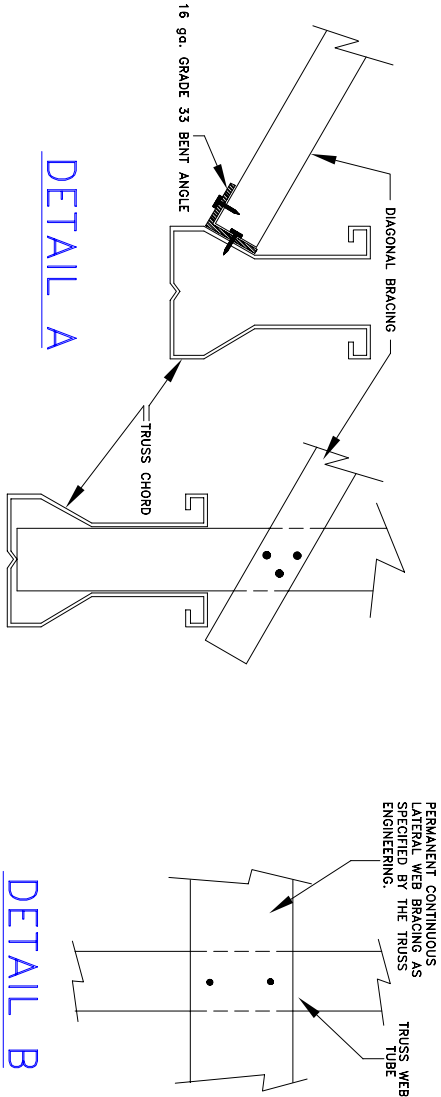


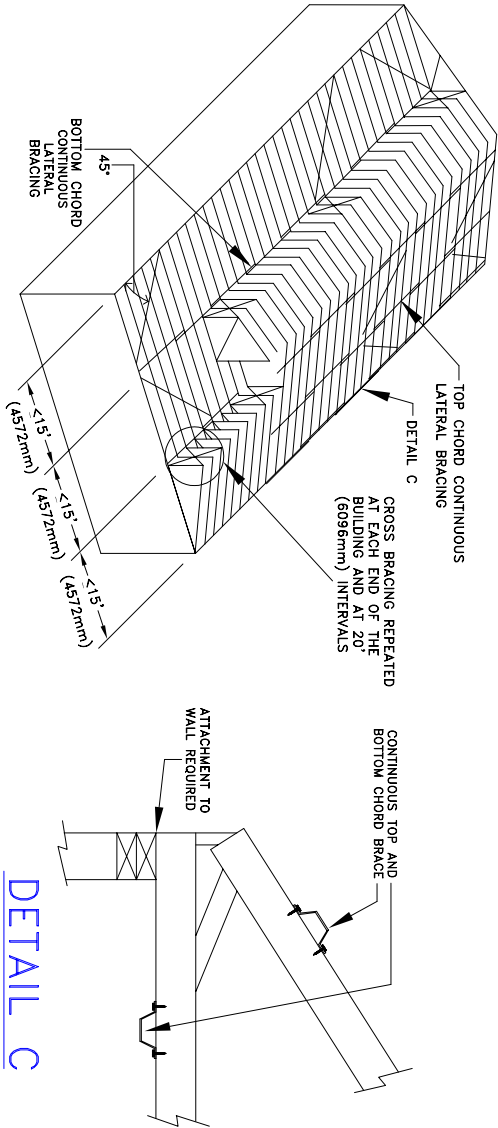
STEEL TRUSS BRACING CONNECTION DETAIL



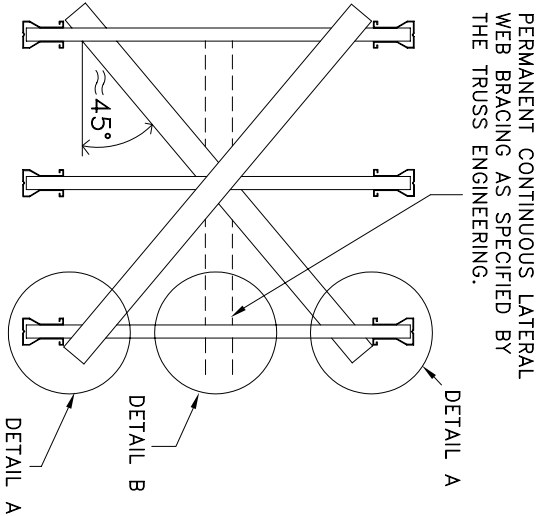
DETAIL A

DETAIL B

- GENERAL NOTES:**
1. TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING INSTALLING AND BRACING. REFER TO THE "FIELD INSTALLATION GUIDE FOR COLD-FORMED STEEL ROOF TRUSSES" PUBLISHED BY LSGEA (LIGHT GAUGE STEEL ENGINEERS ASSOCIATION, 1726 M ST. NW, SUITE 601, WASHINGTON, DC 20036) FOR GENERAL GUIDANCE IN SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. ALSO, REFER TO THE "DESIGN GUIDE FOR CONSTRUCTION BRACING OF COLD-FORMED STEEL TRUSSES" TECHNICAL NOTE 551d, PUBLISHED BY LSGEA FOR ADDITIONAL GUIDANCE IN THE DESIGN OF THE BRACING SYSTEM.
 2. THIS DRAWING IS A SUGGESTED GUIDE AND SHOULD BE CONSIDERED AS THE MINIMUM REQUIREMENTS AND IS LIMITED TO TRUSSES SPACED UP TO 48 INCHES (1219mm) ON CENTER WITH AN OVERALL LENGTH UP TO 60 FEET (18288mm) MAXIMUM. A PROFESSIONAL ENGINEER SHOULD BE CONSULTED FOR TRUSS SYSTEMS IN EXCESS OF THESE LIMITS.
 3. BRACING AND CONNECTIONS ARE TO BE DESIGNED BY A PROFESSIONAL ENGINEER. ALPINE RECOMMENDS THE DIAGONAL BRACING, TOP AND BOTTOM CHORD CONTINUOUS LATERAL BRACING AND WEB CONTINUOUS LATERAL BRACING TO BE A MINIMUM OF 150F125-33 FURRING CHANNEL OR 362S162-33 STUD MATERIAL WITH A MINIMUM OF 3-#10 SHEET METAL SCREWS AT ALL CONNECTIONS.
 4. WARNING, DO NOT STAND ON BRACING OR USE IT IN ANY WAY TO SUPPORT YOURSELF DURING CONSTRUCTION OR ANY OTHER TIME.
 5. INTENDED FOR USE WITH ALPINE TRUSSTEEL TRUSSES ONLY.



DETAIL C

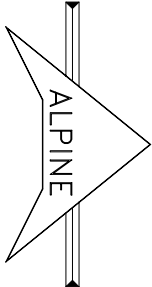


NOTE: SEE TRUSSTEEL DETAIL TS017.

****WARNING**** TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING INSTALLING AND BRACING. 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.

BRACING DEPICTED ON THIS DESIGN IS ONLY FOR LATERAL SUPPORT OF TRUSS MEMBERS TO REDUCE BUCKLING LENGTHS. ALL DESIGN, ATTACHMENT AND INSTALLATION OF TEMPORARY AND PERMANENT BRACING, TO RESIST LATERAL FORCES AND HOLD TRUSSES PLUMB, SHALL BE THE RESPONSIBILITY OF OTHERS. ALPINE ENGINEERED PRODUCTS, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN OR HANDLING, SHIPPING, INSTALLING, AND BRACING OF TRUSSES. AN ENGINEER'S SEAL ON THIS DRAWING APPLIES ONLY TO DESIGN OF THE TRUSS DEPICTED HERE AND SHALL NOT BE RELIED UPON IN ANY OTHER WAY.



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THIS IS A DANGEROUS CONDITION

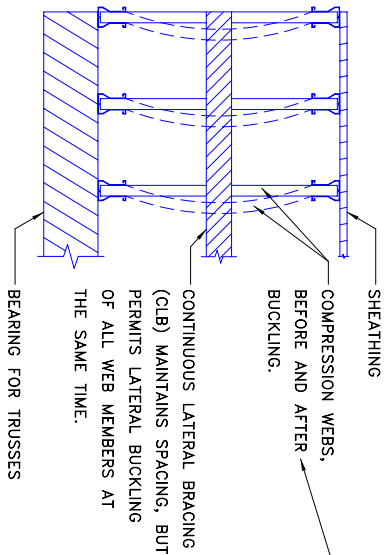


FIG. 1

TO PREVENT THIS FAILURE, ANCHOR OR RESTRAIN THE LATERAL BRACING!

USE METHOD SHOWN IN FIG. 2, 3A & 3B, OR ANOTHER STRUCTURALLY SOUND METHOD SPECIFIED BY PROFESSIONAL ENGINEER OR ARCHITECT.

FIG. 2

ANCHORAGE BY BUILDING DESIGNER (OTHER ANCHORAGE PROVISIONS FOR OTHER TYPES OF WALLS).

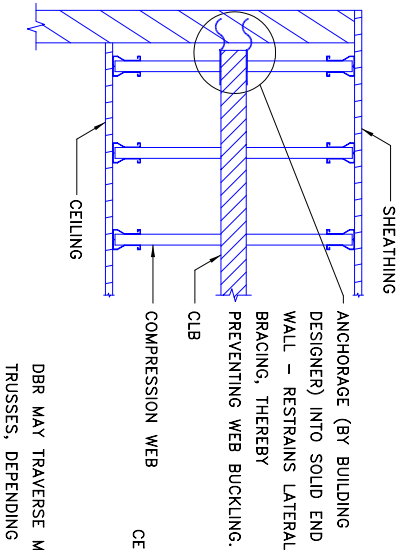
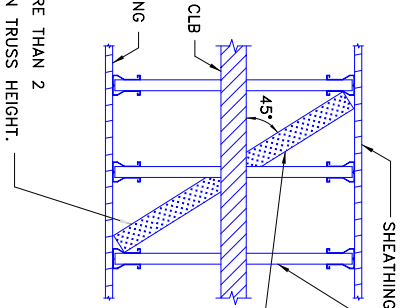


FIG. 3A

DIAGONAL BRACE RESTRAINT (DBR) WITHIN THE UNIT (3A & 3B)



DBR MAY TRAVERSE MORE THAN 2 TRUSSES, DEPENDING ON TRUSS HEIGHT.

DIAGONAL BRACE AND IT'S CONNECTION ARE TO BE DESIGNED BY A PROFESSIONAL ENGINEER OR ARCHITECT. THE DIAGONAL BRACE PREVENTS LATERAL MOVEMENT OF THE WEB AND TRANSFERS LATERAL BRACE FORCE TO ROOF AND CEILING DIAPHRAGMS. DIAGONAL BRACE SHOULD BE REPEATED AT APPROXIMATELY 20' (6096mm) INTERVALS.

CLB RESTRAINT

NOTE: TRUSS SPACING IS 2'0" (610mm) O.C. MAXIMUM.
NOTE: CLB IS TO BE 150F125-33 OR 362S162-33 OR EQUALS. ATTACH TO EACH WEB WITH (2)#10 SELF DRILLING SHEET METAL SCREWS. SEE DRAWING TS019 FOR OTHER DETAILS.

ANCHORAGE OR RESTRAINT OF LATERAL BRACING



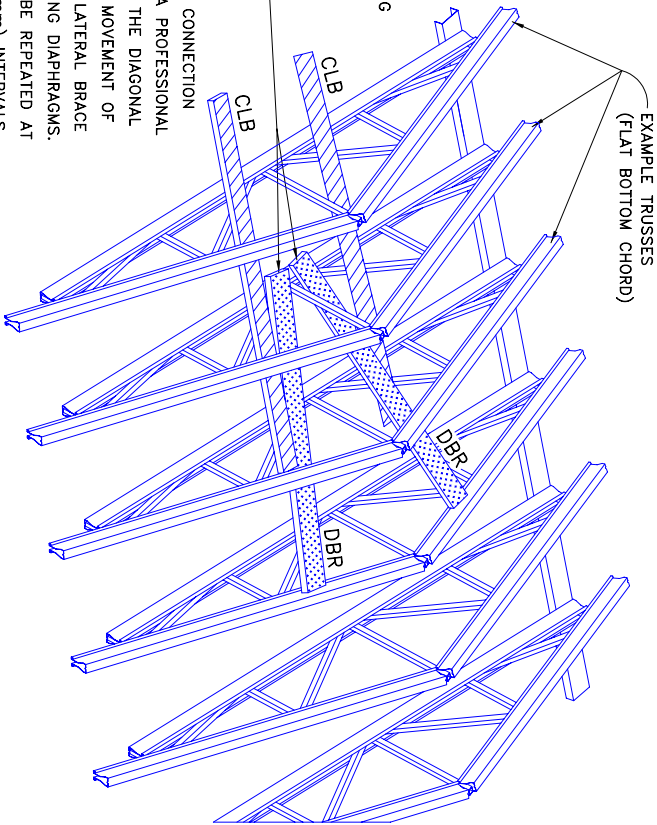
THE DRAWING BELOW SHOWS HOW TO RESTRAIN THE CONTINUOUS LATERAL BRACING (CLB - ) NEEDED IN TRUSSES (DRAWING SHOWS EXAMPLE TRUSSES WITH FLAT BOTTOM CHORDS). THE DIAGONAL BRACE RESTRAINT (DBR - ) MEMBERS AND IT'S CONNECTIONS ARE TO BE DESIGNED BY A PROFESSIONAL ENGINEER. THE ENDS ARE ATTACHED TO TOP & BOTTOM CHORDS. THE DIAGONAL BRACE MAY BE ATTACHED TO THE CLB OR THE WEB OPPOSITE THE CLB.

FIG. 3B



ALPINE

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****IMPORTANT**** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. BRACING DEPICTED ON THIS DESIGN IS ONLY FOR LATERAL SUPPORT OF TRUSS MEMBERS TO REDUCE BUCKLING LENGTHS. ALL DESIGN, ATTACHMENT AND INSTALLATION OF TEMPORARY AND PERMANENT BRACING, TO RESIST LATERAL FORCES AND HOLD TRUSSES PLUMB, SHALL BE THE RESPONSIBILITY OF OTHERS. ALPINE ENGINEERED PRODUCTS, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN OR HANDLING, SHIPPING, INSTALLING, AND BRACING OF TRUSSES. AN ENGINEER'S SEAL ON THIS DRAWING APPLIES ONLY TO DESIGN OF THE TRUSS DEPICTED HERE AND SHALL NOT BE RELIED UPON IN ANY OTHER WAY.

TRUSSSTEEL DETAIL

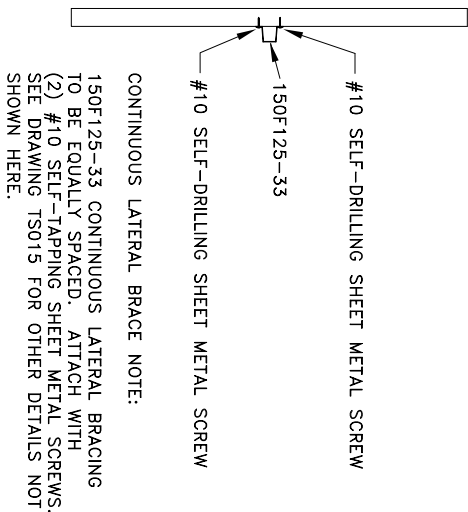
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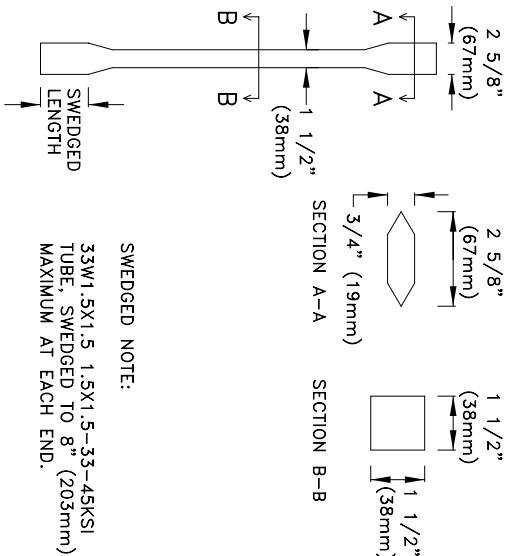
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WEB BRACING

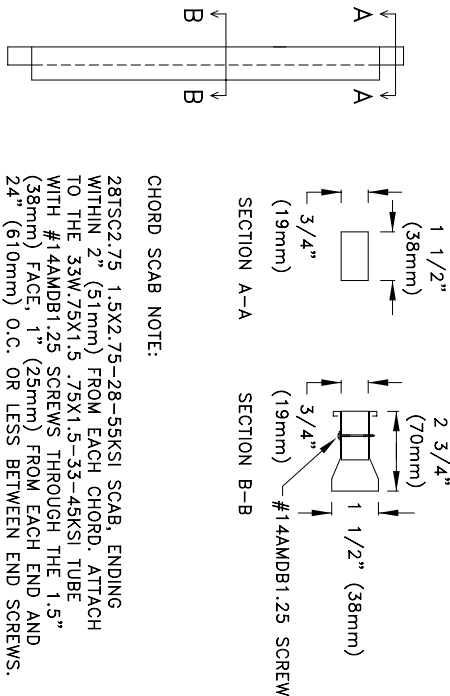
CONTINUOUS LATERAL BRACE



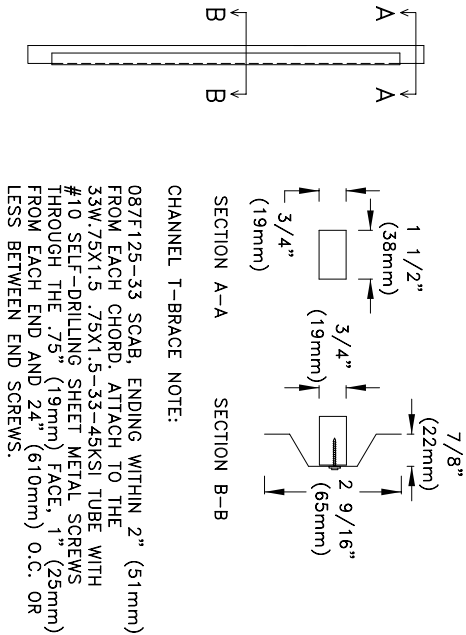
SWEDGED WEB



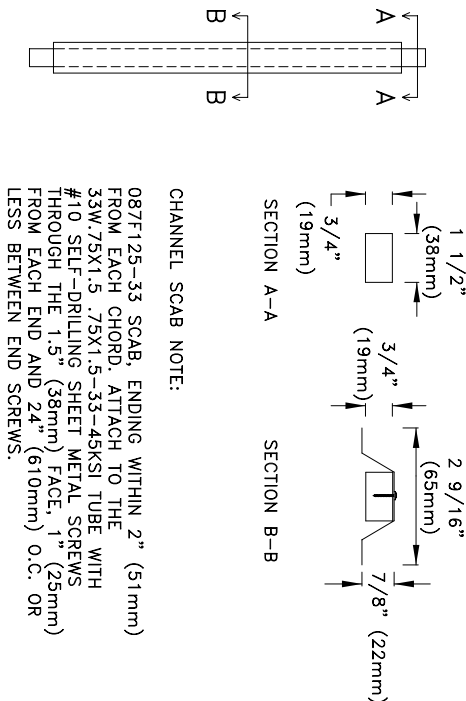
CHORD SCAB

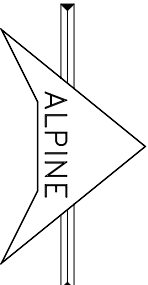


CHANNEL T-BRACE



CHANNEL SCAB BRACE





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