



IGNIS ADVISORY NOTE

Evaluation No.IGNS-5284 Issue 01 Revision 01 [2017]

RESCOM MGO COMPOSITE WALL SYSTEM

I refer to your email dated 28 August 2017 relating to the proposed composite use of the ResCom MgO board with a fire rated plasterboard wall system. It is understood that a -60/60 FRL wall system is required. It has been detailed to Ignis Solutions that the wall system is to be as follows:

- Exterior cladding of 10mm ResCom
- Vapour barrier (to have a flammability index <5)
- 90mm timber stud
- R2.0 Glasswool batt (to be non-combustible)
- 16mm fire rated plasterboard lining internally (based on BGC fire rated plasterboard)

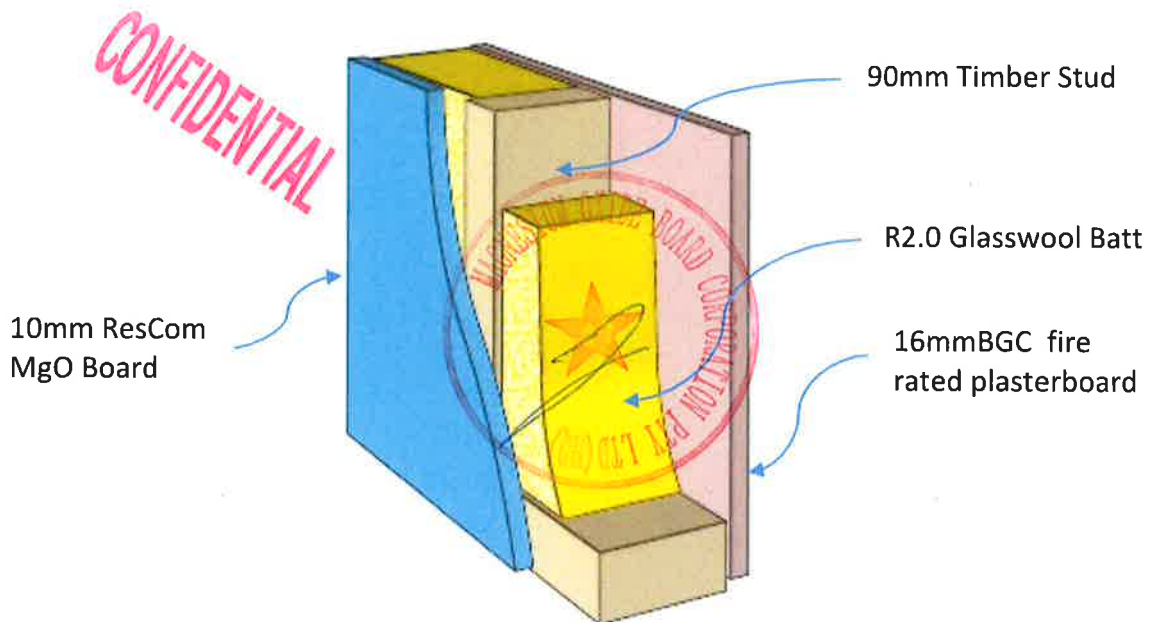
This evaluation report serves as a certificate from professional engineer in accordance with Clause A2.2 (a)(iii) of the National Construction Code Volume One Building Code of Australia 2016 based on the information provided as detailed above.

The ResCom MgO 10mm has been tested with both exterior and interior cladding/lining being the ResCom board by SGS in their test report SHCCM150401181 dated 03 June 2015 based on a 75mm light-gauge steel joists. It is proposed to substitute the internal lining with 13mm fire rated plasterboard.

The 16mm BGC fire rated plasterboard has been tested with both exterior and interior cladding/lining being the plasterboard within the BGC wall system test 2522800.2 by Exova Warringtonfire achieving an 60/60/30 FRL with a stud depth of at least 76mm.

Specification A2.3 of the BCA details requirements for fire-resistance of building elements. Clause 2(b) requires the building element to be identical with a prototype submitted to the standard fire test and Clause 2(c) permits a difference in only minor degree. Clause 2(c) requires the proposed system to be capable of achieving the FRL despite the minor departure from the tested prototype. An image of the proposed system is detailed below.





Based on the equivalent testing and compliance of the two wall systems as well as the enhancement with R2.0 insulation and a 90mm timber stud from the tested system, the substitution of the internal 10mm ResCom MgO Board for 16mm BGC fire rated plasterboard is considered suitable and is likely to maintain the 60/60/60 FRL.

The installation of the wall system is to be in accordance with the ResCom installation manual as well as normal trade practice as established by the Building Code of Australia and associated Australian Standards.


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