Australian Standard™

AS 1774.22

Refractories and refractory materials—Physical test methods

Method 22: Refractory mortar—Test methods

PREFACE

This Standard was prepared by the Standards Australia Committee MN/7, Refractories and Refractory Materials as a revision of AS 1774.22—1985, *Methods for physical testing of refractories and refractory materials*, Method 22: *Bonding strength of refractory mortar*.

In the preparation of this Standard cognizance was taken of BS 1902.11:1990 *Methods of testing refractory materials*, Part 11: *Refractory mortars and putties* and GB 5024.1—85 *Test methods for refractory mortars*.

The objective of this revision is to provide a suite of tests for the evaluation of refractory mortars.

CONTENTS

Page

Standards Australia

Page

METHOD

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard sets out methods for the preparation and testing of specimens of refractory mortars for determining a range of properties.

1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS		
1774	Refractories and refractory materials—Physical test methods	
1774.3	Method 3:	Determination of cold modulus of rupture
1774.10	Method 10:	Pyrometric cone equivalent (refractoriness)
1774.19	Method 19:	The determination of sieve analysis and water content
1774.30	Method 30:	Drying and firing schedules
2243	Safety in laboratories (series)	
2701	Methods of sampling and testing mortar for masonry constructions	
2701.7	Part 7:	Method for determination of water retention
2780	Refractories and refractory materials—Glossary of terms	

1.3 DEFINITIONS

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

1.4 SAFETY

This Standard may involve hazardous materials, operations, and equipment. This Standard does not purport to address the safety problems associated with its use. It is the responsibility of the user of this Standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

Reference should be made to relevant parts of AS 2243.

1.5 GENERAL APPARATUS

1.5.1 Balance

A weighing device capable of weighing at least 5 kg to the nearest 10 g.

1.5.2 Drying oven

A fan-forced, ventilated oven capable of maintaining a temperature of 110 ±5°C.

1.5.3 Mixer

A planetary or paddle mixer having the casing and blades constructed of a material that is inert to the materials being mixed.

1.5.4 Spacing rods

Spacing rods which are made of corrosion resistant metal, 2.00 ±0.05 mm in thickness, and of appropriate length.