



PRODUCT CERTIFICATE

James Hardie Linea™ Oblique™ Weatherboard Cavity Cladding



KEY INFORMATION

CERTIFICATE: GM-CM30059 RevE

1	SUMMARY OF DESCRIPTION OF BUILDING METHOD OR PRODUCT
<p>Linea™ Oblique™ Weatherboard Cavity Cladding is a cavity-based fibre cement weatherboard wall cladding.</p> <p>Linea™ Oblique™ Weatherboard Cavity Cladding consists of Linea™ Oblique™ Weatherboard, which is a rusticated profile fibre cement weatherboard, fixed horizontally or vertically over timber battens to form the cavity. Proprietary ventilated battens are used in the vertical application. The cladding is finished with a latex paint system.</p> <p>The cladding incorporates a primary and secondary means of weather resistance (first and second line of defence) against water penetration by separating the cladding from the external wall framing with a nominal 20 mm cavity. The cavity allows for any occasional ingress of water that may get past the external skin to drain to the exterior of the building, and any remaining moisture to dry by evaporation.</p>	
2	SUMMARY OF INTENDED USE OF BUILDING METHOD OR PRODUCT
<p>Linea™ Oblique™ Weatherboard Cavity Cladding is designed to be used as part of an external cladding system for residential and commercial buildings where domestic construction techniques are used.</p>	
3	BUILDING CODE PROVISIONS
<p>Linea™ Oblique™ Weatherboard Cavity Cladding if designed, used, installed and maintained in accordance with this Certificate, will meet the following provisions of the NZBC:</p> <p>Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4 for the relevant physical conditions of B1.3.3 (a), (h), (j) and (q).</p> <p>Clause B2 DURABILITY: Performance B2.3.1 (b), 15 years and B2.3.2.</p> <p>Clause C3 FIRE AFFECTING AREAS BEYOND THE FIRE SOURCE: Performance C3.7</p> <p>Clause E2 EXTERNAL MOISTURE: Performance E2.3.2, E2.3.5, E2.3.6, E2.3.7</p> <p>Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1.</p>	

4	CERTIFICATE HOLDER DETAILS
<p>James Hardie New Zealand Limited Trading as James Hardie 1 O'Rorke Road, Penrose , Auckland 1006, New Zealand, TechnicalTeam@jameshardie.co.nz Tel: 0800 808 868, www.jameshardie.co.nz</p>	

ISSUED	LAST UPDATE	RECERTIFICATION
26/04/2019	03/05/2022	03/05/2025
5 SIGNATURE		
 Herve Michoux, Global Mark Managing Director		

6	PRODUCT CERTIFICATION BODY
<p style="text-align: center;">Global-Mark Pty Ltd 57 Willis Street, Wellington, 6011 customer.service@global-mark.co.nz +64 9 889 0622 www.global-mark.co.nz</p>	
The complaints process for this certificate can be found here:	
https://www.global-mark.com.au/?s=complaint	



This certificate is issued by an independent certification body accredited by JAS-ANZ, the product certification accreditation body appointed by the Chief Executive of the Ministry of Business, Innovation and Employment under the Building Act 2004.

This certificate may only be reproduced in its entirety. It is advised to check that this certificate is currently valid and not withdrawn or suspended by referring to the Register of Product Certificates on the Building Performance website <http://www.building.govt.nz>.

CERTIFICATE V1.5

PRODUCT CERTIFICATE

James Hardie Linea™ Oblique™ Weatherboard Cavity Cladding

7 CONDITIONS AND LIMITATIONS OF USE

1. Linea™ Oblique™ Weatherboard Cavity Cladding is certified as an external wall cladding for buildings within the following scope:
 - a. the scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1; and,
 - b. with a risk score of 0-20, calculated in accordance with NZBC Acceptable Solution E2/AS1, Table 2; and,
 - c. situated in NZS 3604:2011 Wind Zones up to, and including Extra High.
2. Linea™ Oblique™ Weatherboard Cavity Cladding is certified as an external fixed wall cladding solution for buildings within the following scope:
 - a. the scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1 with regards to building height and floor plan area; and,
 - b. constructed with timber framing subject to specific engineering design; and,
 - c. situated in specific design wind pressures up to a maximum design differential ultimate limit state (ULS) of 2.5 kPa.
3. Specification and Installation shall be undertaken in accordance with all relevant technical information as follow (collectively references as the applicable technical documentation)
 - a. For the Horizontal applications, the BRANZ Appraisal No. 896 (2015) Amended 15 December 2015 Linea™ Oblique™ Weatherboard (Horizontal) Cavity Cladding and Linea™ Oblique™ Weatherboard Horizontal Cavity Technical Specification September 2018, and
 - b. For the Vertical Application, the BRANZ Appraisal No. 897 (2015) Amended 15 December 2015 Linea™ Oblique™ Weatherboard (vertical) Cavity Cladding and Linea™ Oblique™ Weatherboard Vertical Cavity Technical Specification July 2018
4. Linea™ Oblique™ Weatherboard Cavity Cladding must only be installed vertically or horizontally on vertical surfaces.
5. Linea™ Oblique™ Weatherboard Cavity Cladding is certified for use with aluminium window and door joinery that is installed with vertical jambs and horizontal heads and sills. Only joinery compliant with the requirements of NZS 4211:2008 including amendment 1 for the relevant Wind Zone or wind pressure shall be used with Linea™ Oblique™ Weatherboard Cavity Cladding.
6. Linea™ Oblique™ Weatherboard Cavity Cladding can only be used with the ancillary components as described in this certificate.
7. All exposed faces, including top edges at sills and all bottom edges of Linea™ Oblique™ Weatherboard and fibre cement ancillary components must be finished with a latex exterior paint system complying with any of Parts 7, 8, 9, or 10 of AS 3730.
8. E2.3.5 and E2.3.6 compliance is limited to cavities created between the internal surface of the weatherboard and the sarking.

8 HEALTH AND SAFETY INFORMATION

Standard industry safety practices and manufacturer safety requirement as detailed in the technical literature including the applicable SDS must be observed at all time. Please refer to James Hardie SDS Fibre Cement Products Nov 2020

9 SUPPORTING INFORMATION ABOUT DESCRIPTION

Linea™ Oblique™ Weatherboards are rusticated profile weatherboards. The weatherboards are pre-primed with an acrylic primer on the front face and edges. Linea™ Oblique™ Weatherboards are 16 mm thick and are available 200 and 300 mm wide. The boards are supplied 2700 and 4200 mm long.

Linea™ Oblique™ Weatherboards are manufactured from a reduced density cellulose fibre cement formulation. The boards are formed, cut to length and then cured by high-pressure autoclaving. After autoclaving, a rusticated profile is machined on the top edge of the front face, and a rebated lap is machined on the bottom of the back face of the weatherboard. The front edge at the bottom of the board and the board ends are finished square. Linea™ Oblique™ Weatherboards are manufactured to meet the requirements of AS/NZS 2908.2.

James Hardie supplies the following ancillary components:

PRODUCT CERTIFICATE

James Hardie Linea™ Oblique™ Weatherboard Cavity Cladding

- For the horizontal applications
 - Joint flashings – Oblique Trimline Joint Flashing and Vertical Joint Flashing. The joint flashings are available in extruded aluminium in 3000 mm lengths.
 - External and internal corner mouldings – 90° anodised aluminium external box corner available in 2700 and 4000 mm lengths, and 90° internal corner ‘W’ mould, available in 2700 mm lengths. Window jamb flashing – aluminium ‘L’ extrusion available in 3000 mm lengths.
 - Cavity vent strip – Stria aluminium cavity closure or uPVC vent strip, available in 3000 mm lengths.
- For the vertical applications
 - James Hardie horizontal cavity battens – 45 x 20 mm thick Radiata pine batten treated to Hazard Class H3.1. The top edge is bevelled with an 18° slope. The back face is grooved with 50 mm wide x 6 mm deep rebates at 150 mm centres, and the front face is grooved with 5 mm wide x 5 mm deep rebates at 150 mm centres. The grooves are offset on each face.
 - Oblique Trimline joint flashing – extruded aluminium in 3000 mm lengths.
 - Trimline jointers – aluminium horizontal, internal corner and external corner jointers to cover joints in the Trimline joint flashing.
 - External and internal corner mouldings – 90° anodised aluminium external box corner available in 2700 and 4000 mm lengths, and 90° internal corner ‘W’ mould, available in 2700 mm lengths. Cavity vent strip – uPVC, available in 3000 mm lengths.

Other components not supplied by James Hardie but meet the following requirements

- For the horizontal and vertical applications
 - Flexible wall underlay – building paper complying with NZBC Acceptable Solution E2/AS1, Table 23, or breather-type membranes covered by a valid Codemark Certification for use as wall underlays
 - Flexible wall underlay support – polypropylene strap, 75 mm galvanised mesh, galvanised wire, or additional vertical battens for securing the flexible wall underlay in place and preventing bulging of the bulk insulation into the drainage cavity. (Note: mesh and wire galvanising must comply with AS/NZS 4534.)
 - Rigid wall underlay – James Hardie Rigid Air Barriers covered by BRANZ Appraisal No. 611 (2011). Flexible sill, head and jamb flashing tape - flexible flashing tapes complying with NZBC Acceptable Solution E2/AS1, Paragraph 4.3.11, or flexible flashing tapes covered by a valid Codemark Certification for use around window and door joinery openings.
 - Cavity battens - nominal 50 mm wide by 25 mm thick (minimum finished size of 45 mm wide by 18 mm thick) timber treated to Hazard Class H3.1.
 - Cavity batten fixings - 40 x 2.8 mm flat head hot-dip galvanised nails.
 - Linea™ Oblique™ Weatherboard fixings (with flexible wall underlays) - 65 x 2.87 mm D-head or RounDrive hot-dip galvanised or stainless steel ring shank nails.
 - Linea™ Oblique™ Weatherboard fixings (with rigid wall underlays up to 10 mm thick) 75 x 3.06 mm D-head or RounDrive hot-dip galvanised or stainless steel ring shank nails
 - (Note: Stainless steel fixings must be Grade 316 and hot-dip galvanising must comply with AS/NZS 4680).
 - Joinery head flashings - extruded or folded from aluminium or galvanised steel to suit the window or door trim opening. Refer to NZS 3604, Section 4 and NZBC Acceptable Solution E2/AS1, Table 20 for durability requirements.
 - Flexible sealant - sealant complying with NZBC Acceptable Solution E2/AS1, or sealant covered by a valid Codemark Certification for use as a weather sealing sealant for exterior use.



PRODUCT CERTIFICATE

James Hardie Linea™ Oblique™ Weatherboard Cavity Cladding



- For the horizontal applications
 - Timber trim and moulding for use around windows and door. Timber trim and moulding must be finished in accordance with NZBC.
 - Timber trim and moulding fixings - 60 x 3.15 mm or 75 x 3.15 mm hot-dip galvanised jolt head nails and stainless steel ring shank jolt head nail.
 - Stainless steel fixings must be Grade 316 and hot-dip galvanising must comply with AS/NZS 4680).
 - Planted sill and scribes - timber treated to Hazard Class H3.1, pre-primed before installation. Window and door trim cavity air seal - air seals complying with NZBC Acceptable Solution E2/AS1, Paragraph 9.1.6, or self-expanding, moisture cure polyurethane foam air seals covered by a valid Codemark Certification suitable for use around window, door and other wall penetration openings.
- For the vertical applications
 - Window and door trim cavity air seal - air seals complying with NZBC Acceptable Solution E2/AS1, Paragraph 9.1.6, or self-expanding, moisture cure polyurethane foam air seals covered by a valid Codemark Certification suitable for use around window, door and other wall penetration openings.

10 SUPPORTING INFORMATION ABOUT INTENDED USE

NIL

11 SUPPORTING INFORMATION ABOUT CONDITIONS AND LIMITATIONS OF USE

Linea™ Oblique™ Weatherboard Cavity Cladding can be used to provide fire resistance rated construction, but this aspect has not been assessed and is outside the scope of this certificate.

12 BASIS FOR CERTIFICATION

The certification decision is based on independent technical review(s) of test report(s), engineering opinion(s) and other documented evidence(s), factory audit(s) and site review(s)

Code Clause	Compliance pathway	Evidence
B1	Alternative solution -Expert judgement	001, 002, 003,004, 005 and 006
B2	Alternative solution -Expert judgement	001, 002, 003,004, 005 and 006
C3	Alternative solution -Expert judgement	001, 002, 003,004, 005 and 006
E2	Alternative solution -Expert judgement	001, 002, 003,004, 005 and 006
F2	Alternative solution -Expert judgement	001, 002, 003,004, 005, 006 and 007

13 SUPPORTING DOCUMENTATION FOR CERTIFICATION

Ref	Author	Title	Date and/or revision
001	BRANZ	LINEA™ OBLIQUE™ - WEATHERBOARD (HORIZONTAL) CAVITY CLADDING - Appraisal No. 896[2015]	Amended 15 December 2015
002	BRANZ	LINEA™ OBLIQUE™ - WEATHERBOARD (VERTICAL) CAVITY CLADDING - Appraisal No. 897[2015]	Amended 15 December 2015
003 *	BRANZ	BRANZ Appraisals Means of Compliance - Basis of Appraisal - LINEA™ OBLIQUE™ - WEATHERBOARD (HORIZONTAL) CAVITY CLADDING - Appraisal No. 896[2015]	19/11/2015
004 *	BRANZ	BRANZ Appraisals Means of Compliance - Basis of Appraisal - LINEA™ OBLIQUE™ - WEATHERBOARD (VERTICAL) CAVITY CLADDING - Appraisal No. 897[2015]	19/11/2015



This certificate is issued by an independent certification body accredited by JAS-ANZ, the product certification accreditation body appointed by the Chief Executive of the Ministry of Business, Innovation and Employment under the Building Act 2004.

This certificate may only be reproduced in its entirety. It is advised to check that this certificate is currently valid and not withdrawn or suspended by referring to the Register of Product Certificates on the Building Performance website <http://www.building.govt.nz>. The purpose of construction site audits is to confirm the practicability of installing the product; and to confirm the appropriateness and accuracy of installation instructions. In issuing this certificate, Global-Mark has relied on the independent expert and/or laboratory advise or reports. In placing the CodeMark mark on the product/system, the certificate holder makes a declaration of compliance with the certification standard(s) and confirms that the product is identical to the product certified herein.



PRODUCT CERTIFICATE

James Hardie Linea™ Oblique™ Weatherboard Cavity Cladding



005	James Hardie New Zealand Limited	Linea™ Oblique™ Weatherboard Horizontal Cavity Technical Specification	September 2018
006	James Hardie New Zealand Limited	Linea™ Oblique™ Weatherboard Vertical Cavity Technical Specification	July 2018
007	James Hardie New Zealand Limited	LQA8N - SAFETY DATA SHEET- JAMES HARDIE FIBRE CEMENT SHEETS PRODUCTS	Version No.: 1.0 ISSUED Date : 18/06/2020

* These documents were provided commercial in confidence and are not publicly available

14 CONDITIONS RELATING TO NOTIFICATION

- (a) the certificate holder notifies the product certification body in writing of any intended change to any of the following particulars:
 - (i) the name, address, or contact details of the certificate holder:
 - (ii) any address of a location where a certified product is produced or manufactured:
- (b) the certificate holder notifies the product certification body in writing of any intended change, modification, or alteration to any of the following:
 - (i) the certified building method or product:
 - (ii) the method of its production or manufacture:
 - (iii) the product quality plan prepared in respect of the certified building method or product:
 - (iv) the application or installation instructions for the certified building method or product:
 - (v) any documentation relating to the use and maintenance of the certified building method or product:
- (c) if the certificate holder has any reason to suspect that the certified building method or product does not comply with the Building Code, the certificate holder notifies the product certification body in writing of the reason for that suspicion:
- (d) if the certificate holder or the product certification body finds that a certified building method or product that has been released on the market does not comply with the Building Code, the certificate holder discloses that fact in disclosure statements published in a form that is acceptable to the product certification body and to the chief executive:
- (e) if the certificate is suspended or revoked, the certificate holder—
 - (i) notifies all customers to whom the building method or product is regularly supplied; and
 - (ii) immediately ceases using the certificate, the mark of conformity, and any reference to the number of the certificate.

End of the document



This certificate is issued by an independent certification body accredited by JAS-ANZ, the product certification accreditation body appointed by the Chief Executive of the Ministry of Business, Innovation and Employment under the Building Act 2004.

This certificate may only be reproduced in its entirety. It is advised to check that this certificate is currently valid and not withdrawn or suspended by referring to the Register of Product Certificates on the Building Performance website <http://www.building.govt.nz>. The purpose of construction site audits is to confirm the practicability of installing the product; and to confirm the appropriateness and accuracy of installation instructions. In issuing this certificate, Global-Mark has relied on the independent expert and/or laboratory advise or reports. In placing the CodeMark mark on the product/system, the certificate holder makes a declaration of compliance with the certification standard(s) and confirms that the product is identical to the product certified herein.