

CRACKED OR BROKEN CHORD REPAIR DETAIL

THIS DRAWING SPECIFIES REPAIRS FOR A TRUSS WITH BROKEN CHORD OR WEB MEMBER.

THIS DESIGN IS VALID ONLY FOR SINGLE PLY TRUSSES WITH 2X4 OR 2X6 BROKEN MEMBERS. NO MORE THAN ONE BREAK PER CHORD PANEL AND NO MORE THAN TWO BREAKS PER TRUSS ARE ALLOWED. CONTACT THE TRUSS MANUFACTURER FOR ANY REPAIRS THAT DO NOT COMPLY WITH THIS DETAIL.

- (B) = DAMAGED AREA, 12" MAX LENGTH OF DAMAGED SECTION
- (L) = MINIMUM NAILING DISTANCE ON EACH SIDE OF DAMAGED AREA (B)
- (S) = TWO 2X4 OR TWO 2X6 SIDE MEMBERS, SAME SIZE, GRADE, AND SPECIES AS DAMAGED MEMBER. MINIMUM SIDE MEMBER LENGTH(S) = (2)(L) + (B)

GLUE AND NAIL A 2X SIDE MEMBER, SAME SIZE, GRADE AND SPECIES AS DAMAGED MEMBER, TO EACH FACE, POSITIONED WITH THE MINIMUM NAILING DISTANCE "L" ON EACH SIDE OF DAMAGED AREA, GLUE USING AN AFG-01 ELASTOMERIC ADHESIVE. PREPARE SURFACES PER ADHESIVE MANUFACTURER'S SPEC'S AND GLUE FULL WIDTH.

THIS REPAIR DETAIL MAY BE USED FOR BROKEN CONNECTOR PLATE AT MID-PANEL SPLICES.

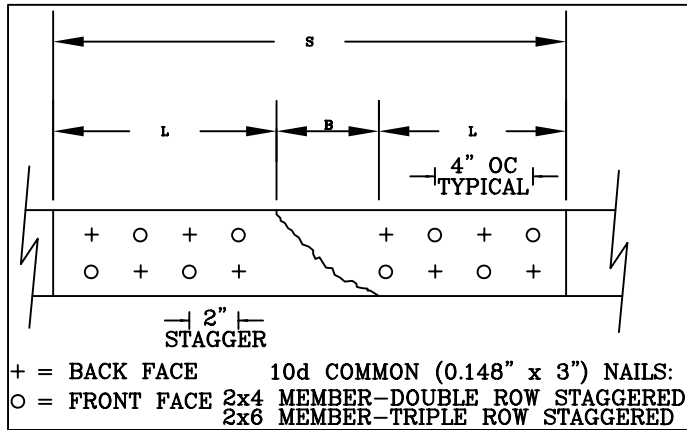
NAIL USING 10d BOX OR GUN NAILS (0.128"x3") INTO EACH SIDE MEMBER.

NAIL INTO 2x4 MEMBERS USING TWO (2) ROWS AT 4" O.C., ROWS STAGGERED
NAIL INTO 2x6 MEMBERS USING THREE (3) ROWS AT 4" O.C., ROWS STAGGERED.

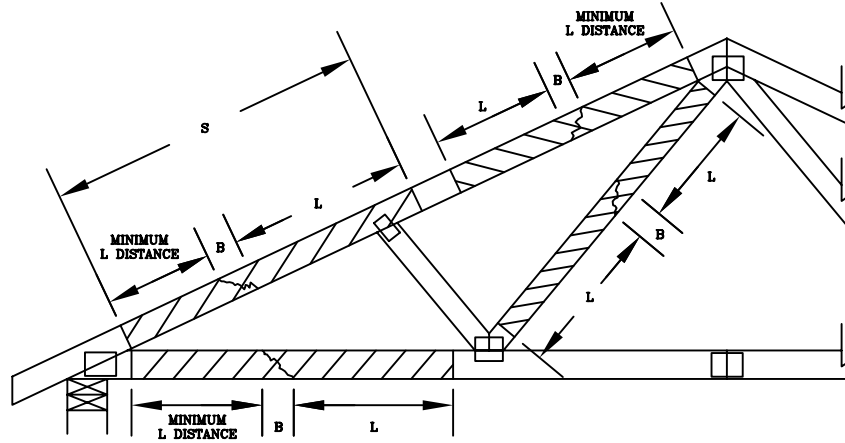
THIS REPAIR DETAIL MAY NOT BE USED FOR DAMAGED CHORD OR WEB SECTIONS OCCURRING WITHIN THE CONNECTOR PLATE AREA.

LOAD DURATION = 0%
MEMBER FORCES MAY BE INCREASED FOR DURATION OF LOAD

| CHORD MEMBER | L | MAXIMUM MEMBER AXIAL FORCE | | | |
|--------------|-----|----------------------------|-------|-------|-------|
| | | SPF-C | HF | DF-L | SYP |
| 2x4 | 24" | 1595# | 1629# | 1872# | 2043# |
| 2x6 | | 2392# | 2444# | 2808# | 3064# |
| 2x4 | 30" | 2126# | 2172# | 2496# | 2724# |
| 2x6 | | 3190# | 3258# | 3744# | 4086# |
| 2x4 | 36" | 2658# | 2715# | 3120# | 3405# |
| 2x6 | | 3987# | 4072# | 4680# | 5108# |
| 2x4 | 42" | 3190# | 3258# | 3744# | 4086# |
| 2x6 | | 4784# | 4887# | 5616# | 6129# |
| 2x4 | 48" | 3721# | 3801# | 4368# | 4767# |
| 2x6 | | 5582# | 5702# | 6552# | 7150# |



NAIL SPACING DETAIL



Building Components Group Inc.

Earth City, MO 63045

****WARNING** READ AND FOLLOW ALL NOTES ON THIS SHEET**
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow BCSI (Building Component Safety Information, by TPI and WTCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural panels and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3 & B7. See this job's general notes page for more information.

****IMPORTANT** FURNISH COPY OF THIS DESIGN TO INSTALLATION CONTRACTOR.**
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design, any failure to build the truss in conformance with TPI, or fabricating, handling, shipping, installing & bracing of trusses. TWBCG connector plates are made of 20/18/14GA (W.H./S./E.) ASTM A653 grade 37/40/60 (K/W./E./S) galv. steel. Apply plates to each face of truss, positioned as shown above and on Joint Details. A seal on this drawing or cover page indicates acceptance and professional engineering responsibility solely for the truss component design shown. The suitability and use of this component for any building is the responsibility of the Building Designer per ANST/TPI 1 Sec. 2.
ITW-BCG: www.itwbcg.com; TPI: www.tpinst.com; WTCA: www.sbcindustry.com; ICC: www.iccsafe.org

| | |
|------|--------------|
| REF | CHORD REPAIR |
| DATE | 1/1/09 |
| DRWG | REPCHRD0109 |

SPACING 24.0"