



Designation: C909 – 18 (Reapproved 2022)

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

This standard is issued under the fixed designation C909; 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 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.

1.3 *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

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.

C861 Practice for Determining Metric Dimensions of Standard Series Refractory Brick and Shapes
IEEE/ASTM SI 10 American National Standard for Metric Practice

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.

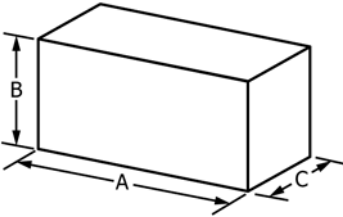
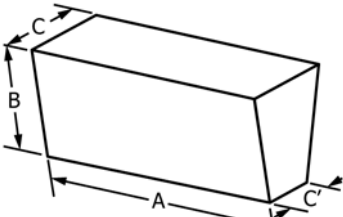
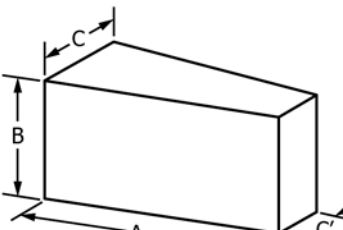
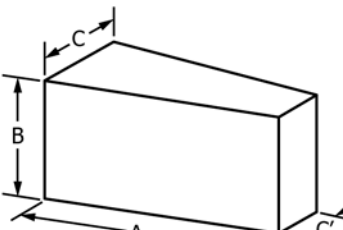
4. Standard Dimensions

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.

TABLE 1 Standard Dimensions, mm

NOTE 1—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	A	B	B'	C	C'	Name	A	B	B'	C	C'	
 <p>Straight 64mm</p>	228	114		64		Straight 76 mm	228	114		76		
	228	152		64			228	152		76		
	228	171		64			228	171		76		
	228	228		64			228	228		76		
	304	114		64			304	114		76		
	342			64			304	152		76		
	342	114		64			342	114		76		
				64							76	
			152		64			342	152		76	
	Split							Split	228	114		51
							228	114		38		
							228	114		32		
							228	114		25		
 <p>Arch 64 mm</p>	228	57		64		Soap 76 mm	228	57		76		
	228	89		64			228	89		76		
	228	114		64	54		228	114		76	70	
	228	114		64	44		228	114		76	64	
	228	114		64	25		228	114		76	51	
				64			228	114		76	25	
	228	171		64	57		228	228		76	73	
	228	171		64	44		228	228		76	70	
				64			228	228		76	64	
				64			228	228		76	51	
 <p>Wedge 64 mm</p>	228	228		64	57	Wedge 76 mm	304	114		67	70	
	228	228		64	48		304	114		76	64	
	228	228		64	38		304	114		76	51	
	304	114		64	54		342	114		76	70	
	304	114		64	44		342	114		76	64	
	304	114		64	25		342	114		76	51	
				64			342	114		76	25	
	342	114		64	54		342	152		76	70	
	342	114		64	44		342	152		76	64	
	342	114		64	25		342	152		76	51	
 <p>Wedge 64 mm</p>	228	114		64	57	Wedge 76 mm	228	114		76	73	
	228	114		64	48		228	114		76	70	
	228	114		64	38		228	114		76	64	
				64			228	114		76	51	
	228	171		64	57		228	171		76	73	
	228	171		64	48		228	171		76	70	
	228	171		64	38		228	171		76	64	
				64			228	171		76	51	
				64			304	114		76	73	
				64			304	114		76	70	
			64		304	114		76	64			
			64		304	114		76	51			
			64		342	114		76	73			
			64		342	114		76	70			
			64		342	114		76	64			
			64		342	114		76	51			
342	114		64	48	342	152		76	73			
342	114		64	38	342	152		76	70			
			64		342	152		76	64			
			64		342	152		76	51			