The maximum tied transverse width shall be 60 feet有条件, joints must be staggered in accordance with the preceding guidelines. If a tied joint is used, it must be an un-tied joint be a construction joint. The maximum transverse slab length is 15 ft.

**Sub-NOTES**
- All bars are perpendicular to the plan alignment is for the bar axis to be parallel to centerline and parallel to pavement surface.
- The plan alignment is for the bar axis to be parallel to centerline and parallel to pavement surface.

**BAR DIAMETER TABLE**

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Bar Diameter Table</th>
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<tbody>
<tr>
<td>T &lt;= 1&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>1&quot; &lt; T &lt;= 1 1/2&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>T &gt; 1 1/2&quot;</td>
<td>3/4&quot;</td>
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</table>

**CONSTRUCTION JOINT**
- All joints are perpendicular to the typical roadway detail.

**MULTIPLE LANE ROADWAY DETAIL**
- All joints are perpendicular to each other.

**TRANSVERSE JOINT**
- Section A-A
- Section B-B
- Section C-C

**DOWEL BAR 18"**
- Centered on joint

**RESERVOIR**
- Must be centered on construction joint (see sealed construction joint details, sheet 3 of 3)

**SCHEDULES**
- Shear bars
- Tie bars
- Dowel bars

**NOTE:**
- Scales shown are full 1" = 1'-0" for pavement dowel bars details.
ELEVATION - IMPACT SLAB, HIGHWAYS/STREETS/ROADS

FOR TRANSVERSE JOINTS ADJOINING ASPHALT PAVEMENT IN RECONSTRUCTION OR NEW CONSTRUCTION PROJECTS WHERE T=1/2 FT.

NOTES:
1. T = THICKNESS OF CONCRETE PAVEMENT (I.E. DEPTH)
2. L = PANEL LENGTH/HOLE JOINT SPACING
3. T1 = 1.5" / 2
4. FOR RECOMMENDED DOWEL SIZES, SEE JOINT TYPES SHEET.

ELEVATION - ANCHOR FOR END OF CONCRETE

PORTLAND CEMENT CONCRETE

ELEVATION - IMPACT SLAB, HIGHWAYS/STREETS/ROADS

NOTES:
1. THE PAVEMENT EDGE IS TO BE PLACED APPROXIMATELY VERTICAL.
2. THE DOWEL BAR DIAMETERS SHALL BE DETERMINED BY THE BAR DIAMETER TABLE.
4. THE MAXIMUM TIED TRANSVERSE WIDTH SHALL BE 60 FEET.
5. A CONSTRUCTION JOINT SHALL BE AT LEAST 6 FEET FROM A SAWED JOINT.
6. TRANSVERSE AND LONGITUDINAL JOINTS SHALL BE SAWED JOINTS.
7. SEALANTS AND PREFORMED SEALS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS.
8. THE ANCHOR IS TO BE USED AT RAILROAD GRADE CROSSINGS ADJACENT TO FLEXIBLE PAVEMENTS AND SIMILAR INTERRUPTIONS TO THE CONCRETE PAVEMENT.
9. MAKE A VERTICAL SAW CUT IN THE ASPHALT TO SERVE AS A FORM FOR THE END OF THE CONCRETE PAVEMENT.
10. PREFERRED PRACTICE IS TO PLACE THE CONSTRUCTION JOINT AT THE LOCATION OF A PLANNED CONTRACTION JOINT AND USE DOWEL BARS PER STD. TRANSVERSE JOINT DETAILS.
11. NOT TO SCALE.
12. ALL LONGITUDINAL CONCRETE TO ASPHALT JOINTS SHALL BE SAWED AND SEALED.

SPECIAL NOTES:
* THIS ANCHOR IS NOT TO BE USED IN CONJUNCTION WITH CONCRETE PAVEMENT.
NOT FOR USE UNLESS SPECIFICALLY AUTHORIZED FOR IN PROJECT PLANS.

**SINGLE CUT** (FIELD-INSTALLED SEALANT)

- 1/4" x 1/4"
- MIN. T/3
- SAW CUT

**SINGLE CUT** (FIELD-INSTALLED SEALANT)

- 1/4" x 1/4"
- MIN. T/3
- SAW CUT

**WIDENED CUT** (FIELD-INSTALLED SEALANT)

- 1/4" x 1/4"
- MIN. T/3
- SAW CUT

**SEALANT:**

- HOT Poured SEALANT (SUBSECTION 704.03)
- HOT Poured SEALANT (SUBSECTION 704.03)
- HOT Poured SEALANT (SUBSECTION 704.03)

**APPROVED SILICONE SEALANT:**

- 1/4" x 1/4"
- MIN. T/3

**CONCRETE TO ASPHALT**

- CONCRETE
- ASPHALT

**NOTES:**

1. FOR HOT-POURED SEALANT, SHAPE FACTOR D/W = 1 (TYPICAL ONLY IF BACKER ROD USED).
2. FOR SILICONE SEALANT, D/W = 0.5 (TYPICAL).
3. FOR TWO-COMPONENT HOT-POURED SEALANT, D/W = 0.5 (TYPICAL).
4. FOR PREFORMED COMPRESSION SEAL, W IS SIZED FOR SLAB & CLIMATE.
5. SUBSECTION REFERENCES ARE TO STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
6. HOT Poured AND PREFORMED SEALS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER’S REQUIREMENTS.
7. SAW CUT TO CONTROL SLAB CRACKING SHALL BE T/3 DEEP • T” EQUALS DESIGN THICKNESS OF CONCRETE PAVEMENT.

**CROSS-SECTIONS:**

- SEALANT
- BACKER ROD
- TOOLING SCHEDULE REQUIRED EXCEPT FOR SELF LEVELING TYPE SEALANT

**SUB-NOTES:**

- DIMENSIONING REFERS TO SEALANT RESERVOIR ONLY.

**SEALANT SHAPE FACTOR:**

- WIDTH
- DEPTH OF SEALANT
- SEAM ANGLE

**PORTLAND DRAWING**

- CONCRETE CEMENT
- CONCRETE PAVEMENT

**STANDARD DRAWING**

- 409-1

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**Revisions:**

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**Original Drawing by:**

- LOREN THOMAS
- MICHIGAN PROGRAM CLERK

**Original Signed by:**

- TIM COLE
- CHIEF ENGINEER