

This product has been determined to satisfy NCC Performance Requirement H1P1 for structural resistance of materials and forms of construction in high wind areas

SPECIFICATION

This data sheet covers the use of Primeline™ Newport™ weatherboard in residential façade applications over a light-gauge steel frame or a timber wall frame and must be read in conjunction with the current product literature: "External Cladding Technical Specification" available from our website: <https://www.jameshardie.com.au/productrange/primeline-weatherboard>

Primeline™ NEWPORT™ Cladding Description:

Sheet thickness nominally 9mm; Milled smooth pre-primed surface finish; Final surface finish (coating, painting etc) must be in accordance with James Hardie's product literature.

Available in 170mm width only. Stock length 4200mm.

FRAMING & SHEET INSTALLATION

Install weatherboards to steel or timber stud-frames as shown in **Figure 1** and **Figure 2** and product literature with the stud spacing taken from **Table 1**, or **Table 2** depending on the wind load design, noting that the capacity on timber framing is lower than on steel framing because of the tendency for the nails to withdraw from the timber.

All intermediate support studs must be a minimum of 64 x 35mm deep for metal framing and 70 x 35mm for timber.

Framing – Steel

The steel wall frame (minimum 64 x 35mm studs) must be in accordance with NCC 2022 Clause H1D6 Item (3). Studs to be rolled steel sections not exceeding 2mm in thickness.

Framing – Timber:

Use of timber framing must be in accordance with AS 1684: 2021 "Residential timber-framed construction" and framing manufacturer's specifications. Use seasoned timber or else unseasoned hardwood minimum F14 grade. LVL timber may be used.

FIXING / FASTENERS

The concealed back-fixed HardieLock™ system ("spline") must be used in the fixing of this product, but refer to the Structural Bracing section for a potential variation.

Drive screw head flush with plank surface. Locate fastener as shown in the diagrams, but never less than 20mm from top, bottom or vertical edges of the weatherboard.

Fixings and fasteners may be Class 3 finish if concealed and/or sealed, but must be Class 4 if exposed to the elements. Use the following fasteners or approved equivalent fasteners:

Steel-Framed Construction:

Use 41mm HardieDrive™ self-embedding head screw or 30mm Buildex 'FibreTeks' screw.

Timber-Framed Construction:

The same stud spacing designs may be applied equally using 50mm long Ø 2.8mm fibre-cement (FC) nails. The racking capacities quoted below may be claimed provided that steel anchor ("cyclone") rods are used.

Jointing:

The ends of the weatherboards can be jointed on-stud, or off-stud using the HardiLock spline (refer to product literature).

On-Stud Jointing:

On-stud jointing must be done on a minimum 45mm width single stud or double 35mm width studs.

TABLE 1: Maximum Stud Spacing for Wind Load

AS 4055 Wind Load Classification	General Areas of Building		Within 1200mm of Building Edges	
	ULS Pressure (kPa)	Stud Spacing (mm)	ULS Pressure (kPa)	Stud Spacing (mm)
C1	-0.98 +1.05	600	-1.95	600
C2	-1.45 +1.56	600	-2.90**	450
C3	-2.14 +2.30	600	-4.27	steel: 450 timber: 300 w/o spline: 250
C4	-2.88 +3.11	450	-5.77	

**Note: Cavity battens may be fixed on-stud in all cases, but fixed off-stud up to 2.9kPa (C2 classification) only – refer to cavity fixing specification below on this sheet.

TABLE 2: ULS Design Pressure Capacity

Stud Spacing (mm)	With Spline (no bracing capacity needed)		Without Spline (bracing capacity claimed)
	Steel (kPa)	Timber (kPa)	Steel or Timber (kPa)
600	4.9	2.7	2.5
450	6.8	5.0	3.3
300	not tested	6.2	4.9

STRUCTURAL BRACING

Bracing capacity may be not be claimed when concealed fixing with the HardieLock spline is used as required by the current James Hardie product literature. However, the fasteners may be installed to pass through both planks, in which case the uniform pressure capacity reduces as in **Table 2** and the bracing capacities are as follows:

For wall heights of both 2400mm and 2700mm, the ULS racking capacity for 1.6mm gauge steel framing is 2.4kN/m for 600mm or 450mm stud spacing and 3.6kN/m for 300mm stud spacing.

For timber framing the racking capacity is 2.4kN/m for stud centres 300mm to 600mm, provided that M12 steel anchor rods are used with their spacing determined from AS 1684.3: 2021, but never more than 2.4m apart if bracing capacity is claimed.

These capacities are achieved via the framing and external lining and thus provided regardless of whether the required internal lining has been installed. Where a 6mm JHFC (James Hardie fibre cement) internal lining is added, the capacity rises to 6.6kN/m for timber and steel framing for stud centres 300mm to 600mm (refer to James Hardie DTCM sheet for bracing capacity of fibre-cement cladding).

Bracing capacity cannot be claimed for the cavity-fixed construction method except for any JHFC layer that is fixed directly to the wall framing.

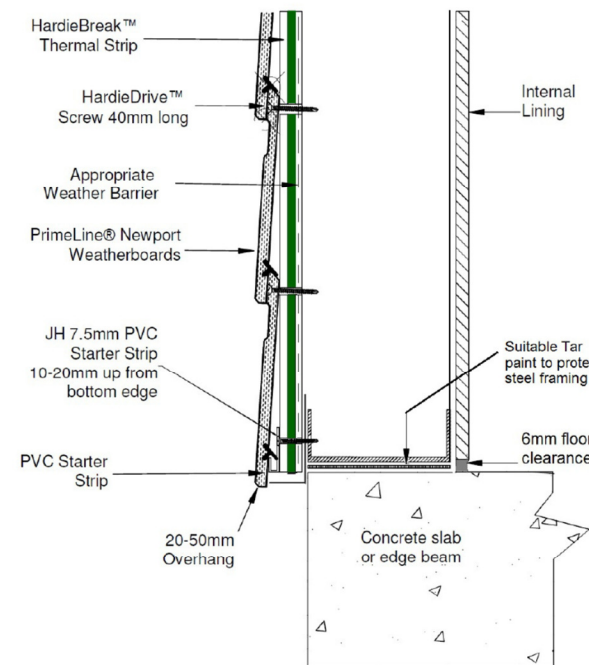


Figure 1: Installing the First Weatherboard

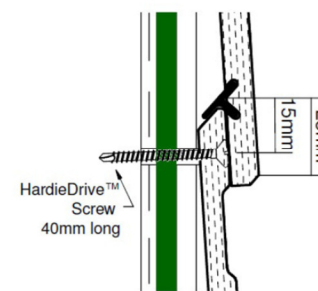


Figure 2: Nail (or Screw) Spacing for Newport Weatherboard

Cavity Fixing:

James Hardie claddings may be fixed onto cavity battens in accordance with our DTCM Sheet M/446/01 for cavity battens where the required batten fasteners and maximum nogging spacing are specified. Battens may be fixed **off-stud** up to an ULS design pressure of 2.9kPa (ie C2 wind classification) only.

DETAILS & OTHER MATTERS

More extensive construction details and jointing details are provided in current James Hardie literature for Primeline Newport weatherboard cladding available from our website. Refer also to the Warranty for the system in that literature.

For further details on matters such as a thermal break, an appropriate weather barrier (eg vapour permeable sarking), flashing, system accessories and finishing, refer to current James Hardie technical literature for Primeline Newport weatherboard, the NCC or relevant Australian Standards.

Product Name

PRIMELINE™ NEWPORT™ WEATHERBOARD

Product Description

9mm Pre-Primed External Wall Cladding

Manufacturer's Details

James Hardie Australia Pty Ltd
10 Colquhoun Street, Rosehill NSW 2142



Design Criteria

[1] General

All design and construction must comply with the appropriate requirements of the current National Construction Code (NCC) and other applicable regulations and standards.

[2] Wind Loading

The cladding sheet must be fastened to the frame in accordance with **Table 1** for the different wind classifications, which are taken from AS 4055: 2021 "Wind Loads for Housing". The effective design wind speeds are given in Table 2.1 of AS 4055: 2021.

For design to AS/NZS 1170.2: 2021 "Part 2: Wind Actions", the ULS design capacity of the system is given in **Table 2**, noting that an ULS material capacity reduction factor ('phi') is implicitly included and no further factoring of the design capacity is needed.

Limitations

[1] Primeline™ Newport™ weatherboard is an external wall cladding for residential use only. This cladding has been designed for external pressure and suction loadings only. **The designer must ensure that the framing is capable of resisting simultaneously the internal and external design pressures (ie an internal lining is required).**

[2] To use **Table 1**, the design must comply with the geometric limits given at Clause 1.2 of AS 4055: 2021 (eg max eaves height = 6m and maximum building width = 16m), except as varied by the design engineer.

[3] Gun nailing must not be used for bracing systems.

Accepted for inclusion in Deemed to Comply Manual

DTCM drawing number: M/458/01

Chairperson Signature:

Chairperson Name: Elisha Harris

Date of Approval: 30/04/2026 Expiry Date: 30/04/2031

Notes covering basis of DTC (Relevant test reports etc)

The nominated structural capacity of the system is based on the following documentation:

[1] James Hardie "Technical Submission for Structural Certification of 9mm PrimeLine Weatherboards Used as External Cladding" (Fifth Edition) dated 5 September 2025, which references various test reports.

[2] David Beneke Consulting letter of certification 2024-36-LO-55 dated 8 September 2025.

[3] James Hardie Test Report TS017-03 "Uniform Load Testing to ASTM E72- 80..." dated 14 July 1998.

[4] Cyclone Structural Testing Station Report No.TS 471 dated 23 July 1996 "Static and Cyclic Uniform Loading of Hardiflex Cladding" and James Hardie letter to NT BASB dated 7 August 1996 regarding the outcome.

Checking Engineer

Name: DAVID BENEKE
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Signature:

Must be an Australian registered structural engineer

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