

Australian Standard™

Refractory bricks and shapes

Part 5: Magnesite, chrome

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PREFACE

This Standard was prepared by Standards Australia Committee MN-007, Refractories and Refractory Materials to supersede AS 1617.5—1993.

This Standard is based on ASTM C455-84, *Classification of chrome brick, chrome-magnesite brick, magnesite-chrome brick, and magnesite brick*, but has been extensively modified on the basis of additional information obtained from a survey of Australian refractories and available raw materials.

This Standard is aligned with, and a companion Standard to, AS 1617.3, *Refractory bricks and shapes, Part 3: High alumina*, and AS 1617.4, *Refractory bricks and shapes, Part 4: Silica*.

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STANDARDS AUSTRALIA

Australian Standard

Refractory bricks and shapes

Part 5: Magnesite, chrome

1 SCOPE

This Standard specifies requirements for machine-made, basic refractory bricks.

This Standard deals with—

- (a) classification in terms of composition and type of bonding;
- (b) dimensional tolerances;
- (c) texture and surface appearance; and
- (d) permanent dimensional change after heating.

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 |
| 1774.13 | Method 13: Permanent dimensional change |
| 1774.30 | Method 30: Drying and firing schedules |
| 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 MATERIAL

Bricks may be produced from dead burned magnesite, electrofused magnesia, chrome ore, magnesia-rich spinels or mixtures of the above.

5 CLASSIFICATION

5.1 Chemical composition

Bricks shall be classified according to their chemical composition in accordance with Clause 4 and the following:

- (a) *Magnesite brick*—Having a magnesia content of not less than 80 percent.
- (b) *Magnesite-chrome brick*—having a magnesia content of not less than 55 percent but less than 80 percent.
- (c) *Chrome-magnesite brick*—having a magnesia content of not less than 25 percent but less than 55 percent.