



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 C 861.

2. Referenced Documents

2.1 *ASTM Standards*:²

C 861 Practice for Determining Metric Dimensions of Stan-

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.

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.

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.

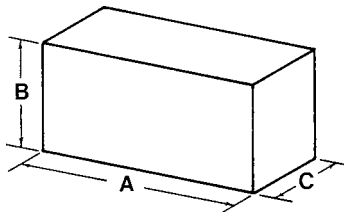

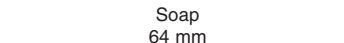
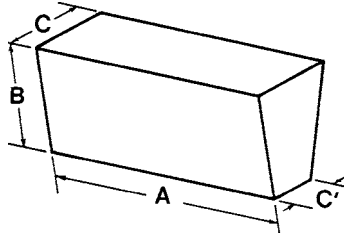
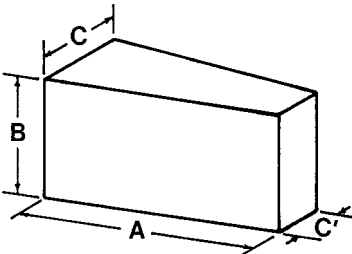
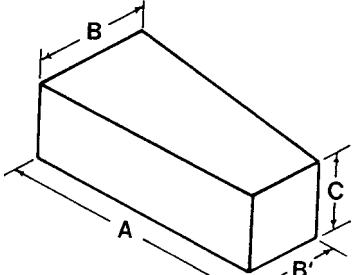
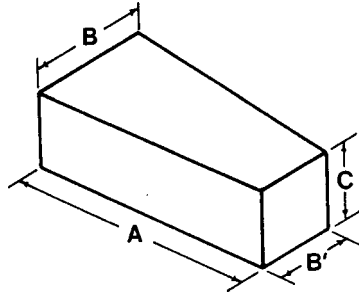
Name	A	B	B'	C	C'	Name	A	B	B'	C	C'	
												
Straight 64mm	228	114		64		Straight 76 mm	228	114		76		
	228	152		64			228	152		76		
	228	171		64			228	171		76		
	228	228		64			228	228		76		
	304	114		64			304	114		76		
	342			64			342	114		76		
	342	114		64			342	114		76		
		152		64			342	152		76		
												
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	44		228	114		76	64	
	228	114		64	25		228	114		76	51	
							228	114		76	25	

TABLE 1 *Continued*

Name	A	B	B'	C	C'	Name	A	B	B'	C	C'
											
Wedge 64 mm	228	114		64	57		228	114		76	73
	228	114		64	48		228	114		76	70
	228	114		64	38		228	114		76	64
							228	114		76	51
	228	171		64	57	Wedge 76 mm	228	171		76	73
	228	171		64	48		228	171		76	70
	228	171		64	38		228	171		76	64
							228	171		76	51
							304	114		76	73
							304	114		76	70
							304	114		76	64
							304	114		76	51
						342	114		76	73	
						342	114		76	70	
						342	114		76	64	
						342	114		76	51	
						342	152		76	73	
342	114		64	48		342	152		76	70	
342	114		64	38		342	152		76	64	
						342	152		76	51	
											
Key 64 mm	228	114	102	64			228	114	102	76	
	228	114	89	64			228	114	89	76	
	228	114	76	64			228	114	76	76	
	228	114	57	64			228	114	57	76	
							228 ^A	145	130	76	
							228 ^A	150	144	76	
	228	152	137	64		Key 76 mm	228	152	137	76	
	228	152	122	64			228	152	122	76	
	228	152	76	64			228	152	76	76	
							304	152	143	76	
							304	152	140	76	
							304	152	127	76	
							304	152	114	76	
							342 ^A	152	144	76	
							342 ^A	152	130	76	
							342	152	127	76	
	342	152	127	64		342	152	111	76		
	342	152	111	64		342	152	111	76		
	342	152	76	64		342	152	76	76		

^AAll-key blast furnace lining shapes.

TABLE 2 Standard Brick for Oxygen Steelmaking Furnaces, mm



	A	B	B'	C
	380	152	152	76
	380	152	140	76
	380	152	127	76
	380	152	102	76
	456	152	152	76
	456	152	140	76
	456	152	127	76
	456	152	102	76
	532	152	152	76
	532	152	140	76
	532	152	127	76
	532	152	102	76
	608	152	152	76
	608	152	140	76
	608	152	127	76
	608	152	102	76
	648	152	152	76
	648	152	140	76
	684	152	127	76
	684	152	102	76
	760	152	152	76
	760	152	140	76
	760	152	127	76
	760	152	102	76

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