

Designation: C909 – 93 (Reapproved 2005)

Standard Practice for Dimensions of a Modular Series of Refractory Brick and Shapes¹

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1. Scope

1.1 This practice covers the dimensions for rectangular and tapered brick in common usage in the United States.

1.2 The dimensions are modular based on 38 mm as the basic module as described in Practice C861.

2. Referenced Documents

2.1 *ASTM Standards:*² C861 Practice for Determining Metric Dimensions of Stan-

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.

dard Series Refractory Brick and Shapes

IEEE/ASTM SI 10 American National Standard for Use of the International System of Units (SI): The Modern Metric System

3. Significance and Use

3.1 The dimensions listed in this practice represent the dimensions of rectangular and tapered refractory shapes manufactured and used in the United States.

3.2 The modular concept of dimensions permits a versatile arrangement of bonding during the construction of masonry units.

4. Standard Dimensions

4.1 Table 1 lists the standard nominal dimensions for straight, split, soap, arch, wedge, and key brick.

4.2 Table 2 lists the standard nominal dimensions for key brick for oxygen steelmaking furnaces.

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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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TABLE 1 Standard Dimensions, mm

Note—It is recognized there are brick sizes, designated by the International Standards Organization, whose dimensions closely approximate some of the shapes shown in Table 1.

Name	А	В	Β′	С	C′	Name	А	В	B′	С	C′
B A											
Straight 64mm	228 228 228 228	114 152 171 228		64 64 64 64			228 228 228 228	114 152 171 228		76 76 76 76	
	304	114		64		Straight 76 mm	304 304	114 152		76 76	
	342 342	114 152		64 64			342 342	114 152		76 76	
Split						Split	228 228 228 228	114 114 114 114		51 38 32 25	
Soap 64 mm	228 228	57 89	and	64 64	le it	Soap 76 mm	228	57		76	
Arch 64 mm	228 228 228	114 114 114		64 64 64	54 44 25		228 228 228 228	114 114 114 114		76 76 76 76	70 64 51 25
	228 228	171 171		64 64	57 44		228 228 228 228	228 228 228 228		776 76 76 76	73 70 64 51
	228 228 228	228 228 228		64 64 64	57 48 38		304 304 304	114 114 114		67 76 76	70 64 51
	304 304 304	114 114 114		64 64 64	54 44 25		342 342 342 342	114 114 114 114		76 76 76 76	70 64 51 25
	342 342 342	114 114 114		64 64 64	54 44 25		342 342 342	152 152 152		76 76 76	70 64 51