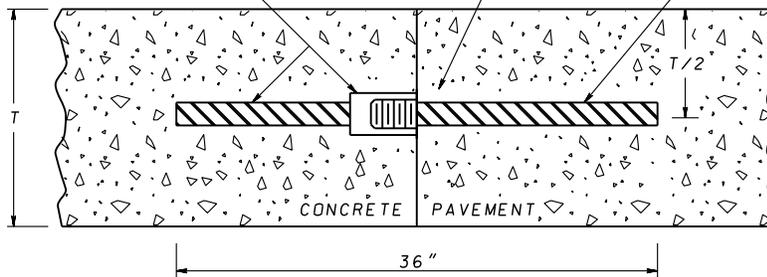


**LONGITUDINAL TIE DEVICE – ONE – PIECE BAR**

SEE NOTE 5

SOLID BAR & SLEEVE MAY BE REPLACED BY TUBE WITH INTERNAL THREAD

SEE NOTE 4



**LONGITUDINAL TIE DEVICE – TWO – COMPONENT BAR**

T = PAVEMENT THICKNESS

**NOTES**

1. SEE 908.09 FOR TIE-BAR MATERIAL SPECIFICATIONS.
2. ANY SIMILAR DEVICE MAY BE SUBMITTED FOR CONSIDERATION BY THE ENGINEER AND OMT'S PAVEMENT & GEOTECHNICAL DIVISION. IF THE GENERAL TYPE OF A SUBSTITUTION IS APPROVED, THE DEVICE MUST STILL MEET THE STRENGTH REQUIREMENTS APPEARING IN THE SPECIFICATIONS OR SPECIAL PROVISIONS.
3. THE PORTION OF THE DEVICE INITIALLY INSTALLED MUST BE HELD FIRMLY IN PLACE BY TAP - BOLTS INSERTED THROUGH DRILLED HOLES. IF HOLES IN THE FORMS HAVE BEEN FORMED BY ANY OTHER METHOD THAN DRILLING THEN STEEL WASHERS MUST BE USED IN ADDITION TO THE TAP - BOLTS AS DIRECTED BY THE ENGINEER.
4. TAP- BOLTS REQUIRED FOR INITIAL INSTALLATION IF FORMS ARE USED FOR PLACEMENT OF CONCRETE. OTHERWISE THE FEMALE END OF A TWO- COMPONENT TIE-BAR SHALL BE PLACED ON CHAIRS OR PLACED INTO CONCRETE WHEN SUFFICIENT STRENGTH HAS BEEN REACHED TO SUPPORT THE BAR IN THE SPECIFIED POSITION IN THE SLAB. ANOTHER METHOD IS TO DRILL HOLES INTO THE LONGITUDINAL JOINT FACE AND INSERT THE TIE-BAR INTO THE HOLE AND SECURE WITH BONDING MATERIAL SPECIFIED IN 902.11.
5. #4 EPOXY COATED DEFORMED, GRADE 40 TIE-BAR PLACE 3'-0" C/C, SEE NOTES 6 AND 7.
6. ONE-PIECE TIE-BARS SHALL BE STRAIGHT OR NINETY-DEGREE BENT TIE-BARS. BENT TIE-BARS ARE INSERTED INTO LONGITUDINAL JOINT FACE DURING PAVING AND STRAIGHTENED BY COLD BENDING PRIOR TO PLACING ADJACENT SLAB. ONE-PIECE TIE-BAR PLACEMENT IN LONGITUDINAL JOINT IS THE SAME AS THE FEMALE END PLACEMENT OF THE TWO-COMPONENT BAR (SEE NOTE 4).
7. THE FIRST LONGITUDINAL TIE-BAR SHOULD BE OFFSET BY A MINIMUM OF 18" FROM THE NEAREST TRANSVERSE JOINT.
8. REPAIR DAMAGED EPOXY AREAS AS SPECIFIED IN 465.03.

SPECIFICATION	CATEGORY CODE ITEMS
APPROVED	<i>[Signature]</i> DIRECTOR - OFFICE OF HIGHWAY DEVELOPMENT
	APPROVAL • SHA REVISIONS
	APPROVAL 6-15-64 REVISED 2-25-16
	APPROVAL • FEDERAL HIGHWAY ADMINISTRATION
	APPROVAL 7-21-65 REVISED 2-23-16

**Maryland Department of Transportation  
STATE HIGHWAY ADMINISTRATION**

STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES

**CONCRETE PAVEMENT  
LONGITUDINAL TIE DEVICES**

**STANDARD NO. MD 572.61-01**