Australian Standard™

Refractory bricks and shapes

Part 2: Insulating

Standards Australia

This Australian Standard was prepared by Committee MN-007, Refractories and Refractory Materials. It was approved on behalf of the Council of Standards Australia on 14 March 2003 and published on 25 March 2003.

The following are represented on Committee MN-007:

Australian Ceramic Society

Australasian Institute of Mining and Metallurgy

Australian Aluminium Council

Bureau of Steel Manufacturers of Australia

CSIRO—Manufacturing and Infrastructure Technology

Institute of Refractories Engineers

Refractories Manufacturers Association of Australia

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PREFACE

This Standard was prepared by Standards Australia Committee MN-007, Refractories and Refractory Materials to supersede AS 1617.2—1993.

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1 SCOPE

This Standard specifies requirements for machine-made insulating refractory bricks produced from clays, diatomaceous earth, exfoliated vermiculite, expanded fireclay grog, bubble alumina, perlite or other suitable materials.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS	
1618	Dimensions and preferred sizes for refractory bricks
1774	Refractories and refractory materials—Physical test methods
1774.5	Method 5: The determination of density, porosity and water absorption
1774.13	Method 13: Permanent dimensional change
2497	Procedures for acceptance testing of refractory products
2497.1	Part 1: Batch procedure
2780	Refractories and refractory materials—Glossary of terms

3 DEFINITIONS

For the purpose of this Standard, the definitions given in AS 2780 apply.

4 CLASSIFICATION

Shaped insulating refractory products are classified by groups in accordance with the following criteria:

(a) The temperature at which the permanent linear change in dimensions, determined in accordance with AS 1774.13, is 2% or less (see Table 1).

(b) The bulk density, determined in accordance with AS 1774.5 and rounded to two decimal places, is considered as a distinguishing property to differentiate a low-density shape. Products may be classified as belonging to Class L as given in Table 2.

5 DESIGNATION OF A SHAPED INSULATING PRODUCT

A shaped insulating product shall be designated by the group (see Table 1) to which it belongs and, where applicable, the fact that it belongs to Class L and an indication of its bulk density.

Examples

125	0.80
140	1.20
085L	0.50
140L	0.80