

IGNIS BUSHFIRE ADVISORY NOTE

C-COAT IC-GREY

IGNL-6093-04-01L Issue 01 Revision 00 [2022]

1 Introduction

Ignis Labs undertook pilot testing to establish a Fire Resistance Level for the subject material in accordance with AS 1530.4:2014. Test report IGNL-6093-04-01 dated 01 July 2022.

The intent of this advice is to provide guidance on the application of the C-Coat IC-Grey coating for use within bushfire prone areas.

Based on the tested system, the system achieves a Fire Resistance Level of at least -/30/30. Accordingly, the subject material and tested system is deemed suitable for use in Bushfire Prone Areas of BAL 12.5 to BAL Flame Zone.

2 Test Specimen

The construction of the panel from the unexposed face to the exposed face included the following:

- 9.0 mm fibre cement board. As described by the test sponsor, it is an intumescent coating. It had a measured thickness of 8.03 mm. It is grey in colour.
- 3.0 mm C-Coat NFS insulation. As described by the test sponsor, it is a water-based solution. It had a measured thickness of approximately 5 mm as measured at the edge of the specimen.
- 3.0 mm C-Coat IC Grey. It had a measured thickness of approximately 1 mm as measured at the edge of the specimen.

The layers of the specimen were fixed to the 92 mm wide galvanised steel test frame using 45 mm hex head screws at 200 mm spacings. The C-Coat IC Grey was applied to the C-Coat NFS insulation as a liquid in layers of approximately 1 mm.

For the purpose of building regulations in Australia, the Fire Resistance Level (FRL) of the tested system is as follows.

-/90/30

3 AS 3959 Requirements

AS 3959 establishes the construction requirements of buildings in bushfire prone areas. The standard is primarily concerned with improving the ability of buildings in designated bushfire-prone areas to better withstand attack from bushfire thus giving a measure of protection to the building occupants as well as to the building itself.

It should be borne in mind that all bushfire protection measures cannot guarantee that a building will survive a bushfire event on every occasion. This is substantially due to the degree of vegetation management, construction work quality, the unpredictable nature and behaviour of fire, and extreme weather conditions.

The survivability of buildings is also dependent on a combination of measures such as landscaping, water supplies, access, building design and maintenance.





Clause 3.4 of AS 3959 establishes that the construction requirements specified for a particular BAL shall be acceptable for a lower level.

Clause 9.4.1(c) details the exposed components of external walls shall be as follows, a system with an FRL of -/30/30 when tested from the outside.

According to the above tested system, the C-Coat IC Grey achieves an FRL of at least -/30/30 and therefore has the ability to satisfy application for BAL 12.5 to BAL Flame Zone.

4 Summary

Based on the tested system, the system achieves a Fire Resistance Level of at least -/30/30. Accordingly, the subject material and tested system is deemed suitable for use in Bushfire Prone Areas of BAL 12.5 to BAL Flame Zone.

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