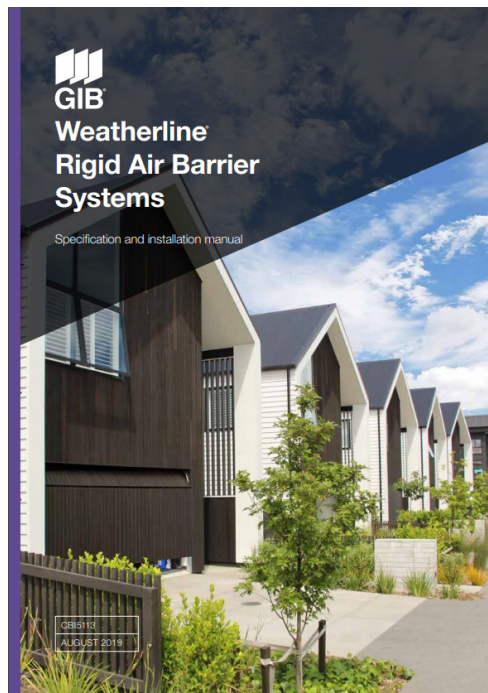




**BRANZ Appraised**  
Appraisal No. 1048 [2019]

## GIB WEATHERLINE® RIGID AIR BARRIER SYSTEMS

**Appraisal No. 1048 [2019]**  
Amended 09 September 2019



### BRANZ Appraisals

Technical Assessments of  
products for building and  
construction.



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## Product

- 1.1 GIB Weatherline® is an exterior-grade glass-fibre fleece wrapped, modified gypsum core sheet material for use as a rigid wall underlay and temporary weather protecting sheathing. The product is also for use in wall bracing and fire-rated systems.

## Scope

- 2.1 GIB Weatherline® Rigid Air Barrier Systems have been appraised for use as a rigid wall underlay and temporary weather-protecting sheathing on buildings within the following scope:
  - constructed with timber framing in accordance with the scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1; and,
  - with wall claddings installed over an 18 mm minimum drained cavity; or,
  - with masonry veneer in accordance with NZBC Acceptable Solution E2/AS1; and,
  - situated in NZS 3604 Wind Zones up to and including Extra High.
- 2.2 GIB Weatherline® Rigid Air Barrier Systems have also been appraised for use as wall bracing systems for timber framed buildings within the scope of NZS 3604.
- 2.3 GIB Weatherline® Rigid Air Barrier Systems have also been appraised for use as load-bearing fire-rated wall systems for timber framed buildings.

## Building Regulations

### New Zealand Building Code (NZBC)

- 3.1 In the opinion of BRANZ, GIB Weatherline® Rigid Air Barrier Systems, 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. GIB Weatherline® Rigid Air Barrier Systems meet the requirements for loads arising from earthquake and wind [i.e. B1.3.3 (f) and (h)]. See Paragraphs 12.1 – 12.6.

**Clause B2 DURABILITY:** Performance B2.3.1 (a), not less than 50 years, B2.3.1 (b), 15 years and B2.3.2. GIB Weatherline® Rigid Air Barrier Systems meet this requirement. See Paragraph 13.1.

**Clause C3 FIRE AFFECTING AREAS BEYOND THE FIRE SOURCE:** Performance C3.7. GIB Weatherline® Rigid Air Barrier Systems can be used to meet this requirement by providing passive fire and smoke protection. See Paragraphs 15.1 to 15.4.

**Clause E2 EXTERNAL MOISTURE:** Performance E2.3.2. When used as part of the cladding system, GIB Weatherline® Rigid Air Barrier Systems will contribute to meeting this requirement. See Paragraphs 16.1 and 16.2.



**Clause F2 HAZARDOUS BUILDING MATERIALS:** Performance F2.3.1. GIB Weatherline® Rigid Air Barrier Systems meet this requirement and will not present a health hazard to people.

- 3.2 GIB Weatherline® Rigid Air Barrier Systems can be used to satisfy the bracing demand requirements of Section 5 of NZS 3604 which is an NZBC Acceptable Solution.

## Technical Specification

- 4.1 The following components are supplied by Winstone Wallboards Limited:

### Exterior

- GIB Weatherline® is an exterior-grade, glass-fibre fleece wrapped modified-gypsum core sheet material. The product is available in 10 mm and 13 mm thicknesses and a board width of 1200 mm. Standard sheet lengths are 2700 and 3000 mm. Custom sheet lengths are also available.
- GIB® Grabber® 41 mm x 6 g ceramic-coated high-thread drywall screws.
- GIB Weatherline® Flashing Tape, which is available in roll widths of 30, 60, 100, 150 and 200 mm, and a roll length of 30 m.
- GIB Weatherline® Sill Tape, which is available in roll widths of 150 and 200 mm, and a roll length of 20 m.

### Interior

- 10 and 13 mm thick GIB Fyreline® is a paper-bound, gypsum-plaster core sheet lining material.
- 10 and 13 mm thick GIB® Standard, GIB Braceline® GIB Noiseline®, GIB Aqualine®, GIB Ultraline®, GIB Toughline® and GIB Toughline® Aqua.
- GIB® Grabber® 32 and 41 mm x 6 g high thread drywall screws.
- Jointing tapes, compounds and finishing plasters in accordance with the GIB® Site Guide.
- GIB® Handibrac® – a one-piece, 2 mm thick, galvanised-steel angle bracket approximately 95 mm high, 65 mm long and 54 mm wide. The bracket is supplied with 5 Type 17 screws 14 g x 35 mm.
- Concrete floor end-stud hold-down – M12 x 150 mm minimum hot-dipped galvanised bolts or proprietary anchor with a minimum characteristic pull-out strength of 15 kN, with a 50 x 50 x 3 mm hot-dipped galvanised washer.

- 4.2 The following components are specified by Winstone Wallboards Limited and supplied by others:

### Cavity battens and fixings

- Structural timber cavity battens – 45 x 18 mm, clear grade, finger-jointed radiata pine, minimum H3.1 treated timber.
- James Hardie CLD Structural Cavity Batten – 70 x 19 mm fibre cement batten.
- 75 x 3.15 mm hot-dip galvanised or stainless-steel ring-shank jolt-head nails.
- 75 x 3.06 mm hot-dip galvanised or stainless-steel ring-shank D-head power-driven nails.

### Insulation

- Pink® Batts® R2.2 [90mm] glass wool insulation.

## Handling and Storage

- 5.1 Handling and storage of all materials supplied by Winstone Wallboards Ltd or the building contractor, whether on site or off site, is under the control of the building contractor. GIB Weatherline® sheets must be stacked flat, off the ground and supported on a level platform. They must be kept dry at all times either by storing under cover or providing waterproof covers to the stack. Care must be taken to avoid damage to edges, ends and surfaces. The sheets must always be carried on edge. Other accessories must be stored so they are kept clean, dry and undamaged.

## Technical Literature

- 6.1 Refer to the Appraisals listing on the BRANZ website for details of the current Technical Literature for GIB Weatherline® Rigid Air Barrier Systems. The Technical Literature must be read in conjunction with this Appraisal. 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

### Temporary Weather Protection

- 7.1 Commencing from installation, GIB Weatherline® Rigid Air Barrier Systems must not be exposed to the weather for more than 90 days.
- 7.2 GIB Weatherline® Rigid Air Barrier Systems may be used as a temporary weather protecting sheathing to allow the internal lining of the building to proceed before the wall cladding is installed. To achieve temporary weathertightness, all joints, internal and external corners of GIB Weatherline® Rigid Air Barrier Systems must be sealed with GIB Weatherline® Flashing and Sill Tapes, 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 airseals. The moisture content of the internal timber framing must have a maximum moisture content as specified by the internal lining system supplier at the time of the insulation installation and internal lining application.

### Fixing Options

- 8.1 GIB Weatherline® sheets can be fixed using two options:

#### Screw and batten fixing [GWTa]

- Fixing option GWTa uses screws and vertical structural battens of timber or James Hardie CLD Structural Cavity Battens. This fixing option is suitable for sheet or horizontal plank-type claddings which are specified for fixing over either structural or non-structural vertical cavity battens. For option GWTa, GIB Weatherline® sheets are fixed to studs at maximum 600 mm centres and to the top and bottom of the sheets at maximum 200 mm centres.

#### Screw only [GWTb]

- The second option [GWTb] is fixed with a more intensive screw fixing pattern. The GIB Weatherline® sheets are fixed to studs and at the top and bottom of the sheets at various centres depending on Wind Zone and stud spacing. Refer Table 1. This fixing option is suitable for masonry veneer and vertical plank type claddings which specify horizontal ventilated cavity battens.

**Table 1: Screw Only Option [GWTb] Fixing Centres**

NZS 3604 Wind Zone	Stud Centres	
	400 mm	600 mm
Low	300 mm	200 mm
Medium	200 mm	150 mm
High	200 mm	100 mm
Very High	150 mm	n/a
Extra High	100 mm	n/a

Note: GIB Weatherline® sheets are fixed to studs, and at the top and bottom of the sheets, at the fixing centres noted above.



### **GIB Weatherline® Rigid Air Barrier Systems Set Out**

- 8.2 GIB Weatherline® Rigid Air Barrier Systems must be installed vertically and must only be jointed on framing. At the base of the wall, the sheathing must hang below the bottom plate a minimum of 15 mm, up to a maximum of 40 mm.

### **Cladding and Batten Fixing**

- 8.3 Cladding fixings including brick tie fixings, must be increased in length by the thickness of the GIB Weatherline® sheet to maintain the minimum timber framing penetration. Similarly, the fixings for cavity battens must be increased in length by the thickness of the GIB Weatherline® sheet. The batten fixings specified in section 4 of this Appraisal take this required length increase into account.
- 8.4 The suitability of use of GIB Weatherline® Rigid Air Barrier Systems, when used with proprietary wall claddings, should be confirmed with the cladding system proprietor.

### **Bracing**

- 9.1 When used in accordance with this Appraisal and the Technical Literature, 10 mm and 13 mm GIB Weatherline® Rigid Air Barrier Systems can be used to meet the wall bracing element requirements of NZS 3604, for timber framed buildings not requiring specific design. The Technical Literature contains details of the construction of the various bracing systems and the bracing unit ratings achieved for each system. The bracing types and ratings are also given within Table 3.

### **Framing**

#### **Timber Treatment**

- 10.1 Timber wall framing behind GIB Weatherline® Rigid Air Barrier Systems must be treated as required by NZBC Acceptable Solution B2/AS1.

#### **Timber Framing**

- 10.2 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. Studs must be at maximum 400 mm or 600 mm centres depending on wind zone and sheet fixing option used. Noggings 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.]
- 10.3 Timber wall framing, where GIB Weatherline® Rigid Air Barrier Systems are joined, must be nominal 50 mm width [i.e. 45 mm minimum finished width].

### **General**

- 11.1 GIB Weatherline® Rigid Air Barrier Systems are intended for use as a rigid wall underlay fixed over timber framed walls to support the wind pressures, and to act as a secondary barrier to wind-driven rain.
- 11.2 GIB Weatherline® Rigid Air Barrier Systems are suitable for use under wall claddings as an alternative to the rigid wall underlay specified in NZBC Acceptable Solution E2/AS1, Table 23 on timber framed buildings, except that claddings must not be installed directly over the GIB Weatherline® Rigid Air Barrier. Refer to Table 2.

**Table 2: NZBC E2/AS1 Table 23 Requirements**

<b>NZBC E2/AS1 Table 23 Rigid Wall Underlay Properties</b>	<b>Property Performance Requirement</b>	<b>GIB Weatherline® Rigid Air Barrier Systems Actual Property Performance</b>
Vapour Resistance	≤ 7 MN s/g	≤ 0.8 MN s/g
Water Resistance	≥ 20 mm	Pass

## Structure

### Mass

12.1 The mass of GIB Weatherline® is approximately 9.0 kg/m<sup>2</sup> for 10 mm thickness and 11.5 kg/m<sup>2</sup> for 13 mm thickness at equilibrium moisture content. 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

12.2 GIB Weatherline® Rigid Air Barrier Systems are suitable for use in all Wind Zones of NZS 3604, up to, and including, Extra High. Refer to the Technical Literature for framing fixing, requirements and centres.

### Claddings

12.3 The length of the fixings for the wall cladding and structural cavity batten must be increased by the thickness of the GIB Weatherline® sheet specified, to maintain the face load strength of the wall cladding system [i.e. timber framing penetration].

### Bracing

12.4 The bracing units achieved [wind and earthquake] when using GIB Weatherline® Rigid Air Barrier Systems are given in Table 3. The GIB Weatherline® Rigid Air Barrier Systems Technical Literature provides comprehensive construction and panel hold-down details.

12.5 The bracing units are derived from the BRANZ P21 test method based on a wall height of 2.4 m. For any other wall height, the bracing rating can be calculated by multiplying the appropriate value by 2.4 and dividing by the wall height in metres, except that panels less than 1.8 m high must be rated as if they were 1.8 m high.

### Penetrations for Services

12.6 Holes up to 100 x 100 mm positioned no closer than 200 mm to the edge of a sheet or to another hole, may be allowed for services in GIB Weatherline® Rigid Air Barrier Systems without affecting the bracing rating of the panel. These penetrations are subject to specific fire engineering design where these penetrations occur in Fire Resistance Rated walls.

**Table 3: GIB Weatherline® Bracing Systems**

Bracing System	Minimum Bracing Element Length	Lining/Sheathing Requirements	Other Requirements	NZS 3604 Bracing Rating [BUs/m]	
				Wind	Earthquake
GSW-N	0.4	Internal: Any 10 or 13 mm GIB® plasterboard	None	85	75
	1.2	External: 10 or 13 mm GIB Weatherline®		95	85
GSW-H	0.4	Internal: Any 10 or 13 mm GIB® plasterboard	Panel hold-downs	90	85
	1.2	External: 10 or 13 mm GIB Weatherline®		130*	110
WH	0.4	Internal: None		105	100
	1.2	External: 10 or 13 mm GIB Weatherline®		125*	105
BLW-H	0.4	Internal: 10 or 13 mm GIB® Braceline GIB® Noiseline		105	115
	1.2	External: 10 or 13 mm GIB Weatherline®		150*	145*

**Notes:** Where lining/sheathings are specified on both faces, each face must be fastened as a bracing element.

\* **Timber Floors** – A limit of 120 BU/m applies to NZS 3604 timber floors.

### Durability

13.1 GIB Weatherline® Rigid Air Barrier Systems meet code compliance with NZBC Clause B2.3.1 [a], not less than 50 years when used for bracing or fire-rated systems 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

- 13.2 Provided it is not exposed to the weather or ultra-violet light for a total of more than 90 days, and provided the exterior cladding is maintained in accordance with the cladding manufacturer's instructions and the cladding remains weather resistant, GIB Weatherline® Rigid Air Barrier Systems are expected to have a serviceable life of at least 50 years.
- 13.3 To achieve a 50-year serviceable life in all Exposure Zones, GIB® Grabber® 41 mm x 6 g ceramic coated high thread drywall screws must be protected with either GIB Weatherline® Flashing Tape, GIB Weatherline® Sill Tape or a structural cavity batten.
- 13.4 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 for fasteners. The fixing of GIB Weatherline® sheets in areas subject to microclimatic conditions requires specific design in accordance with NZS 3604 Paragraph 4.2.4 and is outside the scope of this Appraisal.

### Maintenance

13.5 GIB Weatherline® Rigid Air Barrier Systems will not normally require maintenance. However, if damage occurs to the cladding or lining protecting the GIB Weatherline® Rigid Air Barrier System or to the GIB Weatherline® Rigid Air Barrier System itself, the repairs or replacement must be carried out to ensure the integrity of the rigid wall underlay or wall bracing system.



## Prevention of Fire Occuring

- 14.1 Separation or protection must be provided to GIB Weatherline® Rigid Air Barrier Systems from heat sources such as fire places, heating appliances, flues and chimneys. Part 7 of NZBC Acceptable Solution C/AS1, C/AS2 and NZBC Verification Method C/VM1 provide methods for separation and protection of combustible materials from heat sources.

## Control of External Fire Spread

### Vertical Spread of Fire

- 15.1 This Appraisal only covers buildings 10m 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 10m. Control of external vertical fire spread is therefore outside the scope of this Appraisal.

### Horizontal Spread of Fire

- 15.2 The GIB Weatherline® sheet has a peak heat release rate of less than 100 kw/m<sup>2</sup> and a total heat released of less than 25 MJ/m<sup>2</sup>. Testing was carried out as per Paragraph 5.4 of NZBC Acceptable Solution C/AS1 and Paragraph 5.8.1 of NZBC Acceptable Solution C/AS2, achieving a Type A performance for the GIB Weatherline® sheet. The external wall cladding and surface finish selected for use with the GIB Weatherline® System will determine the allowable distance to the relevant boundary for the buildings Risk Group.
- 15.3 Refer to NZBC Acceptable Solutions C/AS1, C/AS2 and Verification Method C/VM2 for fire resistance rating and control of external fire spread requirements for external walls.

### FRRs of External Walls

- 15.4 GIB Weatherline® Rigid Air Barrier Systems can be used for load-bearing external walls to provide passive fire protection. Fire Resistance Ratings (FRR) of up to 60/60/60 can be achieved with the system. Construction details are contained in the Technical Literature and must be strictly followed to obtain the required Fire Resistance Rating.

## External Moisture

- 16.1 GIB Weatherline® Rigid Air Barrier Systems must be used behind claddings that meet the performance requirements of NZBC Clause E2.
- 16.2 GIB Weatherline® Rigid Air Barrier, 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

### Installation Skill Level Requirements

- 17.1 Installation must always be carried out in accordance with the GIB Weatherline® Rigid Air Barrier System's Technical Literature and this Appraisal by, or under the supervision of, a Licensed Building Practitioner [LBP] with the relevant Licence Class.

### System Installation

#### GIB Weatherline® Rigid Air Barrier Installation

- 18.1 GIB Weatherline® Rigid Air Barrier Systems 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 The sheet fixings must be positioned a minimum of 12 mm from bound sheet edges and 18 mm from cut edges. The fixing must be driven at right angles to the sheet until the head finishes flush with the sheet surface.
- 18.3 GIB Weatherline® sheets must be dry prior to installation.
- 18.4 Prior to fixing GIB Weatherline® Rigid Air Barrier, a check must be made to ensure all sheet edges will be supported by framing.



- 18.5 GIB Weatherline® Rigid Air Barrier sheet must be fixed to the timber framing with fixings as specified in Paragraph 4.2. The maximum fixing centres must be as specified in the Technical Literature. Depending on the performance required for the wall [e.g. bracing, fire resistance], the fixing centres must be closed up to the closest centres specified of all the relevant systems.
- 18.6 GIB Weatherline® sheets must be installed vertically with the longitudinal sheet edges touch fitted. Sheets at horizontal joints between floor levels must be installed with a minimum 5 mm gap between the sheet ends and must be supported over horizontal framing. Sheets at inter-storey floor levels must have a minimum 10 mm gap between the sheet ends at this point to allow for shrinkage of the framing.
- 18.7 Any damaged areas of GIB Weatherline® Rigid Air Barrier, such as holes or gaps around service penetrations, must be repaired. Damaged areas can be repaired by covering with joint sealing tape or proprietary penetration seals.

#### **Joint Sealing Tape Installation**

- 18.8 All vertical and horizontal sheet joints, internal and external corners, and exposed screws (except where they will be covered by a vertical cavity batten e.g. intermediate studs) must be covered with GIB Weatherline® Flashing Tape. The GIB Weatherline Flashing Tape must be installed as soon as practical to avoid sheet wetting. The manufacturer's instructions regarding the application temperatures for the joint sealing tapes must be followed. The GIB Weatherline® sheets must be dry before flashing tape and batten installation. They must also be cleaned of dust and other surface contaminants prior the application of the joint sealing tape to ensure adequate adhesion is achieved.

#### **Window Tape Installation**

- 18.9 GIB Weatherline® Sill Tape must be installed to the sill of window and door openings. The head and jambs of window and door openings must be covered with GIB Weatherline® Flashing Tape. Attention must be paid to ensure all exposed timber wall framing in the opening is protected. This requirement does not apply where Altus Smartfit® window and door joinery is used. Refer BRANZ Appraisal No. 868.

#### **Batten Installation**

- 18.10 Where required, structural cavity battens must be fixed in accordance with the Technical Literature.

#### **Internal Linings and Insulation**

- 18.11 Internal linings and insulation must be installed in accordance with the relevant manufacturer's instructions.

#### **Inspections**

- 18.12 The Technical Literature must be referred to during the inspection of GIB Weatherline® Rigid Air Barrier Systems installation.

### **Health and Safety**

- 19.1 Dust resulting from the sanding of internal linings, jointing or finishing compounds may be a respiratory irritant, therefore the use of suitable respiratory protection is recommended. Where sealants, insulation and other materials are used, the instructions of the manufacturer must be followed.

## **Basis of Appraisal**

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

### **Tests**

- 20.1 Bracing tests were carried out by Winstone Wallboards Ltd in accordance with BRANZ Technical Paper P21 to determine the performance of GIB Weatherline® Rigid Air Barrier Systems when the building is subjected to lateral wind or earthquake loading. The test facilities of Winstone Wallboards Ltd, their procedures and the test results have been reviewed by BRANZ and found to be satisfactory.





- 20.2 Testing has been carried out at an external laboratory to determine the face load pressure resistance and temporary weathertightness performance of GIB Weatherline® Rigid Air Barrier Systems. The laboratory facilities, their procedures and the test results have been reviewed by BRANZ and found to be satisfactory.
- 20.3 BRANZ has completed testing to evaluate the suitability of fixing brick ties over GIB Weatherline® sheet.
- 20.4 The resistance of GIB Weatherline® Rigid Air Barrier Systems to water vapour transmission and resistance to water penetration in accordance with NZS 2295 has been completed by BRANZ.
- 20.5 Fire resistance testing has been completed by BRANZ in accordance with AS 1530.4.
- 20.6 Cone calorimeter tests to ISO 5660 have been completed by BRANZ.

### Other Investigations

- 21.1 Structural, fire and durability opinions have been given by BRANZ technical experts.
- 21.2 BRANZ expert opinion on NZBC E2 code compliance for GIB Weatherline® Rigid Air Barrier Systems 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 Acceptable Solution E2/AS1 for rigid sheathings.
- 21.3 Site inspections were carried out by BRANZ to assess the practicability of installation.
- 21.4 The Technical Literature for GIB Weatherline® Rigid Air Barrier Systems has been examined by BRANZ and found to be satisfactory.

### Quality

- 22.1 The manufacture of GIB Weatherline® Rigid Air Barrier Systems has been examined by BRANZ, including methods adopted for quality control. Details regarding the 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 Winstone Wallboards Ltd is the responsibility of Winstone Wallboards Ltd. The quality control system of the Winstone Wallboards Ltd has been assessed and registered as meeting the requirements of ISO 9001:2015 by TELARC, Registration No. 581.
- 22.3 Quality of installation on site of components and accessories supplied by Winstone Wallboards Ltd and the building contractor 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 the framing systems, flashings, joint seal tapes and flexible sill and jamb tape systems in accordance with the instructions of Winstone Wallboards Ltd.



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01 February 2019

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## Sources of Information

- AS 1530.4: 2005 Fire-resistance of elements of building construction.
- AS/NZS 1170: 2002 Structural design action – General principles.
- ISO 5660 Reaction-to-fire tests – heat release, smoke production and mass lose rate – Part 1: Heat release rate (cone calorimeter method) and Part 2: Smoke production rate (dynamic measurement).
- ISO 5660.1: 2002 Heat release rate (cone calorimeter method)
- NZS 2295: 2006 Pliable, permeable building underlays.
- 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.

## Amendments

### **Amendment No. 1, dated 09 September 2019**

This appraisal has been amended to omit paragraph 10.4, to update paragraph 18.9 with regard to Altus Smartfit Joinery and to update paragraphs 14.1 and 15.1 to reflect changes made in NZBC Acceptable Solutions C/AS2 – C/AS6.



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01 February 2019

GIB WEATHERLINE®  
RIGID AIR BARRIER SYSTEMS



In the opinion of BRANZ, **GIB® Weatherline Rigid Air Barrier Systems** is fit for purpose and will comply with the Building Code to the extent specified in this Appraisal provided it is used, designed, installed and maintained as set out in this Appraisal.

The Appraisal is issued only to **Winstone Wallboards Ltd**, 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. **Winstone Wallboards Ltd**:
  - 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 workmanship;
  - 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 **Winstone Wallboards Ltd**.
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 **Winstone Wallboards Ltd** or any third party.

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**For BRANZ**

**Chelydra Percy**

Chief Executive

Date of Issue:

01 February 2019