

# CERTIFICATE

## Material Fire Test Result Summary

**IGNL-7099-04-03C I01 R00**

DATE OF TEST 10.10.2023  
 ISSUE DATE 09.11.2023  
 EXPIRY DATE 08.11.2028

AS 1530.4:2014  
 Fire-resistance tests for elements of construction

**SPONSOR**

**Flame Security International**  
 Building F10, Level 5, University of New South Wales  
 Kensington, NSW 2052

**TEST BODY**

**Ignis Labs Pty Ltd**  
 ABN 36 620 256 617  
 3 Cooper Place  
 Queanbeyan NSW 2620  
 Australia  
 www.ignislabs.com.au  
 (02) 6111 2909  
 Test body is the test location

**Specimen Name**

Steel Beam Penetration with 2 mm Firecoat Exterior Paint

**Specimen Description**

The tested system was a plasterboard wall comprising of steel framing with a steel I beam penetration painted with 2 mm thick FSI external paint.

The test specimen has measured height 995 mm, measured width of 995 mm, and measured thickness of 88 mm. The specimen was sealed into the furnace with Sika Fire 400 sealant applied to both faces. The wall specimen was composed of 2 Layers of 16 mm CSR Fyrecheck plasterboard on each side of a steel frame with AAC Blocks within the steel frame to support the steel I beam penetration. The I beam was 994 mm long and painted with FSI paint. It penetrated the face of the specimen 200 mm from the bottom edge.

The construction and installation of the specimen was undertaken by Ignis Labs at the direction of FSI. Ignis Labs was not involved in the selection of the materials. Ignis Labs was opted to install the wall specimen to the testing furnace.

**Result**

Criteria	Test Result
	Baseline Internal Wall
Structural adequacy	-
Integrity	140 minutes (no failure)
Insulation	135 minutes

**Fire Resistance Level (FRL)**

For the purpose of building regulations in Australia, the Fire Resistance Level (FRL) of the test specimen with the application of Firecoat paint to protect steel beams to a minimum thickness of 2 mm.

**IGNL-7099-04-0C3C – Steel beam with Firecoat paint protection 120/-/-**

**Test Method**

The test specimen was tested in accordance with Australian Standard AS 1530, Method for fire tests on building components and structures, Part 4: Fire-resistance tests for elements of construction (AS 1530.4:2014) with the exception of the measurement of deflection, the measurement of received total heat flux, and without applying a loading system. The furnace had a nominal opening of 1.0 m x 1.0 m for attachment of specimens. The infill parts of the furnace included Bostic fire ban one fire grade mastic.

**Reference Documents**

This certificate is based on the following documents:

- Ignis Labs Test Report IGNL-7099-04-03R I01R00 dated 9 November 2023.

**Note**

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



*Tom Lewis*

**Tom Lewis** | GIEAust  
 Laboratory Engineer

*Benjamin Hughes-Brown*

**Benjamin Hughes-Brown**  
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 Chartered Professional Engineer  
 CPEng, NER (Fire Safety / Mech) 2590091, RPEQ11498, BDC-1875,  
 PRE0000303, DEPO000317, PE0001872  
 MFireSafetv (UWS), BEng (UTS), GradDipBushFire (UWS), DipEngPrac (UTS), DipEng (CIT)

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