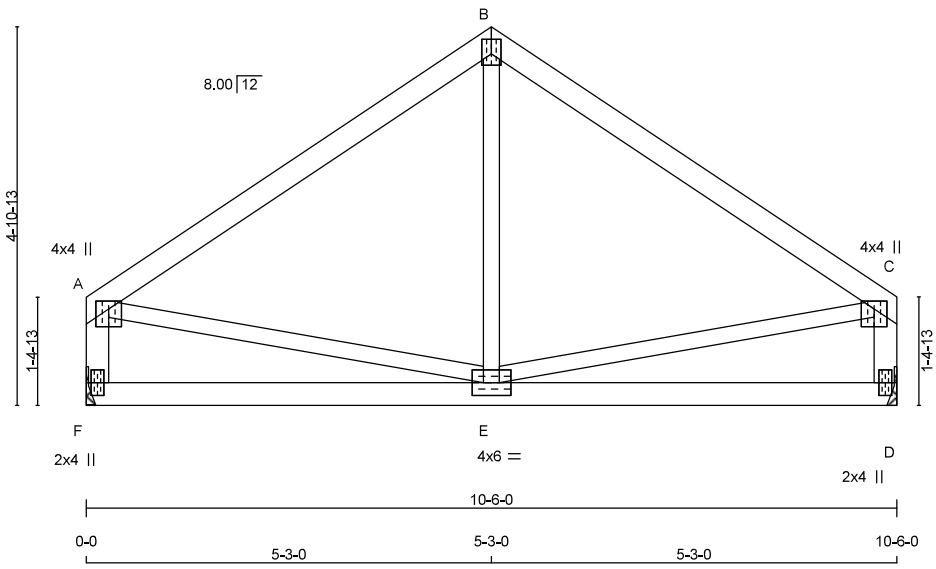
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
NE0723-125	T05	2	1	GREENPARK - ZADORRA ESTATES - VILLA 11-1 TRUSS DESC.	

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Wed Jul 19 16:31:34 2023 Page 1
ID:a_geEeAITwiPs63VUzyy33z8f4n-SdRV353ir9H9NxV7yfnKjrnqYGdV966G55LRSwywSpN

Scale = 1:29.8



TOTAL WEIGHT = 2 X 41 = 81 lb

[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - C	2x4	DRY	No.2	SPF
F - A	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	4.0	1.25	2.00
B	TTW+p	MT20	3.0	4.0	2.25	1.50
C	TMVW+p	MT20	4.0	4.0	1.25	2.00
D	BMV1+p	MT20	2.0	4.0		
E	BMWWW-t	MT20	4.0	6.0		
F	BMV1+p	MT20	2.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	723	0	723	0	0	MECHANICAL	
D	723	0	723	0	0	MECHANICAL	

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	505	365 / 0	0 / 0	0 / 0	0 / 0	140 / 0	0 / 0
D	505	365 / 0	0 / 0	0 / 0	0 / 0	140 / 0	0 / 0

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A-B	-513 / 0	-119.4	-119.4	0.43 (1)	6.25	E-B	-58 / 81	0.03 (4)
B-C	-513 / 0	-119.4	-119.4	0.42 (1)	6.25	A-E	0 / 435	0.10 (1)
F-A	-686 / 0	0.0	0.0	0.07 (1)	7.81	E-C	0 / 435	0.10 (1)
D-C	-686 / 0	0.0	0.0	0.07 (1)	7.81			
F-E	0 / 0	-18.2	-18.2	0.14 (4)	10.00			
E-D	0 / 0	-18.2	-18.2	0.14 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	34.8	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.3	PSF
TOTAL LOAD		=	48.1	PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (0.35")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.35")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.43/0.97 (A-B:1) , BC=0.14/0.97 (E-F:4) , WB=0.10/0.97 (C-E:1) , SSI=0.20/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.57 (E) (INPUT = 0.90)
JSI METAL= 0.15 (C) (INPUT = 1.00)

Jul 19, 2023

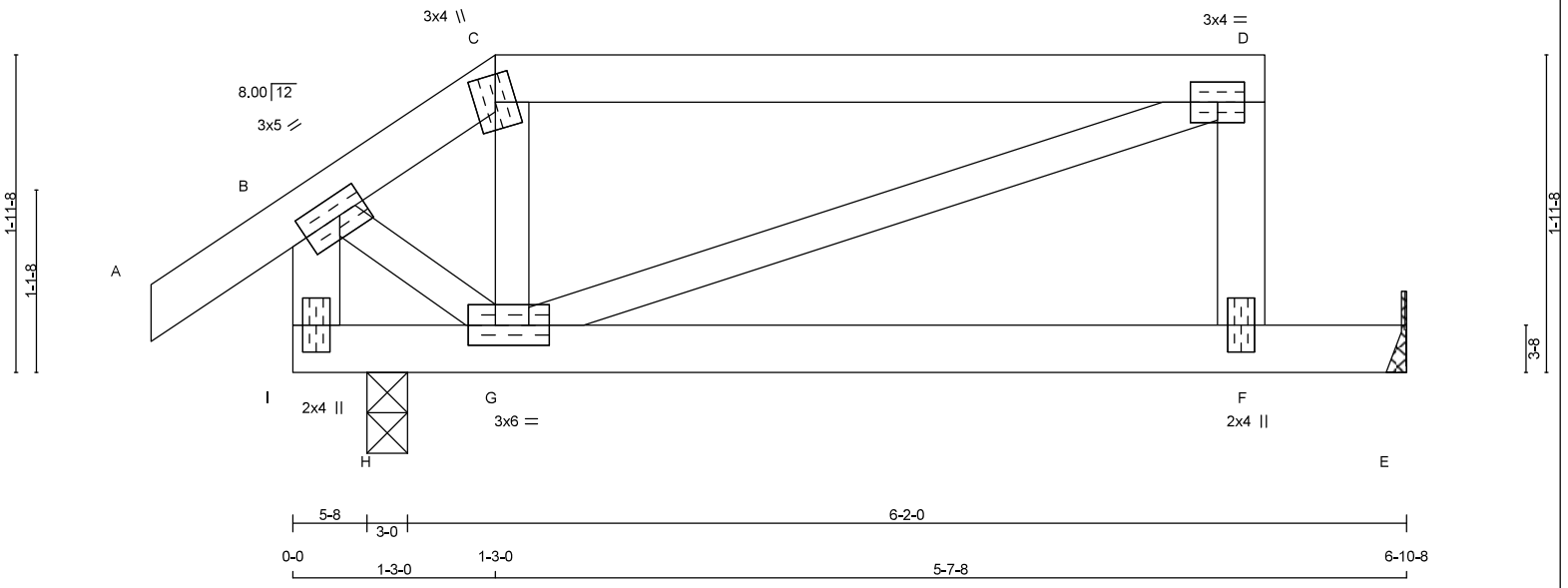
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

KOTT

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
NE0723-125	T06	2	1	GREENPARK - ZADORRA ESTATES - VILLA 11-1	
				TRUSS DESC.	

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Wed Jul 19 16:31:35 2023 Page 1
ID:a_geEeAITwiPs63VUzyy33z8f4n-wp?tHR4LcSP0?53JVMIZG2K00fvSuZ4PKl4__MywSpM

Scale = 1:14.2



TOTAL WEIGHT = 2 X 24 = 49 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
I - B	2x4	DRY	No.2	SPF
I - E	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	3.0	5.0	1.50	2.00
C	TTW+m	MT20	3.0	4.0		
D	TMVW-t	MT20	3.0	4.0		
F	BMV+p	MT20	2.0	4.0		
G	BMWWW-t	MT20	3.0	6.0	1.50	2.00
I	BMV+p	MT20	2.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	410	0	410	0	0	MECHANICAL	
H	651	0	651	0	0	3-0	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	287	206 / 0	0 / 0	0 / 0	0 / 0	81 / 0	0 / 0
H	453	339 / 0	0 / 0	0 / 0	0 / 0	113 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 FROM	TO	MAX (PLF) CSI (LC)	MAX UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	0 / 32	-119.4	-119.4	0.08 (1)	10.00	G- C	-352 / 0	0.05 (1)
B- C	-186 / 0	-119.4	-119.4	0.24 (1)	6.25	G- D	-99 / 0	0.04 (1)
C- D	-204 / 0	-119.4	-119.4	0.30 (1)	6.25	B- G	0 / 514	0.12 (1)
F- D	-258 / 0	0.0	0.0	0.38 (1)	7.81			
I- B	-450 / 0	0.0	0.0	0.14 (1)	7.81			
I- H	-216 / 0	-18.2	-18.2	0.22 (1)	6.25			
H- G	-216 / 0	-18.2	-18.2	0.22 (1)	6.25			
G- F	0 / 297	-18.2	-18.2	0.12 (1)	10.00			
F- E	0 / 0	-137.7	-137.7	0.42 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	34.8	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.3	PSF
TOTAL LOAD	=	48.1	PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.21")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.21")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.38/0.97 (D-F:1) , BC=0.42/0.97 (E-F:1) , WB=0.12/0.97 (B-G:1) , SSI=0.36/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (B) (INPUT = 0.90)
JSI METAL= 0.27 (F) (INPUT = 1.00)

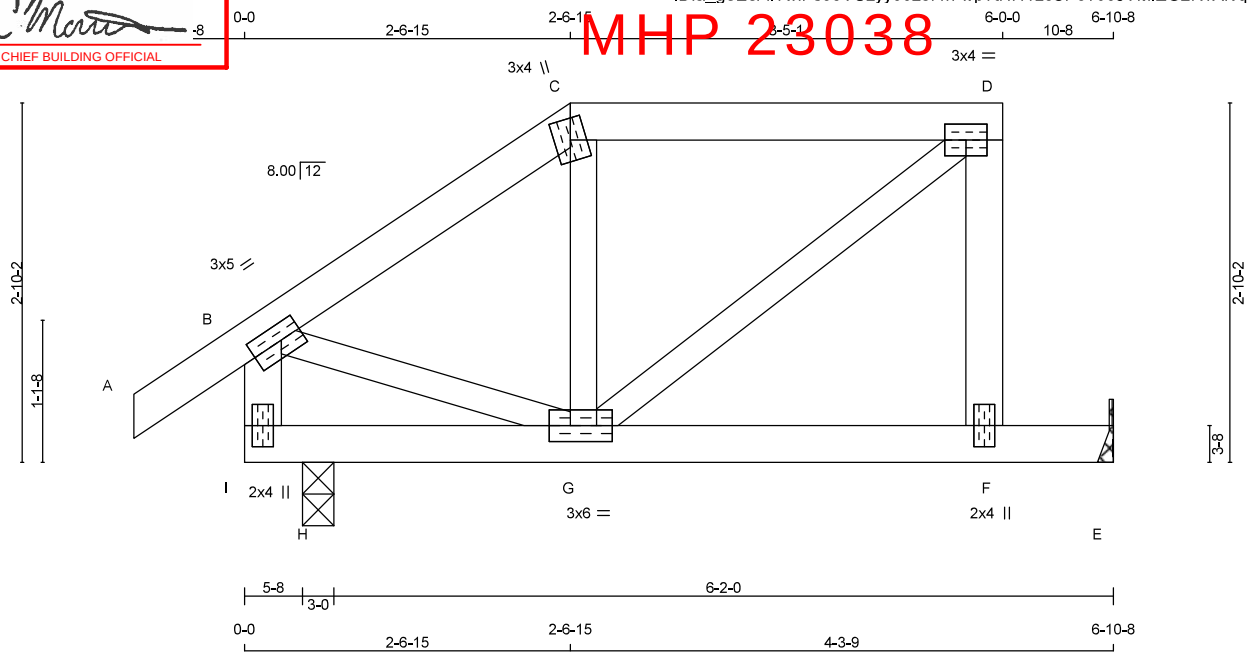
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

KOTT

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
NE0723-125	T07	1	1	GREENPARK - ZADORRA ESTATES - VILLA 11-1	
				TRUSS DESC.	

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Wed Jul 19 16:31:35 2023 Page 1
ID:a_geEeAITwiPs63VUzyy33z8f4n-wp?tHR4LcSP0?53JVMIZG2K1XfvquZvPKl4__MywSpM

Scale = 1:18.2



TOTAL WEIGHT = 27 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
I - B	2x4	DRY	No.2	SPF
I - E	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	3.0	5.0	1.50	2.00
C	TTW+m	MT20	3.0	4.0		
D	TMVW-t	MT20	3.0	4.0		
F	BMV+p	MT20	2.0	4.0		
G	BMWWW-t	MT20	3.0	6.0	1.50	2.00
I	BMV+p	MT20	2.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	390	0	390	0	0	MECHANICAL	
H	671	0	671	0	0	3-0	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	273	196 / 0	0 / 0	0 / 0	0 / 0	76 / 0	0 / 0
H	467	349 / 0	0 / 0	0 / 0	0 / 0	118 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC	MAX CSI (LC)	WEBS MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FORCE (LBS)	MAX CSI (LC)
A- B	0 / 32	-119.4	-119.4	0.08 (1)	10.00	G- C	-210 / 0	0.04 (1)	
B- C	-240 / 0	-119.4	-119.4	0.12 (1)	6.25	G- D	0 / 76	0.02 (1)	
C- D	-189 / 0	-119.4	-119.4	0.17 (1)	6.25	B- G	0 / 561	0.13 (1)	
F- D	-262 / 0	0.0	0.0	0.28 (1)	7.81				
I- B	-565 / 0	0.0	0.0	0.25 (1)	7.81				
I- H	-340 / 0	-18.2	-18.2	0.25 (1)	6.25				
H- G	-340 / 0	-18.2	-18.2	0.21 (1)	6.25				
G- F	0 / 129	-18.2	-18.2	0.13 (1)	10.00				
F- E	0 / 0	-137.7	-137.7	0.39 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	34.8	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.3	PSF
TOTAL LOAD	=	48.1	PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.21")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.21")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.28/0.97 (D-F:1) , BC=0.39/0.97 (E-F:1) , WB=0.13/0.97 (B-G:1) , SSI=0.45/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.79 (G) (INPUT = 0.90)
JSI METAL= 0.31 (I) (INPUT = 1.00)

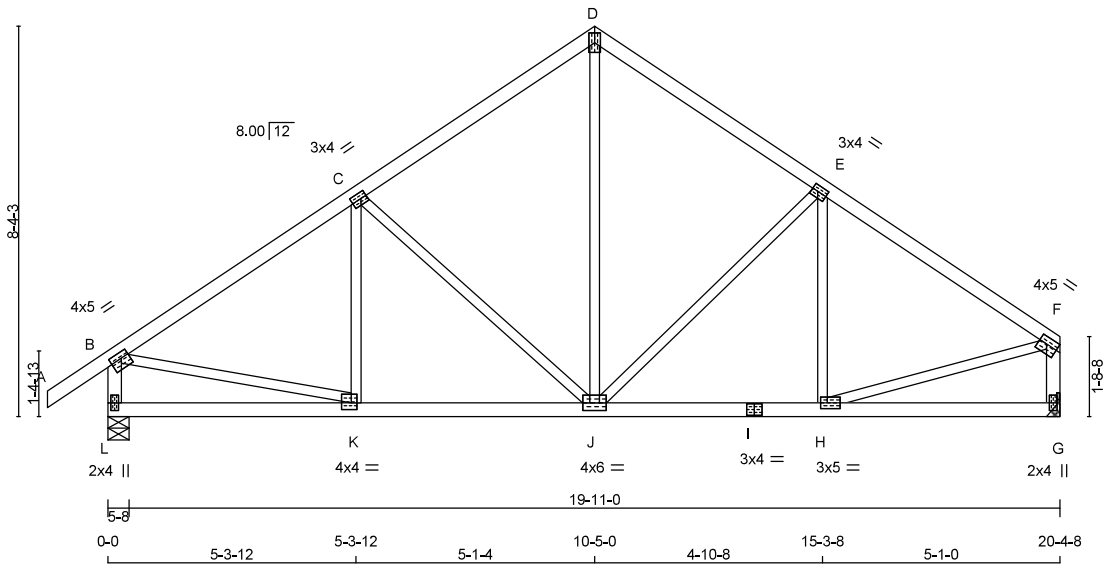
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

KOTT

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
NE0723-125	T08	3	1	GREENPARK - ZADORRA ESTATES - VILLA 11-1	
				TRUSS DESC.	

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Wed Jul 19 16:31:36 2023 Page 1
ID:a_geEeAITwiPs63VUzyy33z8f4n-O0ZGUn4zNmXtdFeW34qooFs9c3G8dwqYYPqXWoywSpL

Scale = 1:49.3



TOTAL WEIGHT = 3 X 88 = 264 lb
[M][F]

LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	5.0	1.50	2.00
C	TMWW-t	MT20	3.0	4.0	1.50	1.50
D	TTW+p	MT20	3.0	5.0		
E	TMWW-t	MT20	3.0	4.0	1.50	1.50
F	TMVW-t	MT20	4.0	5.0	1.75	Edge
G	BMV1+p	MT20	2.0	4.0		
H	BMWW-t	MT20	3.0	5.0	1.50	1.75
I	BS-t	MT20	3.0	4.0		
J	BMWWW-t	MT20	4.0	6.0		
K	BMWW-t	MT20	4.0	4.0	1.75	1.50
L	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
L	1567	0	1567	0	0	5-8	1-11
G	1403	0	1403	0	0	MECHANICAL	

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	1092	805 / 0	0 / 0	0 / 0	0 / 0	287 / 0	0 / 0
G	980	709 / 0	0 / 0	0 / 0	0 / 0	271 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.77 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX UNBRAC LENGTH	WEBS MEMB. FR-TO	FORCE (LBS)	MAX. FACTORED MAX CSI (LC)
A-B	0 / 45	-119.4	-119.4	0.16 (1)	10.00	K-C	-158 / 51	0.06 (1)
B-C	-1503 / 0	-119.4	-119.4	0.45 (1)	4.77	C-J	-527 / 0	0.47 (1)
C-D	-1117 / 0	-119.4	-119.4	0.43 (1)	5.38	J-D	0 / 745	0.17 (1)
D-E	-1115 / 0	-119.4	-119.4	0.39 (1)	5.45	J-E	-432 / 0	0.37 (1)
E-F	-1406 / 0	-119.4	-119.4	0.41 (1)	4.97	H-E	-230 / 26	0.09 (1)
L-B	-1525 / 0	0.0	0.0	0.16 (1)	6.58	B-K	0 / 1310	0.29 (1)
G-F	-1363 / 0	0.0	0.0	0.15 (1)	6.87	H-F	0 / 1246	0.28 (1)
L-K	0 / 0	-18.2	-18.2	0.12 (4)	10.00			
K-J	0 / 1284	-18.2	-18.2	0.26 (1)	10.00			
J-I	0 / 1202	-18.2	-18.2	0.24 (1)	10.00			
I-H	0 / 1202	-18.2	-18.2	0.24 (1)	10.00			
H-G	0 / 0	-18.2	-18.2	0.11 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	34.8	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.3	PSF
TOTAL LOAD		=	48.1	PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (0.68")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.68")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.45/0.97 (B-C:1) , BC=0.26/0.97 (J-K:1) , WB=0.47/0.97 (C-J:1) , SSI=0.25/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (H) (INPUT = 0.90)
JSI METAL= 0.51 (B) (INPUT = 1.00)

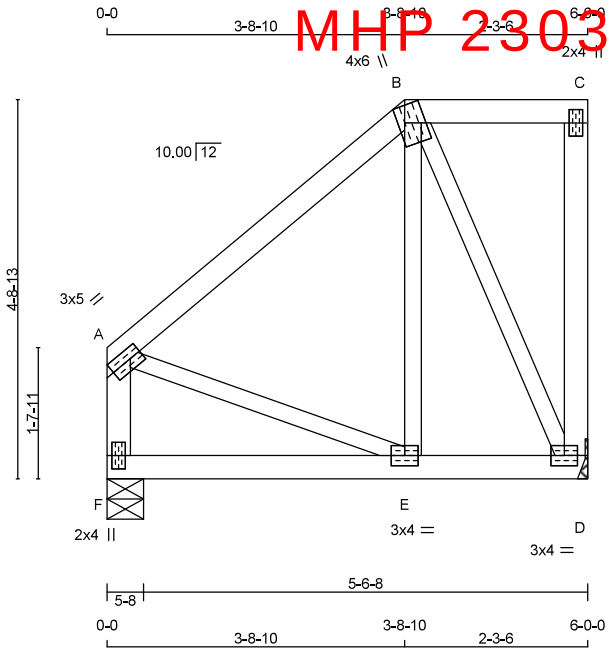
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

KOTT

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
NE0723-125	T09	1	1	GREENPARK - ZADORRA ESTATES - VILLA 11-1	
				TRUSS DESC.	

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Wed Jul 19 16:31:36 2023 Page 1
ID:a_geEeAITwiPs63VUzyy33z8f4n-O0ZGUn4zNmXtdFeW34qooFsDO3KBd0LYYPqXWoywSpL

Scale = 1:28.8



TOTAL WEIGHT = 31 lb
[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - C	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
F - A	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	5.0	1.50	1.75
B	TTWW+m	MT20	4.0	6.0	Edge	1.00
C	TMV+p	MT20	2.0	4.0		
D	BMVW1-t	MT20	3.0	4.0		
E	BMWW-t	MT20	3.0	4.0		
F	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
D	413	0	413	0	0	MECHANICAL	
F	413	0	413	0	0	5-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	289	209 / 0	0 / 0	0 / 0	0 / 0	80 / 0	0 / 0
F	289	209 / 0	0 / 0	0 / 0	0 / 0	80 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	WEBS MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B	-178 / 0	-119.4	-119.4	0.21 (1)	6.25	E- B	0 / 66	0.02 (4)
B- C	0 / 0	-119.4	-119.4	0.11 (1)	10.00	B- D	-299 / 0	0.11 (1)
D- C	-136 / 0	0.0	0.0	0.05 (1)	7.81	A- E	0 / 144	0.03 (1)
F- A	-383 / 0	0.0	0.0	0.04 (1)	7.81			
F- E	0 / 0	-18.2	-18.2	0.05 (4)	10.00			
E- D	0 / 137	-18.2	-18.2	0.06 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	34.8	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.3	PSF
TOTAL LOAD	=	48.1	PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.21/0.97 (A-B:1) , BC=0.06/0.97 (D-E:4) , WB=0.11/0.97 (B-D:1) , SSI=0.13/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.38 (D) (INPUT = 0.90)
JSI METAL= 0.09 (A) (INPUT = 1.00)

Jul 19, 2023

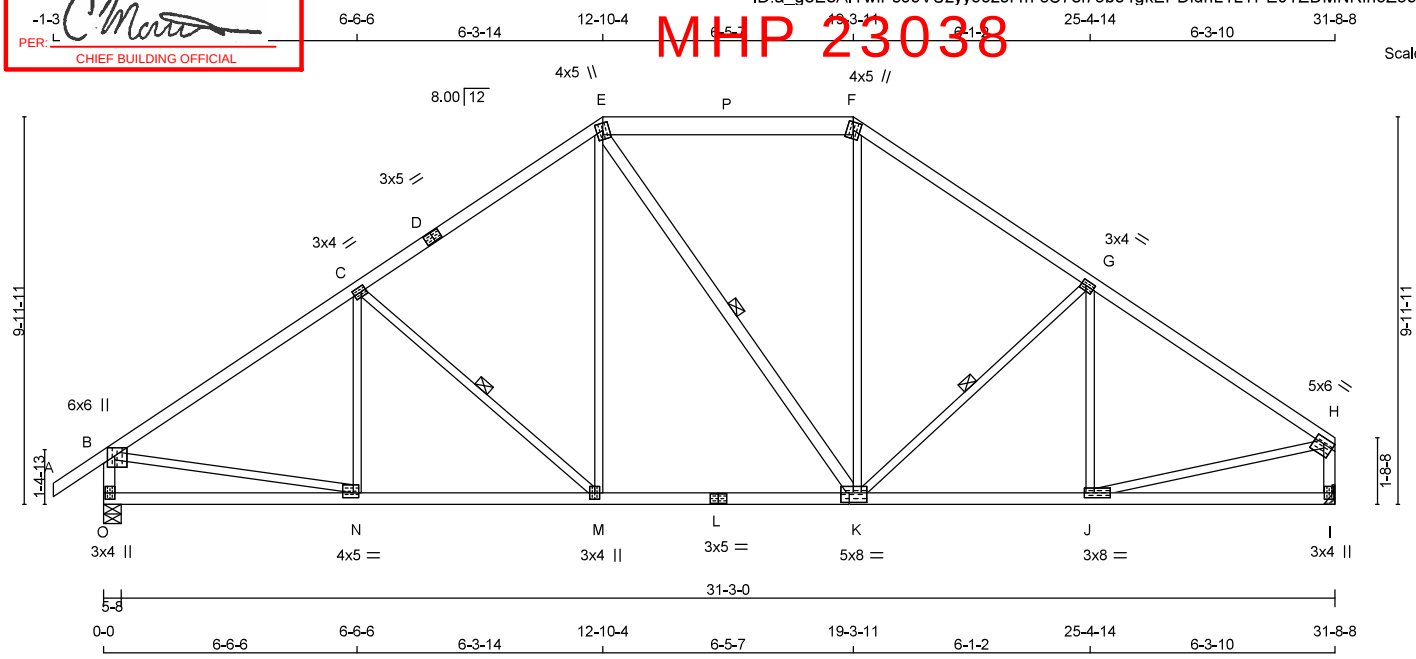
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

KOTT

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
NE0723-125	T10	5	1	GREENPARK - ZADORRA ESTATES - VILLA 11-1	

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Wed Jul 19 16:31:37 2023 Page 1
ID:a_geEeAITwiPs63VUzyy33z8f4n-sC7ei75b84gkEPDidnL1LTPE9TZDMNRin3Z53FywSpK

Scale = 1:59.3



TOTAL WEIGHT = 5 X 147 = 733 lb
[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - F	2x6	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
O - B	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
O - L	2x4	DRY	No.2	SPF
L - K	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
E - K	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	6.0	6.0	Edge	3.75
C	TMWW-t	MT20	3.0	4.0	1.50	1.50
D	TS-t	MT20	3.0	5.0		
E	TTWW+m	MT20	4.0	5.0	2.25	2.00
F	TTW+m	MT20	4.0	5.0		
G	TMWW-t	MT20	3.0	4.0	1.50	1.50
H	TMVW-t	MT20	5.0	6.0	1.75	Edge
I	BMV1+p	MT20	3.0	4.0		
J	BMWW-t	MT20	3.0	8.0	1.50	3.00
K	BSWWW-t	MT20	5.0	8.0	3.00	2.50
L	BS-t	MT20	3.0	5.0		
M	BMWW+t	MT20	3.0	4.0		
N	BMWW-t	MT20	4.0	5.0	1.50	1.75
O	BMV1+p	MT20	3.0	4.0	2.00	0.50

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

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

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
O	2371	0	2371	0	0	5-8	4-3
I	2207	0	2207	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT I. MINIMUM BEARING LENGTH AT JOINT I = 3-11.

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
O	1657	1199 / 0	0 / 0	0 / 0	0 / 0	457 / 0	0 / 0
I	1545	1104 / 0	0 / 0	0 / 0	0 / 0	441 / 0	0 / 0

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

BRACING
FOR SECTION E-F, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.20 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/ 2 LENGTH OF C-M, E-K, G-K. DBS = 20-0-0 . CBF = 75 LBS.

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS MEMB.	FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB.	FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- B		0 / 45	-119.4	-119.4	0.16 (1)		10.00	N- C		-248 / 37	0.13 (1)
B- C		-2630 / 0	-119.4	-119.4	0.85 (1)		3.20	C- M		-600 / 0	0.28 (1)
C- D		-2185 / 0	-119.4	-119.4	0.76 (1)		3.60	M- E		0 / 527	0.12 (1)
D- E		-2185 / 0	-119.4	-119.4	0.76 (1)		3.60	E- K		-52 / 0	0.04 (1)
E- P		-1743 / 0	-126.9	-126.9	0.46 (1)		2.00	K- F		0 / 475	0.11 (1)
P- F		-1743 / 0	-126.9	-126.9	0.46 (1)		2.00	K- G		-497 / 0	0.23 (1)
F- G		-2147 / 0	-119.4	-119.4	0.70 (1)		3.74	J- G		-331 / 24	0.18 (1)
G- H		-2489 / 0	-119.4	-119.4	0.77 (1)		3.42	B- N		0 / 2260	0.51 (1)
O- B		-2319 / 0	0.0	0.0	0.24 (1)		5.53	J- H		0 / 2162	0.49 (1)
I- H		-2160 / 0	0.0	0.0	0.23 (1)		5.70				
O- N		0 / 0	-18.2	-18.2	0.16 (4)		10.00				
N- M		0 / 2230	-18.2	-18.2	0.46 (1)		10.00				
M- L		0 / 1772	-18.2	-18.2	0.39 (1)		10.00				
L- K		0 / 1772	-18.2	-18.2	0.39 (1)		10.00				
K- J		0 / 2112	-18.2	-18.2	0.43 (1)		10.00				
J- I		0 / 0	-18.2	-18.2	0.19 (4)		10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	34.8	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.3	PSF
TOTAL LOAD	=	48.1	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 8.00/12 AND -8.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 3.0 P.S.F.

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (1.06")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.06")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.21")

CSI: TC=0.85/0.97 (B-C:1) , BC=0.46/0.97 (M-N:1) , WB=0.51/0.97 (B-N:1) , SSI=0.31/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

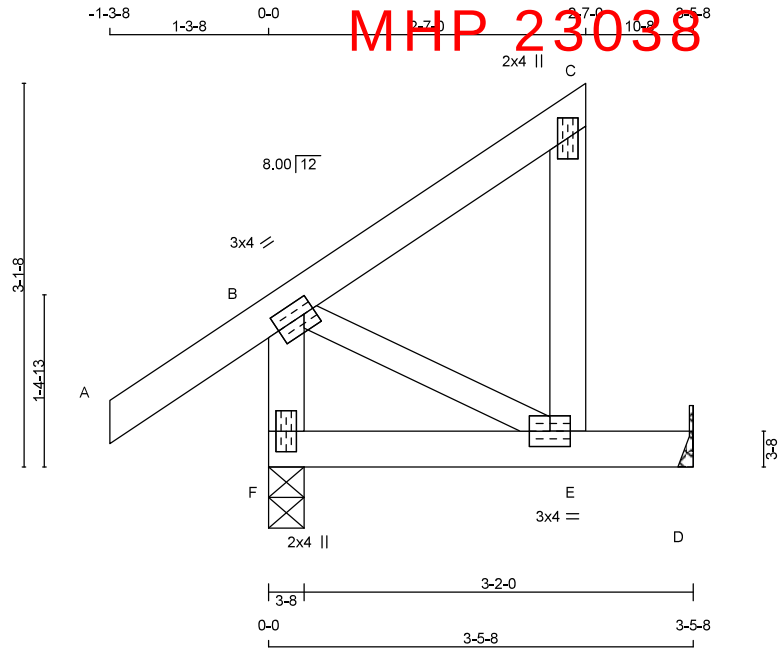
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (J) (INPUT = 0.90)
JSI METAL= 0.66 (L) (INPUT = 1.00)

KOTT

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
NE0723-125	T11	7	1	GREENPARK - ZADORRA ESTATES - VILLA 11-1	

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Wed Jul 19 16:31:37 2023 Page 1
ID:a_geEeAITwiPs63VUzyy33z8f4n-sC7ei75b84gkEPDidnL1LTPPvTeqMUNin3Z53FywSpK



TOTAL WEIGHT = 7 X 15 = 106 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
E - C	2x4	DRY	No.2	SPF
F - B	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	3.0	4.0	1.50	1.00
C	TMV+p	MT20	2.0	4.0		
E	BMVW-t	MT20	3.0	4.0		
F	BMV1+p	MT20	2.0	4.0		

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

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
F	389	0	389	0	0	3-8	1-8
D	147	0	147	0	0	MECHANICAL	

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

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	269	208 / 0	0 / 0	0 / 0	0 / 0	61 / 0	0 / 0
D	104	67 / 0	0 / 0	0 / 0	0 / 0	37 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (7)

CHORDS						WEBS			
MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
A-B	0 / 45	-119.4	-119.4	0.16 (5)	10.00	B-E	0 / 0	0.00 (1)	
B-C	0 / 0	-119.4	-119.4	0.14 (1)	10.00				
E-C	-154 / 0	0.0	0.0	0.02 (1)	7.81				
F-B	-318 / 0	0.0	0.0	0.03 (1)	7.81				
F-E	0 / 0	-18.2	-18.2	0.17 (1)	10.00				
E-D	0 / 0	-18.2	-18.2	0.17 (1)	10.00				

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	34.8	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.3	PSF
TOTAL LOAD	=	48.1	PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.16/0.97 (A-B:5) , BC=0.17/0.97 (E-F:1) , WB=0.00/0.97 (B-E:1) , SSI=0.11/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

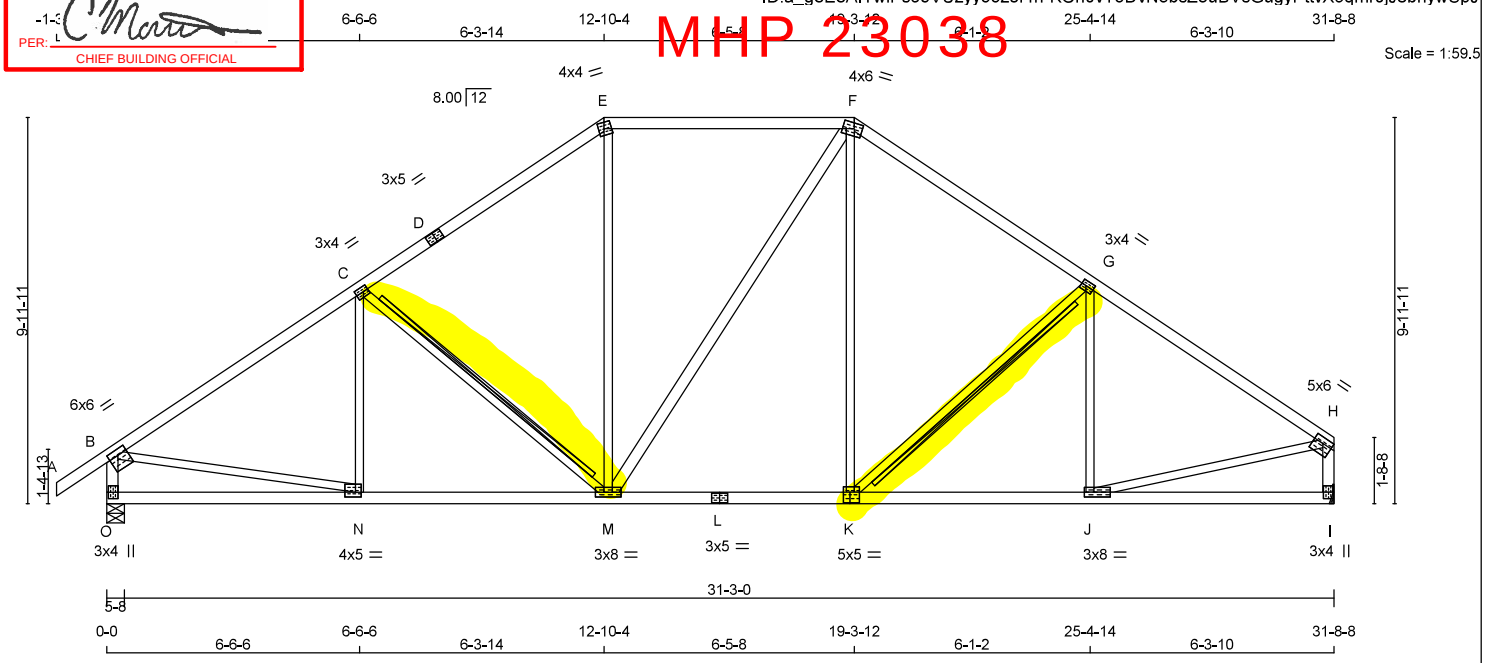
JSI GRIP= 0.28 (B) (INPUT = 0.90)
JSI METAL= 0.08 (C) (INPUT = 1.00)

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

KOTT

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
NE0723-125	T12	1	1	GREENPARK - ZADORRA ESTATES - VILLA 11-1	
				TRUSS DESC.	

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Wed Jul 19 16:31:38 2023 Page 1
ID:a_geEeAITwiPs63VUzyy33z8f4n-KOh0vT6DvNobsZouBVsGugyPttvX5qmr0jJebhywSpJ



TOTAL WEIGHT = 143 lb
[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - F	2x4	DRY	2100F 1.8E	SPF
F - H	2x4	DRY	No.2	SPF
O - B	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
O - L	2x4	DRY	No.2	SPF
L - K	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
M - F	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	6.0	1.75	3.00
C	TMWW-t	MT20	3.0	4.0	1.50	1.50
D	TS-t	MT20	3.0	5.0		
E	TTW-m	MT20	4.0	4.0	2.00	1.75
F	TTWW-m	MT20	4.0	6.0	1.75	2.50
G	TMWW-t	MT20	3.0	4.0	1.50	1.50
H	TMVW-t	MT20	5.0	6.0	1.75	Edge
I	BMV1+p	MT20	3.0	4.0		
J	BMWW-t	MT20	3.0	8.0	1.50	3.00
K	BSWW-I	MT20	5.0	5.0	3.25	2.00
L	BS-t	MT20	3.0	5.0		
M	BMWWW-t	MT20	3.0	8.0		
N	BMWW-t	MT20	4.0	5.0	1.50	1.75
O	BMV1+p	MT20	3.0	4.0	2.00	0.50

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

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

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
O	2347	0	2347	0	0	5-8	4-2
I	2183	0	2183	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT I. MINIMUM BEARING LENGTH AT JOINT I = 3-10.

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
O	1637	1199 / 0	0 / 0	0 / 0	0 / 0	438 / 0	0 / 0
I	1525	1104 / 0	0 / 0	0 / 0	0 / 0	422 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.20 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.

2x4 DRY SPF No.2 T-BRACE AT C-M, G-K

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS MEMB.	MAX. FACTORED FORCE (LBS)	FROM	FACTORED VERT. LOAD (PLF) TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO									
A- B	0 / 45	-119.4	-119.4	0.16 (1)		10.00	N- C	-241 / 47	0.12 (1)
B- C	-2597 / 0	-119.4	-119.4	0.85 (1)		3.20	C- M	-622 / 0	0.34 (1)
C- D	-2132 / 0	-119.4	-119.4	0.76 (1)		3.61	M- E	0 / 489	0.11 (1)
D- E	-2132 / 0	-119.4	-119.4	0.76 (1)		3.61	M- F	0 / 52	0.01 (1)
E- F	-1734 / 0	-119.4	-119.4	0.44 (1)		5.41	K- F	0 / 436	0.10 (1)
F- G	-2097 / 0	-119.4	-119.4	0.69 (1)		3.78	K- G	-517 / 0	0.27 (1)
G- H	-2456 / 0	-119.4	-119.4	0.76 (1)		3.44	J- G	-322 / 34	0.17 (1)
O- B	-2296 / 0	0.0	0.0	0.24 (1)		5.55	B- N	0 / 2234	0.50 (1)
I- H	-2136 / 0	0.0	0.0	0.23 (1)		5.73	J- H	0 / 2134	0.48 (1)
O- N	0 / 0	-18.2	-18.2	0.17 (4)		10.00			
N- M	0 / 2204	-18.2	-18.2	0.46 (1)		10.00			
M- L	0 / 1705	-18.2	-18.2	0.37 (1)		10.00			
L- K	0 / 1705	-18.2	-18.2	0.37 (1)		10.00			
K- J	0 / 2084	-18.2	-18.2	0.43 (1)		10.00			
J- I	0 / 0	-18.2	-18.2	0.20 (4)		10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	34.8	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.3	PSF
TOTAL LOAD	=	48.1	PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (1.06")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (1.06")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.20")

CSI: TC=0.85/0.97 (B-C:1) , BC=0.46/0.97 (M-N:1) , WB=0.50/0.97 (B-N:1) , SSI=0.31/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI)		SHEAR (PLI)		SECTION (PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (B) (INPUT = 0.90)
JSI METAL= 0.69 (B) (INPUT = 1.00)

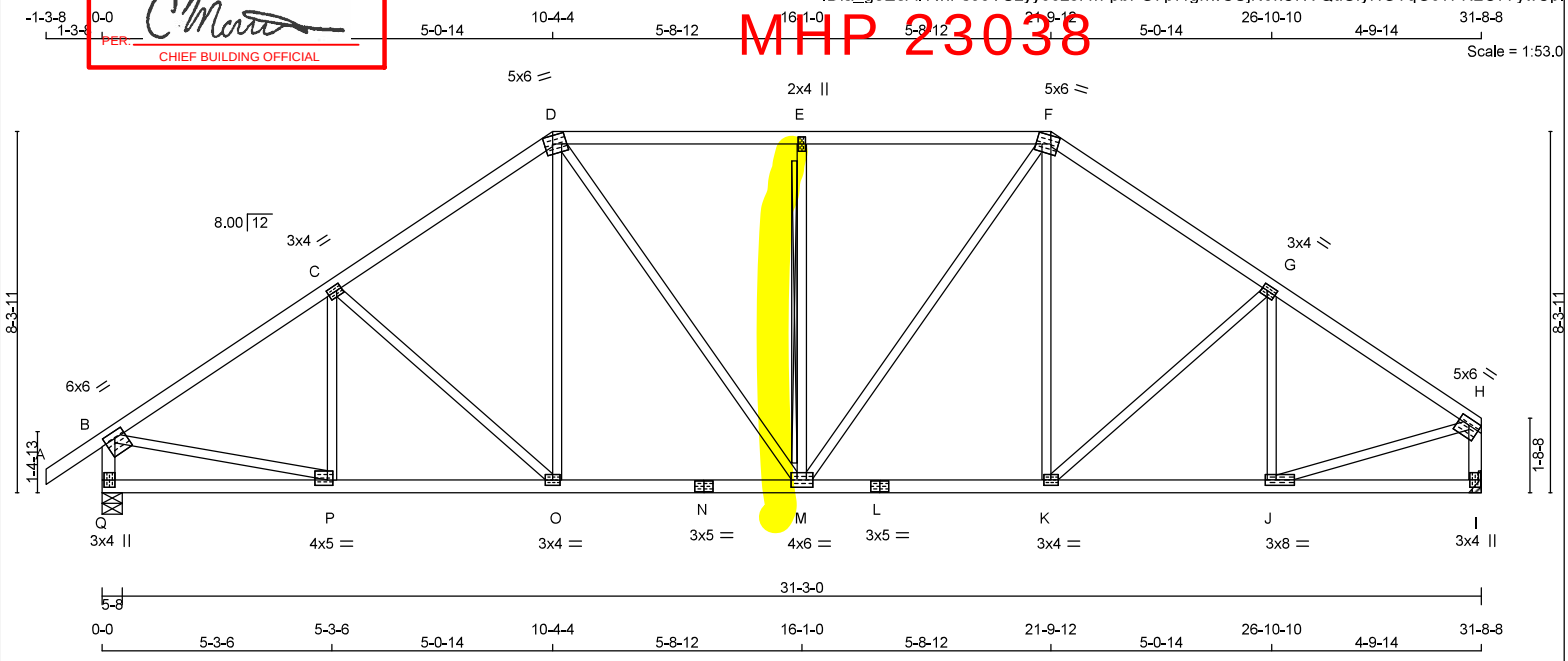
Jul 19, 2023

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

KOTT

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
NE0723-125	T13	1	1	GREENPARK - ZADORRA ESTATES - VILLA 11-1	
				TRUSS DESC.	

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Wed Jul 19 16:31:39 2023 Page 1
ID:a_geEeAITwiPs63VUzyy33z8f4n-pbFO7p7rghwSUjN5kCNVQuUfyHGTqG3?FN2C77ywSpl



TOTAL WEIGHT = 142 lb
[M][F]

LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	6.0	1.75	3.00
C	TMWW-t	MT20	3.0	4.0	1.50	1.50
D	TTWW-m	MT20	5.0	6.0	2.25	2.25
E	TMW+w	MT20	2.0	4.0		
F	TTWW-m	MT20	5.0	6.0	2.25	2.00
G	TMWW-t	MT20	3.0	4.0	1.50	1.50
H	TMVW-t	MT20	5.0	6.0	1.75	Edge
I	BMV1+p	MT20	3.0	4.0		
J	BMWW-t	MT20	3.0	8.0	1.50	3.00
K	BMWW-t	MT20	3.0	4.0		
L	BS-t	MT20	3.0	5.0		
M	BMWWW-t	MT20	4.0	6.0		
N	BS-t	MT20	3.0	5.0		
O	BMWW-t	MT20	3.0	4.0		
P	BMWW-t	MT20	4.0	5.0	1.50	1.50
Q	BMV1+p	MT20	3.0	4.0	2.00	0.50

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

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

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT	REQRD
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	BRG	BRG
Q	2347	0	2347	0	0	IN-SX	IN-SX
I	2183	0	2183	0	0	5-8	4-2
						MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT I. MINIMUM BEARING LENGTH AT JOINT I = 3-10.

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	1637	1199 / 0	0 / 0	0 / 0	0 / 0	438 / 0	0 / 0
I	1525	1104 / 0	0 / 0	0 / 0	0 / 0	422 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.75 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS						WEBS			
MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FORCE (LBS)	MAX CSI (LC)
FR-TO									
A-B	0 / 45	-119.4	-119.4	0.16 (1)	10.00	P-C	-348 / 0		0.12 (1)
B-C	-2576 / 0	-119.4	-119.4	0.53 (1)	3.75	C-O	-364 / 0		0.33 (1)
C-D	-2334 / 0	-119.4	-119.4	0.49 (1)	3.94	O-D	0 / 344		0.08 (1)
D-E	-2222 / 0	-119.4	-119.4	0.57 (1)	3.86	D-M	0 / 538		0.12 (1)
E-F	-2222 / 0	-119.4	-119.4	0.57 (1)	3.86	M-E	-837 / 0		0.41 (1)
F-G	-2277 / 0	-119.4	-119.4	0.46 (1)	4.04	M-F	0 / 616		0.14 (1)
G-H	-2388 / 0	-119.4	-119.4	0.46 (1)	3.96	K-F	0 / 245		0.06 (1)
Q-B	-2304 / 0	0.0	0.0	0.24 (1)	5.55	K-G	-214 / 0		0.19 (1)
I-H	-2144 / 0	0.0	0.0	0.23 (1)	5.72	J-G	-488 / 0		0.17 (1)
						B-P	0 / 2221		0.50 (1)
Q-P	0 / 0	-18.2	-18.2	0.11 (4)	10.00	J-H	0 / 2102		0.47 (1)
P-O	0 / 2176	-18.2	-18.2	0.41 (1)	10.00				
O-N	0 / 1909	-18.2	-18.2	0.37 (1)	10.00				
N-M	0 / 1909	-18.2	-18.2	0.37 (1)	10.00				
M-L	0 / 1864	-18.2	-18.2	0.36 (1)	10.00				
L-K	0 / 1864	-18.2	-18.2	0.36 (1)	10.00				
K-J	0 / 2020	-18.2	-18.2	0.39 (1)	10.00				
J-I	0 / 0	-18.2	-18.2	0.10 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	34.8	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.3	PSF
TOTAL LOAD	=	48.1	PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

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

CSI: TC=0.57/0.97 (D-E:1) , BC=0.41/0.97 (O-P:1) , WB=0.50/0.97 (B-P:1) , SSI=0.33/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY)		SHEAR (PSI)		SECTION (PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

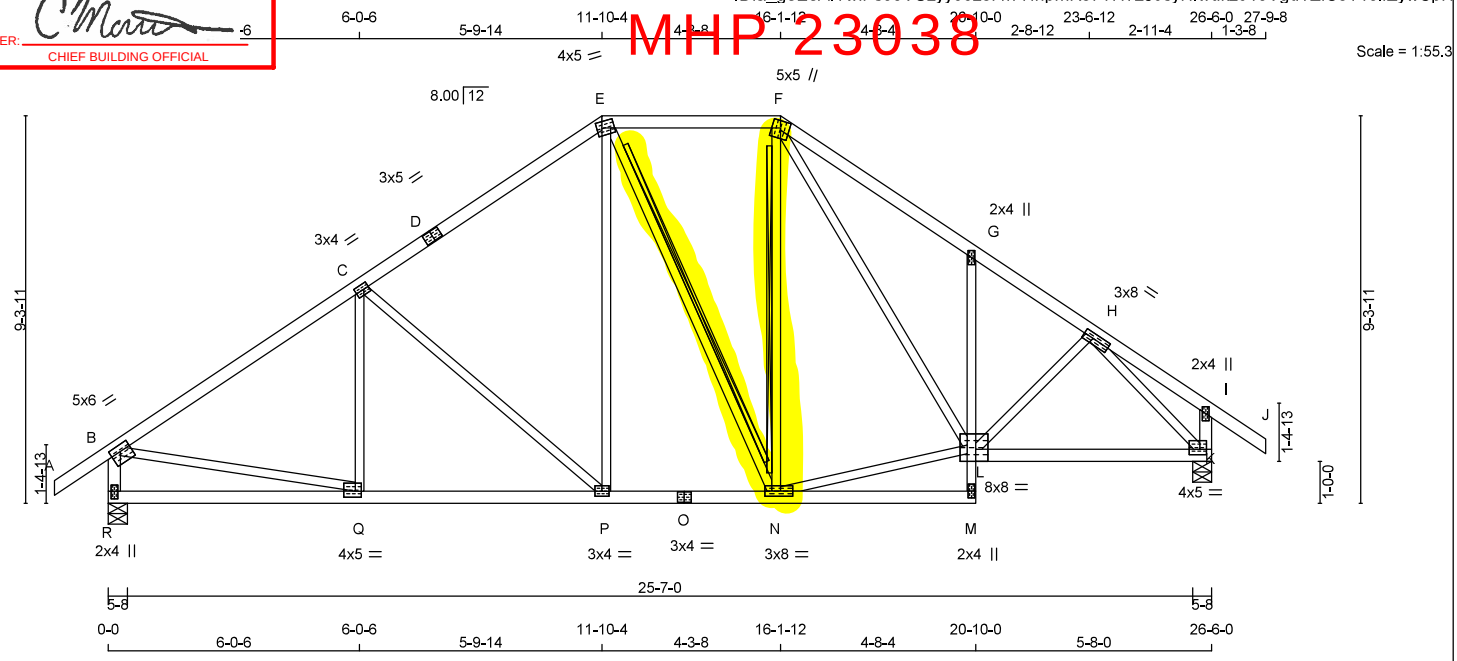
Jul 19, 2023

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

KOTT

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
NE0723-125	T14	1	1	GREENPARK - ZADORRA ESTATES - VILLA 11-1	
				TRUSS DESC.	

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Wed Jul 19 16:31:40 2023 Page 1
ID:a_geEeAITwiPs63VUzyy33z8f4n-HnpmK87TR?2J5syHIwukz51oVgdTZfS8T1olfZywSpH



TOTAL WEIGHT = 130 lb
[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - F	2x4	DRY	No.2	SPF
F - J	2x4	DRY	No.2	SPF
R - B	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
R - O	2x4	DRY	No.2	SPF
O - M	2x4	DRY	No.2	SPF
M - G	2x3	DRY	No.2	SPF
L - K	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	6.0	1.75	3.00
C	TMWW-t	MT20	3.0	4.0	1.50	1.50
D	TS-t	MT20	3.0	5.0		
E	TTWW-m	MT20	4.0	5.0	1.75	1.50
F	TTWW+m	MT20	5.0	5.0	2.00	2.50
G	TMV+p	MT20	2.0	4.0		
H	TMWW-t	MT20	3.0	8.0	1.50	3.00
I	TMV+p	MT20	2.0	4.0		
K	BMVW1-t	MT20	4.0	5.0	1.50	2.00
L	BVMWWW-I	MT20	8.0	8.0	Edge	3.50
M	BMV+p	MT20	2.0	4.0		
N	BMWWW-t	MT20	3.0	8.0	1.50	2.00
O	BS-t	MT20	3.0	4.0		
P	BMWW-t	MT20	3.0	4.0		
Q	BMWW-t	MT20	4.0	5.0	1.75	1.75
R	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

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

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
R	1988	0	1988	0	0	5-8	2-15
K	1988	0	1988	0	0	5-8	2-2

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	1387	1018 / 0	0 / 0	0 / 0	0 / 0	369 / 0	0 / 0
K	1387	1018 / 0	0 / 0	0 / 0	0 / 0	369 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.88 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 FROM (PLF)	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A-B	0 / 45	-119.4	-119.4	0.16 (1)	10.00	Q-C	-196 / 56	0.09 (1)
B-C	-2088 / 0	-119.4	-119.4	0.65 (1)	3.88	C-P	-594 / 0	0.75 (1)
C-D	-1644 / 0	-119.4	-119.4	0.60 (1)	4.35	P-E	0 / 471	0.11 (1)
D-E	-1644 / 0	-119.4	-119.4	0.60 (1)	4.35	E-N	-110 / 0	0.09 (1)
E-F	-1285 / 0	-119.4	-119.4	0.30 (1)	5.30	N-F	-77 / 53	0.05 (1)
F-G	-2077 / 0	-119.4	-119.4	0.37 (1)	4.31	N-L	0 / 1293	0.29 (1)
G-H	-2031 / 0	-119.4	-119.4	0.27 (1)	4.46	F-L	0 / 840	0.19 (1)
H-I	0 / 8	-119.4	-119.4	0.14 (1)	10.00	L-H	0 / 250	0.06 (1)
I-J	0 / 45	-119.4	-119.4	0.16 (1)	10.00	B-Q	0 / 1805	0.41 (1)
R-B	-1942 / 0	0.0	0.0	0.20 (1)	5.97	H-K	-2234 / 0	0.61 (1)
K-I	-319 / 0	0.0	0.0	0.03 (1)	7.81			
R-Q	0 / 0	-18.2	-18.2	0.16 (4)	10.00			
Q-P	0 / 1777	-18.2	-18.2	0.36 (1)	10.00			
P-O	0 / 1332	-18.2	-18.2	0.27 (1)	10.00			
O-N	0 / 1332	-18.2	-18.2	0.27 (1)	10.00			
N-M	0 / 22	-18.2	-18.2	0.09 (4)	10.00			
M-L	0 / 39	0.0	0.0	0.07 (1)	10.00			
L-G	-551 / 0	0.0	0.0	0.22 (1)	7.81			
L-K	0 / 1542	-18.2	-18.2	0.35 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	34.8	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.3	PSF
TOTAL LOAD	=	48.1	PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (0.88")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (0.88")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.13")

CSI: TC=0.65/0.97 (B-C:1) , BC=0.36/0.97 (P-Q:1) , WB=0.75/0.97 (C-P:1) , SSI=0.29/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (P) (INPUT = 0.90)
JSI METAL= 0.57 (B) (INPUT = 1.00)

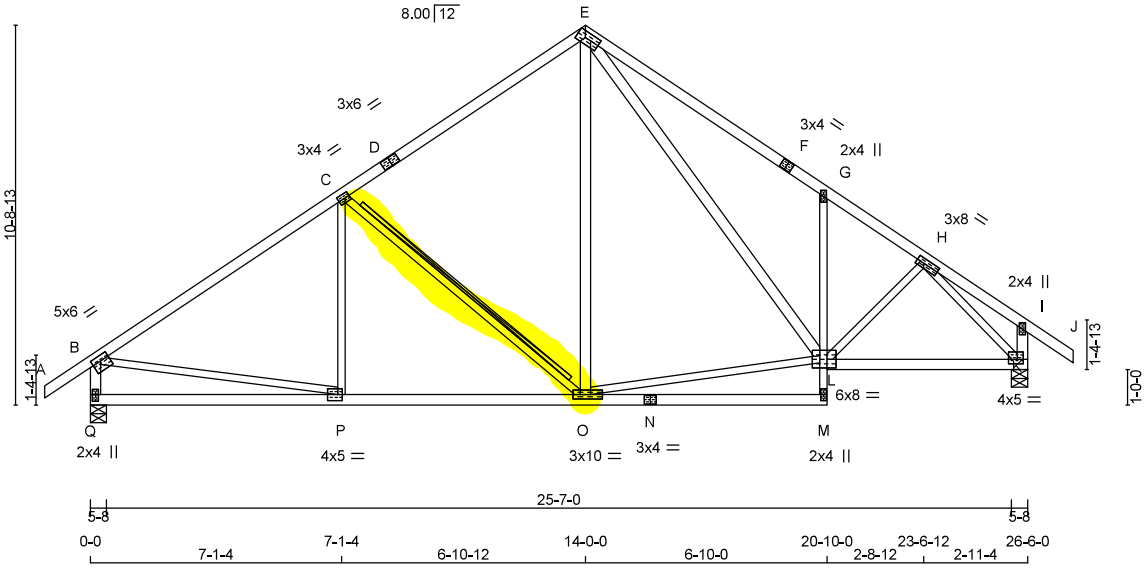
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

KOTT

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
NE0723-125	T15	3	1	GREENPARK - ZADORRA ESTATES - VILLA 11-1	
				TRUSS DESC.	

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Wed Jul 19 16:31:40 2023 Page 1
ID:a_geEeAITwiPs63VUzyy33z8f4n-HnpmK87TR?2J5syHIwukz51qigcNZhJ8T1olfZywSpH

Scale = 1:65.1



TOTAL WEIGHT = 3 X 130 = 390 lb
[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	2100F 1.8E	SPF
D - E	2x4	DRY	2100F 1.8E	SPF
E - F	2x4	DRY	2100F 1.8E	SPF
F - J	2x4	DRY	2100F 1.8E	SPF
Q - B	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
Q - N	2x4	DRY	No.2	SPF
N - M	2x4	DRY	No.2	SPF
M - G	2x3	DRY	No.2	SPF
L - K	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
O - E	2x4	DRY	No.2	SPF
E - L	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	6.0	1.75	3.00
C	TMWW-t	MT20	3.0	4.0	1.50	1.50
D	TS-t	MT20	3.0	6.0		
E	TTWW-I	MT20	4.0	8.0	2.00	5.00
F	TS-t	MT20	3.0	4.0		
G	TMV+p	MT20	2.0	4.0		
H	TMWW-t	MT20	3.0	8.0	1.50	2.50
I	TMV+p	MT20	2.0	4.0		
K	BMVW1-t	MT20	4.0	5.0	1.50	2.00
L	BVMWWW-I	MT20	6.0	8.0	3.00	3.00
M	BMV+p	MT20	2.0	4.0		
N	BS-t	MT20	3.0	4.0		
O	BMWWW-t	MT20	3.0	10.0	1.50	2.50
P	BMWW-t	MT20	4.0	5.0	2.00	1.50
Q	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
Q	1988	0	1988	0	0	5-8	2-15
K	1988	0	1988	0	0	5-8	2-2

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	1387	1018 / 0	0 / 0	0 / 0	0 / 0	369 / 0	0 / 0
K	1387	1018 / 0	0 / 0	0 / 0	0 / 0	369 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.86 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.28 FT OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT C-O

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 FROM (PLF)	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 45	-119.4	-119.4	0.10 (1)	10.00
B- C	-2067 / 0	-119.4	-119.4	0.57 (1)	4.86
C- D	-1463 / 0	-119.4	-119.4	0.53 (1)	5.59
D- E	-1463 / 0	-119.4	-119.4	0.53 (1)	5.59
E- F	-2155 / 0	-119.4	-119.4	0.49 (1)	4.94
F- G	-2155 / 0	-119.4	-119.4	0.49 (1)	4.94
G- H	-2031 / 0	-119.4	-119.4	0.36 (1)	5.21
H- I	-5 / 0	-119.4	-119.4	0.12 (1)	10.00
I- J	0 / 45	-119.4	-119.4	0.10 (1)	10.00
Q- B	-1934 / 0	0.0	0.0	0.20 (1)	5.97
K- I	-349 / 0	0.0	0.0	0.04 (1)	7.81
Q- P	0 / 0	-18.2	-18.2	0.20 (4)	10.00
P- O	0 / 1766	-18.2	-18.2	0.40 (1)	10.00
O- N	0 / 24	-18.2	-18.2	0.20 (4)	10.00
N- M	0 / 24	-18.2	-18.2	0.20 (4)	10.00
M- L	0 / 56	0.0	0.0	0.08 (1)	10.00
L- G	-824 / 0	0.0	0.0	0.43 (1)	7.28
L- K	0 / 1533	-18.2	-18.2	0.35 (1)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
P- C	-133 / 84	0.08 (1)
C- O	-784 / 0	0.50 (1)
O- E	0 / 481	0.08 (1)
O- L	0 / 1154	0.26 (1)
E- L	0 / 1021	0.16 (1)
L- H	0 / 359	0.08 (1)
B- P	0 / 1786	0.40 (1)
H- K	-2206 / 0	0.63 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	34.8	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.3	PSF
TOTAL LOAD	=	48.1	PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (0.88")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (0.88")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.15")

CSI: TC=0.57/0.97 (B-C:1) , BC=0.43/0.97 (G-L:1) , WB=0.63/0.97 (H-K:1) , SSI=0.34/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE LEFT HEEL ONLY

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI)		SHEAR (PLI)		SECTION (PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

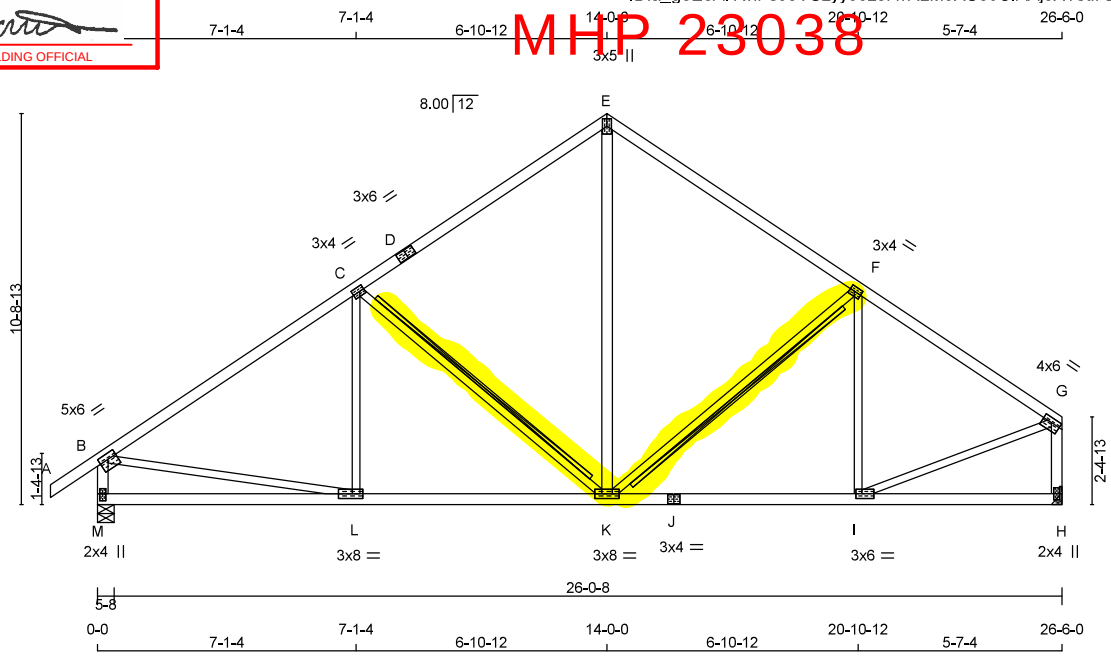
JSI GRIP= 0.89 (P) (INPUT = 0.90)
JSI METAL= 0.57 (B) (INPUT = 1.00)

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

KOTT

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
NE0723-125	T18	3	1	GREENPARK - ZADORRA ESTATES - VILLA 11-1	
				TRUSS DESC.	

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Wed Jul 19 16:31:41 2023 Page 1
ID:a_geEeAITwiPs63VUzyy33z8f4n-IzM9XU85CIAAj0XTsdPzVJavg4yGIAXIihXIC0ywSpG



TOTAL WEIGHT = 3 X 117 = 350 lb
[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
M - B	2x4	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
K - E	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	6.0	1.75	3.00
C	TMWW-t	MT20	3.0	4.0	1.50	1.50
D	TS-t	MT20	3.0	6.0		
E	TTW+p	MT20	3.0	5.0		
F	TMWW-t	MT20	3.0	4.0	1.50	1.50
G	TMVW-t	MT20	4.0	6.0	1.50	3.00
H	BMV1+p	MT20	2.0	4.0		
I	BMWW-t	MT20	3.0	6.0	1.50	2.00
J	BS-t	MT20	3.0	4.0		
K	BMWWW-t	MT20	3.0	8.0		
L	BMWW-t	MT20	3.0	8.0	1.50	3.50
M	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
M	1988	0	1988	0	0	5-8	2-15
H	1824	0	1824	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT H. MINIMUM BEARING LENGTH AT JOINT H = 2-7.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
M	1387	1018 / 0	0 / 0	0 / 0	0 / 0	369 / 0	0 / 0
H	1275	922 / 0	0 / 0	0 / 0	0 / 0	352 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.14 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.

2x4 DRY SPF No.2 T-BRACE AT C-K, F-K

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	WEBS MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO						FR-TO		
A- B	0 / 45	-119.4	-119.4	0.16 (1)	10.00	L- C	-129 / 89	0.08 (1)
B- C	-2068 / 0	-119.4	-119.4	0.94 (1)	3.14	C- K	-790 / 0	0.50 (1)
C- D	-1456 / 0	-119.4	-119.4	0.84 (1)	3.88	K- E	0 / 917	0.15 (1)
D- E	-1456 / 0	-119.4	-119.4	0.84 (1)	3.88	K- F	-437 / 0	0.28 (1)
E- F	-1446 / 0	-119.4	-119.4	0.75 (1)	4.21	I- F	-433 / 0	0.26 (1)
F- G	-1741 / 0	-119.4	-119.4	0.68 (1)	4.05	B- L	0 / 1787	0.40 (1)
M- B	-1934 / 0	0.0	0.0	0.20 (1)	5.97	I- G	0 / 1597	0.36 (1)
H- G	-1784 / 0	0.0	0.0	0.23 (1)	6.18			
M- L	0 / 0	-18.2	-18.2	0.21 (4)	10.00			
L- K	0 / 1767	-18.2	-18.2	0.39 (1)	10.00			
K- J	0 / 1497	-18.2	-18.2	0.34 (1)	10.00			
J- I	0 / 1497	-18.2	-18.2	0.34 (1)	10.00			
I- H	0 / 0	-18.2	-18.2	0.16 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	34.8	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.3	PSF
TOTAL LOAD	=	48.1	PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (0.88")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (0.88")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.13")

CSI: TC=0.94/0.97 (B-C:1) , BC=0.39/0.97 (K-L:1) , WB=0.50/0.97 (C-K:1) , SSI=0.34/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (H) (INPUT = 0.90)
JSI METAL= 0.57 (B) (INPUT = 1.00)

Jul 19, 2023

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

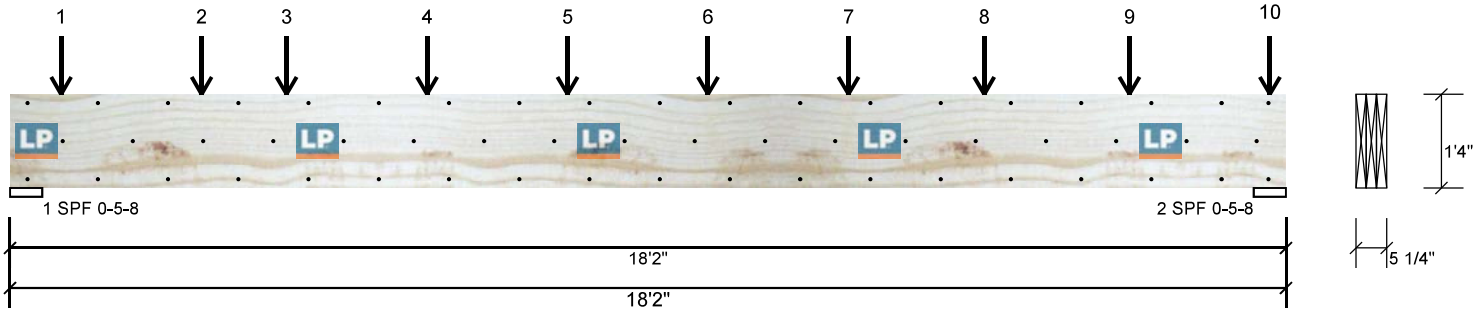
KOTT

Client: **NE0723-125**
Project: **GREENPARK - ZADORRA**
Address: **ESTATES - VILLA 11-1**

Date: 6/16/23
Input by: RB
Job Name: ZADORRA ESTATES VILLA 11 ELEV 1&2
Project #:
Level: Level

MHP 23038

RB-1 LP LVL 2900F b-2.0E 1.750" X 16.000" 3-Ply - PASSED



Member Information

Type:	Girder	Application:	Roof (Residential)
Plies:	3	Slope:	0/12
Moisture Condition:	Dry	Design Method:	LSD
Deflection LL:	360	Building Code:	NBCC 2015 OBC 2012(2020 Update)
Deflection TL:	360	Load Sharing:	Yes
Importance:	Normal - II	Deck:	Not Checked
		Vibration:	Not Checked

Unfactored Reactions PATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	0	2432	5802	0
2	Vertical	0	2082	4963	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.500"	Vert	66%	3041 / 8702	11743	L	1.25D+1.5S
2 - SPF	5.500"	Vert	57%	2603 / 7445	10048	L	1.25D+1.5S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	48641 ft-lb	9'11 1/4"	89862 ft-lb	0.541 (54%)	1.25D+1.5S	L
Shear	9989 lb	1'9 1/2"	26712 lb	0.374 (37%)	1.25D+1.5S	L
LL Defl inch	0.401 (L/521)	9'2 1/4"	0.580 (L/360)	0.691 (69%)	S	L
TL Defl inch	0.568 (L/367)	9'2 3/16"	0.580 (L/360)	0.980 (98%)	D+S	L

Design Notes

1. Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 3.5.
2. Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 3.5.
3. Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
4. Dead Load Deflection: Instant = 0.168", Long Term = 0.251".
5. Fasten all plies using 3 rows of Pneumatic Gun Nail (.120x3.25") at 12" o.c. Maximum end distance not to exceed 6". Nail from both sides. Clinch Nails where possible.
6. Refer to last page of calculations for fasteners required for specified loads.
7. Girders are designed to be supported on the bottom edge only.
8. Top loads must be supported equally by all plies.
9. Top must be laterally braced at a maximum of 4'7 7/16" o.c.
10. Bottom must be laterally braced at end bearings.

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	0-8-12		Top	422 lb	0 lb	1104 lb	0 lb	
	Bearing Length	0-3-8							
2	Point	2-8-12		Top	422 lb	0 lb	1104 lb	0 lb	

Continued on page 2...

Notes

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

This design is valid until 4/28/26

Manufacturer Info

Louisiana-Pacific Corp
414 Union Street, Suite 2000
Nashville, TN 37219
(888) 820-0325
www.lpcorp.com
CCMC: 11518-R, APA: PR-L280 (C)

Kott Group
14 Anderson Blvd., On
L4A7X4
905-642-4400

KOTT

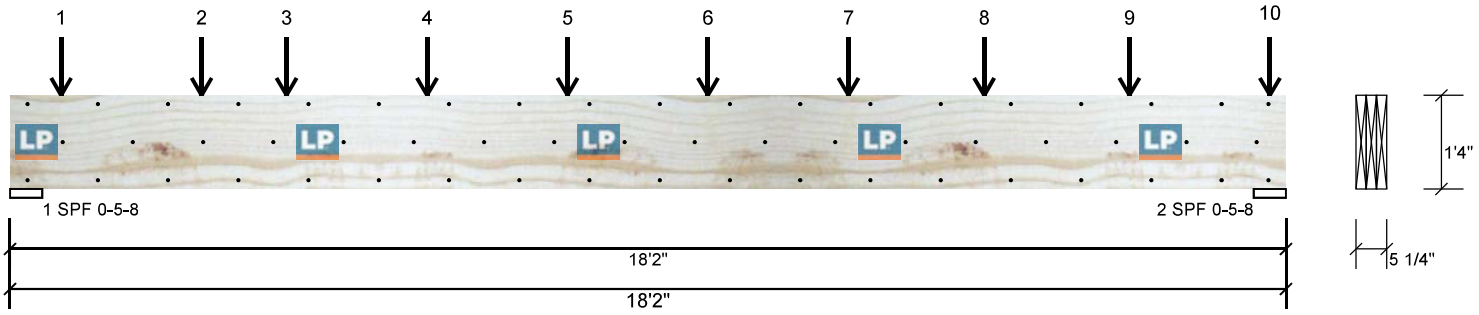
CSD DRAW DESIGN BUILD

Client: NE0723-125
Project: GREENPARK - ZADORRA
Address: ESTATES - VILLA 11-1

Date: 6/16/23
Input by: RB
Job Name: ZADORRA ESTATES VILLA 11 ELEV 1&2
Project #:

MHP 23038

RB-1 LP LVL 2900Fb-2.0E 1.750" X 16.000" 3-Ply - PASSED Level: Level



...Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
	Bearing Length	0-3-8							
3	Point	3-11-4		Top	422 lb	0 lb	1104 lb	0 lb	
	Bearing Length	0-3-8							
4	Point	5-11-4		Top	422 lb	0 lb	1104 lb	0 lb	
	Bearing Length	0-3-8							
5	Point	7-11-4		Top	422 lb	0 lb	1104 lb	0 lb	
	Bearing Length	0-3-8							
6	Point	9-11-4		Top	422 lb	0 lb	1104 lb	0 lb	
	Bearing Length	0-3-8							
7	Point	11-11-4		Top	422 lb	0 lb	1104 lb	0 lb	
	Bearing Length	0-3-8							
8	Point	13-10-7		Top	1058 lb	0 lb	2791 lb	0 lb	
	Bearing Length	0-3-8							
9	Point	15-11-4		Top	33 lb	0 lb	123 lb	0 lb	
	Bearing Length	0-3-8							
10	Point	17-11-4		Top	33 lb	0 lb	123 lb	0 lb	
	Bearing Length	0-3-8							
	Self Weight				24 PLF				

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jul 19, 2023

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

Notes

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

This design is valid until 4/28/26

Manufacturer Info

Louisiana-Pacific Corp
414 Union Street, Suite 2000
Nashville, TN 37219
(888) 820-0325
www.lpcorp.com
CCMC: 11518-R, APA: PR-L280 (C)

Kott Group
14 Anderson Blvd., On
L4A7X4
905-642-4400

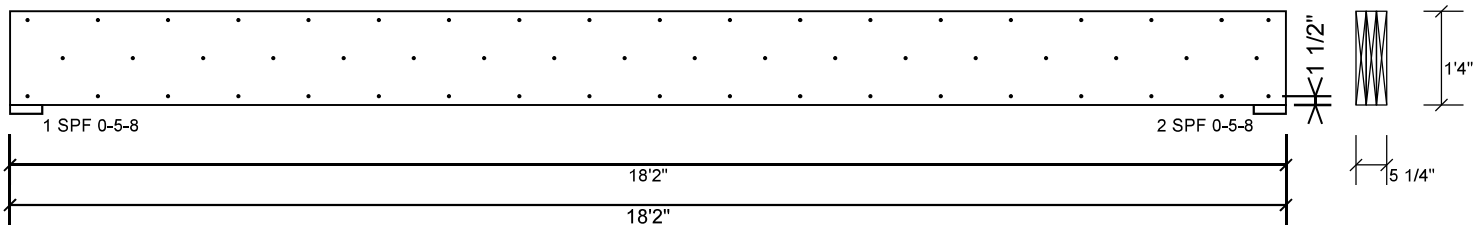
KOTT

CSD DRAW DESIGN BUILD

Client: NE0723-125
Project: GREENPARK - ZADORRA
Address: ESTATES - VILLA 11-1

Date: 6/16/23
Input by: RB
Job Name: ZADORRA ESTATES VILLA 11 ELEV 1&2
Project #:

RB-1 LF-LVL 2900Fb-2.0E 1.750" X 16.000" 3-Ply - PASSED Level: Level



Multi-Ply Analysis

Fasten all plies using 3 rows of Pneumatic Gun Nail (.120x3.25") at 12" o.c.. Nail from both sides. Maximum end distance not to exceed 6". Clinch Nails where possible.

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	383.1 PLF
Yield Limit per Fastener	127.7 lb.
Yield Mode	g
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

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

Notes

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

This design is valid until 4/28/26

Manufacturer Info

Louisiana-Pacific Corp
414 Union Street, Suite 2000
Nashville, TN 37219
(888) 820-0325
www.lpcorp.com
CCMC: 11518-R, APA: PR-L280 (C)

Kott Group
14 Anderson Blvd., On
L4A7X4
905-642-4400

KOTT

CSD DRAW DESIGN BUILD

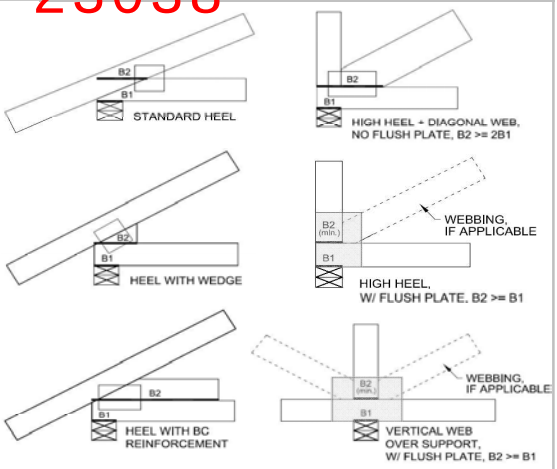
KOTT TRUSS BEARING CAPACITY TABLE

(INTERNAL USE ONLY)

T ' TRUSS LUMBER TYPE (SUPPORTED ON SPF #2 TOP PLATE) 7-Jun-21

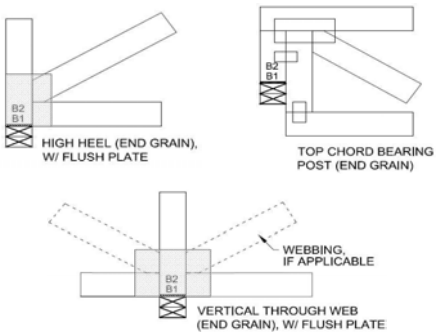
	TYPE 1, NO FLUSH PLATE, B2>=2B1								
	BEARING PLATE (B1)	1-PLY		2-PLY		3-PLY		4-PLY	
		MSR2100	SPF No.2 MSR1950	MSR2100	SPF No.2 MSR1950	MSR2100	SPF No.2 MSR1950	MSR2100	SPF No.2 MSR1950
NO BEARING ENHANCER	1 1/2"	1383		2767		4151		5534	
	2x4	3712	3228	7425	6457	11138	9685	14851	12914
	2x6	5834	5073	11668	10146	17503	15220	23337	20293
	2x8	7690	6687	15381	13375	23072	20063	30763	26750
	TYPE 1, FLUSH PLATE								
	BEARING PLATE (B1)	1-PLY		2-PLY		3-PLY		4-PLY	
		MSR2100	SPF No.2 MSR1950	MSR2100	SPF No.2 MSR1950	MSR2100	SPF No.2 MSR1950	MSR2100	SPF No.2 MSR1950
FLUSH PLATE	1 1/2"	1383		2767		4151		5534	
	2x4	3712		7425		11138		14851	
	2x6	5834		11668		17503		23337	
	2x8	7690		15381		23072		30763	
	TYPE 1, FLUSH PLATE + BEARING ENHANCER								
BEARING ENHANCER	BEARING PLATE (B1)	1-PLY		2-PLY		3-PLY		4-PLY	
		MSR2100	SPF No.2 MSR1950	MSR2100	SPF No.2 MSR1950	MSR2100	SPF No.2 MSR1950	MSR2100	SPF No.2 MSR1950
CPn-4 (Simpson)	2x4	4515		9030		13545		18065	
CPn-6 (Simpson)	2x6	7095		14190		21285		28390	
CP4-9 (KOTT)	2x4	6007	4898	12014	9796	18021	14694	19801	19592
CP6-9 (KOTT)	2x6	8677	7075	17354	14150	26031	21225	31117	28300
SBP4 (MiTek)	2x4	7288		11001		14714		18427	
SBP6 (MiTek)	2x6	11030		16865		22699		28534	
SBP6 (MiTek)	2x8	12886		20578		28269		35960	

TYPE 1 CONFIGURATIONS



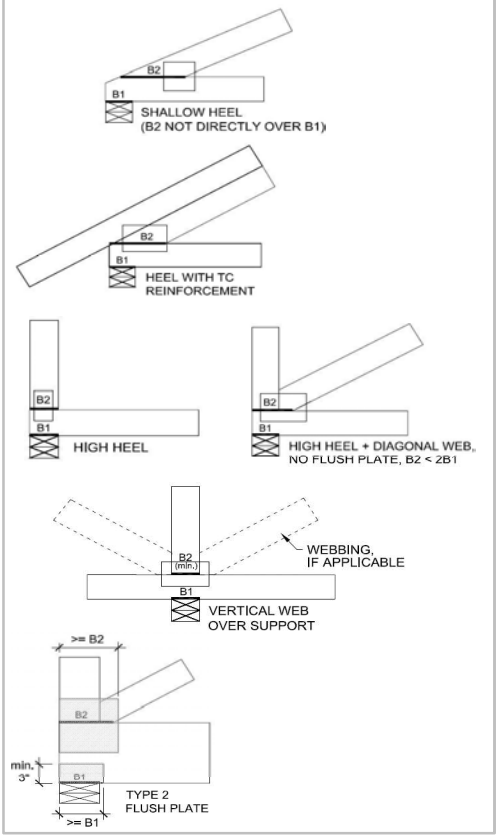
	TYPE 1 (END GRAIN)								
	BEARING PLATE (B1)	POST (B2) ABOVE BEARING	1-PLY		2-PLY		3-PLY		4-PLY	
			MSR2100 (EG)	SPF No.2 (EG)	MSR2100 (EG)	SPF No.2 (EG)	MSR2100 (EG)	SPF No.2 (EG)	MSR2100 (EG)	SPF No.2 (EG)
END GRAIN	2x4	2x4	3712		7425		11138		14851	
	2x6	2x6	5834		11668		17503		23337	
			MSR1950 (EG)	SPF No.2	MSR1950 (EG)	SPF No.2	MSR1950 (EG)	SPF No.2	MSR1950 (EG)	SPF No.2
	2x8	2x8	7690		15381		23072		30763	
	TYPE 1 (END GRAIN), FLUSH PLATE + BEARING ENHANCER									
END GRAIN, BEARING ENHANCER	BEARING PLATE (B1)	POST (B2) ABOVE BEARING	1-PLY		2-PLY		3-PLY		4-PLY	
			MSR2100 (EG)	SPF No.2 (EG)	MSR2100 (EG)	SPF No.2 (EG)	MSR2100 (EG)	SPF No.2 (EG)	MSR2100 (EG)	SPF No.2 (EG)
CPn-4 (Simpson)	2x4	2x4	4515		9030		13545		18065	
CPn-6 (Simpson)	2x6	2x6	7095		14190		21285		28390	
CP4-9 (KOTT)	2x4	2x6	15585	9006	19801	18013	19801		19801	
			MSR1950 (EG)	SPF No.2 (EG)	MSR1950 (EG)	SPF No.2 (EG)	MSR1950 (EG)	SPF No.2 (EG)	MSR1950 (EG)	SPF No.2 (EG)
CP6-9 (KOTT)	2x6	2x8	21834	13009	31117	26019	31117		31117	

TYPE 1 (END GRAIN) CONFIGURATIONS



	TYPE 2, NO FLUSH PLATE, B2<2B1								
	BEARING PLATE (B1)	POST (B2) ABOVE BEARING	1-PLY		2-PLY		3-PLY		4-PLY	
			MSR2100	SPF No.2 MSR1950	MSR2100	SPF No.2 MSR1950	MSR2100	SPF No.2 MSR1950	MSR2100	SPF No.2 MSR1950
NO BEARING ENHANCER	2x4	2x4	2639	2152	5279	4304	7919	6457	10588	8609
		2x6	3393	2767	6787	5534	10181	8302	13575	11069
	2x6	2x4	3393	2767	6787	5534	10181	8302	13575	11069
		2x6	4147	3382	8296	6764	12444	10146	16592	13529
		2x8	4808	3920	9616	7840	14424	11761	19232	15681
		2x10	5562	4535	11124	9070	16686	13606	22248	18141
	2x8	2x4	3959	3228	7919	6457	11878	9685	15838	12914
		2x6	4808	3920	9616	7840	14424	11761	19232	15681
		2x8	5467	4458	10935	8916	16403	13375	21871	17833
	TYPE 2, FLUSH PLATE									
	BEARING PLATE (B1)	POST (B2) ABOVE BEARING	1-PLY		2-PLY		3-PLY		4-PLY	
			MSR2100	SPF No.2 MSR1950	MSR2100	SPF No.2 MSR1950	MSR2100	SPF No.2 MSR1950	MSR2100	SPF No.2 MSR1950
FLUSH PLATE	2x4	2x4	TYPE 1 APPLIES							
		2x6								
	2x6	2x4	4672	3809	9344	7619	14016	11429	18689	15238
		2x6	TYPE 1 APPLIES							
		2x8								
		2x10								
	2x8	2x4	4672	3809	9344	7619	14016	11429	18689	15238
		2x6	7342	5986	14684	11973	22026	17959	29368	23946
		2x8	TYPE 1 APPLIES							

TYPE 2 CONFIGURATIONS



NOTES:

1. Factored truss reaction shall not exceed bearing capacity corresponding to: configuration type, size of bearing surfaces, truss lumber, # of plies, and applicable enhancers.

2a. Values in table are in conformance with CSA O86-14 Cl. 6.5.7 and TPIC 2014-Update 2, and may be used for residential or commercial designs.

2b. Values in table are in conformance with MiTek Canada Detail B37821Q "SPF Bearing Capacities".

2c. Values in table are in conformance with Simpson Catalogue C-C-CAN2020.

3a. Conditions for use of table values include: standard duration (K_D=1), dry lumber (K_{Scp}=1), untreated lumber (K_T=1), length of bearing factor not applied (K_B=1).

3b. Size factor (K_{Zcp}) applied to support material calculation when acceptable. Flush plate factor (K_P) applied to truss material calculation when acceptable (ie. excludes end grain).

3c. Flat roof factor (K_F) must applied for trusses making up a flat roof system; to do so, multiply bearing capacity values by 0.75 for this application.

4. Bearing plate is to be specified by the project engineer; values in table assume a bearing material of SPF #2 (or better).

5. When required, flush plate must not be located further than 1/4" away from bearing surface, and must cover the entire bearing plate length (B1).

6. When required, bearing enhancer must be installed as per manufacturer's guidelines.

7. Type 2 bearing configurations can be converted to use Type 1 table values as outlined in TPIC 2014-Update 1 Cl. 7.5.9.

8. This table is not valid after April 30, 2022.

STANDARD DETAIL **MSD2015-H**

MHP 23038

Issued: MARCH 1, 2022
Expiry: APRIL 30, 2024

TOE-NAIL CAPACITY DETAILS

LATERAL AND WITHDRAWAL RESISTANCE OF BEARING ANCHORAGE BY TOE-NAILS

NAIL TYPE	Length (in)	Diameter (in)	LATERAL Resistance per nail (Lbs.)		WITHDRAWAL Resistance per nail (Lbs.)	
			SPF	D. FIR	SPF	D. FIR
COMMON WIRE	3.00	0.144	122	139	30	42
	3.25	0.144	127	144	32	45
	3.50	0.160	152	173	38	52
COMMON SPIRAL	3.00	0.122	96	108	26	36
	3.25	0.122	97	108	28	40
	3.50	0.152	142	161	36	50
3.25" Gun nail	3.25	0.120	94	105	28	39

Note: If using truss with D. Fir lumber and SPF bearing plate, use tabulated SPF values in table.

Nail type:	Common wire	Common spiral	Common wire	Common spiral	Gun Nail
Diameter (in.)	0.160	0.152	0.144	0.122	0.120
Length (in.)	3.50	3.50	3.00	3.00	3.25
LUMBER	**MAXIMUM NUMBER OF TOE-NAILS**				
2x4 SPF	2	2	3	3	3
2x6 SPF	4	4	4	5	5
2x4 D. FIR	2	2	2	2	2
2x6 D. FIR	3	3	3	4	4

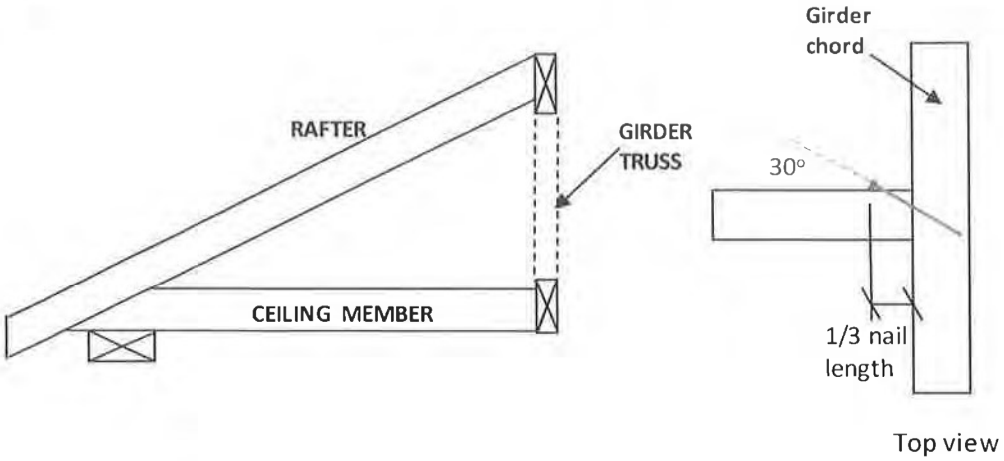


Figure 1: Toe-Nailing Rafter / Ceiling Member to Girder Truss

PEO
Certificate No. 10889485

LICENSED PROFESSIONAL ENGINEER
2022-04-05
C. Cordogiannis
90553736
PROVINCE OF ONTARIO

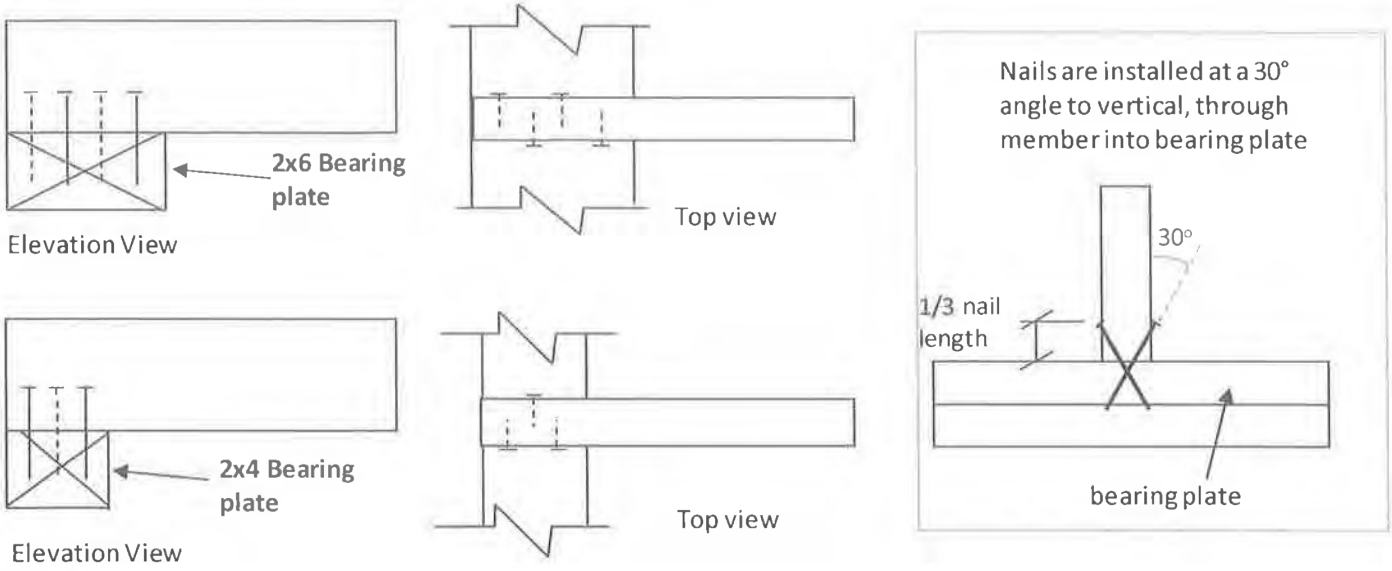
STANDARD DETAIL **MSD2015-H**

MHP 23038

Issued: MARCH 1, 2022
Expiry: APRIL 30, 2024

TOE-NAIL CAPACITY DETAILS

Figure 2: Toe-Nail Anchorage to Bearing Plate for Uplift



NOTES:

1. Rafter and ceiling members may be connected to top and bottom chords of girder truss by toe-nailing the members into the girder chords (see fig. 1), provided the factored vertical reactions of the supported members do not exceed the lateral resistance of the toe-nails. Mechanical connectors (hangers) are required if factored vertical reactions exceed the toe-nail capacity, or if the connection must resist horizontal loads (loads perpendicular to the face of girder or rafter).

2. Trusses, rafters or ceiling members may be anchored to the bearing plate with toe-nails (see fig. 2), provided that the factored uplift reactions due to **wind or earthquake loads** do not exceed the **withdrawal resistance of the toe-nails.** Mechanical anchors (tie-downs) are required for reactions that exceed the toe-nail withdrawal capacity. Toe-nail anchorage to bearing plates is **NOT** permitted if uplift reactions are generated from gravity loads (snow, floor live, dead).

3. Tabulated toe-nail resistances on page 1 are for **one** toe-nail. Multiply unit values by the number of nails used in the connection. Maximum number of nails in a connection shall not exceed the tabulated limits shown on page 1 for a given lumber size /species.

4. Nail values are based on specific gravity of G = 0.42 (SPF) and G = 0.49 (D. Fir).

5. 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.

6. For wind / earthquake loads, tabulated lateral resistances may be multiplied by 1.15 (K_D factor). No increases are permitted for tabulated withdrawal resistances.

7. Lumber must be dry (< 19% moisture content) at the time of nail installation.

8. Nail values in this table comply with CSA O86-19, Clause 12.9.

PEO
Certificate No. 10889485

LICENSED PROFESSIONAL ENGINEER
2022-04-05
C. Cordogiannis
90553736
PROVINCE OF ONTARIO

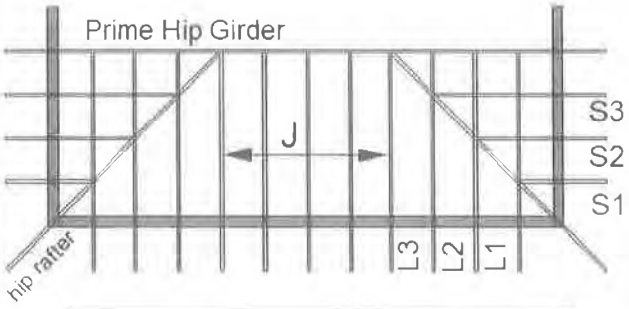
STANDARD DETAIL MSD2015-J

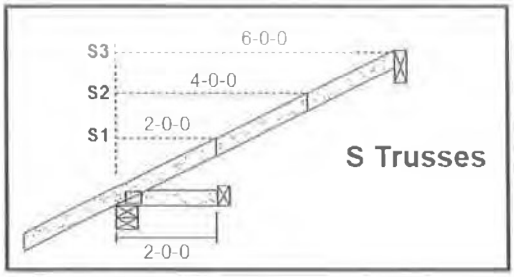
MHP 23038

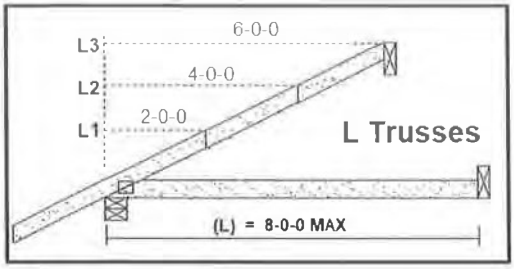
Issued: MARCH 17, 2021
Expiry: APRIL 30, 2023

STANDARD HIP END FRAMING

PLAN VIEW

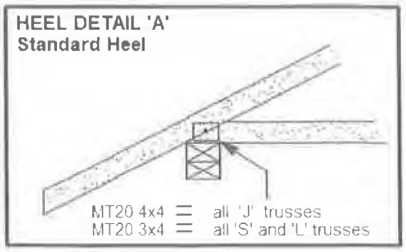


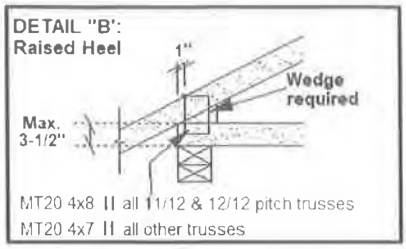


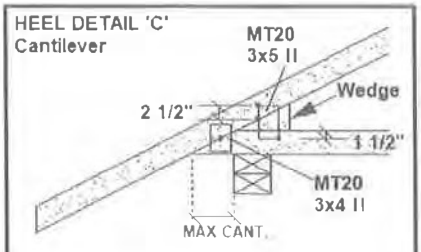


Specified Load Rating:

Top chord Live:	51.0 PSF or less
Top chord Dead:	6.0 PSF or less
Bottom chord Live:	0.0 PSF
Bottom chord Dead:	7.3 PSF or less



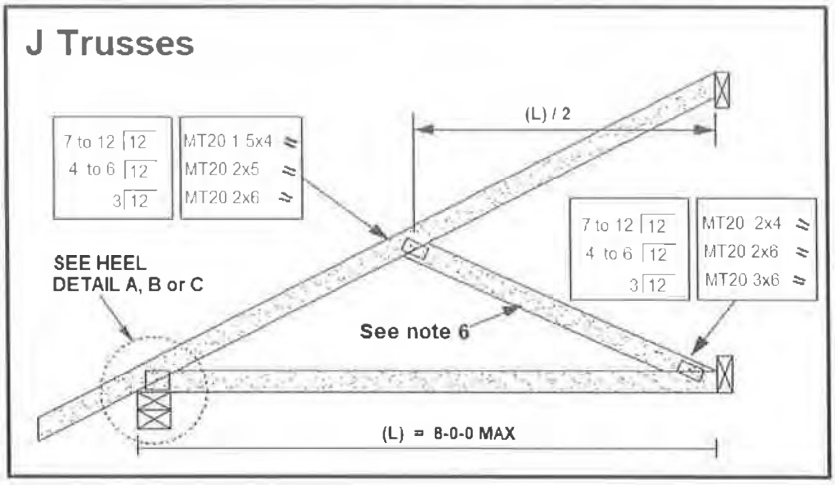




CANTILEVER DETAIL "C"

SLOPE	MAX CANT.	WEDGE PLATE	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

J Trusses



PEO
Certificate No. 10889485

NOTES:

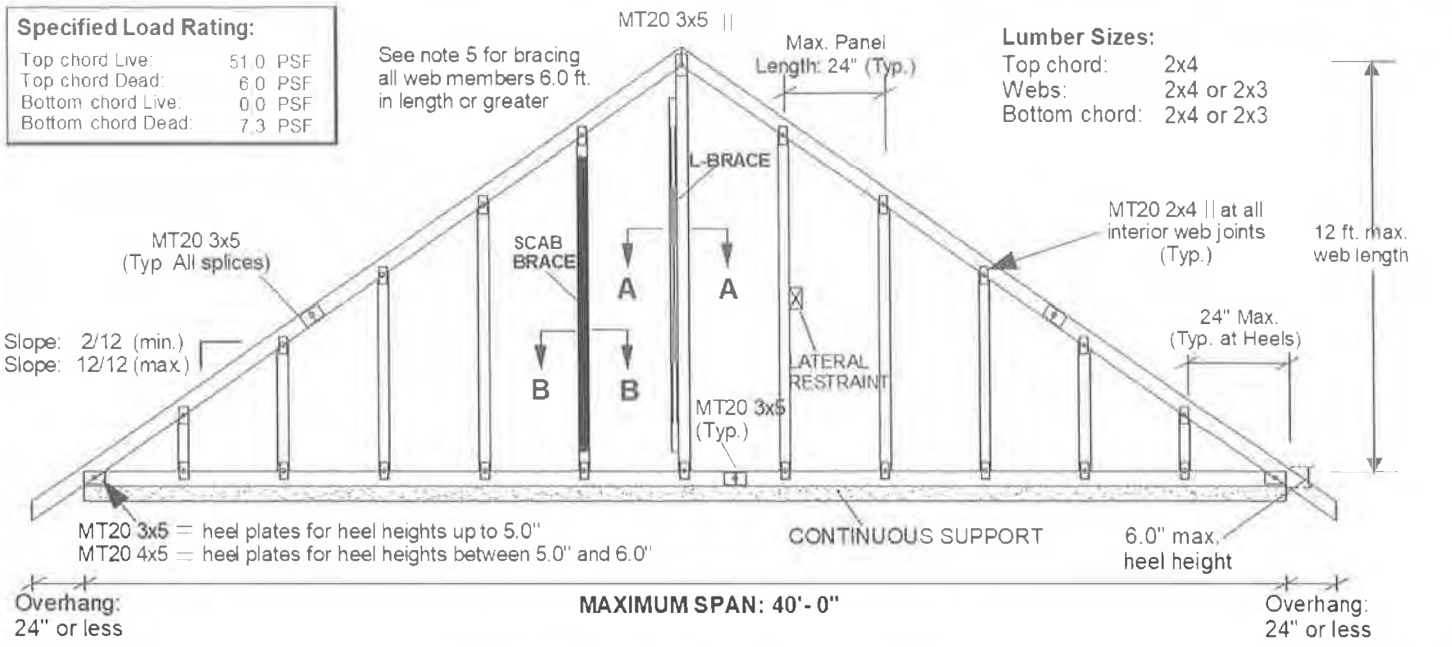
1. This detail is valid only for projects conforming to **PART 9 NBCC 2015** that do not require a wind analysis to be incorporated into the design of the trusses.
2. Overhang length shall not exceed 24 inches.
3. All lumber shall be 2x4 SPF (or D-Fir) DRY No. 2 grade or better.
4. All plates specified are MITEK MT20, pressed into both faces of each truss. Heel plates of all trusses shall conform to heel details 'A', 'B' or 'C'.
5. Diagonal hip rafter design shall conform to section 9.23.14.6 of NBCC 2015.
6. For 6.0 ft. or less span, diagonal web on truss 'J" is optional. Girder design must reflect choice of partial jack ('J' with diagonal web) or open jack ('J' without diagonal web)
7. All truss-to-rafter and truss-to-truss connections shall be specified as per MITEK standard detail *'MSD2015-H: Toe-Nail Capacity Details'*

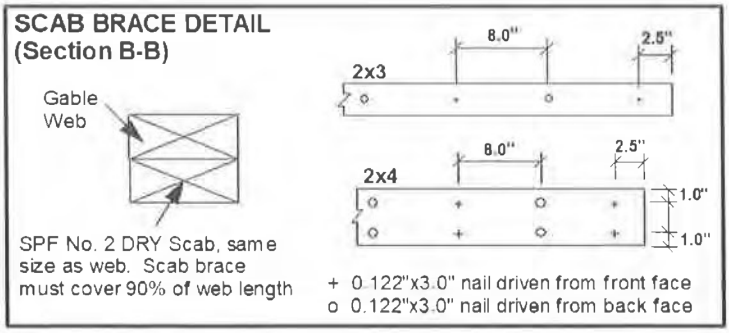
MHP 23038

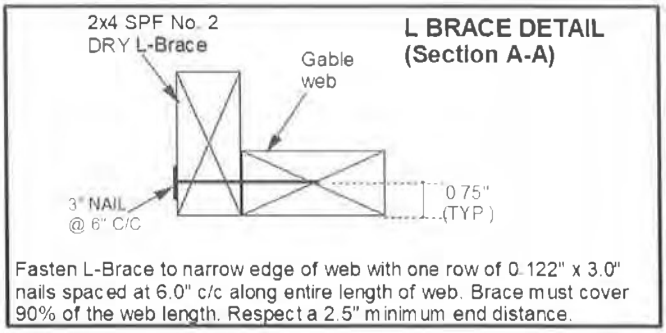
STANDARD DETAIL MSD2015-K

Issued: MARCH 1, 2022
Expiry: APRIL 30, 2024

STANDARD GABLE END DETAIL







Notes:

1. This detail is only valid for projects conforming to **Part 9, NBCC 2015** that do not require a wind analysis to be incorporated into the design of the truss.
2. This detail is for vertical (gravity) load rating of the truss only. Truss must be continuously supported over the entire length of bottom chord.
3. Maximum web length not to exceed 12.0 ft. Spacing of gable stud webs in the truss not to exceed 24 inches cc.
4. Splice joints shall not be located in the first panel adjacent to the heel joint or peak joint.
5. Lateral restraint required at half-length of all webs over 6.0 ft. long. Alternatively install an L-Brace or scab brace as shown above. Scab braces shall be limited to 10 ft. long webs or less.
6. All plates are MITEK MT20 pressed into both faces of truss.
7. All lumber to be SPF (or D-Fir) DRY and of No.2 grade or better.
8. Additional building bracing is typically installed to brace the face of the end wall assembly. See BCSI Canada '*Building Designer Responsibilities for Gable End Frame Bracing*' for additional information on building bracing for gable-end assemblies.

PEO
Certificate No 10889485

MHP 23038

CANADA B1C

BCSI-B1C SUMMARY SHEET - GUIDE FOR HANDLING, INSTALLING, RESTRAINING AND BRACING OF TRUSSES

Spans over 60' may require complex permanent bracing. Please always consult a registered design professional.

WARNING!

General Notes

Trusses are not marked in any way to identify the frequency or location of temporary lateral restraint and diagonal bracing. Follow the recommendations for handling, installing and temporary restraining and bracing of trusses. Refer to BCSI CANADA – Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses* for more detailed information.

Truss Design Drawings may specify locations of permanent lateral restraint or reinforcement for individual truss members. Refer to the BCSI-B3C Summary Sheet* for more information. All other permanent bracing design is the responsibility of the building designer.

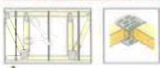
Remarques générales

Les fermes ne sont pas marquées d'aucune façon pour identifier la fréquence ou l'emplacement de la retenue latérale temporaire et du contreventement diagonal. Respectez les recommandations pour la manipulation, l'installation ainsi que la retenue et le contreventement temporaires des fermes. Reportez-vous au BCSI CANADA – Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses (Guide de bonnes pratiques pour la manipulation, l'installation, la retenue et le contreventement des fermes en bois reliées par une plaque métallique) pour obtenir des renseignements plus détaillés.*

Les dessins de conception de fermes peuvent préciser des emplacements de retenue latérale permanente ou de renforcement pour des membrures de fermes individuelles. Reportez-vous à la fiche sommaire BCSI-B3C pour obtenir plus de renseignements. Le concepteur du bâtiment est responsable de toute autre conception de contreventement.*

WARNING The consequences of improper handling, erecting, installing, restraining and bracing can result in a collapse of the structure, or worse, serious personal injury or death.

AVERTISSEMENT *Les conséquences d'une manipulation, d'une implantation, d'une installation, d'une retenue et d'un contreventement inappropriés peuvent entraîner l'effondrement de la structure, ou pire, des blessures graves ou la mort.*



CAUTION Exercise care when removing banding and handling trusses to avoid damaging trusses and prevent injury. Wear personal protective equipment for the eyes, feet, hands and head when working with trusses.

MISE EN GARDE *Faites attention lorsque vous retirez des sangles et manipulez des fermes pour éviter d'endommager les fermes et prévenir les blessures. Portez de l'équipement de protection individuelle pour les yeux, les pieds, les mains et la tête lorsque vous travaillez avec des fermes.*

CAUTION Use special care in windy weather or near power lines and airports.

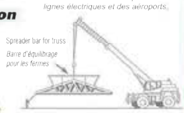
MISE EN GARDE *Faites preuve d'une attention particulière lors des conditions venteuses ou près des lignes électriques et des aéroports.*

Handling – *Manipulation*

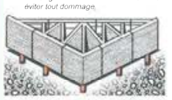
NOTICE Avoid lateral bending.
Évitez la flexion latérale.

NOTICE The contractor is responsible for properly receiving, unloading and storing the trusses at the jobsite. Unload trusses to smooth surface to prevent damage.

L'entrepreneur est responsable de la réception, du déchargement et de l'entreposage appropriés des fermes sur le chantier de construction. Déchargez les fermes sur une surface lisse pour éviter tout dommage.



Use proper rigging and hoisting equipment.
Utilisez l'équipement de montage et de levage approprié.



Trusses may be unloaded directly on the ground at the time of delivery or stored temporarily in contact with the ground after delivery. If trusses are to be stored for more than one week, place blocking of sufficient height beneath the stack of trusses at 8' (2.4 m) to 10' (3 m) on center (oc).

Les fermes peuvent être déchargées directement sur le sol au moment de la livraison ou rangées temporairement en contact avec le sol après la livraison. Si les fermes seront entreposées pendant plus d'une semaine, placez des blocs d'une hauteur suffisante sous la pile de fermes à une distance de 2,4m (8 pi) à 3m (10 pi) entraxes.

For trusses stored for more than one week, cover bundles to protect from the environment.

Pour les fermes entreposées pendant plus d'une semaine, couvrez les lots pour les protéger des intempéries.

Refer to BCSI CANADA* for more detailed information pertaining to handling and jobsite storage of trusses.

Reportez-vous au BCSI CANADA pour obtenir des renseignementsplus détaillés concernant la manipulation et l'entreposage des fermes sur le chantier de construction.*

DO NOT store unbraced bundles upright. — ***N**'entreposez **PAS** verticalement les lots non contreventés.*

DO NOT store on uneven ground. — ***N**'entreposez **PAS** sur un sol inégal.*

Hoisting and Placement of Truss Bundle
Manutention et mis en place des paquets de ferme

DON'T overload the crane.
***NE** surchargez **PAS** la crue.*

NEVER use banding to lift a bundle.
***N**'utilisez **JAMAIS** de feuillards métalliques seuls pour soulever un lot.*

A single lift point may be used for bundles of top chord pitch trusses up to 45' (13.7 m) and parallel chord trusses up to 30' (9.1 m).
Use at least two lift points for bundles of top chord pitch trusses up to 60' (18.3 m) and parallel chord trusses up to 45' (13.7 m). Use at least three lift points for bundles of top chord pitch trusses >60' (18.3 m) and parallel chord trusses >45' (13.7 m).

Un seul point de levage peut être utilisé pour les lots de fermes en pente à membrure supérieure jusqu'à 13,7m (45 pi) et de fermes à membrure parallèle jusqu'à 9,1m (30 pi). Utilisez au moins trois points de levage pour les lots de fermes à membrure supérieure inclinée >18,3m (60 pi) et fermes à membrure parallèle >13,7m (45 pi).

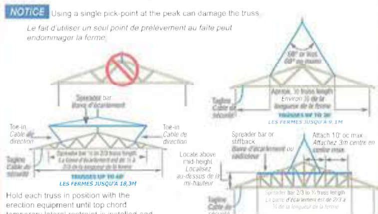
WARNING Do not over load supporting structure with truss bundle.

AVERTISSEMENT *Ne surchargez pas la structure d'appui avec un lot de fermes.*

Place truss bundles in stable position.
Positionnez les lots de manière stable.

Mechanical Hoisting Recommendations for Single Trusses
Recommandations de levage mécanique pour les fermes uniques

NOTICE Using a single pick-point at the peak can damage the truss.
Le fait d'utiliser un seul point de prélèvement au faîte peut endommager la ferme.



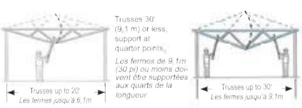
Hold each truss in position with the erection equipment until top chord temporary lateral restraint is installed and the truss is fastened to the bearing points.

Retenez chaque ferme en position avec l'équipement de montage jusqu'à ce que le dispositif de retenue latérale temporaire de la membrure supérieure soit installé et que la ferme soit fixée aux supports d'appui.

Installation of Single Trusses by Hand
Installation manuelle de fermes individuelles

Trusses 20' (6.1 m) or less, support near peak.
Les fermes de 6,1m (20 pi) ou moins doivent être supportées au faîte.

Trusses 30' (9.1 m) or less, support at quarter points.
Les fermes de 9,1m (30 pi) ou moins doivent être supportées aux quarts de la longueur.

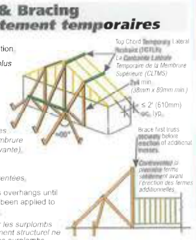


Temporary Restraint & Bracing
Retenue et contreventement temporaires

NOTICE Refer to BCSI-B2C* for more information.
Reportez-vous au BCSI-B2C pour obtenir plus de renseignements.*

Locate ground braces for first truss directly in line with all rows of top chord temporary lateral restraint (see table in the next column).

Localisez les contreventements du sol de la première ferme directement en ligne avec toutes les rangées de la retenue latérale temporaire à la membrure supérieure (consultez le tableau de la colonne suivante).



DO NOT walk on unbraced trusses.
***NE** marchez **PAS** sur des fermes non contreventées.*

DO NOT stand on truss overhangs until structural sheathing has been applied to the truss and overhangs.

***NE VOUS TENEZ PAS** sur les surplombs de ferme avant que le revêtement structurel ne soit appliqué sur la ferme et les surplombs.*

Steps to Setting Trusses
Étapes pour placer les fermes

1) Install ground bracing. 2) Set first truss and attach securely to ground bracing. 3) Set next 4 trusses with short member temporary lateral restraint (see below). 4) Install top chord diagonal bracing (see below). 5) Install web member plane diagonal bracing to stabilize the first five trusses (see below). 6) Install bottom chord temporary lateral restraint and diagonal bracing (see below). 7) Repeat process with groups of four trusses until all trusses are set.

1) Installez le contreventement de sol. 2) Placez la première ferme, puis fixez-la solidement au contreventement de sol. 3) Placez les quatre fermes suivantes avec la retenue latérale temporaire de la membrure courte (ci-dessous). 4) Installez le contreventement diagonal de la membrure supérieure (ci-dessous). 5) Installez le contreventement diagonal du plan de la membrure d'âme pour stabiliser les cinq premières fermes (consultez la deuxième figure dans la colonne). 6) Installez la retenue latérale temporaire de la membrure inférieure et le contreventement diagonal (ci-dessous). 7) Répétez la procédure par tranche de quatre fermes jusqu'à ce que toutes les fermes soient installées.

NOTICE Refer to BCSI-B2C* for more information.
Reportez-vous au BCSI-B2C pour obtenir plus de renseignements.*

Restraint/Bracing for All Planes of Trusses
Retenue et contreventement pour tous les plans de fermes

Minimum lumber used for lateral restraint and diagonal bracing is 2x4 stress-graded lumber. Attach to each truss with at least 2-3" common spiral (0.122" x 3"), 2-3" common wire (0.144" x 3") or 2-3" pneumatic (0.131" x 3") nails.

Le bois utilisé pour les retenues latérales et le contreventement en diagonale doit être au minimum en 2x4 classé. Fixez sur chaque ferme avec au moins des clous communs vrillés de 2-3" x 0.122", clous communs 3" x 0.144" ou clous pneumatiques 2-3" (3" x 0.131").

This restraint and bracing method is for all trusses except 3x2 and 4x2 parallel chord trusses (PCTs). See top of next column for temporary restraint and bracing of PCTs.

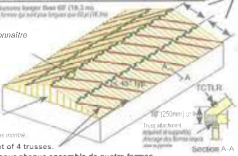
Cette méthode de retenue et de renforcement convient à toutes les fermes, sauf les fermes à membrure parallèle de 3x2 et 4x2 (FMP). Reportez-vous à la partie supérieure de la colonne suivante pour la retenue et le renforcement temporaires des FMP.

1) TOP CHORD — *MEMBRURE SUPÉRIEURE*

Truss Span *La Portée de la Ferme*	Top Chord Temporary Lateral Restraint (TCTLR) Spacing *L'Espacement de la Contrainte Latérale Temporaire de la Membrure Supérieure (CLTMS)*
Up to 30' *(Jusqu'à 9,1m)*	10' oc max. *(3m c/c max.)*
30' to 45' *(9,1m à 13,7m)*	8' oc max. *(2,4m c/c max.)*
45' to 60' *(13,7m à 18,3mm)*	6' oc max. *(1,8m c/c max.)*
60' to 80'* *(18,3m à 24,4m)*	4' oc max. *(1,2m c/c max.)*

*Consult a registered design professional for trusses longer than 60' (18.3 m).
**Consultez un concepteur professionnel enregistré pour les fermes qui sont plus longues que 60 pi (18,3m).*

See BCSI-B2C* for TCTLR options.
Reportez-vous au BCSI-B2C pour connaître les options de CLTMS.*



NOTICE Refer to BCSI-B3C* for gable end frame restraint/bracing/reinforcement information.
*Pour obtenir des renseignements sur la retenue, le contreventement et le renforcement des charpentes de pignon, reportez-vous au BCSI-B3C.**

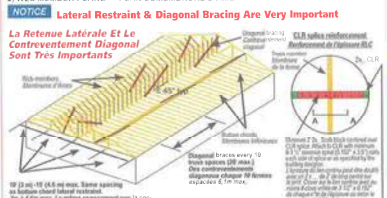
Note: Ground bracing not shown for clarity.
Pour simplifier, le contreventement de sol n'est pas montré.

Repeat diagonal braces for each set of 4 trusses.
Répétez le renforcement diagonal pour chaque ensemble de quatre fermes.

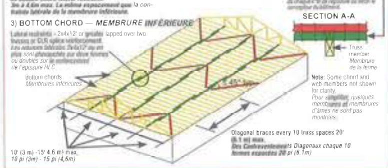
2) WEB MEMBER PLANE — *PLAN DEMEMBRURE D'ÂME*

NOTICE **Lateral Restraint & Diagonal Bracing Are Very Important**

La Retenue Latérale Et Le Contreventement Diagonal Sont Très Importants

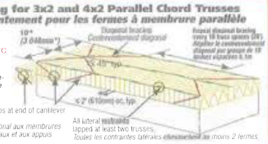


3) BOTTOM CHORD — *MEMBRURE INFÉRIEURE*



Restraint & Bracing for 3x2 and 4x2 Parallel Chord Trusses
Retenue et contreventement pour les fermes à membrure parallèle de 3x2 et de 4x2

NOTICE Refer to BCSI-B7C Summary Sheet* for more information.
*Pour obtenir plus de renseignements, reportez-vous á la fiche sommaire BCSI-B7C.**



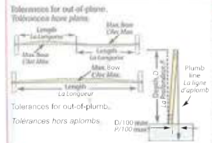
Apply diagonal brace to vertical webs at end of cantilever and at bearing locations.
Appliquez un contreventement diagonal aux membrures verticales à l'extrémité du porte-à-faux et aux appuis.

All lateral restraints lapped at least two trusses.
Toutes les contraintes latérales chevauchent au moins 2 fermes.

*Top chord temporary lateral restraint spacing shall be 10' oc max.
**L'espacement de la contrainte latérale temporaire des membrures supérieures doit être 10' pi (3m) c/c max.*

Installing — *Installation*

Tolerances for out-of-plane.
Tolérances hors plans.



Tolerances for out-of-plumb.
Tolérances hors aplombs.

Out-of-Plumb *Hors d'Aplomb*	
D/100 *P/100*	D (ft.) *P (mm)*
1/8" (3mm)	1' (305mm)
1/4" (6mm)	2' (610mm)
3/8" (10mm)	3' (914mm)
1/2" (13mm)	4' (1,2m)
5/8" (16mm)	5' (1,5m)
3/4" (19mm)	6' (1,8m)
7/8" (22mm)	7' (2,1m)
1" (25mm)	≥8' (≥2,4m)

Out-of-Plane – *Hors Axe*	
Max. Bow	Truss Length
3/8" (10mm)	12.5' (3,8m)
7/16" (11mm)	14.6' (4,5m)
1/2" (13mm)	16.7' (5,1m)
9/16" (14mm)	18.8' (5,7m)
5/8" (16mm)	20.8' (6,3m)
11/16" (17mm)	22.9' (7m)
3/4" (19mm)	25.0' (7,6m)
7/8" (22mm)	29.2' (8,9m)
1" (25mm)	≥33.3' (≥10,2m)

Construction Loading
Chargement de construction

DO NOT proceed with construction until all lateral restraint and bracing is securely and properly in place.

***NE** continuez **PAS** la construction sans que toutes les retenues latérales et tous les contreventements soient bien fixés et adéquatement mis en place.*

DO NOT exceed maximum stack heights. Refer to BCSI-B4C* for more information.

***NE** dépassez **PAS** les hauteurs d'empilement maximales. Pour obtenir plus de renseignements, reportez-vous au BCSI-B4C.**

Maximum Stack Height for Material on Trusses *La Hauteur Maximum des Piles de Matériaux sur les Fermes*	
Material *Le Matériel*	Height *La Hauteur*
Gypsum Board *Le Panneau de Gypse*	10" *(250mm)*
Plywood or OSB *Le Contreplaqué ou OSB*	12" *(305mm)*
Asphalt Shingles *Les Bardeaux d'Asphalte*	[illegible] bundles *2 paquets*
Concrete Block *Les Blocs de Béton*	8" *(203mm)*
Clay Tile *Les Tuiles d'Argile*	3-4 tiles high *3 à 4 tuiles d'épaisseur*

1. Table is based on trusses designed with a live load of 40 psf or greater. Contact a registered design professional for other loading conditions.
2. Stack heights assume short term duration of load. Install stacks of materials as quickly as possible.

NEVER stack materials near a peak, at mid-span, on cantilevers or overhangs.
***N'EMPILEZ JAMAIS** des matériaux près d'un faîte, au milieu, sur des poutres-consoles ou des surplombs.*

DO NOT overload small groups or single trusses.
***NE** surchargez **PAS** de petits groupes ou des fermes uniques.*

Truss bracing not shown for clarity.
Pour simplifier, le contreventement de la ferme n'est pas montré.

Place loads over as many trusses as possible.
Répartissez la charge sur le plus grand nombre de fermes possible.

Position loads over load bearing walls.
Positionnez les chargessur des murs porteurs.

Truss bracing not shown for clarity.

Alterations — *Modifications*

NOTICE Refer to BCSI-B5C.*
*Reportez-vous au BCSI-B5C.**

DO NOT cut, alter, or drill any structural member of a truss unless specifically permitted by the truss design drawing.

***NE** coupez, **NE** modifiez et **NE** percez **PAS** les éléments de structure d'une ferme à moins que cela soit spécifiquement permis par le dessin de conception des fermes.*

NOTICE Trusses that have been overloaded during construction or altered without the truss manufacturer's prior approval may render the truss manufacturer's limited warranty null and void.

La garantie limitée du fabricant des fermes sera annulée si les fermes ont été surchargées pendant la construction ou modifiées sans l'approbation préalable du fabricant des fermes.

*Contact the component manufacturer for more information or consult a registered design professional for assistance.
**Communiquez avec le fabricant du composant pour obtenir de plus amples renseignements ou consultez un professionnel en conception agréé pour obtenir de l'aide.*

AVERTISSEMENT! GUIDE POUR LA MANIPULATION, L'INSTALLATION, LA RETENUE ET LE CONTREVENTEMENT DES FERMES

Les portées supérieures à 18,3m (60 pi) peuvent exiger un contreventement permanent complexe. Veuillez toujours concepteur professionnel enregistré.

CORPORATION OF THE CITY OF OSHAWA
TRUE COPY
OF PERMIT PLANS
Dec 06 2023
PER: [signature]
CHIEF BUILDING OFFICIAL

MHP 23038

CANADA B3C

BCSI-B3C SUMMARY SHEET - PERMANENT RESTRAINT/BRACING OF CHORDS & WEB MEMBERS

Truss clear spans of 60' or greater may require complex permanent bracing. Please always consult a registered design professional.

WARNING Disregarding permanent restraint/bracing is a major cause of truss field performance problems and has been known to lead to roof or floor system collapse.

AVERTISSEMENT Le fait de négliger la retenue et le contreventement permanents est une cause majeure des problèmes visant la performance des fermes sur le chantier et cela est reconnu pour avoir entraîné l'effondrement des systèmes de toit et de plancher.

CAUTION Trusses with clear spans of 60 feet (18.3 m) or greater, may require complex permanent bracing. Please always consult a registered design professional.

MISE EN GARDE Les fermes ayant des portées libres de 18,3m (60 pi) et plus peuvent exiger un contreventement permanent complexe. Veuillez toujours consulter un concepteur professionnel agréé.

Restraint/Bracing Materials & Fasteners
Matériaux et attaches de retenue et de contreventement

Commonly used restraint/bracing materials include wood structural panels, gypsum board sheathing, stress-graded lumber, proprietary metal products, and metal purlins and straps.

Les matériaux de retenue et de contreventement communs incluent les panneaux structuraux de bois, le revêtement de panneaux de gypse, le bois classé par résistance mécanique, les produits métalliques exclusifs, les pannes et les feuillards métalliques.

MINIMUM ATTACHMENT REQUIREMENTS FOR LUMBER RESTRAINT/BRACING[1,2]
LES EXIGENCES MINIMUMS DES ATTACHMENTS POUR LA CONTRAINTE/LE CONTREVENTEMENT DU BOIS[1,2]

Lumber Size *Taille de Bois*	Minimum Nail Size *Taille Minimum de Clou*	Minimum Number of Nails per Connection *Nombre Minimum de Clous par Connexion*
2x4 stress-graded *38mm x 89mm classé par la résistance mécanique*	3" common spiral (0.122"x3") *clous vrillés ordinaires 3" (3mm x 76mm)* 3" common wire (0.144"x3") *clous ronds ordinaire 3" (3.7mm x 76mm)* 0.131" x 3" pneumatic *clous pneumatique 0.131"x3"(3.3mm x 76mm)*	2
2x6 stress-graded *38mm x 140mm classé par la résistance mécanique*		3

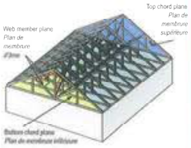
[1]Other attachment requirements may be specified by the truss designer or building designer.
[2]The grade/size and attachment for bracing materials such as wood structural panels, gypsum board sheathing, proprietary metal restraint/bracing products, and metal purlins and straps are provided by the building designer.

[1]Des autres exigences d'attachement peuvent être spécifiées par le dessinateur de ferme ou le concepteur du bâtiment.
[2]La taille et l'attachement pour des matériaux de contreventement comme les panneaux structuraux de bois, le revêtement de panneaux de gypse, les produits métalliques exclusifs pour la contrainte ou le contreventement, et des pannes et des feuillards sont fournis par le concepteur du bâtiment.

Permanent Bracing for the Various Planes of a Truss
Contreventement permanent pour les divers plans d'une ferme

Permanent bracing is important because it:
a) prevents out-of-plane buckling of truss members.
b) helps maintain proper truss spacing.
c) resists and transfers lateral loads from wind and seismic forces.

Le contreventement permanent est important parce qu'il :
a) prévient le flambement hors plan des membrures de fermes.
b) aide à maintenir l'espacement approprié des fermes.
c) résiste aux charges latérales des forces du vent et des forces sismiques et les transfère.



Trusses require permanent bracing within ALL of the following planes:
1. Top chord plane
2. Bottom chord plane
3. Web member plane

Les fermes exigent un contreventement permanentdans TOUS les plans suivants :
1. Le plan de la membrure supérieure
2. Le plan de la membrure inférieure
3. Le plan de la membrure d'âme

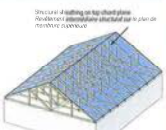
CAUTION Without permanent bracing the truss, or a portion of its members, will buckle (i.e., fail) at loads far less than design.

MISE EN GARDE Sans un contreventement permanent, la ferme, ou une partie de ses membrures, flambera (c'est-à-dire fera défaut) à des charges grandement inférieures à celles indiquées dans la conception.

1. Permanent Bracing for the Top Chord Plane
Contreventement permanent pour le plan de membrure supérieure

Use plywood, oriented strand board (OSB), or wood or metal structural purlins that are properly braced. Attach to each truss.

Utilisez du contreplaqué, des panneaux OSB ou des pannes structurales de bois ou de métal correctement contreventés. Fixez à chaque ferme.



The truss design drawing (TDD) provides information on the assumed support for the top chord.

Le dessin de conception de ferme (DCF) fournit des renseignements sur le support prévu pour la membrure supérieure.

Fastener size and spacing requirements and grade for the sheathing, purlins and bracing are provided in the building code and/or by the building designer.

Le code du bâtiment et (ou) le concepteur du bâtiment fournissent les exigences relatives à la taille des attaches, à l'espacement et au classement du revêtement, des pannes et du contreventement.

Diagonal "X" bracing in the top chord plane at intervals specified by the building designer.
Le contreventement diagonal "X" au plan de membrure supérieure aux intervalles spécifiés par le concepteur du bâtiment.

2. Permanent Bracing for the Bottom Chord Plane
Contreventement permanent pour le plan de membrure inférieure

Use rows of continuous lateral restraint with diagonal bracing, gypsum board sheathing or some other ceiling material capable of functioning as a diaphragm.

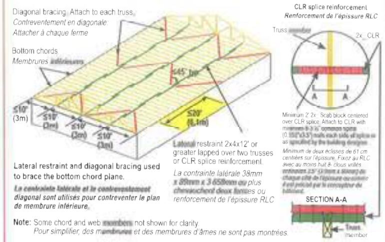
Utilisez des rangées de retenues latérales continues avec un contreventement diagonal, un revêtement de panneaux de gypse ou un autre matériau en mesure de fonctionner comme diaphragme.

The TDD provides information on the assumed support for the bottom chord.

Le DCF fournit des renseignements sur le support prévu pour la membrure inférieure.

Install bottom chord permanent lateral restraint at the spacing indicated on the TDD and/or by the building designer with a maximum of 10' (3 m) on center.

Installez la retenue latérale permanente de la membrure inférieure à l'espacement indiqué sur le DCF et (ou) par le concepteur du bâtiment avec un maximum de 3m (10 pi) entraxes.



Diagonal bracing. Attach to each truss.
Contreventement en diagonale:
Attacher à chaque ferme
Bottom chords
Membrures inférieures
≤45° typ
≤10' (3m)
≤20' (6.1m)
Lateral restraint 2x4x12' or greater lapped over two trusses or CLR splice reinforcement.
La contrainte latérale 38mm x 89mm x 3 658mm ou plus chevauchent deux fermes ou renforcement de l'épissure RLC
CLR splice reinforcement
Renforcement de l'épissure RLC
Truss member
2x_CLR
SECTION A-A

Lateral restraint and diagonal bracing used to brace the bottom chord plane.

La contrainte latérale et le contreventement diagonal sont utilisés pour contreventer le plan de membrure inférieure.

Note: Some chord and web members not shown for clarity.
Pour simplifier, des membrures et des membrures d'âmes ne sont pas montrées.

3. Permanent Bracing for the Web Member Plane
Contreventement permanent pour le plan de membrure d'âme

Web member permanent bracing collects and transfers buckling restraint forces and/or lateral loads from wind and seismic forces. The same bracing can often be used for both functions.

Le contreventement permanent de la membrure d'âme récupère et transfère les forces de retenue de flambement et (ou) les charges latérales des forces du vent et des forces sismiques. Le même contreventement peut souvent être utilisé pour les deux fonctions.

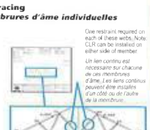
Individual Web Member Permanent Restraint & Bracing
Retenue et contreventement permanents des membrures d'âme individuelles

Check the TDD to determine which web members (if any) require restraint to resist buckling.

Vérifiez le DCF pour déterminer quelles membrures d'âme (si applicable) nécessitent une retenue pour résister au flambement.

Restrain and brace with:
A. continuous lateral restraint & diagonal bracing.
B. individual member web reinforcement.

Retenue et contreventement à l'aide :
A. d'une retenue latérale continue et d'un contreventement diagonal.
B. d'un renforcement des membrures d'âme individuelles.



A. Continuous Lateral Restraint (CLR) & Diagonal Bracing
Retenue latérale continue (RLC) et contreventement diagonal

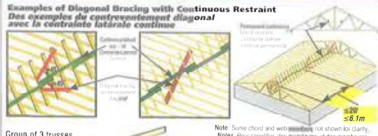
Attach each row of CLR at the locations shown on the TDD.

Fixez la RLC aux emplacements indiqués sur le DCF.

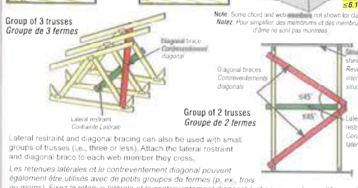
Install the diagonal bracing at an angle of less-than-or-equal-to 45° to the CLR and position so that it crosses the web in close proximity to the CLR. Attach the diagonal brace as close to the top and bottom chords as possible and to each web it crosses. **Repeat every 20' (6.1 m) or less.**

Installez le contreventement diagonal à un angle de 45° ou moins par rapport à la RLC et le positionner de sorte qu'il traverse l'âme à proximité de la RLC. Fixez le contreventement diagonal aussi près que possible des membrures supérieures et inférieures et de chaque âme qu'il croise. ***Répétez à tous les 6,1m (20 pi) ou moins.***

Examples of Diagonal Bracing with Continuous Restraint
Des exemples du contreventement diagonal avec la contrainte latérale continue



Note: Some chord and web members not shown for clarity.
Notez: Pour simplifier, des membrures et des membrures d'âme ne sont pas montrées.



Group of 3 trusses
Groupe de 3 fermes
Diagonal brace
Contreventement diagonal
Lateral restraint
Contrainte Latérale
Group of 2 trusses
Groupe de 2 fermes
Diagonal braces
Contreventements diagonals
Structural sheathing
Revêtement intermédiaire structural
≤45°
Lateral restraint
Contrainte latérale

Lateral restraint and diagonal bracing can also be used with small groups of trusses (i.e., three or less). Attach the lateral restraint and diagonal brace to each web member they cross.

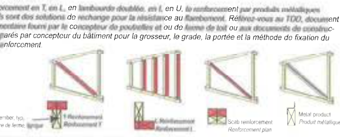
Les retenues latérales et le contreventement diagonal peuvent également être utilisés avec de petits groupes de fermes (p. ex., trois ou moins). Fixez la retenue latérale et le contreventement diagonal à chaque membrure d'âme qu'ils traversent.

ALWAYS DIAGONALLY BRACE THE CONTINUOUS LATERAL RESTRAINT!
CONTREVENTEZ TOUJOURS EN DIAGONAL LA RETENUE LATÉRALE CONTINUE!

B. Individual Web Member Reinforcement
Renforcement des membrures d'âme individuelles

T-, L-, Scab, I-, U-Reinforcement and proprietary metal reinforcement provide an alternative for resisting web buckling. Refer to TDD, supplemental document provided by the truss designer or the construction documents prepared by the building designer for the size, grade, span and attachment of the web reinforcement.

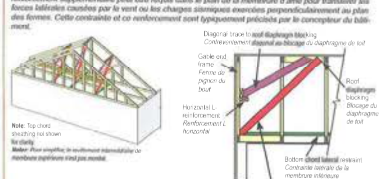
Le renforcement en T, en L, en lambourde doublée, en I, en U, le renforcement par produits métalliques exclusifs sont des solutions de rechange pour la résistance au flambement. Référez-vous au TDD, document supplémentaire fourni par le concepteur de poutrelles et ou de ferme de toit ou aux documents de construction préparés par concepteur du bâtiment pour la grosseur, le grade, la portée et la méthode de fixation du d'âme renforcement.



Web Member Plane Permanent Building Stability Bracing to Transfer Wind & Seismic Forces
Contreventement permanent pour assurer la stabilité du bâtiment des plans des membrures d'âme pour transférer les forces du vent et les forces sismiques

The web member restraint or reinforcement specified on a TDD is required to resist buckling due to axial forces caused by the in-plane loads applied to the truss. Additional restraint and bracing within the web member plane may also be required to transfer lateral forces due to wind and/or seismic loads applied perpendicular to the plane of the trusses. This restraint and bracing is typically specified by the building designer.

La contrainte ou le renforcement des membrures d'âme précisé au DAF est requis pour résister au flambement sous des forces axiales causées par les chargements verticaux. Une contrainte ou un renforcement supplémentaire peut être requis dans le plan de la membrure d'âme pour transférer les forces latérales causées par le vent ou les charges sismiques exercées perpendiculairement au plan des fermes. Cette contrainte et ce renforcement sont typiquement précisés par le concepteur du bâtiment.



Note: Top chord sheathing not shown for clarity.
Notez: Pour simplifier, le revêtement intermédiaire de membrure supérieure n'est pas montré.
Diagonal brace to roof diaphragm blocking
Contreventement diagonal au blocage du diaphragme de toit
Gable end frame
Ferme de pignon du bout
Horizontal L-reinforcement
Renforcement L horizontal
Roof diaphragm blocking
Blocage du diaphragme de toit
Bottom chord lateral restraint
Contrainte latérale de la membrure inférieure

Gable end/wall permanent diagonal bracing. Locate in line with bottom chord permanent CLR or as specified by the building designer.
Le contreventement diagonal permanent du pignon du bout/mur. Placez en ligne avec la CLC permanente de la membrure inférieure ou comme est spécifié par le concepteur du bâtiment.

Some truss designers provide general design tables and details to assist the building designer in determining the bracing required to transfer lateral loads due to wind and/or seismic forces from the gable end frame into the roof and/or ceiling diaphragm.

Certains concepteurs de fermes fournissent des tableaux de conception généraux et des détails pour assister le concepteur du bâtiment à déterminer le contreventement requis pour transférer les charges latérales causées par les forces du vent et (ou) les forces sismiques provenant de la ferme du pignon jusqu'au diaphragme de toit et (ou) de plafond.

Gable End Frames and Sloped Bottom Chords
Ferme du pignon et membrures inférieures en pente

The gable end frame should always match the profile of the adjacent trusses to permit installation of proper bottom chord plane restraint & bracing unless special bracing is designed to support the end wall.

La ferme du pignon devrait toujours correspondre au profil des fermes adjacentes pour permettre l'installation de la retenue et du contreventement appropriés du plan de membrure inférieure, à moins qu'un contreventement spécial soit conçu pour supporter le mur d'extrémité.

CAUTION Using a flat bottom chord gable end frame with adjacent trusses that have sloped bottom chords is prohibited by some building codes as adequate bracing of this condition is difficult and sometimes impossible. Special end wall bracing design considerations are required by the building designer if the gable end frame profile does not match the adjacent trusses.

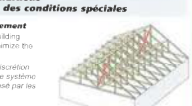
MISE EN GARDE Il est interdit par certains codes du bâtiment d'utiliser une ferme de pignon à membrure inférieure plate avec des fermes adjacentes qui ont des membrures inférieures en pente, car un contreventement adéquat dans cette condition est difficile, voire parfois impossible. Des considérations spéciales de conception du contreventement des murs d'extrémité sont exigées par le concepteur du bâtiment si le profil de la ferme de pignon ne correspond pas aux fermes adjacentes.

Permanent Bracing for Special Conditions
Contreventement permanent pour des conditions spéciales

Sway Bracing—*Entretoise de contreventement*

Sway bracing is installed at the discretion of the building designer to help stabilize the truss system and minimize the lateral movement due to wind and seismic loads.

L'entretoise de contreventement est installé à la discrétion du concepteur du bâtiment pour aider à stabiliser le système de fermes et à minimiser le mouvement latéral causé par les charges du vent et les charges sismiques.



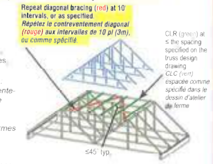
Sway bracing installed continuously across the building also serves to distribute gravity loads between trusses of varying stiffness.

L'entretoise de contreventement installée de façon continue le long d'un bâtiment sert également à distribuer les charges de gravité entre les fermes de rigidité variable.

Permanent Restraint/Bracing for the Top Chord in a Piggyback Assembly
Retenue et contreventement permanents pour la membrure supérieure dans un assemblage de fermes chapeaux

Provide restraint and bracing by:
- using rows of minimum 4x2 stress-graded lumber CLR and diagonal bracing.
- connecting the CLR into the roof diaphragm.
- adding structural sheathing or bracing frames.
- some other equivalent means.

Installez la retenue et le contreventement en :
- *utilisant des rangées de RLC et un contreventement diagonal de bois classé par résistance mécanique d'au moins 4x2.*
- *fixant la RLC au diaphragme du toit.*
- *ajoutant un revêtement structural ou des fermes de contreventement.*
- *utilisant un autre moyen équivalent.*



Repeat diagonal bracing (red) at 10' intervals, or as specified.
Répétez le contreventement diagonal (rouge) aux intervalles de 10 pi (3m), ou comme spécifié.
CLR (green) at ≤ the spacing specified on the truss design drawing
CLC (vert) espacée comme spécifié dans le dessin d'atelier de ferme
≤45° typ.

Refer to the TDD for the maximum assumed spacing between rows of lateral restraint (e.g. purlins) attached to the top chord of the supporting truss.

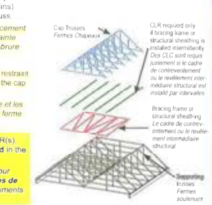
Reportez-vous au DAF pour connaître l'espacement maximal supposé entre les rangées de contrainte latérale (par ex., les pannes) fixées à la membrure supérieure de la ferme de support.

The TDD provides the assumed thickness of the restraint and minimum connection requirements between the cap and the supporting truss or restraint.

Le DCF fournit l'épaisseur prévue de la retenue et les exigences minimales de raccordement entre la ferme chapeau et la ferme portante ou la retenue.

If diagonal bracing is used to restrain the CLR(s), repeat **at 10' (3 m) intervals, or as specified** in the construction documents.

Si un contreventement diagonal est utilisé pour retenir la (les) RLC, répétez ***à des intervalles de 3m (10 pi) ou comme le précisent*** *les documents de construction.*



Cap Trusses
Fermes Chapeaux
CLR required only if bracing frame or structural sheathing is installed intermittently
Des CLC sont requis justement si le cadre de contreventement ou le revêtement intermédiaire structural est installé par intervalles
Bracing frame or structural sheathing
Le cadre de contreventement ou le revêtement intermédiaire structural
Supporting trusses
Fermes soutenues

SBCA
Structural Building Components Association
6300 Enterprise Lane • Madison, WI 53719
608-274-4849 • sbcindustry.com

Truss Plate Institute of Canada
c/o MiTek Canada
100 Industrial Rd • Bradford, ON L3Z 3G7
905-952-2900 • tpic.ca

CANADAB3 190301

RETENUE ET CONTREVENTEMENT PERMANENTS DES MEMBRURES ET DES MEMBRURES D'ÂME

Les portées de 18,3m (60 pi) et plus peuvent exiger un contreventement permanent complexe. Veuillez toujours consulter un ingénieur professionnel.