CodeMark>>>

Certificate no: CMNZ10005

Version: 02

Original issue date: 20 February 2019

Version date: 29 May 2025

1. Certificate Holder Details

Laminex®

Fletcher Building Products Ltd t/a Laminex New Zealand 810 Great South Road Penrose

Auckland

Tel: 0800 303 606

Email: csc@laminex.co.nz

Web: www.laminex.co.nz

2. Product Certification Body

BRANZ Limited

1222 Moonshine Road RD1, Porirua 5381 Private Bag 50 908 Porirua 5240 New Zealand Tel: 04 237 1170

Email: assuranceservices@branz.co.nz

Web: www.branz.nz

Complaints: The complaints process for this

certificate can be found here:

 $\underline{\text{https://www.branz.co.nz/codemark-info/complaints-}}$

and-appeals/



Product Certificate

Strandsarking® Roof Sarking

3. Description of Building Method or Product

Strandsarking® is an engineered wood-based panel material for use as roof sarking under asphalt shingles, profiled metal roofing and other similar types of roofing materials.

All panels are ink marked with the New Zealand Timber Preservation Council registration number and treatment type, Strandsarking and a five-digit traceability code.

4. Intended use of Building Method or Product

Strandsarking® is for use as roof sarking on buildings within the following scope:

- in accordance with the scope limitations of NZS 3604; and,
- with timber roof framing designed in accordance with NZS 3604, or timber roof members subject to specific design; and,
- in NZS 3604 Wind Zones up to, and including, Extra High; and,
- in areas with a maximum snow loading of 1 kPa; and,
- with a minimum roof pitch of 9°; and,
- with roof trusses or framing at maximum of 900 mm centres with roofing materials up to 50 kg/m²; or,
- with roof trusses or framing at maximum of 600 mm centres with roofing materials up to 150 kg/m².

5. New Zealand Building Code Provisions

Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4 for the relevant physical conditions of B1.3.3 (a), (b), (c), (g), (h), and (q) [i.e. loads arising from self-weight, gravity loads, temperature, snow, wind and creep].

Clause B2 DURABILITY: Performance B2.3.1 (b) 15 years and B2.3.2 (a).

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1.



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6. Conditions and Limitations of Use

The maximum exposure period for Strandsarking® before being clad with the roofing system is 8 weeks.

The moisture content of the Strandsarking® must be controlled in accordance with the provisions of NZBC Acceptable Solutions E2/AS1 and E3/AS1, NZS 3604, and the Reference Document.

A roof underlay must be used under the roofing material.

Roof space ventilation must be provided under Strandsarking® installations.

Strandsarking® must not be used as roof bracing (diaphragm roofs).

The manufacturer does not intend Strandsarking® to be used at elevations above sea level greater than 500 m.

REFERENCE DOCUMENT

This Product Certificate must be read in conjunction with:

Strandsarking® Technical Manual, Edition 6, dated May 2024.

7. Health and Safety Information

Exposure to wood dust may cause irritation to the respiratory system and skin and may cause sensitisation resulting in asthma or skin dermatitis. A dust mask and eye protection must be worn when working with Strandsarking®. Work areas must be ventilated and kept clean. Machinery used must be fitted with dust extractors. Off-cuts, shavings and dust must be disposed of in accordance with the requirements of local authorities.

8. Basis for Certification

Testing

- Testing in accordance with the requirements of AS/NZS 1860.1 and BRANZ criteria to demonstrate structural and durability performance.
- The change in the physical properties of Strandsarking®, including modulus of rupture, modulus of elasticity, internal bond strength, thickness swell and surface water absorption after natural weathering have been determined by BRANZ.
- Formaldehyde emission levels have been determined by testing to AS/NZS 4266.1. The results of these tests have been reviewed by BRANZ and found to be satisfactory.



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9. Supporting Documentation for Certification

- Acceptable Solutions and Verification Methods for New Zealand Building Code Protection from Fire Clauses C1-C6, Ministry of Business, Innovation and Employment, First Edition April 2002 [Amendment 4, 1 January 2017]
- Acceptable Solutions and Verification Methods for New Zealand Building Code External Moisture Clause E2, Ministry of Business, Innovation and Employment, Third Edition July 2005 (Amendment 8, 30 November 2018).
- Acceptable Solutions and Verification Methods for New Zealand Building Code Internal Moisture Clause E3, Ministry of Business, Innovation and Employment, Second Edition February 1998 (Amendment 6, 01 January 2017).
- AS/NZS 1860.1:2002 Particleboard flooring Part 1: Specifications
- AS/NZS 4266.1:2017 Reconstituted wood-based panels Methods of test. Method 16: Formaldehyde emission Desiccator method.
- BRANZ Appraisal No. 891 Strandsarking® Roof Sarking.
- BRANZ Memorandum TV17705 for Laminex NZ, dated 8 November 2024.
- C1-C6 Protection from Fire Acceptable Solution C/AS1 Protection from fire for buildings with sleeping (residential) and outbuildings (risk group SH), 2nd Edition, 2 November 2023.
- C/AS2 Acceptable Solution for Buildings other than risk group SH For New Zealand Building Code Clauses C1-C6 Protection from Fire, 1st Edition, Amendment 3, 2 November 2023.
- NZS 3604:2011 Timber-framed buildings.
- Ministry of Business, Innovation and Employment Record of amendments Acceptable Solutions, Verification Methods and handbooks.
- The Building Regulations 1992.

10. Supporting Information About Description

Strandsarking® is manufactured from strands of radiata pine. The wood strands are treated with a water-based organic preservative and insecticide and contain a mineral wax-based water-repellent. They are bonded with a pMDI resin.

Strandsarking® has a nominal thickness of 16.3 mm and comes as square edge panel. It has a textured surface to provide a macro-texture for a more slip resistant top surface than is available with smooth sanded panel products. The panels have an average density of 685 kg/m³ and average moisture content of 10% at manufacture.

For the purposes of calculating the building performance index of the building envelope the R-value of Strandsarking® 16.3 mm panels should be taken as 0.14 m²K/W.

The product is available as 3,600 x 800 mm panels with a nominal mass per panel of 32 kg and nominal mass per square metre of 11 kg/m².



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Fixings for Strandsarking® are as follows:

- 65 x 2.8 mm diameter ring shanked hot-dipped galvanised flat head nails; or,
- 65 x 2.8 mm diameter ring shanked stainless steel flat head nails; or,
- 50 mm x 10 gauge (4.8 mm) stainless steel screws.

11. Supporting Information About Intended Use

GENERAL

Strandsarking® panels must be laid with the long edge perpendicular to the trusses or rafters in a staggered pattern (brickbond). The ends of each panel must be supported by a truss or rafter or by solid blocking.

Each panel of Strandsarking® should span at least two spans (i.e. be continuous over three trusses or rafters). Where Strandsarking® is over a single span (i.e. supported by only two trusses or rafters) solid blocking must be provided to support all edges. Profiled metal roofing must be fixed through Strandsarking® to support framing.

It has been determined by BRANZ that roof material including Strandsarking® not exceeding a mass of 25 kg/m² is to be considered as light roof for design in accordance with NZS 3604. Roof material including Strandsarking® with a mass of greater than 25 kg/m² is defined as heavy roof.

PREVENTION OF FIRE OCCURRING

Separation or protection must be provided to Strandsarking® from heat sources such as fireplaces, heating appliances and chimneys. Part 7 of NZBC Acceptable Solutions C/AS1 and NZBC Acceptable Solution C/AS2 provide methods for separation and protection of combustible materials from heat sources.

INSTALLATION

Strandsarking® fixings at panel ends and at intermediate supports must be at 150 mm maximum centres, except that in NZS 3604 Wind Zones Very High and Extra High, the fixings to intermediate supports must be at 100 mm centres maximum.

A 3 mm gap must be left between each Strandsarking® panel in order to allow for normal expansion of the panels in service.

A 5 mm clearance must be left between Strandsarking® panels and any other elements protruding through the roof.

Roofing material suppliers must be consulted in order to ascertain the specific ventilation requirements for their particular system. Refer to the Reference Document for more information.



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12. Supporting Information About Conditions and Limitations of Use

All conditions and limitations provided as stated in this Product Certificate.

Signatures

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Claire Falck

CEO, BRANZ Limited.

All CodeMark certificates that are current much be registered with MBIE. MBIE maintains a register of valid product certificates. <u>Please find</u> the register here.

If the certificate is not listed on this register or it appears as (SUSPENDED), it is not a valid CodeMark certificate and does not have to be accepted by a building consent authority as establishing compliance with the New Zealand Building Code.

