dumawall®
WATERPROOF WALL TILES

BPIR
COMPLIANT

INSTALLATION GUIDE

VERSION 2.3 | SEPTEMBER 2024

PSP MATERIALS PRODUCTS SOLUTIONS

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1.0 GENERAL INFORMATION

1.1 Introduction

DumaWall+ and DumaWall XL (DumaWall) are 5mm thick, impervious uPVC tiles/panels intended for use as internal wall linings.

DumaWall+ Tiles feature an interlocking tongue and groove profile on all four edges and are available in the following size:

- 375mm x 650mm
- 8 tiles per pack – 1.95m^2

DumaWall XL Panels feature an interlocking tongue and groove profile along the two longest edges and are available in the following size:

- 900mm x 2600mm
- 2 panels per pack – 4.68m^2

DumaWall is installed with a Modified Silicone (MS) Polymer High Tack Adhesive and Aluminium Finishing Trims - avaliable in anodised silver and powder-coated black.

1.2 Important Documents

In addition to this guide, PSP also supply the following documents to assist with DumaWall specification, installation, and maintenance:

- The Minor Variation form (where a consented internal lining is to be substituted with DumaWall)
- The BPIR Declaration
- Warranty - refer to PSP Terms & Conditions *Paragraph 16. Warranties and Liability*
- Manufacturer's Warranty - *10 Years*

1.3 Controlled Documents

All documents are controlled. It is important to ensure that the current documents are always used. For documents, refer to www.psp.co.nz.

2.0 DESIGN

2.1 Building Consent Application

Where the specification of DumaWall is part of a building consent application, the following documentation must be submitted:

- This Installation Guide
- The BPIR Declaration

2.2 Specification

DumaWall is only intended for internal use, vertical installation and spaces where the sustained temperature does not exceed 60°C or fall below -10°C. It must not be installed within 1m of a heat source (< 60°C).

Substrate

The substrate, to which the DumaWall will be adhered, must be fixed to a structure that complies with the New Zealand Building Code (NZBC) or to an existing structure that has the equivalent stiffness of the framing provisions for NZS 3604:2011.

Where DumaWall is to be installed in a wet area, the substrate must be waterproof.

DumaWall Installation

DumaWall is to be fixed to the substrate with an MS Polymer High Tack Adhesive. Ensure that the adhesive is suitable for the substrate (including compatibility with waterproofing), and the DumaWall. PSP supplies Aluminium Trims.

2.3 Product Substitution

Where DumaWall is to be used as a substitute for the consented product, the following documentation must be supplied to the building inspector before installation of the DumaWall:

- The Minor Variation Form
- This Installation Guide
- The BPIR Declaration

3.0 PLAN THE LAYOUT

Planning the layout at the beginning of the project will ensure that the final installation of the tiles/ panels will create the desired look. It will also ensure less wastage and faster installation.

Note: Ensure that your plan is easy to follow, as it will be used at the dry layout stage.

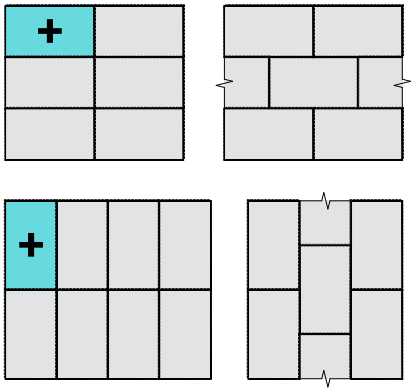
REMEMBER:

* DumaWall is only intended for internal use; for installation on vertical surfaces.
* It should not be used in areas where the sustained temperature exceeds 60°C (e.g. saunas) or falls below -10°C (e.g. refrigeration areas).
* It must not be installed within 1m of a heat source or where exposure to a contact temperature greater than 60°C could occur.

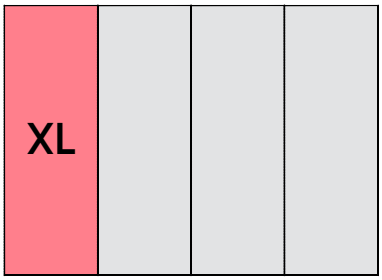
STEP 1

Consider tile/panel dimensions and orientation.

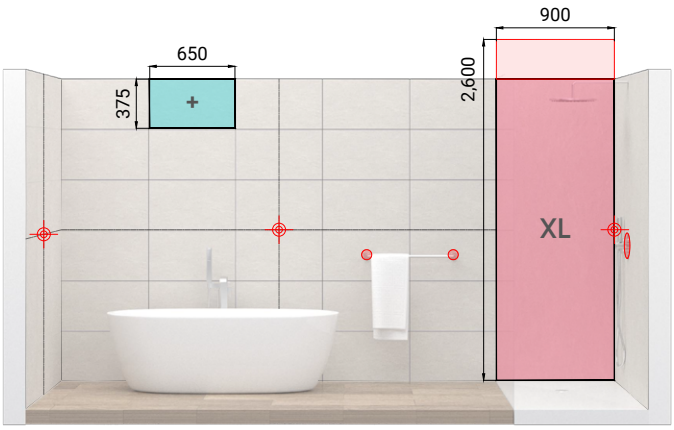
- **DumaWall+** 375mm x 650mm
  May be installed horizontally or vertically



- **DumaWall XL** 900mm x 2600mm
  Intended to be installed vertically.



STEP 2



For each wall:

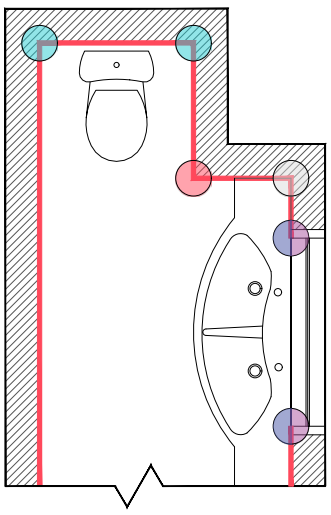
- Measure and mark fixtures that will affect the installation, especially electrical fixtures.
- Determine the centre of the wall; this represents the mid-point of the layout.
- The tiles or panels will be positioned from the mid-point. Take note of the tiles or panels that need to be cut, ensuring allowances for the trim installation.

Note: Gap allowances between the trim and DumaWall may be needed. For instance, when placing the last tile/panel in a row or considering that DumaWall XL has the ability to expand/ contract up to 1mm/m length.

STEP 3

Determine trim locations and required lengths.

KEY	VERTICAL COMPONENT
	DumaWall Tiles/Panels
	WALL COMPOSITION
L	EXTERNAL CORNER
L	INTERNAL CORNER
	UNIVERSAL TRIM
	START TRIM
	END TRIM
	CLICK TRIM



Details are subject to change; verify with latest documents. Uncontrolled in printed format.

4.0 PREPARATION

4.1 Safety and Tools

Keep Safe

Follow simple health and safety practices:

- Create a safe working environment that is well organised, tidy, and clear of obstructions.
- Always ensure PPE is worn (eye protection, gloves, dust mask, and safety footwear).
- Always operate tools and equipment strictly in accordance with the supplier's manuals.
- Regularly service tools and equipment to ensure efficient and correct operation.
- Where possible, work in an area that is well ventilated or where mechanical dust extraction is possible. This is especially important if cutting or drilling.
- Where working at height, ensure the correct selection and use of safety gear.
- An electrician may be required where there is risk of touch voltage.

For further information, refer to resources at www.worksafe.govt.nz:

- Managing Health and Safety.
- Small Construction Sites, The Absolutely Essential Health and Safety Toolkit.

Skills and Tools

Competent DIYer skills and standard carpentry tools are required to install DumaWall. The following tools may help to simplify installation:

- Drill + Speed Drill Bits
- Scribing Knife
- Utility Knife
- Scoring Knife
- Soft-faced Mallet
- Cartridge Gun
- Table Saw
- Circular Saw
- Hole Saw
- Jigsaw
- Hack Saw

Additional Products

To install DumaWall, the following products may be required:

- **ALUMINIUM FINISHING TRIMS** - Install trims to ensure a durable and waterproof finish. All trims are supplied in 2.6m lengths, avaliable in anodised silver and powder-coated black.
- **ADHESIVE (BY OTHERS)** - The Modified Silicone (MS) Polymer Adhesive must be compatible with DumaWall and the substrate (including compatibility with waterproofing if applicable). High Tack adhesives are recommended for instant grab.
- **VHB TAPE (BY OTHERS)** - If a High Tack Adhesive option is unavaliable, use a VHB (double-sided) Tape to hold the panel in tile/ place while the adhesive cures.
- **MASKING TAPE (BY OTHERS)**

4.2 Handling and Storage

* Take care when transporting, handling, and storing DumaWall to prevent damage.
* Transport and store the panels flat. Make sure that the length of panels are well supported to avoid bending and distortion.
* Do not stack panels if they are wet. Cover in a well-ventilated area out of direct sunlight.
* Confirm that the tiles/panels have been stored in a flat position for a minimum of 48 hours prior to installation.

4.3 Install Plumbing in Wet Areas

It is important to ensure that the waterproofing is not compromised when installing plumbing. Refer to the supplier of the plumbing fixtures or a plumber for instructions and advice.

For general guidance, refer to BRANZ Build 157. [December 2016] Penetrations in Wet Areas.

4.4 Apply Waterproofing

Where DumaWall is installed in a wet area, waterproofing is required. Apply a suitable waterproofing to the substrate, ensuring that the selected waterproofing is compatible with the MS Polymer High Tack Adhesive. Refer to the product supplier or a plumber for instructions and advice.

For general guidance, refer to BRANZ BULLETIN Issue 518. [December 2009] Wet Area Tile Waterproofing.

4.5 Prepare Substrate

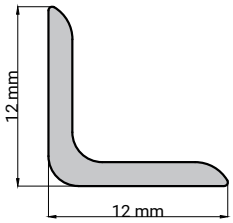
Ensure that the substrate is level, true, and fixed soundly to the framing. Check that the substrate surface is clean, dry, and free of contaminants. If required, lightly sand or prime glossy surfaces to remove sheen.

4.6 Cut Aluminium Trims

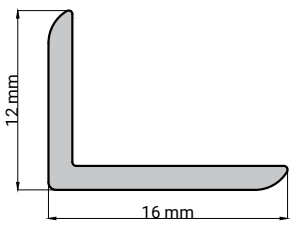
Cut Trims to Length

Identify locations that require finishing trims; consider both vertical and horizontal edges. All trims are supplied in 2.6m lengths.

Select the appropriate trim and proceed to measure, mark, and cut the necessary lengths. Trims may be cut with a hack saw or circular saw.

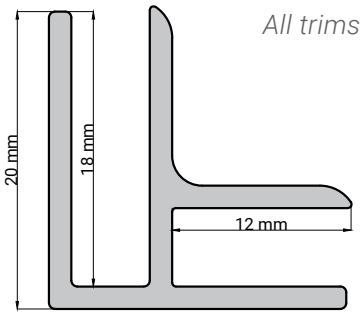


INTERNAL CORNER

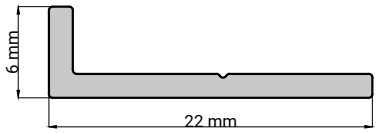


EXTERNAL CORNER

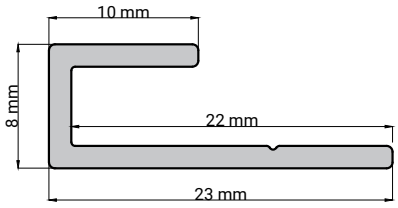
All trims supplied in 2.6m lengths.



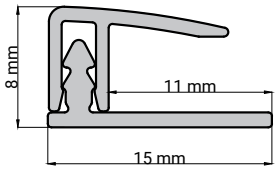
UNIVERSAL CORNER



START TRIM



FINISHING TRIM



CLICK FINISHING TRIM

4.7 Cut DumaWall

Measure and mark on the DesignerSplash panel where holes and cuts are required.

Cut Panel to Size

DumaWall may be cut with:

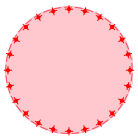
- A Circular Saw (60 tooth or higher)
- A Fine-toothed Blade Table Saw
- A Fine-toothed Jigsaw
- A Sharp Scoring Knife - to score a cut line. Snap at the line and sand edge if necessary.

Tip: Apply masking tape to the cut-line to protect the surface of DesignerSplash and reduce the risk of chipping and saw-induced scratches.

Details are subject to change; verify with latest documents. Uncontrolled in printed format.

4.7 Cut DumaWall (Continued)

Circular Holes



1. On the front/back side of the tile/panel, mark the circular area to be removed.
2. Utilise a hole saw or drill (3.5 - 5mm speed bit) to create a series of holes as close to each other as possible.
3. Push the waste material through and finish the opening with a utility knife.

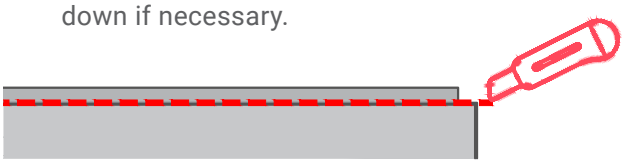
Rectangular Holes

1. On the front/back side of the tile/panel, mark the rectangular area to be removed.
2. Drill holes at the corners of the rectangle (15 - 18mm dia.) big enough to accommodate the fine-toothed jigsaw blade.
3. Cut the opening with a jigsaw.

Removing Tongue Profiles

Tongue profiles should be removed for a clean 90º edge where DumaWall butts up to a corner or where it is in the top or bottom tile position.

1. Gently slice off the tongue with a utility knife.
2. Snap off any remaining edges and sand down if necessary.



4.8 Create a Dry Layout

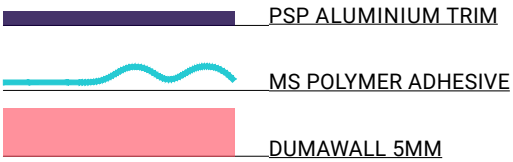
The dry layout stage is recommended to ensure that the final placement of DumaWall is square and true.

It will highlight any necessary adjustments to the substrate or if the DumaWall tiles/panels need trimming to align with the wall, floor, or ceiling.

5.0 INSTALLATION

5.1 Install Aluminium Trims

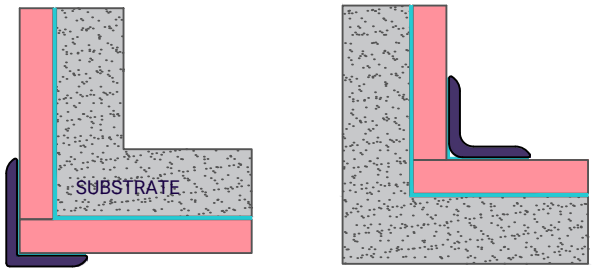
Follow the MS Polymer High Tack Adhesive supplier's instructions when installing the trims.



EXTERNAL & INTERNAL CORNER TRIMS

Use corner trims at junctions of tiles/panels to provide a finished look.

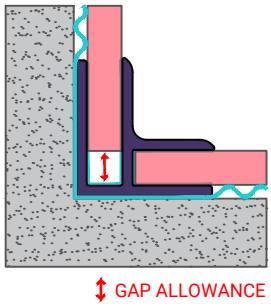
To install the trim, apply a small bead of adhesive directly to the corner junction or on the trim itself, then press it into place.



Tip: If necessary, use masking tape to temporarily secure the trim in place while the adhesive cures.

UNIVERSAL TRIM

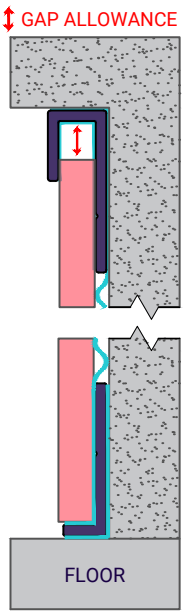
Apply a small bead of adhesive directly to the substrate corner or on the trim itself. Also, apply a bead of adhesive into the each of the trim's receiving channels.



Note: Gap allowance may be needed for installing the last tile/panel in a row or considering that DumaWall XL has the ability to expand/contract up to 1mm/m length.

START & END TRIMS

Apply a small bead of adhesive directly to the substrate or on the trim itself, then press it into place. Also, apply a bead of adhesive into the trim's receiving channel.

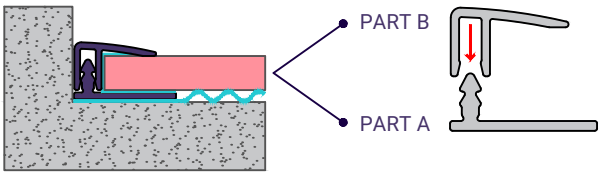


Note: Provide a gap allowance when using the start/end trim.

CLICK TRIM

Easily finish the terminal end of tiles/panels without the need for the installation gap allowance.

To install the Click Trim, apply a small bead of adhesive directly to the substrate or on Part A itself, then press it into place. After adhering the tile/panel over Part A, securely click on Part B to provide a finished look.



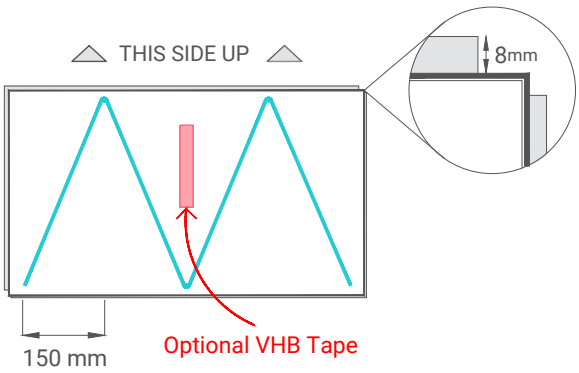
5.2 Install DumaWall

STEP 1

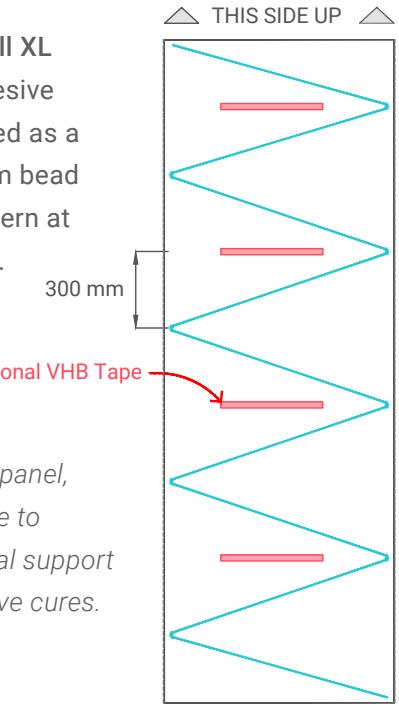
Before applying the MS Polymer High Tack Adhesive, wipe down the back of the tile/panel, and refer to the adhesive supplier's instructions.

STEP 2

For all **DumaWall+** tiles, apply a continuous 5mm bead of in an M or W shape at 150mm centres.



For all **DumaWall XL** panels, the adhesive should be applied as a continuous 5mm bead in a zig-zag pattern at 300mm centres.

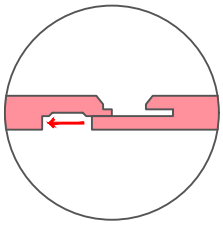


Tip: For the first panel, Apply a VHB tape to provide additional support while the adhesive cures.

STEP 3

Begin the DumaWall installation from the bottom row, ensure the long 8mm tongue profile faces upwards. Apply even pressure across the tile/panel, and press it into place.

Work from right to left, connecting the next tile by inserting the tongue into the interlocking groove.



STEP 4

After the first row has set, install the remaining tiles/panels in your desired pattern, as planned during the dry layout stage.

STEP 5

To install the last tile/panel, cut down the edge to provide a gap allowance for DumaWall to be seamlessly inserted into trim.

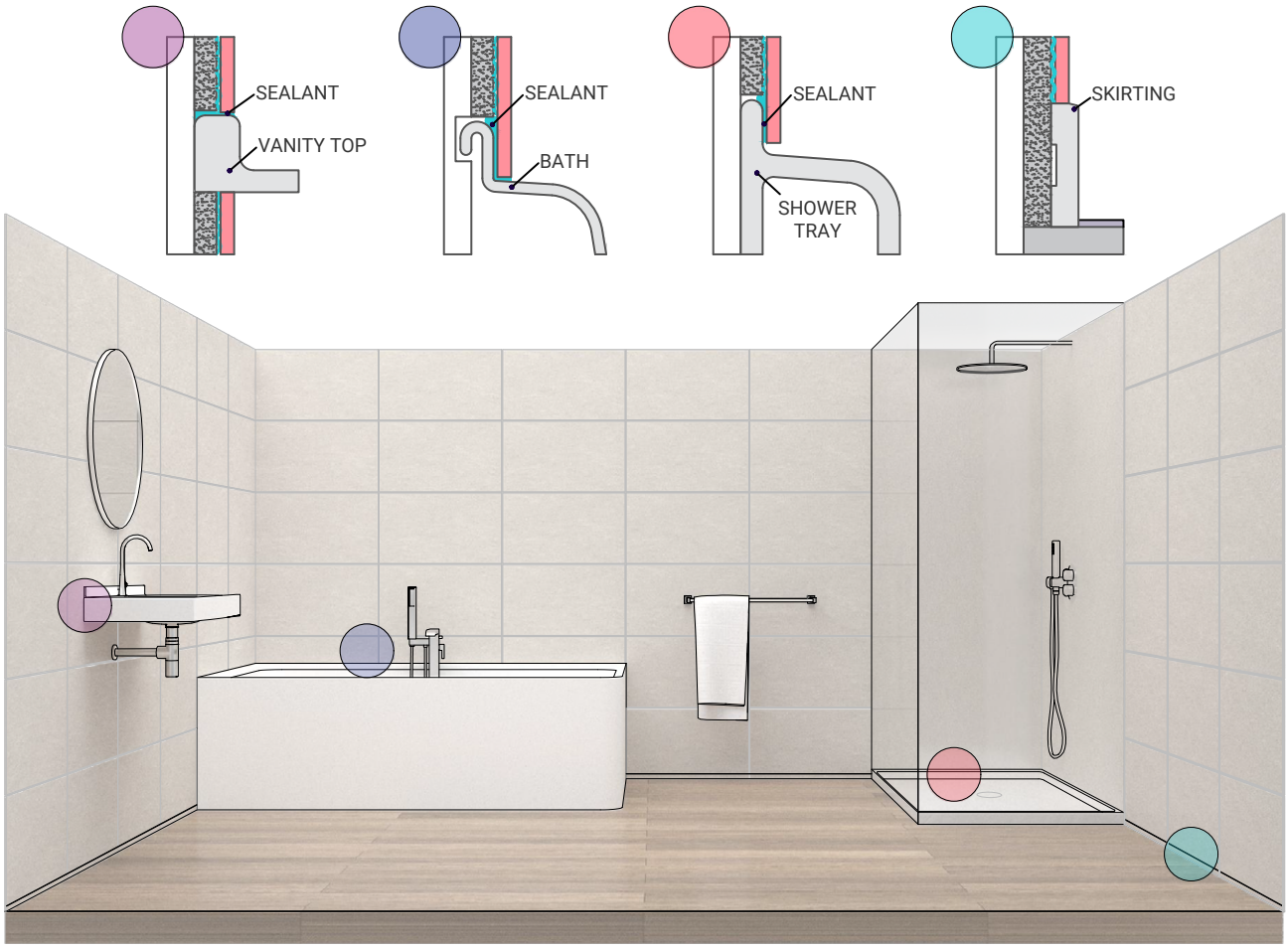
Hold the last tile/panel at an angle to insert it into end trim. Once the DumaWall is flush with substrate, slide it back to interlock the tongue and groove. Clean up any excess adhesive with a silicone remover.

Tip: For the last tile/panel, use the Click Trim as an easier install alternative to the End Trim.

Details are subject to change; verify with latest documents. Uncontrolled in printed format.

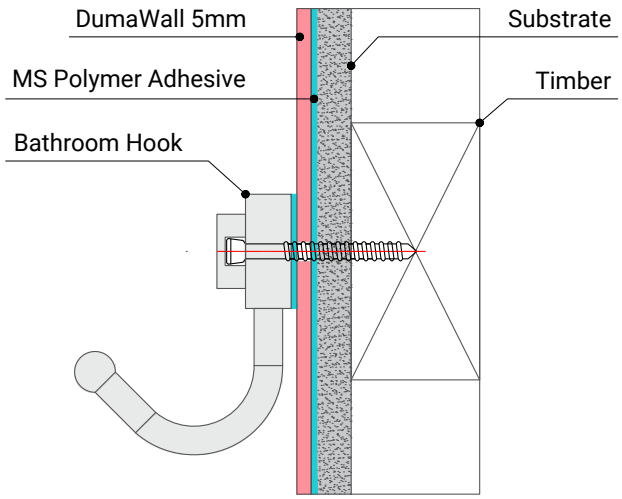
5.3 Installing in Wet Areas

Use an MS Polymer Sealant in wet areas to ensure waterproofing.



5.4 Install Fixtures

The adhered DumaWall is not strong enough to support fixtures such as shelves and shower rails. “Stick on” fixtures are not recommended, as failure may cause damage to the DumaWall and substrate. It is best to install fixtures through to the framing.



Where the tile/panel is required to be waterproof, BRANZ recommends the following approach: *Identify, mark, and predrill the fixing location. Before inserting the fixing, fill with sealant. Apply sealant to the back face of the plate or bracket before fixing through* the DumaWall to the framing.

For general guidance, refer to BRANZ Build 157. [December 2016] Penetrations in Wet Areas.

6.0 CARE AND MAINTENANCE

DumaWall+ and **DumaWall XL** are fully washable and should be regularly cleaned. Use a sponge with warm soapy water to remove any dirt or grime. Do not use abrasive substances or chloride-based products or solvents.

Tip: For a natural cleaning option, use a mixture of 1 cup of vinegar and 4 cups of hot water.