

**GENERAL NOTES**

**COMPRESSION SEAL:** MATERIAL REQUIREMENTS FOR THE COMPRESSION SEAL SHALL CONFORM TO ITEM 705.11. INSTALLATION SHALL FOLLOW MANUFACTURER'S RECOMMENDATIONS AND BE INSTALLED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE.

THE LUBRICANT ADHESIVE USED SHALL BE AS RECOMMENDED BY THE MANUFACTURER.

**ARMOR STEEL COATING:** ALL STEEL PARTS OF THE JOINT ASSEMBLY SHALL BE ASTM A709M, GRADE 250. THE FINISHED STEEL ASSEMBLY SHALL BE METALIZED. THE THICKNESS OF THE COATING SHALL BE 150 TO 200 MICROMETERS. THE WIRE USED FOR THE METALIZING SHALL CONSIST OF 85% ZINC AND 15% ALUMINUM. SURFACE PREPARATION AND APPLICATION SHALL CONFORM TO SSPC COATING SYSTEM GUIDE NO. 23.00, "GUIDE FOR THERMAL SPRAY METALLIC COATING SYSTEMS". A SEALER AS PER SSPC PAINT SPECIFICATION NO. 27, SHALL BE APPLIED TO METALIZED SURFACES THAT WILL BE IN CONTACT WITH CONCRETE.

ALL EXPOSED METALIZED SURFACES OF THE JOINT ARMOR DAMAGED DUE TO SHIPING, FIELD WELDING, INSTALLATION OR REMOVAL OF TEMPORARY SUPPORTS SHALL BE REPAIRED. THE REPAIRS SHALL BE MADE USING THE METHOD OF ASTM A780, EXCEPT THAT SURFACE PREPARATION SHALL MEET THE REQUIREMENTS OF SSPC-SP3, "POWER TOOL CLEANING".

THE JOINT ARMOR SHOULD NOT BE PAINTED, EXCEPT THAT THE METALIZED SURFACES DAMAGED DURING CROSSFRAME INSTALLATION. THESE AREAS, SHALL BE CLEANED AND PAINTED IN CONFORMANCE WITH THE STRUCTURE'S PAINT SYSTEM REQUIREMENTS. OVER SPRAY FROM PAINTING NEED NOT BE REMOVED.

MEASUREMENT FOR PAY PURPOSES SHALL BE BASED ON LINEAR METER OF SEALED JOINT SYSTEM, MEASURED HORIZONTALLY ALONG THE JOINT CENTERLINE AND BETWEEN THE OUTER LIMITS OF THE FABRICATED JOINT, FURNISHED AND PLACED. THIS SHALL INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE THE JOINT IN PLACE, WHICH INCLUDES: THE JOINT ARMOR, ELASTOMERIC COMPRESSION SEAL, RETAINERS, ANCHORING DEVICES, TEMPORARY SUPPORTS AND THE END CROSSFRAME TOP GUSSET PLATES. PAYMENT WILL BE MADE PER LINEAR METER FOR ITEM 516, "STRUCTURAL EXPANSION JOINTS, INCLUDING ELASTOMERIC COMPRESSION SEAL".

**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. PLACE BACKWALL CONCRETE DURING STABLE OR RISING AMBIENT TEMPERATURES AND CONCLUDE PLACEMENT AT OR IMMEDIATELY BEFORE THE DAY'S PEAK AMBIENT TEMPERATURE.
3. 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:  
 $A = 75 \text{ mm} \pm D_{TA}$ , WHERE  
 $A$  = JOINT WIDTH (MILLIMETERS) MEASURED NORMAL TO JOINT  
 $D_{TA}$  = ADJUSTMENT (MILLIMETERS) FOR A PEAK AMBIENT TEMPERATURE OTHER THAN 15° C (SEE CHART).
4. LOOSEN TEMPORARY END DAM BOLTS AFTER INITIAL SET OF CONCRETE, PREFERABLY NOT LATER THAN TWO HOURS AFTER CONCLUSION OF CONCRETE PLACEMENT.

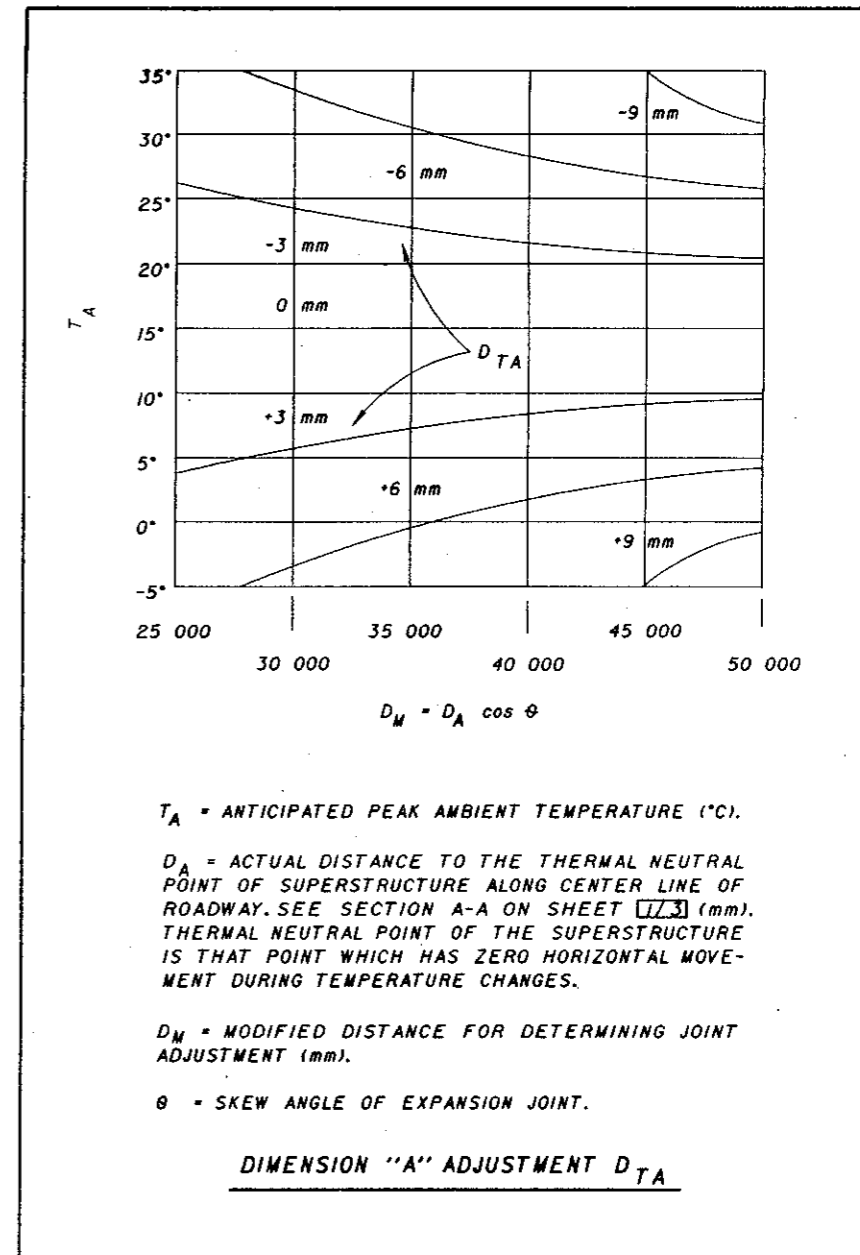
**NOTES TO DESIGNER**

DESIGN LIMITS: GENERALLY  $\theta$  NOT GREATER THAN 15°,  $D_M$  (SEE CHART) NOT LONGER THAN 45 720 mm.

- ▲ SIDEWALK AND PARAPET JOINT ARMOR ANCHORS: IN LIEU OF THE 13 mm  $\phi$  END-WELDED STUDS SHOWN, ALTERNATE METHODS OF ANCHORING THE JOINT ARMOR MAY BE USED, SUBJECT TO APPROVAL BY THE DIRECTOR.

Ⓞ **PROCEDURE**

SET DIMENSION "A", SHEETS 1 AND 2 OF 3, TO 75 mm  $\pm$  THE ADJUSTMENT SHOWN IN THE CHART. AFTER THE ABUTMENT BACKWALL HAS BEEN PLACED, LOOSEN BOLTS AS NOTED.



DESIGN AREA  
BUREAU OF BRIDGES  
AND  
STRUCTURAL DESIGN

STATE OF OHIO DEPARTMENT OF TRANSPORTATION  
Richard J. Engel  
ENGINEER OF BRIDGES

DATE  
8-20-95

DESIGNED MPB/JFF	CHECKED RLD/JAM	REVIEWED MPB/LMW	EX-2-81N
DRAWN AJM/BDB			

STANDARD  
COMPRESSION SEAL EXPANSION  
JOINTS AT ABUTMENTS FOR  
STEEL STRINGER STRUCTURES-METRIC

3 / 3