

 **dumawall**[®]
WATERPROOF WALL TILES


BPIR
COMPLIANT



INSTALLATION GUIDE

VERSION 2.2 | FEBRUARY 2024

 **PSP** MATERIALS
PRODUCTS
SOLUTIONS

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1.0 GENERAL INFORMATION

1.1 Introduction

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

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

- 375 mm x 650 mm
- 8 tiles per pack – 1.95m²

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

- 900 mm x 2600 mm
- 2 panels per pack – 4.68m²

DumaWall is installed with a MS Modified Silicone (MS) Polymer High Tack Adhesive and Aluminium Finishing Trims - available in Anodised Silver and Powder-coated Black finishes.

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, request this document from PSP)
- The BPIR Declaration
- Warranty - refer to PSP Terms & Conditions [Paragraph 16. Warranties and Liability](#)

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 building code 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 finishing 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.

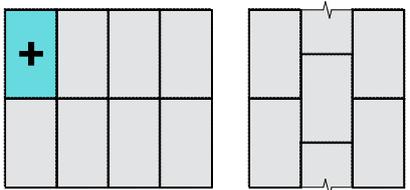
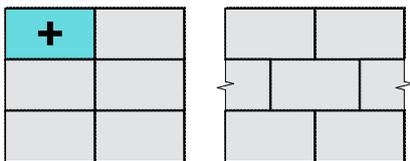
REMEMBER:

- * 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.

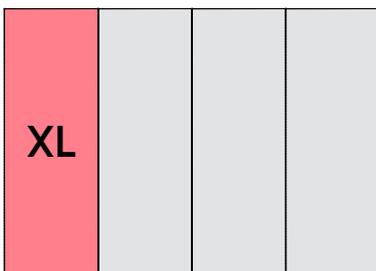
STEP 1

Consider tile/panel dimensions and orientation.

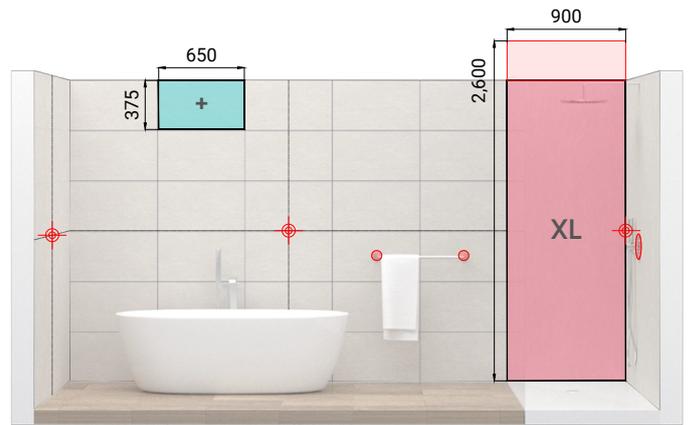
- **DumaWall+** 375 mm x 650 mm
May be installed horizontally or vertically



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



STEP 2



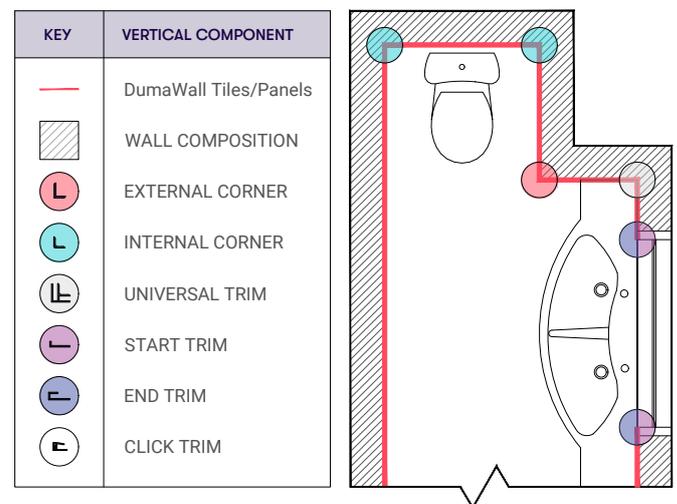
For each wall:

- Measure and mark fixtures that will affect the installation, especially electrical fixtures.
- Determine the center point 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 allowance 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 1 mm/m length.

STEP 3

Determine trim locations and required lengths.



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.

For further information, refer to

www.worksafe.govt.nz and, in particular:

- WorkSafe. [July 2018] Small Construction Sites, The Absolutely Essential Health and Safety Toolkit.
- WorkSafe. [December 2016] Health and Safety at Work, Quick Reference Guide.

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
- Plunge Saw
- Jig Saw
- Hack Saw



Electric Shock Hazard: An electrician may be required where there is risk of touch voltage.

Additional Products

To install DumaWall, the following products are required:

- **ALUMINIUM FINISHING TRIMS** - To ensure the finish of the installation is durable and waterproof. Trims are supplied in 2.6m lengths, with options in silver and black.
- **ADHESIVE** - MS Polymer Adhesive compatible with DumaWall and substrate (including compatibility with waterproofing if applicable). Preferably a High Tack product for instant grab during install.

Tip: VHB (double-sided) Tape may be helpful for fixing of DumaWall where the initial hold is of concern while the adhesive cures.

4.2 Handling and Storage

- * Take care when transporting, handling, and storing DumaWall to prevent damage.
- * Transport and store the tiles/panels flat. Cover in a well-ventilated area out of direct sunlight. Make sure that the tiles/panels are well supported to avoid distortion.
- * Do not stack tiles/panels if they are wet.
- * 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.

BRANZ also covered this in BRANZ Build 157. [December 2016] Penetrations in Wet Areas.

Refer to www.buildmagazine.org.nz/index.php/articles/show/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.

BRANZ covered this in BRANZ BULLETIN Issue 518. [December 2009] Wet Area Tile Waterproofing. Refer to <https://www.branz.co.nz/pubs/bulletins/bu518/>

4.5 Prepare Substrate

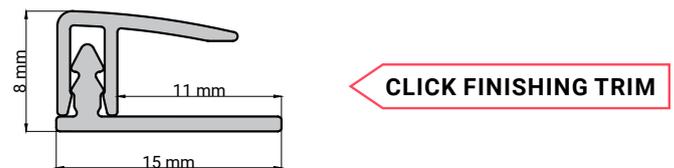
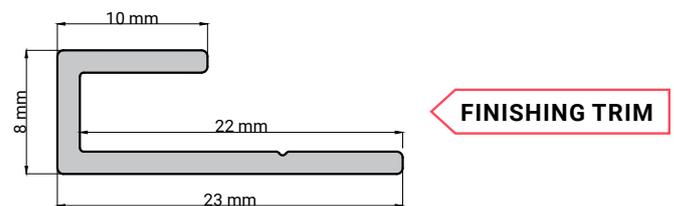
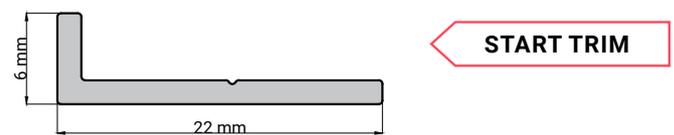
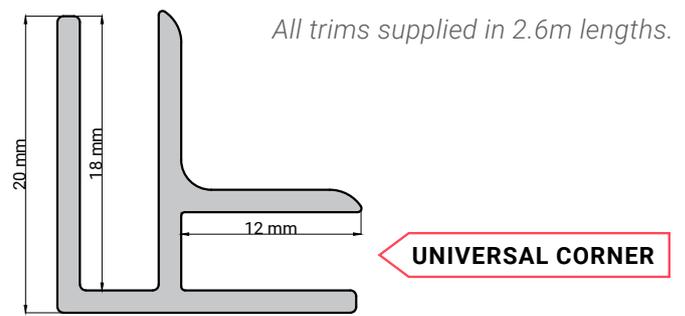
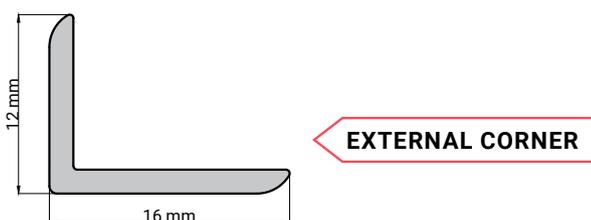
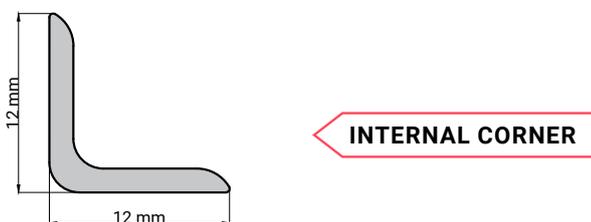
Ensure that the wall substrate is level, true, and fixed soundly to the framing. Check that the substrate surface is clean, dry, and free of dirt, grease, and other contaminants. Lightly sand or prime glossy surfaces to remove sheen.

4.6 Cut Aluminium Trims

Cut Trims to Length

Review trim locations, considering vertical and horizontal applications. 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.



All trims supplied in 2.6m lengths.

4.7 Cut DumaWall

Cut and Create Openings

Measure and mark the tile/panel where holes and cuts are required. Exercise caution to protect the tile/panel from saw or jigsaw-induced scratches.

DumaWall may be cut with:

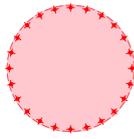
- A Circular Saw (60 tooth or higher)
- A Fine-toothed Blade Table Saw
- A Fine-toothed Jig Saw
- A Sharp Scoring Knife - to score a cut line.
Snap at the line and sand edge if necessary.

Tip: Apply masking tape to the line of the cut to reduce the risk of chipping and to protect the surface of the DumaWall.

4.7 Cut DumaWall (Continued)

Circular Holes

1. On the front or back side of the tile/panel, mark the circular area to be removed.
2. Utilise a hole saw or drill (3.5 - 5.0 mm 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 or similar.



Rectangular Holes

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



Removing Tongue and Groove Profiles

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

1. Carefully cut off tongue with a utility knife.
2. Snap off any remaining edges and sand down if necessary.



4.8 Create a Dry Layout

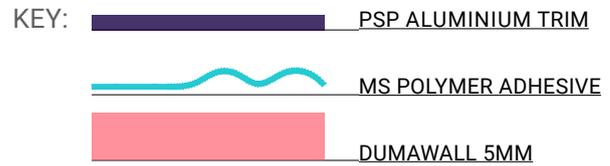
The Dry Layout stage is recommended to ensure that the final placement of DumaWall is square and true.

It will highlight if adjustments are needed to walls that are out of square or if the tiles or panels need to be trimmed because of wall, floor, or ceiling alignment.

5.0 INSTALLATION

5.1 Install Aluminium Trims

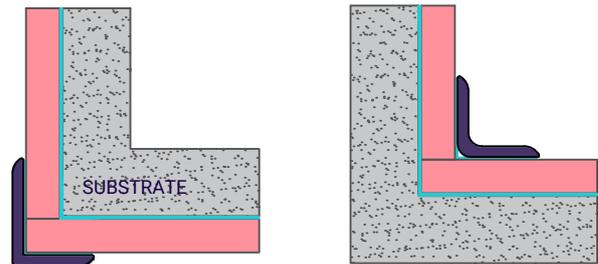
Follow the MS Polymer High Tack Adhesive supplier's instructions when installing the trims.



EXTERNAL & INTERNAL CORNER TRIMS

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

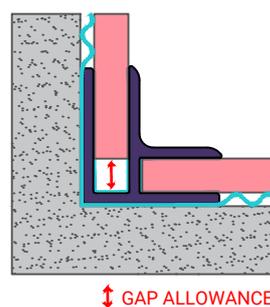
To install trim, apply a small bead of adhesive directly to the corner junction or on the trim itself, then press it in place.



Tip: If necessary, use some masking tape to secure trim whilst 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 1 mm/m length.

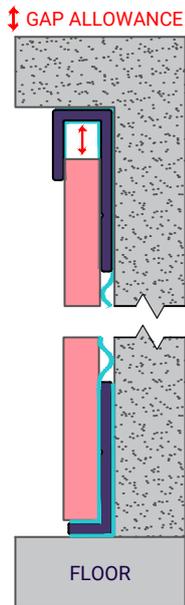
START & END TRIMS

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

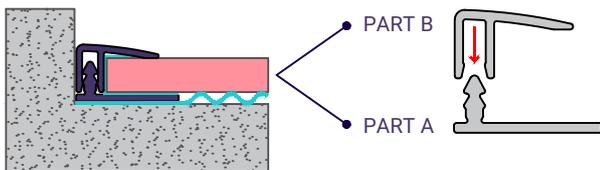
Note: Gap allowance may be needed when using start trim.

CLICK TRIM

Easily finish the terminal end of tiles/panels without need for 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 in place. After adhering tile/panel over Part A, securely click on Part B to provide a finished look.



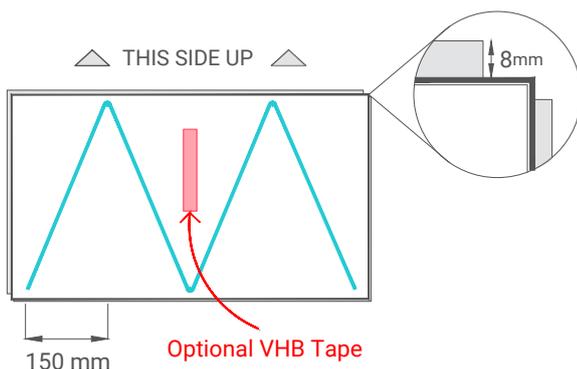
5.2 Install DumaWall

STEP 1

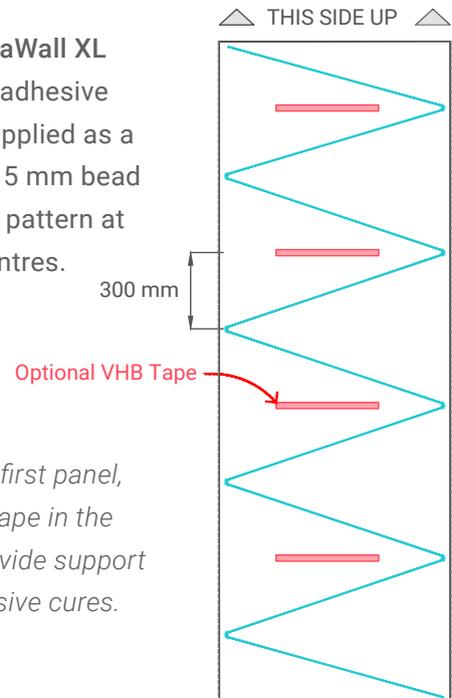
Before applying MS Polymer High Tack Adhesive wipe the back of the tile/panel with a damp cloth, and refer to the adhesive supplier's instructions.

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 5 mm bead in a zig-zag pattern at 300 mm centres.

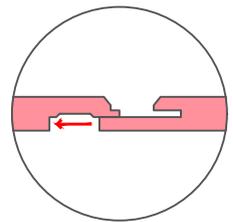


Tip: For the first panel, apply VHB tape in the voids to provide support whilst adhesive cures.

STEP 3

Begin DumaWall installation from the bottom row, ensure the long 8mm tongue profile faces upwards. Apply even pressure across the tile, and press it in 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 desired pattern, as planned in the Dry Layout stage.

STEP 5

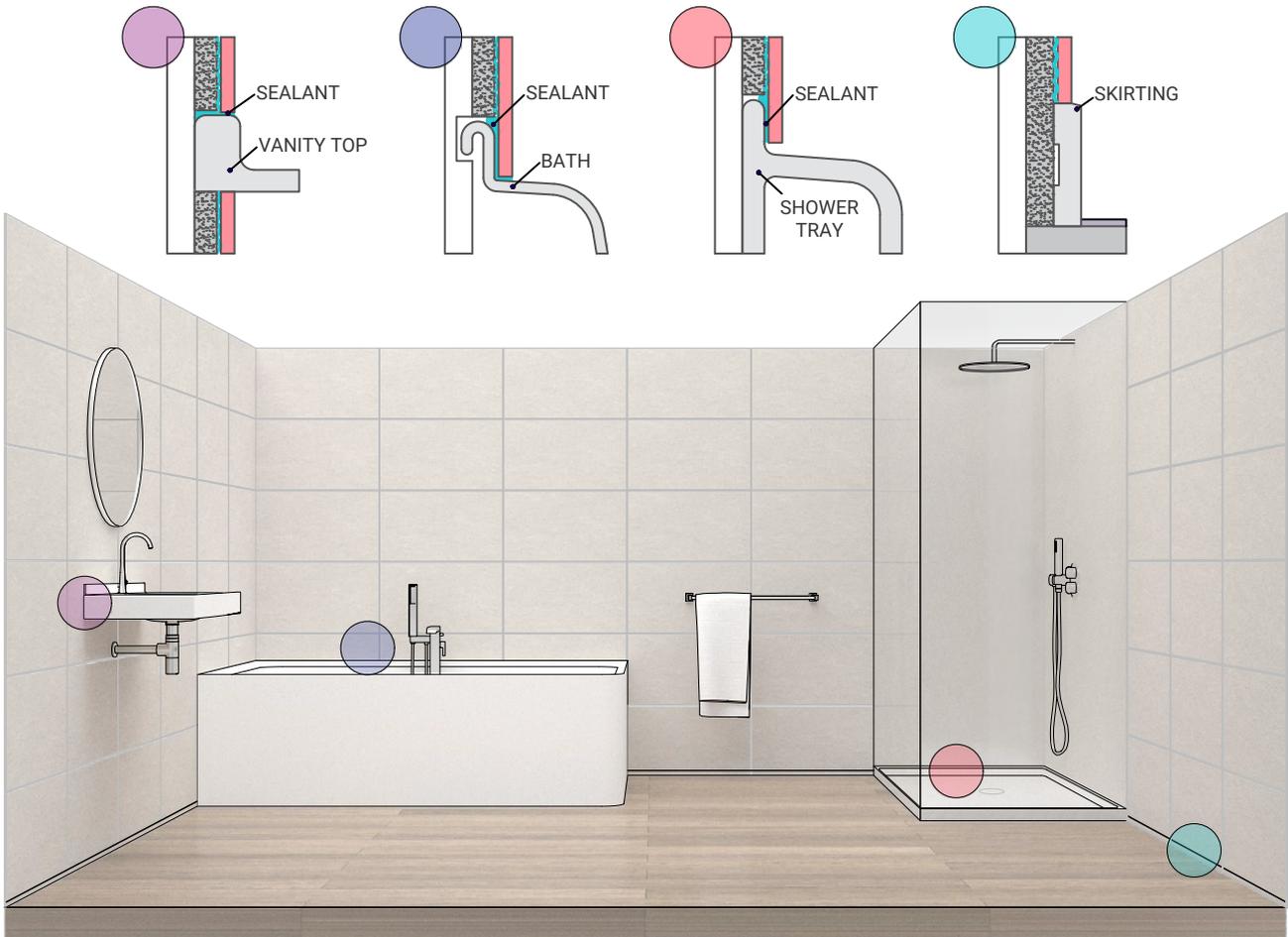
To install the last tile/panel, cut down the edge to provide gap allowance for DumaWall to be seamlessly inserted into trim.

Insert the last tile/panel at an angle, easing 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 panel, you may choose to use the Click Trim as an easier alternative to the End Trim.

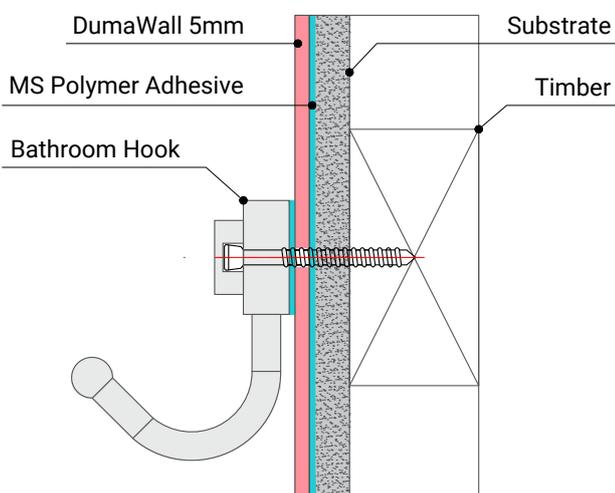
5.3 Installing in Wet Areas

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



5.4 Install Fixtures

The DumaWall and adhesive are not strong enough to support shelves or other fixtures. "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 further information, refer to [BRANZ Build 157. \[December 2016\] Penetrations in Wet Areas.](#)

5.5 Complete the Installation

When the adhesive has dried and cured (as per the supplier's instructions), clean the DumaWall with warm soapy water (or natural alternative).

Tip: For a natural home-remedy cleaning option, use a mixture of 1 cup vinegar to 4 cups hot water.

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.