31 January 2024
Date of Issue

IGNIL ADVISORY NOTE

Evaluation No. IGNL-7323-99-01L Issue 01 Revision 02 [2023]

FIRECOAT BUSHFIRE COMPLIANCE

1 Executive Summary

Ignis Labs has been engaged by Firecoat to undertake a review of their external paint for its suitability in bushfire prone areas and its compliance with AS 3959:2018 for BAL 12.5 to BAL 40 and thus compliance with National Construction Code 2022 Volume One Clauses G5P1, G5D1, G5D2 and G5D3 and Volume Two H7D4.

The National Construction Code 2022 Volume One Clauses G5P1, G5D1, G5D2 and G5D3 and Volume Two H7D4 requires compliance with AS 3959:2018.

In accordance with AS 3959:2018, to satisfy the requirements for external wall compliance to BAL 12.5 to BAL 40 testing is to be undertaken in accordance with AS 1530.8.1:2018.

The Firecoat external paint, painted to a nominal thickness of 1 mm dry film and 1.5 mm wet film thickness, satisfies the requirements of AS 3959:2018 for BAL 12 to BAL 40 for wall and suitable applications.

2 Testing and Fire Safety Measures

Clause 3.4 of AS 3959:2018 details that the construction requirements specified for a particular BAL shall be acceptable for a lower level. Firecoat has been tested to BAL 40 requirements in accordance with AS 1530.8.1:2018 by Warringtonfire in their test report FRT220228 Revision R1.0 dated 23 November 2022 with crib class AA.

BAL 12.5 to BAL 40 | Firecoat painted to a nominal thickness of 1.5 mm dry film thickness over a timber substrate (Baltic pine weatherboards, radiata pine, timber species as listed in AS 3959-2018 Appendix E, equivalent or better) will satisfy the requirements of AS 3959:2018 for BAL 12.5 to BAL 40.

3 Conclusion

The Firecoat external paint, painted to a nominal thickness of 1 mm dry film and 1.5 mm wet film thickness, satisfies the requirements of AS 3959:2018 for BAL 12 to BAL 40 for wall and suitable applications. The substrate preparation and application of the paint is to be in accordance with the instructions from Firecoat.

Although the Firecoat has been tested to improve the performance of buildings when subjected to bushfire attack in designated bushfire-prone areas there can be no guarantee that a building will survive a bushfire event on every occasion. This is substantially due to the unpredictable nature and behaviour of fire and extreme weather conditions.

This advisory note serves as a certificate from a professional engineer in accordance with Clause A5G3 (1)(e) of the BCA 2022. Benjamin Hughes-Brown is a Chartered Professional Engineer and Fellow of Engineers Australia with over 15 years of experience in fire safety engineering. Benjamin satisfies the criteria established by BCA Clause A2G1 being a professional engineer. This is a report from a professional engineer.

Benjamin Hughes-Brown | FIEAust CPEng NER APEC Engineer IntPE(Aus)
Chartered Professional Engineer
CPEng, NER (Fire Safety / Mech) 2590091, RPEQ 11498, BDC-1875, PRE0000303, DEP0000317, PE0001872
MFireSafety (UWS), BEng (UTS), GradDipBushFire (UWS), DipEngPrac (UTS), DipEng (CIT)