

REPORT OF LOAD TESTS ON EDP REPLACEMENT FLOOR TILE

Summary No. 0400

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Project

On behalf of the client, EDP Europe Ltd, CERAM Building Technology were requested to undertake point load tests on a Replacement Steel Floor Tile incorporating Double Layered Brushstrip Grommets.



EDP Replacement Floor Tile

Client



EDP Europe Ltd
43 Redhills Rd
South Woodham Ferrers
Chelmsford
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CM3 5UL

Test Method

A total of four load tests were carried out on the test sample.

Test 1 consisted of a load of 4.5kN (~460kg) applied through a 25mm x 25mm indenter directly over one corner of the tile with two adjacent edges of the indenter contiguous with two adjacent edges of the panel. Duration 5 minutes.

Test 2 consisted of a load of 13.5kN (~1375kg) applied through the same indenter and at the same location as in Test 1. Duration 5 minutes.

Test 3 consisted of a load of 1kN (~102kg) applied through a 100mm diameter steel plate located at the geometric centre of the tile. Duration 5 minutes.

Test 4 consisted of a load of 2kN (~204kg) applied through the same indenter and at the same location as in Test 3. Duration 5 minutes.

Test Results

When loaded as detailed in Test 1 above the tile showed no visible signs of damage.

When loaded as detailed in Test 2 above the tile showed no visible signs of damage.

When loaded as detailed in Test 3 above the tile withstood the load without failure. The centre of the tile deflected by approximately 10mm during the loading period.

When loaded as detailed in Test 4 above the tile withstood the load without failure. The centre of the tile deflected by approximately 18mm during the loading period.

Assessment

The EDP Replacement Steel Floor Tile incorporating Double Layered Brushstrip Grommets withstood the test load of 4.5kN (PSA Heavy Grade) with no damage. The sample also withstood a load 13.5kN (PSA Heavy Grade Safety Factor) with no damage. The test sample also withstood a load of 1kN at the centre of the tile (equivalent to the weight of an average adult male) without failure, followed by a load of 2kN (2 times safety factor) at the same point without failure.

Authorised by:

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SUMMARY REPORT