

Alpolic/FR Fire Rating meets the NZ Building code standard

Mitsubishi Chemicals, Japan, the manufacturers of Alpolic FR have only manufactured and distributed Alpolic FR core for cladding installations worldwide. They have never manufactured a non-FR core, cladding material.

PSP LTD have been supplying Alpolic/FR for over 15 years to the New Zealand market.

Alpolic/FR, has been tested to the National fire protection agency's verification NFPA 285, and passed all requirements and is classified as an acceptable solution under the NZ building code for fire rated cladding systems.

The NFPA 285 test was completed and complies with all current, and at the time NZ Fire codes. Alpolic/FR also has a Group 1S rating, for internal surface linings as per NZBC C3.4 (a) surface finishes.

The following is an excerpt from MBIE Fire rating requirements for Cladding Systems the thing to take note of is the highlighted section on the NFPA 285 acceptance for buildings of any height.

Cladding system requirements

A cladding system is defined as the outside or exterior weather-resistant surface of a building and includes cladding, underlays, cavity components, windows, doors and all penetrations, flashings, seals, joints and junctions. The testing requirement applies to all components within the cladding system.

There are two types of categories for cladding material:

Cladding type	Peak heat release rate (kW/m ²)	Total heat release rate (MJ/m ²)
Type A	100	25
Type B	150	50

From 1 January 2017, the Acceptable Solution requirements for external cladding are as follows:

Building height	Distance to boundary <1m	Distance to boundary >1m
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Risk Group SI is sleeping use where care or detention is provided, such as care home or hospital.

0–7m	Type A	Type B for Risk Group SI No Requirement for other Risk Groups
>7m	Type A	Type A for Risk Group SI Type B for other Risk Groups

Continued.

Non-combustible materials would meet the requirements for both Type A and B without testing, for example, concrete, brick/block, ceramic tile, aluminium, glass, steel, cellulose fibre-cement products with applied finishes/coatings less than 1mm thick.

However, timber products would usually not meet the above requirements without an application of a fire retardant treatment.

This is described in [Appendix C7.1.3 of Acceptable Solution and Verification Method C/VM1 & C/AS1 Amendment 4](#) [PDF 951 KB]

As an alternative to the above, a cladding system can be used for any building height if it has passed criteria within National Fire Protection Association NFPA 285 (Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components).