

Australian Standard[®]

Methods of testing sheet roof and wall cladding

Method 4: Resistance to impact (sandbag)— Sheet roof materials

AS 4040.4—2006

1 SCOPE

This Standard sets out a method for determining the resistance to impact of sheet roof materials. The test is intended to simulate the accidental falling of a person onto a plastic building sheet incorporated into a roof structure.

2 REFERENCED DOCUMENT

The following documents are referred to in this Standard:

AS

1562 Design and installation of sheet roof and wall cladding

1562.3 Part 3: Plastic

3567 Textiles—Cloth, duck—Cotton and polyester/cotton

3 PRINCIPLE

A sandbag is dropped from a height of 2.5 m onto a supported test specimen of building sheet to determine its resistance to impact.

4 APPARATUS

4.1 Sandbag

A bag made from polyester/cotton core-spun duck complying with the requirements for Grade CS 420 (420 g/m²) of AS 3567.

The sandbag shall have the following properties:

- (a) Cylindrical shape of diameter 300 ±50 mm and height 700 ±50 mm with stitching on the inside.
- (b) One end stitched to a circular base and the open end fitted with a hem and cord so that it can be drawn closed.
- (c) Filled with dry sand to provide a mass of 25 ±0.2 kg.
- (d) Rope attached to the top.

4.2 Pulley

A pulley attached to a suitable support, so that the bag may be raised 2.5 ±0.01 m above the test specimen, using a rope to which the cord of the sandbag is tied.

4.3 Measuring stick

A measuring stick of 2.5 ±0.01 m, to check the height of drop from the top of the test specimen to the bottom of the sandbag.