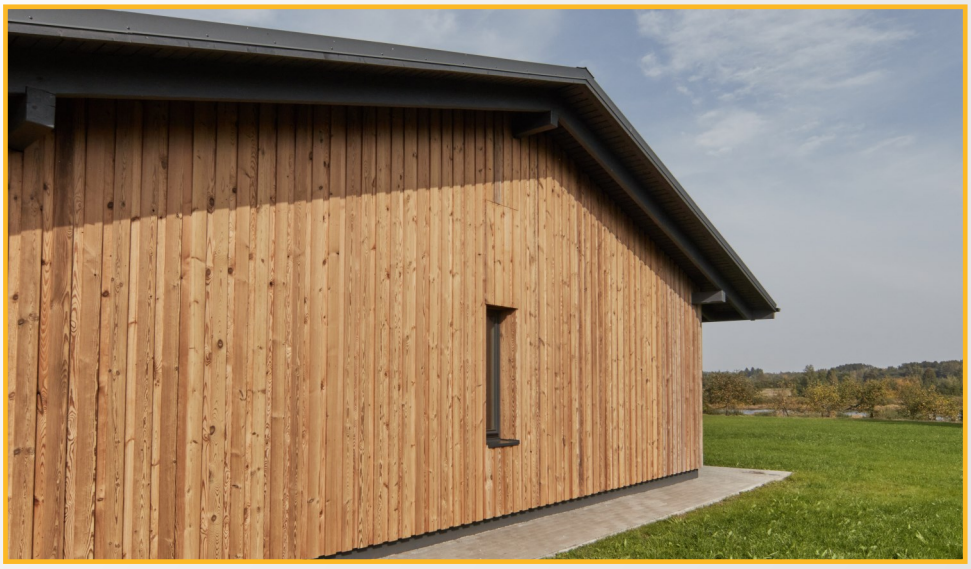
A Product Technical Statement *for* the ICARUS Vertical Weatherboard Cladding System

PTS # 2247

EXPIRY DATE: 30 Sept 2023

The ICARUS Vertical Weatherboard Cladding System



Product

1.1 The ICARUS Vertical Weatherboard Cladding System, uses thermally modified timber weatherboards for its shiplap style timber weatherboards, which are not subject to fungal decay.

1.2 The ICARUS Vertical Weatherboard Cladding System is intended to be installed over either timber framing complying with NZS3604, or Light Gauge Steel framing complying with NAS Standard 1.

1.3 The ICARUS Vertical Weatherboard Cladding System is to be installed under the supervision of an experienced and competent Licensed Building Practitioner in accordance with the manufacturer's instructions.

1.4 The ICARUS Vertical Weatherboard Cladding System is manufactured by Tunnicliffe Timber Solutions(2018) Limited.

Scope and Limitations

3.1 The ICARUS Vertical Weatherboard Cladding System is subject to the following scope of use or limitations:

⇒ 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);

⇒ 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;

⇒ The system is for use over timber framing incorporating a 'frame protection system' and non- structural cavity battens;

⇒ 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;

⇒ The system is to be installed in accordance with the approved technical and quality plan literature provided by Tunnicliffe Timber Solutions(2018) Limited., available from their web site www.tunnicliffes.co.nz;

⇒ The system is to be installed over a compliant 'frame protection system' (see separate document).

Note: On completion of the installation of the ICARUS Vertical Weatherboard Cladding System, the building owner shall be supplied with a maintenance schedule/document.

This review of compliance has been carried out as 'an alternative solution' in terms of the New Zealand Building Code.

Manufacturer/

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Accessories

Accessories for thermally modified NZ grown Pinus Radiata, treated at Edgecumbe, include:

⇒ Fixings – 75 to 90 x 3.15mm Stainless steel or silicon bronze rose-head annular groove nails, or equivalent screw fixings;
⇒ Battens – 20 x 45mm H3.2 cavity batten (vertically fixed) or 20 x 45mm H3.2 castellated, cavity batten (horizontally fixed);
⇒ µPVC cavity closer to suit;
⇒ 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 a proprietary protective coating system.

Technical Literature

4.1 The ICARUS Vertical Weatherboard Cladding System Technical Literature Ver 1 including a site checklist, shall be used for all aspects of design, use, installation and maintenance.
4.2 The ICARUS Vertical Weatherboard Cladding System Construction drawings
4.3 For a copy of this technical literature please contact Tunnicliffe Timber Solutions(2018) Limited; www.tunnicliffes.co.nz

Demonstrating Compliance

For Compliance with B1.3.3 – Resistance to wind:
There is in-service history to verify the ability of the installed product to resist the forces associated with wind (positive & negative), on buildings up to 10 m in height.

Compliance with B2.3.1(b) - Durability for at least 15 years:
The manufacturer has provided a statement about in-service history . (Refer reference documents notes).
The durability of the product is also enhanced through the application of a proprietary stain which mitigates the entry of moisture and UV.

Compliance with B2.3.1(c) - Durability for at least 5 years:
The specified exterior protective stain will comply with performance clause B2.3.1(c) provided the manufacturer's instructions are followed.

Compliance with E2.3.2 – resistance to external moisture:
The cladding designs are in accordance with Acceptable Solution E2/AS1, and together with local in-service history of like products, show that when correctly installed, the product will resist the ingress of moisture.
Compliance with F2.3.1 – non-hazardous materials
The absence of chemical materials used in the product, is evidence of compliance.

Warranty

The Tunnicliffe Timber Solutions(2018) Limited provides a limited 15 year warranty.
Such warranty is subject to the completed site checklist and associated photo records being received by Tunnicliffe Timber Solutions(2018) Limited.
Email: info@tunnicliffes.co.nz

Reference documents

1. The ICARUS Vertical Weatherboard Cladding System Technical Literature Ver 1, available from www.tunnicliffes.co.nz;
2. The ICARUS Vertical Weatherboard Cladding System Building Product Quality Plan (BPQP) Ver 1 , available from www.tunnicliffes.co.nz;
3. A report on the assessment of natural durability of thermally modified timbers by SCION;
4. The Building Regulations 1992 with amendments;
5. NZS3604 Timber frame buildings;
6. NASH Standard Part 1:2016 Design Criteria - Alternative Solution (for Light Gauge Steel framing);
7. Acceptable Solution E2/AS1 for demonstrating compliance with performance clause E2.3.2.

Having regard to the data and construction details supplied by Tunnicliffe Timber Solutions (2018) Limited, it is the opinion of BEAL, that ICARUS Vertical Weatherboard Cladding System, when installed in accordance with the manufacturer's instructions, will comply with the relevant performances of the New Zealand Building Code.

On behalf of
Building Element Assessment Laboratory Limited

BEAL BUILDING ELEMENT ASSESSMENT LABORATORY LIMITED

TUNNICLIFFE TIMBER