BEAL Appraisal Certificate

APPRAISAL # IN 2217 **EXPIRY DATE: 30 Sept 2026**

The Aquamox Wall Backer Board and Shower Base Systems

Product

1.1 The Aquamox Wall Backer Board and Shower Base systems from Crest Group Ltd, is a tried and proven modular wet area lining system that allows for ready application of tiling systems.

1.2 The AWBB&SB systems comprise modular components of insulating backer board, shower base hobs and accessories suitable for waterproofing over then tiling over.

1.3 The AWBB&SB systems are to be applied by persons suitably experienced and competent, within the scope and limitations described in the Appraisal-holder's technical literature.

NZ Building Regulations

2.1 In the opinion of BEAL, the Aquamox Wall Backer Board and Shower Base Systems, when designed, installed and maintained in accordance with the statements and conditions of this Appraisal Certificate, will meet the following provisions of the New Zealand Building Code:

Clause B1 MECHANICAL / ADHESION PROPERTIES
The Aquamox Wall Backer Board and Shower Base Systems (AWBB&SB systems) meets the requirements of Performance B1.3.1 and B1.3.2. (Refer para 6.3)

Clause B2 DURABILTY
Performance B2.3.1 (b) 15 years. The AWBB&SB will meet this requirement. (Refer para 6.4)

Clause E3 INTERNAL MOISTURE
Performances E3.3.3. E3.3.4 & E3.3.5 Wet area showers and walls incorporating the AWBB&SB systems will meet this requirement. (Refer para 6.8)

Clause F2 HAZARDOUS BUILDING MATERIALS
Performance F2.3.1. The AWBB&SB will not present a health hazard to people. (Refer para 6.9)

2.2 The AWBB&SB systems have been appraised as an 'Alternative Solutions' in terms of compliance with the New Zealand Building Code.

Applicant: **Crest Group Ltd.**
5 Stonehill Drive,
Wiri, Auckland, 2104.
P: 0800 404 042
E: Jerome@crestshowers.co.co.nz
www.aquamox.co.nz

Appraised by: **BEAL**
2A Plimmerton Drive
Plimmerton, Porirua, NZ
P: +64 4 233 6661
E: bts@beal.co.nz
www.beal.co.nz

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Scope and Limitations

3.1 The AWBB&SB system has been appraised for use as a waterproof tile backer board and shower tray system, suited for use in wet areas to ensure compliance with performance clause E3 of the NZBC;

3.2 The design and construction of any supporting framing and or substrates, including control joints, or termination points or the like, are to be to specific design and are therefore the responsibility of the owner/building designer and are outside the scope of this Appraisal Certificate.

3.3 The AWBB&SB system is not to be used for the application of vinyl coverings.

3.4 Tiles less than 50mm x 50mm are unsuitable for use owing to the point load pressure.

3.5 It is essential that the shower base be not installed over (timber or LGS) floor joists - it requires continuous support under the entire shower base area.

3.6 Installation shall be carried out only by suitably experienced and competent tradespersons.

3.7 The owner of the building is responsible for the proper maintenance of the AWBB&SB system as set out in the technical literature along with the Warranty.

Technical Literature

4.1 The AWBB&SB system technical literature must be read in conjunction with this Appraisal. All aspects of design, use, installation and maintenance contained within the Technical Literature and scope of this Appraisal Certificate must be followed.

4.2 For a copy of the range of technical literature please contact Crest Group Ltd. www.aquamox.co.nz

Technical Details

5.1 The product can be applied over a well-designed, sound built structures that are in compliance with the NZBC and the project specification.

Components include:

- **Aquamox Tile Over Backer Board**

This is a sandwich construction product manufactured from high-density Extruded PolyStyrene board coated top and bottom with a proprietary covering made from mortar and fiberglass reinforcement, that can be made waterproof using an NZBC compliant, compatible liquid applied membrane (LAM), and where required, use of the Flexible Waterproof tape and or Aquamox Adhesive Glue. The board is supplied in 4 sizes:

CODE	WIDTH (mm)	LENGTH (mm)	THICKNESS (mm)
AP1206	1200	600	6
AP1200	1200	600	10
AP1230	1200	600	30
AP1210	1200	1200	10

- **Aquamox Flexible Waterproof Tape**

This is a modern 100mm wide waterproof tape with mesh backing to enable the LAM to be applied directly over it;

- **Aquamix Adhesive Glue**

This is a single component non-solvent based adhesive available in 375ml cartridge used for the base and hobs;

- **Aquamox Tile Over Backer Board Fixings**

These are special fixings with plastic flanges to correctly fix the Tile Over Backer Board to the framing and or substrates;

- **Aquamox Niche**

This is a preformed Niche made from the same materials as the Tile Over Backer Board.

ACCESSORIES supplied by Crest Group Ltd:

- **Wastes**
- **Channel Drains**

For a copy of the range of compatible accessories, please contact Crest Group Ltd. www.aquamox.co.nz

Advice for designers

General

6.1 The AWBB&SB is suited for use in wet areas including bathrooms, showers and similar wet areas to ensure compliance with performance clause E3 of the NZBC.

6.2 Before any installation can be carried out, it is essential that a careful inspection of the intended areas to be waterproofed, is completed as set out in the AWBB&SB technical literature.

Adhesion - Clause B1.3.2

6.3 The installed AWBB&SB using the Aquamox Adhesive Glue has good adhesion to a wide range of substrates and therefore meets the requirements of clause B1.3.2.

Durability - Clause B2

6.4 The AWBB&SB system, when used in accordance with this Appraisal Certificate, subject to normal conditions of environment, use, and good housekeeping maintenance, is expected to have a serviceable life of at least 15 years.

Access - Clause D1

6.5 Note that compliance with performance clause D1 for non-slip floor finishes, is reliant on the correct selection of tiles and is therefore outside the scope of this Appraisal certificate.

Internal Moisture - Clause E3

6.6 The AWBB&SB will comply with the requirements of this clause when the system is installed according to the technical literature supplied by the Crest Group Ltd.

Hazardous Building Materials - Clause F2

6.7 Performance F2.3.1. The installed AWBB&SB when installed according to the requirements of this appraisal, meets this requirement and will not present a health hazard to people using the building.

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Installation Requirements

Installation Skill Requirement

7.1 Installation shall be carried out only by suitably experienced and competent tradespersons.

Application Over Repaired Substrates

7.2 The installation of the AWBB&SB over any repaired parts of a wet ara wall or floor, is subject to specific design and outside the scope of this Appraisal Certificate.

Health and Safety

7.3 The safe use and handling of the coating system and related components are provided in the Technical Literature. The products must be used in conjunction with the relevant materials safety data sheet for each component.

Basis of this Appraisal

BEAL use the compliance verification procedure to demonstrate compliance with the relevant clauses of the NZBC based on a risk analysis procedure. The following is a summary of the technical investigations carried out:

Assessments

8.1 The following assessments of the AWBB&SB system have been undertaken by BEAL:
Review of test data and technical literature supplied by Crest Group Ltd. Together with the review of test reports carried out by BEAL.

Testing

8.2 The following testing of the system has been carried out by BEAL:

- Water Resistance over time for the Aquamox Tape
- Water Resistance for the assembled shower tray system
- Compression Resistance of the Aquamox Tile Over Backer Board
- Compression Resistance of the Aquamox Hob
- Adhesive Shear Strength of the Flexible Waterproofing Tape
- Flatwise adhesion of a typical LAM on Tile Over Backer Board.
- Testing was also completed by Intertek covering non-hazardous material, Insulation properties and Fire resistance

In-service History

8.3 The AWBB&SB has been in use and, when subject to the manufacturer's requirements, performed satisfactorily for the past 45 years in New Zealand and other parts of the world, in a wide range of conditions.

8.4 The installation of the AWBB&SB was also evaluated (including site visits) in practical building situations assessing the following;

- Ease of installation
- Potential risks of non-performance when being installed
- Any external factors that could affect the quality of the installed product

Ease of repair or maintenance

8.5 The Technical Literature has been examined by BEAL and found to be satisfactory.

Quality

8.6 The manufacture of the AWBB&SB has been assessed by BEAL regarding the history and composition of the materials obtained by BEAL and found to be satisfactory.

8.7 The quality of materials, components and accessories supplied by Crest Group Ltd. is managed through the use of a Building Product Quality Plan.

8.8 The Crest Group Ltd. Building Product Quality Plan, based on a manufacturing quality plan, ensures continuous conformance with the quality requirements from purchase to application by experienced and approved applicators.

8.9 The Crest Group Ltd.'s Building Product Quality Plan is reviewed and audited at least annually by BEAL or appointed agent.

8.11 Designers are responsible for the substructure design, and building contractors are responsible for the quality of construction of the substructure or new substrate in accordance with the instructions of the substrate manufacturer and this Appraisal Certificate.

8.12 Building owners are responsible for the maintenance of the AWBB&SB in accordance with the manufacturer's instructions and this Appraisal Certificate.

Sources of Information

- The Building Regulations 1992, reprinted 1 January 2017
- NZS 3604:2011 Timber framed Buildings
- AS/NZS2269 Plywood - Structural
- NASH Standards 1 & 2
- NZS3109 Concrete Construction
- (NZ) Code of Practice for Internal Wet-area Membrane Systems
- Technical literature supplied by Crest Group Ltd
- Test Reports from Intertek Shanghai covering non-hazardous material, Insulation properties and Fire resistance
- Test Reports from BEAL as described earlier including:
- TR220727-1 Water Resistance over time for the Aquamox Tape
- TR220727-2 Water Resistance for the assembled shower tray system
- TR220803-1 Compression Resistance of the Aquamox Tile Over Backer Board
- TR220803-2 Compression Resistance of the Aquamox Hob
- TR220907-1 Adhesive Shear Strength of the Flexible Waterproofing Tape
- TR220907-1 Flatwise adhesion of a typical LAM on Tile Over Backer Board.

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Concluding statement

9.1 In the opinion of BEAL, the AWBB&SB is fit for purpose and will comply with the NZBC to the extent specified provided that it is used, designed, installed and maintained in accordance with the manufacturer's instructions and this Appraisal Certificate.
The Appraisal Certificate is issued only to Crest Group Ltd., and is valid until further notification, subject to the conditions of this Appraisal.

Conditions of Appraisal

10.1. This appraisal Certificate:
a) Relates only to the AWBB&SB system as described herein;
b) Must be read, considered and used in full, together with the current version of the technical literature
c) Does not address any legislation, regulations, codes or standards, not specifically named herein;
d) Is copyright of BEAL

10.2 The Appraisal Certificate holder continues to meet the quality requirements of the Crest Group Ltd. Building Product Quality Plan and has the plan audited and Appraisal certificate revalidated by BEAL on an annual basis.

10.3 Crest Group Ltd. shall notify BEAL and obtain approval of any changes of the product specification or quality assurance prior to product being marketed including any trade literature, web site info or the like.

10.4 BEAL makes no representation 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 the Appraisal Certificate holder.

10.5 BEAL's verification of the building product or system complying with one or more of the above-mentioned criteria is given on the basis that the criteria used were those that were appropriate to demonstrate compliance with the NZBC at the date of this Appraisal Certificate. In the event that the criteria is withdrawn or amended at a later date, this Appraisal may no longer remain valid.

10.6 Any reference in this Appraisal Certificate to any other publication shall be read as a reference to the version of publication specified in this Appraisal Certificate.

Authorised Signatory,

C R Prouse - Director
BEAL (Building Element Assessment Laboratory Limited)
[September 2022 v1.2]

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