Standard Method of Test for

Air Content of Freshly Mixed Concrete by the Pressure Method

AASHTO Designation: T 152-16
Release: Group 1 (April 2016)
ASTM Designation: C231/C231M-10

AASHTO

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1. SCOPE

1.1. This method covers determination of the air content of freshly mixed concrete from observation of the change in volume of concrete with a change in pressure.

1.2. This method is intended for use with concretes and mortars made with relatively dense aggregates for which the aggregate correction factor can be satisfactorily determined by the technique described in Section 7. It is not applicable to concretes made with lightweight aggregates, air-cooled blast-furnace slag, or aggregates of high porosity. In these cases, T 196M/T 196 should be used. This test method is also not applicable to nonplastic concrete such as is commonly used in the manufacture of pipe and concrete masonry units.

1.3. The text of this standard references notes and footnotes that provide explanatory information. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements for this standard.

1.4. The values stated in inch-pound units are to be regarded as the standard.

1.5. *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

Warning—Fresh hydraulic cementitious mixtures are caustic and may cause chemical burns to skin and tissue upon prolonged exposure.

2. REFERENCED DOCUMENTS

2.1. *AASHTO Standards*:

- R 18, Establishing and Implementing a Quality Management System for Construction Materials Testing Laboratories
- R 39, Making and Curing Concrete Test Specimens in the Laboratory
- R 60, Sampling Freshly Mixed Concrete
- R 61, Establishing Requirements for Equipment Calibrations, Standardizations, and Checks
- T 23, Making and Curing Concrete Test Specimens in the Field
- T 119M/T 119, Slump of Hydraulic Cement Concrete
- T 121M/T 121, Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
- T 196M/T 196, Air Content of Freshly Mixed Concrete by the Volumetric Method