



*Florida Department of Transportation*

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SECRETARY

January 20, 2021

**MATERIALS BULLETIN NO. 21-01**

**DCE MEMORANDUM NO. 21-02**

*(FHWA Approved:(01/20/2021)*

**TO: DISTRICT MATERIALS AND RESEARCH ENGINEERS  
DISTRICT CONSTRUCTION ENGINEERS**

**FROM:** Timothy Ruelke P.E., Director, Office of Materials  
Dan L. Hurtado P.E., Director, Office of Construction

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*Timothy J. Ruelke*  
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**COPIES:** Will Watts, Scott Arnold, Ananth Prasad, Chad Thompson, Patrick Upshaw, Jose Armenteros

**SUBJECT: TEST METHOD FOR AIR CONTENT OF FRESHLY MIXED CONCRETE  
BY THE VOLUMETRIC METHOD**

Effective immediately, due to the shortage of isopropyl alcohol, concrete field testing being performed in accordance with ASTM C173 “Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method” may be partially supplemented as follows with language from the 1994 version of the test method.

Section 7.3 Adding Water and Alcohol shall be replaced with:

*7.3 Adding Water*—Attach the top section into position on the bowl, insert the funnel, and add water until it appears in the neck. Remove the funnel (Note 3). Using the rubber syringe, adjust the water level until the bottom of the meniscus is level with the zero mark. Attach and tighten the watertight cap.

If foam is present, adhere to the following procedure as stated in ASTM C173 – 94a:

*7.5 Dispelling Foam*—Remove the cap. Using the syringe, add sufficient isopropyl alcohol, in one calibrated cup increments, to dispel as much of the foam as is practicable. Record the number of calibrated cups of alcohol used.

**MATERIALS BULLETIN NO. 21-01**

**DCE MEMORANDUM NO. 21-02**

Page 2

Add the number of cups of alcohol used to the meter reading to calculate the final air content.

If this modified test method is used, reference this memorandum within the MAC test comments.

This memorandum does not waive any specification requirements but simply allows a temporary option due to the shortage of isopropyl alcohol. It is in effect until **January 1, 2022**. After that date, the current procedure should be followed, or alternative acceptable testing method should be performed to determine the air content of freshly mixed concrete.

Should you have any questions please contact Richard DeLorenzo, 352-955-6667, or Jose Armenteros, 352-955-6666.

TR/ja

This Memo has Expired