## **INFRASTRUCTURE TECHNOLOGIES**

www.csiro.au

14 Julius Avenue, North Ryde NSW 2113 PO Box 52, North Ryde NSW 1670, Australia T (02) 9490 5444 • ABN 41 687 119 230



## Certificate of Test

No. 3147

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 4: Floors, roofs and ceilings Horizontal Separating Elements), on behalf of:

> **Tech Coatings NZ Limited** 12 Tokomaru Street Welbourn 4312 New Zealand

A full description of the test specimen and the complete test results are detailed in the Division's report numbered FSH 1920.

Product Name: Timber framed floor/ceiling system with 19-mm thick structural timber plywood flooring, lined with a single layer

of 13-mm thick standard GIB plasterboard, protected with 1040μ of FBL-100 Intumescent paint

Description: The floor/ceiling system measured 4690-mm long x 3000-mm wide x 273-mm thick and comprised 240-mm deep

> x 45-mm thick MSG H3 treated Radiata pine joists and blockings. The floor was lined with 19-mm CCA thick structural plywood and the underside of the floor/ceiling clad with a single layer of 13-mm thick standard GIB plasterboard protected with 1040µ of FBL-100 Intumescent paint. The floor structure comprised 240-mm x 45mm x 4600-mm long MSG H3 treated timber joists, spaced at nominally 400-mm centres. The outside face of the boundary joists were protected with a single layer of 253-mm wide x 13-mm thick Fyreline GIB Plasterboard. The timber floor joists were clad on the unexposed face using 19-mm CCA thick structural plywood sheets nominally 1200-mm wide x 2400-mm wide. The specimen was lined on the exposed face of the floor joists with one layer of 13-mm thick standard GIB Plasterboard, nominally measuring 2400-mm long x 1200-mm wide and 13-mm thick. The exposed face of the plaster ceiling was painted with FBL-100 Intumescent paint - thickness of 1040µ DFT was measured after the final paint application. The floor/ceiling specimen was exposed to the furnace chamber from

the underside. A total load of 2510 kg was applied to the specimen for the duration of the test.

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

Structural Adequacy no failure at 62 minutes Integrity 61 minutes Insulation no failure at 62 minutes Incipient spread of fire 30 minutes

and therefore for the purpose of Building Regulations in Australia, achieved a fire-resistance level (FRL) of 60/60/60. The fireresistance level of the floor system is applicable when the system is exposed to fire from the same side as tested.

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: 31 July 2018

Issued on the 13<sup>th</sup> day of September 2018 without alterations or additions.

**Brett Roddy** 

Manager, Fire Testing and Assessments

"Copyright CSIRO 2018 ©" Copying or alteration of this report without written authorisation from CSIRO is forbidden



B. Rong

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