Designation: ~~C1190 – 95 (Reapproved 2010)~~ C1190 – 18

Standard Practice for Location of Test Specimens from Magnesia-Carbon and Impregnated Burned Basic Brick[1]

This standard is issued under the fixed designation C1190; 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 covers a procedure for preparing test specimens from magnesia-carbon and impregnated burned basic brick. This practice generally concerns preparation of test specimens from brick greater than 13 in. (33 cm) in length. These brick are mainly manufactured for use in electric arc furnaces and basic oxygen furnaces.

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~~ safety, health, and ~~health~~environmental practices and determine the applicability of regulatory limitations prior to use.*

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

C133 Test Methods for Cold Crushing Strength and Modulus of Rupture of Refractories

C607 Practice for Coking Large Shapes of Carbon-Bearing Materials

C830 Test Methods for Apparent Porosity, Liquid Absorption, Apparent Specific Gravity, and Bulk Density of Refractory Shapes by Vacuum Pressure

C831 Test Methods for Residual Carbon, Apparent Residual Carbon, and Apparent Carbon Yield in Coked Carbon-Containing Brick and Shapes

C1099 Test Method for Modulus of Rupture of Carbon-Containing Refractory Materials at Elevated Temperatures

3. Summary of Practice

3.1 This practice defines a procedure for obtaining samples from carbon-containing basic brick. These samples can be used to characterize the product for the following physical properties: hot modulus of rupture (MOR), as-received porosity, coked porosity, ignited porosity, carbon properties, coked modulus of rupture, and thermal expansion.

3.2 This practice does not specify specific sample sizes. For specific sample sizes, the particular ASTM test of interest should be consulted.

4. Significance and Use

4.1 This practice defines a procedure that ensures reasonably consistent preparation of specimens for product testing and evaluation.

4.2 This practice can be used in the laboratories of producers, users, and general interest parties for research and development or quality control work. It is particularly useful for interlaboratory comparisons on products, for repetitive evaluations or comparisons of products or product quality, and in specifying a uniform preparation practice for specimens for acceptance testing.

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[1] This practice is under the jurisdiction of ASTM Committee C08 on Refractories and is the direct responsibility of Subcommittee C08.92_The Joseph E. Kopanda Subcommittee for Editorial, Terminology, and Classification.

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[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.