

Job	Truss	Truss Type	Qty	Ply	REUNION AT BLACKWELL
251264	B7A	Hip	1	1	Job Reference (optional)

Heartland Truss, LLC, Plattsburg, MO. 8.820 s Mar 10 2025 MiTek Industries, Inc. Thu Nov 13 14:42:22 2025 Page 1
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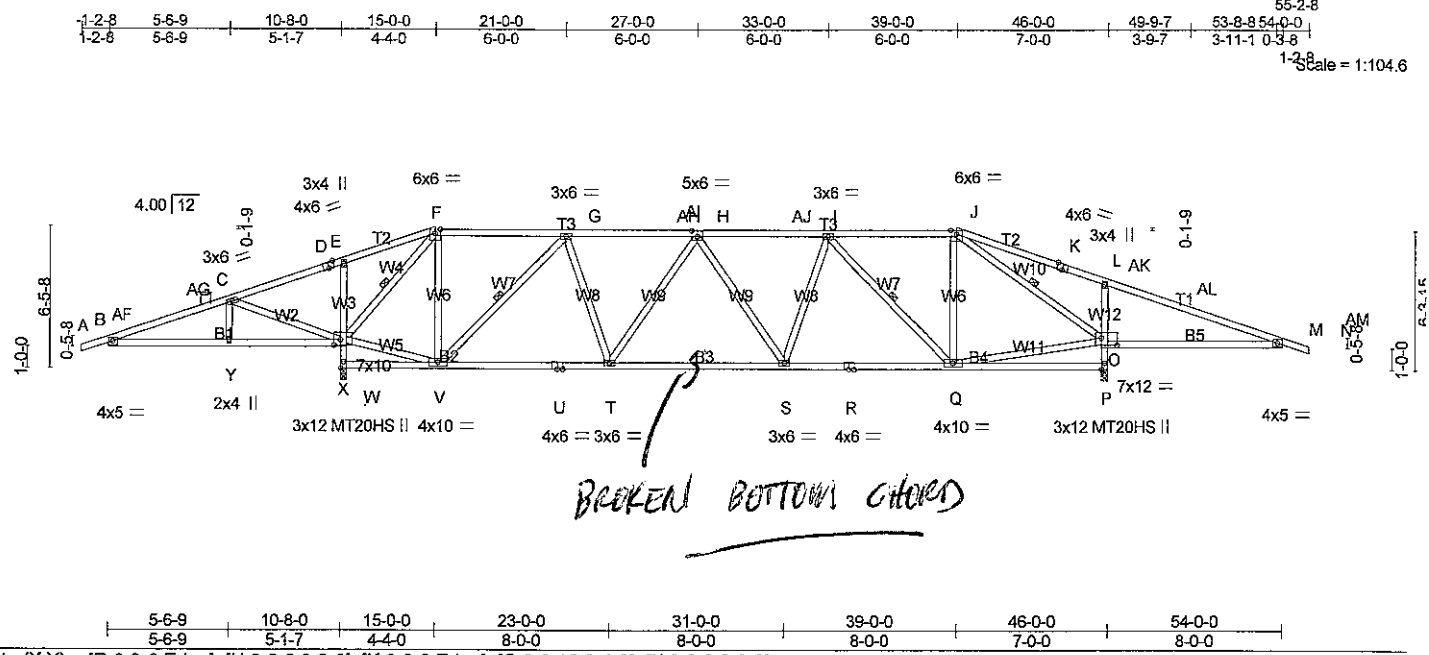


Plate Offsets (X,Y)-- [D:0-3-0,Edge], [H:0-3-0,0-3-0], [K:0-3-0,Edge], [O:0-8-12,0-4-0], [X:0-3-8,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.92 BC 0.89 WB 0.98	in (loc) l/def L/d Vert(LL) -0.20 S-T >999 240 Vert(CT) -0.33 S-T >999 180 Horz(CT) 0.08 P n/a n/a	MT20 MT20HS	244/190 187/143
TCDL 10.0	Rep Stress Incr YES Code IBC2018/TPI2014	Matrix-MS			
BCLL 10.0					
BCDL 10.0				Weight: 307 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* T1: 2x4 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-3-1 max.): F-J, E-W, L-P.
BOT CHORD 2x4 SP No.2 *Except* B5: 2x4 SP 1650F 1.5E	Except: 2-6-0 oc bracing: O-P 2-9-0 oc bracing: W-X
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 4-6-8 oc bracing. WEBS 1 Row at midpt F-X, G-V, I-Q, J-O

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

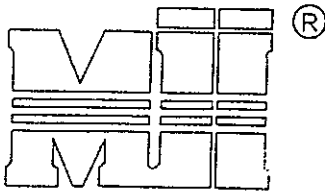
REACTIONS. (lb/size) W=2402/0-3-8 (min. 0-3-4), P=2063/0-3-8 (min. 0-2-12)
 Max Horz W=166(LC 12)
 Max Uplift W=723(LC 8), P=609(LC 9)
 Max Grav W=2729(LC 39), P=2343(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD B-AF=-480/1041, AF-AG=-480/1086, C-AG=-464/1185, C-D=-849/2125, D-E=-831/2267,
 E-F=-780/2219, F-G=-834/563, G-AH=-2030/294, AH-AI=-2030/294, H-AI=-2030/294,
 H-AJ=-2252/286, I-AJ=-2252/286, I-J=-1290/174, J-K=-560/1635, K-L=-575/1450,
 L-AK=-646/1662, AK-AL=-649/1639, AL-AM=-672/1512, M-AM=-674/1440, W-X=-2684/814,
 E-X=-504/156, O-P=-2237/671, L-O=-886/297
 BOT CHORD B-Y=-1030/505, X-Y=-1030/505, U-V=-77/1830, T-U=-77/1830, S-T=-126/2322,
 R-S=-151/2164, Q-R=-151/2164, M-O=-1435/699
 WEBS C-Y=-112/252, C-X=-1126/455, V-X=-499/707, F-X=-2451/734, F-V=-210/1296,
 G-V=-1722/313, G-T=-54/719, H-T=-529/179, I-S=0/353, I-Q=-1259/226, J-Q=-72/904,
 O-Q=-59/1306, J-O=-2425/573

MIN. of 5 FOOT
 LONG SCAB ON
 EACH FACE W/
 2 ROWS OF 10-d
 Nails Staggered
 @ 3" o/c

- NOTES-
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-2-8 to 4-2-5, Interior(1) 4-2-5 to 15-0-0, Exterior(2E) 15-0-0 to 22-7-10, Interior(1) 22-7-10 to 39-0-0, Exterior(2E) 39-0-0 to 46-7-10, Interior(1) 46-7-10 to 49-9-11, Exterior(2E) 49-9-11 to 55-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
 - 2) TCLL: ASCE 7-16; Pf=20.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 20.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 5) Provide adequate drainage to prevent water ponding.
 - 6) All plates are MT20 plates unless otherwise indicated.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

MiTek Industries, Inc. Chesterfield, MO.



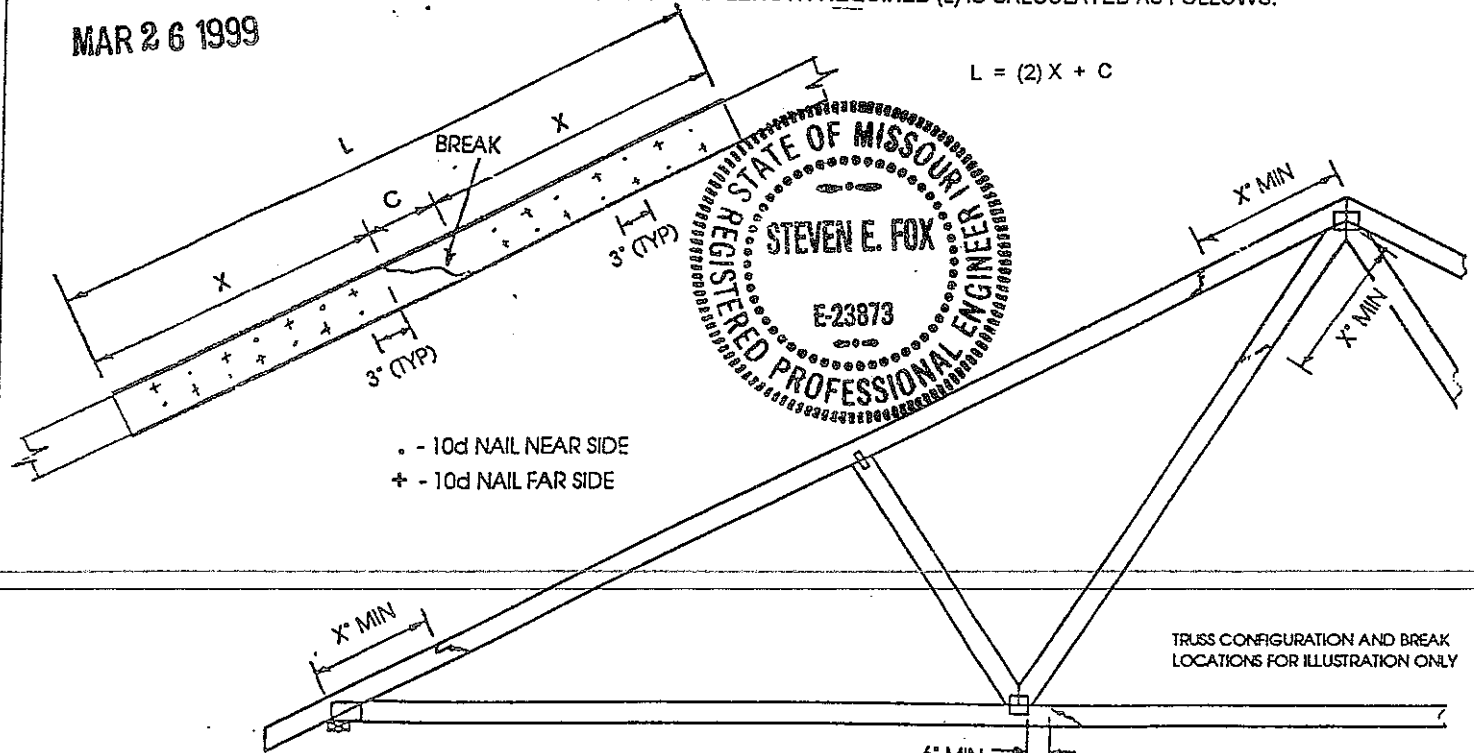
TOTAL NUMBER OF NAILS ON EACH SIDE OF BREAK *		X (INCHES)	MAXIMUM FORCE (LBS) 15% LOAD DURATION							
			SYP		DF		SPF		HF	
2X 4	2X 6		2X 4	2X 6	2X 4	2X 6	2X 4	2X 6	2X 4	2X 6
14	21	24"	1740	2610	1605	2407	1360	2040	1386	2079
18	27	30"	2237	3356	2063	3095	1749	2623	1782	2673
22	33	36"	2735	4102	2522	3783	2138	3173	2178	3267
26	39	42"	3232	4848	2981	4471	2526	3790	2574	3861
30	45	48"	3729	5594	3440	5159	2915	4373	2970	4455

* DIVIDE EQUALLY FRONT AND BACK

ATTACH 2X_ SCAB OF THE SAME SIZE AND GRADE AS THE BROKEN MEMBER TO EACH FACE OF TRUSS (CENTERED ON BREAK OR SPLICE) W/ CONSTRUCTION QUALITY ADHESIVE AND 10d COMMON WIRE NAILS (TWO ROWS FOR 2X 4, THREE ROWS FOR 2X 6) SPACED 3" O.C. STAGGERED AS SHOWN. (.148" DIA.X3")

THE LENGTH OF THE BREAK (C) SHALL NOT EXCEED 12". (C = PLATE LENGTH FOR SPLICE REPAIRS)
THE MINIMUM OVERALL SCAB LENGTH REQUIRED (L) IS CALCULATED AS FOLLOWS:

$$L = (2) X + C$$



- - 10d NAIL NEAR SIDE
- + - 10d NAIL FAR SIDE



TRUSS CONFIGURATION AND BREAK LOCATIONS FOR ILLUSTRATION ONLY

THE LOCATION OF A BREAK MUST BE GREATER THAN OR EQUAL TO THE REQUIRED X DIMENSION FROM ANY PERIMETER BREAK OR HEEL JOINT AND A MINIMUM OF 6" FROM ANY INTERIOR JOINT (SEE SKETCH ABOVE).

DO NOT USE TO REPAIR JOINT SPLICES.

NOTES:

1. THIS IS A SPECIFIC REPAIR DETAIL TO BE USED ONLY FOR ITS ORIGINAL INTENTION. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS WILL BE CAPABLE OF SUPPORTING THE LOADS INDICATED ON THE ORIGINAL ENGINEERED DRAWING.
2. ALL MEMBERS MUST BE RETURNED TO THEIR ORIGINAL POSITIONS BEFORE APPLYING REPAIR AND HELD IN PLACE DURING APPLICATION OF REPAIR.
3. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
4. WHEN NAILING THE SCABS, THE USE OF A BACKUP WEIGHT IS RECOMMENDED TO AVOID LOOSENING OF THE CONNECTOR PLATES AT THE JOINTS OR SPLICES.
5. THIS REPAIR IS TO BE USED FOR SINGLE PLY TRUSSES IN THE 2X_ ORIENTATION ONLY.
6. THIS REPAIR IS LIMITED TO TRUSSES WITH NO MORE THAN THREE BROKEN MEMBERS.

WARNING - Verify design parameters and READ NOTES ON THIS AND REVERSE SIDE 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 to be installed and loaded vertically. 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 GST-88 Quality Standard, DSB-82 Bracing Specification, and HIB-91 Handling, Installing and Bracing Recommendation available from Truss Plate Institute, 583 D'Oroville Drive, Madison, WI 53719.

