

# Australian Standard™

## Refractories and refractory materials—Physical test methods

### Method 4.5: Preparation of test pieces—Gunning refractories

AS 1774.4.5

#### SECTION 1 SCOPE AND GENERAL

##### 1.1 SCOPE

This Standard specifies the procedures for the preparation of test pieces from refractory materials by dry and wet gunning at ambient temperatures.

NOTE: The values obtained from test pieces prepared using this method may not correspond with those obtained from test pieces of the same material prepared at a gunning installation site.

This Standard does not apply to plastic gunning mixes.

##### 1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

- |          |  |
|----------|--|
| 1774     | Refractories and refractory materials—Physical test methods  |
| 1774.4.1 | Method 4.1: Preparation of test pieces—Castable refractories |
| 2243     | Safety in laboratories (series)                              |
| 2780     | Refractories and refractory materials—Glossary of terms      |
| 4433     | Guide to the sampling of particulate materials               |
| 4433.2   | Part 2: Preparation of samples                               |

##### 1.3 DEFINITIONS

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

###### 1.3.1 Activator

A chemical solution added to the refractory at the gunning nozzle which causes the refractory to set, stiffen or coagulate.

###### 1.3.2 Dry gun assembly

An assembly essentially comprising a chamber into which the refractory is added together with a mechanism that controls the flow from the unit. Depending on the type used, the gun may be open at the top, or be a closed pressurized unit.

###### 1.3.3 Plastic gunning mix

A plastic refractory supplied ready for use for ramming and capable of being installed with specialized gunning equipment.