

# Australian Standard®

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## Methods of testing roof tiles

### Method 1: Determination of distortion

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#### METHOD

**1 SCOPE** This Standard specifies the selection of tiles for testing and sets out the method for determining the distortion of the tile.

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

AS  
4046 Methods of testing roof tiles  
4046.0 Part 0: Introduction and list of methods

#### 3 APPARATUS

**3.1 Support** An array of four battens, fixed to supports inclined at approximately 45° to the horizontal and at a spacing to suit the tiles to be tested (see Figure 1).

**3.2 Reference tiles** A set of ten tiles of the same type as the test specimen, manufactured to the tile manufacturer's specifications and certified to be free of distortion.

NOTE: These master tiles may be made from some other more durable material.

**4 TEST SPECIMENS** Twelve tiles shall be selected at random from an identifiable lot (see AS 4046.0) and each shall be individually marked.

**5 PROCEDURE** The procedure for each of the 12 tiles is as follows:

- (a) Position the test stand to permit easy fixing and measurement of the tiles.
- (b) Fix the first course using four reference tiles.
- (c) Fix the second course using three tiles with the test specimen in the centre and a reference tile on each side.
- (d) Fix the third course using four reference tiles.
- (e) Measure, to the nearest millimetre, any gap between the test specimen and the adjacent reference tiles (i.e. above, below and to the side) and record the results.
- (f) Repeat Steps (c) to (e) for the remaining eleven tiles.
- (g) Where appropriate, repeat Steps (b) to (f) for the alternative bond (i.e. broken or straight bond).

**6 REPORT** The following information shall be reported:

- (a) Details of the lot from which the tiles were selected.
- (b) The date and location of the test.
- (c) For each test specimen, the maximum gap between the test specimen and the adjacent reference tiles.
- (d) Reference to this Australian Standard, i.e. AS 4046.1.