

Technical Data Sheet

Australia May 2020

HardieWrap™ Weather Barrier

COMPONENTS


IMPORTANT NOTES

Before installing HardieWrap™ weather barrier ensure all electrical and other hazards are eliminated.

1. HardieWrap™ weather barrier is suitable for most Australian climates. It is NOT recommended for use in hot humid tropics (e.g. Townsville), please refer to the www.abcb.gov.au for more information. The building designer is responsible for performing a condensation risk analysis to ensure this product is suitable for your project. Only suitable for vertical walls under James Hardie™ and Scyon™ external cladding and other cladding products for which it meets the cladding manufacturer's recommendations.
2. Failure to install, finish or maintain this product in accordance with applicable building codes, regulations, standards and James Hardie's written application instructions may lead to personal injury, affect system performance, violate local building codes, and void James Hardie's product warranty.
3. The builder is responsible to ensure the product is not damaged before installation. James Hardie will not be responsible for rectifying damaged product after installation unless in accordance with the terms of this warranty or any statutory guarantees that may apply.
4. Make sure your information is up to date. When specifying or installing James Hardie™ and Scyon™ products, ensure you have the current manual. If in doubt, or you need more information, visit www.jameshardie.com.au, www.accel.com.au or Ask James Hardie™ on 13 11 03.

HARDIEWRAP™ WEATHER BARRIER

HardieWrap™ weather barrier is a non-perforated, highly breathable and reflective safe-glare weather barrier designed to be used in both commercial and residential wall and gable applications with James Hardie™ cladding and Scyon™ external cladding and other external cladding products for which it meets the cladding manufacturer's recommendations. **Product ID: 305664**

	ROLL WIDTH (M)	ROLL LENGTH (M)	M² PER ROLL
	2.75	30	82.5
	PACK QUANTITY	UNIT WEIGHT (KG)	ROLLS PER PALLET
	1	9	63

ACCESSORIES / TOOLS NOT SUPPLIED BY JAMES HARDIE

ACCESSORIES	DESCRIPTION
	Dust reducing saw with a HardieBlade™ saw blade & HEPA Vacuum extraction Makita 5057KB or Hitachi C7YA Used to cut James Hardie™ fibre cement and also can be used to cut unrolled HardieWrap™ weather barrier roll on site to a shorter roll length. 1 per pack. Part No. 305571
	Hammer Tacker and Staples Used to staple HardieWrap™ weather barrier to timber wall studs e.g. Arrow, Airco or Stanley.
	Short Flat Pan Head Screws Minimum Class 3 fastener. In coastal applications, we recommend using a class 4 or higher grade of coating. Used to fix HardieWrap™ weather barrier to steel frames.
	Retractable utility knife Used to cut installed HardieWrap™ weather barrier.

TECHNICAL SPECIFICATIONS

HardieWrap™ weather barrier complies with the requirements of AS/NZS4200.1: 2017 for "Pliable Building Membranes".

PHYSICAL CHARACTERISTICS

The HardieWrap™ weather barrier has the following properties in accordance to AS/NZS 4200.1:2017	
Duty Classification	Light*
Vapour control classification (ASTM E96)	Class 4 (0.59 MNs/g)
Water Control Classification (AS/NZS 4201.4)	High Water Barrier
Emittance on silver side (AS/NZS 4201.5)	0.17
Flammability Index (AS 1530.2)	Low
Non-combustibility (NCC C1.9(e) & 3.7.1.1)	Suitable#
Thickness	<1mm
Resistance to dry delamination (AS/NZS 4201.1)	Pass
Resistance to wet delamination (AS/NZS 4201.2)	Pass
Bursting Strength (AS 2001.2.19 - 1988)	253N
Edge Tear Resistance Machine Direction (TAPPI T470)	156N
Edge Tear Resistance Lateral Direction (TAPPI T470)	155N
Folding Endurance Machine Direction (AS 1301.423)	Pass
Folding Endurance Cross Direction (AS 1301.423)	Pass
Air Resistance (BS 6538 Part 3)	8.42 MN.s/m ³

These are minimum performance values, not manufacturing specifications.

* Based on minimum value for bursting strength, making it suitable for walls and gables.

^ HardieWrap™ weather barrier has an outward facing low e reflective surface with an emittance value of 0.16 tested in accordance with AS/NZS 4201.5.

Suitable where non-combustible materials are required by the NCC or other Australian Standards.

SAFE WORKING PRACTICES

For information refer to product SDS at www.jameshardie.com.au or www.accel.com.au; and the safe workplace government authority in your state to create a safe working environment.

STORAGE AND HANDLING

All James Hardie™ building products should be stored in an internal dry area, out of direct sunlight and not exposed to chemicals. James Hardie™ products must not be installed during an electrical storm and it must be installed in a dry state to a dry surface and protected from weather during transport and storage. HardieWrap™ weather barrier has not been designed to withstand prolonged direct exposure to the exterior elements. Upon installation of this product, the selected cladding must be installed within 3 months of installation.

RESPONSIBILITY

The specifier or other party responsible for the project must ensure that HardieWrap™ weather barrier and its details in this specification are appropriate for the intended application and building design.

MOISTURE MANAGEMENT

The installation guidelines herein are informational in nature only and may not be appropriate for use in all applications. It is the sole responsibility of the architect, designer or specifier to identify moisture-related risks associated with any particular building design, and to make any appropriate adjustments or modifications to the installation guidelines herein. Wall construction design must effectively manage moisture, considering both the interior and exterior environments of the building, particularly in buildings that have higher risks of wind-driven rain penetration and conditioned spaces. Wall openings, penetrations, junctions, connections, window, sills, headers and jamps must incorporate appropriately flashing or flashing details, as recommended by the designer.

CAVITY WALLS IN HIGH WIND AREAS

This is not applicable for direct fixed cladding. For cavity construction in wind speeds above 50 m/s or external design building pressures of 2.0 kPa and above, a rigid air barrier board must be installed directly behind the HardieWrap™ weather barrier. HardieFlex™ sheets may be a suitable rigid air barrier. Alternatively, cavity air pressures may be restricted and controlled to avoid blow out of the weather barrier. For more information, Ask James Hardie™ on 13 11 03.

FIRE RESISTANCE

HardieWrap™ weather barrier is suitable for use as a weather barrier as a component of non-combustible walls and in bushfire prone areas as it has a low Flammability Index in accordance with AS 1530.2.

SPECIFICATION NOTES

When specifying state the following:

Product: HardieWrap™ weather barrier

Use: Under James Hardie™ and Scyon™ external cladding in walls and gables.

PRODUCT WARRANTY

HardieWrap™ weather barrier has a 10 year manufacturing warranty. For terms and conditions of product warranty, refer to www.jameshardie.com.au or www.accel.com.au

INSTALLATION TIPS

HardieWrap™ weather barrier must be installed in accordance with AS/NZS 4200.2:2017 Pliable Building Membranes and Underlays Part 2 Installation Requirements.

1. HardieWrap™ weather barrier must be installed with the printed side facing outwards.
2. The weather barrier shall be run horizontally across the vertical wall frame.
3. Extend 150mm around building corners.
4. The weather barrier must be lapped not less than 150 mm at all horizontal joints and one stud bay at all vertical joints.
5. Use the inverted “Y” cut at rough window and door openings. Fold the top flap up and out of the way and fasten temporarily. Fold the remaining three flaps in through the opening, fastening them inside with staples. Install additional window flashings as applicable.
6. Ensure all penetrations are fully sealed against water ingress.
7. Repair punctures or tears, by the recommended practices.
8. The rear of the HardieWrap™ weather barrier must not be left exposed for a period of over six months. A lining or cladding must be installed on the opposite side of the frames.

FASTENERS

At a minimum class 3 coating is required. Coastal applications must have a higher grade coating.

- Timber frames: 10 x 10mm nominal staples.
- Steel frames: Flat pan head screws.

THERMAL PERFORMANCE

The contribution of HardieWrap™ Weather Barrier to the Total R-value depends on installation and environmental conditions. The following table provides Total R-values for building system configurations independently assessed in accordance with AS4859.2:2018 Thermal Insulation Materials for Buildings. Part 1 and 2. Each calculation result is subject to any specific table requirements and notes - If a construction differs from the described systems, the thermal resistance may be different, please contact James Hardie for further information.



TOTAL R VALUE FOR COMMON WALL SYSTEMS			Direct Fixed Nogging spacing is Timber Frame: 1350mm		HardieBreak™ thermal break strip Nogging spacing is Steel Frame: 1350mm		Scyon™ Cavity Trims Nogging spacing is Timber Frame: 1350mm Steel Frame: 675-800mm		James Hardie™ 35mm Top Hats Nogging spacing is Timber Frame: 1350mm Steel Frame: 900mm	
Fixing system	Stud Centers (mm)	Insulation	R-Value (Summer)	R-Value (Winter)	R-Value (Summer)	R-Value (Winter)	R-Value (Summer)	R-Value (Winter)	R-Value (Summer)	R-Value (Winter)
<p>TIMBER FRAME</p>	600	R2.0	1.93	2.04	-	-	2.26	2.40	2.30	2.46
		R2.5	2.26	2.37	-	-	2.59	2.73	2.66	2.82
		R2.7	2.39	2.50	-	-	2.71	2.85	2.79	2.95
	450	R2.0	1.89	2.00	-	-	2.20	2.33	2.26	2.40
		R2.5	2.20	2.30	-	-	2.50	2.63	2.59	2.74
		R2.7	2.31	2.41	-	-	2.62	2.74	2.72	2.87
<p>STEEL FRAME</p>	600	R2.0	-	-	1.77	1.85	1.69	1.80	1.76	1.88
		R2.5	-	-	1.97	2.06	1.86	1.97	1.95	2.08
		R2.7	-	-	2.05	2.13	1.92	2.03	2.02	2.15
	450	R2.0	-	-	1.67	1.74	1.61	1.71	1.64	1.75
		R2.5	-	-	1.85	1.92	1.75	1.85	1.80	1.92
		R2.7	-	-	1.91	1.98	1.80	1.91	1.86	1.98

NOTES:

1. The above estimates the resulting (overall) Total R for the whole wall surface (excluding glazing) from the parallel heat paths. Insulation R adjusted for its mean temperatures for 18°C indoor and 12 °C outdoor winter, or 24 °C indoor and 36 °C outdoor summer, Australia. Indoor and outdoor air temperatures per AS/NZS4859.2:2018 Clause 5.1. For full report access, please contact James Hardie.
2. Steel frame systems have been estimated with a nominal Base Metal Thickness (BMT) of 0.75mm. For frames with BMT of 0.55mm or lower the overall Total R-Value may be increased by 0.1.
3. When Total Transmittance (U-Value) is required, this is calculated by U=1/R. Total R & U values include indoor and outdoor air film.
4. If 9mm Axon™ cladding (R0.023) is replaced by 9mm ExoTec™ (R0.015) cladding, all Total R results will reduce by 0.08.
5. If 12mm ExoTec™ cladding (R0.020) is used instead of 9mm ExoTec™ cladding (R0.015), all Total R results will increase by 0.005.
6. 10mm plasterboard has R0.059, so for Villaboard™ (R0.013) indoor lining, subtract 0.046 from the above Total R results.