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Our Ref. 250-204

### **Service life of Luna Thermo-D Thermally Modified Timber (TMT) for exterior cladding**

BRE has a long record of assessing the properties and performance of ThermoWood® (the collective name for Finnish TMT product). In December 2003 BRE extensively reviewed VTT technical data which is the cornerstone for the development of the technology. In 2008 we published our BRE Digest 504 “Modified Wood – an introduction to products in UK construction”. In that we considered the properties and performance of ThermoWood®.

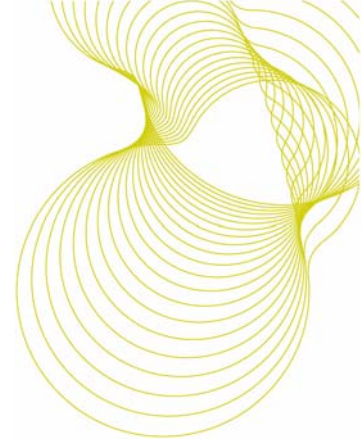
Two documents that are especially pertinent to the consideration of Luna Thermo-D are as follows:

The first is an accelerated weathering performance study conducted by the Helsinki University of Technology (Virta *et al.*). It shows the reduced cupping of cladding boards made from Lunawood thermally modified timber. This dimensional stability of the material is recognised as a considerable advantage for cladding for extending the service life of coatings and the boards.

The second is the KOMO certificate (32941/04) for your product that declares legitimate confidence that modified wood produced by Lunawood complies with the stated technical specification of the certificate. This includes a durability class 2 for the substrate. We would expect a timber of natural durability class 2 to be able to deliver a 30 year service life for a Use Class 3 application such as exterior cladding.



BRE's Quality Management System is approved to BS EN ISO9001:2000,  
certificate number LRQ 4001063



Considering all these points we are able to provide the following statement:

*BRE is able to conclude that the expected service life for the Luna Thermo-D used in the UK for exterior cladding will be 30 years, when following manufacturer's guidance and best practice construction principles.*

If you have any questions I'd be happy to answer them.

Yours sincerely,

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