



PRODUCT CERTIFICATE



HUME CEMBOARD

PRIMAaqua, PRIMAlux, PRIMACTU, PRIMAliner, PRIMAalpha Groove

CERTIFICATE NO: CM20210
Original issue date: 27 March 2020
Version number: Rev.1
Version date: 3 March 2023

1 CERTIFICATE HOLDER DETAILS

HUME CEMBOARD INDUSTRIES Sdn. Bhd. – CENTRAL

Address: 12, JALAN TANDANG 46050 PETALING JAYA, SELANGOR DARUL EHSAN MALAYSIA

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2 PRODUCT CERTIFICATION BODY



SAI Global Certification Services Pty Limited

(ACN 108 716 669) Trading as "SAI Global"

Operating as "Intertek & Intertek SAI Global"

JAS-ANZ Accreditation No. Z1440295AS

650 Lorimer Street Port, Melbourne, VIC 3207

www.saiglobal.com

The complaints process for this certificate can be found here:

<https://saiassurance.com.au/complaints-appeals/>

3 DESCRIPTION OF BUILDING METHOD OR PRODUCT

PRIMAaqua – A flat autoclaved cellulose fibre reinforced cement sheet with smooth sanded and sealed surface and square rebate edges on both sides of its length for a flush joint.

PRIMAlux – A flat autoclaved cellulose fibre reinforced cement sheet sanded with arrised edges for butt or PVC joints.

PRIMACTU – A flat autoclaved cellulose fibre reinforced cement sheet with a pre-marked nailing pattern.

PRIMAliner – A flat autoclaved cellulose fibre cement sheet with square rebated edges on both sides of its length for flush jointed internal walls.

PRIMAalpha Groove – A flat autoclaved cellulose fibre cement sheet with decorative V-shaped grooves carved into the sanded surface.

Continuation of description can be found in item 11 – Supporting Information about Description.

Matters that should be taken into account in the use or application of the building method or product can be found in item 6 – Conditions and Limitations of Use.

4 INTENDED USE OF BUILDING METHOD OR PRODUCT

PRIMAaqua – An internal wall and ceiling lining or as a substrate for tiles in wet areas.

PRIMAlux – An internal wall and ceiling lining where flushed joints are not required.

PRIMACTU – A substrate for ceramic tiles in wet and dry areas.

PRIMAliner – An internal wall lining where a seamless joint is required or as a substrate for ceramic or marble tiles in wet areas.

PRIMAalpha Groove – An internal wall and ceiling lining.

Continuation of intended use can be found in item 12 – Supporting Information about Intended use.

5 NEW ZEALAND BUILDING CODE PROVISIONS

For **PRIMAaqua, PRIMAlux, PRIMAliner** and **PRIMAalpha Groove**

Clause B1 Structure – B1.3.1; B1.3.2; B1.3.3(a, j); B1.3.4(a, b, c, d)

Clause B2 Durability – B2.3.1(b) when used as a substrate for tiles; B2.3.1(c); B2.3.2

Clause C3 Fire affecting areas beyond the fire source – C3.4(a)

Clause E3 Internal moisture – E3.3.4; E3.3.5; E3.3.6

Clause F2 Hazardous Building materials – F2.3.1

How the building method or product complies or contributes can be found in item 9 – Basis for Certification.

Any qualifications on the extent of that compliance can be found in item 6 – Conditions and limitations of use.

For **PRIMACTU**

Clause B1 Structure – B1.3.1; B1.3.3(a); B1.3.4(a, b, c, d)

Clause B2 Durability – B2.3.1(b) when used as a substrate for tiles; B2.3.2

Clause E3 Internal Moisture – E3.3.3, E3.3.5, E3.3.6 (contributes to)

Clause F2 Hazardous Building materials – F2.3.1



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CERTIFICATE V2



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6 CONDITIONS AND LIMITATIONS OF USE

1. **PRIMAaqua, PRIMAlux, PRIMACTU, PRIMAliner** and **PRIMAalpha Groove** must be installed in accordance with the manufacturer’s installation instructions in the relevant Prima Technical Manuals referenced below.
2. Timber framing must comply with NZS 3604 or be specifically designed in accordance with NZS3603 and AS/NZS1170.
3. Steel framing must be in accordance with NASH Standard Part 2: May 2019 Light Steel Framed Buildings or be specifically designed in accordance with NZS3404 and AS/NZS 1170

NOTE: Together, items 3,4,5 and 6 define scope of use

Reference Documents:

- PRIMA International Internal Lining Technical Manual V2. (for PRIMAaqua, PRIMAlux, and PRIMACTU)
- PRIMAliner International brochure V4 1804 (for PRIMAliner)
- PRIMAalpha Groove Technical Manual International V1 2019 (for PRIMAalpha Groove)

7 HEALTH AND SAFETY INFORMATION

Samples of Hume Cemboard fibre cement panels were tested to AS 4964 – Method for the qualitative identification of asbestos in bulk samples and results of the analysis confirmed no asbestos was detected.

8 SIGNATURES

Name and Signature of the Product Certification Body’s (PCB) authorised representative and, where different, the person assigned by the PCB to make the certification decision

Calin Moldovean
President, Business Assurance
SAI Global Assurance



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9 BASIS FOR CERTIFICATION

- Structure – by testing and comparison with provisions of Verification Method B1/VM1 and Acceptable Solution B1/AS1
- Durability – by testing and comparison with provisions of Verification Method B2/VM1
- Fire – by testing and comparison with the provisions of Verification Method C/VM2
- Internal Moisture – by comparison with the provisions of Acceptable Solution E3/AS1
- Hazardous Building Materials – by analysis by testing

10 SUPPORTING DOCUMENTATION FOR CERTIFICATION

Acceptable Solutions and Verification Methods for New Zealand Building Code:

1. Building regulations 1992 (SR 1992/150) – Version as at 15 November 2021.
2. Acceptable Solutions and Verification Methods for New Zealand Building Code Clause **B1 Structure**. Amendment 20 (29 November 2021).
3. Acceptable Solutions and Verification Methods for New Zealand Building Code Clause **B2 Durability**. Amendment 12 (28 November 2019).
4. Verification method: Framework for Fire Safety Design for New Zealand Building Code Clauses **C1-C6 Protection from Fire**. Amendment 6 (5 November 2020)
5. Verification Methods E2/VM1 and Acceptable Solutions E2/AS1, E2/AS2 and E2/AS3 for New Zealand Building Code Clause **E2 External Moisture**. Amendment 10 (5 November 2020).

Test Reports

1. **CSIRO Report FNC9015 Combustibility Test for Material (October 2007)**
This report presents results of testing PRIMAaqua/PRIMAliner in accordance with AS 1530.1-1984 Methods for fire tests on building materials, components and structures - Part 1: Combustibility test for materials and designates the product as non-combustible.
2. **HCI/17/000300AA Tests (PRIMAaqua) to AS/NZS2908.2 (December 2017)**
This report contains the results of testing PRIMAaqua to AS/NZS 2908.2, including bending strength, apparent density, water permeability, warm water, dry soak, freeze-thaw, heat rain and dimensional tolerances, and indicated the material complied in all respects with the performance characteristics required of Type A (external application) sheets, Category 3 under AS/NZS 2908.2:2000 Cellulose cement products Part 2: Flat sheets.
3. **HCI/17/000300AB Tests (PRIMAaqua) to AS/NZS2908.2 (December 2017)**
This report contains the results of testing PRIMAaqua to AS/NZS 2908.2, including bending strength, apparent density, and dimensional tolerances, and indicated the material complied in all respects with the performance characteristics required of Type B (internal application) sheets, Category 3 under AS/NZS 2908.2:2000 Cellulose cement products Part 2: Flat sheets.
4. **HCI/12/000200AA Tests (PRIMAliner) to AS/NZS2908.2 (April 2013)**
This report contains the results of testing PRIMAliner to AS/NZS 2908.2, including bending strength, apparent density, water permeability, warm water, dry soak, freeze-thaw, heat rain and dimensional tolerances, and indicated the material complied in all respects with the performance characteristics required of Type A (external application) sheets, Category 3 under AS/NZS 2908.2:2000 Cellulose cement products Part 2: Flat sheets
5. **HCI/12/000200AB Tests (PRIMAliner) to AS/NZS2908.2 (April 2013)**



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This report contains the results of testing PRIMAliner to AS/NZS 2908.2, including bending strength, apparent density, and dimensional tolerances, and indicated the material complied in all respects with the performance characteristics required of Type B (internal application) sheets, Category 3 under AS/NZS 2908.2:2000 Cellulose cement products Part 2: Flat sheets.

6. HCI/18/000200AB Tests (PRIMACTU) to AS/NZS2908.2 (May 2018)

This report contains the results of testing PRIMACTU to AS/NZS 2908.2, including bending strength, apparent density, and dimensional tolerances, and indicated the material complied in all respects with the performance characteristics required of Type B (internal application) sheets, Category 3 under AS/NZS 2908.2:2000 Cellulose cement products Part 2: Flat sheets.

7. HCI/18/000700AB Tests (PRIMAalpha Groove) to AS/NZS2908.2 (February 2019)

This report contains the results of testing PRIMAalpha Groove to AS/NZS 2908.2, including bending strength, apparent density, and dimensional tolerances, and indicated the material complied in all respects with the performance characteristics required of Type B (internal application) sheets, Category 3 under AS/NZS 2908.2:2000 Cellulose cement products Part 2: Flat sheets.

8. BRANZ Appraisal 636 PRIMACTU (23 May 2019)

This report contains an assessment by BRANZ of the PRIMACTU in forming an opinion on the product durability in accordance with AS/NZS2908:1992 and concludes it is suitable for use with waterproofing membranes in wet areas.

9. BRANZ Appraisal 737 PRIMAaqua & PRIMAliner (9 August 2019)

This report contains an assessment by BRANZ of the PRIMAaqua and PRIMAliner to demonstrate the required internal wall lining fixing and internal ceiling lining pull-off strength for both steel and timber framing for Wind Zones of NZ 3604 and includes consideration of internal moisture performance of the product when installed and finished as wall linings to provide surfaces that are impervious and easily cleaned.

10. CSIRO Appraisal 244 PRIMAaqua & PRIMAliner (February 1999)

This report contains an assessment by CSIRO of the PRIMAaqua and PRIMAliner wall and ceiling lining and concludes that the product is suitable for use in dry or wet areas that are not subject to direct sunlight, rain or snow.

11. OPUS Appraisal 1997/14 PRIMAaqua Fibre Cement Wallboard (June 1998)

This report contains an assessment by Opus on the properties and performance of PRIMAaqua for use as internal wall and ceiling lining in wet areas or areas subject to water splash must be lined with materials detailed in E3/AS1 and includes testing done at Opus Central Laboratories confirming the product will provide adequate resistance to impacts likely to occur in normal residential use.

12. Envirolab (various samples of Hume Cemboard fibre cement panels and thicknesses) Tests to AS4964 – Method for the qualitative identification of asbestos in bulk samples

Samples of Hume Cemboard fibre cement panels were tested, and results of the analysis confirmed no asbestos was detected



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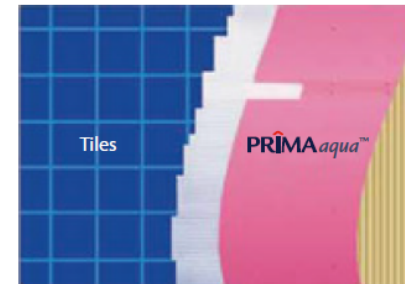
SUPPORTING INFORMATION

11 SUPPORTING INFORMATION ABOUT DESCRIPTION

PRIMAaqua – A flat autoclaved cellulose fibre cement sheet with smooth sanded and sealed surface and square rebated edges on both sides of its length for a flush joint. The basic composition is Portland cement, cellulose fibre, ground sand and water. Available in 6.0mm and 9.0mm thickness. A variety of standard lengths and widths are available to suit specific application. The density at Equilibrium Moisture Content (EMC) of 7% is 1390kg/m³. Flexural strength at EMC:

- Parallel – 10.5 MPa
- Transverse – 15.5 MPa
- Average – 13.0 MPa

PRIMAaqua™ Wall and Ceiling Linings (Flush Finish Board)				
Appearance	Smooth sanded surface. Square Rebate at 2 long edges.			
Mass at EMC	<ul style="list-style-type: none"> • 6.0mm sheets- 8.5kg/m² • 9.0mm sheets- 12.5kg/m² 			
Density at EMC	• Density at EMC is 1390kg/m ³			
Length (mm)	Width (mm)			
	900	1200		1350
	6.0	6.0	9.0	6.0
1800		✓		
2400	✓	✓	✓	✓
2700		✓	✓	
3000	✓	✓	✓	✓
3600	✓	✓		✓
4200		✓		✓



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PRIMAlux – An autoclaved cellulose fibre reinforced cement sheet sanded with arrised edges for butt or PVC joints. Available in 4.5mm and 6.0mm thickness. The approximate masses at Equilibrium Moisture Content (EMC) of 7% at a temperature of 27°C and 65% to 95% RH are:


- 4.5mm sheet – 6.5kg/m²
- 6.0mm sheet – 8.5kg/m²
- Density at EMC is 1390kg/m³

PRIMAlux™ Wall and Ceiling Linings		
Appearance	Smooth sanded surface. Arrised edge on all 4 sides.	
Mass at EMC	• 4.5mm sheets- 6.5kg/m ² • 6.0mm sheets- 8.5kg/m ²	
Density at EMC	• Density at EMC is 1390kg/m ³	
Length (mm)	Width (mm)	
	900	1200
1800	✓	✓
2400	✓	✓
3000	✓	✓



PRIMACTU – An autoclaved 6.0mm thick flat cellulose fibre reinforced cement sheet with pre-marked nailing pattern.

PRIMACTU™	
Appearance	Smooth surface with pre-marked. fixing positions, square edge.
Thickness	6.0mm
Width	900mm, 1200mm
Length	1800mm
Mass at EMC	8.5kg/m ²



For more information about standard sizes and product physical and mechanical properties, and installation instructions refer to PRIMA International Internal Lining Technical Manual V2. (for **PRIMAaqua**, **PRIMAlux**, and **PRIMACTU**).

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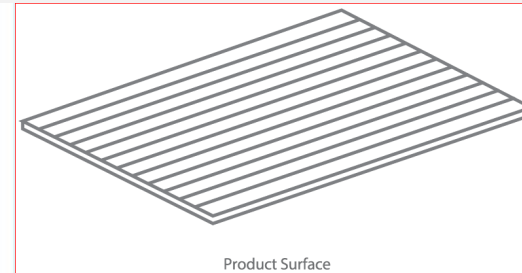
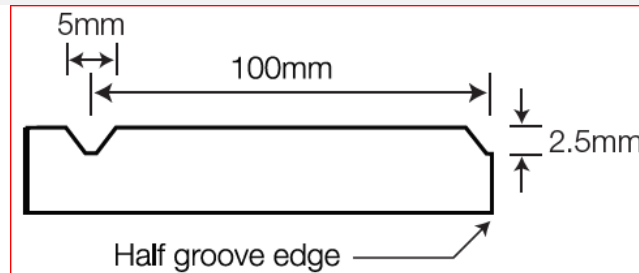
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PRIMAliner – A flat autoclaved cellulose fibre cement sheet with square rebated edges on both sides of its length for flush jointed internal walls. Available in 6.0mm, 9.0mm, and 12.0mm thickness. The density at Equilibrium Moisture Content (EMC) of 7% is 1390kg/m³. Flexural strength at EMC:

- Dry – 14.0 MPa
- Wet – 8.0 MPa

For more information about standard sizes and product physical and mechanical properties, and installation instructions refer to **PRIMAliner** International brochure V4 1804.

PRIMAalpha Groove – A flat 7.5mm thick autoclaved cellulose fibre cement sheet with decorative V-shaped grooves carved into the sanded surface.



Properties	Values
Product Composition	Top Grade Cellulose Fiber Finely Ground Sand Portland Cement Water
Bending Strength (Saturation)	> 7 MPa (AS/NZS 2908.2)
Category	3
Type	A
Average Density (Oven Dry)	1300 kg/m ³ (AS/NZS 2908.2)
Dimensional & Geometrical Conformance	Passed (AS/NZS 2908.2)
Water Permeability	Passed (AS/NZS 2908.2)
Moisture Movement 30-90% relative humidity	0.05% (ISO 8336: 2009)
Heat-Rain Resistance	Passed (AS/NZS 2908.2)
Frost Resistance	Passed (AS/NZS 2908.2)
Warm Water Resistance	Passed (AS/NZS 2908.2)
Soak-Dry Performance	Passed (AS/NZS 2908.2)

For more information about standard sizes and product physical and mechanical properties, and installation instructions refer to **PRIMAalpha Groove** Technical Manual International V1 2019.

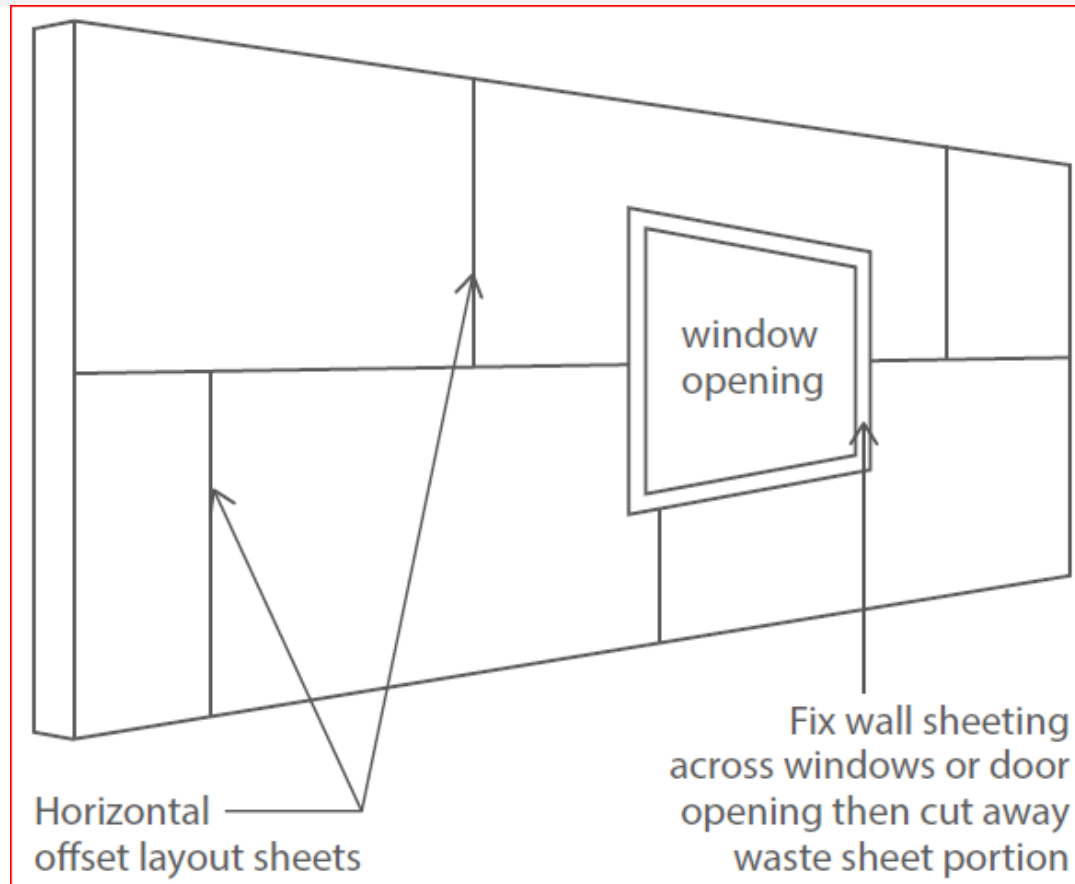
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12 SUPPORTING INFORMATION ABOUT INTENDED USE

PRIMAaqua – An internal wall and ceiling linings, or as a substrate for tiles in wet areas. Sheets may be installed vertically or horizontally and are to be placed in a pattern to minimise the number of joints. Horizontal sheeting is more convenient for residential construction. When fixing horizontally, sheets must be laid in staggered or brick pattern. Sheet joints must not coincide with sides of openings. Refer to Figure below.



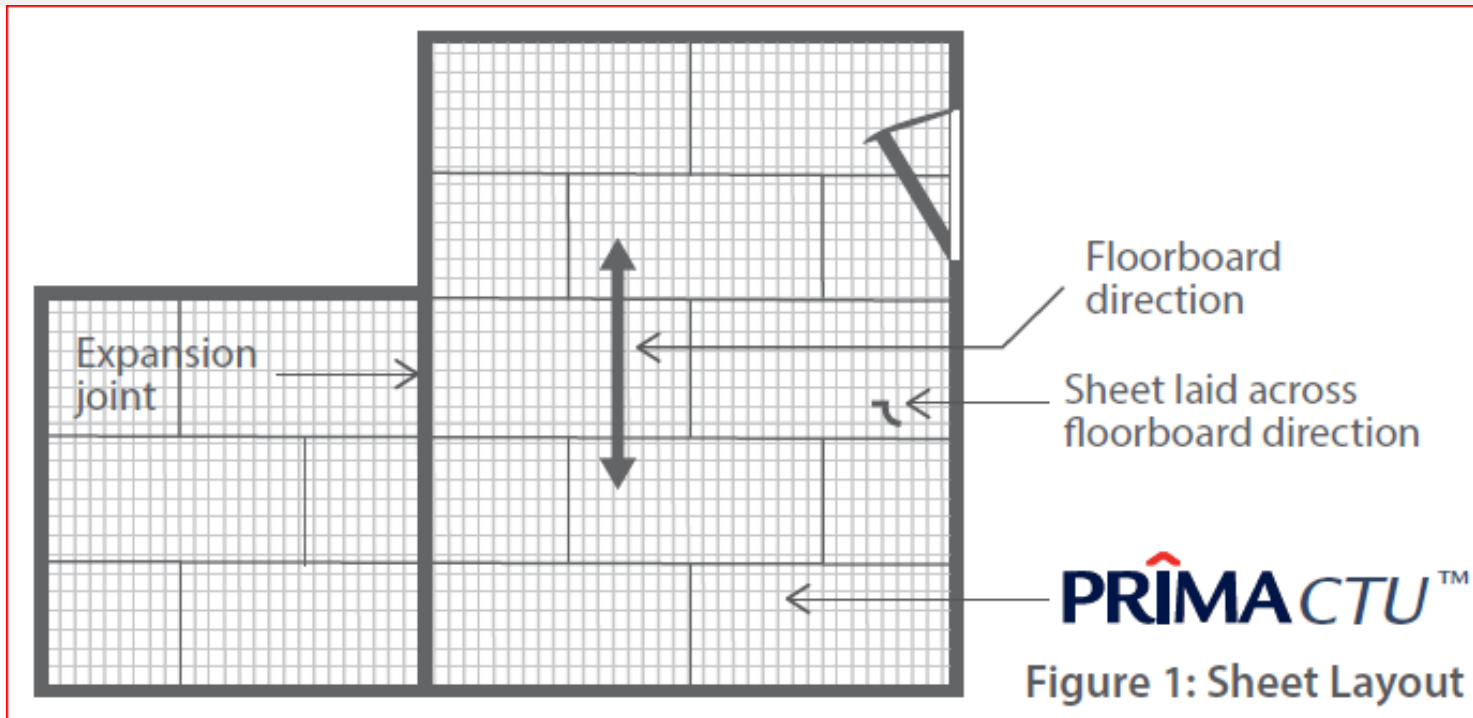
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PRIMAlux – An internal wall and ceiling lining for dry and wet area applications where flushed joints are not required.

PRIMACTU – A substrate for ceramic tiles in wet and dry areas. Sheets are to be laid in a staggered or brick pattern, across the direction of floorboards. Sheet joints must not coincide with floorboard joints as shown in Figure 1 below.



PRIMAliner – An internal wall lining where seamless joint is required or as a substrate for ceramic or marble tiles in wet areas.

PRIMAalpha Groove – An internal wall and ceiling lining. Suitable for use with either timber or light gauge steel framed houses or buildings.

For more information about intended use, refer to the following manuals, as relevant:

- PRIMA International Internal Lining Technical Manual V2. (for **PRIMAaqua, PRIMAlux, and PRIMACTU**)
- **PRIMAliner** International brochure V4 1804 (for **PRIMAliner**)
- **PRIMAalpha Groove** Technical Manual International V1 2019 (for **PRIMAalpha Groove**)