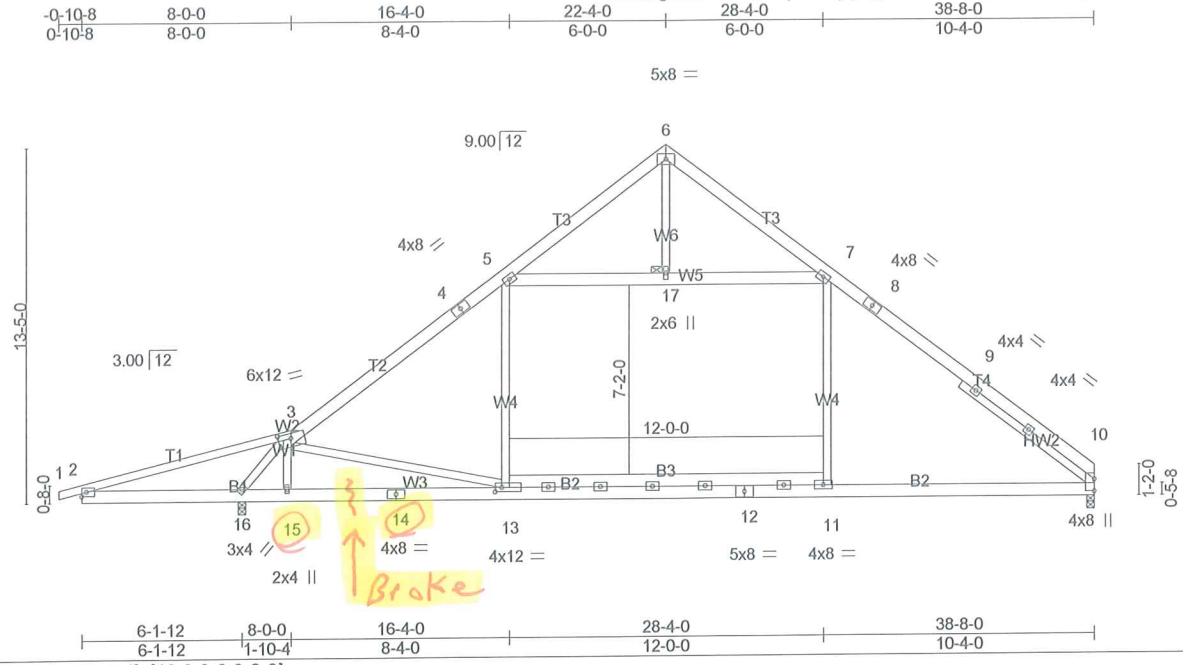


Job J0923-5485	Truss A2	Truss Type ROOF SPECIAL	Qty 6	Ply 1	Lot 44 Purfoy Place
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Comtech, Inc., Fayetteville, NC 28309, Linwood Norris Run: 8.430 s May 12 2021 Print: 8.430 s May 12 2021 MiTek Industries, Inc. Tue Feb 6 08:11:25 2024 Page 1  
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Scale = 1:87.1

Plate Offsets (X,Y)-- [3:0-5-12,0-2-4], [13:0-3-0,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.66	Vert(LL)	0.59 10-11	>670	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.73	Vert(CT)	-0.50 10-11	>791	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.62	Horz(CT)	0.04 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 309 lb	FT = 20%

LUMBER-	BRACING-	
TOP CHORD 2x6 SP No.1 *Except*	TOP CHORD	Structural wood sheathing directly applied or 4-10-11 oc purlins.
T1: 2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
BOT CHORD 2x6 SP No.1	JOINTS	1 Brace at Jt(s): 17
WEBS 2x4 SP No.2 *Except*		
W5: 2x6 SP No.1		
SLIDER Right 2x4 SP No.2 - 6-4-5		

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

REACTIONS. (lb/size) 16=1891/0-3-8 (min. 0-2-4), 10=1255/0-3-8 (min. 0-1-12)  
 Max Horz 16=411(LC 9)  
 Max Uplift 16=-361(LC 12), 10=-208(LC 13)  
 Max Grav 16=1928(LC 2), 10=1463(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-18=-762/982, 3-18=-749/1054, 3-4=-1920/510, 4-5=-1699/543, 5-19=-435/175,  
 6-19=-382/215, 6-20=-383/212, 7-20=-436/172, 7-8=-1737/553, 8-9=-1864/515,  
 9-21=-1863/508, 10-21=-2025/505  
 BOT CHORD 2-16=-957/788, 15-16=-359/1184, 14-15=-346/1182, 13-14=-346/1182, 12-13=-171/1494,  
 11-12=-176/1471, 10-11=-170/1494  
 WEBS 3-16=-2139/804, 3-15=-432/426, 3-13=-492/928, 5-13=-3/534, 7-11=-15/643,  
 5-17=-1357/608, 7-17=-1357/608

- NOTES-
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-10-8 to 3-6-5, Interior(1) 3-6-5 to 22-4-0, Exterior(2) 22-4-0 to 26-8-13, Interior(1) 26-8-13 to 38-8-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are 4x6 MT20 unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 361 lb uplift at joint 16 and 208 lb uplift at joint 10.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

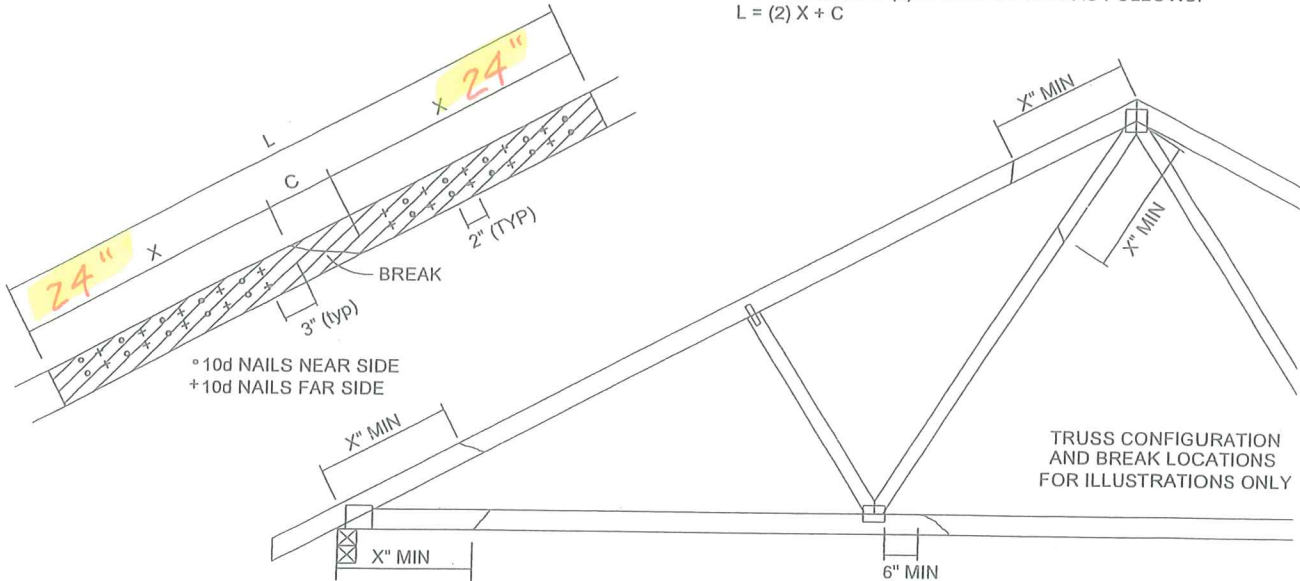


TOTAL NUMBER OF NAILS EACH SIDE OF BREAK *		X INCHES	MAXIMUM FORCE (lbs) 15% LOAD DURATION							
			SP		DF		SPF		HF	
2x4	2x6		2x4	2x6	2x4	2x6	2x4	2x6	2x4	2x6
20	30	24"	1706	2559	1561	2342	1320	1980	1352	2028
26	39	30"	2194	3291	2007	3011	1697	2546	1738	2608
32	48	36"	2681	4022	2454	3681	2074	3111	2125	3187
38	57	42"	3169	4754	2900	4350	2451	3677	2511	3767
44	66	48"	3657	5485	3346	5019	2829	4243	2898	4347

\* DIVIDE EQUALLY FRONT AND BACK

ATTACH 2x SCAB OF THE SAME SIZE AND GRADE AS THE BROKEN MEMBER TO EACH FACE OF THE TRUSS (CENTER ON BREAK OR SPLICE) WITH 10d NAILS (TWO ROWS FOR 2x4, THREE ROWS FOR 2x6) SPACED 4" O.C. AS SHOWN. (.131" dia. x 3") STAGGER NAIL SPACING FROM FRONT FACE AND BACK FACE FOR A NET 0-2-0 O.C. SPACING IN THE MAIN MEMBER. USE A MIN. 0-3-0 MEMBER END DISTANCE.

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:  
 $L = (2) X + C$

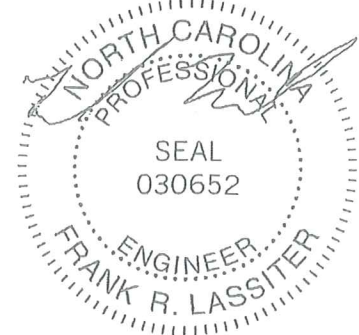


THE LOCATION OF THE BREAK MUST BE GREATER THAN OR EQUAL TO THE REQUIRED X DIMENSION FROM ANY PERIMETER BREAK OR HEEL JOINT AND A MINIMUM OF 6" FROM ANY INTERIOR JOINT (SEE SKETCH ABOVE)

DO NOT USE REPAIR FOR JOINT SPLICES

NOTES:

1. THIS REPAIR DETAIL IS TO BE USED ONLY FOR THE APPLICATION SHOWN. 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.
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.



May 27, 2015

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIT-7473 rev. 1/29/2013 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 Inss 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 ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 281 N. Lee Street, Suite 312, Alexandria, VA 22314.  
 If Southern Pine (SP) lumber is specified, the design values are those effective 06/01/2013 by NDS



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