



## BRANZ Appraised

Appraisal No. 611 [2026]

## JAMES HARDIE RIGID AIR BARRIERS

### Appraisal No. 611 [2026]

This Appraisal replaces BRANZ  
Appraisal No. 611 [2020]



### BRANZ Appraisals

Technical Assessments of  
products for building and  
construction.



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## Product

- 1.1 James Hardie Rigid Air Barriers are a range of rigid wall underlay materials including RAB™ Board and HomeRAB™ Pre-Cladding. They are sealed fibre cement sheets designed for use as rigid wall underlay behind wall cladding systems. HomeRAB™ Pre-Cladding and RAB™ Board are manufactured using a medium density fibre cement formulation.

## Scope

### HomeRAB™ Pre-Cladding

- 2.1 HomeRAB™ Pre-Cladding has been appraised for use as a rigid wall underlay and temporary weather-protecting sheathing on timber-framed buildings within the following scope:
  - the scope limitations of NZBC Acceptable Solution E2/AS1; and,
  - situated in NZS 3604 Wind Zones up to, and including, Very High; and,
  - with the following claddings:
    - absorbent wall claddings directly fixed to framing; and,
    - non-absorbent wall claddings directly fixed to framing with a flexible wall underlay over the HomeRAB™ Pre-Cladding; and,
    - absorbent and non-absorbent wall claddings installed over a nominal 20 mm drained cavity; and,
    - masonry veneer in accordance with NZBC Acceptable Solution E2/AS1.

### RAB™ Board

- 2.2 RAB™ Board has been appraised for use as a rigid wall underlay and temporary weather-protecting sheathing on timber-framed buildings within the following scope:
  - the scope limitations of NZBC Acceptable Solution E2/AS1 with regard to building height and floor plan area; and,
  - constructed with timber framing, or timber frame infill complying with the NZBC; and,
  - with absorbent wall claddings directly fixed to framing; and,
  - with non-absorbent wall claddings directly fixed to framing with a flexible wall underlay over the RAB™ Board; and,
  - with absorbent and non-absorbent wall claddings installed over an nominal 20 mm drained cavity; and,
  - with masonry veneer in accordance with NZBC Acceptable Solution E2/AS1; and,
  - when used in conjunction with wall cladding systems suitable for use with maximum wind pressures for structural and weathertightness design of 2.1 kPa serviceability limit state (SLS) and 3.2 kPa ultimate limit state (ULS) where studs are at maximum 600 mm centres, and 3 kPa SLS and 4.5 kPa ULS where studs are at maximum 400 mm centres.



- 2.3 RAB™ Board has also been appraised for use as a rigid wall underlay and temporary weather-protecting sheathing on timber-framed buildings within the following scope:
- with a building height not exceeding 25 m; and,
  - constructed with timber framing complying with the NZBC; and,
  - with inter-storey deflections designed for up to height/180 of horizontal in-plane movement during seismic SLS events (based on a 3 m inter-storey height); and,
  - with absorbent and non-absorbent wall claddings installed over a nominal 20 mm drained cavity; and,
  - when used in conjunction with either James Hardie or other cladding systems suitable for use with maximum wind pressures for structural and weathertightness design of 2.1 kPa SLS and 3.2 kPa ULS where studs are at maximum 600 mm centres, and 3 kPa SLS and 4.5 kPa ULS where studs are at maximum 400 mm centres.

*[Note: James Hardie Rigid Air Barriers can be used to provide structural bracing. RAB™ Board can also be used in fire resistance rated construction. These aspects have not been assessed by this Appraisal and are outside its scope.]*

## Building Regulations

### New Zealand Building Code (NZBC)

- 3.1 In the opinion of BRANZ, James Hardie Rigid Air Barriers, if used, designed, installed and maintained in accordance with the statements and conditions of this Appraisal, will meet, or contribute to meeting the following provisions of the NZBC:

**Clause B1 STRUCTURE:** Performance B1.3.1, B1.3.2 and B1.3.4. James Hardie Rigid Air Barriers meet the requirements for loads arising from earthquake and wind [i.e. B1.3.3 (f) and (h)]. See Paragraphs 8.1-8.7.

**Clause B2 DURABILITY:** Performance B2.3.1 (a) not less than 50 years, B2.3.1 (b) 15 years and B2.3.2. James Hardie Rigid Air Barriers meet these requirements. See Paragraphs 9.1-9.3.

**Clause C3 FIRE AFFECTING AREAS BEYOND THE SOURCE:** Performance C3.5 and C3.7. When used as part of an external wall system, James Hardie Rigid Air Barriers contributes to meeting these requirements. See Paragraphs 12.1-12.3.

**Clause E2 EXTERNAL MOISTURE:** Performance E2.3.2. When used as part of the cladding system, James Hardie Rigid Air Barriers contributes to meeting this requirement. See Paragraphs 13.1-13.3.

**Clause F2 HAZARDOUS BUILDING MATERIALS:** Performance F2.3.1. James Hardie Rigid Air Barriers meet this requirement.

## Technical Specification

- 4.1 System components and accessories for James Hardie Rigid Air Barriers, which are supplied by James Hardie New Zealand Limited, are:
- **HomeRAB™ Pre-Cladding** is a 4.5 mm thick fibre cement sheet, manufactured from a cellulose fibre cement formulation. It is produced in sheet material form with 'HomeRAB™' printed on the front face. The sheets are formed, cut to length, and then cured by high pressure autoclaving. The sheet is coated on the front face and four edges with a green tinted water repellent sealer. HomeRAB™ Pre-Cladding is available in sizes of 1,200 mm wide and 2,450, 2,750 and 3,000 mm long. It is manufactured to conform to the requirements of AS/NZS 2908.2.
  - **RAB™ Board** are 6 or 9 mm thick fibre cement sheets, manufactured from a cellulose fibre cement formulation. It is produced in sheet material form with 'RAB™ Board' printed on the front face. The sheets are formed, cut to length, and then cured by high pressure autoclaving. The sheet is coated on the front face and four edges with a green tinted water repellent sealer. RAB™ Board is available in sizes of 1,200 mm wide and 2,450, 2,750 and 3,000 mm long. It is manufactured to conform to the requirements of AS/NZS 2908.2 and is classified as a Type A, Category 2 fibre cement product.



### Accessories

- HomeRAB™ Pre-Cladding and RAB™ Board horizontal flashings - uPVC, available in 3,000 mm lengths.
- 4.2 Accessories specific to James Hardie Rigid Air Barriers, which are supplied by the building contractor are:
- Joint sealing tape and flexible sill and jamb flashing tape system - SUPER-STICK Flexible Flashing Tape, Thermakraft Premium Jointing Tape or Thermaflash.
  - HomeRAB™ Pre-Cladding and RAB™ Board 6 mm sheet fixing - gun-driven 40 mm or 50 x 2.8 mm hot-dip galvanised or ring shank stainless steel round head nails, or hand-driven 40 x 2.8 mm hot-dip galvanised or ring shank stainless steel Hardie Flex™ nails.
  - RAB™ Board 9 mm sheet fixing - 50 x 2.8 mm hot-dip galvanised or stainless steel round drive nails.

*[Note: Hot-dip galvanising must comply with AS/NZS 4680 and stainless steel must be Grade 304 or 316.]*

## Handling and Storage

- 5.1 Handling and storage of all materials supplied by James Hardie New Zealand Limited, whether on-site or off-site, is under the control of building contractor and shall be handled according to the requirements in the Technical Literature.
- 5.2 Accessories must be stored so they are kept clean, dry and undamaged. All accessories must be used within the maximum storage period recommended by the manufacturer.

## Technical Literature

- 6.1 This Appraisal must be read in conjunction with:
- HomeRAB™ Pre-Cladding, RAB™ Board Installation Manual, March 2026.
- 6.2 All aspects of design, use, installation and maintenance contained in the Technical Literature and within the scope of this Appraisal must be followed.

## Design Information

### Framing

#### Timber Treatment

- 7.1 Timber framing must be treated as required by NZBC Acceptable Solution B2/AS1.

#### Timber Framing

- 7.2 For HomeRAB™ Pre-Cladding installations, timber framing must comply with NZS 3604 for buildings or parts of buildings within the scope limitations of NZS 3604. Buildings or parts of buildings outside the scope of NZS 3604 must be to a specific design in accordance with NZS 3603 and AS/NZS 1170. Where specific design is required, the framing must be of at least equivalent stiffness to the framing provisions of NZS 3604. In all cases studs must be at maximum 600 mm centres. Dwargs must be fitted flush between the studs at maximum 800 mm centres. *[Note: The timber framing must also be suitable for the selected wall cladding. Refer to the selected cladding system's Technical Literature for specific framing requirements.]*
- 7.3 For RAB™ Board installations, timber framing must comply with NZS 3604 for buildings or parts of buildings within the scope limitations of NZS 3604. Buildings or parts of buildings outside the scope of NZS 3604 must be to a specific design in accordance with NZS 3603 and AS/NZS 1170 considering local factors. In all cases, studs must be at maximum 600 mm centres for buildings situated in wind pressures up to 3.2 kPa ULS, and at maximum 400 mm centres for buildings situated in wind pressures greater than 3.2 kPa ULS up to 4.5 kPa ULS. Dwargs must be fitted flush between the studs at maximum 800 mm centres. *[Note: The timber framing must also be suitable for the selected wall cladding. Refer to the selected cladding system's Technical Literature for specific framing requirements.]*

- 7.4 The maximum moisture content of timber framing must be in accordance with NZBC Acceptable Solution E2/AS1.
- 7.5 Timber wall framing where James Hardie Rigid Air Barriers are joined must be 45 mm minimum finished width.

**James Hardie Rigid Air Barrier Set Out**

- 7.6 James Hardie Rigid Air Barriers must be installed vertically. At the base of the wall, the sheet must hang below the bottom plate a minimum of 15 mm. Sheet overhang where used with timber floors must hang below timber subfloor members a minimum of 15 mm, up to a maximum of 40 mm.
- 7.7 In all cases, HomeRAB™ Pre-Cladding and RAB™ Board sheet edges must be supported and fixed to the wall framing.

**Temporary Weather Protection**

- 7.8 Commencing from installation, James Hardie Rigid Air Barriers must not be exposed to the weather for more than 180 days.
- 7.9 James Hardie Rigid Air Barriers may be used as a temporary weather protecting sheathing to allow the insulation and internal lining of the building to proceed before the wall cladding is installed. To achieve temporary weathertightness, all joints, internal and external corners of the James Hardie Rigid Air Barriers must be sealed, the roof cladding and soffit linings must be installed, the flexible sill and jamb flashing tape system must be installed around the window and door openings, and the window and door joinery must be installed complete with head flashings and air seals. The timber wall framing moisture content must not exceed that specified by the internal lining system supplier at the time of the insulation installation and internal lining application.
- 7.10 James Hardie Rigid Air Barriers are suitable for use under wall claddings as a rigid wall underlay in accordance with NZBC Acceptable Solution E2/AS1, except that non-absorbent claddings must not be installed directly over the James Hardie Rigid Air Barriers.

**Table 1: NZBC Acceptable Solution E2/AS1 Requirements**

NZBC E2/AS1 Rigid Wall Underlay Properties	Property Performance Requirement	James Hardie Rigid Air Barriers Actual Property Performance
Vapour Resistance	< 7 MN s/g	0.6 MN s/g
Water Resistance	> 20 mm	Pass

**Structure**

**Mass**

- 8.1 The mass of HomeRAB™ Pre-Cladding is approximately 6.5 kg/m<sup>2</sup>. The mass of 6 mm RAB™ Board is approximately 8.6 kg/m<sup>2</sup> and the mass of 9 mm RAB™ Board is approximately 13 kg/m<sup>2</sup>. This mass must be added to the selected wall cladding system mass when determining the overall wall cladding mass in terms of NZS 3604.

**Wind Zones**

- 8.2 HomeRAB™ Pre-Cladding is suitable for use in all Wind Zones of NZS 3604, up to, and including, Very High. The sheets must be fixed at centres as specified in Table 2. The fixings must be positioned a minimum of 12 mm from all sheet edges, and a minimum of 50 mm horizontally and 75 mm vertically from sheet corners. The fastener heads must finish flush with the sheet surface.

**Table 2: HomeRAB™ Pre-Cladding Fixing Centres**

NZS 3604 Wind Zone	Framing Set Out [Maximum]	Nailing Centres to Studs, Plates and Dwargs
Low, Medium and High	Studs at 600 mm centres and dwargs at 800 mm centres	200 mm
Very High	Studs at 400 mm centres and dwargs at 800 mm centres	200 mm

- 8.3 RAB™ Board is suitable for use in design wind pressures up to and including 4.5 kPa ULS when used in conjunction with wall cladding systems able to resist the same face load pressures. The sheets must be fixed at centres as specified in Table 3. The fixings must be positioned a minimum of 12 mm from all sheet edges, and a minimum of 50 mm horizontally and 75 mm vertically from sheet corners. The fastener heads must finish flush with the sheet surface.

**Table 3: RAB™ Board Fixing Centres**

Wind Pressure	Framing Set Out [Maximum]	RAB™ Board Nailing Centres to Studs, Plates and Dwargs
NZS 3604 Wind Zones up to, and including, Extra High	Studs at 600 mm centres and dwargs at 800 mm	200 mm general 150 mm fire rated walls
SED Wind Pressure ≤ 3.2 kPa	Studs at 600 mm centres and dwargs at 800 mm	150 mm
SED Wind Pressure ≤ 4.5 kPa	Studs at 400 mm centres and dwargs at 800 mm	150 mm

**Top Plate Hold Down Connections**

- 8.4 James Hardie Rigid Air Barriers can be used as an alternative to wire dog connectors to achieve a top plate connection capacity of 4.7 kN in accordance with Fixing Type B of NZS 3604, Table 8.18. To achieve the connection strength, the HomeRAB™ Pre-Cladding and RAB™ Board sheets must be fixed along the top edge into the top plate with 50 x 2.8 mm hot-dip galvanised or ring shank stainless steel round head nails, or hand-driven 40 x 2.8 mm hot-dip galvanised or ring shank stainless steel HardieFlex™ nails at 75 mm centres. The fixings must be positioned a minimum of 20 mm from the sheet edge. The fastener heads must finish flush with the sheet surface. The remainder of the sheet is fixed in accordance with Table 2 or Table 3.

**Wall Cladding Fixing**

- 8.5 The length of the selected wall cladding fixing must be increased by a minimum of the thickness of the James Hardie Rigid Air Barrier to maintain the face load strength of the wall cladding system.

**Bracing**

- 8.6 HomeRAB™ Pre-Cladding and RAB™ Board can be used to provide structural bracing. This has not been assessed by this Appraisal and is outside its scope.

**Inter-storey Deflection**

- 8.7 RAB™ Board is suitable to accommodate inter-storey deflections. When installed in accordance with the detail contained in the Technical Literature, RAB™ Board is capable to withstanding SLS deflections up to height/180. For structures where greater inter-storey deflections are expected, a deflection head should be incorporated into design as detailed in the Technical Literature in conjunction with specific engineering design.

**Durability**

- 9.1 James Hardie Rigid Air Barriers meet code compliance with NZBC Clause B2.3.1 [a] not less than 50 years when used where the cladding durability requirement or expected serviceable life is not less than 50 years, e.g. behind masonry veneer, and code compliance with NZBC Clause B2.3.1 [b] 15 years where the cladding durability requirement is 15 years.

**Serviceable Life**

- 9.2 Provided they are not exposed to the weather or ultraviolet [UV] light for a total of more than 180 days, and provided the exterior cladding is maintained in accordance with the cladding manufacturer’s instructions and the cladding remains weather resistant, James Hardie Rigid Air Barriers are expected to have a serviceable life of at least 50 years.



- 9.3 Areas of geothermal activity and coastal locations can be very corrosive to fasteners, especially coastal locations within distances of up to 500 m of the sea including harbours, or 100 m from tidal estuaries and sheltered inlets in some instances. These coastal locations are defined in NZS 3604 as Zone D. When James Hardie Rigid Air Barriers are used as a rigid sheathing in Zone D they must be fixed with stainless steel fasteners. Fasteners outside Zone D may be hot-dip galvanised steel.
- 9.4 Microclimatic conditions, including geothermal hot spots, industrial contamination and corrosive atmospheres, and contamination from agricultural chemicals or fertilisers can convert mildly corrosive atmosphere into aggressive environments. The use of James Hardie Rigid Air Barriers in areas subject to microclimatic conditions requires specific design in accordance with NZS 3604 and is outside the scope of this Appraisal.

### Maintenance

- 10.1 James Hardie Rigid Air Barriers will not normally require maintenance. However, if damage occurs to the cladding or lining protecting the sheathing or to the sheathing itself, the repairs or replacement must be carried out to ensure the integrity of the rigid wall underlay.

### Prevention of Fire Occurring

- 11.1 James Hardie Rigid Air Barrier Sheets are considered a non-combustible material and need not be separated from heat sources such as fireplaces, heating appliances and chimneys. However, when used in conjunction with, or attached to heat sensitive materials, the heat sensitive material must be separated from heat sources such as fireplaces, heating appliances and chimneys. NZBC Acceptable Solutions C/AS1 and C/AS2 provide methods for separation and protection of combustible materials from heat sources.

### Fire Separations

#### Fire Resistance Ratings

- 12.1 James Hardie Rigid Air Barriers can be used for loadbearing and non-loadbearing walls to form fire resistance rated (FRR) separations with an FRR of 120/120/120 when constructed in accordance with the James Hardie Fire and Acoustic Design Manual.

### Control of Internal Fire and Smoke Spread

#### Structural Stability During Fire

- 13.1 For buildings within the scope of NZBC Acceptable Solution C/AS2, primary building elements that structurally support a FRR separation have specific requirements as outlined in the Acceptable Solution.

### Control of External Fire Spread

- 14.1 Refer to NZBC Acceptable Solutions C/AS1 and C/AS2 and NZBC Verification Method C/VM2 for fire resistance rating, control of external fire spread and vertical fire spread requirements for external walls.

#### Horizontal Fire Spread

- 14.2 Where required by NZBC Acceptable Solution C/AS1 or C/AS2, the cladding system will need to be installed as a FRR external wall system with the required FRR.

#### Vertical Fire Spread - Buildings 10 m in height or less

- 14.3 When James Hardie Rigid Air Barriers are used in buildings 10 m or less in height, NZBC Functional Requirement C3.2 identifies that external vertical fire spread to upper floors only needs be considered for buildings with a building height greater than 10 m.

#### Vertical Fire Spread - Buildings greater than 10m in height

- 14.4 James Hardie Rigid Air Barriers can form part of an external wall cladding system designed to meet Vertical Fire Spread requirements. This has not been assessed by this Appraisal and is outside its scope.



- 14.5 Specific fire engineering design is required for each building over 10 m in height to ensure the external cladding system will meet the requirements of NZBC Acceptable Solution C/AS2 or NZBC Verification Method C/VM2.
- 14.6 The specific engineering design for building within the scope of NZBC Acceptable Solution C/AS2 must include specific detailing at each floor level to meet the requirements of NZBC Acceptable Solution C/AS2 cavity barriers.
- 14.7 The following information is provided to support the specific engineering design.

**External Cladding System**

- 14.8 Two NFPA 285 full scale tests have been completed that included James Hardie Rigid Air Barriers as follows:
  - James Hardie RAB™ Board with 20 x 40 mm timber cavity batten and James Hardie Axon Panel Cladding System. *[Note: James Hardie Axon Panel cladding system has not been assessed by BRANZ and is outside the scope of this Appraisal.]*
  - James Hardie RAB™ Board with James Hardie CLD fibre cement cavity battens without a cladding system [for use with non-combustible cladding materials].
- 14.9 Tables 4 and 5 detail the components from the two NFPA 285 tests and provide detail of any testing or assessment results for the components:

**Table 4: Components of the James Hardie Rigid Air Barriers NFPA 285 Testing with James Hardie Axon™ Panel Cladding System**

Component	Test Method	Result
6 or 9 mm RAB™ Board	Component of NFPA 285 Test and ISO 5660 Part 1	Type A
Tape	Component of NFPA 285 Test	Pass
20 x 40 mm timber cavity batten	Component of NFPA 285 Test	Pass
Axon™ Panel Cladding System	Component of NFPA 285 Test	Pass

**Table 5: Components of the James Hardie Rigid Air Barriers NFPA 285 Testing with James Hardie CLD fibre cement cavity battens**

Component	Test Method	Result
6 or 9 mm RAB™ Board	Component of NFPA 285 Test and ISO 5660 Part 1	Type A
Tape	Component of NFPA 285 Test	Pass
19 x 70 mm James Hardie CLD fibre cement cavity batten	Component of NFPA 285 Test	Pass

**External Moisture**

- 15.1 James Hardie Rigid Air Barriers must be used behind claddings that meet the performance requirements of NZBC Clause E2.
- 15.2 James Hardie Rigid Air Barriers meet the performance requirements for a rigid wall underlay as specified in NZBC Acceptable Solution E2/AS1, except that non-absorbent claddings must not be installed directly over the James Hardie Rigid Air Barriers.
- 15.3 James Hardie Rigid Air Barriers, when installed in accordance with the Technical Literature and this Appraisal, will assist in the total cladding system’s compliance with NZBC Clause E2.

**Installation Information**

- 16.1 Installation of James Hardie Rigid Air Barriers must be in accordance with the instructions given in this Appraisal and the Technical Literature.

### Installation Skill Level Requirement

- 17.1 Where the installation is Restricted Building Work (RBW) the installation must be completed by, or under the supervision of, a Licensed Building Practitioner with the relevant Licence Class. All building work must be undertaken by competent and experienced tradespeople conversant with James Hardie Rigid Air Barriers.

### System Installation

- 18.1 James Hardie Rigid Air Barriers may be cut by scoring and snapping, hand guillotine, hand or power saw. Holes and cut-outs may be formed by drilling a number of holes around the perimeter of the opening required and tapping out the centre with a hammer, or by using a hole saw.
- 18.2 Sheets must be dry prior to installation. Cut edges that are left exposed must be sealed prior to installation.
- 18.3 Prior to fixing James Hardie Rigid Air Barriers, a check must be made to ensure all sheet edges will be supported by framing. At the base of the wall, the sheet must hang below the bottom plate by a minimum of 15 mm.
- 18.4 James Hardie Rigid Air Barriers must be fixed to the timber framing with 40 mm or 50 x 2.8 mm hot-dip galvanised or ring shank stainless steel round head nails, or hand-driven 40 x 2.8 mm hot-dip galvanised or ring shank stainless steel Hardie Flex™ nails. Refer to Table 2, Table 3 and Paragraph 8.4 for fixing centres and Paragraph 9.3 for material selection.
- 18.5 At vertical joints, James Hardie Rigid Air Barriers must be installed with a 2-4 mm gap between the sheet edges and must be supported over vertical framing. At horizontal joints between floor levels, James Hardie Rigid Air Barriers must be installed with a minimum 6 mm gap between the sheet edges and must be supported over horizontal framing. At inter-storey floor levels, James Hardie Rigid Air Barriers must not be fixed to inter-storey joists or blocking and must have a minimum 15 mm gap between the sheet edges at this point to allow for shrinkage of the framing. All horizontal joints must be flashed with a uPVC flashing.
- 18.6 Any damaged areas, such as small holes or gaps around service penetrations, must be repaired. Damaged areas can be repaired by covering with joint sealing tape.

### Joint Sealing Tape Installation

- 18.7 All vertical sheet joints, internal and external corners must be covered with SUPER-STICK flexible flashing tape, Thermakraft Premium Jointing Tape or Thermaflash. The manufacturer's instructions regarding the application temperatures for the joint sealing tapes, and the requirements for the use of adhesive primer must be followed.
- 18.8 James Hardie Rigid Air Barriers must be cleaned of dust and other surface contaminants prior to the application of the joint sealing tape to ensure adequate adhesion is achieved.

### Flexible Sill and Jamb Tape Installation

- 18.9 The selected flexible sill and jamb tape flashing system must be installed in accordance with the tape manufacturer's instructions, except where varied by the James Hardie Rigid Air Barriers Technical Literature. Particular attention must be paid to the installation of the sill and jamb tapes around window and door joinery openings to ensure all exposed timber wall framing in the opening is protected.

### Inspections

- 18.10 The Technical Literature must be referred to during the inspection of James Hardie Rigid Air Barriers installations. When the construction sequence is followed in accordance with the Technical Literature, the Building Consent Authority (BCA) inspections for pre-cladding and pre-lining may be combined.

### Health and Safety

- 19.1 Protective equipment must be worn and used as required by the Technical Literature and the manufacturer's instructions.

## Basis of Appraisal

The following is a summary of the technical investigations carried out:

### Tests

- 20.1 Testing has been carried out by James Hardie Building Products to determine the face load pressure resistance of HomeRAB™ Pre-Cladding. Testing has also been carried out by James Hardie Building Products to determine the face load pressure resistance of RAB™ Board in conjunction with Titan Facade Panels. The testing was completed in a National Association of Testing Authorities [NATA] Accredited laboratory and was observed by BRANZ. The test method and results have been reviewed by BRANZ and found to be satisfactory.
- 20.2 The resistance of James Hardie Rigid Air Barriers to water vapour transmission in accordance with AS/NZS 4200.1 and resistance to water penetration in accordance with AS/NZS 4201.4 has been completed by BRANZ.
- 20.3 Testing of specimens assembled containing James Hardie Rigid Air Barriers has been carried out to NFPA 285 by Intertek Group plc and has passed the test criteria.

### Other Investigations

- 21.1 Structural and durability opinions were given by BRANZ technical experts.
- 21.2 BRANZ expert opinion on NZBC Clause E2 code compliance for James Hardie Rigid Air Barriers was based on evaluation of all details within the scope and as stated within this Appraisal. The details contained within the Technical Literature have been reviewed, and an opinion has been given by BRANZ technical experts that the system will meet the performance levels of NZBC Acceptable Solution E2/AS1 for rigid wall underlays.
- 21.3 Site inspections have been carried out by BRANZ to assess the practicability of installation, and to examine completed installations.
- 21.4 The Technical Literature for James Hardie Rigid Air Barriers has been examined by BRANZ and found to be satisfactory.

### Quality

- 22.1 The manufacture of James Hardie Rigid Air Barriers has been examined by BRANZ, including methods adopted for quality control. Details regarding the quality and composition of the materials used were obtained by BRANZ and found to be satisfactory.
- 22.2 The quality of materials, components and accessories supplied by James Hardie New Zealand Limited is the responsibility of James Hardie New Zealand Limited.
- 22.3 Quality of installation on-site of components and accessories supplied by James Hardie New Zealand Limited is the responsibility of the installer.
- 22.4 Designers are responsible for the building design, and building contractors are responsible for the quality of installation of framing systems and joinery, wall underlays, flashing tapes, air seals and cavity battens in accordance with the instructions of James Hardie New Zealand Limited.
- 22.5 Sub-trades are responsible for installation of penetrations, flashings etc. that are relevant to their trade in accordance with the James Hardie Rigid Air Barriers Technical Literature.
- 22.6 Building owners are responsible for the maintenance of James Hardie Rigid Air Barriers in accordance with the instructions of James Hardie New Zealand Limited.



## Sources of Information

- AS/NZS 1170:2002 Structural design action - General principles.
- AS/NZS 2908.2:2000 Cellulose-cement products - Flat sheet.
- AS/NZS 4200.1:1994 Pliable building membranes and underlays - Materials.
- AS/NZS 4201.4:1994 Pliable building membranes and underlays - Methods of test - Resistance to water penetration.
- NFPA 285:2012 Standard method of test for the evaluation of flammability characteristics of exterior non-loadbearing wall assemblies containing components using the intermediate scale, multi-storey test apparatus.
- NZS 3602:2003 Timber and wood-based products for use in building.
- NZS 3603:1993 Timber structures standard.
- 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.



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31 March 2026

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BARRIERS



In the opinion of BRANZ, **James Hardie Rigid Air Barriers** are fit for purpose and will comply with the Building Code to the extent specified in this Appraisal provided they are used, designed, installed and maintained as set out in this Appraisal.

The Appraisal is issued only to **James Hardie New Zealand Limited**, and is valid until further notice, subject to the Conditions of Appraisal.

### Conditions of Appraisal

1. This Appraisal:
  - a) relates only to the product as described herein;
  - b) must be read, considered and used in full together with the Technical Literature;
  - c) does not address any Legislation, Regulations, Codes or Standards, not specifically named herein;
  - d) is copyright of BRANZ.
2. **James Hardie New Zealand Limited:**
  - a) continues to have the product reviewed by BRANZ;
  - b) shall notify BRANZ of any changes in product specification or quality assurance measures prior to the product being marketed;
  - c) abides by the BRANZ Appraisals Services Terms and Conditions;
  - d) warrants that the product and the manufacturing process for the product are maintained at or above the standards, levels and quality assessed and found satisfactory by BRANZ pursuant to BRANZ's Appraisal of the product.
3. BRANZ makes no representation or warranty as to:
  - a) the nature of individual examples of, batches of, or individual installations of the product, including methods and quality of work;
  - b) the presence or absence of any patent or similar rights subsisting in the product or any other product;
  - c) any guarantee or warranty offered by **James Hardie New Zealand Limited**.
4. Any reference in this Appraisal to any other publication shall be read as a reference to the version of the publication specified in this Appraisal.
5. BRANZ provides no certification, guarantee, indemnity or warranty, to **James Hardie New Zealand Limited** or any third party.

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For BRANZ

**Claire Falck**

Chief Executive

Date of Issue:

31 March 2026