CONTRACTION JOINT
UNDOWELED - TRANSVERSE and
UNTIED - LONGITUDINAL

CONTRACTION JOINT
DOWEL - TRANSVERSE

CONTRACTION JOINT
TIED - LONGITUDINAL

ISOLATION/EXPANSION JOINT
DOWELED - TRANSVERSE

ISOLATION JOINT
UNDOWELED - LONGITUDINAL

CONSTRUCTION JOINT
PLAIN - TRANSVERSE or LONGITUDINAL

CONSTRUCTION JOINT
DOWEL BUTT - TRANSVERSE

CONSTRUCTION JOINT
TIED BUTT - LONGITUDINAL

CONSTRUCTION JOINT
TIED BUTT - TRANSVERSE

CONSTRUCTION JOINT
KEYWAY - LONGITUDINAL

BAR SIZES

<table>
<thead>
<tr>
<th>PAVEMENT THICKNESS (T) (IN)</th>
<th>TIE BAR</th>
<th>DOWEL BAR DIAMETER (IN)</th>
</tr>
</thead>
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<tr>
<td>8 - T ≤ 10</td>
<td>#5</td>
<td>1/8</td>
</tr>
<tr>
<td>10 - T ≤ 12</td>
<td>#5</td>
<td>3/16</td>
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U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LAND HIGHWAY

MINOR CONCRETE PAVEMENT JOINTS

REVIEWED 5/2015 REVISED 5/2015

MINOR CONCRETE PAVEMENT JOINT SEALING DETAILS

NOTES:
1. Use epoxy-coated material for all tie bars, dowels, and other steel used in the construction of concrete pavement.
2. Deformed reinforcing bars or hook bolts may be used for tie bars.
3. Do not place tie bars within 15 inches of transverse joints.
4. Install isolation joints when abutting a fixed structure. Use expansion joint material extending the full depth and length of the concrete surface.
5. Transverse and longitudinal construction joints are not included in the joint layout plan. Use transverse and longitudinal construction joints sparingly. Submit planned construction joint locations for approval.
6. For construction joints, if tie bars and dowels are not set in concrete during placement, drill and anchor the tie bars and dowels into the existing concrete construction with epoxy resin.
7. Maintain joint sealant shape factor of 1:1; except when silicone sealant is used maintain the width to depth shape factor of 2:1 or as recommended by the sealant manufacturer.
8. See Section 712 for joint material requirements.
9. See Detail ET 501-1 or ET 502-1 for reinforcement details.

NOTE: MINOR CONCRETE PAVEMENT JOINTS