



8th December 2021
VERDUS NZ Limited
Kitotara Business Centre,
10/68 Marsden Bay Drive
Marsden Point, 0118.
Attention Camden

A Product Technical Statement covering –

Compliance of 'The VERDUS Thermally Modified Timber Weatherboard System' - supplied by VERDUS NZ Ltd.

1. Statement of Building Code Compliance

The VERDUS Thermally Modified Timber Weatherboard System, supplied by VERDUS NZ Ltd., will comply with the following performance clauses of the New Zealand Building Code (NZBC) based on the evidence described in the relevant sections of this document:

- **Clause B1.3.3 – Resistance to wind, refer to Section 6.1**
- **Clause B2.3.1(b) – Durability for at least 15 years, refer to Section 6.2**
- **Clause B2.3.1(c) – Durability for at least 5 years, refer to Section 6.3**
- **Clause E2.3.2 – External Moisture resistance, refer to Section 6.4**
- **Clause F2.3.1 – Hazardous Materials absent, refer to Section 6.5**

2. Scope of Use:

The VERDUS Thermally Modified Timber Weatherboard System offers three cladding options for residential buildings:

- ➔ A SHIPLAP OPTION – VERTICAL & HORIZONTAL;
- ➔ A BEVELBACK OPTION;
- ➔ A BOARD & BATTEN OPTION.

3. Conditions or limitations of use:

Design and use of the VERDUS Thermally Modified Timber Weatherboard System is subject to the following conditions or limitations:

- a) Used in an external environment above ground, with a (seismic) locality factor (Z) of up to 0.42 (Upper Hutt), in a temperate climate, with wind zones up to and including 55m/sec (Extra High);
- b) The design height of residential buildings shall be up to and including 10m from the finished ground level with timber framing constructed as per NZS 3604;

- c) The system is for use over timber framing incorporating a 'frame protection system' and non-structural cavity battens;
- d) The system is limited to use for residential housing including Class 1 and Class 2 type construction, i.e. stand-alone houses and multi-apartment dwellings, up to three stories high;
- e) The system shall be installed in accordance with the approved technical and quality plan literature by those trained and approved by The NZ Natural Timber Co. Ltd. Available from;

Note: On completion of the installation of the VERDUS Thermally Modified Timber Weatherboard System, the building owner shall be supplied with a maintenance schedule/document.

4. Components for each of these systems:

For SHIPLAP – VERTICAL & HORIZONTAL OPTION:

For BEVELBACK OPTION:

For BOARD & BATTEN OPTION:

- a) Weatherboards (Thermally modified Norwegian Spruce)
- b) Fixings – 75 to 90 x 3.15mm Stainless steel or silicon bronze rose-head annular groove nails, or equivalent screw fixings;
- c) Underlay system to meet the requirements of a 'frame protection system' (see separate document);
- d) Battens – 20 x 45mm H3.2 cavity batten (vertically fixed) or 20 x 45mm H3.2 castellated, cavity batten (horizontally fixed);
- e) µPVC cavity closer to suit;
- f) Powder-coated aluminium flashings for above windows, internal and external corners, meter boxes, eaves and apron flashings.

Note 1: Fixing centres are 400mm minimum and 600mm maximum.

Note 2: The weatherboards are finished using iOAKA finishing oil coating system.

5. Consenting instructions

This Product Technical Statement is based on an independent review and assessment of the technical information supplied by the manufacturer, by a recognised and competent entity, BEAL.

This review included a review of the design and installation literature to ensure accuracy and ease of understanding.

This review also covered a quality management system that includes checklists and record-keeping, that may be accessed by BCA inspectors to verify compliance.

6. Typical requirements for an assessment

As with any claim of compliance, with the NZBC, appropriate evidence is required before being considered.

In addition, the technical literature including any drawings, warranty or maintenance statements need to be reviewed to ensure the absence of inaccurate, unclear or misleading statements. Any quality system related to the product shall likewise be reviewed.

Finally, any in-service history of the product, will be taken into account.

This Product Technical Statement is issued having taken into account all of these requirements.

6.1 For Compliance with B1.3.3 – Resistance to wind

There is sufficient in-service history to verify the ability of the applied product to resist the forces associated with wind (positive & negative), on buildings up to 10 m in height.

6.2 Compliance with B2.3.1(b) - Durability for at least 15 years

The chemically free VERDUS timber weatherboards are the result of a special process known as the INTENZ Thermowood 230 degrees treatment. In-service history together with the research work carried out by Georg-August-Universität Göttingen Burckhardt-Institut in Germany, indicates a durability of the product system to perform in the specified environments, subject to the required maintenance, for a period of at least 15 years.

6.3 Compliance with B2.3.1(c) – Durability for at least 5 years

The specified stain will comply with performance clause B2.3.1(c) provided the manufacturer's instructions are followed.

6.4 Compliance with E2.3.2 – resistance to external moisture

The cladding designs (similar to Acceptable Solution E2/AS1) together with in-service history, show that correctly installed, the product will resist the ingress of moisture.

6.5 Compliance with F2.3.1 – the absence of chemical materials in the product, that are potentially hazardous to occupants, is evidence that the product complies with this performance requirement.

In summary, the research and test data, together with in-service history, all demonstrate compliance of the 'VERDUS Thermally Modified Timber Weatherboard System' with the performance clauses of the NZBC described above - when installed as described in the manufacturer's technical and quality system information.



C.R.Prouse – Principal
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