

**METHODS OF SAMPLING AND TESTING**  
**MT 117-15**  
**MAKING AND CURING CONCRETE COMPRESSIVE AND**  
**FLEXURAL STRENGTH TEST SPECIMENS**  
**IN THE FIELD FOR SELF-CONSOLIDATING CONCRETE (SCC)**  
**(Modified AASHTO T23)**

MT 117 is identical to AASHTO T 23 except for the following stipulations:

1. Include the following Montana Materials Manual references.

***MT Materials Manual***

[MT 118 Method of Determining Air Content of Freshly Mixed Self-Consolidating Concrete by the Pressure Method](#)

[MT 609 Field Numbering Concrete Cylinders](#)

2. In general, tamping via rodding or vibration is eliminated from the method for the testing of self-consolidating concrete. Specifically:

- A. Replace Section 1.1 with the following:

“This method covers procedures for making and curing cylindrical and beam specimens from representative samples of fresh self-consolidating concrete (SCC) for a construction project.”

- B. Eliminate Section 5.4

- C. Replace Section 5.8 with the following:

“Slump Flow Apparatus--The apparatus for measurement of slump flow shall conform to the requirements of AASHTO T 347”.

- D. Replace Section 8.2 with the following:

“*Air Content* – Determine and record the air content in accordance with [MT 118](#). The concrete used in performing the air content test shall not be used in fabricating test specimens.”

- E. Replace Section 9.2 with the following:

“Casting the Concrete – Place the concrete in the molds using a container large enough to fill each mold in one lift.”

- F. Replace Section 9.2.1 with the following:

“Number of Layers – Make specimens by filling the molds in one lift. Do not rod or vibrate.”

- G. Eliminate Sections 9.2.2 and 9.3

3. Replace Section 11.1 with the following:

Prior to transporting, cure and protect specimens as required in Section 10. Specimens shall not be transported until at least 8 h after final set (See Note 7). For transporting, efforts shall be made to protect the specimens from jarring, extreme changes in temperature, freezing, and moisture loss. Before transporting specimens from the field to the laboratory for testing, place specimens in sturdy boxes surrounded by a suitable cushioning material to prevent damage from jarring. During cold weather, protect the specimens from freezing with suitable insulation material. Prevent moisture loss during transportation by wrapping the specimens in plastic or wet burlap and by surrounding them with wet sand or sawdust or using tight-fitting plastic caps for plastic molds.