



Designation: C 909 – 93 (Reapproved 2000)

# Standard Practice for Dimensions of a Modular Series of Refractory Brick and Shapes<sup>1</sup>

This standard is issued under the fixed designation C 909; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

## 1. Scope

1.1 This practice lists 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 C 861.

## 2. Referenced Documents

2.1 *ASTM Standards:*

C 861 Practice for Determining Metric Dimensions of Standard Series Refractory Brick and Shapes<sup>2</sup>

E 380 Practice for Use of the International System of Units

<sup>1</sup> This practice is under the jurisdiction of ASTM Committee C08 on Refractories and is the direct responsibility of Subcommittee C08.12 on Specifications, Classifications, and Dimensions.

Current edition approved Dec. 15, 1993. Published February 1994. Originally published as C 909 – 79. Last previous edition C 909 – 84 (1989) $\epsilon^1$ .

<sup>2</sup> *Annual Book of ASTM Standards*, Vol 15.01.

(SI) (The Modernized Metric System)<sup>3</sup>

## 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

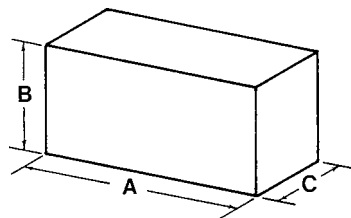
4.1 **Table 1** lists the standard nominal dimensions for straight, split, soap, arch, wedge, and key brick.

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

<sup>3</sup> *Annual Book of ASTM Standards*, Vol 14.02.

TABLE 1 Standard Dimensions, mm

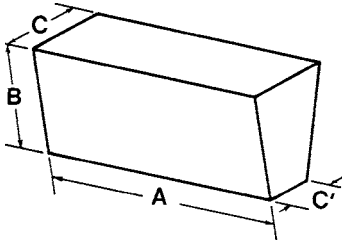
NOTE 1—It is recognized there are brick sizes, designated by the International Standards Organization, whose dimensions closely approximate some of the shapes shown in **Table 1**.



Name	A	B	B'	C	C'	Name	A	B	B'	C	C'
Straight 64mm	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	
							304	152		76	
	342						342	114		76	
	342	114		64			342	152		76	
		152		64							

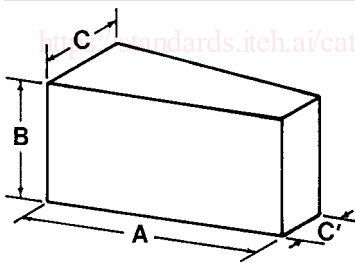
TABLE 1 Continued

Name	A	B	B'	C	C'	Name	A	B	B'	C	C'	
Split						Split	228	114		51		
							228	114			38	
							228	114			32	
							228	114			25	
Soap 64 mm	228	57		64		Soap 76 mm	228	57		76		
	228	89		64								



Arch 64 mm

228	114		64	54	228	114		76	70
228	114		64	25	228	114		76	51
228	171		64	57	228	228		776	73
228	171		64	44	228	228		76	64
228	228		64	57	304	114		67	70
228	228		64	38	304	114		76	51
304	114		64	44	342	114		76	64
304	114		64	25	342	114		76	25
342	114		64	44	342	152		76	64
342	114		64	25	342	152		76	51



Wedge 64 mm

228	114		64	57	228	114		76	73
228	114		64	38	228	114		76	64
228	171		64	57	228	171		76	73
228	171		64	38	228	171		76	64
304	114		64	57	304	114		76	73
304	114		64	48	304	114		76	64
304	114		64	25	342	114		76	73
342	114		64	44	342	114		76	64
342	114		64	25	342	152		76	51

Wedge  
76 mm