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Daan Olthuis
Tunnicliffe Timber Company Ltd
EDGECUMBE

Dear Daan

ThermoWood® 230 Durability

As requested, the results of durability tests for thermally modified New Zealand grown Radiata pine using the ThermoWood® 230 technology have been reviewed after eleven years exposure at our Whakarewrewa test site.

The results have been compared with Macrocarpa (*Cupressus macrocarpa*) heartwood, H3.1 light organic solvent preservative (LOSP) treated Radiata pine as well as H3.2 CCA (Copper Chrome Arsenic) and Copper Napthenate treated Radiata pine. The typical use of H3.1 timber is for cladding, fascia and joinery whereas H3.2 treated timber is used for structural and decking (NZS 3640:2003).

Todate, in accelerated above-ground tests ThermoWood® 230 is more durable than H3.1 treated radiata pine and macrocarpa heartwood but not as durable as H3.2 treated Radiata pine. Macrocarpa heartwood and H3.1 treated timber are included in Table 2A sections 2A1-2A3 for weatherboards, fascia, barge and coverboards, plus 2A5-6 for exterior joinery and timber reveals for aluminium windows under NZS 3602:2003 "Timber and Wood based Products for Use in Building" section 111 "Requirements for wood-based building components with a 15-year durability". Therefore ThermoWood® 230 should be an acceptable substitute in low-moderate decay hazard situations.

Yours sincerely,

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