

Repair

REPBCFIL0699
REPSY42A0699
REPWEBSC0699

Bottom Chord Filler Repair
SY42 Field Stubbing Repair Detail
Broken Web Repair Detail

THIS DRAWING SPECIFIES REPAIRS FOR A TRUSS WITH CRACKED OR BROKEN WEBS.

THIS DESIGN IS VALID ONLY FOR SINGLE PLY TRUSSES WITH 2X4 #3, STUD, OR STANDARD CRACKED OR BROKEN WEBS. NO MORE THAN 1 CRACK OR BREAK PER WEB AND 2 CRACKED OR BROKEN WEBS PER TRUSS ARE ALLOWED. CONTACT THE TRUSS MANUFACTURER FOR ANY REPAIRS THAT DO NOT COMPLY WITH THIS DETAIL.

CRACKED OR BROKEN WEB REPAIR DETAIL

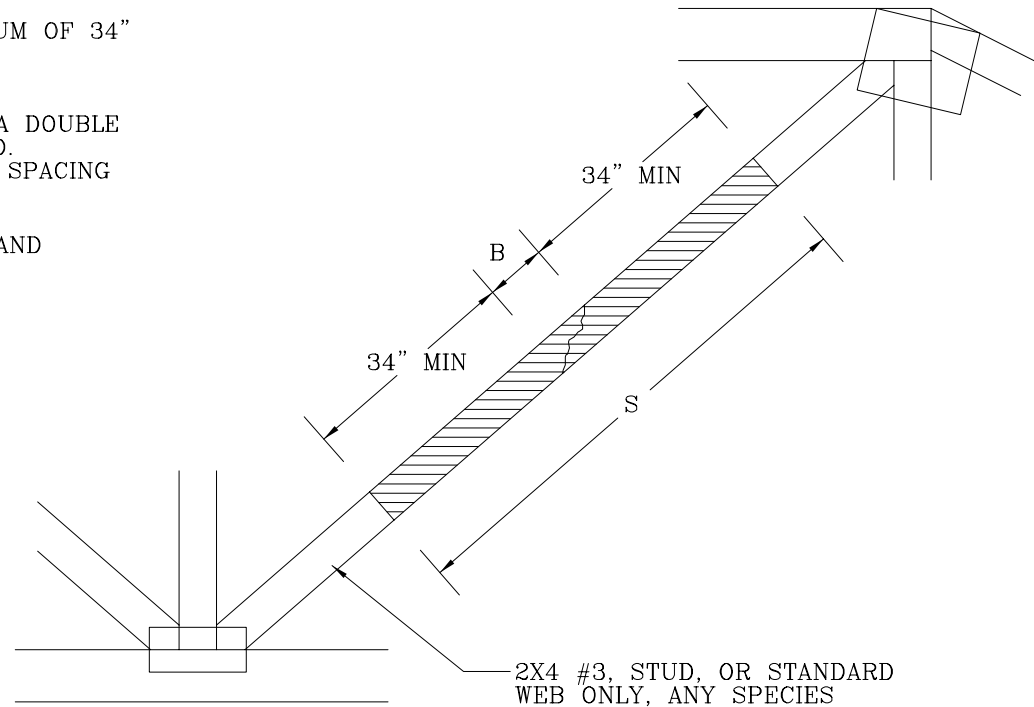
(B) = DAMAGED AREA, 0" MIN TO 12" MAX LENGTH OF CRACK OR BREAK IN WEB.

(S) = (2) 2X4 SCABS, SAME GRADE, SPECIES AS WEB MEMBER. MINIMUM LENGTH OF SCAB MUST BE THE GREATER OF:

1. 68" + LENGTH OF DAMAGED AREA (B), MINIMUM OF 34" ON BOTH SIDES OF THE DAMAGED AREA.
OR
2. 80% OF THE ORIGINAL WEB LENGTH.

ATTACH ONE SCAB TO EACH FACE OF THE WEB WITH A DOUBLE ROW OF 10d COMMON NAILS SPACED 4" OC STAGGERED. REFER TO NAIL SPACING DETAIL FOR ADDITIONAL NAIL SPACING INFORMATION.

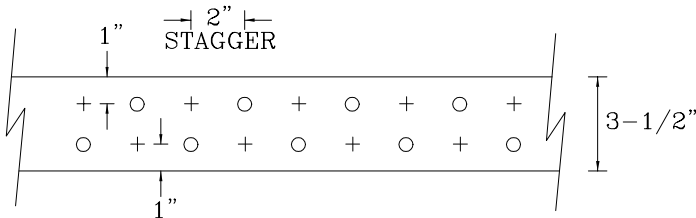
NOTE: FIELD REPAIRS MUST COMPLY WITH ALPINE DESIGNS AND SPECIFICATIONS.



10d COMMON (0.148" x 3") NAILS:
DOUBLE ROW, STAGGERED

4" OC
TYPICAL

+ = BACK FACE
○ = FRONT FACE



NAIL SPACING DETAIL

THIS DRAWING REPLACES DRAWINGS HC25094073 & 958,849

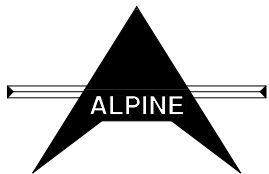
TRUSS REPAIR

DAMAGED TRUSSES MUST BE CAREFULLY EVALUATED TO DETERMINE THE EXTENT OF DAMAGE AND THE FEASIBILITY OF REPAIR. IN SOME CASES THE PRUDENT SOLUTION IS TO SCRAP THE DAMAGED TRUSSES AND REBUILD. INTERNAL WOOD FIBER DAMAGE AND EXCESS CONNECTOR STRESS FROM BENDING OR SHOCK CANNOT BE READILY DETECTED. THEREFORE, IT IS VITAL THAT THE TRUSS FABRICATOR AND BUILDING CONTRACTOR CONSIDER THE CAUSE OF THE DAMAGE IN THEIR DECISION WHETHER TO REPAIR OR REBUILD.

REPAIR WORK SHOWN ON THIS DRAWING APPLIES ONLY TO THOSE SECTIONS OF THE TRUSS REPORTED BY THE TRUSS MANUFACTURER TO HAVE BEEN DAMAGED. A QUALIFIED THIRD PARTY INSPECTOR SHALL CHECK TRUSSES TO DETERMINE THE EXTENT OF ANY FURTHER DAMAGE, IF ANY, AND VERIFY THAT REPAIRS HAVE BEEN PERFORMED AS INDICATED ON THIS DRAWING.

REF	WEB REPAIR
DATE	06/25/99
DRWG	REPWEBSC0699
-ENG	MLH/KAR

SPACING 24.0"



SY42 FIELD STUBBING REPAIR DETAIL

REFER TO ALPINE ENGINEER'S SEALED DESIGN FOR ORIGINAL SPAN, LUMBER, PLATES, AND OTHER INFORMATION NOT SHOWN ON THIS DETAIL.

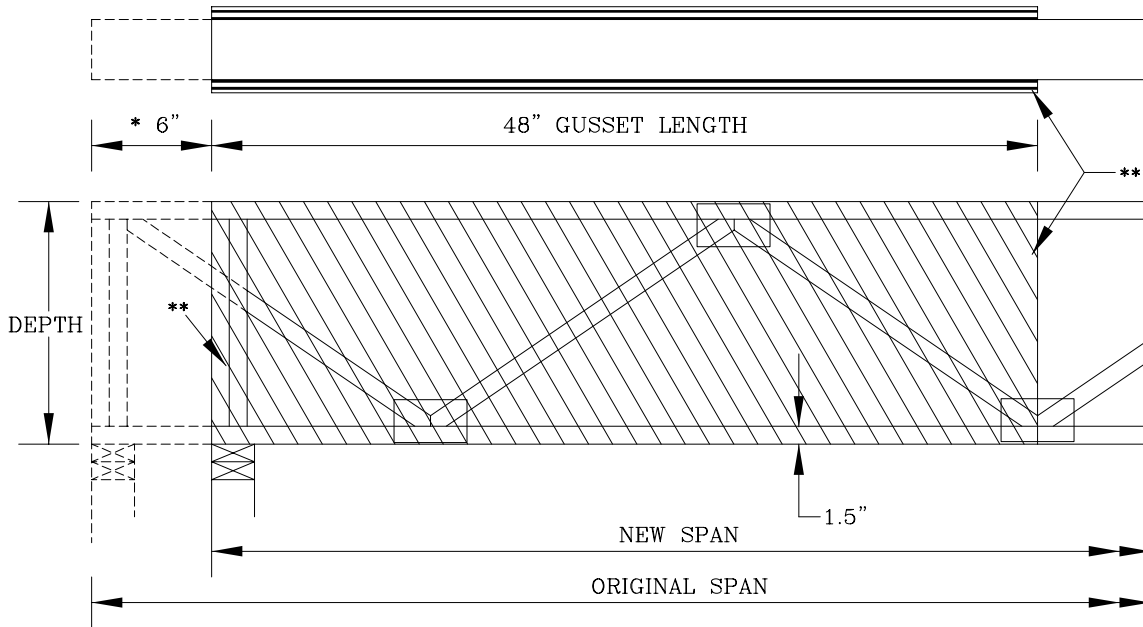
* THIS REPAIR ALLOWS FOR A SINGLE SPAN, TWO BEARING, NON-CANTILEVERED, SY42 TRUSS TO BE SHORTENED A MAXIMUM OF 6" FROM ONE OR BOTH ENDS. TRUSSES SHALL SUPPORT A MAXIMUM TRIBUTARY LOAD AREA OF 2'-0" WITH NO OTHER UNIFORM OR CONCENTRATED LOADS.

** (2) 4x2 #3 FIELD-APPLIED BLOCKS. SCRIBE TO CUT FOR TIGHT FIT. ATTACH TO TRUSS WHERE SHOWN.

*** REPAIR TRUSS USING 1/2" APA RATED 32/16 OR 3/4" APA RATED 48/24 SHEATHING (REFER TO CHART) NAILED TO BOTH FACES OF TRUSS. SIZE GUSSETS AS SHOWN. USE 8d BOX (0.113" DIA. x 2.5") NAILS IN 1 ROW AT 2" O.C. NAIL INTO ALL MEMBERS IN CONTACT WITH GUSSETS.

TRUSSES MUST BE INSPECTED BY THE TRUSS MANUFACTURER OR LOCAL BUILDING DEPARTMENT AFTER THE COMPLETION OF REPAIRS TO ASSURE COMPLIANCE WITH ALPINE DESIGNS AND SPECIFICATIONS.

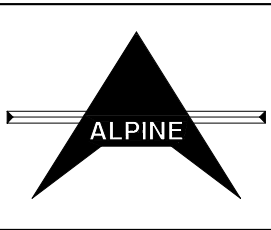
A CHASE OPENING, IF PRESENT, MUST BE LOCATED AT CENTERLINE OF TRUSS SPAN. TRUSS MAY BE CUT BACK UP TO 6" AT EACH END, UNLESS OTHERWISE SPECIFIED ON ENGINEER'S SEALED DESIGN.



1/2" 32/16 RATED SHEATHING	
MAXIMUM NEW SPAN	MINIMUM DEPTH
35-01-00	20"
31-07-00	18"
28-00-00	16"
24-04-00	14"
20-08-00	12"
16-11-00	10"

3/4" 48/24 RATED SHEATHING	
MAXIMUM NEW SPAN	MINIMUM DEPTH
40-03-08	20"
36-03-08	18"
32-03-08	16"
28-03-08	14"
24-03-08	12"
20-03-08	10"

THIS DRAWING REPLACES DRAWING 1,029,157



TRUSS REPAIR

DAMAGED TRUSSES MUST BE CAREFULLY EVALUATED TO DETERMINE THE EXTENT OF DAMAGE AND THE FEASIBILITY OF REPAIR. IN SOME CASES THE PRUDENT SOLUTION IS TO SCRAP THE DAMAGED TRUSSES AND REBUILD. INTERNAL WOOD FIBER DAMAGE AND EXCESS CONNECTOR STRESS FROM BENDING OR SHOCK CANNOT BE READILY DETECTED. THEREFORE, IT IS VITAL THAT THE TRUSS FABRICATOR AND BUILDING CONTRACTOR CONSIDER THE CAUSE OF THE DAMAGE IN THEIR DECISION WHETHER TO REPAIR OR REBUILD.

REPAIR WORK SHOWN ON THIS DRAWING APPLIES ONLY TO THOSE SECTIONS OF THE TRUSS REPORTED BY THE TRUSS MANUFACTURER TO HAVE BEEN DAMAGED. A QUALIFIED THIRD PARTY INSPECTOR SHALL CHECK TRUSSES TO DETERMINE THE EXTENT OF ANY FURTHER DAMAGE, IF ANY, AND VERIFY THAT REPAIRS HAVE BEEN PERFORMED AS INDICATED ON THIS DRAWING.

TC LL	40	PSF	REF	STUB SY42
TC DL	10	PSF	DATE	06/25/99
BC DL	5	PSF	DRWG	REPSY42A0699
BC LL	0	PSF	-ENG	MLH/KAR
TOT.LD.	55	PSF		
DUR.FAC.	1.00			
SPACING	24.0"			

BOTTOM CHORD FILLER REPAIR

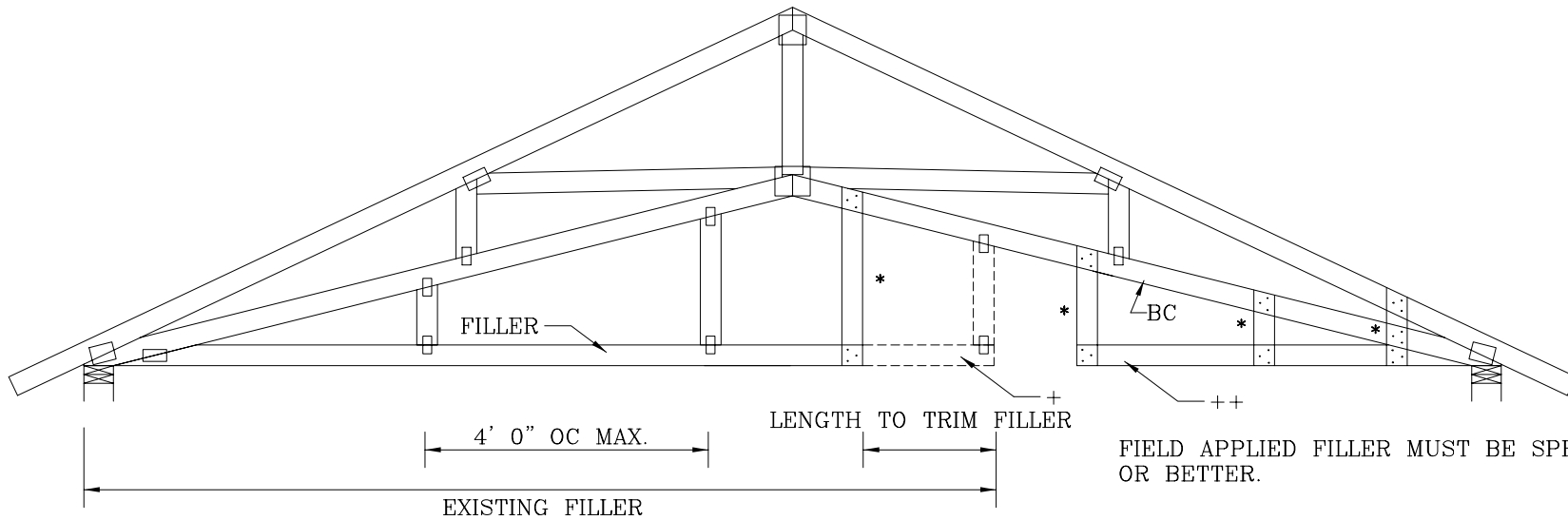
RECOMMENDED REPAIR PROCEDURE

1. MEASURE DISTANCE FOR NEW LENGTH OF FILLER.
2. APPLY NEW 2X4 STUD GRADE OR BETTER VERTICAL SCAB TO BOTTOM CHORD AND FILLER WITH (3) NAILS 0.131" DIA. x 3.0" OR LARGER, (I.E. 10d OR 16d COMMON, SINKER, GUN, OR 16d BOX NAILS) TO EACH END OF VERTICAL.
3. CAREFULLY REMOVE EFFECTED CONNECTOR PLATES. USE CARE NOT TO DAMAGE THE REMAINING CONNECTOR PLATES OR LUMBER IN ANY WAY.
4. TRIM FILLER TO LENGTH, AT EDGE OF NEW VERTICAL SCAB.

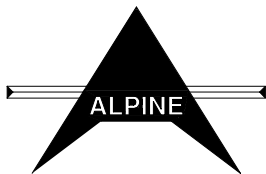
MAXIMUM BOTTOM CHORD LOAD IS 10 PSF.

- + BOTTOM CHORD FILLER TO BE REMOVED. SEE NOTE #3.
- ++ FIELD APPLIED FILLER.
- * 2X4 STUD GRADE OR BETTER VERTICAL SCAB. ATTACH TO BOTTOM CHORD AND FILLER WITH (3) NAILS WITH A MIN. 0.131" DIA. X 3.0" LENGTH.

REFER TO ENGINEER'S SEALED DESIGN REFERENCING THIS DETAIL FOR ALLOWABLE FILLER DIMENSIONS, PLACEMENT, AND WEBBING.



THIS DRAWING REPLACES DRAWING 962,767



****WARNING**** TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO HIB-91 (HANDLING INSTALLING AND BRACING), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 583 D'ONOFRIO DR., SUITE 200, MADISON, WI. 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING. ****IMPORTANT**** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ALPINE ENGINEERED PRODUCTS, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN. ANY FAILURE TO BUILD THE TRUSSES IN CONFORMANCE WITH TPI OR FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPECIFICATION PUBLISHED BY THE AMERICAN FOREST AND PAPER ASSOCIATION) AND TPI. ALPINE CONNECTORS ARE MADE OF 20GA ASTM A653 GR40 GALV. STEEL EXCEPT AS NOTED. APPLY CONNECTORS TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION CONNECTORS PER DRAWINGS 160 A-Z. THE SEAL ON THIS DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS COMPONENT DESIGN SHOWN. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY PARTICULAR BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER, PER ANSI/TPI 1-1995 SECTION 2.

REF BC FILLER REP.
DATE 06/25/99
DRWG REPBCFIL0699
-ENG MLH/KAR