INFRASTRUCTURE TECHNOLOGIES
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Certificate of Test

No. 3219

This is to certify that the element of construction described below was tested by CSIRO Infrastructure Technologies in accordance with Australian Standard 1530, Methods for fire tests on building materials, components and structures, Part 4 Fire-resistance tests of elements of construction, 2014 (Section 3: Walls – Vertical Separating Elements), on behalf of:

James Hardie Australia Pty Ltd
10 Colquhoun Street
Rosehill NSW

A full description of the test specimen and the complete test results are detailed in the Division's report numbered FSV 1980.

Product Name: Load-bearing, concrete core filled Ritek 115XL wall system.

Description: The specimen comprised a reinforced concrete filled wall system measuring 3000-mm high x 3000-mm wide x 116-mm thick. The specimen wall comprised three pre-fabricated permanent formwork panels which were screw fixed together and filled with concrete after assembly. The 1200-mm wide pre-fabricated permanent formwork panels comprised two 6-mm thick fibre cement sheets bonded using industrial strength adhesive to plated aluminium extrusions separated with plastic joiners at nominally 200-mm vertical centres, to form a stud assembly. The studs were equally spaced over the width of the panel at nominally 164-mm centres. The plastic joiners provided a large open aspect for provision of horizontal and vertical reinforcing bars, as shown in drawing numbered 192301.P01.D.00, sheet 2, dated 23 January 2019, by James Hardie Research Pty Limited. The pre-fabricated wall panels were installed vertically and fastened together using 8g x 25-mm long CSK screws at nominally 300-mm vertical centres. The screws were fixed into a 1.2-m thick x 40-mm wide aluminium strip located on the inside of the panel fibre cement sheeting. A maximum vertical joint width of 2-mm was maintained between wall panel facings. The wall assembly was reinforced using N12 reinforcing bars at 400-mm centres, both horizontally and vertically prior to being filled with 32 MPa concrete. The wall specimen was of symmetrical construction. A total load of 400 kN was applied to the specimen for the duration of the test. The load determined by the client, was applied uniformly by a steel platen acting along the top of the wall. Drawings numbered 192301.P01.D.00, sheet 1-3, all dated 23 January 2019, by James Hardie Research Pty Limited is referenced by the sponsor as a complete description of the specimen.

Performance observed in respect of the following AS 1530.4-2014 criteria:

Structural Adequacy	no failure at 241 minutes
Integrity	no failure at 241 minutes
Insulation	199 minutes

and therefore for the purpose of Building Regulations in Australia, achieved a fire-resistance level (FRL) of 240/240/180.

The fire-resistance level of the wall system is applicable when the system is exposed to fire from either direction. For the purposes of AS 1530.4-2014 the results of these fire tests may be used to directly assess fire hazard, but it should be recognized that a single test method will not provide a full assessment of fire hazard under all fire conditions. This certificate is provided for general information only and does not comply with regulatory requirements for evidence of compliance.

Testing Officer: Chris Wojcik Date of Test: 23 January 2019

Issued on the 18th day of February 2019 without alterations or additions.

B. Roddy

Brett Roddy
Manager, Fire Testing and Assessments

This document is issued in accordance with NATA's accreditation requirements.
Accreditation No. 165 – Corporate Site No. 3625
Accredited for compliance with ISO/IEC 17025 - Testing