

IGNIS ADVISORY NOTE

Evaluation No.IGNS-6149 Issue 01 Revision 01 [2018]

Regen StructaClad Bushfire Compliance

1 Introduction

Ignis Solutions has been engaged to evaluate the compliance of the StructaClad wall system and its non-combustible status for use in Bushfire Prone Areas.

This engineering certificate serves as a certificate from professional engineer in accordance with Clause A.2.2 (a)(iii) and 1.2.2 (a)(iii) of the National Construction Code Volume One and Two Building Code of Australia 2016 and Clause A.2.2(a)(v) of the National Construction Code Volume One 2016 Amendment 1.

The StructaClad product is a durable insulated façade system with an embedded insulation of M Grade Expanded Polystyrene core with a 12mm MEGABOARD skin on the exterior. Within the subject development the internal lining of the building is provided with standard grade plasterboard.



2 Building Code of Australia (BCA) Compliance

There are two versions of the BCA reviewed for compliance as part of this advisory note. BCA Volume One and Two 2016 and BCA Volume One 2016 Amendment 1.

The National Construction Code through Volume One Clause G5.1 and Volume Two Part 3.7.4.0 requires that buildings of Class 1 located in a designated bushfire prone area be constructed with AS 3959.



3 AS 3959-2009 Construction of buildings in bushfire-prone areas

AS 3959 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 (until the fire front passes) as well as to the building itself.

AS 3959 sets requirements for external walls and their construction in Bushfire Attack Levels (BAL) from Low to 40.

AS 3959 permits the external wall to be a masonry veneer, concrete or natural stone or non-combustible material. The external element of the StructaClad being the MEGABOARD satisfies this requirement.

The above compliance elements applies to BAL 12.5, 19 and 29. It is important to note that both the BCA and AS 3959 does not require the wall insulation to be tested to fire hazard properties for residential Class 1 buildings.

The following table details the requirement for the exposed components of an external wall.

Clause	Requirement	Status
Section 5	BAL 12.5	
5.4.1 (a)	Non-combustible material	Compliance achieved
Section 6	BAL 19	
6.4.1 (a)	Non-combustible material	Compliance achieved
Section 7	BAL 29	
7.4.1 (a)	Non-combustible material	Compliance achieved

4 Conclusion

Based on the information detailed above, the Regen StructaClad is suitable for use in Bushfire-prone areas of BAL low to 40.

Provided any joints are no greater than 3mm or appropriately sealed, compliance with AS 3959-2009 as well as the National Construction Code of Australia Volumes 1 and 2 2016 and 2016 Amendment 1 can be achieved.

Benjamin Hughes-Brown FIEAust CPEng NER APEC Engineer IntPE(Aus)
Managing Director
Chartered Professional Engineer
CPEng, NER (Fire Safety / Mech) 2590091, RPEQ 11498, BPB-C10-1875, EF-39394
MFireSafety (UWS), BEng (UTS), GradDipBushFire (UWS), DipEngPrac (UTS), DipEng (CIT)