

STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 4489.4.1—1997

Test methods for limes and limestones

Method 4.1: Soundness—Pat

RECONFIRMATION NOTICE

Major stakeholders of this publication have been consulted and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 03 June 2016.

NOTES

Test methods for limes and limestones

Method 4.1: Soundness—Pat

1 SCOPE This Standard sets out the method for determining the soundness of pats for popping, pitting and expansion cracks that form in lime putty and finished lime.

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS	
2592	Gypsum plaster for building purposes
4489	Test methods for limes and limestones
4489.4.3	Soundness—Autoclave

3 PRINCIPLE Pats are prepared from hydrated lime, water and plaster of Paris. After drying and then steaming at low pressure, the pats are inspected visually for popping, pitting and expansion cracks.

4 MATERIALS The plaster of Paris used in the preparation of the pats shall comply with the appropriate requirements of AS 2592, except that it shall pass a 180 µm sieve.

5 APPARATUS The following apparatus is required:

- (a) Balance, accurate to 0.03 g.
- (b) Beaker or bowl, of minimum 1 L capacity.
- (c) Three ring moulds (100 mm internal diameter, 5 mm deep, an annular thickness of at least 5 mm, and having an internal taper of about 5 degrees), each with a non-porous base plate about 140 mm square (6 mm wire reinforced glass is suitable for the base plate).
- (d) Petroleum jelly.
- (e) A well-ventilated drying oven controlled at $105 \pm 5^\circ\text{C}$.
- (f) Spatula, 25 mm wide blade.
- (g) Mixer, mechanical, as per AS 4489.4.3.
- (h) Trowel, of the type shown in Figure 1.
- (i) Laboratory, of temperature able to be maintained at $23 \pm 2^\circ\text{C}$.
- (j) Autoclave, sterilizing type, of a working pressure of 105 kPa which will result in an operating temperature of approximately 105°C .

NOTE: A LABEC Autoclave, model AA13 (Automatic), single phase 240 V, 50 Hz overall dimensions 650 mm × 620 mm × 1150 mm, weight 125 kg, Safety valve 150 kPa, overall heat rating 3600 W, supplied by Australian Laboratory Equipment has been found to be suitable. An alternative autoclave may be used.

All materials shall be at laboratory temperature prior to test.