STANDARD REPAIR DETAIL FOR BROKEN CHORDS, WEBS AND DAMAGED OR MISSING CHORD SPLICE PLATES

ED-REP01A1

A MiTek Affiliate

Trenco, Edenton, North Carolina

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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	(320)	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.

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Biles 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 + CBREAK 3" (typ) 10d NAILS NEAR SIDE +10d NAILS FAR SIDE TRUSS CONFIGURATION AND BREAK LOCATIONS FOR ILLUSTRATIONS ONLY X" MIN 6" MIN

> 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 APPLING 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.

  WHEN NAILING THE SCABS, THE USE OF A BACKUP WEIGHT IS RECOMMENDED TO AVOID LOOSENING OF THE CONNECTOR PLATES AT THE JOINTS OR SPLICES.

  THIS REPAIR IS TO BE USED FOR SINGLE PLY TRUSSES IN THE 2x\_ ORIENTATION ONLY. THIS REPAIR IS LIMITED TO TRUSSES WITH NO MORE THAN THREE BROKEN MEMBERS.

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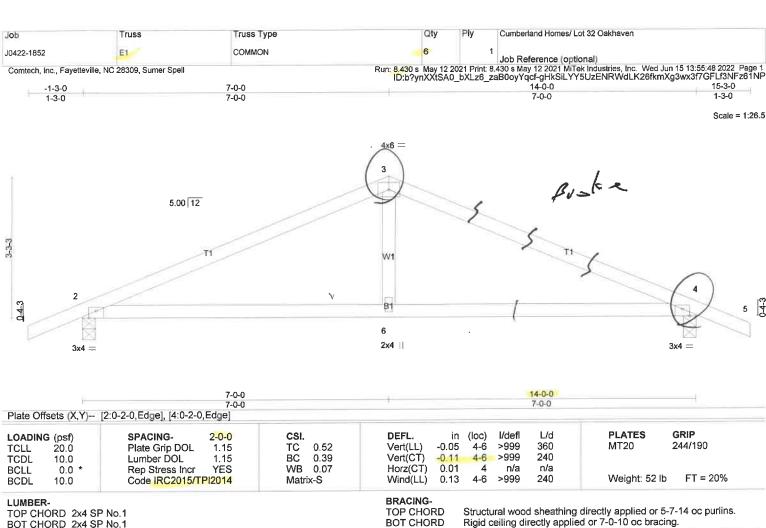
May 27,2015

WARNING -Varity design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-1473 rek 1/23/2014 SEFORE USE MARTITIA - Variffy design parameters and READ MOTES ON THIS AND INCLUDED MITTEN REFERENCE PAGE MIT-1473 ms. 1/23/2013 SEFOREUSE. Design volid for use only with Mifek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design percenters and proper incorporation of component is responsibility of building designer - not frust designer. Brocing 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 MISI/FII Quality Criteria, DSB-89 and BCSI Building Component Sgipty Information available from truss Place Institute, 281 N. Lee Sixeet, Suite 312, Alexandro, VA 22314-4.

If Southern Pina (SP) jumited its specified, this design values are those effective 96) 811/2013 by ALSC



818 Soundside Road Edenton, NC 27932



BOT CHORD 2x4 SP No.1 2x4 SP No.2 **WEBS** 

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

(lb/size) 2=632/0-3-8 (min. 0-1-8), 4=632/0-3-8 (min. 0-1-8) REACTIONS.

Max Horz 2=41(LC 16)

Max Uplift2=-192(LC 8), 4=-192(LC 9)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. 2-7=-859/852, 7-8=-788/854, 3-8=-780/873, 3-9=-780/873, 9-10=-788/854,

TOP CHORD

4-10=-859/853

2-6=-691/716, 4-6=-691/716

**WEBS** 3-6=-414/331

## NOTES-

**BOT CHORD** 

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-3-0 to 3-1-13, Interior(1) 3-1-13 to 7-0-0, Exterior(2) 7-0-0 to 11-4-13, Interior(1) 11-4-13 to 15-3-0 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 4) \* 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=192, 4=192,
- 6) 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