

**RECEIVED** TOWN OF MILTON MAR 29, 2017 JUNIPER 7 **BUILDING DIVISION** 



TOWN OF MILTON
PLANNING AND DEVELOPMENT
JUNIPER 7 MODEL

**BUILDING: REVIEWED** 

SCOTT SHERRIFFS

MAR 30, 2017

PLANS EXAMINER

Neither the issuance of a permit nor carrying out of inspections by the Town of Milton relives the owner from full responsibility for compliance with the provisions of the Ontario Building Code Act and the Ontario Building Code, both as amended, as well as other applicable statutes and regulations of the Province on Ontario, By-laws of the Region of Halton and Town of Milton



# CONVENTIONAL FRAMING BY OTHERS

ALL CONVENTIONAL FRAMING TO CONFORM WITH PART 9 OF THE 0 B.C
ROOF RAFTERS THAT CROSS MEET OVER TRUSSES
TO BE 2x4 S.P.F. @ 24\*O/IC 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\*.

# HANGER LEGEND:

▼ LUS24 → HGUS26

LJS26DS HGUS26-2

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

Model: JUNIPER 7 EL 1 Customer: GREENPARK Project: LECCO RIDGE

Location: MILTON

Date: 10/25/2016 Drawn by: BB

# <u>ENGINEERING NOTE PAGE (ENP-1)</u> PLEASE READ PRIOR TO INSTALLATION

## 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.

BRACING IS REQUIRED FOR WEBS BUT CAN NOT BE PROVIDED SUBSTITUTE EACH WITH ONE SPF #2 2" X 4" T-BRACE COVERING 90% OF WEB LENGTH AND FASTENED TO EDGE OF WEB USING 3 1/4" SPIRAL NAILS @ 6" C/C

JOB NAME TRUSS NAME QUANTITY PLY JOB DESC.

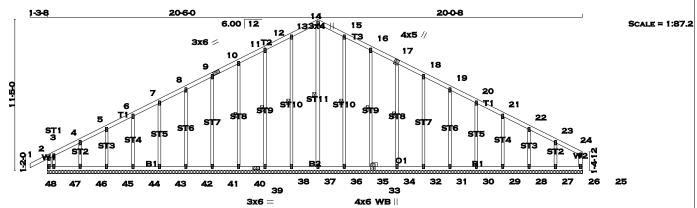
PT0317-168 GAB01 1 1 TRUSS DESC

LECCO RIDGE-JUNIPER 7 EL 1

Page 2 of 29 ENG JOB: PT0317-168

KOTT, Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:44 2017 Page 1 ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-uMBnltuaYu\_kd\_onoZBmuGMGaK8Z2YJsEdfUmfzY6



-3-8 40-6-8

TOTAL WEIGHT = 201 lb

LUMBER				
N. L. G. A. R	ULES			
CHORDS	SIZE		LUMBER	DESCR.
48 - 2	2x4	DRY	No.2	SPF
1 - 10	2x4	DRY	No.2	SPF
10 - 14	2x4	DRY	No.2	SPF
14 - 17	2x4	DRY	No.2	SPF
17 - 24	2x4	DRY	No.2	SPF
25 - 24	2x4	DRY	No.2	SPF
48 - 39	2x4	DRY	No.2	SPF
39 - 33	2x4	DRY	No.2	SPF
33 - 25	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT		DD\/	NI O	005
36 - 14	2x4	DRY	No.2	SPF
ALL GABLE	WERS			
ALL GADLL	2x3	DRY	No.2	SPF
EXCEPT	2,0	DICI	140.2	SFF
ST2	2x4	DRY	No.2	SPF
012	2.44	DICI	140.2	SFF

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table	PLATES (table is in inches)								
JT TYPE	PLATES	W	LEN	Y X					
2 TMV+p	MT20	2.0	4.0						
3, 4, 5, 6, 7, 8, 9	), 11, 12, 13, <sup>1</sup>	15, 16,	18, 19	9, 20, 21, 22, 23					
3 TMW+w	MT20	2.0	4.0						
10 TS-t	MT20	3.0	6.0						
14 TTW+p	MT20	3.0	4.0						
17 TSW+I	MT20	4.0	5.0	Edge 1.50					
24 TMV+p	MT20	2.0	4.0						
25 BMV1+p	MT20	2.0	4.0						
26, 27, 28, 29, 3	0, 31, 32, 35,	36, 37	7, 38, 4	40, 41, 42, 43, 44,					
45, 46, 47									
26 BMW1+w	MT20	2.0	4.0						
33									
34									
34 BBW1+l	MT20	4.0	6.0	1.50					
39 BS-t	MT20	3.0	6.0						
48 BMV1+p	MT20	2.0	4.0						

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

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.



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

40-6-8

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

PROVIDE ANCHORAGE AT BEARING JOINT 47 FOR 150 LBS FACTORED UPLIFT BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

#### RACING

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 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 14-36, 13-37, 12-38, 11-40, 15-35, 16-34, 17-32. DBS = 20-0-0 . CBF = 20 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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)

0/5 0/4

0/4

0/3

0/2

0/2

0/3

0/4 0/4 0/3

41-40

40-39 39-38

38-37 37-36

36-35 35-34 34-33

33-32 32-31 -17.5 -17.5 -17.5

-17.5 -17.5

-17.5 -17.5

-17.5

-17.5 0.01 (4) -17.5 0.01 (4)

-17.5 0.01 (4)

-17.5 0.01 (4) -17.5 0.01 (4)

-17.5 0.01 (4)

-17.5 0.01 (4)

-17.5 0.01 (4)

-17.5 0.01 (4) -17.5 0.01 (4) 10.00

10.00

10.00

10.00

TOTAL L	OAD CASES:	(4)						
	RDS	FACTO				WE		
	FACTORED	FACTO					MAX. FACTO	
MEMB.	FORCE	VERT. LO				MEMB.	FORCE	MAX
	(LBS)	(PL		USI (LC)	UNBRAC		(LBS)	CSI (LC)
FR-TO		FROM			LENGTH			
48- 2	-240 / 0	0.0		0.03 (1)			-164 / 0	0.11 (1)
1- 2	0 / 23	-77.3		0.10 (1)		37-13	-153 / 0	0.12 (1)
2-3	-70 / 0	-77.3		0.09 (1)		38-12	-155 / 0	0.09(1)
3- 4	-21 / 0	-77.3		0.04 (1)	6.25	40-11	-154 / 0	0.07 (1)
4- 5	-18 / 0			0.04 (1)		41- 9	-154 / 0	0.15 (1)
5-6	-14 / 0			0.04 (1)		42-8	-154 / 0	0.10 (1)
6- 7	-11 / 0			0.04(1)		43- 7	-154 / 0	0.07 (1)
7-8	-9/0	-77.3		0.04 (1)		44- 6	-154 / 0	0.04 (1)
8- 9	-7 / 0	-77.3		0.04 (1)		45- 5	-152 / 0	0.03 (1)
9-10	-6/0	-77.3		0.04 (1)		46- 4	-156 / 0	0.02 (1)
10-11	-6 / 0	-77.3		0.04(1)	10.00	47- 3	0 / 17	0.00(1)
11-12	-4 / 0	-77.3		0.04(1)	10.00	35-15	-154 / 0	0.12 (1)
12-13	-3 / 0	-77.3		0.04(1)			-148 / 0	0.09 (1)
13-14	-2/0	-77.3		0.04(1)		32-17	-155 / 0	0.07 (1)
14-15	-2/0	-77.3		0.04(1)		31-18	-161 / 0	0.16 (1)
15-16	-3 / 0	-77.3		0.03(1)		30-19	-152 / 0	0.10 (1)
16-17	-4 / 0	-77.3	-77.3	0.04(1)	10.00	29-20	-154 / 0	0.07(1)
17-18	-3/0	-77.3	-77.3	0.04(1)	10.00	28-21	-154 / 0	0.04(1)
18-19	-4 / 0	-77.3	-77.3	0.04(1)	10.00	27-22	-152 / 0	0.03(1)
19-20	-7 / 0	-77.3		0.04(1)	10.00	26-23	-158 / 0	0.02(1)
20-21	-9/0	-77.3	-77.3	0.04(1)	10.00			
21-22	-11 / 0	-77.3	-77.3	0.04(1)	6.25			
22-23	-15 / 0	-77.3		0.04(1)	6.25			
23-24	-18 / 0	-77.3	-77.3	0.04(1)	6.25			
25-24	-80 / 0	0.0	0.0	0.02 (1)	7.81			
48-47	0 / 20	-17.5	-17.5	0.03 (1)	10.00			
47-46	0 / 21	-17.5		0.02 (4)				
46-45	0/16	-17.5		0.02 (4)				
45-44	0/12	-17.5		0.01 (4)				
44-43	0/10	-17.5		0.01 (4)				
43-42	0/8	-17.5		0.01 (4)				
42-41	0/6	-17.5		0.01 (4)	10.00			
44 40	0/5	47.5		0.01 (1)				

DESIGN CRITERIA

SPECIFIED LOADS:

### SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014

- CSA 086-09 - TPIC 2011

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

CSI: TC=0.10 (1-2:1) , BC=0.03 (47-48:1) , WB=0.16 (18-31:1) , SSI=0.09 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

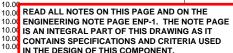
NAIL VALUES

PLATE GRIP(DRY) SHEAR (PSI) (PLI) (PLI) (PLI) (MAX MIN MAX MIN

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.71 (14) (INPUT = 0.90 ) JSI METAL= 0.07 (14) (INPUT = 1.00 )





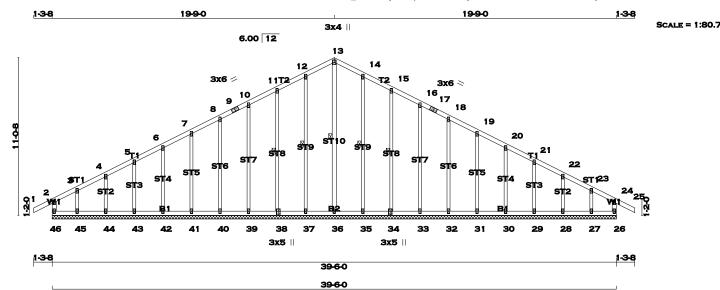
JOB NAME TRUSS NAME QUANTITY JOB DESC DRWG NO. TRUSS DESC PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1 ENG JOB: PT0317-168 **GAB02** 

KOTT . Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:45 2017 Page ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-MYIAzDuDJC6bE8NzMHj?RTvRKkUzn?30THO1J5zY6le

Page 3 of 29

TOTAL WEIGHT = 193 lb



LUMBER				
N. L. G. A. R	ULES			
CHORDS	SIZE		LUMBER	DESCR.
46 - 2	2x4	DRY	No.2	SPF
1 - 9	2x4	DRY	No.2	SPF
9 - 13	2x4	DRY	No.2	SPF
13 - 17	2x4	DRY	No.2	SPF
17 - 25	2x4	DRY	No.2	SPF
26 - 24	2x4	DRY	No.2	SPF
46 - 38	2x4	DRY	No.2	SPF
38 - 34	2x4	DRY	No.2	SPF
34 - 26	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
36 - 13	2x4	DRY	No.2	SPF
ALL GABLE	WEBS			
	2x3	DRY	No.2	SPF
EXCEPT ST2	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

JT TYPE
3, 4, 5, 6, 7, 8, 10, 11, 12, 14, 15, 16, 18, 19, 20, 21, 22, 23 3 TMW+w MT20 2.0 4.0 9 TS-t MT20 3.0 6.0
3 TMW+w MT20 2.0 4.0 9 TS-t MT20 3.0 6.0
9 TS-t MT20 3.0 6.0
13 TTW+p MT20 3.0 4.0
17 TS-t MT20 3.0 6.0
24 TMV+p MT20 2.0 4.0
26 BMV1+p MT20 2.0 4.0
27, 28, 29, 30, 31, 32, 33, 35, 36, 37, 39, 40, 41, 42, 43, 44,
45
27 BMW1+w MT20 2.0 4.0
34 BSW1+l MT20 3.0 5.0 3.00 1.50
38 BSW1+l MT20 3.0 5.0 3.00 1.50
46 BMV1+p MT20 2.0 4.0

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.



THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE

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

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 13-36, 12-37, 11-38, 14-35, 15-34. DBS

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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

40-39 39-38

38-37

37-36

36-35

35-34 34-33

33-32 32-31

31-30 30-29 29-28

-18 / 0 -19 / 0

-22 / 0

-23 / 0

-23 / 0

-22 / 0 -19 / 0

-18 / 0

-16/0

-15 / 0

-12 / 0 -10 / 0

LOADING TOTAL LOAD CASES: (4)

		,						
сно	RDS					WE	BS	
	FACTORED	FACTOR	RED				MAX. FACTO	RED
MEMB.	FORCE	VERT. LO		1 MAX	MAX.	MEMB.		MAX
	(LBS)	(PL			UNBRAC		(LBS)	CSI (LC)
FR-TO	( - /	FROM		( -,	LENGTH		( -/	( -,
46- 2	-193 / 0	0.0	0.0	0.02(1)	7.81	36-13	-186 / 0	0.12(1)
1- 2	0 / 23	-77.3	-77.3	0.10(1)	10.00	37-12	-155 / 0	0.11 (1)
2- 3	-9/0	-77.3	-77.3	0.07(1)	10.00	38-11	-154 / 0	0.08(1)
3- 4	0/10	-77.3	-77.3	0.04(1)	10.00	39-10	-154 / 0	0.19(1)
4- 5	0 / 10	-77.3		0.04(1)		40-8	-154 / 0	0.13(1)
5- 6	0 / 14	-77.3		0.04(1)			-154 / 0	0.09(1)
6- 7	0 / 16	-77.3		0.04 (1)			-154 / 0	0.06 (1)
7- 8	0 / 18	-77.3		0.04 (1)			-151 / 0	0.04 (1)
8- 9	0/20	-77.3		0.04 (1)		44- 4	-162 / 0	0.03 (1)
9-10	0/20	-77.3		0.04 (1)	10.00	45- 3	-109 / 0	0.02 (1)
10-11	0 / 21	-77.3		0.04 (1)	10.00	35-14	-155 / 0	0.11 (1)
11-12	0 / 24	-77.3		0.04 (1)	10.00	34-15	-154 / 0	0.08 (1)
12-13	0 / 26	-77.3		0.04 (1)	10.00	33-16		0.19 (1)
13-14	0/26	-77.3		0.04 (1)	10.00	32-18		0.13 (1)
14-15	0/24	-77.3		0.04 (1)				0.09 (1)
15-16	0 / 21	-77.3		0.04 (1)		30-20	-154 / 0	0.06 (1)
16-17	0 / 20	-77.3		0.04 (1)		29-21	-151 / 0	0.04 (1)
17-18	0 / 20	-77.3		0.04 (1)		28-22		0.03 (1)
18-19	0 / 18	-77.3		0.04 (1)		27-23	-109 / 0	0.02 (1)
19-20	0 / 16	-77.3		0.04 (1)	10.00			
20-21	0 / 14	-77.3		0.04 (1)	10.00			
21-22	0 / 10	-77.3		0.04 (1)	10.00			
22-23	0 / 10	-77.3		0.04 (1) 0.07 (1)				
23-24 24-25	-9 / 0 0 / 23	-77.3 -77.3		0.07 (1)				
26-24	-193 / 0	0.0		0.10 (1)				
20-24	-19370	0.0	0.0	0.02 (1)	7.01			
46-45	-2/1	-17.5	-17 5	0.02 (1)	10.00			
45-44	-6/0	-17.5		0.02 (1)	10.00			
44-43	-10 / 0	-17.5		0.01 (4)	10.00			
43-42	-12/0	-17.5		0.01 (4)				
42-41	-15 / 0	-17.5		0.01 (4)				
41-40	-16 / 0	-17.5		0.01 (4)	6.25			
40-39	-18 / 0			0.01 (4)				

-17.5 0.01 (4)

-17.5 0.01 (4) -17.5 0.01 (4)

-17.5 0.01 (4) -17.5 0.01 (4)

-17.5 0.01 (4)

-17.5 0.01 (4)

-17.5 0.01 (4) -17.5 0.01 (4)

-17.5 -17.5 0.01 (4) 0.01 (4)

-17.5 -17.5 -17.5 -17.5 -17.5

-17.5 -17.5

-17.5 -17.5

-17.5 -17.5 -17.5

6.25 6.25

6 25

6.25 6.25

6.25

**DESIGN CRITERIA** 

SPECIFIED LOADS: TOP CH. LL = DL = LL = DL = 3.0 PSF 7.0 **PSF** 

#### 24.0 IN. C/C

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

33.3

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014

- CSA 086-09 TPIC 2011

TOTAL LOAD

DESIGN ASSUMPTIONS

OVERHANG NOT TO BE ALTERED OR CUT

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

CSI: TC=0.10 (1-2:1) , BC=0.02 (45-46:1) , WB=0.19 (10-39:1) , SSI=0.07 (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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN 618 354 1667 822 2284 1656

TRUSS MANUFACTURING PLANT.

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.71 (13) (INPUT = 0.90 ) JSI METAL= 0.08 (13) (INPUT = 1.00 )

RECEIVED TOWN OF MILTON MAR 29, 2017 JUNIPER 7 **BUILDING DIVISION** 





JOB NAME TRUSS NAME QUANTITY PLY JOB DESC. DRWG NO. Page 4 of 29 TRUSS DESC PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1 ENG JOB: PT0317-168 GAB03 Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:46 2017 Page KOTT . Stouffville, ON, CGC ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-qkJYAZvr4WERsIx9w\_EE\_hRc98p0WUv9ix8brXzY6ld 1-3-8 SCALE = 1:20.9 2x4 || 5 2x4 || 4.00 12 4 2x4 || 3 W ST 9 2x4 || **4**x**4** = 2x4 | 2x4 || 1-3-8 695 TOTAL WEIGHT = 26 lb LUMBER N. L. G. A. RULES CHORDS SIZE DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER **DESIGN CRITERIA** LUMBER DESCR SIZE **BEARINGS** 5 2x4 DRY SPF SPF SPECIFIED LOADS: LL = DL = LL = DL = AD = No.2 THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS. CH. 3.0 2x6 DRY No.2 SPF PSF THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE 2x3 DRY No.2 SPF 7.0 PSF BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) TOTAL LOAD 33.3 PSF DRY SPF No.2 2x3

ALL WEBS ALL GABLE WEBS DRY: SEASONED LUMBER

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)
JT TYPE PLATES
2 TMB1-I MT20 W LEN Y 4.0 4.0 4.0 4.0 4.0 4.0 4.0 2.0 2.0 2.0 TMW+w MT20 TMW+w TMV+p MT20 BMV1+p MT20 2.0 BMW1+w MT20 BMW1+w 20 40

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

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

LOADING TOTAL LOAD CASES: (4)

CHC	RDS					W E	BS	
MAX.	FACTORED	FACTO	RED				MAX. FACTO	RED
MEMB.	FORCE	VERT. LO	AD LC	1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PL	.F) (	CSI (LC)	UNBRA(	2	(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
1- 2	0/8	-77.3	-77.3	0.10(1)	10.00	7- 4	-166 / 0	0.02(1)
2-10	-3 / 27	-77.3	-77.3	0.03(1)	10.00	8-3	-178 / 0	0.03(1)
10- 3	-10 / 0	-77.3	-77.3	0.05 (1)	10.00	9-10	-150 / 0	0.00(1)
3- 4	-6 / 0	-77.3	-77.3	0.05 (1)	10.00			
4- 5	-5 / 0	-77.3	-77.3	0.04(1)	10.00			
6- 5	-65 / 0	0.0	0.0	0.01(1)	7.81			
2- 9	0 / 11	-17.5	-17.5	0.03(1)	10.00			
9- 8	0 / 11	-17.5	-17.5	0.03(1)	10.00			
8- 7	0/4	-17.5	-17.5	0.02(1)	10.00			
7-6	0/0	-17.5	-17.5	0.01 (4)	10.00			
l								

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=0.10 (1-2:1), BC=0.03 (8-9:1), WB=0.03

(3-8:1), SSI=0.09 (2-9:1)

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) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN

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= 0.04 (2) (INPUT = 1.00)



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



JOB NAME TRUSS NAME QUANTITY PLY JOB DESC DRWG NO. Page 5 of 29 TRUSS DESC PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1 ENG JOB: PT0317-168 GAB04 Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:46 2017 Page 1 KOTT . Stouffville, ON, CGC ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-qkJYAZvr4WERslx9w\_EE\_hRc98p6WUr9ix8brXzY6ld 8-10-0 1-3-8 SCALE = 1:27.3 2x4 || 2x4 || 4.00 12 6 2x4 || 5 2x4 | E ST2 7:7 **B1** 13 10 12 **4**x4 = 2x4 || 2x4 || 2x4 || 2x4 || 4x4 8-10-0 8-10-0 TOTAL WEIGHT = 35 lb LUMBER N. L. G. A. RULES CHORDS SIZE DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER **DESIGN CRITERIA** LUMBER DESCR SIZE **BEARINGS** 2x4 DRY SPF SPF SPECIFIED LOADS: LL = DL = LL = DL = AD = No.2 THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS. CH. 3.0 2x6 DRY No.2 SPF PSF THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE. ALL WEBS 2x3 DRY No.2 SPF 7.0 PSF ALL GABLE WEBS BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) TOTAL LOAD 33.3 DRY SPF No.2 2x3 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 DRY: SEASONED LUMBER SPACING = 24.0 IN. C/C GABLE STUDS SPACED AT 2-0-0 OC. THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

PLATES (table is in inches)
JT TYPE PLATES
2 TMB1-I MT20 W LEN Y 4.0 4.0 TMW+w MT20 2.0 4.0 TMV+p BMV1+p MT20 2.0 4.0 MT20 4.0 9, 10, 11 9 BMV BMW1+w MT20 12 12 TMBW1-I MT20 4.0 4.0 7.25

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

LOADING TOTAL LOAD CASES: (4)

CHO	ORDS					W E	BS	
MAX	FACTORED	FACTO	RED				MAX. FACTO	RED
MEMB.	FORCE	VERT. LC	AD LC	1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PL	_F) (	CSI (LC)	UNBRAC	)	(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
1- 2	0/8	-77.3	-77.3	0.10(1)	10.00	9-6	-175 / 0	0.03(1)
2-14	-175 / 0	-77.3	-77.3	0.09(1)	6.25	10- 5	-147 / 0	0.02(1)
14- 3	-17 / 0	-77.3	-77.3	0.02(1)	6.25	11- 4	-161 / 0	0.02(1)
3- 4	-12 / 0	-77.3	-77.3	0.04(1)	6.25	12-3	-110 / 0	0.02(1)
4- 5	-8 / 0	-77.3	-77.3	0.04(1)	10.00	13-14	0 / 205	0.00(1)
	-2 / 0	-77.3	-77.3	0.04(1)	10.00			
	-5 / 0	-77.3		0.04(1)				
8- 7	-63 / 0	0.0	0.0	0.01 (1)	7.81			
2-13	0 / 23	-17.5	-17.5	0.03(1)	10.00			
13-12	0 / 23			0.03(1)				
12-11	0 / 13			0.01 (4)				
11-10	0/7			0.01 (4)				
10- 9	0/3	-17.5	-17.5	0.01 (4)	10.00			
9-8	0/0	-17.5	-17.5	0.01 (4)	10.00			

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

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

CSI: TC=0.10 (1-2:1) , BC=0.03 (2-13:1) , WB=0.03 (6-9:1) , SSI=0.11 (2-14:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.12 (12) (INPUT = 0.90 ) JSI METAL= 0.03 (9) (INPUT = 1.00 )



RECEIVED TOWN OF MILTON MAR 29, 2017 JUNIPER 7 **BUILDING DIVISION** 



JOB NAME TRUSS NAME QUANTITY PLY JOB DESC. TRUSS DESC PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1

3 **GIRD01** 

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:47 2017 Page ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-IxtwNvwTrpMIURWMTilTWu\_i5YxvFnCJwbt8N\_zY6lc

DRWG NO.

Page 6 of 29

ENG JOB: PT0317-168

9-0-0 460 4-6-0 SCALE: 1/4"=1 2 10.00 12 5x10 = 5x10 = 6-10-1 2 3-1-1 3-1-11 BI **B2** 8 9 7 10 4x6 = 6x8 || 6x8 || 6x8 II 6x8 || 6x8 || 17-1-0 18-0-0

LUMBER				
N. L. G. A. R	ULES			
CHORDS	SIZE		LUMBER	DESCR.
1 - 2	2x4	DRY	No.2	SPF
2 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
11 - 1	2x6	DRY	No.2	SPF
6 - 5	2x6	DRY	No.2	SPF
11 - 8	2x6	DRY	No.2	SPF
8 - 6	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				-

DRY: SEASONED LUMBER.

KOTT . Stouffville, ON, CGC

DESIGN CONSISTS OF  $\underline{\mathbf{3}}$  TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	S #ROWS	SURFACE	LOAD(PLF)
		SPACING (IN)	, ,
TOP CH	ORDS: (0.1	22"X3") SPIRAL NAILS	
1-2	1	12	TOP
2-4	1	12	TOP
	- :		
4- 5	1	12	TOP
11- 1	2	12	TOP
6- 5	2	12	TOP
BOTTON	<b>I CHORDS</b>	: (0.122"X3") SPIRAL NAILS	
11-8	3	4	SIDE(962.2)
8-6	3	4	SIDE(962.2)
WEBS:	(0.122"X3")	SPIRAL NAILS	,
2x3	` 1	6	
		•	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

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.

PLA	TES	(table	is	in	inches)	
TT	TVDE		J	1 4	TEC	

JT	TYPE	PLATES	W	LEN	Y X
1	TMVW-p	MT20	5.0	10.0	Edge
2	TTWW-m	MT20	6.0	8.0	Edge 3.00
3	TMW+w	MT20	2.0	4.0	
4	TTWW-m	MT20	6.0	8.0	Edge 3.00
5	TMVW-p	MT20	5.0	10.0	Edge



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

RD
i
Χ

PROVIDE ANCHORAGE AT BEARING JOINT 11 FOR 2593 LBS FACTORED UPLIFT PROVIDE ANCHORAGE AT BEARING JOINT 6 FOR 2593 LBS FACTORED UPLIFT

NOTE: ANCHORAGE REQUIRED FOR LARGE UPLIFT FORCES

PROVIDE FOR 280 LBS FACTORED HORIZONTAL REACTION AT JOINT 11

# UNFACTORED REACTIONS 1ST LCASE \_\_\_\_\_MAX./MIN. COMPONENT REACTIONS

JΤ	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL			
11	10791	6634 / 0	1894 / 0	0/0	3257 / -3313	2273 / 0	0/0			
3	10791	6634 / 0	1894 / 0	0/0	3279 / -3313	2273 / 0	0/0			
HOR	IZONTAL RE	EACTIONS								
11		0/0	0/0	0/0	200 / -200	0/0	0 /0			
REAR	REARING MATERIAL TO BE SPENO 2 OR BETTER AT JOINT(S) 11 6									

Н

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 3.65 FT.

MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIGID CEILING DIRECTLY

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

LOADING TOTAL LOAD CASES: (18)

CHORDS	WEBS	
MAX. FACTORED	FACTORED MAX. FACTORED	
MEMB. FORCE	VERT. LOAD LC1 MAX MAX. MEMB. FORCE MAX	
(LBS)	(PLF) CSI (LC) UNBRAC (LBS) CSI (LC)	
FR-TO	FROM TO LENGTH FR-TO	
1-2 -10169 / 1943	-102.7 -102.7 0.36 (2) 3.65 10-2 -504 / 2982 0.22 (3)	
2- 3 -10036 / 2014	-102.7 -102.7 0.23 (1) 3.74 2-9 -825 / 3865 0.33 (11)	
3-4 -10036 / 2014	-102.7 -102.7 0.23 (1) 3.74 9-3 -443 / 274 0.11 (2)	
4-5 -10177 / 1943	-102.7 -102.7 0.36 (3) 3.65 9-4 -789 / 3885 0.32 (13)	
11-1 -11383 / 2150	0.0 0.0 0.40 (2) 5.57 7-4 -467 / 2972 0.22 (2)	
6-5 -11378 / 2150	0.0 0.0 0.40 (3) 5.57 1-10 -1637 / 9055 0.66 (1)	
	7- 5 -1583 / 9032 0.66 (1)	
11-10 -231 / 257	-1422.3-1422.3 0.65 (3) 6.25	
10-9 -1460 / 7847	-1422.3-1422.3 0.95 (1) 6.25	
9-8 -1370 / 7821	-1422.3-1422.3 0.95 (1) 6.25	
8- 7 -1370 / 7821	-1422.3-1422.3 0.95 (1) 6.25	
7-6 -23 / 49	-1422.3-1422.3 0.65 (2) 6.25	

#### TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF ( 9.0) PSF AT WIND LOAD APPLIED IS DETIVED FROM REFERENCE VELOCITY PRESSURE OF (\$3.0) PSP 41 (26-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CPC9, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2), BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.

### **DESIGN CRITERIA**

SPECIFIED LOADS: TOP CH. LL = 30.1 DL = 5.0 LL = 10.0 DL = 7.0 AD = 52.1 PSF PSF TOTAL LOAD

#### SPACING = 24.0 IN. C/C

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

TOTAL WEIGHT = 3 X 101 = 303 lb

GIRDER TYPE: CStdGirder START DISTANCE = 0-0 START SPAN CARRIED = 40-6-8 END DISTANCE = 18-0-0 END SPAN CARRIED = 40-6-8 END WALL WIDTH = 5-8 APPLIED TO FRONT SIDE OF BOTTOM CHORD. - ADDT'L LOADS BASED ON 100 % OF GSL.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2010

THIS DESIGN COMPLIES WITH: - PART 4 OF OBC 2012 . BCBC 2012 . ABC 2014 - CSA 086-09

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR NOT USED

(80 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 30.1 P.S.F. SPECIFIED ROOF LIVE

ALLOWABLE DEFL.(LL)= L/360 (0.60°) CALCULATED VERT. DEFL.(LL)= L/999 (0.07°) ALLOWABLE DEFL.(TL)= L/180 (1.20°) CALCULATED VERT. DEFL.(TL)= L/999 (0.10°)

CSI: TC=0.40 (1-11:2), BC=0.95 (7-9:1), WB=0.66 (5-7:1), SSI=0.79 (6-7:2)

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

SNOW LOAD IMPORTANCE FACTOR = 1.00 WIND LOAD IMPORTANCE FACTOR = 1.00 LIVE LOAD IMPORTANCE FACTOR = 1.00 COMPANION LIVE LOAD FACTOR = 0.50

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

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

MT20 618 3

RECEIVED TOWN OF MILTON MAR 29, 2017

PLATE PLACEN PLATE ROTATION

JSI GRIP= 0.88

JUNIPER 7 **BUILDING DIVISION** 



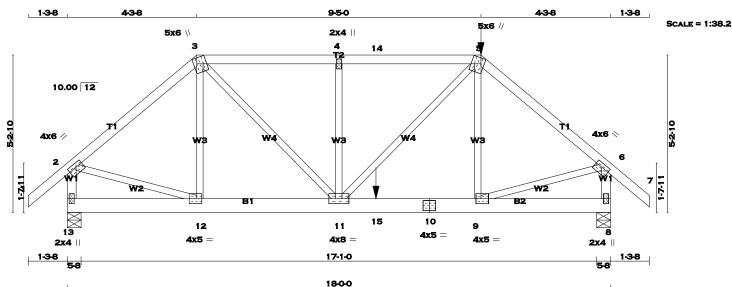
JOB NAME TRUSS NAME QUANTITY JOB DESC. DRWG NO. TRUSS DESC PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1 ENG JOB: PT0317-168 **GIRD02** 

KOTT . Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:47 2017 Page 1 ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-IxtwNvwTrpMIURWMTilTWu\_iuY1bFtiJwbt8N\_zY6lc

Page 7 of 29

TOTAL WEIGHT = 90 lb



LUMBER				
N. L. G. A. R	ULES			
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
13 - 2	2x4	DRY	No.2	SPF
8 - 6	2x4	DRY	No.2	SPF
13 - 10	2x6	DRY	No.2	SPF
10 - 8	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				

DRY: SEASONED LUMBER.

PLATES (table is in inches)									
JT	TYPE	PLATES	W	LEN	Υ	Χ			
2	TMVW-t	MT20	4.0	6.0	1.50	2.75			
3	TTWW+m	MT20	5.0	6.0	2.25	1.25			
4	TMW+w	MT20	2.0	4.0					
5	TTWW+m	MT20	5.0	6.0	2.25	1.25			
6	TMVW-t	MT20	4.0	6.0	1.50	2.75			
8	BMV1+p	MT20	2.0	4.0					
9	BMWW-t	MT20	4.0	5.0	2.00	2.00			
10	BS-t	MT20	4.0	5.0					
11	BMWWW-t	MT20	4.0	8.0					
12	BMWW-t	MT20	4.0	5.0	2.00	2.00			
13	BMV1+p	MT20	2.0	4.0					

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S)
REQUIRED TO SUPPORT CONCENTRATED
LOAD(S) 154.4 lbs FACTORED DOWN AT 13-8-8 ON TOP CHORD, AND 740.9 lbs FACTORED DOWN AT 10-2-12 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		

	FACTORED		MAXIMUM FACTORED			INPUT	REQRD
	GROSS F	REACTION	GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
13	1372	0	1372	0	0	5-8	5-8
8	1630	0	1630	0	0	5-8	5-8

UNFACTORED REACTIONS

	1ST LCASE	MAX./I	MIN. COMPO	NENT REACTIO	NS		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
13	960	688 / 0	0/0	0/0	0/0	273 / 0	0/0
8	1142	810/0	0/0	0/0	0/0	332 / 0	0/0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 13, 8

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.63 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY

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

LOADING TOTAL LOAD CASES: (4)

	IORDS	FACTORED			WE	B S MAX. FACTO	DED.
MEMB.		VERT. LOAD LO			MEMP		MAX
IVILIVID.		(PLF)					
FR-TO	(LDS)	FROM TO	COI (LC)	LENGT	J ED TO	(LDS)	COI (LC)
	0/34					-242 / 0	0.09 (1)
		-77.3 -77.3					0.25 (1)
3-4	-1000 / 0	-77.3 -77.3 -77.3 -77.3	0.42(1)	4.03	11-4	-493 / 0	0.19 (1)
4-14	-1653 / 0	-//.3 -//.3	3 0.42 (1)	4.63	11-5	0 / 642	0.16 (1)
		-112.8 -112.8					0.04 (4)
		-77.3 -77.3					0.24 (1)
6- 7	0/34	-77.3 -77.3	3 0.12 (1)	10.00	9- 6	0 / 1250	0.31 (1)
		0.0 0.0					
8- 6	-1617 / 0	0.0 0.0	0.18 (1)	6.46			
13-12	0/0	-17.5 -17.5	5 0.04 (4)	10.00			
12-11	0 / 941	-17.5 -17.5	5 0.29 (1)	10.00			
	0 / 1204						
15-10	0 / 1204	-25.5 -25.5	0.52 (1)	10.00			
		-25.5 -25.5					
	0/0						
			(.,				
FACTO	DRED CONCENT	TRATED LOADS	(LBS)				
	LOC. LC1			ACE I	DIR.	TYPE	
		1 -154					
		. 104 I -741			ERT	TOTAL	
10	10 2 12 -74	1-71	1 11	O VI		IOIAL	

### **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: LL = DL = LL = TOP CH. 23.3

PSF PSF 3.0 BOT CH. PSF TOTAL LOAD PSF 33.3

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip SIDE SETBACK = 4-3-8 END SETBACK = 4-3-8 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 7-9-4 OF SPAN MEASURED FROM THE RIGHT.

\*\*\* 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 (0.60") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (0.60") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.42 (4-5:1) , BC=0.52 (9-11:1) , WB=0.31 (6-9:1) , SSI=0.40 (9-11:1)

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 RECEIVED

TRUSS MANUF NAIL VALUES PLATE GRIP(D (PSI)

MT20

TOWN OF MILTON MAR 29, 2017 JUNIPER 7 618 **BUILDING DIVISION** 





JOB NAME TRUSS NAME QUANTITY PLY JOB DESC. DRWG NO. TRUSS DESC PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1 ENG JOB: PT0317-168 **GIRD03** 

KOTT . Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:48 2017 Page ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-m7RlbFx5c7U95b5Y1PGi36Xx5xRC\_MLS9FdhvQzY6lb

438 10.00 12 3x5 / 2 3x5 / 1-7-11 5 4x4 = <sup>4</sup> 3x4 II 3-6-8 5-8 438

SCALE = 1:33.6

Page 8 of 29

TOTAL WEIGHT = 27 lb

LUMBER				
N. L. G. A. R	ULES			
CHORDS	SIZE		LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF
4 - 3	2x4	DRY	No.2	SPF
6 - 1	2x4	DRY	No.2	SPF
6 - 4	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				

DRY: SEASONED LUMBER.

### DI ATES (table is in inches)

LATES (table is in inches)										
JT	TYPE	PLATES	W	LEN	Υ	X				
1	TMVW-t	MT20	3.0	5.0	1.50	1.75				
2	TMWW-t	MT20	3.0	5.0	1.50	2.00				
3	TMV+p	MT20	2.0	4.0						
4	BMVW1-t	MT20	4.0	4.0						
5	BMWW+t	MT20	3.0	4.0	1.75	1.50				
6	BMV1+p	MT20	2.0	4.0						

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 776.6 lbs FACTORED DOWN AT 10-12 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

IMENSIONS, SUPPORTS	AND LOADINGS	SPECIFIED BY	FABRICATOR	IO BE I	VERIFIED	ВΥ
BUILDING DESIGNER						
EADINGS						

	FACTO	RED	MAXIMU	M FACT	INPUT	REQRD	
	GROSS RI	EACTION	GROSS	REACTIO	BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
4	741	0	741	0	0	HANGER I	BY OTHERS
						MIN. SEAT	SIZE: 3-8
6	1064	0	1064	0	0	5-8	5-8

UNFACTORED REACTIONS											
	1ST LCASE	MAX./	MIN. COMPO	NENT REACTIO	NS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL				
4	520	364 / 0	0/0	0/0	0/0	156 / 0	0/0				
6	746	522 / 0	0/0	0/0	0/0	224 / 0	0/0				
1											

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

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

LOADING TOTAL LOAD CASES: (4)

CHO	CHORDS WEBS									
MAX	FACTORED	FACTO	FACTORED MAX					RED		
MEMB.	FORCE	VERT. LC	DAD LC	1 MAX	MAX.	MEMB.	FORCE	MAX		
	(LBS)	(PI	_F) (	CSI (LC)	<b>UNBRAC</b>	0	(LBS)	CSI (LC)		
FR-TO		FROM	TO		LENGTH	FR-TO				
1- 2	-475 / 0	-77.3	-77.3	0.06(1)	6.25	5- 2	0 / 634	0.16 (1)		
2-3	-11 / 0	-77.3	-77.3	0.05(1)	6.25	2-4	-642 / 0	0.16 (1)		
4- 3	-66 / 0	0.0	0.0	0.03(1)	7.81	1- 5	0 / 429	0.11(1)		
6- 1	-589 / 0	0.0	0.0	0.07 (1)	7.81					
6- 7	0/0	-17.5	-17.5	0.31(1)	10.00					
7- 5	0/0	-200.3	-200.3	0.31(1)	10.00					
5- 4										
EACTORED CONCENTRATED LOADS (LRS)										
FACIO	FACTORED CONCENTRATED LOADS (LBS)									

,,,,	I OILED OOI	1001111	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, (DO (LDC	,		
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
7	10-12	-777	-777		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:

IOP	CH.	LL	=	23.3	PSF
		DL	=	3.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.0	PSF
TOTA	L LO	AD	=	33.3	PSF

### SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder START DISTANCE = 10-12 START SPAN CARRIED = 10-2-0 END DISTANCE = 4-3-8 END SPAN CARRIED = 10-2-0 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 (0.19")
CALCULATED VERT. DEFL.(LL)= L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL)= L/999 (0.01")

CSI: TC=0.07 (1-6:1), BC=0.31 (5-6:1), WB=0.16 (2-5:1), SSI=0.38 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PI I) (PI I)

MAX M MT20 618

PLATE PLACEM

PLATE ROTATION

JSI GRIP= 0.85 JSI METAL= 0.2

TOWN OF MILTON MAR 29, 2017 JUNIPER 7 **BUILDING DIVISION** 

RECEIVED





JOB NAME TRUSS NAME QUANTITY PLY JOB DESC. TRUSS DESC PT0317-168 **GIRD04** 

LECCO RIDGE-JUNIPER 7 EL 1

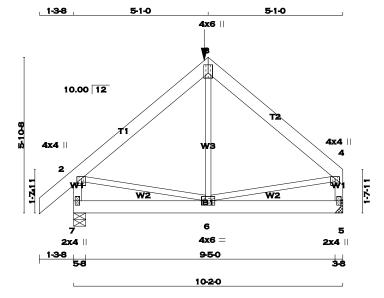
DRWG NO. Page 9 of 29 ENG JOB: PT0317-168

SCALE = 1:43.5

TOTAL WEIGHT = 60 lb

KOTT . Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:48 2017 Page ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-m7RlbFx5c7U95b5Y1PGi36XwBxUK\_NrS9FdhvQzY6lb



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR 3 2x6 DRY No.2 No.2 SPF SPF 2x6 2x4 DRY No 2 SPF No.2 5 2x6 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)
JT TYPE PLATES
2 TMVW+p MT20 W LEN Y 4.0 1.00 2.00 4.0 TTW+p TMVW+p 6.0 3.75 2.00 4.0 1.00 2.00 MT20 4.0 BMV1+p MT20 2.0 4.0 BMWWW-t MT20 4.0 6.0 BMV1+p MT20 2.0 4.0

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S)
REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 469.6 lbs FACTORED DOWN AT 5-1-0 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE

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

BEARINGS FACTORED MAXIMUM FACTORED INPLIT REQRD GROSS REACTION GROSS REACTION BRG HORZ UPLIFT IN-SX JT VFRT HOR7 DOWN IN-SX 7 5-8 5-8 HANGER BY OTHERS 775 0 775 0 0 MIN. SEAT SIZE: 3-8

UNFACTORED REACTIONS											
	1ST LCASE	MAX./	MIN. COMPO	NENT REACTIO	NS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL				
7	620	445 / 0	0/0	0/0	0/0	175 / 0	0/0				
5	545	378 / 0	0/0	0/0	0/0	167 / 0	0/0				
1											

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)

СН	ORDS					WE	BS		
MAX	. FACTORED	FACTOR	RED				MAX. FACTO	RED	
MEMB.	FORCE	VERT. LO	AD LC	1 MAX	MAX.	MEMB.	FORCE	MAX	
	(LBS)	(PL	F) (	CSI (LC)	UNBRA	С	(LBS)	CSI (LC)	
FR-TO		FROM	TO		LENGTH	H FR-TO			
1-2	0/36	-77.3	-77.3	0.06(1)	10.00	6-3	-41 / 141	0.05 (4)	
2-3	-642 / 0	-77.3	-77.3	0.19(1)	6.25	2-6	0 / 505	0.12(1)	
3-4	-642 / 0	-77.3	-77.3	0.19(1)	6.25	6- 4	0 / 505	0.12(1)	
7-2	-827 / 0	0.0	0.0	0.09(1)	7.81				
5- 4	-715 / 0	0.0	0.0	0.08 (1)	7.81				
7- 6	0/0	-29.0	-29.0	0.11 (4)	10.00				
6- 5	0/0	-29.0	-29.0	0.11 (4)	10.00				
FACTO	RED CONCEN	TRATED LO	ADS (I	LBS)					
JT	LOC. LC1				ACE	DIR.	TYPE		
3	5-1-0 -470	-470		FR	ONT V	ERT	TOTAL		

- CSA 086-09 - TPIC 2011

> RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.34")
> CALCULATED VERT. DEFL.(LL)= L/999 (0.01")
> ALLOWABLE DEFL.(TL)= L/360 (0.34")
> CALCULATED VERT. DEFL.(TL)= L/999 (0.01")

(55 % OF 27 2 P.S.F. G.S.I. PLUS 8 4 P.S.F.

CSI: TC=0.19 (2-3:1) , BC=0.11 (6-7:4) , WB=0.12 (2-6:1) , SSI=0.10 (6-7:4)

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

**DESIGN CRITERIA** 

SPECIFIED LOADS:

TOP CH.

TOTAL LOAD

LL = DL = LL = DL = AD =

SPACING = 24.0 IN. C/C

GIRDER TYPE: CPrimeHip SIDE SETBACK = 5-1-0 END SETBACK = 5-1-0 END WALL WIDTH = 5-8

APPLIED TO FRONT SIDE

PART 9, NBCC 2010

3.0

7.0 PSF

33.3

CORNER FRAMING TYPE: CONVENTIONAL

- ADDT'L LOADS BASED ON 55 % OF GSL.

OR SMALL BUILDING REQUIREMENTS OF

THIS TRUSS IS DESIGNED FOR RESIDENTIAL

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

END JACK TYPE: CONVENTIONAL

THIS DESIGN COMPLIES WITH:

PSF

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

MAX MIN 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= 0.80 (2) (INPUT = 0.90 ) JSI METAL= 0.22 (2) (INPUT = 1.00 )

RECEIVED TOWN OF MILTON MAR 29, 2017 JUNIPER 7 **BUILDING DIVISION** 

SED PROFESSIONAL 100136551 HOVINCE OF ONTARIO



JOB NAME TRUSS NAME QUANTITY PLY JOB DESC. DRWG NO. Page 10 of 29 TRUSS DESC PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1 ENG JOB: PT0317-168 **J01** 

KOTT . Stouffville, ON, CGC

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

TYPE TMV+p

BMV1+p

SIZE

DRY

DRY

2x4

DRY: SEASONED LUMBER.

PLATES (table is in inches)

PLATES MT20

TEE-LOK TL20 PLATES IS ALLOWED.

W 2.0

2.0 4.0

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH

LUMBER

No.2 No.2

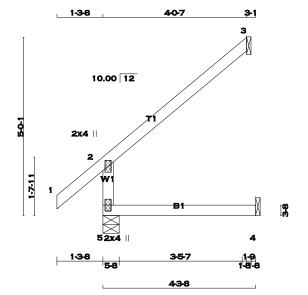
LEN Y

4.0

DESCR

SPF SPF

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:49 2017 Page ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-FJ\_gobxjNRc0jlgkb6nxbJ34YLq7jr1bOvMFSszY6la



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED INPLIT REQRD

MAXIMUM FACTORED GROSS REACTION GROSS REACTION LIPLIFT IN-SX JT. VFRT HORZ DOWN HORZ IN-SX 345 117 5 3 4 345 117 5-8 5-8 0 0 0 1-8 1-8

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

UNFACTORED REACTIONS

	1ST LCASE	MAX./N	MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL			
5	239	182 / 0	0/0	0/0	0/0	57 / 0	0/0			
3	80	71 / 0	0/0	0/0	0/0	9/0	0/0			
4	26	0/0	0/0	0/0	0/0	26 / 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

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

LOADING TOTAL LOAD CASES: (4)

CHORDS			WEBS							
MAX.	FACTORED	FACTORED			MAX. FACTORED					
MEMB.	FORCE	VERT. LO.	AD LC	1 MAX	MAX.	MEMB.	FORCE	MAX		
	(LBS)	(PL	F) (	CSI (LC)	<b>UNBRAC</b>	0	(LBS)	CSI (LC)		
FR-TO		FROM	TO		LENGTH	FR-TO				
5-2	-302 / 0	0.0	0.0	0.05 (4)	7.81					
1-2	0 / 34	-77.3	-77.3	0.11(1)	10.00					
2-3	-25 / 0	-77.3	-77.3	0.21 (1)	6.25					
5- 4	0/0	-17.5	-17.5	0.07 (4)	10.00					

**DESIGN CRITERIA** 

TOTAL LOAD

SPECIFIED LOADS: TOP CH. LL = LL = 23.3 DL = 3.0 LL = 0.0 DL = 7.0 AD = 33.3 PSF

SPACING = 24.0 IN. C/C

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

SCALE = 1:32.4

TOTAL WEIGHT = 14 lb

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL)= L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL)= L/999 (0.01")

CSI: TC=0.21 (2-3:1) , BC=0.07 (4-5:4) , WB=0.00 (n/a:0), SSI=0.12 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.22 (2) (INPUT = 0.90 ) JSI METAL= 0.08 (2) (INPUT = 1.00 )



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



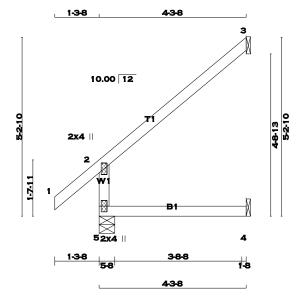
JOB NAME TRUSS NAME QUANTITY PLY JOB DESC. DRWG NO. Page 11 of 29 TRUSS DESC PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1 ENG JOB: PT0317-168 **J02** 

KOTT . Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:50 2017 Page 1 ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-jVY20xyL8kktLvFx9qIA8XcFrIAMSIHicZ6o\_JzY6IZ

SCALE = 1:33.6

TOTAL WEIGHT = 15 lb



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR SIZE 2 2x4 DRY No.2 No.2 SPF SPF DRY

DRY: SEASONED LUMBER.

PLATES (table is in inches)

TYPE TMV+p PLATES MT20 W 2.0 LEN Y 4.0 BMV1+p 2.0 4.0

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

	FACTOR	RED	MAXIMUI	M FACT	INPUT	REQRD	
	GROSS RE	ACTION	GROSS F	REACTIO	BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
5	357	0	357	0	0	5-8	5-8
3	125	0	125	0	0	1-8	1-8
4	33	0	37	0	0	1-8	1-8

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

UNFACTORED REACTIONS

	1ST LCASE	MAX./I	MAX./MIN. COMPONENT REACTIONS								
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL				
5	248	189 / 0	0/0	0/0	0/0	58 / 0	0/0				
3	85	75 / 0	0/0	0/0	0/0	10 / 0	0/0				
4	26	0/0	0/0	0/0	0/0	26 / 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

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

LOADING TOTAL LOAD CASES: (4)

CHC	RDS		WEBS					
MAX.	FACTORED	FACTORED		MAX. FACTORED				
MEMB.	FORCE	VERT. LOAD L	C1 MAX	MAX. N	ИЕМВ.	FORCE	MAX	
	(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)	
FR-TO		FROM TO		LENGTH F	R-TO			
5-2	-314 / 0	0.0	0 0.05 (4)	7.81				
1- 2	0/34	-77.3 -77	3 0.11 (1)	10.00				
2-3	-26 / 0	-77.3 -77	3 0.24 (1)	6.25				
5- 4	0/0	-17.5 -17	5 0.07 (4)	10.00				

**DESIGN CRITERIA** 

SPECIFIED LOADS: LL = 23.3 DL = 3.0 LL = 0.0 DL = 7.0 AD = 33.3 CH. PSF

PSF TOTAL LOAD

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL)= L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL)= L/999 (0.01")

CSI: TC=0.24 (2-3:1), BC=0.07 (4-5:4), WB=0.00 (n/a:0), SSI=0.12 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

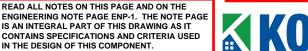
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.23 (2) (INPUT = 0.90 ) JSI METAL= 0.08 (2) (INPUT = 1.00 )





JOB NAME TRUSS NAME QUANTITY PLY JOB DESC. DRWG NO. TRUSS DESC PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1 ENG JOB: PT0317-168 J03

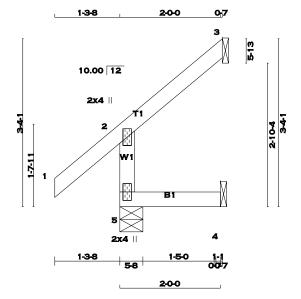
KOTT . Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:50 2017 Page 1 ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-jVY20xyL8kktLvFx9qIA8XcHzIBCSIHlcZ6o\_JzY6lZ

Page 12 of 29

SCALE = 1:22.9

TOTAL WEIGHT = 9 lb [M]



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER SIZE DESCR 2 2x4 DRY No.2 No.2 SPF SPF DRY

DRY: SEASONED LUMBER.

PLATES (table is in inches) TYPE TMV+p PLATES MT20 W 2.0 LEN Y 4.0 BMV1+p

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

2.0 4.0 DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER
BEARINGS

	FACTORED		MAXIMUM FACTORED			INPUT	REQRD				
	GROSS R	GROSS REACTION			BRG	BRG					
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX				
5	224	0	224	0	0	5-8	5-8				
3	60	0	60	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

	1ST LCASE	MAX./N	MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL			
5	155	123 / 0	0/0	0/0	0/0	31 / 0	0/0			
3	41	36 / 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

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

LOADING TOTAL LOAD CASES: (5)

CHORDS WEBS MAX. FACTORED FACTORED
MB. FORCE VERT. LOAD LC1 MAX MAX. MAX. FACTORED FORCE MA MEMB. MEMB. MAX CSI (LC) UNBRAC (LBS) (PLF) (LBS) CSI (LC) FROM TO

0.0 0.0 0.01 (4)

-77.3 -77.3 0.11 (1)

-77.3 -77.3 0.05 (1) FR-TO LENGTH FR-TO 5- 2 1- 2 2- 3 -205 / 0 7.81 -12/0 5- 4 -17.5 -17.5 0.02 (4)

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN



SPECIFIED LOADS: TOP CH. PSF

LL = 23.3 DL = 3.0 LL = 0.0 DL = 7.0 AD = 33.3 PSF TOTAL LOAD

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

(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 (1-2:1), BC=0.02 (4-5:4), WB=0.00 (n/a:0), SSI=0.06 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

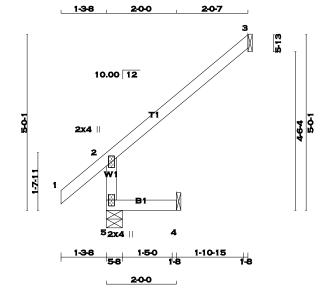


READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT **CONTAINS SPECIFICATIONS AND CRITERIA USED** IN THE DESIGN OF THIS COMPONENT.



JOB NAME TRUSS NAME QUANTITY PLY JOB DESC. DRWG NO. Page 13 of 29 TRUSS DESC PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1 ENG JOB: PT0317-168 J04

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:50 2017 Page KOTT . Stouffville, ON, CGC ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-jVY20xyL8kktLvFx9qIA8XcFlIBCSIHlcZ6o\_JzY6lZ



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER SIZE DESCR 2x4 DRY No.2 No.2 SPF SPF DRY DRY: SEASONED LUMBER.

PLATES (table is in inches) TYPE TMV+p PLATES MT20 W 2.0 LEN Y 4.0 BMV1+p

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

2.0 4.0 DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

DEA	BEARINGS											
	FACTORED		MAXIMUM FACTORED			INPUT	REQRD					
	GROSS R	EACTION	GROSS	REACTIO	BRG	BRG						
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX					
5	321	0	321	0	0	5-8	5-8					
3	117	0	117	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

1ST LCASE MAX./MIN. COMPONENT REACTIONS

SNOW LIVE PERM.LIVE WIND SOIL DEAD 0/0 5 3 4 0/0 39 / 0 80 71 / 0 0/0 0/0 0/09/0 0/0 13/0

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

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

LOADING TOTAL LOAD CASES: (4)

CHC	RDS	WEBS							
MAX.	FACTORED	FACTORE	D				MAX. FACTO	RED	
MEMB.	FORCE	VERT. LOAD	LC.	1 MAX	MAX.	MEMB.	FORCE	MAX	
	(LBS)	(PLF)	(	CSI (LC)	<b>UNBRAC</b>		(LBS)	CSI (LC)	
FR-TO		FROM TO	)		LENGTH	FR-TO			
5-2	-302 / 0	0.0	0.0	0.01 (4)	7.81				
1-2	0/34	-77.3 -7	77.3	0.11 (1)	10.00				
2-3	-25 / 0	-77.3 -	77.3	0.21 (1)	6.25				
5- 4	0/0	-17.5 -	17.5	0.02 (4)	10.00				

**DESIGN CRITERIA** 

- TPIC 2011

DESIGN ASSUMPTIONS

SPECIFIED LOADS: TOP CH. LL = LL = DL = LL = DL = AD = 3.0 PSF 7.0 PSF TOTAL LOAD 33.3

SPACING = 24.0 IN. C/C

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

SCALE = 1:32.8

TOTAL WEIGHT = 12 lb

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

OVERHANG NOT TO BE ALTERED OR CUT (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.(TL)= L/360 (0.19") CALCULATED VERT. DEFL.(TL)= L/ 999 (0.00") CSI: TC=0.21 (2-3:1) , BC=0.02 (4-5:4) , WB=0.00

(n/a:0), SSI=0.12 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.22 (2) (INPUT = 0.90 ) JSI METAL= 0.08 (2) (INPUT = 1.00 )



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



JOB NAME TRUSS NAME QUANTITY PLY JOB DESC. DRWG NO. Page 14 of 29 TRUSS DESC PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1 ENG JOB: PT0317-168 J05 Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:51 2017 Page 1 KOTT . Stouffville, ON, CGC ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-Bi6RDGzzv2sky3q7iXqPhk9Sj9WbBlXurDrMWlzY6lY 1-3-8 2-0-7 SCALE = 1:22.6 3 10.00 12 2x4 || 1:7:11 B1 8 1-3-8 438 TOTAL WEIGHT = 11 lb DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY

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) TYPE TMV+p PLATES MT20 W 2.0 LEN Y 4.0 BMV1+p 2.0 4.0

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

BUILDING DESIGNER

REA	RINGS						
	FACTORED		MAXIMUM FACTORED			INPUT	REQRD
	GROSS RI	EACTION	GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
5	247	0	247	0	0	5-8	5-8
3	60	0	60	0	0	1-8	1-8
4	33	0	37	0	0	1-8	1-8

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

UNFACTORED REACTIONS

	1ST LCASE	MAX./N	MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL			
5	173	123 / 0	0/0	0/0	0/0	50 / 0	0/0			
3	41	36 / 0	0/0	0/0	0/0	5/0	0/0			
4	26	0/0	0/0	0/0	0/0	26 / 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)

CHC	CHORDS				WEBS			
MAX.	FACTORED	FACTOR	RED			M	IAX. FACTO	RED
MEMB.	FORCE	VERT. LO	AD LC	1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PLI	F) (	CSI (LC)	<b>UNBRAC</b>	2	(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
5-2	-205 / 0	0.0	0.0	0.05 (4)	7.81			
1- 2	0 / 34	-77.3	-77.3	0.11 (1)	10.00			
2-3	-12 / 0	-77.3	-77.3	0.05 (1)	6.25			
5- 4	0/0	-17.5	-17.5	0.07 (4)	10.00			

### **DESIGN CRITERIA**

SPECIFIED LOADS: CH.

LL = 23.3 DL = 3.0 LL = 0.0 DL = 7.0 AD = 33.3 PSF PSF TOTAL LOAD

### 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

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL)= L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL)= L/999 (0.01")

CSI: TC=0.11 (1-2:1), BC=0.07 (4-5:4), WB=0.00 (n/a:0), SSI=0.06 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

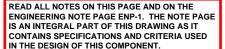
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN 618 354 1667 822 2284 1656

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 )



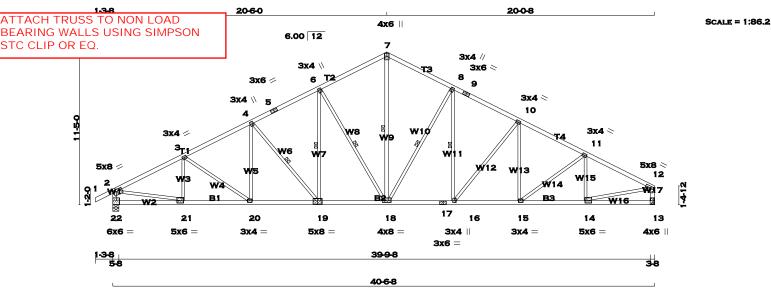




TRUSS NAME JOB NAME QUANTITY PLY JOB DESC DRWG NO. TRUSS DESC PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1 ENG JOB: PT0317-168 T01 8

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:51 2017 Page 1  $ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-Bi6RDGzzv2sky3q7iXqPhk9Ko9OIBXdurDrMWlzY6INACCORRECTION (Control of the Control of the Contro$ 

Page 15 of 29



LUMBER				
N. L. G. A. R	ULES			
CHORDS	SIZE		LUMBER	DESCR.
1 - 5	2x4	DRY	No.2	SPF
5 - 7	2x4	DRY	No.2	SPF
7 - 9	2x4	DRY	No.2	SPF
9 - 12	2x4	DRY	No.2	SPF
22 - 2	2x4	DRY	No.2	SPF
13 - 12	2x4	DRY	No.2	SPF
22 - 19	2x4	DRY	No.2	SPF
19 - 17	2x4	DRY	No.2	SPF
17 - 13	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
18 - 7	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

KOTT . Stouffville, ON, CGC

PL.	PLATES (table is in inches)										
JT	TYPE	PLATES	W	LEN	Υ	Χ					
2	TMVW-t	MT20	5.0	8.0	1.75	3.00					
3, 1	10, 11										
3	TMWW-t	MT20	3.0	4.0	1.50	1.75					
4	TMWW+t	MT20	3.0	4.0	2.00	0.75					
5	TS-t	MT20	3.0	6.0							
6	TMWW+t	MT20	3.0	4.0	1.50	0.75					
7	TTW+p	MT20	4.0	6.0	Edge						
8	TMWW+t	MT20	3.0	4.0	1.50	0.75					
9	TS-t	MT20	3.0	6.0							
12	TMVW-t	MT20	5.0	8.0	1.75	Edge					
13	BMV1+t	MT20	4.0	6.0	Edge	0.50					
14	BMWW-t	MT20	5.0	6.0	2.00	1.75					
15	BMWW-t	MT20	3.0	4.0							
16	BMWW+t	MT20	3.0	4.0	1.75	1.50					
17	BS-t	MT20	3.0	6.0							
18	BMWWW-t	MT20	4.0	8.0	1.50	4.00					
19	BSWW-I	MT20	5.0	8.0	3.00	4.00					
20	BMWW-t	MT20	3.0	4.0							
21	BMWW-t	MT20	5.0	6.0	2.00	1.50					
22	BMV1-t	MT20	6.0	6.0	3.50						

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

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.



DIMENSIONS, SUPPORTS	AND LOAD	DINGS SPECIFI	ED BY FAB	RICATOR TO BE	VERIFIED BY
BUILDING DESIGNER					
BEARINGS					
EACTORED	NAA VINALINA	EACTORED	INDLIT	DEODD	

	FACTORED		MAXIMUI	M FACTO	ORED	INPUT	REQRD
	GROSS RE	ACTION	GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
22	2779	0	2779	279	-724	5-8	5-8
13	2639	0	2639	0	-667	HANGER E	Y OTHERS
						MIN. SEAT	SIZE: 3-8

PROVIDE ANCHORAGE AT BEARING JOINT 22 FOR 724 LBS FACTORED UPLIFT PROVIDE ANCHORAGE AT BEARING JOINT 13 FOR 667 LBS FACTORED UPLIFT

NOTE: ANCHORAGE REQUIRED FOR LARGE UPLIFT FORCES. SHALL BE PROVIDED BY BUILDG. DESIGNER

PROVIDE FOR 279 LBS FACTORED HORIZONTAL REACTION AT JOINT 22

UNFACTORED REACT	<u>rions</u>

	1ST LCASE	MAX./	<u>MIN. COMPO</u>	<u>NENT REACTIO</u>	ONS		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
22	2206	1301 / 0	405 / 0	0/0	97 / -839	500 / 0	0/0
13	2111	1219/0	405 / 0	0/0	102 / -789	487 / 0	0/0
HOR	IZONTAL RE	EACTIONS					
22		0/0	0/0	0/0	199 / -161	0/0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 22

# BRACING MAX, UNBRACED TOP CHORD LENGTH = 3.10 FT.

MAX. UNBRACED BOTTOM CHORD LENGTH = 6.11 FT. OR RIGID CEILING DIRECTLY

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

- 1 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-19. DBS = 18-0-0 . CBF = 92 LBS. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-19, 8-16. DBS = 20-0-0 . CBF = 48 LBS.
- LBS.
  1 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-18. DBS = 10-0-0 . CBF = 81 LBS.
  1 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-18. DBS = 14-0-0 . CBF = 88 LBS.
  1 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-18. DBS = 12-0-0 . CBF = 93 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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: (18)

-607 / 3296 -739 / 3322

16-15 15-14

-27.5 -27.5 -27.5 -27.5

ı	СН	ORDS					W F	BS	
		. FACTORED	FACTOR	ED			** _	MAX. FACTO	ORED
	MEMB.	FORCE	VERT. LOA		1 MAX	MAX.	MEMB.		MAX
		(LBS)			CSI (LC)				
	FR-TO	( -/	FROM 1				FR-TO		( -,
	1- 2	0 / 36	-102.7 -	102.7	0.15 (2)	10.00	21-3	-450 / 207	0.10(1)
	2-3	-3948 / 1017			0.61 (1)			-330 / 204	0.22 (2)
	3- 4	-3820 / 1032	-102.7 -	102.7	0.53 (1)	3.23	20-4	-58 / 333	0.07 (5)
	4- 5	-3323 / 945	-102.7 -	102.7	0.48 (1)	3.49	4-19	-821 / 351	0.34(2)
	5-6	-3323 / 945	-102.7 -	102.7	0.48 (1)	3.49	19-6	-201 / 761	0.17 (2)
	6- 7	-2723 / 859	-102.7 -	102.7	0.43 (1)	3.85	6-18	-1299 / 538	0.93(2)
	7-8	-2723 / 865	-102.7 -	102.7	0.41 (1)	3.86	18- 7	-598 / 2004	0.40 (13)
	8- 9	-3270 / 928	-102.7 -	102.7	0.45 (1)	3.53	18-8	-1234 / 518	0.88 (3)
	9-10	-3270 / 928	-102.7 -	102.7	0.45 (1)	3.53	16-8	-188 / 706	0.16 (3)
	10-11	-3692 / 995	-102.7 -	102.7	0.50(1)	3.31	16-10	-741 / 326	0.95 (3)
	11-12	-3692 / 944	-102.7 -	102.7	0.55 (1)	3.25	15-10	-40 / 278	0.06 (6)
	22-2	-2713 / 749	0.0	0.0	0.27 (1)	5.23	15-11	-205 / 163	0.14 (3)
	13-12	-2576 / 691	0.0	0.0	0.26(1)	5.35	14-11	-564 / 235	0.14(1)
							2-21	-804 / 3598	0.81 (1)
	22-21	-264 / 239	-27.5	-27.5	0.17 (17	6.25	14-12	-775 / 3395	0.76(1)
	21-20	-1057 / 3551	-27.5	-27.5	0.64 (1)	6.11			
	20-19	-889 / 3410	-27.5	-27.5	0.61 (1)	6.25			
	19-18	-663 / 2979	-27.5	-27.5	0.58 (1)	6.2	READ A	ALL NOTES (	ON THIS PA
	18-17	-501 / 2931	-27.5	-27.5	0.57 (1)	6.2	ENGINE	ERING NOT	E PAGE EN
	17-16	-501 / 2931	-27.5	-27.5	0.57 (1)	6.2	IS AN II	NTEGRAL PA	ART OF TH
ı	40 45	007 / 2000	07.5	07.5	0.50 (4)	C 0			

-27.5 0.59 (1) -27.5 0.60 (1)

6.2! 6.2! 6.2! 6.2! 6.2! READ ALL NOTES ON THIS PAGE AND ON THE **ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE** IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

### **DESIGN CRITERIA**

SPECIFIED LOADS: LL = 30.1 DL = 5.0 LL = 10.0 DL = 7.0 AD = 52.1 TOP CH. PSF PSF TOTAL LOAD

### SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2010

TOTAL WEIGHT = 8 X 188 = 1504 lb

THIS DESIGN COMPLIES WITH:

- PART 4 OF OBC 2012 , BCBC 2012 , ABC 2014 - CSA 086-09

- TPIC 2011

**DESIGN ASSUMPTIONS** 

- SLOPE REDUCTION FACTOR NOT USED

(80 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 30.1 P.S.F. SPECIFIED ROOF LIVE

ALLOWABLE DEFL.(LL) = L/360 (1.35\*) CALCULATED VERT. DEFL.(LL) = L/999 (0.24\*) ALLOWABLE DEFL.(TL) = L/180 (2.70\*) CALCULATED VERT. DEFL.(TL) = L/999 (0.34\*)

CSI: TC=0.61 (2-3:1), BC=0.64 (20-21:1), WB=0.95 (10-16:3), SSI=0.26 (2-3:2)

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

SNOW LOAD IMPORTANCE FACTOR = 1.00 WIND LOAD IMPORTANCE FACTOR = 1.00 LIVE LOAD IMPORTANCE FACTOR = 1.00 COMPANION LIVE LOAD FACTOR = 0.50

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

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

(PLI) MAX MIN MAX MIN MAX MIN 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

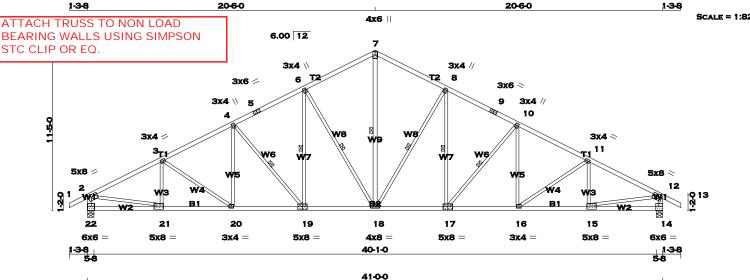
JSI GRIP= 0.89 (14) (INPUT = 0.90) JSI METAL= 0.89 (21) (INPUT = 1.00)



TRUSS NAME JOB NAME QUANTITY PLY JOB DESC TRUSS DESC PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1 T02 8

DRWG NO. Page 16 of 29 ENG JOB: PT0317-168

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:52 2017 Page ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-fugpRc\_cgM\_baDPJGFLeDyhSmZitw\_K24sbv3BzY6IX 1-3-8 SCALE = 1:82.1 4x6 II



LUMBER				
N. L. G. A. F	RULES			
CHORDS	SIZE		LUMBER	DESCR.
1 - 5	2x4	DRY	No.2	SPF
5 - 7	2x4	DRY	No.2	SPF
7 - 9	2x4	DRY	No.2	SPF
9 - 13	2x4	DRY	No.2	SPF
22 - 2	2x4	DRY	No.2	SPF
14 - 12	2x4	DRY	No.2	SPF
22 - 19	2x4	DRY	No.2	SPF
19 - 17	2x4	DRY	No.2	SPF
17 - 14	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
18 - 7	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER

KOTT . Stouffville, ON, CGC

PL	PLATES (table is in inches)								
JT	TYPE	PLATES	W	LEN	Y X				
2	TMVW-t	MT20	5.0	8.0	1.75 3.00				
3	TMWW-t	MT20	3.0	4.0	1.50 1.75				
4	TMWW+t	MT20	3.0	4.0	2.00 0.75				
5	TS-t	MT20	3.0	6.0					
6	TMWW+t	MT20	3.0	4.0	1.50 0.75				
7	TTW+p	MT20	4.0	6.0	Edge				
8	TMWW+t	MT20	3.0	4.0	1.50 0.75				
9	TS-t	MT20	3.0	6.0					
10	TMWW+t	MT20	3.0	4.0	2.00 0.75				
11	TMWW-t	MT20	3.0	4.0	1.50 1.75				
12	TMVW-t	MT20	5.0	8.0	1.75 3.00				
14	BMV1-t	MT20	6.0	6.0	Edge 2.50				
15	BMWW-t	MT20	5.0	8.0	2.50 2.75				
16	BMWW-t	MT20	3.0	4.0					
17	BSWW-I	MT20	5.0	8.0	3.00 4.00				
18	BMWWW-t	MT20	4.0	8.0	1.50 4.00				
19	BSWW-I	MT20	5.0	8.0	3.00 4.00				
20	BMWW-t	MT20	3.0	4.0					
21	BMWW-t	MT20	5.0	8.0	2.50 2.75				
22	DM/\/1 +	MT20	6.0	60	2.50				

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

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.



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

	FACTOR	ED	MAXIMUN	M FACTO	ORED	INPUT	REQRD
	<b>GROSS RE</b>	ACTION	GROSS F	REACTIO	N	BRG	BRG
JΤ	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
22	2809	0	2809	262	-730	5-8	5-8
14	2809	0	2809	0	-730	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT 22 FOR 730 LBS FACTORED PROVIDE ANCHORAGE AT BEARING JOINT 14 FOR 730 LBS FACTORED

NOTE: ANCHORAGE REQUIRED FOR LARGE UPLIFT FORCES

PROVIDE FOR 262 LBS FACTORED HORIZONTAL REACTION AT JOINT 22

UNI	FACTORED REA	<u>ACTIONS</u>				
	1ST LCASE	MAX./MIN	. COMF	PONENT	REAC	TIONS

	131 LUASI	IVIAA.,	IVIIIN. COIVIPO	NENT KEACTION	סמכ		
JT	COMBINE	SNOW C	LIVE	PERM.LIVE	WIND	DEAD	SOIL
22	2230	1314 / 0	410 / 0	0/0	97 / -847	506 / 0	0/0
14	2230	1314/0	410 / 0	0/0	97 / -847	506 / 0	0/0
HORIZONTAL REACTIONS							
22		0/0	0/0	0/0	187 / -187	0/0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 22, 14

MAX. UNBRACED TOP CHORD LENGTH = 2.96 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.10 FT. OR RIGID CEILING DIRECTLY

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

- 1 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-18. DBS = 14-0-0 . CBF = 90 LBS. - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-18, 6-18. DBS = 10-0-0 . CBF = 81 LBS.
- 1 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-17, 6-19. DBS = 20-0-0 . CBF = 47 LBS.
- 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 10-17, 4-19. DBS = 18-0-0 . CBF = 92

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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: (18)

-504 / 3033

-620 / 3461 -787 / 3596

18-17 17-16 16-15

-27.5 -27.5 -27.5 -27.5

СН	ORDS				WE	BS	
MAX	. FACTORED	FACTORED				MAX. FACTO	ORED
MEMB.	FORCE	VERT. LOAD LO	1 MAX	MAX.	MEMB	. FORCE	MAX
	(LBS)	(PLF)	CSI (LC)	UNBRA	VC.	(LBS)	CSI (LC)
FR-TO		FROM TO			H FR-TO		
1- 2	0/36	-102.7 -102.7				-607 / 2054	0.41 (14)
2- 3	-3998 / 1027	-102.7 -102.7					0.93 (3)
3- 4	-3877 / 1043	-102.7 -102.7				-201 / 759	0.17 (3)
4- 5	-3383 / 957	-102.7 -102.7				-819 / 350	0.34(3)
5- 6	-3383 / 957	-102.7 -102.7				-57 / 331	0.07 (6)
6- 7	-2785 / 876	-102.7 -102.7				-326 / 203	0.22 (3)
7- 8	-2785 / 876	-102.7 -102.7				-457 / 209	0.10 (1)
8- 9	-3383 / 957	-102.7 -102.7				-1297 / 538	0.93 (2)
9-10	-3383 / 957	-102.7 -102.7				-200 / 759	0.17 (2)
10-11	-3877 / 1043	-102.7 -102.7					0.34 (2)
11-12	-3998 / 1027	-102.7 -102.7				-57 / 331	0.07 (5)
12-13	0 / 36	-102.7 -102.7					0.22 (2)
22- 2	-2743 / 755		0.28 (1)				0.10 (1)
14-12	-2743 / 755	0.0 0.0	0.28 (1)	5.20			0.82 (1)
					15-12	-813 / 3643	0.82 (1)
22-21	-247 / 278						
21-20	-1049 / 3596	-27.5 -27.5				ALL NOTES	ON THIS D
20-19	-883 / 3461	-27.5 -27.5				ALL NOTES	
19-18	-657 / 3033	-27.5 -27.5	0.59 (1)	6.2	ENGIN	EERING NOT	E PAGE EN

-27.5 0.59 (1) -27.5 0.59 (1)

-27.5 0.62 (1) -27.5 0.64 (1)

6.2! 6.2! 6.2! 6.2! 6.2! READ ALL NOTES ON THIS PAGE AND ON THE **ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE** IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

# **DESIGN CRITERIA**

SPECIFIED LOADS: LL = 30.1 DL = 5.0 LL = 10.0 DL = 7.0 AD = 52.1 TOP CH. PSF PSF TOTAL LOAD

### SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2010

TOTAL WEIGHT = 8 X 190 = 1522 lb

THIS DESIGN COMPLIES WITH:

- PART 4 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09

- TPIC 2011

DESIGN ASSUMPTIONS

- SLOPE REDUCTION FACTOR NOT USED

(80 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 30.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.37°) CALCULATED VERT. DEFL.(LL) = L/ 999 (0.25°) ALLOWABLE DEFL.(TL) = L/180 (2.73°) CALCULATED VERT. DEFL.(TL) = L/ 999 (0.35°)

CSI: TC=0.79 (2-3:2), BC=0.64 (20-21:1), WB=0.93 (6-18:2), SSI=0.26 (2-3:2)

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

SNOW LOAD IMPORTANCE FACTOR = 1.00 WIND LOAD IMPORTANCE FACTOR = 1.00 LIVE LOAD IMPORTANCE FACTOR = 1.00 COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

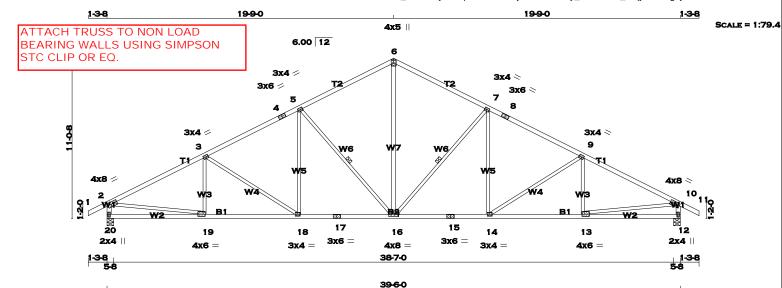
JSI GRIP= 0.89 (15) (INPUT = 0.90 ) JSI METAL= 0.78 (12) (INPUT = 1.00)



JOB NAME TRUSS NAME QUANTITY PLY JOB DESC DRWG NO. TRUSS DESC PT0317-168 2 LECCO RIDGE-JUNIPER 7 EL 1 ENG JOB: PT0317-168 T03

KOTT . Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:53 2017 Page ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-74EBey\_ERf6SCM\_Wqystm9Egvy5WfWwBJWKSbdzY6IW



LUMBER				
N. L. G. A. R	ULES			
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
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	2x3	DRY	No.2	SPF
EXCEPT				
16 - 6	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER

PLATES (table is in inches)							
JT	TYPE	PLATES	W	LEN	Υ	X	
2	TMVW-t	MT20	4.0	8.0	1.75	3.00	
3, 5	5, 7, 9						
3	TMWW-t	MT20	3.0	4.0	1.50	1.75	
4	TS-t	MT20	3.0	6.0			
6	TTW+p	MT20	4.0	5.0			
8	TS-t	MT20	3.0	6.0			
10	TMVW-t	MT20	4.0	8.0		3.00	
12	BMV1+p	MT20	2.0	4.0	2.25	1.00	
13	BMWW-t	MT20	4.0	6.0	1.75	1.75	
14	BMWW-t	MT20	3.0	4.0			
15	BS-t	MT20	3.0	6.0			
16	BMWWW-t	MT20	4.0	8.0			
17	BS-t	MT20	3.0	6.0			
18	BMWW-t	MT20	3.0	4.0			
19	BMWW-t	MT20	4.0	6.0	1.75	1.75	
20	BMV1+p	MT20	2.0	4.0	2.25	1.00	

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED

Ī	DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED B
ı	DIMENSIONS, SOLITORIS AND ECADINGS SI EGITIED BY LABRICATOR TO BE VERIFIED B
I	BUILDING DESIGNER
ı	
ı	BEARINGS

	FACTO	RED	MAXIMU	M FACT	ORED	INPUT	REQRD
	GROSS R	EACTION	GROSS	REACTIO	N	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
20	1978	0	1978	0	0	5-8	5-8
12	1978	0	1978	0	0	5-8	5-8

UNFACTORED REAC	HONS
40T1040E	1111

ı		151 LCASE	IVIAX./	MIN. COMPO	NENT REACTIO	ON		
	JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
	20	1386	983 / 0	0/0	0/0	0/0	403 / 0	0/0
	12	1386	983 / 0	0/0	0/0	0/0	403 / 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 = 3.60 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-16, 5-16. DBS = 18-0-0 . CBF = 90

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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)

CH	ORDS					W E	BS	
MA:	X. FACTORED						MAX. FACTO	DRED
MEMB.								
	(LBS)	(Pl	_F) (				(LBS)	CSI (LC)
FR-TO		FROM			LENGTH			
1- 2	0 / 23						0 / 1324	0.21 (1)
	-2848 / 0				3.60		-799 / 0	0.56 (1)
3- 4	-2521 / 0	-77.3	-77.3	0.51 (1)	3.94	14- 7	0/312	0.07 (1)
4- 5	-2521 / 0	-77.3	-77.3	0.51 (1)	3.94	14- 9	-372 / 0	0.46 (1)
5- 6	-1956 / 0			0.48 (1)		13- 9		0.06 (1)
6- 7	-1956 / 0	-77.3	-77.3	0.48 (1)		5-16	-799 / 0	0.56(1)
7- 8	-2521 / 0			0.51 (1)			0/312	0.07 (1)
8- 9	-2521 / 0	-77.3	-77.3	0.51 (1)	3.94	3-18	-372 / 0	0.46 (1)
9-10	-2848 / 0	-77.3		0.64 (1)		19- 3	-202 / 49	0.06 (1)
10-11	0 / 23	-77.3	-77.3	0.10(1)	10.00	2-19	0 / 2587	
20- 2	-1928 / 0	0.0	0.0	0.19 (1)	6.06	13-10	0 / 2587	0.58 (1)
12-10	-1928 / 0	0.0	0.0	0.19 (1)	6.06			
20-19	0/0	-17.5	-17.5	0.18(4)	10.00			
19-18	0 / 2566	-17.5	-17.5	0.49(1)	10.00			
18-17	0 / 2254	-17.5	-17.5	0.45 (1)	10.00			
17-16	0 / 2254	-17.5	-17.5	0.45 (1)	10.00			
16-15	0 / 2254	-17.5	-17.5	0.45 (1)	10.00			
15-14	0 / 2254	-17.5	-17.5	0.45(1)	10.00			
14-13	0 / 2566	-17.5	-17.5	0.49 (1)	10.00			
13-12	0/0	-17.5	-17.5	0.18 (4)	10.00			

**DESIGN CRITERIA** 

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

### SPACING = 24.0 IN. C/C

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

TOTAL WEIGHT = 2 X 169 = 338 lb

Page 17 of 29

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 (1.32") CALCULATED VERT. DEFL.(LL) = L/999 (0.17") ALLOWABLE DEFL.(TL)= L/360 (1.32") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.32")

CSI: TC=0.64 (9-10:1) , BC=0.49 (13-14:1) , WB=0.58 (10-13:1) , SSI=0.21 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (7) (INPUT = 0.90 ) JSI METAL= 0.64 (13) (INPUT = 1.00 )



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



JOB NAME TRUSS NAME QUANTITY PLY JOB DESC. DRWG NO. TRUSS DESC PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1 T05

5-1-0

1-3-8

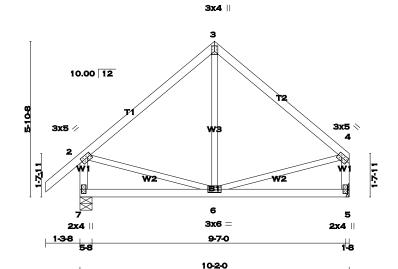
ENG JOB: PT0317-168 Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:53 2017 Page KOTT . Stouffville, ON, CGC

ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-74EBey\_ERf6SCM\_Wqystm9EltyA9ffBBJWKSbdzY6IW

Page 18 of 29

SCALE = 1:43.5

TOTAL WEIGHT = 44 lb



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

DRY: SEASONED LUMBER

PL/	PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Υ	X
2	TMVW-t	MT20	3.0	5.0	1.50	1.75
3	TTW+p	MT20	3.0	4.0	2.50	1.50
4	TMVW-t	MT20	3.0	5.0	1.50	1.75
5	BMV1+p	MT20	2.0	4.0		
6	BMWWW-t	MT20	3.0	6.0		
7	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

/	589	U	589	U	
5	482	0	482	0	

HORZ

UNF	ACTORED RI	EACTIONS					
	1ST LCASE	MAX.	MIN. COMPO	NENT REACTIO	NS		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
7	411	301 / 0	0/0	0/0	0/0	110/0	0/0
5	338	237 / 0	0/0	0/0	0/0	102/0	0/0

0

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

HORZ UPLIFT IN-SX

INPLIT

REQRD

BRG

5-8 5-8 HANGER BY OTHERS

MIN. SEAT SIZE: 1-8

IN-SX

MAXIMUM FACTORED GROSS REACTION

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

DOWN

JΤ

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

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

LOADING TOTAL LOAD CASES: (4)

BUILDING DESIGNER

GROSS REACTION

BEARINGS FACTORED

**VERT** 

	DRDS FACTORED	FACTO	RED			WE	B S MAX. FACTO	RED
MEMB.	FORCE	VERT. LC	AD LC	1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PL	.F) (	CSI (LC)	UNBRA(	2	(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
1- 2	0 / 34	-77.3	-77.3	0.11(1)	10.00	6-3	-9 / 85	0.03 (4)
2-3	-300 / 0	-77.3	-77.3	0.26(1)	6.25	2-6	0 / 238	0.05 (1)
3- 4	-300 / 0	-77.3	-77.3	0.26(1)	6.25	6- 4	0 / 238	0.05 (1)
7- 2	-555 / 0	0.0	0.0	0.06(1)	7.81			
5- 4	-448 / 0	0.0	0.0	0.05(1)	7.81			
7-6	0/0	-17.5	-17.5	0.13 (4)	10.00			
6- 5	0/0	-17.5	-17.5	0.13 (4)	10.00			

### **DESIGN CRITERIA**

SPECIFIED LOADS: CH. PSF

LL = DL = LL = DL = AD = 3.0 7.0 PSF TOTAL LOAD 33.3

### 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 (0.34")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.34") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.26 (2-3:1), BC=0.13 (6-7:4), WB=0.05 (2-6:1) , SSI=0.12 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.49 (4) (INPUT = 0.90 ) JSI METAL= 0.15 (2) (INPUT = 1.00 )

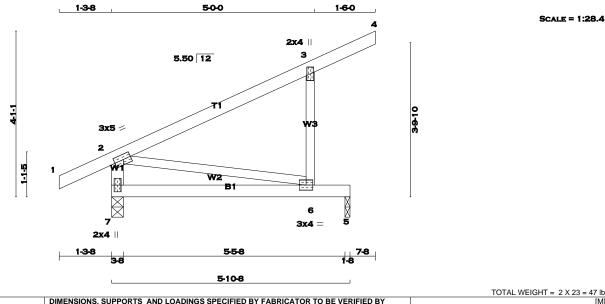


READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



JOB NAME TRUSS NAME QUANTITY PLY JOB DESC. DRWG NO. Page 19 of 29 TRUSS DESC PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1 ENG JOB: PT0317-168 T06 KOTT . Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:54 2017 Page ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-bHoZrl?sCzFJqWZiOgN6lNnvVMTdO6GLXA4074zY6lV



LUMBER				
N. L. G. A. R	ULES			
CHORDS	SIZE		LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	SPF
6 - 3	2x3	DRY	No.2	SPF
7 - 2	2x4	DRY	No.2	SPF
7 - 5	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
DRY: SEASO	ONED L	UMBER.		

PL/	ATES (tab	le is in inches	.)				
JT	TYPE	PLATES	W	LEN	Υ	X	
2	TMVW-t	MT20	3.0	5.0	1.50	2.25	
3	TMV+p	MT20	2.0	4.0			
6	BMVW-t	MT20	3.0	4.0			
7	BMV1+p	MT20	2.0	4.0			

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

	FACTORED		MAXIMU	M FACT	INPUT	REQRD	
	GROSS REACTION		GROSS	REACTIO	BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
7	396	0	396	0	0	3-8	3-8
5	319	0	319	0	0	1-8	1-8

UNF	UNFACTORED REACTIONS										
	1ST LCASE	MAX./	MIN. COMPO	NENT REACTIO	NS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL				
7	275	208 / 0	0/0	0/0	0/0	68 / 0	0/0				
5	223	161 / 0	0/0	0/0	0/0	62 / 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

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

LOADING TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MAX.	FACTORED	FACTOR	RED			ľ	MAX. FACTO	RED	
MEMB.	FORCE	VERT. LO	AD LC	1 MAX	MAX.	MEMB.	FORCE	MAX	
	(LBS)	(PL	F) (	CSI (LC)	<b>UNBRAC</b>	0	(LBS)	CSI (LC)	
FR-TO		FROM	TO		LENGTH	FR-TO			
1- 2	0 / 22	-77.3	-77.3	0.10(1)	10.00	2-6	0/0	0.00(1)	
2-3	0/0	-77.3	-77.3	0.33 (1)	10.00				
3- 4	-25 / 0	-77.3	-77.3	0.13(1)	6.25				
6- 3	-314 / 0	0.0	0.0	0.08 (1)	7.81				
7- 2	-298 / 0	0.0	0.0	0.03(1)	7.81				
7-6	0/0	-17.5	-17.5	0.37 (1)	10.00				
6- 5	0/0	-17.5	-17.5	0.37 (1)	10.00				

### **DESIGN CRITERIA**

SPECIFIED LOADS: TOP CH. LL =

LL = DL = LL = DL = AD = 3.0 PSF 7.0 PSF TOTAL LOAD 33.3

### SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014

- CSA 086-09 - TPIC 2011

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

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/851 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.20") CALCULATED VERT. DEFL.(TL) = L/412 (0.17")

CSI: TC=0.33 (2-3:1) , BC=0.37 (6-7:1) , WB=0.00 (2-6:1) , SSI=0.25 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.31 (6) (INPUT = 0.90 ) JSI METAL= 0.07 (3) (INPUT = 1.00 )



JUNIPER 7 **BUILDING DIVISION** 

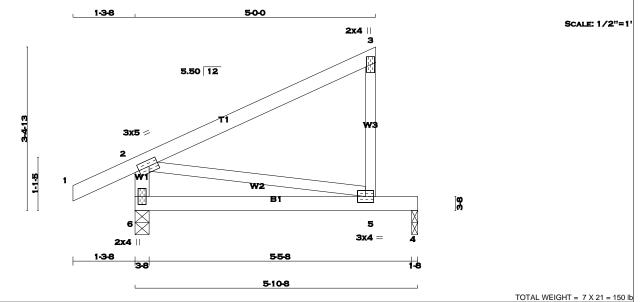


RECEIVED TOWN OF MILTON MAR 29, 2017

JOB NAME TRUSS NAME QUANTITY PLY JOB DESC. DRWG NO. Page 20 of 29 TRUSS DESC. PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1 ENG JOB: PT0317-168 **T07** 

KOTT . Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:54 2017 Page ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-bHoZrl?sCzFJqWZiOgN6lNnvVMVVO6GLXA4074zY6lV



<u>LUMBER</u>				
N. L. G. A. F	RULES			
CHORDS	SIZE		LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF
5 - 3	2x3	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: SEAS				
	J. 1. L	.obert.		

PL	AIES (tabi	e is in inches	S)				
JT	TYPE	PLATES	W	LEN	Υ	X	
2	TMVW-t	MT20	3.0	5.0	1.50	2.25	
3	TMV+p	MT20	2.0	4.0			
5	RM\/\//_t	MT20	3.0	4 0			

6 BMV1+p MT20 2.0 4.0

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEA	RINGS						
	FACTOR	RED	MAXIMU	M FACT	INPUT	REQRD	
	GROSS REACTION		GROSS I	REACTIO	BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
6	378	0	378	0	0	3-8	3-8
4	216	0	216	0	0	1-8	1-8

UNFACTORED REAC	HONS
40T1040E	1111

	1ST LCASE	MAX./I	MIN. COMPC	NS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
6	263	197 / 0	0/0	0/0	0/0	66 / 0	0/0	
4	153	99 / 0	0/0	0/0	0/0	54 / 0	0/0	

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

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

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

LOADING TOTAL LOAD CASES: (4)

CHORDS				WEBS			
FACTORED	FACTO	RED				MAX. FACTO	RED
FORCE	VERT. LO	AD LC	1 MAX	MAX.	MEMB.	FORCE	MAX
(LBS)	(PL	.F) (	CSI (LC)	<b>UNBRAC</b>	0	(LBS)	CSI (LC)
	FROM	TO		LENGTH	FR-TO		
0 / 22	-77.3	-77.3	0.10(1)	10.00	2-5	0/0	0.00(1)
0/0	-77.3	-77.3	0.33 (1)	10.00			
-193 / 0	0.0	0.0	0.05 (1)	7.81			
-298 / 0	0.0	0.0	0.03(1)	7.81			
0/0	-17.5	-17.5	0.25 (1)	10.00			
0/0	-17.5	-17.5	0.25 (1)	10.00			
	FACTORED FORCE (LBS) 0 / 22 0 / 0 -193 / 0 -298 / 0 0 / 0	FACTORED FACTOR FORCE (LBS) (LBS) FROM 0/22 -77.3 0/0 -77.3 -193 / 0 0.0 -298 / 0 0.0 0/0 -17.5	FACTORED FORCE (LBS) (PLF) (PL	FACTORED   FACTORED	FACTORED   FACTORED	FACTORED   FACTORED   FACTORED   FORCE   VERT. LOAD LC1   MAX   MAX.   MEMB.   (LBS)   (PLF)   CSI (LC)   UNBRAC   ENGTH FR-TO   0/02   -77.3   -77.3   0.10 (1)   10.00   2-5   0/0   -77.3   -77.3   0.33 (1)   10.00   2-5   0.00   0.05 (1)   7.81   -298/0   0.0   0.0   0.03 (1)   7.81   0/0   -17.5   -17.5   0.25 (1)   10.00	FACTORED   FACTORED   FORCE   FORCE   FORCE   CFR. LOAD LCT   MAX   MAX.   MEMB.   FORCE   CFR. LOAD   CFR.   CF

### **DESIGN CRITERIA**

SPECIFIED LOADS: TOP CH. LL =

LL = 23.3 DL = 3.0 LL = 0.0 DL = 7.0 AD = 33.3 PSF PSF TOTAL LOAD

### SPACING = 24.0 IN. C/C

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

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

- TPIC 2011

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

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.20") CALCULATED VERT. DEFL.(TL) = L/565 (0.12")

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.26 (2) (INPUT = 0.90 ) JSI METAL= 0.05 (6) (INPUT = 1.00 )



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



Page 21 of 29 TRUSS DESC PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1 ENG JOB: PT0317-168 T08 Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:54 2017 Page KOTT . Stouffville, ON, CGC ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-bHoZrl?sCzFJqWZiOgN6lNnvKMUTO6GLXA4074zY6lV 1-3-8 SCALE = 1:15.8 2x4 # 4.00 12 3x4 \\ 3 3x4 \\ 8 HWI 7:7 B1 8 2x4 || 4x5 1.3-8 5.7.2 3-0 5-11-10 TOTAL WEIGHT = 20 lb LUMBER N. L. G. A. RULES CHORDS SIZE DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER **DESIGN CRITERIA** LUMBER DESCR SIZE BEARINGS FACTORED 4 2x4 DRY No.2 SPF SPF MAXIMUM FACTORED INPLIT REQRD SPECIFIED LOADS: LL = DL = LL = DL = AD = No.2 GROSS REACTION GROSS REACTION CH. BRG BRG PSF LIPLIFT IN-SX 3.0 DRY No 2 SPF JT. VFRT HOR7 DOWN HOR7 IN-SX PSF 376 REINFORCING MEMBERS 5 196 196 0 1-8 (1-8) 1-8 7.0 PSF SPF TOTAL LOAD 33.3 No.2 VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH DRY: SEASONED LUMBER. SPACING = 24.0 IN. C/C UNFACTORED REACTIONS THIS TRUSS IS DESIGNED FOR RESIDENTIAL MAX./MIN. COMPONENT REACTIONS
SNOW LIVE PERM.LIVE WIND OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 COMBINED DEAD SOIL 
 PLATES (table is in inches)

 JIT TYPE
 PLATES

 2
 TMBMR1-I
 MT20

 2
 RT+t
 MT20

 2
 RT+t
 MT20

 4
 TMV+p
 MT20

 6
 BMV+p
 MT20
 195 / 0 0/0 0/0 0/0 67 / 0 0/0 LEN Y THIS DESIGN COMPLIES WITH: 5.0 4.0 4.0 2.25 0.25 - PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014 4.0 3.0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 2, 5 - CSA 086-09 - TPIC 2011 20 4 0 <u>BRACING</u> TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT. (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED. ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.20") CALCULATED VERT. DEFL.(LL) = L/907 (0.08") ALLOWABLE DEFL.(TL)= L/360 (0.20") ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED. LOADING TOTAL LOAD CASES: (4) CALCULATED VERT. DEFL.(TL) = L/485 (0.15") CHORDS WFBS CSI: TC=0.34 (4-8:1), BC=0.32 (6-7:1), WB=0.05 MAX. FACTORED FACTORED MAX. FACTORED FORCE MAX (3-7:1) , SSI=0.22 (4-8:1) MEMB. VERT, LOAD LC1 MAX MAX. MEMB. FORCE MAX (PLF) FROM TO UNBRAC LENGTH FR-TO DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 (LBS) CSI (LC) (LBS) CSI (LC) FR-TO ΤΌ 1- 2 2- 8 -77.3 -77.3 0/5 -77.3 0.09 (1) 10.00 -280/00.00(1)-77.3 0.04 (1) -77.3 0.34 (1) 6.25 0 / 432 0.05 (1) COMPANION LIVE LOAD FACTOR = 0.50 -77.3 -77.3 8- 3 3- 4 -179 / 0 6.25 -179 / 0 -77.3 0.34 (1) 6-4 0.0 0.0 0.03 (1) 7.81 TRUSS PLATE MANUFACTURER IS NOT -188 / 0 RESPONSIBLE FOR QUALITY CONTROL IN THE 2- 7 7- 6 0 / 305 -17.5 10.00 TRUSS MANUFACTURING PLANT. 0/0 -17.5 -17.5 0.32 (1) 10.00 6- 5 0/0 -17.5 -17.5 0.32 (1) 10.00 NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN 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= 0.05 (2) (INPUT = 1.00 ) SER PROFESSIONAL RECEIVED TOWN OF MILTON

JOB NAME

TRUSS NAME

100136551

HOVINCE OF ONTARIO

QUANTITY

PLY

JOB DESC

DRWG NO.

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

BUILDING DIVISION

KOTT

MAR 29, 2017

JUNIPER 7

W LEN Y MT20 MT20 TMBMW1-m 4.0 1.75 1.75 TMWW-t 3.0 4.0 TMV+p BMVW-t 2.0 MT20 40 BMWW+t MT20 3.0 5.0 2.25 1.50

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED

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

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

<u>LOADING</u> TOTAL LOAD CASES: (4)

CHORDS					WEBS			
MAX.	FACTORED	FACTO	RED				MAX. FACT	ORED
MEMB.	FORCE	VERT. LO	AD LC	1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PL	.F) (	CSI (LC)	UNBRA(	2	(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
1- 2	0/5	-77.3	-77.3	0.09(1)	10.00	7-3	0 / 137	0.03 (1)
2-9	-328 / 0	-77.3	-77.3	0.02(1)	6.25	3-6	-404 / 0	0.07(1)
9- 3	-372 / 0	-77.3	-77.3	0.03(1)	6.25	8- 9	-50 / 0	0.00(1)
3- 4	-3 / 0	-77.3	-77.3	0.05 (1)	10.00	9- 7	0 / 95	0.01 (1)
6- 4	-73 / 0	0.0	0.0	0.01(1)	7.81			
2-8	0 / 272	-17.5	-17.5	0.08 (1)	10.00			
8- 7	0 / 272	-17.5	-17.5	0.11 (1)	10.00			
7-6	0 / 358	-17.5	-17.5	0.28 (1)	10.00			
6- 5	0/0	-17.5	-17.5	0.22 (1)	10.00			

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 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.19") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.09 (1-2:1), BC=0.28 (6-7:1), WB=0.07 (3-6:1) , SSI=0.15 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.55 (6) (INPUT = 0.90 ) JSI METAL= 0.13 (6) (INPUT = 1.00 )



RECEIVED TOWN OF MILTON MAR 29, 2017 JUNIPER 7 **BUILDING DIVISION** 



Page 23 of 29 TRUSS DESC ENG JOB: PT0317-168 PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1 T10 Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:55 2017 Page KOTT . Stouffville, ON, CGC ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-3TMx3e0UyHNARg7uxNuLraJ4\_mqf7ZWUmqpZfWzY6IU 1-3-8 SCALE: 3/4"=1 2x4 4.00 12 3x4 \\ 3 3x4 \\ 8 HW 7. В1 9 2x4 || 4x5 1-3-8 5-7-9 3-0 6-0-1 TOTAL WEIGHT = 20 lb LUMBER N. L. G. A. RULES CHORDS SIZE DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER **DESIGN CRITERIA** LUMBER DESCR SIZE BEARINGS FACTORED 4 2x4 DRY No.2 MAXIMUM FACTORED INPLIT REQRD SPECIFIED LOADS: LL = DL = LL = DL = AD = TOP CH. No.2 GROSS REACTION GROSS REACTION HORZ UPLIFT IN-SX 3.0 SPF JT. VFRT HOR7 DOWN IN-SX PSF 3-0 3-0 REINFORCING MEMBERS 5 198 0 0 1-8 1-8 7.0 PSF SPF TOTAL LOAD 33.3 No.2 UNFACTORED REACTIONS

1ST LCASE MAX.

JT COMBINED SNOW DRY: SEASONED LUMBER. SPACING = 24.0 IN. C/C MAX./MIN. COMPONENT REACTIONS
SNOW LIVE PERM.LIVE WIND DEAD SOIL THIS TRUSS IS DESIGNED FOR RESIDENTIAL 0/0 67 / 0 53 / 0 0/0 OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 196 / 0 0/0 0/0 87 / 0 0/0 PLATES (table is in inches)
JT TYPE PLATES
2 TMBMR1-I MT20 THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 2, 5 5.0 4.0 4.0 2.25 0.25 4.0 3.0 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 RT+t - CSA 086-09 RT+t MT20 - TPIC 2011 TMV+r MT20 20 BMV+p (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 A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED. ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/891 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.20") LOADING TOTAL LOAD CASES: (4) CHORDS MAX. FACTORED WEBS CALCULATED VERT. DEFL.(TL) = L/476 (0.15") FACTORED MAX. FACTORED VERT, LOAD LC1 MAX MAX. MEMB MEMB FORCE FORCE MAX CSI: TC=0.34 (4-8:1), BC=0.32 (5-6:1), WB=0.05 (PLF) FROM TO CSI (LC) UNBRAC (3-7:1) , SSI=0.22 (4-8:1) FR-TO LENGTH FR-TO 1- 2 2- 8 -77.3 -77.3 -77.3 0.09 (1) -77.3 0.04 (1) 0.00 (1) 0.05 (1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 0/5 10.00 7- 8 7- 3 -281 / 0 0 / 435 -348 / 0 6.25 8- 3 3- 4 -77.3 -77.3 -77.3 0.34 (1) -77.3 0.34 (1) -180 / 06.25 COMPANION LIVE LOAD FACTOR = 0.50 6-4 -189/00.0 0.0 0.03 (1) 7.81 -17.5 -17.5 0.14 (1) -17.5 -17.5 0.32 (1) -17.5 -17.5 0.32 (1) TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE 2- 7 7- 6 0 / 309 10.00 0/0 10.00 TRUSS MANUFACTURING PLANT. NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN 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= 0.05 (2) (INPUT = 1.00 ) SED PROFESSIONAL **RECEIVED** TOWN OF MILTON

JOB NAME

TRUSS NAME

100136551

HOVINCE OF ONTARIO

QUANTITY

PLY

JOB DESC.

DRWG NO.

**KOTT** 

MAR 29, 2017

JUNIPER 7

**BUILDING DIVISION** 

JOB NAME TRUSS NAME QUANTITY PLY JOB DESC. DRWG NO. Page 24 of 29 TRUSS DESC PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1 ENG JOB: PT0317-168 T11 Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:55 2017 Page KOTT . Stouffville, ON, CGC ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-3TMx3e0UyHNARg7uxNuLraJ8gmmi7X9UmqpZfWzY6IU 1-3-8 SCALE = 1:20.5 2x4 || 5 4.00 12 3x4 = 3x4 \\ 3x4 \\ 3 10 8 2x4 || 3x4 = 4x5 = 1-3-8 7.7.9 8-0-1 TOTAL WEIGHT = 28 lb DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER **DESIGN CRITERIA** BEARINGS FACTORED MAXIMUM FACTORED GROSS REACTION INPUT REQRD SPECIFIED LOADS: LL = DL = LL = DL = AD = GROSS REACTION CH. PSF HORZ UPLIFT IN-SX 3.0 JT. VFRT HOR7 DOWN IN-SX PSF 2 290 290 0 1-8 1-8 7.0 PSF TOTAL LOAD 33.3

	LUMBER					
	N. L. G. A. F	RULES				
	CHORDS	SIZE		LUMBER	DESCR.	
	1 - 5	2x4	DRY	No.2	SPF	
	7 - 5	2x3	DRY	No.2	SPF	
	2 - 6	2x4	DRY	No.2	SPF	
	REINFORC	ING MEI	MBERS			
	HW1	2x6	DRY	No.2	SPF	
	ALL WEBS	2x3	DRY	No.2	SPF	
DRY: SEASONED LUMBER.						

# DI ATES (table is in inches)

FL/	FLATES (table is in inches)									
JT	TYPE	PLATES	W	LEN	Υ	X				
2	TMBMR1-I	MT20	4.0	5.0	2.25	0.25				
2	RT+t	MT20	3.0	4.0						
2	RT+t	MT20	3.0	4.0						
4	TMWW-t	MT20	3.0	4.0						
5	TMV+p	MT20	2.0	4.0						
7	BMVW-t	MT20	3.0	4.0	1.50	1.75				
8	BMW+w	MT20	2.0	4.0						

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

### UNFACTORED REACTIONS

	1ST LCASE	MAX./I	MIN. COMPO	NENT REACTIO	NS		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
2	332	244 / 0	0/0	0/0	0/0	87 / 0	0/0
6	206	133 / 0	0/0	0/0	0/0	73 / 0	0/0

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

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

LOADING TOTAL LOAD CASES: (4)

CHO	DRDS				WEBS			
MAX.	FACTORED	FACTO	RED				MAX. FACTO	DRED
MEMB.	FORCE	VERT. LC	AD LC	1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PL	_F) (	CSI (LC)	UNBRAG	0	(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
1- 2	0/5	-77.3	-77.3	0.09(1)	10.00	8- 4	0 / 236	0.05 (1)
2-10	-542 / 0	-77.3	-77.3	0.03(1)	6.25	4- 7	-649 / 0	0.15 (1)
10- 3	-532 / 0	-77.3	-77.3	0.06(1)	6.25	9-10	0 / 164	0.00(1)
3- 4	-532 / 0	-77.3	-77.3	0.06(1)	6.25	9- 3	-254 / 0	0.02(1)
4- 5	-4 / 0	-77.3	-77.3	0.11(1)	10.00			
7- 5	-117 / 0	0.0	0.0	0.02(1)	7.81			
2- 9	0 / 450	-17.5	-17.5	0.10(1)	10.00			
9-8	0 / 597	-17.5	-17.5	0.23(1)	10.00			
8- 7	0 / 597	-17.5	-17.5	0.57 (1)	10.00			
7- 6	0/0	-17.5	-17.5	0.48 (1)	10.00			

### 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 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.27") CALCULATED VERT. DEFL.(TL) = L/662 (0.15")

CSI: TC=0.11 (4-5:1) , BC=0.57 (7-8:1) , WB=0.15 (4-7:1) , SSI=0.23 (6-7:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.76 (7) (INPUT = 0.90 ) JSI METAL= 0.22 (7) (INPUT = 1.00 )

PROFESSIONA, 100136551 HOVINCE OF ONTARIO

TOWN OF MILTON MAR 29, 2017 JUNIPER 7 **BUILDING DIVISION** 



RECEIVED

JOB NAME TRUSS NAME QUANTITY PLY JOB DESC. DRWG NO. Page 25 of 29 TRUSS DESC PT0317-168 LECCO RIDGE-JUNIPER 7 EL 1 ENG JOB: PT0317-168 T12 3 KOTT, Stouffville, ON, CGC Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 08:54:56 2017 Page 1 ID:\_T3kGIMyOMIq1Fm9dxt37uyPtos-XfwKG\_16jaV13qi4V5PaOosINA5psxGd?UZ6CyzY6l7 8-10-0 1-3-8 SCALE = 1:24.6 2x4 || 5 4.00 12 3x4 = 3x4 \\ 3 3x4 \\ 10 Hw. 9 8 7 2x4 || 3x4 = 1-3-8 988 TOTAL WEIGHT = 3 X 35 = 104 lb DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER **DESIGN CRITERIA** 

LUMBER										
N. L. G. A. R	N. L. G. A. RULES									
CHORDS	SIZE		LUMBER	DESCR.						
1 - 5	2x4	DRY	No.2	SPF						
7 - 5	2x3	DRY	No.2	SPF						
2 - 6	2x4	DRY	No.2	SPF						
REINFORCING MEMBERS										
HW1	2x6	DRY	No.2	SPF						
ALL WEBS DRY: SEASO	2x3 ONED LI	DRY UMBER.	No.2	SPF						

# DI ATES (table is in inches)

FL/	PLATES (table is in inches)									
JT	TYPE	PLATES	W	LEN	Υ	Χ				
2	TMBMR1-I	MT20	4.0	5.0	2.25	0.25				
2	RT+t	MT20	3.0	4.0						
2	RT+t	MT20	3.0	4.0						
4	TMWW-t	MT20	3.0	4.0						
5	TMV+p	MT20	2.0	4.0						
7	BMVW-t	MT20	3.0	4.0	1.50	1.50				
8	BMW+w	MT20	2.0	4.0						

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

BEAL	BEARINGS									
	FACTORED		MAXIMUM FACTORED			INPUT	REQRD			
	<b>GROSS RE</b>	ACTION	GROSS F	REACTIO	BRG	BRG				
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX			
2	561	0	561	0	0	3-0	3-0			
6	396	0	396	0	0	1-8	1-8			
6	396	0	396	0	0	1-8	1-8			

### UNFACTORED REACTIONS

	1ST LCASE	MAX./I	MIN. COMPO	NS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
2	391	286 / 0	0/0	0/0	0/0	105 / 0	0/0	
6	279	187 / 0	0/0	0/0	0/0	92 / 0	0/0	

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

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

LOADING TOTAL LOAD CASES: (4)

CHC	CHORDS				WEBS			
MAX.	FACTORED	FACTOR	RED				MAX. FACTO	RED
MEMB.	FORCE	VERT. LO	AD LC1	1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PL	.F) (	CSI (LC)	UNBRAG		(LBS)	CSI (LC)
FR-TO	` '	FROM	TO	, ,	LENGTH	FR-TO	. ,	` '
1- 2	0/5	-77.3	-77.3	0.09(1)	10.00	8- 4	0 / 214	0.05 (1)
2-10	-680 / 0	-77.3	-77.3	0.03(1)	6.25	4- 7	-797 / 0	0.29(1)
10-3	-665 / 0	-77.3	-77.3	0.12(1)	6.25	9-10	0 / 153	0.00(1)
3- 4	-665 / 0	-77.3	-77.3	0.12(1)	6.25	9-3	-254 / 0	0.02(1)
4- 5	-8 / 0	-77.3	-77.3	0.18 (1)	10.00			. ,
7- 5	-145 / 0	0.0	0.0	0.04 (1)	7.81			
2-9	0 / 565			0.13 (1)	10.00			
9- 8	0 / 739	-17.5	-17.5	0.27(1)	10.00			
8- 7	0 / 739	-17.5	-17.5	0.58 (1)	10.00			
7-6	0/0	-17.5	-17.5	0.46 (1)	10.00			

SPEC	IFIED	LUAI	JS:		
TOP	CH.	LL	=	23.3	PSF
		DL	=	3.0	PSI
BOT	CH.	LL	=	0.0	PSF

 $\begin{array}{ccc} DL &=& 7.0 \\ TOTAL & LOAD &=& 33.3 \end{array}$ 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 (0.32")
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (0.32") CALCULATED VERT. DEFL.(TL) = L/701 (0.17")

CSI: TC=0.18 (4-5:1) , BC=0.58 (7-8:1) , WB=0.29 (4-7:1) , SSI=0.31 (6-7:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (7) (INPUT = 0.90 ) JSI METAL= 0.28 (7) (INPUT = 1.00 )



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



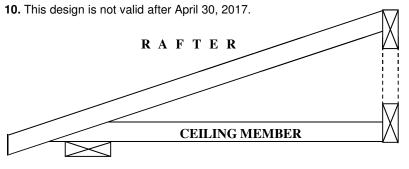
# BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

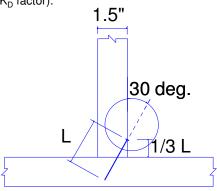
B37579H1

NAIL TYPE	LENGTH	DIAMETER	NAIL LATERAL CAPACITY (L		
NAIL TIPE	(IN)	(IN)	S-P-F	D. FIR	
COMMON	3.00	0.144	132	147	
WIRE	3.25	0.144	132	147	
WINL	3.50	0.160	159	177	
COMMON	3.00	0.122	97	108	
SPIRAL	3.25	0.122	97	108	
SFINAL	3.50	0.152	145	162	

### 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<sub>A</sub> 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<sub>D</sub> 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





TOE-NAIL INSTALLATION

Nail type	Common wire	Common spiral	Common wire	Common spiral			
Nail dia. (in)	0.160	0.152	0.144	0.122			
_	( 3.5'	" nail )	( 3" and 3	3.25" nail )			
LUMBER SIZE	MAXIMUM NUMBER OF TOE-NAILS						
2X4 SPF	2	2	3	3			
2X4 D. Fir	2	2	2	2			

2X6	SPF	4	4	4	5
2X6	D. Fir	3	3	3	4



MiTek Canada Inc 100 Industrial Rd. Bradford, Ontario L3Z 3G7 RECEIVED TOWN OF MILTON MAR 29, 2017 JUNIPER 7 BUILDING DIVISION

G

R R U

E S



# BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

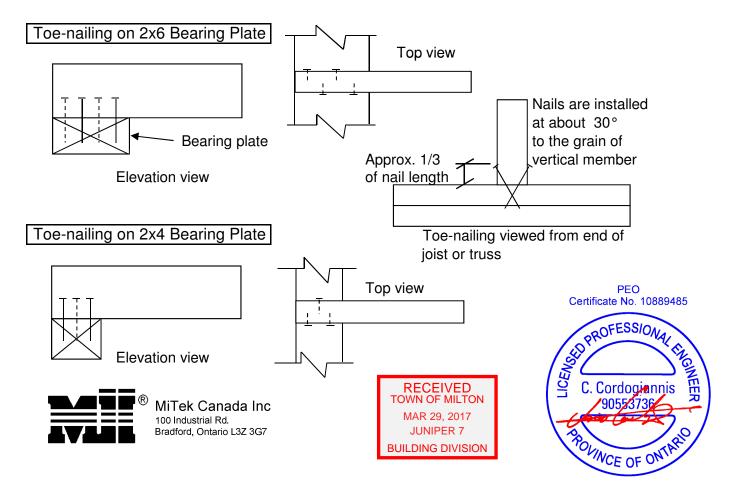
# B37579H2

NAIL TYPE	LENGTH	DIAMETER	NAIL WITHDRAWAL CAPACITY (LB)	
NAIL ITPE	(IN)	(IN)	S-P-F	D. FIR
COMMON	3.00	0.144	30	42
WIRE	3.25	0.144	32	45
WINE	3.50	0.160	38	52
COMMON	3.00	0.122	26	36
SPIRAL	3.25	0.122	28	40
SFINAL	3.50	0.152	36	50

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

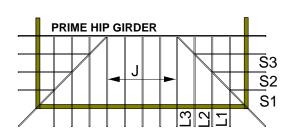
### NOTES:

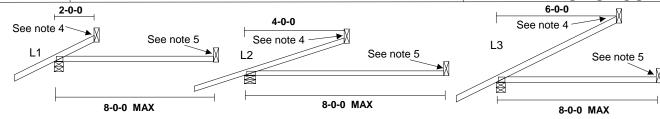
- 1. Truss chord, rafter, or ceiling members may be anchored to bearing plate by toe-nails, provided that the actual factored uplift force due to **wind** or **earthquake** load does not exceed the withdrawal capacities in the table. Hangers (specified by others) are required for uplift forces that are 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<sub>A</sub> 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, 2017

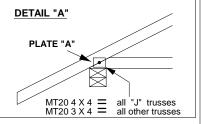


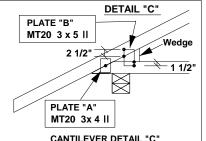
200

600



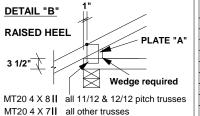






2-0-0	4-0-0	6-0-0
See note 4	See note 4	See note 4
S1	S2	S3
		N.
See note 5	See note 5	See note 5
2-0-0	2-0-0	2-0-0

**4-0-0** 

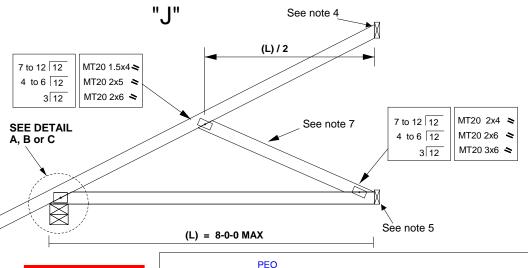


CANTILL VER DETAIL C				
SLOPE	MAX CANTILEVER	PLATE "B"	WEDGE SIZE	
3/12	17"	3 X 5	2 X 3	
4/12	14"	3 X 5	2 X 3	
5/12	12"	3 X 5	2 X 4	
6/12	10"	3 X 5	2 X 4	
7/12	9"	3 X 5	2 X 6	
8/12	8.5"	3 X 5	2 X 6	
9/12	8"	3 X 5	2 X 6	
10/12	7.5"	3 X 5	2 X 6	



# NOTES: 1. ALL LUMBER SHALL BE 2x4 SPF OR D. Fir No. 2 DRY OR BETTER.

- 2. THIS TRUSS IS DESIGNED FOR HOUSING AND SMALL BUILDING REQUIREMENTS OF PART 9 NBCC 2010, WHERE GROUND SNOW LOAD IS 60.0 PSF OR LESS AND RAIN LOAD DOES NOT EXCEED 12.53 PSF; TOP CHORD DEAD LOAD IS 6 PSF OR LESS; BC LIVE LOAD IS 0 PSF AND BC DEAD LOAD IS 7 PSF.
- 3. HIP RAFTER DESIGN SHALL CONFORM TO SECTION 9.23.14.6 OF NBCC 2010.
- 4. FASTEN HIGH END OF RAFTERS USING MITEK CANADA INC. "BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY" STANDARD DETAIL B37579H1.
- 5. FASTEN RIGHT END OF CEILING USING MITEK CANADA INC. "BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY" STANDARD DETAIL B37579H1.
- 6. OVERHANG LENGTH SHALL NOT EXCEED 2 FT.
- 7. WHEN SETBACK IS 6 FT OR LESS, DIAGONAL WEB MAY BE OMITTED AND HIGH END OF TOP CHORD SHALL BE CONNECTED AS PER NOTE 4.
- 8. ALL PLATES SPECIFIED ARE PRESSED INTO BOTH FACES OF THE TRUSS.
- 9. MITEK REFERENCE PAGE MII-7473C FORMS AN INTEGRAL PART OF THIS DETAIL.
- 10. THIS DETAIL IS NOT VALID AFTER APRIL 30, 2017



**RECEIVED** TOWN OF MILTON MAR 29, 2017 JUNIPER 7 **BUILDING DIVISION** 



MiTek Canada, Inc.

100 Industrial Rd. Bradford, Ontario, L3Z 3G7



April 24, 2015

OVERHANG:

24" OR LESS

MAXIMUM SPAN: 40'- 0"

#### LUMBER

**OVERHANG:** 

24" OR LESS

TOP CHORD: 2 X 4 No. 2 DRY SPF or D- Fir 2 X 3 or 2 X 4 No. 2 DRY SPF or D- Fir BOTTOM CHORD: GABLE WEB: 2 X 3 or 2 X 4 No. 2 DRY SPF or D-Fir

#### **PLATES**

JOINT	PLA <sup>-</sup>	ΓES
HEELS	MT20	3 X 5
PEAK	MT20	3 X 5
TC SPLICES	MT20	3 X 5
BC SPLICES	MT20	3 X 5
WER IOINTS	MT20	2 X 4

### **DESIGN CRITERIA**

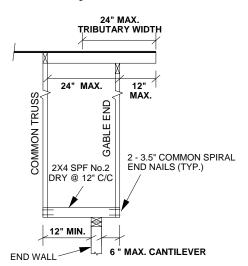
LL = 60.0 PSF OR LESS **TOP CHORD** TOP CHORD DL = 6.0 PSF OR LESS

BOTTOM CHORD LL = 0 PSF BOTTOM CHORD DL = 7.0 PSF

TOTAL LOAD = 73.0 PSF OR LESS

### **CANTILEVER DETAIL**

Note: Gable end may be cantilevered up to 6 inches past end wall as shown. Gable end to be continuously supported by 2x4 SPF No.2 (DRY) members at 12" o.c. along the bottom chord. Roof design loads shall not exceed the loading shown above.



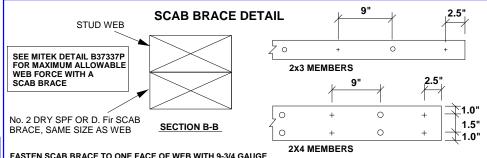


#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2 FT.

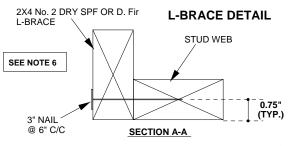
MAX. UNBRACED BOTTOM CHORD LENGTH = 10 FT. OR RIGID CEILING DIRECTLY APPLIED. WEBS MUST BE LATERALLY BRACED, SCAB BRACED OR L-BRACED AS INDICATED IN TABLE BELOW:

WEB LENGTH (L)	SCAB BRACE	L-BRACE	LATERAL BRACE
L < 6 FT.	NOT REQUIRED	NOT REQUIRED	NOT REQUIRED
6 FT. < L < 12 FT.	REQUIRED	2x4 L-BRACE	1 LATERAL AT 1/2 LENGTH OF WEB



0.122" X 3" COMMON SPIRAL NAILS SPACED @ 9" C/C (MAX) WITH 2.5" MINIMUM END DISTANCE. SCAB BRACE MUST COVER 90% OF WEB LENGTH. DRIVE NAILS ALTERNATELY FROM FRONT AND BACK FACES.

+ NAIL FROM FRONT FACE o NAIL FROM BACK FACE



FASTEN L-BRACE TO NARROW EDGE OF WEB WITH ONE ROW OF 9-3/4 GAUGE 0.122" X 3" COMMON SPIRAL NAILS SPACED AT 6" C/C WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

### NOTES:

- Gable studs are spaced at 24" C/C (max.) with a max. length of 12 ft. All plates specified are MiTek MT20, centered at each joint, and
- pressed into both faces of truss.
- . Truss spacing is 24" C/C, maximum.
- Gable truss is designed for continuous support. Bearing material must be of the same species as chord member and of grade No. 2 or better.
- 5 This truss requires rigid sheathing attached to exposed face. 2x3 or 2x4 T-braces shown for gable webs in the MiTek engineering 6.
- drawings may be replaced by a 2x4 L-brace as shown above.

  This truss is designed for residential or small building requirements,
- conforming to Part 9, NBCC 2010. This detail is not valid after April 30, 2017.



RECEIVED TOWN OF MILTON MAR 29, 2017 JUNIPER 7 **BUILDING DIVISION** 

April 24, 2015