

CERTIFICATE

Material Fire Test Certificate

IGNL-4044-07-03C I02 R00

DATE OF TEST 01.06.2020
12.07.2020
ISSUE DATE 17.01.2022
EXPIRY DATE 16.01.2027

3M 48 Series Print Film

SPONSOR
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www.3m.com.au

MANUFACTURER
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TEST BODY
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Test body is the test location



Introduction

Ignis Labs undertook a series of tests of the 3m 40 and 48 Series Print film. The testing was undertaken in accordance with AS ISO 9705:2003 as well as AS/NZS 3837:1998. The group number was determined in accordance with AS 5637.1:2015. This is a short form AS 5637.1:2015 report complying with the reporting requirements set by AS 5637.1:2015.

BCA requirements specify that the Group Number of a wall or ceiling lining shall be determined in accordance with AS 5637.1:2015. Clause 5.3.1 of AS 5637.1:2015 specifies that only materials for which there are correlations between AS/NZS 3837:1998 results and AS ISO 9705:2003 results shall be tested in accordance with AS/NZS 3837:1998 for the purpose of determining a Group Number. Correlation between AS ISO 9705:2003 and AS/NZS 3837:1998 has been undertaken to confirm validation of predictive testing. The base material being the 40 series film has been tested in accordance with AS ISO 9705:2003 and achieved a Group 1 result with a SMOGR_{Arc} of 8.28 m²s⁻² x 1000.

Product Description

The sponsor described the test specimens as a self-adhesive printable film with the nominal composition being polymer blend. The nominal mass per unit area is 110 gsm and the nominal thickness is 0.2 to 0.8mm. The colour of the specimen is white and the end use is signage and graphics. The 3M Graphic Film series 40, in accordance with the manufacturer is not dissimilar to the 48 series.

Ignis Labs was not responsible for the sampling stage. All specimens were sampled by the test sponsor. The test results apply to the specimens as received.

AS 5637.1 Group Number: 1 | SMOGR_{Arc} of 8.28 m²s⁻² x 1000 | ASEA 135.88 m²/kg

Test Method

AS ISO 9705 | The 9705 room was lined with the 3M Graphic Film Series 40 and installed vertically onto the non-combustible wall lining in sheets of 1.2m wide. See test report IGNL-3090-06R I02R00 dated 30.03.2021.

AS/NZS 3837 | Three (3) specimens were tested in accordance with the requirements of AS/NZS 3837. See test report IGNL-4044-07-03C I03R00 dated 14 January 2022.

Observation

The specimens exhibited considerable dimensional changes (shrinkage) over the ceiling and melted along the neutral plane smoke layer. See test report IGNL-3090-06R I02R00 for test images and observations. The specimen did not present an increase level of heat release, flammable conditions or flashover.

Reference Documents

This certificate is based on the following documents:

- IGNL-4044-07-03C I03R00 dated 14 January 2022.
- IGNL-3090-06R I02R00 dated 30.03.2021.

Notes

- The results of this fire test may be used to directly assess fire hazard, but it should be recognised that a single test method will not provide a full assessment of fire hazard under all fire conditions.
- As per Section 9 (m) of AS 5637.1:2015, the determination of the group number was based on the AS ISO 9705:2003 test.
- Clause A5.2(1)(e) of BCA 2019 Amendment 1 allows for evidence of suitability in relation to a report from a professional engineer that certifies that a material, product, form or construction or design fulfils specific requirements of the BCA, sets out the basis on which it is given and the extent to which relevant standards, specifications, rules, codes of practice or other publications have been relied upon to demonstrate it fulfils specific requirements of the BCA.
- This report is provided in accordance with BCA Clause A5.2(1)(e) as a report from a professional engineer. In accordance with BCA Clause A2.2(1)(b) it is demonstrated that the material and testing demonstrates compliance with the requirements of the BCA in accordance with AS 5637.1:2005 in determining the group number.

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