Certificate of Jest

No. 2231 "Copyright CSIRO 2010©" Copying or alteration of this report without written authorisation from CSIRO is forbidden.

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

Nofire Technologies Pty Ltd 3 Scott Street CAIRNS QLD

A full description of the test specimen and the complete test results are detailed in the Division's sponsored investigation report numbered FSV 1413.

Product Name: Steel framed wall system lined on both sides Dens Armor Plus gypsum board, painted with LP Intumescent Paint.

Description: The specimen consisted of a plasterboard-lined framed wall system of overall nominal dimensions 3000-mm high x 3000-mm wide. The wall consisted of a steel frame lined on both sides with one layer of 12.5-mm thick Dens Armor Plus, Moisture and Mould Resistant gypsum board, painted with LP Intumescent Paint.

The frame consisted of six Studco 76-mm x 0.75-mm BMT lipped studs, a top and bottom Studco 76-mm x 32-mm x 0.75-mm BMT tracks and Studco 76-mm x 0.75 BMT noggin tracks. The studs were spaced at nominal 600-mm centres, and there were three rows of noggings at nominal 1200-mm and 600-mm centres, as shown in photograph 1. The steel frame was faced on both sides with a one layer of 12.5-mm thick Dens Armor Plus, Moisture and Mould Resistant gypsum board, orientated horizontally and vertically as shown in drawings numbered 3234-2 and 3234-3, both dated 20 May 2010, by No-Fire Technologies. Only some of the joints lined up with the noggings. The sheets were nominally 1200-mm wide x 3000-mm long x 12.5-mm thick.

The board sheets were secured with 25-mm x 6g bugle head self-drilling screws at 200-mm centres along the edges, and 300-mm centres within the body of the sheets. The resulting gap of approximately 12-mm between the plasterboard and the specimen frame along the three fixed sides, was sealed flush with the face with Hilti CP 606 sealant. The plasterboard on each external face was painted to a nominal dry film thickness of 635 microns with Nofire LP Intumescent Paint, and allowed to cure before testing. Prior to paint application, the gypsum board surface was prepared with Selleys Primer Speckle, applied with a roller and a trowel to an approximate thickness of 500-600 microns. The intumescent paint was then applied using a roller with 8-mm deep nap.

Structural Adequacy	-	not applicable
Integrity	-	100 minutes
Insulation	-	62 minutes

and therefore for the purpose of Building Regulations in Australia, achieved a fire-resistance level (FRL) of -/90/60. The FRL is applicable for exposure to fire from either side. 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:

20 May 2010.

Issued on the 17<sup>th</sup> day of June 2010 without alterations or additions.

Jorry C Collin

Garry E Collins Manager, Fire Testing and Assessments



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