

GENERAL NOTES:

COMPRESSION SEAL: SEAL MATERIAL SHALL CONFORM TO 705.11. SEAL CONFIGURATION SHALL BE SIMILAR TO THE DETAILS SHOWN HEREIN. ACCEPTED MANUFACTURERS ARE: D.S. BROWN (MODEL CV4000), WATSON-BOWMAN-ACME (MODEL WJ400) OR AN APPROVED EQUIVALENT. SEAL INSTALLATION PROCEDURE AND LUBRICANT ADHESIVE SHALL BE AS PER THE MANUFACTURER'S SPECIFICATIONS WITH SUPERVISION BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE.

JOINTS IN COMPRESSION SEALS: SEALS SHALL BE FURNISHED IN ONE CONTINUOUS PIECE UNLESS APPROVED BY THE DIRECTOR.

ARMOR STEEL: ALL STEEL PARTS OF THE EXPANSION JOINT ASSEMBLY SHALL BE ASTM A709, GRADE 50.

JOINTS IN ARMOR STEEL: SHOP OR FIELD JOINTS IN THE ARMOR SHALL BE COMPLETE PENETRATION WELDS GROUND FLUSH WHERE IN CONTACT WITH THE SEAL AND THE RETAINER.

ARMOR COATING: ALL STEEL PARTS OF THE JOINT ASSEMBLY REQUIRE METALIZING WITH 100% ZINC WIRE. SURFACE PREPARATION AND APPLICATION OF THE COATING SHALL BE AS PER THE SOCIETY FOR PROTECTIVE COATINGS SSPC-CS-23.00(1). THE COATING THICKNESS SHALL BE 6 MILS MINIMUM. METALIZED SURFACES EMBEDDED OR PARTIALLY EMBEDDED IN CAST-IN-PLACE CONCRETE REQUIRE SEALING. THE SEALER SHALL BE THE INTERMEDIATE EPOXY COATING MEETING THE REQUIREMENTS OF SS910.03. THE SEALER SHALL COVER ALL PEAKS, VALLEYS AND SURFACE ROUGHNESS ATTRIBUTED TO METALIZING. THE METALIZED COATING SHOULD NOT BE FIELD PAINTED, EXCEPT FOR THE METALIZED SURFACES ON THE 1/2" GUSSET PLATES DAMAGED DURING CROSSFRAME INSTALLATION. THESE AREAS SHALL BE CLEANED AND PAINTED IN CONFORMANCE WITH THE STRUCTURE'S PAINT SYSTEM.

THE METALIZED COATING SHALL BE PROTECTED WHEN BLASTING OR COATING ADJACENT STEEL MEMBERS. OVERSPRAY NEED NOT BE REMOVED.

COATING REPAIRS: COATINGS DAMAGED DURING FABRICATION SHALL BE REPAIRED BY COMPLETE REMOVAL AND RE-METALIZING PER ARMOR COATING NOTES ABOVE. COATINGS DAMAGED DURING SHIPPING, CONSTRUCTION OR FIELD WELDING, EXCEPT AS NOTED IN "ARMOR COATING" NOTES, SHALL BE REPAIRED BY ASTM A780, ANNEX A1, "REPAIR USING ZINC BASED ALLOYS". THE PROCEDURE SHALL BE AS FOLLOWS: REMOVE SURFACE CONTAMINATES, PREHEAT TO 600°F, APPLY ZINC COATING BY RUBBING WITH A PURE ZINC STICK OR SPRINKLING ZINC POWDER ON THE PREHEATED SURFACE TO ACHIEVE A MINIMUM COATING THICKNESS OF 6 MILS.

TEMPORARY SUPPORTS: FABRICATOR DESIGNED AND INSTALLED TEMPORARY SUPPORTS ARE REQUIRED TO SUPPORT SHIPPING, ERECTION AND CONSTRUCTION FORCES WITHOUT DAMAGE TO THE STEEL ARMOR OR COATING. THESE SUPPORTS SHALL BE ADJUSTABLE IN THE FIELD TO ACCOUNT FOR VARIABLE TEMPERATURE SETTINGS. THE SUPPORTS SHALL BE INSTALLED AFTER THE FABRICATION AND COATING IS COMPLETE.

MEASUREMENT: MEASUREMENT AND PAYMENT PER ITEM 516 SHALL INCLUDE ALL LABOR, MATERIALS, COATINGS AND EQUIPMENT NECESSARY TO COMPLETE THE JOINT IN PLACE.

CONSTRUCTION PROCEDURE:

1. ABUTMENT BACKWALL CONCRETE SHALL NOT BE PLACED UNTIL AFTER SUPERSTRUCTURE CONCRETE IN THE SPAN ADJACENT TO THE ABUTMENT HAS BEEN PLACED.
2. NOT MORE THAN FOUR HOURS PRIOR TO THE DAY'S PEAK AMBIENT TEMPERATURE, SET ABUTMENT EXPANSION JOINT WIDTH TO DIMENSION "A" WHICH SHALL BE DETERMINED AS FOLLOWS:

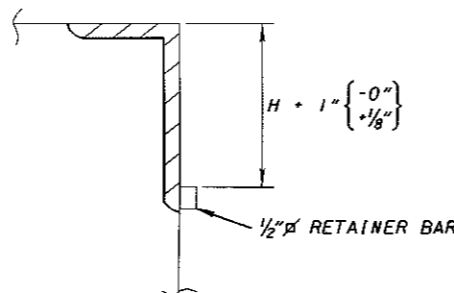
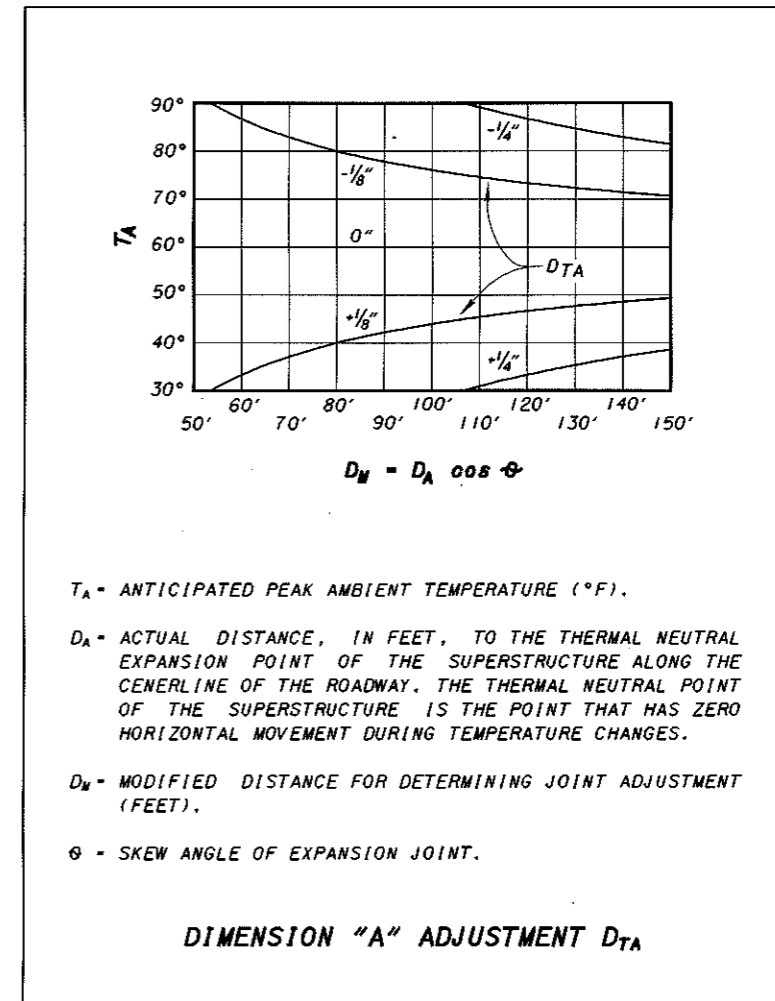
 $A = 2\frac{1}{4} \pm D_{TA}$, WHERE:
 A = JOINT WIDTH (INCHES) MEASURED NORMAL TO JOINT
 D_{TA} = ADJUSTMENT (INCHES) FOR A PEAK AMBIENT TEMPERATURE OTHER THAN 60°F (SEE CHART).
3. PLACE BACKWALL CONCRETE DURING STABLE OR RISING AMBIENT TEMPERATURES AND CONCLUDE PLACEMENT AT OR IMMEDIATELY BEFORE THE DAY'S PEAK AMBIENT TEMPERATURE.
4. LOOSEN ANY TEMPORARY END DAM BOLTS AFTER INITIAL SET OF CONCRETE, PREFERABLY NOT LATER THAN TWO HOURS AFTER CONCLUSION OF CONCRETE PLACEMENT.

NOTES TO DESIGNER:

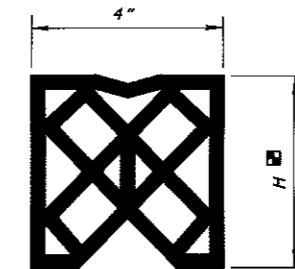
DESIGN LIMITS: THIS DESIGN IS INTENDED FOR STRUCTURES WITH SKEW ANGLES NOT GREATER THAN 15°, ROADWAY GRADES OF 2% OR LESS AND D_M (SEE CHART ON THIS SHEET) NOT LARGER THAN 150 FEET.

BEAM ENDS FOR STRUCTURES SHALL BE MADE VERTICAL. DESIGNERS SHALL SUPPLY DETAILS FOR STRUCTURES WITH ROADWAY GRADES GREATER THAN 2%.

COMPRESSION SEALS AT FIXED BEARINGS SHALL BE AS SHOWN WHERE DIMENSION "A" = 2 1/4" AT ANY AMBIENT TEMPERATURE.



LOCATION OF SEAL RETAINER BARS



COMPRESSION SEAL DETAIL

SEE THE MANUFACTURER'S CATALOGUE FOR THE SEAL ACTUALLY CHOSEN FOR USE.