
Standard Practice for Sampling and Fabrication of 50-mm (2-in.) Cube Specimens Using Grout (Non-Shrink) or Mortar

AASHTO Designation: R 64-22¹

Technically Revised: 2022

Technical Subcommittee: 3b, Fresh Concrete



**American Association of State Highway and Transportation Officials
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Standard Practice for

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1. SCOPE

- 1.1. This practice covers field sampling and fabrication and initial curing of 50-mm (2-in.) cube specimens of non-shrink grout or mortar materials, or both.
- 1.2. The values stated in either inch-pound or SI units shall be regarded separately as standard. The inch-pound units are shown in parentheses. The values stated might not be exact equivalents; therefore, each system must be used independently of the other.
- Note 1**—"Unit weight" was the previous terminology used to describe the property determined by this practice, which is mass per unit volume.
- 1.3. The text of this practice references notes and footnotes that provide explanatory information. These notes and footnotes (excluding those in tables) shall not be considered as requirements of this practice.
- 1.4. *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.
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2. REFERENCED DOCUMENTS

- 2.1. *AASHTO Standards:*
- M 201, Mixing Rooms, Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the Testing of Hydraulic Cements and Concretes
 - M 339M/M 339, Thermometers Used in the Testing of Construction Materials
 - R 60, Sampling Freshly Mixed Concrete
- 2.2. *ASTM Standards:*
- E1, Standard Specification for ASTM Liquid-in-Glass Thermometers
 - E230/E230M, Standard Specification for Temperature-Electromotive Force (emf) Tables for Standardized Thermocouples
 - E2251, Standard Specification for Liquid-in-Glass ASTM Thermometers with Low-Hazard Precision Liquids
 - E2877, Standard Guide for Digital Contact Thermometers