Certificate of Test

No. 2042

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This is to certify that the element of construction described below was tested by the CSIRO Division of Manufacturing and Infrastructure Technology in accordance with Australian Standard 1530, Methods for fire tests on building materials, components and structures, Part 4-2005 on behalf of:

Benex Technologies Pty Ltd Lot 102 Canobolas Road ORANGE NSW

A full description of the test specimen and the complete test results are detailed in the Division's sponsored investigation report numbered FSV 1266.

Product Name: Benex Technologies H60 load-bearing block wall.

Description:

The specimen comprised a single leaf load-bearing block wall 3000-mm high x 3000-mm wide x 200-mm thick. The block wall was built using 600-mm long x 200-mm wide x 200-mm high pressed Benex H60 blocks. The Benex H60 blocks were manufactured from a mixture consisting of predominantly sand, cement and expanded polystyrene. The blocks had two rectangular voids, nominally 225-mm long x 99.5-mm wide at the top of the block and tapering up to 251.5-mm long x 126-mm wide at the bottom of the block, as shown in drawing numbered 1464-13-PT-001, dated 3 May 2007, by Benex Technologies Pty Ltd. The brick was stated to have an average weight of approximately 14 kg.

The blocks were laid up in stretcher bond with nominally 1-mm thick beds and perpends,

using Davco "Dry Bond Off White' thin bed adhesive mortar.

A total load of 224 kN was applied to the specimen for the duration of the test. Details of the wall construction are shown in drawings numbered 1464-13-PT-001 and 1464-13-GA-002, both dated 3 May 2007, by Benex technologies Pty Ltd.

The element of construction described above satisfied the following criteria for fire-resistance for the period stated.

Structural Adequacy

no failure at 241 minutes no failure at 241 minutes

Integrity Insulation

198 minutes

and therefore for the purpose of Building Regulations in Australia, achieved a fire-resistance level (FRL) of 240/240/180. The FRL is applicable for exposure to fire from either direction.

This certificate is provided for general information only and does not comply with the regulatory requirements for evidence of compliance.

Testing Officer:

Chris Wojcik

Date of Test:

3 May 2007.

Issued on the 8th day of June 2007 without alterations or additions.

Garry E Collins

Manager, Fire Testing and Assessments



This laboratory is accredited (Accreditation No. 3632) by the National Association of Testing Authorities, Australia. The tests reported herein have been performed in accordance with its terms of accreditation.



CSIRO Manufacturing & Infrastructure Technology

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