

NZBC - B2 Durability Statement

On advice from Engineering New Zealand and ACENZ, independent engineers have declined to continue certifying B2 in their PS1s. Engineering New Zealand advised: “in our view, producer statements are not suitable for showing compliance to B2” and current regulation provides acceptable solutions only for a limited number of materials”. Their suggested sample letter states: “Compliance needs to be shown on a material-by-material basis using a variety of compliance methods and not all materials used have a clear compliance path”. Aluminium is such a material.

There is a New Zealand standard for the strength of aluminium in structures (NZS1664), that has been used in conjunction with AS/NZS1170 in the design of Spectrum products. However, despite having a proven track record of use and performance in New Zealand environments from inland to coastal locations, there is no durability standard for aluminium, other than reference in E2/AS1 to aluminium flashings being considered to have a 50-year lifespan in all atmospheres.

We can confirm that all the elements shown in Spectrum system documentation have suitable protection and treatment based on the following guidelines:

The Aluminium alloys used by Spectrum are coated with a surface treatment, typically Powder coat. Dulux Duralloy powder coat carries a warranty for up to C3 corrosivity zoning and Dulux Duratec carries warranty for up to C5 corrosivity Zoning. Alternatively, the alloy is surface anodized to WANZ SFA 3503-2005

Material	Means of Compliance	Details
Aluminium Alloy	Alternative Solution	Following the approach used in structural steel compliance, the metal is protected by powder coat finishes complying with AS3715 and AAMA 2604 – Super durable polyester powders. Maintenance in accordance with Dulux or Interpon product specification must be followed. Aluminium is widely accepted as being durable stand alone, with the powder coat film offering redundancy.
316 Stainless steel fixings	NZS 3604 timber framed buildings	Fixing for framing and cladding is specified according to exposure zone. 316 Stainless steel exceeds all of the listed examples. BRANZ Stud report SR241 (2011) shows no corrosion of 316 fixings in Copper treated timber.

Signed



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