



Designation: C 441 – 02a

Standard Test Method for Effectiveness of Mineral Admixtures Pozzolans or Ground Blast-Furnace Slag in Preventing Excessive Expansion of Concrete Due to the Alkali-Silica Reaction¹

This standard is issued under the fixed designation C 441; 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 test method covers the determination of the effectiveness of ~~mineral admixtures~~ pozzolans or slag in preventing the excessive expansion caused by reaction between aggregates and alkalis in portland cement mixtures. The evaluation is based on the expansion developed in mortar bars by a combination of portland cement and a ~~mineral admixture~~ pozzolan or slag, made with reactive aggregates (Pyrex glass), during storage under prescribed conditions of test.

1.2 *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:

C 125 Terminology Relating to Concrete and Concrete Aggregates²

¹ This test method is under the jurisdiction of ASTM Committee C09 on Concrete and Concrete Aggregates and is the direct responsibility of Subcommittee C09.26 on Chemical Reactions .

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