 1153 | 820 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 333 / 0 | 0 / 0 |
| 10 | 1080 | 756 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 325 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 17

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 3-15, 5-13, 8-13. DBS = 20-0-0 . CBF = 63 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)

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| 1- 2 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 |
| 2- 3 | -1842 / 0 | -77.4 | -77.4 | 0.64 (1) | 4.25 |
| 3- 4 | -1450 / 0 | -77.4 | -77.4 | 0.57 (1) | 4.74 |
| 4- 5 | -1450 / 0 | -77.4 | -77.4 | 0.57 (1) | 4.74 |
| 5- 6 | -1170 / 0 | -77.4 | -77.4 | 0.26 (1) | 5.60 |
| 6- 7 | -1437 / 0 | -77.4 | -77.4 | 0.53 (1) | 4.82 |
| 7- 8 | -1437 / 0 | -77.4 | -77.4 | 0.53 (1) | 4.82 |
| 8- 9 | -1748 / 0 | -77.4 | -77.4 | 0.58 (1) | 4.42 |
| 17- 2 | -1595 / 0 | 0.0 | 0.0 | 0.16 (1) | 6.54 |
| 10- 9 | -1491 / 0 | 0.0 | 0.0 | 0.16 (1) | 6.71 |
| 17-16 | 0 / 0 | -17.5 | -17.5 | 0.22 (4) | 10.00 |
| 16-15 | 0 / 1563 | -17.5 | -17.5 | 0.37 (1) | 10.00 |
| 15-14 | 0 / 1180 | -17.5 | -17.5 | 0.25 (1) | 10.00 |
| 14-13 | 0 / 1180 | -17.5 | -17.5 | 0.25 (1) | 10.00 |
| 13-12 | 0 / 1483 | -17.5 | -17.5 | 0.34 (1) | 10.00 |
| 12-11 | 0 / 1483 | -17.5 | -17.5 | 0.34 (1) | 10.00 |
| 11-10 | 0 / 0 | -17.5 | -17.5 | 0.21 (4) | 10.00 |

| WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| 16- 3 | -96 / 91 | 0.06 (1) |
| 3-15 | -504 / 0 | 0.29 (1) |
| 15- 5 | 0 / 417 | 0.07 (1) |
| 5-13 | -24 / 0 | 0.02 (1) |
| 13- 6 | 0 / 396 | 0.06 (1) |
| 13- 8 | -424 / 0 | 0.24 (1) |
| 11- 8 | -163 / 68 | 0.10 (1) |
| 2-16 | 0 / 1581 | 0.36 (1) |
| 11- 9 | 0 / 1513 | 0.34 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.08")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (1.08")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.15")

CSI: TC=0.64/1.00 (2-3:1) , BC=0.37/1.00 (15-16:1) , WB=0.36/1.00 (2-16:1) , SSI=0.22/1.00 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

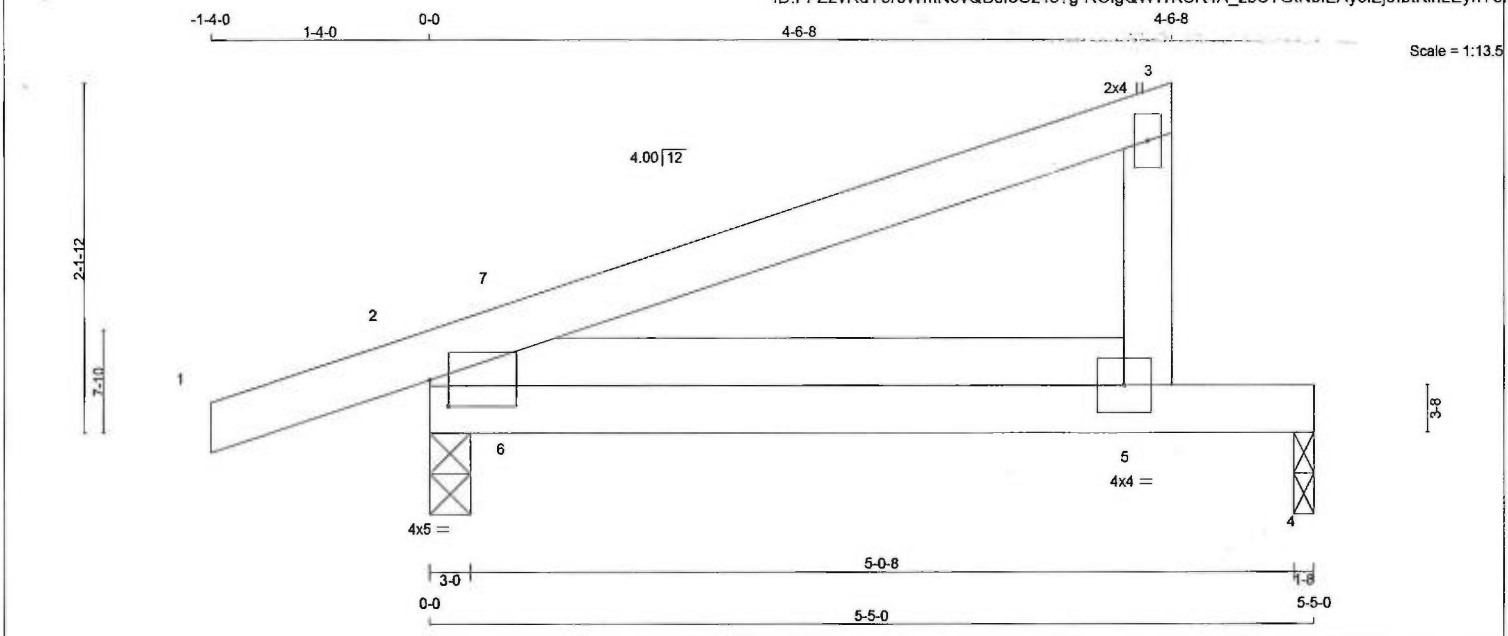
JSI GRIP= 0.88 (2) (INPUT = 0.90 )
JSI METAL= 0.51 (2) (INPUT = 1.00 )

CONTINUED ON PAGE 2

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 | DRWG NO. |
|---|---|---|---|---|---|---|
| NE0818-083 | T16 | 7 | 1 | TRUSS DESC. | | PAGE 43 OF 56 |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:15:00 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-ROlgQWWKSR4A_zbCTGtNblEAyclZj9fbtKlhLEynYe




TOTAL WEIGHT = 7 X 20 = 140 lb

(M)

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 5 - 3 | 2x4 | DRY | No.2 | SPF |
| 2 - 4 | 2x4 | DRY | No.2 | SPF |
| REINFORCING MEMBERS | | | | |
| HW1 | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in Inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMBMW1-I | MT20 | 4.0 | 5.0 | 2.00 | 1.50 |
| 3 | TMV+p | MT20 | 2.0 | 4.0 | | |
| 5 | BMVW-t | MT20 | 4.0 | 4.0 | | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 2 | 358 | 0 | 358 | 0 | 0 | 3-0 | 3-0 |
| 4 | 195 | 0 | 195 | 0 | 0 | 1-8 | 1-8 |

**UNFACTORED REACTIONS**

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

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

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

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 1- 2 | 0 / 5 | -77.4 | -77.4 | 0.10 (1) | 10.00 | 5- 7 | -549 / 0 | 0.11 (1) |
| 2- 7 | -617 / 0 | -77.4 | -77.4 | 0.13 (1) | 6.25 | 6- 7 | 0 / 211 | 0.00 (1) |
| 7- 3 | 0 / 4 | -77.4 | -77.4 | 0.15 (1) | 10.00 | | | |
| 5- 3 | -135 / 0 | 0.0 | 0.0 | 0.02 (1) | 7.81 | | | |
| 2- 6 | 0 / 533 | -17.5 | -17.5 | 0.17 (1) | 10.00 | | | |
| 6- 5 | 0 / 533 | -17.5 | -17.5 | 0.34 (1) | 10.00 | | | |
| 5- 4 | 0 / 0 | -17.5 | -17.5 | 0.26 (1) | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 881 (0.07")

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.53 (5) (INPUT = 0.90 )
JSI METAL= 0.20 (5) (INPUT = 1.00 )

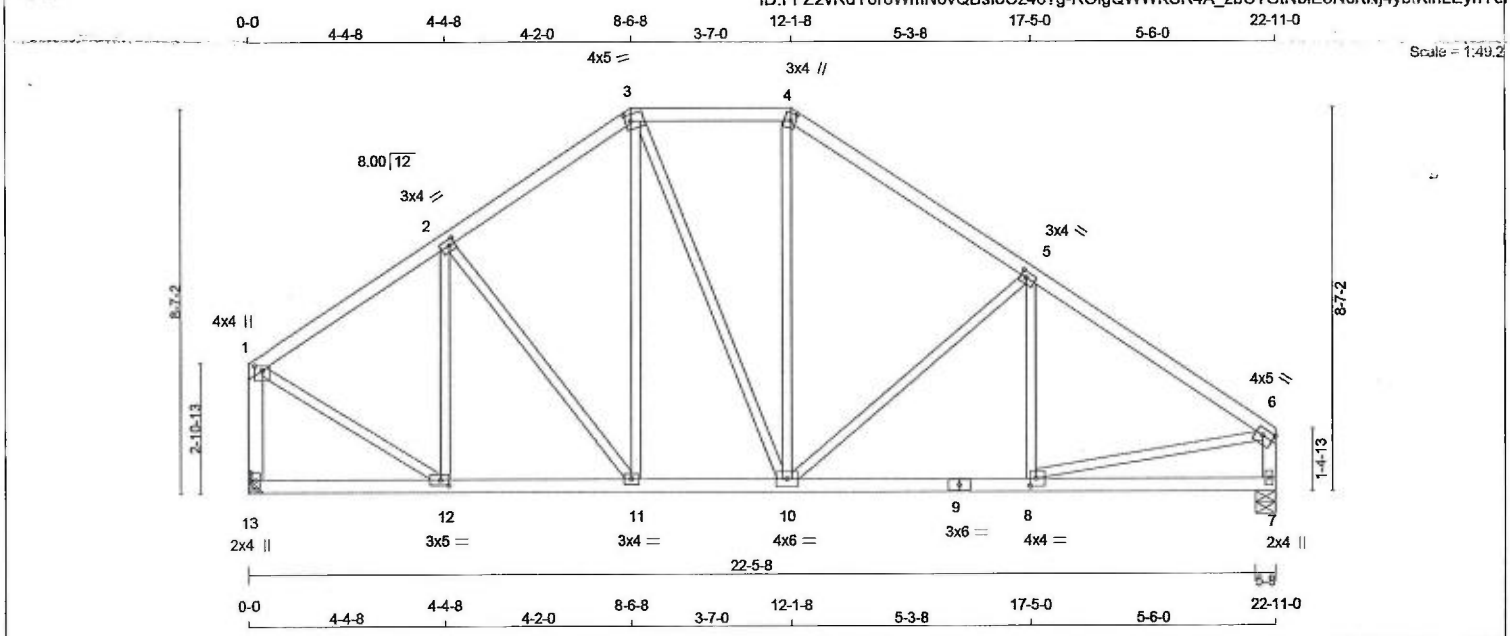
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 | DRWG NO. |
|---|---|---|---|---|---|---|
| NE0818-083 | T21 | 1 | 1 | TRUSS DESC. | | **PAGE 44 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:15:00 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-ROlgQWWKSR4A_zbCTGtNbIE8NcKNj4ybtKlhLEynYef




TOTAL WEIGHT = 108 lb [M][F]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 3 - 4 | 2x4 | DRY | No.2 | SPF |
| 4 - 6 | 2x4 | DRY | No.2 | SPF |
| 13 - 1 | 2x4 | DRY | No.2 | SPF |
| 7 - 6 | 2x4 | DRY | No.2 | SPF |
| 13 - 9 | 2x4 | DRY | No.2 | SPF |
| 9 - 7 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 1 | TMVW+p | MT20 | 4.0 | 4.0 | 1.25 | 2.00 |
| 2 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 3 | TTWW-m | MT20 | 4.0 | 5.0 | 1.75 | 1.50 |
| 4 | TTW+m | MT20 | 3.0 | 4.0 | 2.00 | 1.25 |
| 5 | TMWW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| 6 | TMVW-t | MT20 | 4.0 | 5.0 | 1.75 | Edge |
| 7 | BMV1+p | MT20 | 2.0 | 4.0 | | |
| 8 | BMWW-t | MT20 | 4.0 | 4.0 | 2.00 | 1.50 |
| 9 | BS-t | MT20 | 3.0 | 6.0 | | |
| 10 | BMWWW-t | MT20 | 4.0 | 6.0 | | |
| 11 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 12 | BMWW-t | MT20 | 3.0 | 5.0 | 1.50 | 2.25 |
| 13 | BMV1+p | MT20 | 2.0 | 4.0 | | |

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

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| 13 | 1087 | 0 | 1087 | 0 | 0 | MECHANICAL | |
| 7 | 1087 | 0 | 1087 | 0 | 0 | 5-8 | 5-8 |

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 13 TO RESIST THE MAX FACTORED REACTIONS.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 13 | 763 | 534 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 229 / 0 | 0 / 0 |
| 7 | 763 | 534 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 229 / 0 | 0 / 0 |

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

**BRACING**
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.47 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH |
|---|---|---|---|---|---|
| 1-2 | -864 / 0 | -77.4 | -77.4 | 0.19 (1) | 6.25 |
| 2-3 | -869 / 0 | -77.4 | -77.4 | 0.19 (1) | 6.25 |
| 3-4 | -751 / 0 | -77.4 | -77.4 | 0.13 (1) | 6.25 |
| 4-5 | -930 / 0 | -77.4 | -77.4 | 0.30 (1) | 6.04 |
| 5-6 | -1203 / 0 | -77.4 | -77.4 | 0.32 (1) | 5.47 |
| 13-1 | -1056 / 0 | 0.0 | 0.0 | 0.16 (1) | 7.66 |
| 7-6 | -1047 / 0 | 0.0 | 0.0 | 0.11 (1) | 7.68 |
| 13-12 | 0 / 0 | -17.5 | -17.5 | 0.08 (4) | 10.00 |
| 12-11 | 0 / 736 | -17.5 | -17.5 | 0.16 (1) | 10.00 |
| 11-10 | 0 / 705 | -17.5 | -17.5 | 0.15 (1) | 10.00 |
| 10-9 | 0 / 1024 | -17.5 | -17.5 | 0.23 (1) | 10.00 |
| 9-8 | 0 / 1024 | -17.5 | -17.5 | 0.23 (1) | 10.00 |
| 8-7 | 0 / 0 | -17.5 | -17.5 | 0.13 (4) | 10.00 |

| WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|
| 12-2 | -348 / 0 | 0.18 (1) |
| 2-11 | -54 / 0 | 0.05 (1) |
| 11-3 | 0 / 101 | 0.03 (4) |
| 3-10 | 0 / 121 | 0.03 (1) |
| 10-4 | 0 / 209 | 0.05 (1) |
| 10-5 | -367 / 0 | 0.37 (1) |
| 8-5 | -94 / 64 | 0.04 (1) |
| 1-12 | 0 / 855 | 0.19 (1) |
| 8-6 | 0 / 1044 | 0.23 (1) |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.76")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.76")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.32/1.00 (5-6:1) , BC=0.23/1.00 (8-10:1) , WB=0.37/1.00 (5-10:1) , SSI=0.17/1.00 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

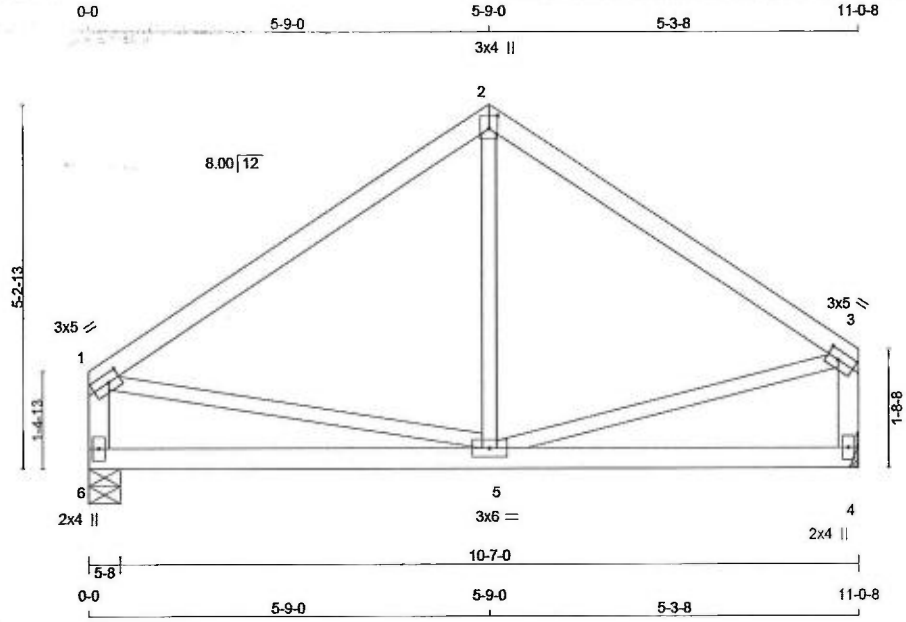
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (4) (INPUT = 0.90 )
JSI METAL= 0.40 (6) (INPUT = 1.00 )

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T22 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 45 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:15:01 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-vaJ2dsWyDlC1b7AO0zOc7zmlv0gjSbok6_UEthynYee




TOTAL WEIGHT = 43 lb [M],[F]

**LUMBER**
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 1 | TMVW-t | MT20 | 3.0 | 5.0 | 1.50 | 2.00 |
| 2 | TTW+p | MT20 | 3.0 | 4.0 | 2.25 | 1.50 |
| 3 | TMVW-t | MT20 | 3.0 | 5.0 | 1.50 | 2.00 |
| 4 | BMV1+p | MT20 | 2.0 | 4.0 | | |
| 5 | BMWWW-t | MT20 | 3.0 | 6.0 | | |
| 6 | BMV1+p | MT20 | 2.0 | 4.0 | | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| 6 | 524 | 0 | 524 | 0 | 0 | 5-8 | 5-8 |
| 4 | 524 | 0 | 524 | 0 | 0 | MECHANICAL | |

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

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 6 | 368 | 257 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 110 / 0 | 0 / 0 |
| 4 | 368 | 257 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 110 / 0 | 0 / 0 |

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

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

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC | MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|---|
| 1-2 | -368 / 0 | -77.4 | -77.4 | 0.33 (1) | | 6.25 | 5-2 | -19 / 89 | 0.03 (4) |
| 2-3 | -367 / 0 | -77.4 | -77.4 | 0.28 (1) | | 6.25 | 1-5 | 0 / 311 | 0.07 (1) |
| 6-1 | -482 / 0 | 0.0 | 0.0 | 0.05 (1) | | 7.81 | 5-3 | 0 / 317 | 0.07 (1) |
| 4-3 | -492 / 0 | 0.0 | 0.0 | 0.05 (1) | | 7.81 | | | |
| 6-5 | 0 / 0 | -17.5 | -17.5 | 0.16 (4) | | 10.00 | | | |
| 5-4 | 0 / 0 | -17.5 | -17.5 | 0.16 (4) | | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.37")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.37")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.33/1.00 (1-2:1) , BC=0.16/1.00 (5-6:4) , WB=0.07/1.00 (3-5:1) , SSI=0.14/1.00 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.68 (5) (INPUT = 0.90 )
JSI METAL= 0.15 (1) (INPUT = 1.00 )

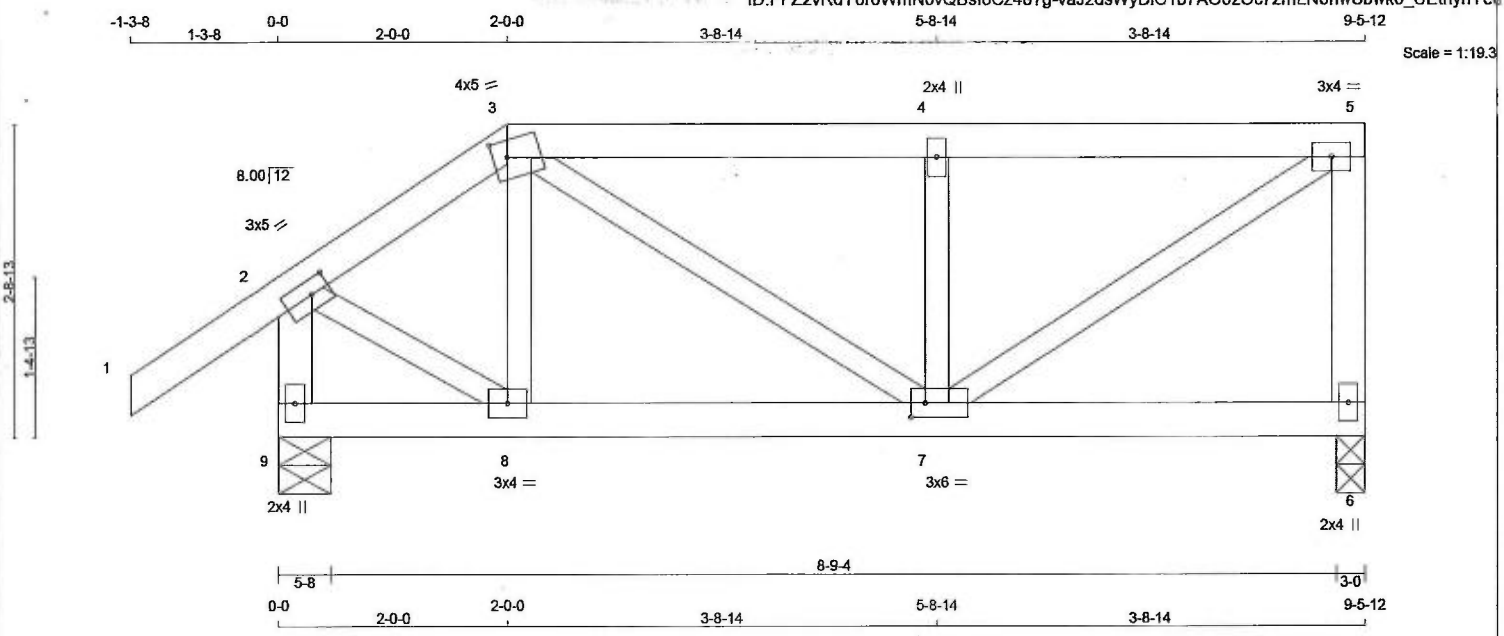
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T24 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | PAGE 46 OF 56 |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:15:01 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsIoCz48?g-vaJ2dsWyDlC1b7AO0zOc7zmLN0hwSbwk6_UEthynYe




TOTAL WEIGHT = 39 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 3 - 5 | 2x4 | DRY | No.2 | SPF |
| 6 - 5 | 2x4 | DRY | No.2 | SPF |
| 9 - 2 | 2x4 | DRY | No.2 | SPF |
| 9 - 6 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in Inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMVW-t | MT20 | 3.0 | 5.0 | 1.50 | 2.00 |
| 3 | TTWW-m | MT20 | 4.0 | 5.0 | 1.75 | 1.50 |
| 4 | TMW+w | MT20 | 2.0 | 4.0 | | |
| 5 | TMVW-t | MT20 | 3.0 | 4.0 | | |
| 6 | BMV1+p | MT20 | 2.0 | 4.0 | | |
| 7 | BMWWW-t | MT20 | 3.0 | 6.0 | 1.50 | 1.50 |
| 8 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 9 | BMV1+p | MT20 | 2.0 | 4.0 | | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 6 | 450 | 0 | 450 | 0 | 0 | 3-0 | 3-0 |
| 9 | 556 | 0 | 556 | 0 | 0 | 5-8 | 5-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 6 | 316 | 221 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 95 / 0 | 0 / 0 |
| 9 | 388 | 285 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 103 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 6, 9

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

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 1-2 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 | 8-3 | -99 / 12 | 0.02 (1) |
| 2-3 | -366 / 0 | -77.4 | -77.4 | 0.05 (1) | 6.25 | 3-7 | 0 / 207 | 0.05 (1) |
| 3-4 | -473 / 0 | -77.4 | -77.4 | 0.17 (1) | 6.25 | 7-4 | -353 / 0 | 0.06 (1) |
| 4-5 | -473 / 0 | -77.4 | -77.4 | 0.17 (1) | 6.25 | 7-5 | 0 / 565 | 0.13 (1) |
| 6-5 | -421 / 0 | 0.0 | 0.0 | 0.06 (1) | 7.81 | 2-8 | 0 / 341 | 0.08 (1) |
| 9-2 | -544 / 0 | 0.0 | 0.0 | 0.06 (1) | 7.81 | | | |
| 9-8 | 0 / 0 | -17.5 | -17.5 | 0.03 (4) | 10.00 | | | |
| 8-7 | 0 / 299 | -17.5 | -17.5 | 0.08 (4) | 10.00 | | | |
| 7-6 | 0 / 0 | -17.5 | -17.5 | 0.06 (4) | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.32")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.32")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.17/1.00 (4-5:1) , BC=0.08/1.00 (7-8:4) , WB=0.13/1.00 (5-7:1) , SSI=0.14/1.00 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (7) (INPUT = 0.90 )
JSI METAL= 0.18 (5) (INPUT = 1.00 )

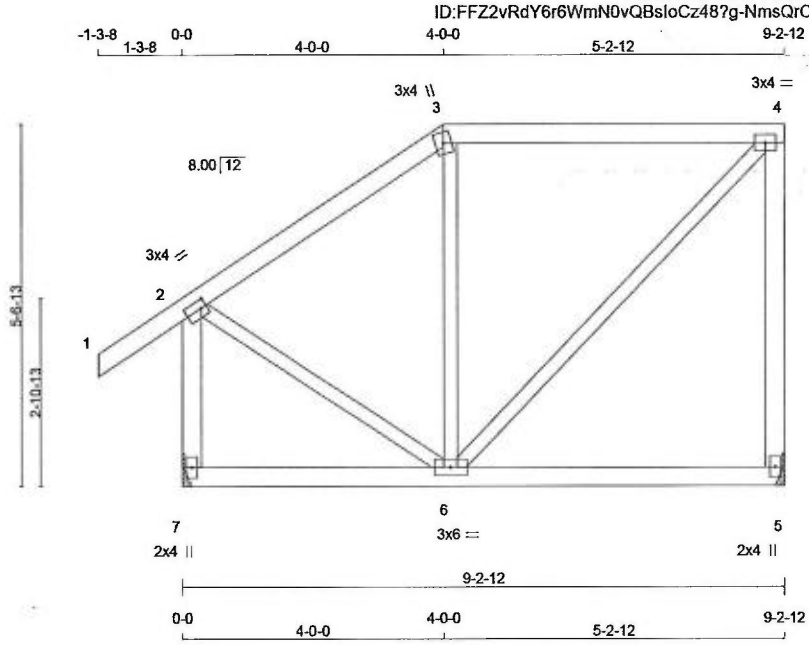
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T25 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 47 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:15:02 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-NmsQrCXb_3KuDHkaahvrgAJT7P1gB2WuLeEoP7ynYed




TOTAL WEIGHT = 46 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 3 - 4 | 2x4 | DRY | No.2 | SPF |
| 5 - 4 | 2x4 | DRY | No.2 | SPF |
| 7 - 2 | 2x4 | DRY | No.2 | SPF |
| 7 - 5 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in Inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 2 | TMVW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.00 |
| 3 | TTW+m | MT20 | 3.0 | 4.0 | | |
| 4 | TMVW-t | MT20 | 3.0 | 4.0 | | |
| 5 | BMV1+p | MT20 | 2.0 | 4.0 | | |
| 6 | BMWWW-t | MT20 | 3.0 | 6.0 | | |
| 7 | BMV1+p | MT20 | 2.0 | 4.0 | | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 5 | 438 | 0 | 438 | 0 | 0 | MECHANICAL | |
| 7 | 544 | 0 | 544 | 0 | 0 | MECHANICAL | |

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 5, 7 TO RESIST THE MAX FACTORED REACTIONS.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 5 | 307 | 215 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 92 / 0 | 0 / 0 |
| 7 | 379 | 279 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 101 / 0 | 0 / 0 |

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

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

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

| CHORDS MEMB. FR-TO | FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|
| 1- 2 | 0 / 29 | -77.4 -77.4 | 0.10 (1) | 10.00 | 6- 3 | -225 / 5 | 0.11 (1) |
| 2- 3 | -239 / 0 | -77.4 -77.4 | 0.21 (1) | 6.25 | 6- 4 | 0 / 278 | 0.06 (1) |
| 3- 4 | -194 / 0 | -77.4 -77.4 | 0.36 (1) | 6.25 | 2- 6 | 0 / 234 | 0.05 (1) |
| 5- 4 | -401 / 0 | 0.0 0.0 | 0.22 (1) | 7.81 | | | |
| 7- 2 | -519 / 0 | 0.0 0.0 | 0.08 (1) | 7.81 | | | |
| 7- 6 | 0 / 0 | -17.5 -17.5 | 0.11 (4) | 10.00 | | | |
| 6- 5 | 0 / 0 | -17.5 -17.5 | 0.11 (4) | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.31")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.31")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.36/1.00 (3-4:1) , BC=0.11/1.00 (6-7:4) , WB=0.11/1.00 (3-6:1) , SSI=0.16/1.00 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.76 (2) (INPUT = 0.90 )
JSI METAL= 0.14 (2) (INPUT = 1.00 )

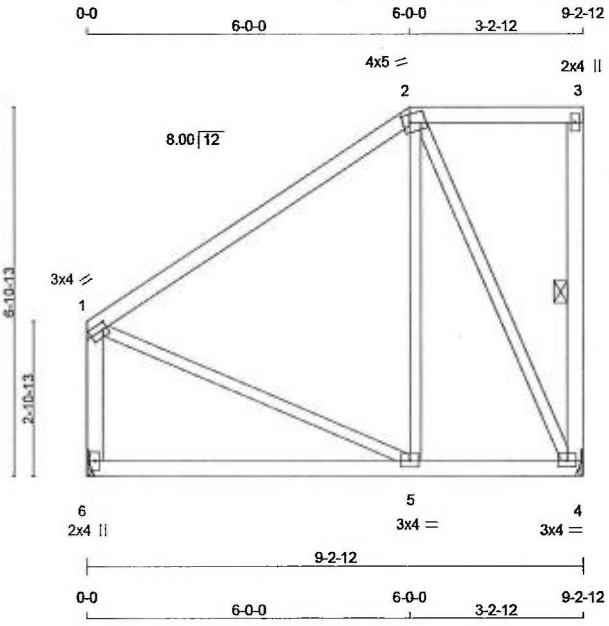
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T26 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 48 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:15:02 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-NmsQrCXb_3KuDHkaahvrgAJTEP00B_tuLeEoP7ynYed




TOTAL WEIGHT = 48 lb

**LUMBER**
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 1 | TMVW-t | MT20 | 3.0 | 4.0 | 1.50 | 1.00 |
| 2 | TTWW-m | MT20 | 4.0 | 5.0 | 1.75 | 1.50 |
| 3 | TMV+p | MT20 | 2.0 | 4.0 | | |
| 4 | BMVW1-t | MT20 | 3.0 | 4.0 | | |
| 5 | BMWW-t | MT20 | 3.0 | 4.0 | | |
| 6 | BMV1+p | MT20 | 2.0 | 4.0 | | |


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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 4 | 438 | 0 | 438 | 0 | 0 | MECHANICAL | |
| 6 | 438 | 0 | 438 | 0 | 0 | MECHANICAL | |

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 4, 6 TO RESIST THE MAX FACTORED REACTIONS.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 4 | 307 | 215 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 92 / 0 | 0 / 0 |
| 6 | 307 | 215 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 92 / 0 | 0 / 0 |

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

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

1 - 1x4 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 3-4. DBS = 20-0-0 . CBF = 16 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)

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 1-2 | -178 / 0 | -77.4 | -77.4 | 0.36 (1) | 6.25 | 5-2 | 0 / 101 | 0.04 (4) |
| 2-3 | 0 / 0 | -77.4 | -77.4 | 0.14 (1) | 10.00 | 2-4 | -338 / 0 | 0.34 (1) |
| 4-3 | -125 / 0 | 0.0 | 0.0 | 0.03 (1) | 6.25 | 1-5 | 0 / 161 | 0.04 (1) |
| 6-1 | -394 / 0 | 0.0 | 0.0 | 0.06 (1) | 7.81 | | | |
| 6-5 | 0 / 0 | -17.5 | -17.5 | 0.14 (4) | 10.00 | | | |
| 5-4 | 0 / 149 | -17.5 | -17.5 | 0.15 (4) | 10.00 | | | |

[M][F]

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.31")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.31")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.36/1.00 (1-2:1) , BC=0.15/1.00 (4-5:4) , WB=0.34/1.00 (2-4:1) , SSI=0.15/1.00 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

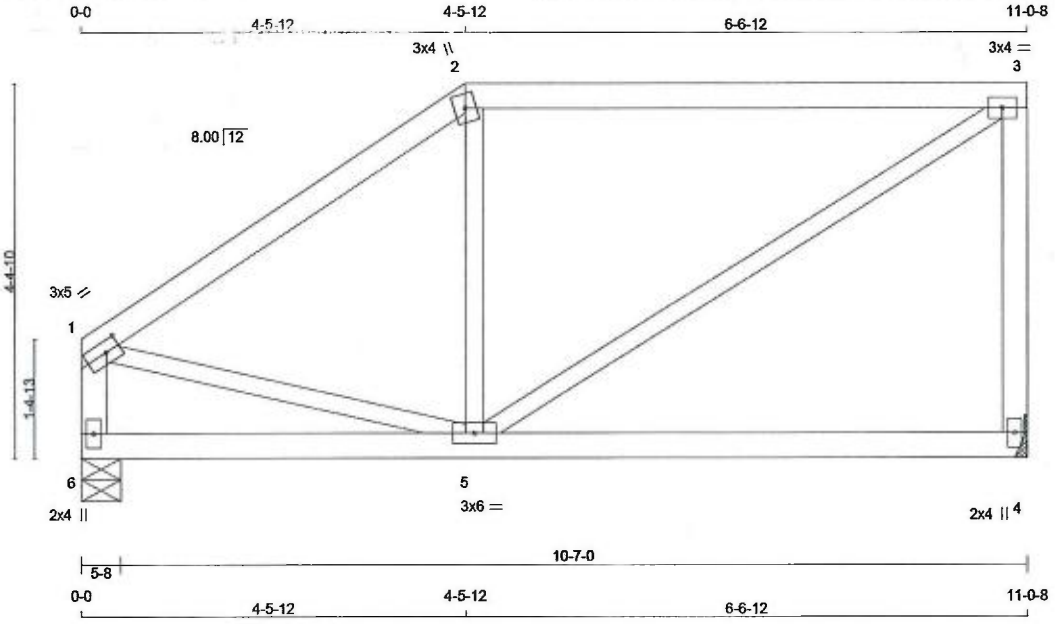
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.65 (2) (INPUT = 0.90 )
JSI METAL= 0.12 (1) (INPUT = 1.00 )

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T28 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 49 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:15:03 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-rzQo2YYDkMTlrRJm8OQ4COsaPpM1wUx1ZlzLxZynYec




Scale = 1:25.7

TOTAL WEIGHT = 44 lb [M]

**LUMBER**
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

**PLATES** (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|---|---|---|---|---|---|---|
| 1 | TMVW-t | MT20 | 3.0 | 5.0 | 1.50 | 2.00 |
| 2 | TTW+m | MT20 | 3.0 | 4.0 | | |
| 3 | TMVW-t | MT20 | 3.0 | 4.0 | | |
| 4 | BMV1+p | MT20 | 2.0 | 4.0 | | |
| 5 | BMWWW-t | MT20 | 3.0 | 6.0 | | |
| 6 | BMV1+p | MT20 | 2.0 | 4.0 | | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| 4 | 524 | 0 | 524 | 0 | 0 | MECHANICAL | |
| 6 | 524 | 0 | 524 | 0 | 0 | 5-8 | 5-8 |

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

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 4 | 368 | 257 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 110 / 0 | 0 / 0 |
| 6 | 368 | 257 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 110 / 0 | 0 / 0 |

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

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

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 1- 2 | -432 / 0 | -77.4 | -77.4 | 0.27 (1) | 6.25 | 5- 2 | -188 / 33 | 0.05 (1) |
| 2- 3 | -354 / 0 | -77.4 | -77.4 | 0.59 (1) | 6.25 | 5- 3 | 0 / 419 | 0.09 (1) |
| 4- 3 | -477 / 0 | 0.0 | 0.0 | 0.14 (1) | 7.81 | 1- 5 | 0 / 368 | 0.08 (1) |
| 6- 1 | -498 / 0 | 0.0 | 0.0 | 0.05 (1) | 7.81 | | | |
| 6- 5 | 0 / 0 | -17.5 | -17.5 | 0.17 (4) | 10.00 | | | |
| 5- 4 | 0 / 0 | -17.5 | -17.5 | 0.17 (4) | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.37")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.37")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.59/1.00 (2-3:1) , BC=0.17/1.00 (5-6:4) , WB=0.09/1.00 (3-5:1) , SSI=0.20/1.00 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.76 (5) (INPUT = 0.90 )
JSI METAL= 0.16 (1) (INPUT = 1.00 )

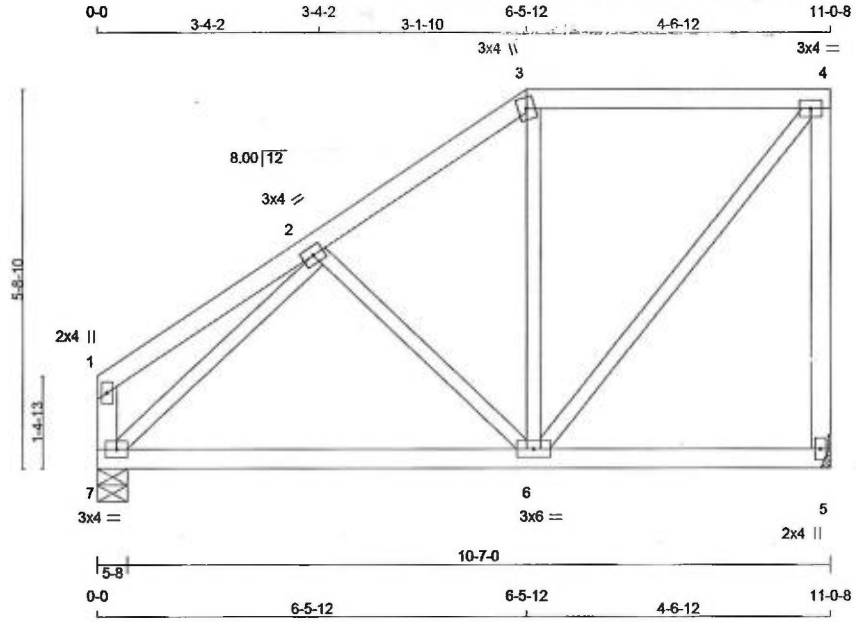
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T29 | 1 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | PAGE 50 OF 56 |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:15:03 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-rzQo2YYDkMTlrRJm8OQ4COsfspLcwTd1ZlzLxZynYe




Scale = 1:33.2

TOTAL WEIGHT = 50 lb

[M][F]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 3 - 4 | 2x4 | DRY | No.2 | SPF |
| 5 - 4 | 2x4 | DRY | No.2 | SPF |
| 7 - 1 | 2x4 | DRY | No.2 | SPF |
| 7 - 5 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table Is In Inches)**

| JT | TYPE | PLATES | W | LEN Y | X |
|---|---|---|---|---|---|
| 1 | TMV+p | MT20 | 2.0 | 4.0 | |
| 2 | TMWW-t | MT20 | 3.0 | 4.0 | |
| 3 | TTW+m | MT20 | 3.0 | 4.0 | |
| 4 | TMVW-t | MT20 | 3.0 | 4.0 | |
| 5 | BMV1+p | MT20 | 2.0 | 4.0 | |
| 6 | BMWWW-t | MT20 | 3.0 | 6.0 | |
| 7 | BMVW1-t | MT20 | 3.0 | 4.0 | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| 5 | 524 | 0 | 524 | 0 | 0 | MECHANICAL | |
| 7 | 524 | 0 | 524 | 0 | 0 | 5-8 | 5-8 |

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 5 TO RESIST THE MAX FACTORED REACTIONS.

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 5 | 368 | 257 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 110 / 0 | 0 / 0 |
| 7 | 368 | 257 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 110 / 0 | 0 / 0 |

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

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

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 | MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|---|
| 1-2 | 0 / 16 | -77.4 | -77.4 | 0.13 (1) | 10.00 | 2-6 | -156 / 0 | 0.06 (1) | |
| 2-3 | -339 / 0 | -77.4 | -77.4 | 0.10 (1) | 6.25 | 6-3 | -94 / 30 | 0.05 (1) | |
| 3-4 | -266 / 0 | -77.4 | -77.4 | 0.21 (1) | 6.25 | 6-4 | 0 / 420 | 0.09 (1) | |
| 5-4 | -500 / 0 | 0.0 | 0.0 | 0.30 (1) | 7.81 | 7-2 | -538 / 0 | 0.18 (1) | |
| 7-1 | -96 / 0 | 0.0 | 0.0 | 0.01 (1) | 7.81 | | | | |
| 7-6 | 0 / 380 | -17.5 | -17.5 | 0.19 (4) | 10.00 | | | | |
| 6-5 | 0 / 0 | -17.5 | -17.5 | 0.17 (4) | 10.00 | | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.37")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.37")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.30/1.00 (4-5:1) , BC=0.19/1.00 (6-7:4) , WB=0.18/1.00 (2-7:1) , SSI=0.14/1.00 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (6) (INPUT = 0.90 )
JSI METAL= 0.19 (2) (INPUT = 1.00 )

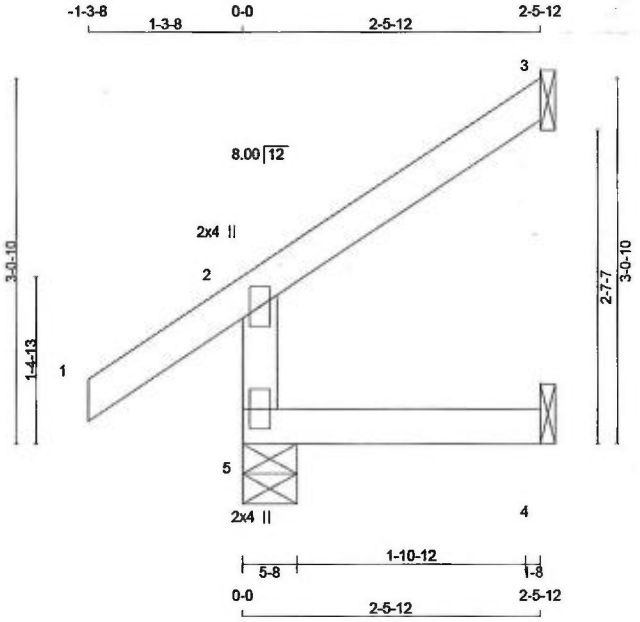
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T30 | 2 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 51 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:15:03 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-rzQo2YYDkMTlrRJm8OQ4COsixpODwVP1ZlzLxZynYe




TOTAL WEIGHT = 2 X 9 = 19 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 5 - 2 | 2x4 | DRY | No.2 | SPF |
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 5 - 4 | 2x4 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

| JT | TYPE | PLATES | W | LEN Y | X |
|---|---|---|---|---|---|
| 2 | TMV+p | MT20 | 2.0 | 4.0 | |
| 5 | BMV1+p | MT20 | 2.0 | 4.0 | |

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 5 | 250 | 0 | 250 | 0 | 0 | 5-8 | 5-8 |
| 3 | 72 | 0 | 72 | 0 | 0 | 1-8 | 1-8 |
| 4 | 19 | 0 | 22 | 0 | 0 | 1-8 | 1-8 |

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

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 5 | 173 | 136 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 37 / 0 | 0 / 0 |
| 3 | 49 | 43 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 6 / 0 | 0 / 0 |
| 4 | 15 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 15 / 0 | 0 / 0 |

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

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

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

**LOADING**
TOTAL LOAD CASES: (5)

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 5- 2 | -226 / 0 | 0.0 | 0.0 | 0.01 (4) | 7.81 | | | |
| 1- 2 | 0 / 29 | -77.4 | -77.4 | 0.10 (1) | 10.00 | | | |
| 2- 3 | -13 / 0 | -77.4 | -77.4 | 0.08 (1) | 6.25 | | | |
| 5- 4 | 0 / 0 | -17.5 | -17.5 | 0.03 (4) | 10.00 | | | |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

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

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

CSI: TC=0.10/1.00 (1-2:1) , BC=0.03/1.00 (4-5:4) , WB=0.00/1.00 (n/a:0) , SSI=0.08/1.00 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.15 (2) (INPUT = 0.90 )
JSI METAL= 0.06 (2) (INPUT = 1.00 )

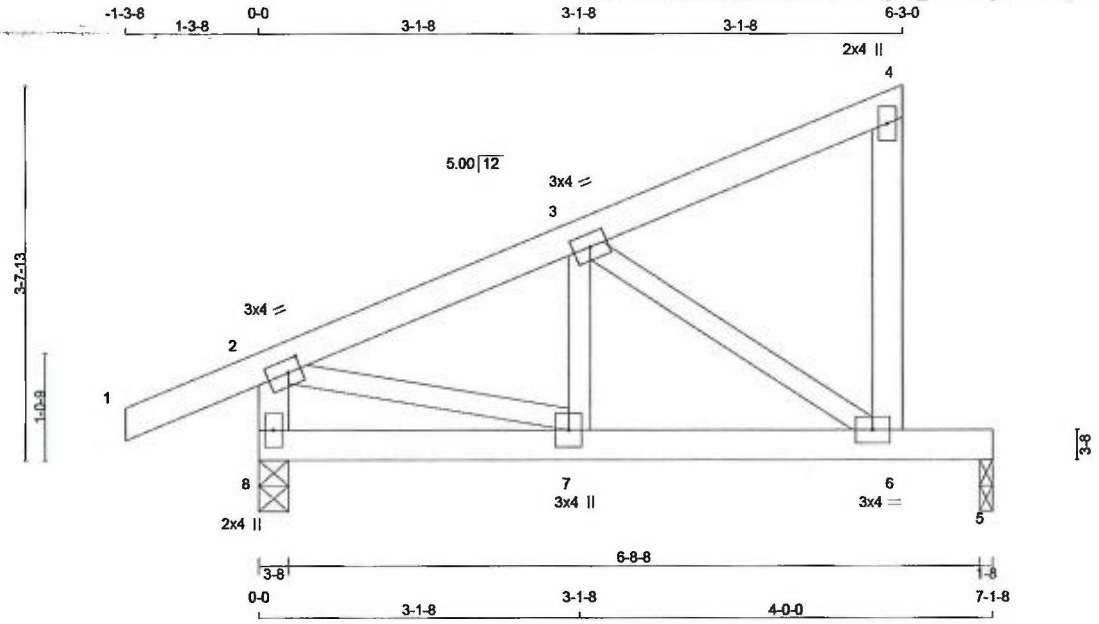
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 | DRWG NO. |
|---|---|---|---|---|---|---|
| NE0818-083 | T31 | 5 | 1 | TRUSS DESC. | | **PAGE 52 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:15:04 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsIoCz48?g-J9_AFuZrVgbcTbuzi6yJlbOsmDf_fx6AoyjuU0ynYeb




TOTAL WEIGHT = 5 X 28 = 140 lb

[M][F]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 4 | 2x4 | DRY | No.2 | SPF |
| 6 - 4 | 2x4 | DRY | No.2 | SPF |
| 8 - 2 | 2x4 | DRY | No.2 | SPF |
| 8 - 5 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES** (table is in inches)

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

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

**BEARINGS**

| | FACTORED GROSS REACTION | | MAXIMUM FACTORED GROSS REACTION | | | INPUT BRG | REQRD BRG |
|---|---|---|---|---|---|---|---|
| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
| 8 | 438 | 0 | 438 | 0 | 0 | 3-8 | 3-8 |
| 5 | 274 | 0 | 274 | 0 | 0 | 1-8 | 1-8 |

**UNFACTORED REACTIONS**

| | 1ST LCASE | MAX./MIN. COMPONENT REACTIONS | | | | | |
|---|---|---|---|---|---|---|---|
| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| 8 | 305 | 226 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 79 / 0 | 0 / 0 |
| 5 | 194 | 128 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 66 / 0 | 0 / 0 |

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

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

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

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

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 1-2 | 0 / 20 | -77.4 | -77.4 | 0.10 (1) | 10.00 | 7-3 | 0 / 87 | 0.03 (4) |
| 2-3 | -377 / 0 | -77.4 | -77.4 | 0.09 (1) | 6.25 | 3-6 | -428 / 0 | 0.10 (1) |
| 3-4 | -10 / 0 | -77.4 | -77.4 | 0.09 (1) | 6.25 | 2-7 | 0 / 368 | 0.08 (1) |
| 6-4 | -94 / 0 | 0.0 | 0.0 | 0.02 (1) | 7.81 | | | |
| 8-2 | -432 / 0 | 0.0 | 0.0 | 0.04 (1) | 7.81 | | | |
| 8-7 | 0 / 0 | -17.5 | -17.5 | 0.09 (1) | 10.00 | | | |
| 7-6 | 0 / 358 | -17.5 | -17.5 | 0.38 (1) | 10.00 | | | |
| 6-5 | 0 / 0 | -17.5 | -17.5 | 0.32 (1) | 10.00 | | | |

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.24")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.24")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.10/1.00 (1-2:1) , BC=0.38/1.00 (6-7:1) , WB=0.10/1.00 (3-6:1) , SSI=0.21/1.00 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.79 (7) (INPUT = 0.90 )
JSI METAL= 0.17 (2) (INPUT = 1.00 )

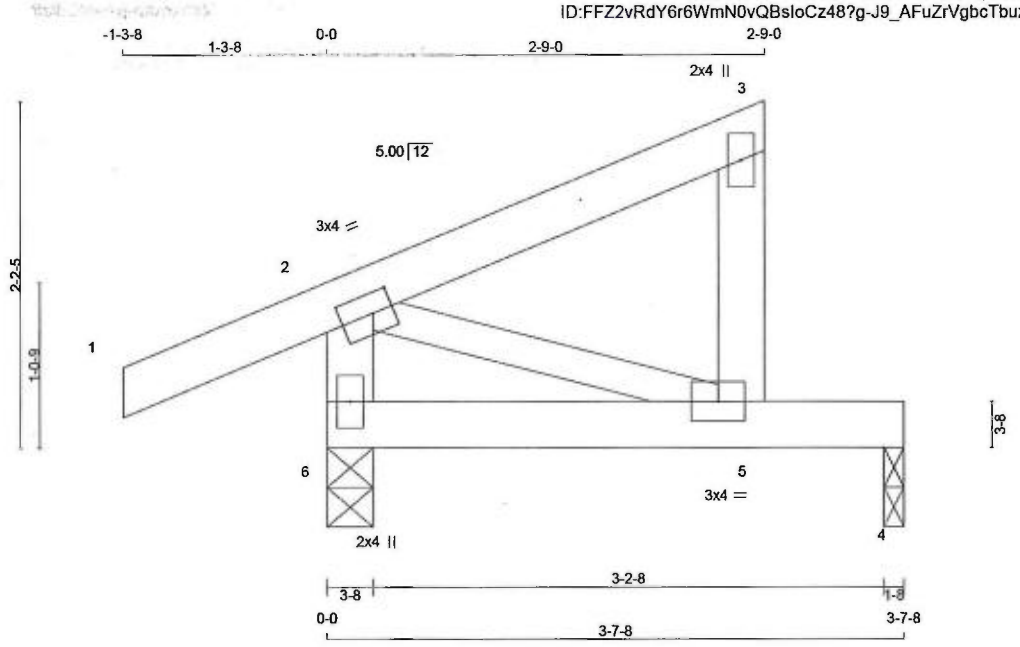
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

KOTT

| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
|---|---|---|---|---|---|
| NE0818-083 | T32 | 4 | 1 | GREENPARK-MINNISALE HOMES-GRANDBROOKE 12 EL 2 TRUSS DESC. | **PAGE 53 OF 56** |

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 17:15:04 2018 Page 1
ID:FFZ2vRdY6r6WmN0vQBsloCz48?g-J9_AFuZrVgbcTbuzi6yJlbOslDjvfyfAoyjuU0ynYeb




TOTAL WEIGHT = 4 X 14 = 54 lb [M]

**LUMBER**
N. L. G. A. RULES

| CHORDS | SIZE | | LUMBER | DESCR. |
|---|---|---|---|---|
| 1 - 3 | 2x4 | DRY | No.2 | SPF |
| 5 - 3 | 2x4 | DRY | No.2 | SPF |
| 6 - 2 | 2x4 | DRY | No.2 | SPF |
| 6 - 4 | 2x4 | DRY | No.2 | SPF |
| ALL WEBS | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

**PLATES (table Is In Inches)**

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

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

**BEARINGS**

| JT | FACTORED GROSS REACTION VERT | HORZ | MAXIMUM FACTORED GROSS REACTION DOWN | HORZ | UPLIFT | INPUT BRG IN-SX | REQRD BRG IN-SX |
|---|---|---|---|---|---|---|---|
| 6 | 268 | 0 | 268 | 0 | 0 | 3-8 | 3-8 |
| 4 | 112 | 0 | 112 | 0 | 0 | 1-8 | 1-8 |

**UNFACTORED REACTIONS**

| JT | 1ST LCASE COMBINED | MAX./MIN. COMPONENT REACTIONS SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|---|---|---|---|---|---|---|---|
| 6 | 186 | 142 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 44 / 0 | 0 / 0 |
| 4 | 80 | 49 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 32 / 0 | 0 / 0 |

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

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

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

**LOADING**
TOTAL LOAD CASES: (5)

| CHORDS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) FROM | TO | LC1 MAX CSI (LC) | MAX. UNBRAC LENGTH | WEBS MEMB. FR-TO | MAX. FACTORED FORCE (LBS) | MAX CSI (LC) |
|---|---|---|---|---|---|---|---|---|
| 1- 2 | 0 / 20 | -77.4 | -77.4 | 0.10 (1) | 10.00 | 2- 5 | 0 / 0 | 0.00 (1) |
| 2- 3 | 0 / 0 | -77.4 | -77.4 | 0.10 (1) | 10.00 | | | |
| 5- 3 | -106 / 0 | 0.0 | 0.0 | 0.01 (1) | 7.81 | | | |
| 6- 2 | -211 / 0 | 0.0 | 0.0 | 0.02 (1) | 7.81 | | | |
| 6- 5 | 0 / 0 | -17.5 | -17.5 | 0.12 (1) | 10.00 | | | |
| 5- 4 | 0 / 0 | -17.5 | -17.5 | 0.12 (1) | 10.00 | | | |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.10/1.00 (2-3:1) , BC=0.12/1.00 (5-6:1) , WB=0.00/1.00 (2-5:1) , SSI=0.09/1.00 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.21 (2) (INPUT = 0.90 )
JSI METAL= 0.04 (6) (INPUT = 1.00 )

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Aug 15, 2018

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

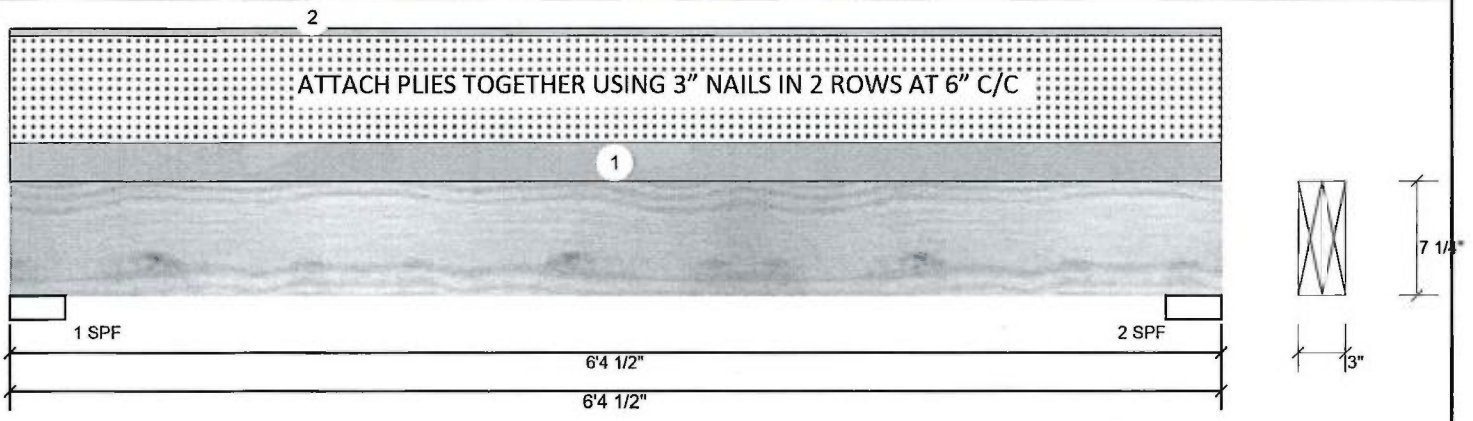
KOTT

**EWP Studio**
Simpson Strong-Tie®
Component Solutions™

Client: NE0818-083
Project: GREENPARK-MINNISALE HOMES-
Address: GRANDBROOKE 12 EL 2

Date: 6/21/2018
Designer: B B
Job Name: B1
Project #:

# B1 S-P-F #2 2.000" X 8.000" 2-Ply - PASSED




## Member Information

| | | | |
|---|---|---|---|
| Type: | Girder | Application: | Roof (Residential) |
| Plies: | 2 | Slope: | 0/12 |
| Moisture Condition: | Dry | Design Method: | LSD |
| Deflection LL: | 480 | Building Code: | NBCC 2010 / OBC 2012 |
| Deflection TL: | 240 | Load Sharing: | No |
| Importance: | Normal | Deck: | Not Checked |
| | | Vibration: | Not Checked |

## Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Live | Dead | Snow | Wind |
|---|---|---|---|---|
| 1 | 0 | 198 | 456 | 0 |
| 2 | 0 | 198 | 456 | 0 |

## Bearings and Factored Reactions

| Bearing | Length | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---|---|---|---|---|---|---|
| 1 - SPF | 3.500" | 14% | 247 / 684 | 931 | L | 1.25D+1.5S |
| 2 - SPF | 3.500" | 14% | 247 / 684 | 931 | L | 1.25D+1.5S |

## Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---|---|---|---|---|---|---|
| Moment | 1278 ft-lb | 3'2 1/4" | 4047 ft-lb | 0.316 (32%) | 1.25D+1.5S | L |
| Unbraced | 1278 ft-lb | 3'2 1/4" | 4020 ft-lb | 0.318 (32%) | 1.25D+1.5S | L |
| Shear | 687 lb | 5'6 1/2" | 3406 lb | 0.202 (20%) | 1.25D+1.5S | L |
| LL Defl inch | 0.030 (L/2363) | 3'2 1/4" | 0.148 (L/480) | 0.200 (20%) | S | L |
| TL Defl inch | 0.043 (L/1648) | 3'2 1/4" | 0.296 (L/240) | 0.150 (15%) | D+S | L |


## Design Notes

1 Girders are designed to be supported on the bottom edge only.
2 Multiple plies must be fastened together as per manufacturer's details.
3 Top loads must be supported equally by all plies.
4 Top braced at bearings.
5 Bottom braced at bearings.
6 Lateral slenderness ratio based on full section width.

| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Uniform | | | Top | 52 PLF | 0 PLF | 143 PLF | 0 PLF | |
| 2 | Uniform | | | Top | 10 PLF | 0 PLF | 0 PLF | 0 PLF | |

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

Manufacturer Info

KOTT

Kott Group
14 Anderson Blvd., On
L4A7X4
905-642-4400

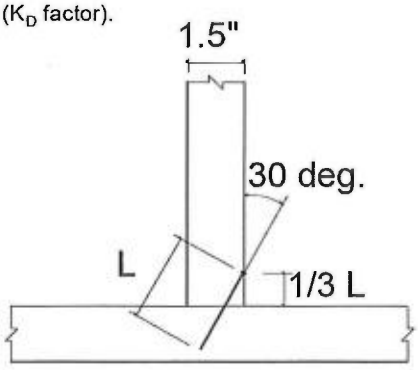
# BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B37579H1

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

**NOTES:**

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


TOE-NAIL INSTALLATION

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

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

PEO
Certificate No. 10889485

LICENSED PROFESSIONAL ENGINEER
C. Cordogiannis
90553736
PROVINCE OF ONTARIO

April 26, 2017

## BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING B37579H2

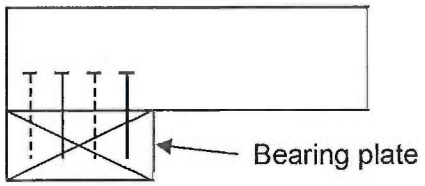
| NAIL TYPE | LENGTH (IN) | DIAMETER (IN) | NAIL WITHDRAWAL CAPACITY (LB) | |
|---|---|---|---|---|
| | | | S-P-F | D. FIR |
| COMMON WIRE | 3.00 | 0.144 | 30 | 42 |
| | 3.25 | 0.144 | 32 | 45 |
| | 3.50 | 0.160 | 38 | 52 |

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

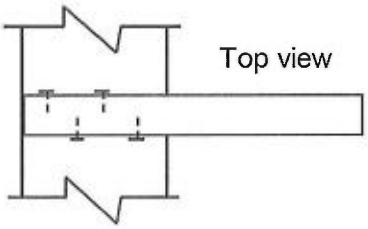
NOTES:

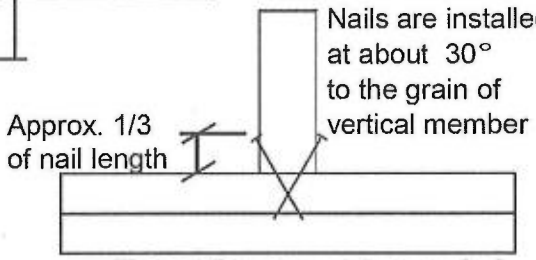
1. Truss chord, rafter, or ceiling members may be anchored to bearing plate by toe-nails, provided that the actual factored uplift force due to **wind or earthquake** load does not exceed the withdrawal capacities in the table. Hangers (specified by others) are required for uplift forces that are higher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

Toe-nailing on 2x6 Bearing Plate



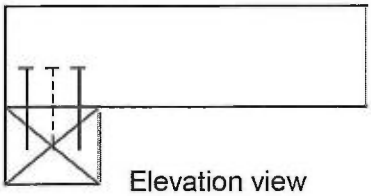

Elevation view



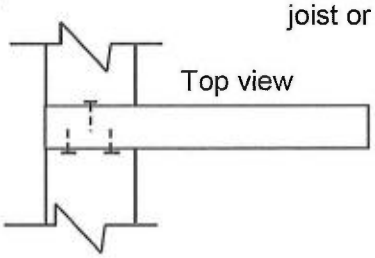




Toe-nailing viewed from end of joist or truss

Toe-nailing on 2x4 Bearing Plate



Elevation view




PEO
Certificate No. 10889485


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

April 26, 2017