

Australian Standard™

**Prepared unshaped refractory materials**

**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 6 March 2006.  
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STANDARDS AUSTRALIA

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RECONFIRMATION

OF

AS 4045.2—2006

Prepared unshaped refractory materials  
Part 2: Insulating

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Technical Committee MN-007 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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## PREFACE

This Standard was prepared by the Standards Australia Committee MN-007, Refractories and Refractory Materials, to supersede AS 4045.2—1995, *Prepared unshaped refractory materials, Part 2: Insulating*.

Part 1 of this Standard is a classification of dense materials.

The objective of this Standard is to provide manufacturers and users of refractories with a classification of insulating unshaped materials.

This revision has been editorially updated into current Standards Australia format.

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## STANDARDS AUSTRALIA

**Australian Standard**  
**Prepared unshaped refractory materials****Part 2: Insulating****1 SCOPE**

This Standard provides a classification and designation of prepared unshaped insulating refractory materials produced from chamotte, 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

1152 Specification for test sieves

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

2780 Refractories and refractory materials—Glossary of terms

**3 DEFINITIONS**

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

**3.1 Granular size**

The mesh width of the finest sieve (complying with AS 1152) through which at least 95% by mass of the material passes.

**3.2 Hydraulic bond**

A bond that causes setting and hydraulic hardening at ambient temperature.

**3.3 Insulating refractory castables**

Mixtures of insulating refractory aggregate and bonding agents.

**3.4 Insulating refractory gunning materials**

Mixtures of insulating refractory aggregate and bonding agents, specially formulated for placing by pneumatic or mechanical projection.

**3.5 Organic bond**

A bond achieved by the addition of an organic material having binding or hardening characteristics.

NOTE: When several bonds are used conjointly, the bond is designated according to the nature of the bond that plays the principal part during the hardening.