0

COMPRESSION SEAL: MATERIAL REQUIREMENTS FOR THE COMPRESSION SEAL SHALL CONFORM TO ITEM 705.11. INSTALLATION SHALL FOLLOW THE MANUFACTURER'S RECOMMENDATIONS AND SHALL BE SUPERVISED BY HIM 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 A709, GRADE 36. THE FINISHED STEEL ASSEMBLY SHALL BE METALIZED. THE THICKNESS OF THE COATING SHALL BE 6 TO 8 MILS. 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". AN OPAQUE SEAL COAT MEETING SECTION 7.2, SEALERS AND TOPCOATS; SHALL BE APPLIED TO METALIZED SURFACES THAT WILL BE IN CONTACT WITH THE CONCRETE.

REPAIRS SHALL BE MADE PRIOR TO THE INSTALLATION OF THE SEAL.
METALIZED SURFACES DAMAGED DURING FABRICATION SHALL BE REPAIRED
BY REBLASTING AND METALIZING AS PER SSPC GUIDE 23.00. METALIZED SURFACES DAMAGED DURING SHIPMENT OR FIELD WELDING SHALL BE
REPAIRED AS PER ASTM A 780-93a, ANNEX AI, REPAIR USING ZINC
BASED ALLOYS, THIS FIELD PROCESS REGUIRES REMOVAL OF CONTANINATES FROM THE SURFACE, PREHEATING THE SURFACE TO 600° F AND
APPLICATION OF ZINC COATING BY EITHER RUBBING A PURE ZINC STICK
OR SPRINKLING ZINC POWDER ON THE PREHEATED SURFACE. THE ZINC
COATING THICKNESS SHALL BE THE SAME AS THAT SPECIFIED FOR THE
METALIZING.

TEMPORARY SUPPORTS SHALL BE INSTALLED THAT ARE CAPABLE OF SUPPORTING SHIPPING AND ERECTION FORCES WITHOUT DAMAGE TO THE EXPANSION DEVICE. FABRICATOR DESIGNED AND INSTALLED TEMPORARY SUPPORTS SHALL BE CAPABLE OF ADJUSTMENT FOR SETTING THE EXPANSION DEVICE IN THE FIELD AND SHALL BE INSTALLED AT THE FABRICATION SHOP AFTER FABRICATION AND COATING IS COMPLETED.

SPLICE OR JOINT IN COMPRESSION SEAL: COMPRESSION SEALS FOR BRIDGE DECK JOINTS SHALL BE FURNISHED IN ONE CONTINUOUS PIECE UNLESS A SHOP FABRICATED SPLICE OR FIELD SPLICE IS APPROVED BY THE DIRECTOR.

MEASUREMENT FOR PAY PURPOSES SHALL BE BASED ON LINEAR FEET 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 FEET FOR ITEM 516, "STRUCTURAL EXPANSION JOINTS, INCLUDING ELASTOMERIC COMPRESSION SEAL".

CONSTRUCTION PROCEDURE

- I. 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 TEM-PERATURE.
- ⊕ 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:

 $A = 2\frac{1}{4}$ ± D_{TA} , WHERE A = JOINT WIDTH (INCHES) MEASURED NORMAL TO JOINT

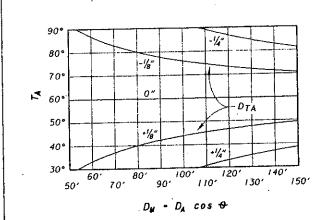
- D_{TA} = AJUSTMENT (INCHES) FOR A PEAK AMBIENT TEMPERATURE OTHER THAN 60° F (SEE CHART).
- 4. LOOSEN ANY TEMPORARY END DAM BOLTS AFTER INITIAL SET OF CONCRETE, PREFERABLY NOT LATER THAN TWO HOURS AFTER CONCLUSION OF CONRETE PLACEMENT.

MOTES TO DESIGNER

DESIGN LIMITS: GENERALLY, \odot NOT GREATER THAN 15°; D_{M} (SEE CHART ON THIS SHEET) NOT LONGER THAN 150 FEET.

BEAM ENDS FOR STRUCTURES ON GRADES OVER 2% SHALL BE MADE VERTICAL.

COUPRESSION SEAL AT THE FIXED ABUTMENT SHALL BE AS SHOWN WHERE DIMENSION "A" - 21/2" AT ANY AMBIENT TEM-PERATURE.



TA - ANTICIPATED PEAK AMBIENT TEMPERATURE (°F).

DA - ACTUAL DISTANCE TO THE THERMAL NEUTRAL EXPANSION POINT OF SUPERSTRUCTURE ALONG CENTER LINE OF ROADWAY. SEE SECTION A-A ON THIS SHEET. THERMAL NEUTRAL POINT OF THE SUPERSTRUCTURE IS THAT POINT WHICH HAS ZERO HORIZONTAL MOVEMENT DURING TEMPERATURE CHANGES (INCHES).

Dw - MODIFIED DISTANCE FOR DETERMINING JOINT ADJUSTMENT (FEET).

0 - SKEW ANGLE OF EXPANSION JOINT.

DIMENSION "A" ADJUSTMENT DTA

ISPORTATION BUREAU OF
9-1-81 AND STRUCTUR

STATE OF QHIO DEPARTMENT OF THE

JS/RLD WTL/WPB

1310#5 0ES19 -2-84 MPB/.

STANDARD
RESSION SEAL EXPANSION
NTS AT ABUTHENTS FOR

8 '

3 /