



Standard Practice for Chemical-Resistant Resin Grouts for Brick or Tile¹

This standard is issued under the fixed designation C723; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This practice provides detailed information on the handling and proper use of chemical-resistant resin grouts for filling joints of chemical-resistant brick or tile such as those covered in Specification C658.

NOTE 1—Resin grouts and mortars are differentiated as follows: Resin grouts are applied to joints, generally $\frac{1}{4}$ in. (6 mm) wide, after the brick or tile are set in place and the setting bed has hardened (grouting or tiler's method). Resin mortars are troweled onto the brick or tile in sufficient quantity to achieve a $\frac{1}{8}$ -in. (3-mm) thick joint after the brick or tile are laid in place (buttering or bricklayer's method). (See Practice C399.)

1.2 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.3 *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.*

2. Referenced Documents

2.1 *ASTM Standards:*²

- C267 Test Methods for Chemical Resistance of Mortars, Grouts, and Monolithic Surfacing and Polymer Concretes
- C398 Practice for Use of Hydraulic Cement Mortars in Chemical-Resistant Masonry
- C399 Practice for Use of Chemical-Resistant Resin Mortars
- C658 Specification for Chemical-Resistant Resin Grouts for Brick or Tile
- C904 Terminology Relating to Chemical-Resistant Nonmetallic Materials

¹ This practice is under the jurisdiction of ASTM Committee C03 on Chemical-Resistant Nonmetallic Materials and is the direct responsibility of Subcommittee C03.02 on Monolithics, Grouts and Polymer Concretes.

Current edition approved Aug. 1, 2012. Published September 2012. Originally approved in 1972. Last previous edition approved in 2008 as C723 – 98 (2008). DOI: 10.1520/C0723-98R12.

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For Annual Book of ASTM Standards volume information, refer to the standard's Document Summary page on the ASTM website.

3. Terminology

3.1 *Definitions*—For definitions of terms used in this practice, see Terminology C904.

4. Storage

4.1 When stated on the package, the manufacturer's recommendations should be followed. In all instances, storage should be in a dry place with containers tightly closed and away from open flames. Powder or resin that has become contaminated should not be used.

5. Apparatus

5.1 For hand mixing, use clean nonabsorbent pails or mortar boxes. Paddles, trowels, or spatulas are suggested mixing tools.

5.2 For power mixing, use suitable size mixing equipment, such as that shown in Fig. 1. Operate at speeds so as to prevent air entrapment.

6. Procedure

6.1 *Mixing:*

6.1.1 Condition and mix the grout in accordance with the manufacturer's specification. Mixed grout should be of uniform, smooth consistency, free of lumps, with as little entrapped air as possible. Clean equipment between batches to prevent buildup of partially set grout.

6.1.2 For hand mixing, measure the liquid component(s) into the mixing container, add the powder slowly, and mix thoroughly.

6.1.3 For power mixing, measure the liquid component(s) into the mixing container, add the powder slowly and mix thoroughly to ensure a uniform mix. Avoid excessive air entrapment. Follow the recommendations of 5.2.

6.1.4 Vary the batch sizes according to temperature. In hot weather, reduce batch sizes; in cold weather, batch sizes may be increased.

6.1.5 In hot weather, the liquid component(s) of the grout may be cooled by partially immersing the container in an ice bath to extend the working life. Take care to ensure that the components are not contaminated with ice or water. Refrigeration may be used.

6.2 *Handling:*