



Minnesota Department of Transportation

MEMO

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DATE: April 29, 2010

TO: Materials, Construction and Design Engineers

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SUBJECT: Mn/DOT Joint Sealing Guidelines

Attached are Mn/DOT's recommendations for sealing concrete pavements. The Mn/DOT Joint Sealing Guidelines were developed as an aid to Designers who are preparing plans for a concrete paving project.

Mn/DOT's standard requirement for joint sealing is a single 1/8" wide sawcut sealed with Mn/DOT Spec. 3725 hot pour. Mn/DOT Spec. 3722 silicone joint sealant is no longer the standard joint sealing material in contraction joints and will not be specified on any future Mn/DOT projects.

The joint sealing guidelines are broken into five (5) categories:

1. **Tied/Keyed or Butted Longitudinal Construction Joints**
2. **All roadways where speed limit is 45 mph or less**
3. **New Concrete Construction for All Base Types**
4. **Overlays**
5. **Concrete Pavement Rehabilitation (CPR)**

Several significant changes will be occurring with the new details.

1. Unless required by the Engineer, the Contractor will no longer be required to saw or seal any tied/keyed or butted longitudinal construction joints. This includes the median/curb and gutter section and concrete pavement joints.
2. The keyed style joint will only be required for pavements that are 7" thick or greater. Many of the problems we see are related to the keyed shape and thinner pavements. .

Please contact the Concrete Engineering Unit if you have any questions or need further clarification.

Mn/DOT Concrete Joint Sealing Guidelines

Type of Construction	Base Materials	Contraction Joint Designation*	Contraction Joint Sealant Type	Longitudinal Joint Designation*	Longitudinal Joint Sealant Type
Tied/Keyed/Butted Longitudinal Joints	All	N/A	N/A	L2TU ** L2KTU ** L3U **	None
All Roadways: Speed limit 45 mph or less	All	C2H C2H-D	3725 Hot Pour	L1H L1TH L2TU ** L2KTU ** L3U **	3725 Hot Pour or None
New Construction: Speed limit greater than 45 mph	Open Graded Aggregate Base (OGAB)	C1U C1U-D	None	L1U L1TU L2TU L2KTU L3U	None
New Construction: Speed limit greater than 45 mph	Class 5	C2H C2H-D	3725 Hot Pour	L1H L1TH L2TU ** L2KTU ** L3U **	3725 Hot Pour or None
High Performance Concrete	N/A	C3P-D	3721 Preformed Elastomeric	L1H L1TH L2TU L2KTU ** L3U **	3725 Hot Pour or None
Overlay: Concrete over Concrete	PASSRC Geotextile	C1U C1U-D	None	L1U L1TU L2TU L2KTU L3U	None
Overlay: Concrete over Bituminous	Full Depth Bituminous	C2H C2H-D	3725 Hot Pour	L1H L1TH L2TU ** L2KTU ** L3U **	3725 Hot Pour or None
Overlay: Concrete over Concrete	Bituminous Bond Breaker				
CPR	N/A	Refer to CPR Details	3725 Hot Pour or None	Refer to CPR Details	3725 Hot Pour or None

*All joint designations are on Standard Plan Sheets 5-297.221 (Sheets 1 and 2) or by special provisions.

**Consult the Mn/DOT Concrete Office when considering sealing L2T, L2KT or L3 joints.

When varying from these guidelines or for further clarification, consult the Mn/DOT Concrete Office.