

TOTAL WEIGHT = 8 X 162 = 1300 lb

**REPAIR DETAIL  
FOR DWG P2226526**

PLATES AT JOINT 7 AND 8 ARE MISSING.

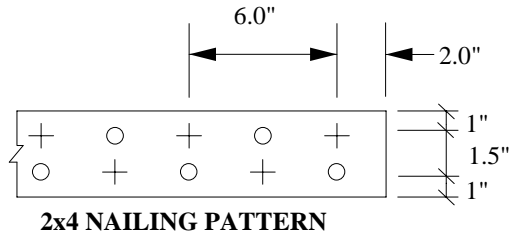
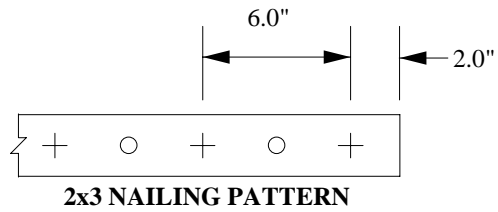
TO REPAIR,

REINFORCE JOINTS 7 AND 8 WITH 5/8" PLYWOOD GUSSET ON BOTH SIDES OF THE TRUSS, SIZE AND LOCATION AS SHOWN ON THE DRAWING.

ALL MEMBERS TO BE FASTENED WITH 3-1/2" SPIRAL WIRE NAILS CLINCHED @ 3" C/C., AS PER THE NAILING PATTERN SHOWN.

FIT IN MAXIMUM NUMBER OF NAILS IN ALL MEMBERS.

THIS REPAIR IS BASED ON THE ASSUMPTION THAT ALL OTHER EXISTING TRUSS MEMBERS AND PLATES ARE INTACT AND UNDISTURBED.

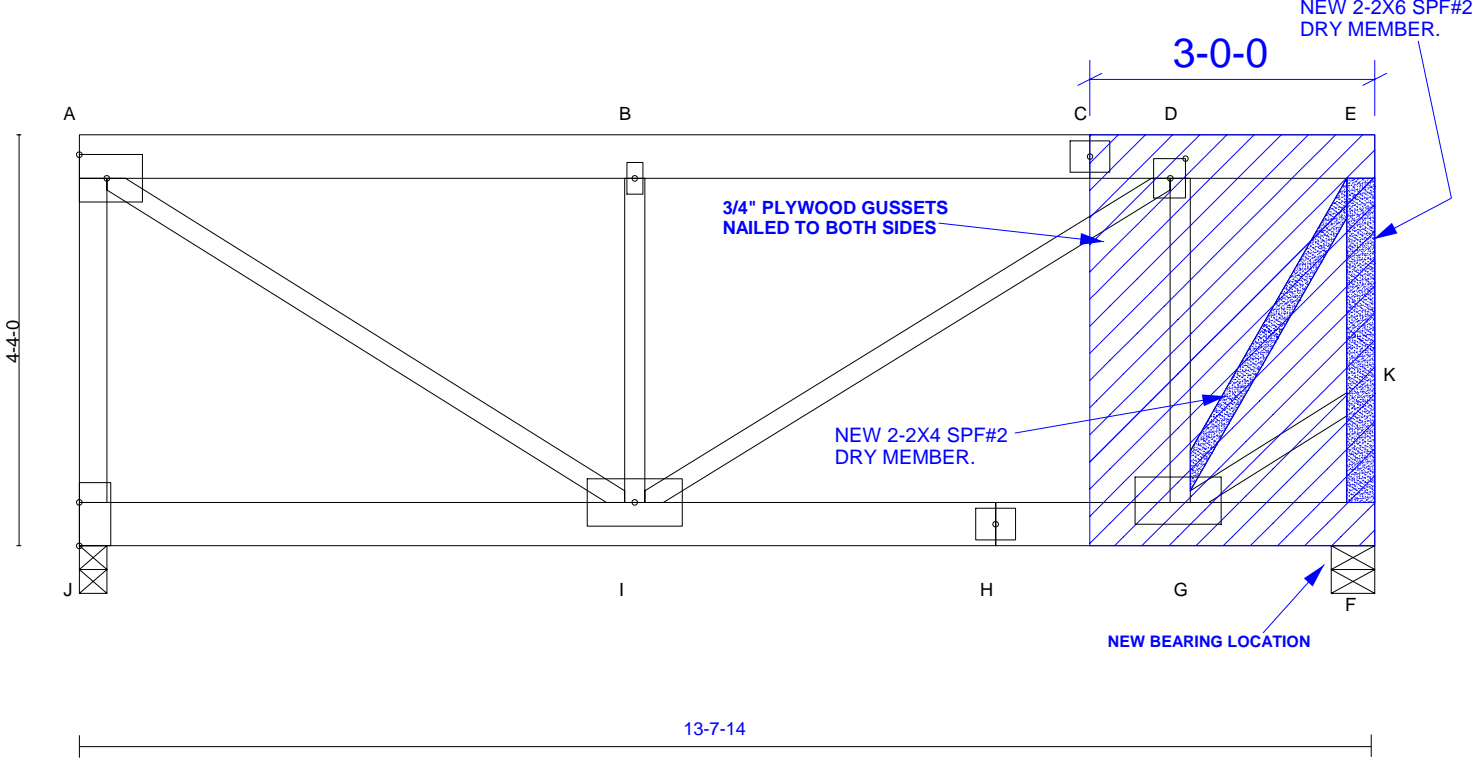


○ NAIL FROM FRONT  
+ NAIL FROM BACK



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





TOTAL WEIGHT = 2 X 96 = 191 lb

**REPAIR DETAIL  
FOR DWG P2269788**

TRUSS HAS BEEN STUBBED 4-3-3 OFF OF THE RIGHT SIDE OF THE TRUSS. THE SPAN OF THE TRUSS NOW IS 13-7-14.

**TO REPAIR:**

CUT 4-3-3 OFF OF THE TOP AND BOTTOM CHORDS. CUT WEB G-E SO THAT IT HAS A TIGHT FIT AGAINST THE NEW 2 X 6 SPF#2 DRY VERTICAL MEMBER THAT HAS TO BE INSERTED. INSERT NEW 2 PLY TIGHT FIT 2X6 SPF #2 DRY MEMBER ON THE RIGHT EDGE OF THE TRUSS BETWEEN THE TOP AND THE BOTTOM CHORDS AS SHOWN ON DRAWING. THIS NEW VERTICAL HAS TO BE PRENAILED WITH ONE ROW OF NAILS 12" O/C. INSERT A NEW 2 PLY 2 X 4 SPF#2 DRY MEMBER (PRENAILED WITH ONE ROW OF NAILS) FROM JOINT E TO JOINT G AS SHOWN ON DRAWING.

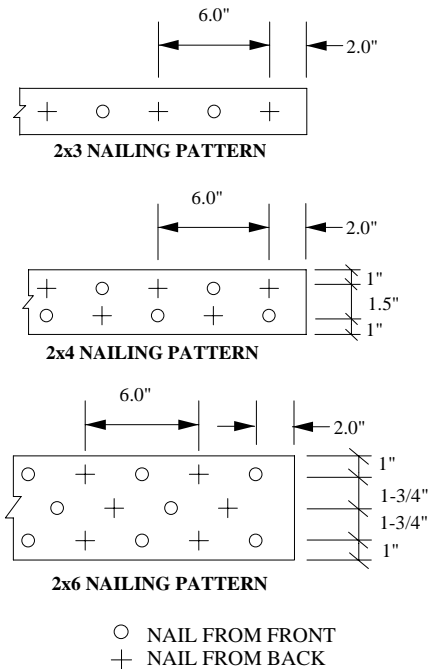
APPLY "BULLDOG PREMIUM PL ADHESIVE TO ALL MEMBERS THAT COME IN CONTACT WITH PLYWOOD GUSSETS ENSURING THAT ALL SURFACES ARE DUST AND DIRT FREE BEFORE APPLYING THE GLUE. GLUE MUST BE SPREAD EVENLY AND PROVIDE FULL COVERAGE.

REINFORCE JOINTS E, F AND G WITH 3/4" GUSSETS ON BOTH SIDES. ALL SIZES AND LOCATION ARE SHOWN ON DWG.

ALL MEMBERS TO BE FASTENED WITH 3 1/2" SPIRAL WIRE NAILS @ 3" C/C, AS PER NAILING PATTERN SHOWN.

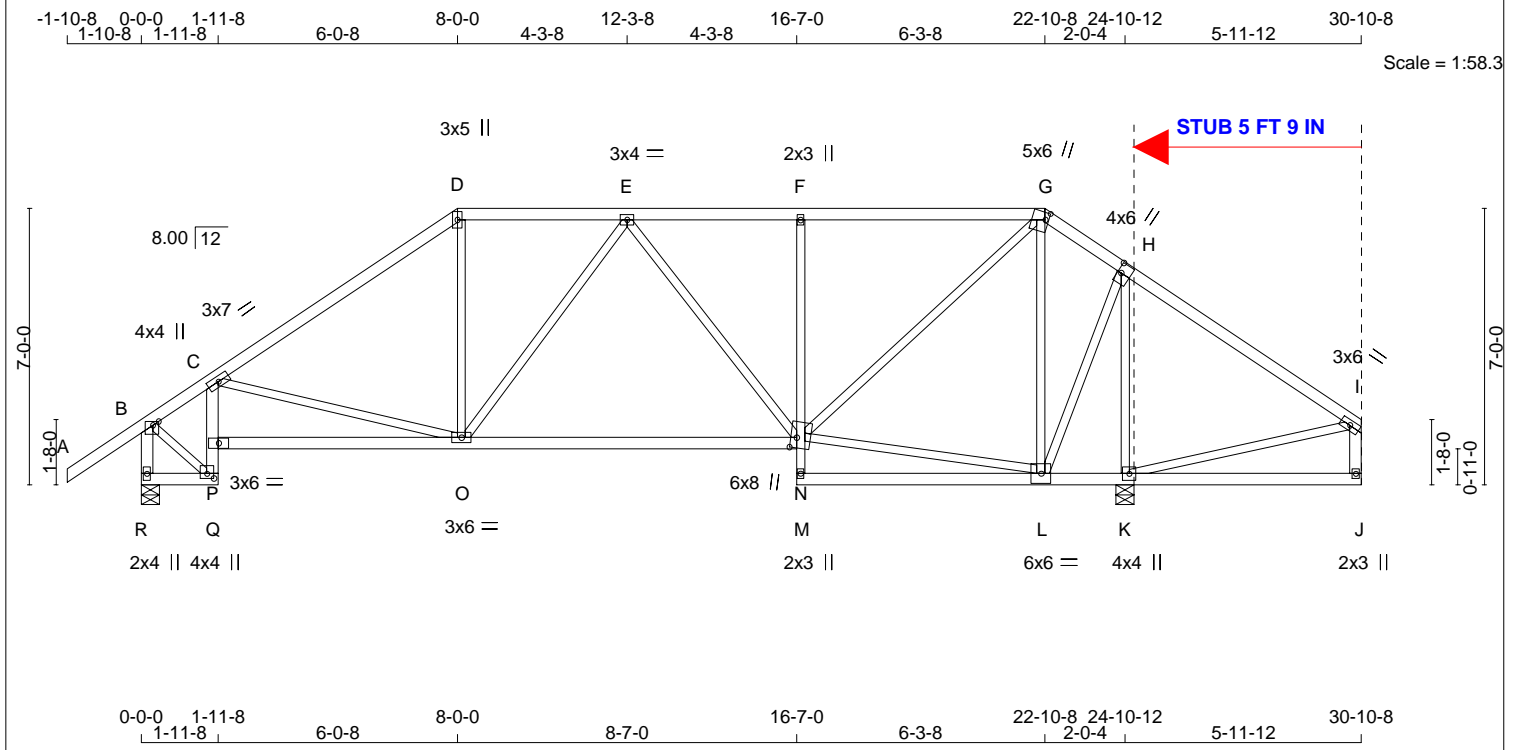
FIT MAXIMUM NUMBER OF NAILS IN ALL MEMBERS.

THIS REPAIR IS BASED ON THE ASSUMPTION THAT ALL OTHER EXISTING TRUSS MEMBERS AND PLATES ARE INTACT AND UNDISTURBED.



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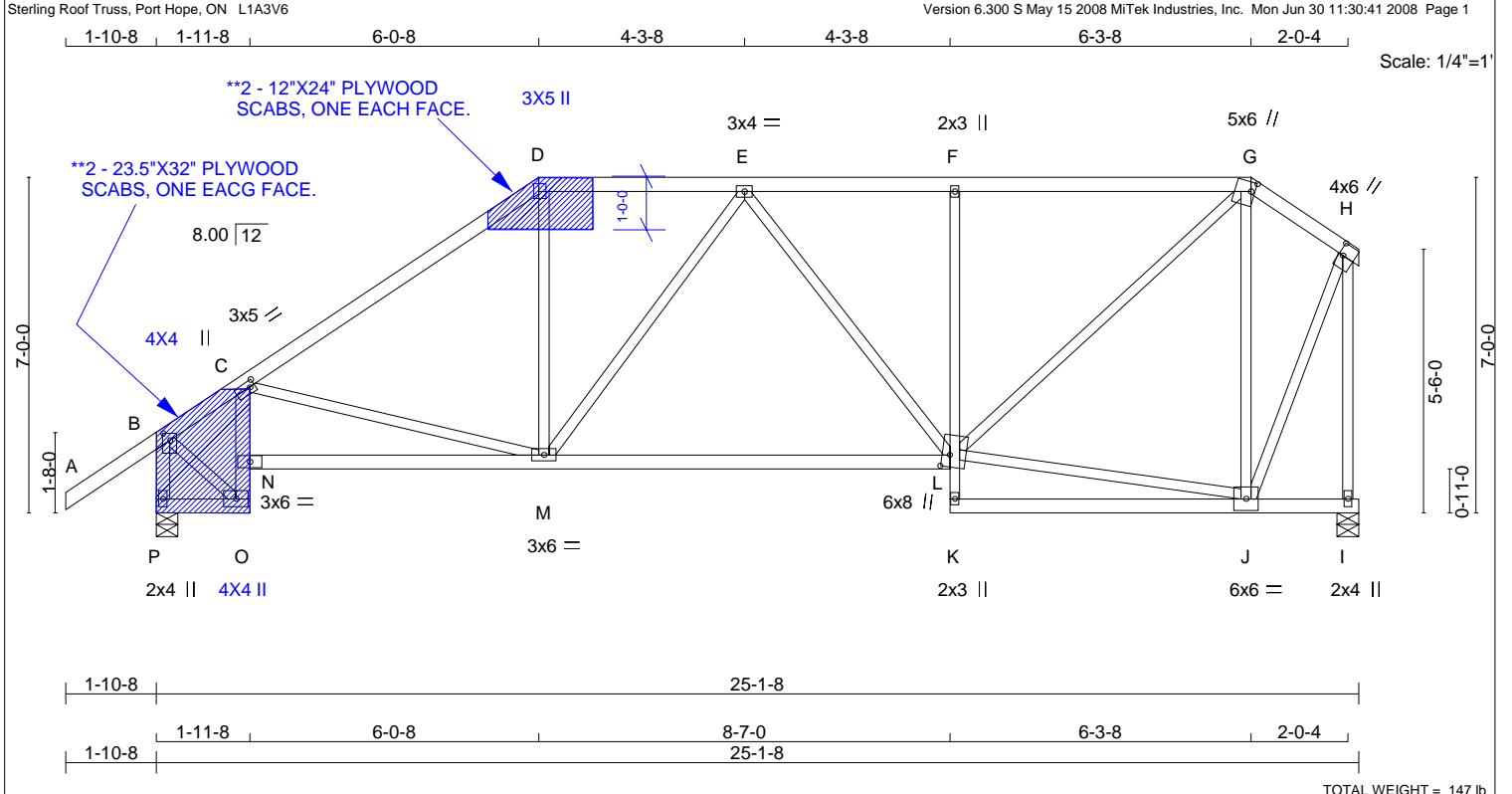


TOTAL WEIGHT = 172 lb

LUMBER					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER							DESIGN CRITERIA			
N. L. G. A. RULES					<b>BEARINGS</b>							SPECIFIED LOADS:			
CHORDS	SIZE	DRY	LUMBER	DESCR.	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG	TOP CH. LL = 26.7 PSF		DL = 3.0 PSF		
A - D	2 X 4	DRY	No.2	SPF	JT VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BOT CH. LL = 10.0 PSF		DL = 7.0 PSF	
D - G	2 X 4	DRY	No.2	SPF	R	1529	0	1529	0	0	0-5-8	TOTAL LOAD = 46.7 PSF			
G - I	2 X 4	DRY	No.2	SPF	K	2199	0	2199	0	0	0-5-8	SPACING = 24.0 IN. C/C			
R - B	2 X 4	DRY	No.2	SPF	<b>UNFACTORED GROSS REACTIONS</b>							LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM			
J - I	2 X 4	DRY	No.2	SPF	1ST LCASE MAX./MIN. COMPONENT REACTIONS							THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2005			
R - Q	2 X 4	DRY	No.2	SPF	JT	COMBINED	SNOW	LIVE	WIND	DEAD	THIS DESIGN COMPLIES WITH:				
Q - C	2 X 4	DRY	2100F 1.8E	SPF	R	1217	736 / 0	235 / 0	0 / 0	247 / 0	- PART 9 OF OBC 2006 , BCBC 2006 , ABC 2006				
P - N	2 X 4	DRY	2100F 1.8E	SPF	K	1785	1019 / 0	383 / 0	0 / 0	382 / 0	- CSA 086-01				
M - F	2 X 3	DRY	No.2	SPF	BEARING MATERIAL TO BE OF THE SAME SPECIES AS CHORD MEMBER AND OF GRADE NO. 2 OR BETTER.							- TPIC 2007			
M - J	2 X 4	DRY	No.2	SPF	<b>BRACING</b>							DESIGN ASSUMPTIONS			
ALL WEBS EXCEPT					TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.25FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25FT. OR RIGID CEILING DIRECTLY APPLIED.							-OVERHANG NOT TO BE ALTERED OR CUT OFF.			
DRY: SEASONED LUMBER.					<b>LOADING</b>							(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD			
<b>PLATES (table is in inches)</b>					LOAD CASE (1) OF (2)							ALLOWABLE DEFL. = L/360 (0.83") CALCULATED VERT. DEFL.(TL) = L/ 811 (0.37")			
JT	TYPE	PLATES	W	LEN	Y	X	<b>CHORDS</b>				<b>WEBS</b>				
B	TMVW+p	MII20	4.0	4.0	1.25	1.75	MEMB. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX CSI (LC)	MAX UNBRAC LENGTH	MEMB. FORCE (LBS)	FACTORED MAX CSI (LC)	CANTILEVER DEFLECTION: ALLOWABLE DEFL. = L/191 (0.38") CALCULATED VERT. DEFL.(TL) = L/ 999 ( 0.00")		
C	TMVW-t	MII20	3.0	7.0			FR-TO	FROM TO		FR-TO		CSI: TC=0.67 (C-D-1) , BC=0.79 (C-P-1) , WB=0.96 (H-K-1) , SSI=0.71 (P-Q-1)			
D	TTW+p	MII20	3.0	5.0			A - B	48T	-87.7 -87.7 0.24 (1)	10.00	C - O	189C	0.15 (1)	DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10	
E	TMVW-t	MII20	3.0	4.0			B - C	1080C	-87.7 -87.7 0.43 (1)	5.27	O - D	436T	0.10 (1)	TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .	
F	TMV+p	MII20	2.0	3.0			C - D	1518C	-87.7 -87.7 0.67 (1)	4.25	O - E	160C	0.16 (1)	NAIL VALUES	
G	TTW+m	MII20	5.0	6.0	2.25	1.00	D - E	1252C	-87.7 -87.7 0.34 (1)	5.30	E - N	299C	0.31 (1)	PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)	
H	TMVW+t	MII20	4.0	6.0	3.00	1.00	E - F	1165C	-87.7 -87.7 0.53 (1)	4.86	N - L	116T	0.03 (1)	MAX MIN MAX MIN MAX MIN	
I	TMVW-t	MII20	3.0	6.0			F - G	1163C	-87.7 -87.7 0.56 (1)	4.86	N - G	1422T	0.32 (1)	MII20 618 354 1667 822 2284 1656	
J	BMV+p	MII20	2.0	3.0			G - H	249C	-87.7 -87.7 0.47 (1)	6.25	L - G	1035C	0.87 (1)	PLATE PLACEMENT TOL. = 0.25 inches	
K	BMVW1+t	MII20	4.0	4.0			H - I	392T	-87.7 -87.7 0.51 (1)	10.00	L - H	1197T	0.27 (1)	PLATE ROTATION TOL. = 0.0 Deg.	
L	BMVW1+t	MII20	6.0	6.0			R - B	1505C	0.0 0.0 0.16 (1)	6.69	K - H	1972C	0.96 (1)	JSI GRIP= 0.78 (G) (INPUT = 1.00 ) JSI METAL= 0.35 (P) (INPUT = 1.00 )	
M	BMV+p	MII20	2.0	3.0			J - I	61T	0.0 0.0 0.01 (2)	10.00	B - Q	1139T	0.26 (1)		
N	BVMW1+w	MII20	6.0	8.0	1.75	3.25	R - Q	0C	-27.5 -27.5 0.02 (2)	10.00	K - I	309C	0.20 (1)		
O	BMVW1+t	MII20	3.0	6.0			Q - P	654C	0.0 0.0 0.79 (1)	6.50					
P	BVM-I	MII20	3.0	6.0			P - C	599C	0.0 0.0 0.79 (1)	6.70					
Q	BMVW+p	MII20	4.0	4.0	1.50	2.00	P - O	1427T	-27.5 -27.5 0.28 (1)	10.00					
R	BMV1+p	MII20	2.0	4.0			O - N	1346T	-27.5 -27.5 0.28 (1)	10.00					
							M - N	73T	0.0 0.0 0.04 (1)	10.00					
							N - F	547C	0.0 0.0 0.65 (1)	7.81					
							M - L	10T	-27.5 -27.5 0.14 (2)	10.00					
							L - K	301C	-27.5 -27.5 0.20 (1)	6.25					
							K - J	0C	-27.5 -27.5 0.17 (1)	10.00					

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473C BEFORE USE.**  
 Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **DSB-89 and BCS11 Building Component Safety Information**, available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719 and TPIC Quality Criteria.



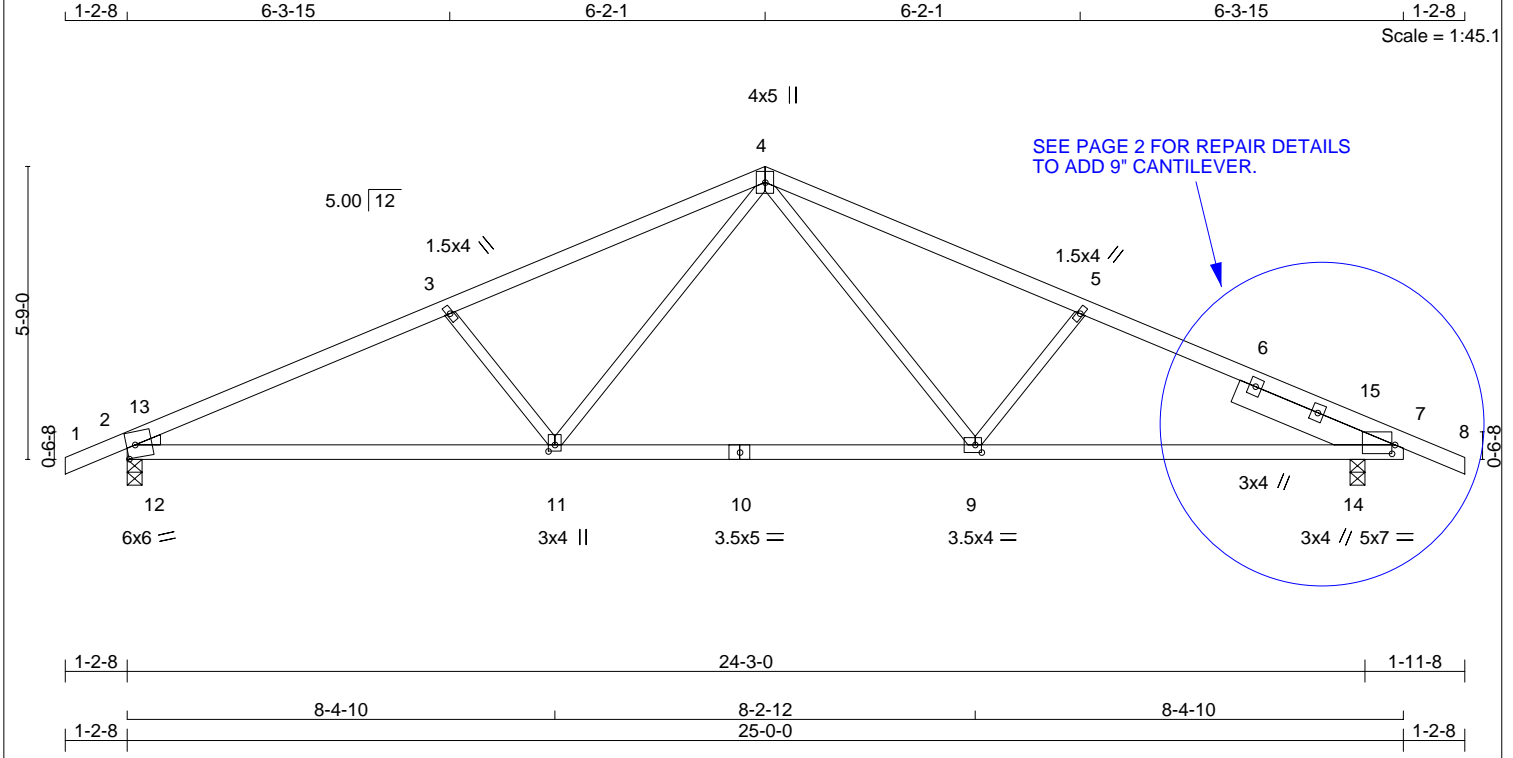


TOTAL WEIGHT = 147 lb

**LUMBER DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY [M]**

**\*\*TRUSS REPAIR INSTRUCTIONS TO STUB 5'-9" OF RIGHT END:**

- (1) All gusset plates shall be 1/2" CSA Standard rated Douglas Fir Plywood, OSB or Canadian Softwood Plywood, cut to fit and located as shown.
- (2) Lumber and connector plates to be cut cleanly and accurately and the remaining plate must be fully embedded and undisturbed.
- (3) Attach gusset plates to each face of all overlapping wood members with Bulldog Grip PL Premium or equal construction adhesive and 2 rows of 3" common spiral nails 9-3/4 gauge (0.122"x3") nails spaced at 6" OC. and clinched on opposite faces. 1 row in 2x3. Stagger fasteners on opposite faces and observe 2.5" minimum end distances.



TOTAL WEIGHT = 17 X 105 = 1783 lb

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

CHORDS	SIZE	DRY	LUMBER	DESCR.
1 - 4	2 X 4	DRY	No.2	SPF
4 - 8	2 X 4	DRY	No.2	SPF
2 - 10	2 X 4	DRY	No.2	SPF
10 - 7	2 X 4	DRY	No.2	SPF

REINFORCING MEMBERS  
HW2 2 X 6 DRY No.2 SPF

ALL WEBS 2 X 3 DRY No.2 SPF

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
2	TMBH1-m	MII20	6.0	6.0	3.00	2.00
3	TMW+w	MII20	1.5	4.0		
4	TTWW+p	MII20	4.0	5.0		
5	TMW+w	MII20	1.5	4.0		
7	TMBR1-l	MII20	5.0	7.0	2.00	0.75
7	RT+t	MII20	3.0	4.0		
7	RT+t	MII20	3.0	4.0		
9	BMWW-t	MII20	3.5	4.0	1.75	1.50
10	BS-t	MII20	3.5	5.0		
11	BMWW+t	MII20	3.0	4.0	1.50	1.50

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

**BEARINGS**

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG	HEEL WEDGE
	VERT	HORZ	DOWN	HORZ			
2	1456	0	1456	0	0-3-8	0-1-9	2 X 3 L
7	1456	0	1456	0	0-3-8	0-1-9	

**UNFACTORED GROSS REACTIONS**

JT	1ST LCASE COMBINED	MAX./MIN. SNOW	MIN. LIVE	WIND	DEAD
2	1180	673 / 0	250 / 0	0 / 0	258 / 0
7	1180	673 / 0	250 / 0	0 / 0	258 / 0

BEARING MATERIAL TO BE OF THE SAME SPECIES AS CHORD MEMBER AND OF GRADE NO. 2 OR BETTER.

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.86FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

**LOADING**  
LOAD CASE (1) OF (2)

FR-TO	MEMB. FORCE (LBS)	CHORDS FACTORED VERT. LOAD (PLF)		MAX CSI (LC)	MAX UNBRAC LENGTH	FR-TO	WEBS FACTORED FORCE (LBS)	
		FROM	TO				MEMB. FORCE (LBS)	MAX CSI (LC)
1-2	11T	-80.8	-80.8	0.09 (1)	10.00	3-11	515C	0.12 (1)
2-13	2823C	-80.8	-80.8	0.30 (1)	3.86	11-4	786T	0.18 (1)
13-3	2505C	-80.8	-80.8	0.41 (1)	4.00	4-9	801T	0.18 (1)
3-4	2194C	-80.8	-80.8	0.46 (1)	4.16	9-5	503C	0.12 (1)
4-5	2204C	-80.8	-80.8	0.46 (1)	4.16	12-13	438T	0.00 (1)
5-6	2299C	-80.8	-80.8	0.38 (1)	4.16	6-14	423C	0.03 (1)
6-15	2299C	-80.8	-80.8	0.38 (1)	4.16	14-15	386T	0.00 (1)
15-7	2386C	-80.8	-80.8	0.10 (1)	4.38			
7-8	11T	-80.8	-80.8	0.09 (1)	10.00			
2-12	2316T	-27.5	-27.5	0.59 (1)	10.00			
12-11	2316T	-27.5	-27.5	0.59 (1)	10.00			
11-10	1536T	-27.5	-27.5	0.46 (1)	10.00			
10-9	1536T	-27.5	-27.5	0.46 (1)	10.00			
9-14	2318T	-27.5	-27.5	0.58 (1)	10.00			
14-7	1980T	-27.5	-27.5	0.36 (1)	10.00			

**DESIGN CRITERIA**

**SPECIFIED LOADS:**

TOP CH.	LL	PSF
	24.4	PSF
BOT CH.	LL	PSF
	3.0	PSF
	10.0	PSF
	7.0	PSF
<b>TOTAL LOAD</b>	<b>44.4</b>	<b>PSF</b>

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2005

THIS DESIGN COMPLIES WITH:  
- PART 9 OF OBC 2006, BCBC 2006, ABC 2006  
- CSA 086-01  
- TPIC 2007

(55% OF 29.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD EQUALS 24.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. = L/360 (0.83")  
CALCULATED VERT. DEFL.(TL) = L/915 (0.33")

CSI: TC=0.46 (3-4:1), BC=0.59 (2-12:1), WB=0.18 (4-9:1), SSI=0.26 (2-13:1)

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

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

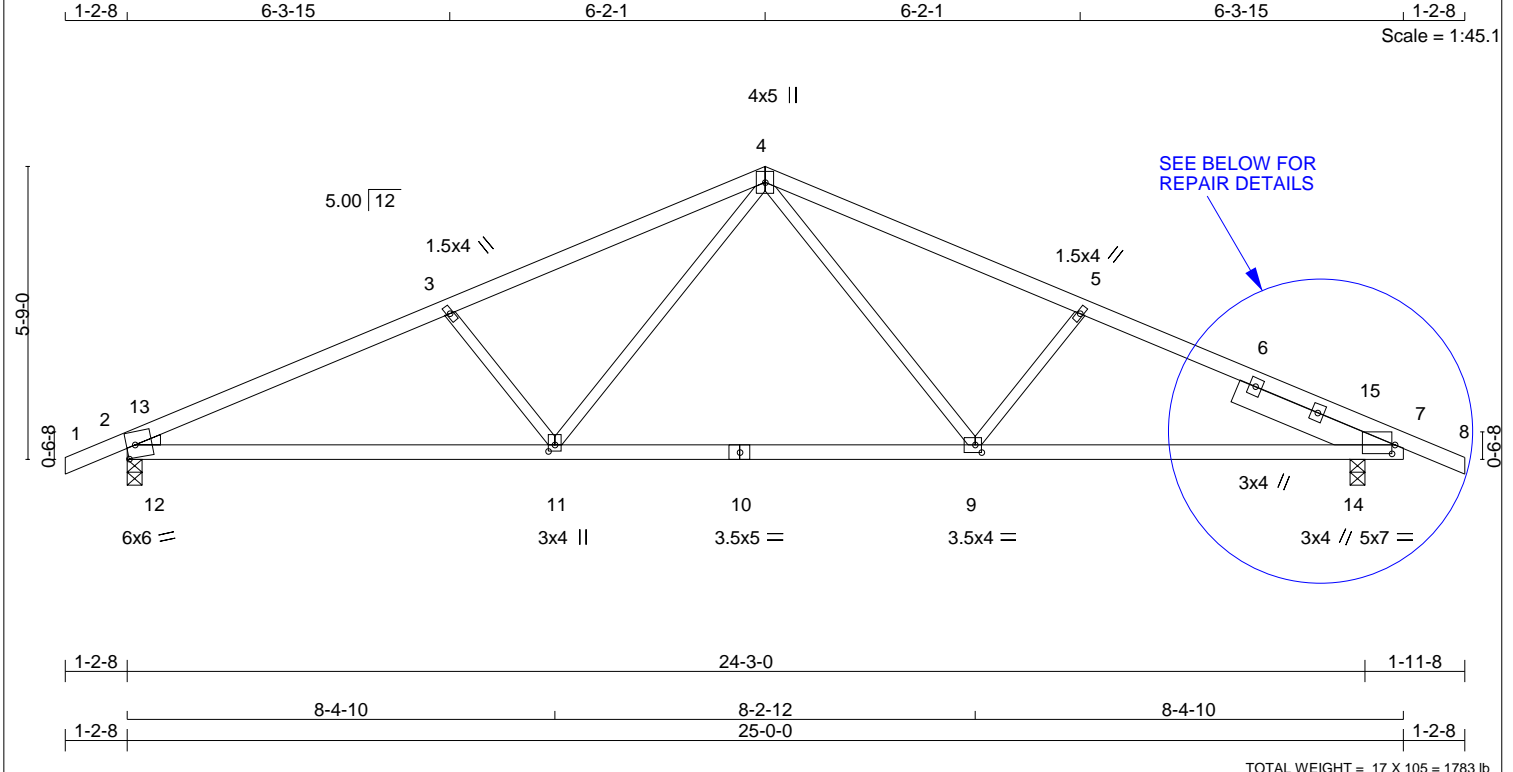
**NAIL VALUES**

PLATE	GRIP(DRY)	SHEAR (PLI)	SECTION (PLI)
MII20	618	354	1667 822 2284 1656

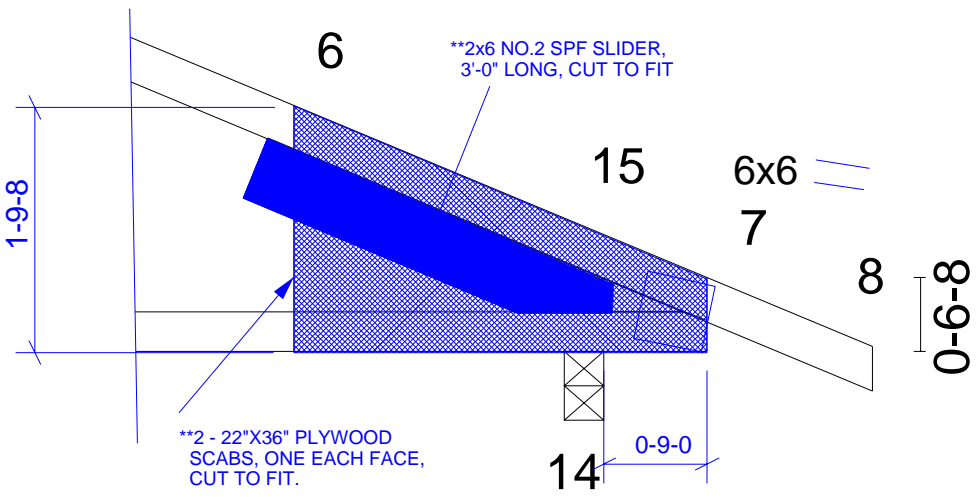
PLATE PLACEMENT TOL. = 0.25 inches

PLATE ROTATION TOL. = 10.0 Deg.

JSI GRIP= 0.83 (7) (INPUT = 0.90)  
JSI METAL= 0.63 (7) (INPUT = 0.95)

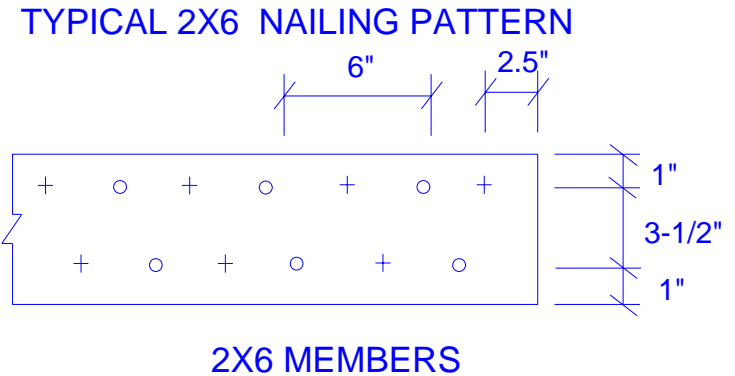
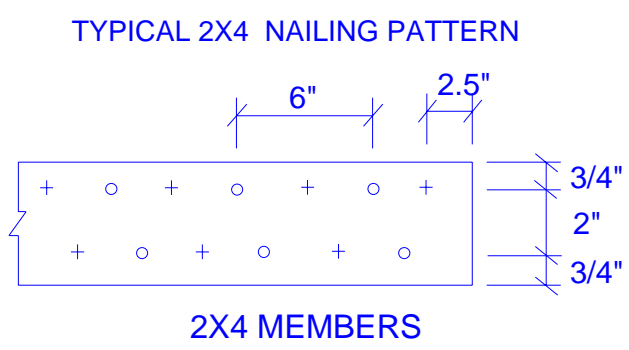


LUMBER DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY [M][F]



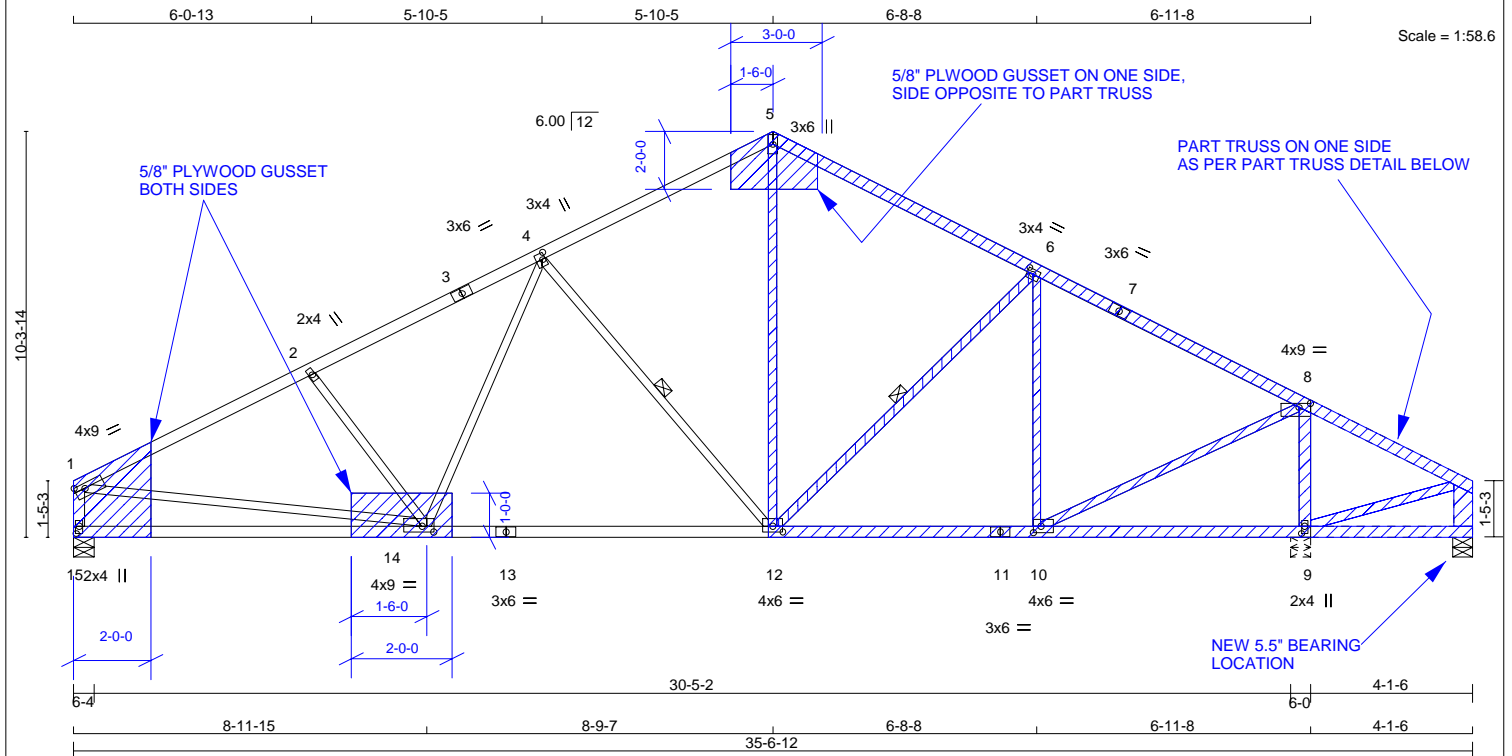
**\*\*TRUSS REPAIR INSTRUCTIONS FOR 9" CANTILEVER:**

- (1) All gusset plates shall be 5/8" CSA Standard rated Douglas Fir Plywood, OSB or Canadian Softwood Plywood, cut to fit and located as shown.
- (2) Lumber and connector plates to be cut cleanly and accurately and the remaining plate must be fully embedded and undisturbed.
- (3) Attach gusset plates to each face of all overlapping wood members with Bulldog Grip PL Premium or equal construction adhesive and 2 rows of 3" common spiral nails 9-3/4 gauge (0.122"X3") nails spaced at 6" OC. and clinched on opposite faces. Stagger fasteners on opposite faces and observe 2.5" minimum end distances.



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**LUMBER**

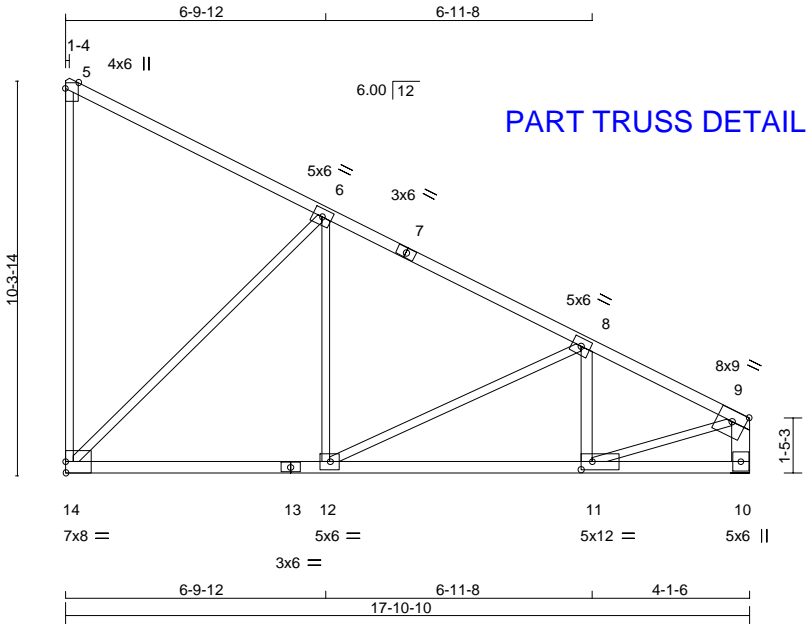
N. L. G. A. RULES					
CHORDS	SIZE	LUMBER	DESCR.		
5 - 7	2 X 4	DRY No.2	SPF		
7 - 9	2 X 4	DRY No.2	SPF		
17 - 1	2 X 4	DRY No.2	SPF		
14 - 13	2 X 4	DRY No.2	SPF		
13 - 10	2 X 4	DRY No.2	SPF		
ALL WEBS EXCEPT					
10 - 9	2 X 6	DRY No.2	SPF		
11 - 8	2 X 4	DRY No.2	SPF		

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
5	TTW+p	MI120	4.0	6.0	Edge	Edge
6	TMWW-t	MI120	5.0	6.0		
7	TS-t	MI120	3.0	6.0		
8	TMWW-t	MI120	5.0	6.0		
9	TMWW-t	MI120	8.0	9.0	Edge	4.25
10	BMW1+w	MI120	5.0	6.0		
11	BMVW-t	MI120	5.0	12.0	2.50	3.50
12	BMWW-t	MI120	5.0	6.0		
13	BS-t	MI120	3.0	6.0		
14	BMWWW-t	MI120	7.0	8.0	Edge	

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



**REPAIR DETAIL FOR DWG P2233065**

RIGHT END OF THE TRUSS NEEDS TO BE EXTENDED BY 4-1-6.

TO REPAIR,

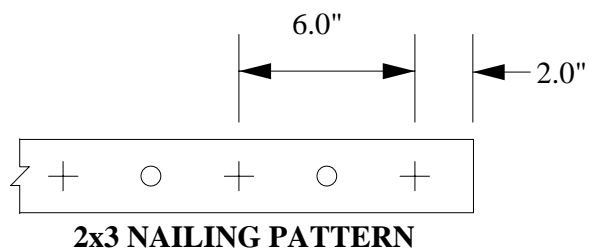
BUILD A PART TRUSS AS PER PART TRUSS DETAIL, AND INSTAL ON ONE SIDE ONLY.

REINFORCE JOINTS 1 AND 14 WITH 5/8" PLYWOOD GUSSETS ON BOTH SIDES AND JOINT 5 WITH 5/8" PLYWOOD GUSSET ON ONE SIDE ONLY.

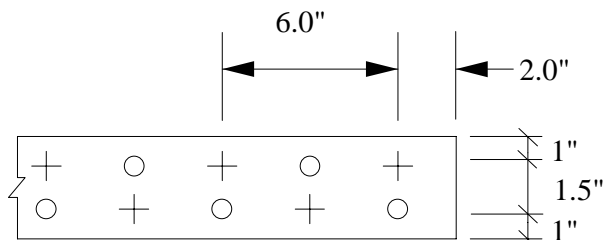
ALL MEMBERS TO BE FASTENED WITH 3-1/2" SPIRAL WIRE NAILS CLINCHED @ 3" C/C., AS PER THE NAILING PATTERN SHOWN.

FIT IN MAXIMUM NUMBER OF NAILS IN ALL MEMBERS

THIS REPAIR IS BASED ON THE ASSUMPTION THAT ALL OTHER EXISTING TRUSS MEMBERS AND PLATES ARE INTACT AND UNDISTURBED.



**2x3 NAILING PATTERN**



**2x4 NAILING PATTERN**

- NAIL FROM FRONT
- + NAIL FROM BACK



**MiTek Canada, Inc.**  
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Bradford, Ontario, L3Z 3G7

