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 use of 8.5mm thick EasyLap™ Panel, Hardie™ Brushed Concrete Cladding and Hardie™ Fine Texture Cladding in residential applications over a light-gauge steel frame or a timber wall frame and must be read in conjunction with current James Hardie literature (ie "Exteriors Installation Guide") for these products available from our website:
https://www.jameshardie.com.au/categories/cladding
https://www.jameshardie.com.au/productrange/easylap-panel

FRAMING & SHEET INSTALLATION

Install sheets vertically to steel or timber stud-frames as shown in **Figure 1** and in accordance with the stud and fastener spacing given in **Table 1** and **Table 2** depending on the wind load classification or design pressure.

Framing width at sheet joints must be a minimum of 42mm for timber and 38mm for steel. Where the studs at sheet joints are less than this, provide double 35mm wide studs at sheet joints. Ensure that double studs are fastened together and flush at the outside face.

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

All sheet edges and joints must be fully supported by framing.

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.

Spacing of the M12 cyclone rods to be determined from AS 1684.3: 2021, but never more than 2.4m apart if bracing capacity is claimed.

Jointing:
Sheet joints must coincide with the centre line of the framing member (see **Figure 2**).

FIXING / FASTENERS

Fixings and fastener may be minimum 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:

Fasteners - Steel Framing:
Use 30mm ITW Buildex FibreTeks® screws or 32mm or 40mm HardieDrive® screws or 32mm or 42mm Quickdrive (CBSDG series) screws.

Fasteners - Timber Framing:
Use a 2.8 x 40mm galvanised fibre cement nail. ND50 Brad nails may be used in wind classification C1 only (ie up to 2.0kPa) and must be spaced at 125mm.

Fasteners – On-Stud Cavity Battens:
To steel framing, use 41mm HardieDrive CSK screws or Tri-Fixx 10-12 x 100 self-drilling bugle-head screws.
To timber framing, use Paslode 65 x 2.8mm ring-shank nails.

Table 1: Maximum Stud & Fastener Spacing in AS 4055 Wind Classifications

AS 4055 Wind Classification	General Areas of Walls						Within 1200mm of Building Edges					
	Max Design Pressure (kPa)	Can Battens Be Fixed Off-Stud	Stud / Batten Spacing (mm)	**Batten** Fastener Spacing (mm)	**Sheet** Fastener Spacing (mm)	ND50 Brads (mm)	Max Design Pressure (kPa)	Can Battens Be Fixed Off-Stud	Stud / Batten Spacing (mm)	**Batten** Fastener Spacing (mm)	**Sheet** Fastener Spacing (mm)	ND50 Brads (mm)
C1	-0.98	YES	600	300	200	125	-1.95	YES	600	300	200	125
C2	-1.45	YES	600	300	200		-2.90	YES*	600*	200	200	
C3	-2.14	NO	600	300	200		-4.27	NO	450	200	150	
C4	-2.88	NO	600	200	200		-5.77	NO	300	200	125	

*Note: *When fixing battens off-stud in N4/C2 edge zones, reduce batten spacing to 400mm for timber framing and 450mm for steel framing.*

Table 2: ULS Design Pressure Capacity

Position of Batten	Stud / Batten Spacing (mm)	**Batten** Fastener Spacing (mm)	**Sheet** Fastener Spacing (mm)	Pressure or Suction Capacity (kPa)
On-Stud	600	300	200	2.4
		200	200	3.0
	450	200	150	4.3
	300	200	125	5.8
Off-Stud	600	Fix to timber or steel noggings as per 'off-stud' fastener specification in footnotes	200	2.0
	450 (**steel** framing)		200	2.9
	400 (**timber** framing)		200	2.9 (2.6 if battens at 450 spacing)

OFF-STUD FIXING OF CAVITY BATTENS

Per **Table 2**, off-stud fixed battens spaced at 600mm will permit a maximum ULS design wind pressure of 2.0kPa. Reducing the batten spacing to 450mm increases the capacity as shown. For further details and options, refer to the James Hardie DTCM Sheet M/446/01 for cavity battens.

Fasteners – Off-Stud Cavity Battens:
Fixing to steel noggings, use 2No 41mm HardieDrive screws per intersection for noggings up to maximum 900mm spacing. Fixing to timber noggings, use 1No 65 x 2.87mm Paslode DekFast ring-shank nail for nogging spacing up to 800mm and 2No 65mm Dekfast nails for nogging spacing up to 900mm.

STRUCTURAL BRACING

Refer to the James Hardie DTCM sheet for structural bracing capacity of fibre-cement cladding, where the EasyLap, Brushed Concrete and Fine Texture range of claddings may be considered as a 6mm JHFC sheet.

DETAILS & OTHER MATTERS

More extensive construction details and jointing details are provided in current James Hardie literature for this range of 8.5mm thick claddings 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 ("sarking"), flashing, system accessories and finishing, refer to current James Hardie technical literature for these products, the NCC or relevant Australian Standards.

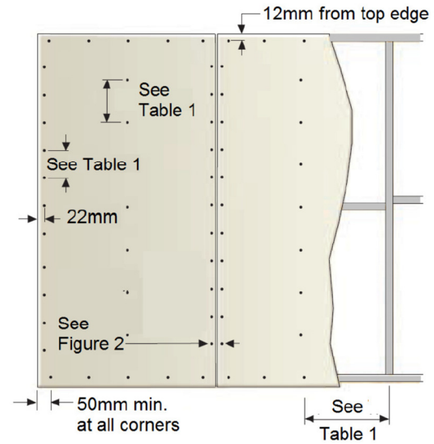

Figure 1: Sheet Fastening Spacing

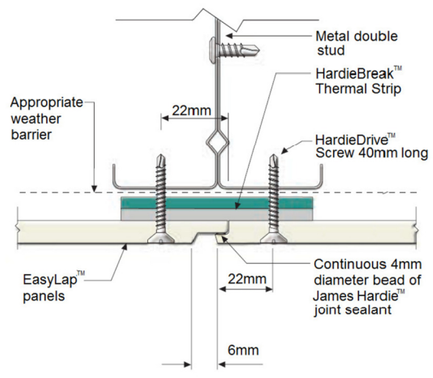

Figure 2: Sheet Joint on Steel Framing

Product Name

EASYLAP™ PANEL, HARDIE™ BRUSHED CONCRETE CLADDING & HARDIE™ FINE TEXTURE CLADDING

Product Description

8.5mm External Cladding for Walls

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 These 8.5mm JHFC products are external wall claddings 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] All fasteners specified must be driven flush. Do not fix fasteners closer than 22mm from shiplap edges, 12mm from top edges, or closer than 50mm from sheet corners (refer to dimensions shown in **Figure 1**).

Accepted for inclusion in Deemed to Comply Manual

DTCM drawing number: M/454/01

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 8.5mm Thickness EasyLap Cladding, Hardie Fine Texture Cladding & Brushed Concrete Cladding", Second Edition dated 4 June 2025, which references various test reports.

[2] David Beneke Consulting letter of certification 2024-36-LO-39 Revision 3 dated 10 June 2025.

[3] 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 of testing cyclic versus static loading.

Checking Engineer

Name: DAVID BENEKE

Registration Number: IEAUST 62658

Date: 30 June 2025

Signature:

Must be an **Australian** registered structural engineer

Certifying Engineer

Name: NAVID NIKJOO

NT Registration Number: 341218 ES

Date: 3 December 2025

Signature:

Must be a registered structural engineer in the **Northern Territory**

Chairperson Signature: Elisha Harris

Chairperson Name: Elisha Harris

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

Date approved 04 June 2025