



**Montana Department
of Transportation**

CONSTRUCTION MEMO

Date Issued: 12/21/16

Date Effective: 1/19/17

Related Specifications: 701.02.8

Subject: Guidance on the Selection of Crushed Cover Aggregate – Cover Material

To: Distribution

From: Matthew R. Strizich, P.E. 
Materials Engineer

The intent of this memorandum is to provide guidance for Supplemental Standard Specification Subsection 701.02.8, Crushed Cover Aggregate – Cover Material which became effective with the March 10, 2016 letting.

This memo supersedes and rescinds the design memo issued April 29, 2011 with the subject of ‘Type I and Type II Cover Material Selection’.

On all projects, specify Type 1 cover material for chip seals placed on roadways where the present traffic is less than 10,000 average daily traffic (ADT) and Type 2 cover material on roadways with present traffic of 10,000 ADT or more. There are instances where roadways with less than 10,000 ADT experience reduced service life due to chip loss. Some examples may be urban roads or intersections with stop-and-go or turning traffic. In those instances use Type 2 aggregate. This guidance is no different than what was provided in the April 29, 2011 memo so no changes to plans under development are necessary.

Continue to document the cover type to be specified with the appropriate project report.

Note: Application rates within Basis of Plan Quantities are the same for both Cover Type 1 and 2.

The purpose of utilizing higher grades of chips is to provide a more durable wearing surface on roadways with relatively high ADT. It has been observed that chip seals on roadways with more than 10,000 ADT may have reduced service lives due to cover material wearing off prematurely within the wheelpaths. Placing Type 2 cover material on these roadways should provide a more durable wearing surface, and increased service life.

The “new” Type 3 chips were previously allowed under the old Type 2 chip specification and have been used on several projects throughout the state. Those larger cover material aggregates require roughly 0.10 gallon/square yard of emulsion more than either of the current Type 1 or Type 2 chips. Type 3 chips should not be used unless specifically requested by Surfacing Design in order to further evaluate whether the additional cost of this chip type is warranted by additional service life.

Contact Jim Davies at 444-3424 or Darin Reynolds at 444-7650 if you have questions regarding this product.

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