IBS
BUILDING PRODUCTS

PRÎMA*aqua*™

IBS DESIGN & INSTALLATION GUIDE

PRÎMA™
FIBRE CEMENT BUILDING SOLUTIONS

IBS BUILDING PRODUCTS

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www.ibs.co.nz

1 PURPOSE OF DOCUMENT

1.1 GENERAL

This document is intended for designers and installers to ensure IBS PRÎMA*aqua*™ panels are specified and installed correctly.

2 WHAT IS PRÎMA*aqua*™?

IBS PRÎMA*aqua*™ is a wet area lining panel manufactured from cellulose fibre cement, with rebated edges on each length.

2.1 DESCRIPTION AND USE

IBS supplies PRÎMA*aqua*™ panels for use as:

› An internal dry wall.

› An internal and external ceiling panel.

› A floor and wall substrate lining (over an existing structural floor) and wall framing for wet areas.

› A flat, even surface that can be covered with ceramic tiles or paint. You can use a water-based, acrylic or epoxy paint system, after the panels have been properly filled. In wet areas, PRÎMA*aqua*™ can also be used with an approved waterproof membrane.

2.2 AVAILABLE PANEL SIZES

› Length (mm): 2400 & 2700

› Width (mm): 1200

› Thickness (mm): 9.0

2.3 SCOPE OF USE

IBS supply PRÎMA*aqua*™ for use within the following scope:

› In all buildings where the structure is suitable for the intended building work.

› In all building areas prone to water splashes.

› As a tile substrate over existing or new reconstituted wood floors (e.g. plywood, particle board, OSB and timber tongue and groove).

› As a wet area lining for bathrooms, kitchens, laundries and internal rooms with high humidity.

› In conjunction with an approved firewall design.

2.4 LIMITATIONS

> When specifying and installing PRĨMA*aqua*™ make sure you follow the IBS PRĨMA*aqua*™ Design and Installation Guide.

> PRĨMA*aqua*™ should not be installed on timber framing where the moisture content is greater than 18%.

> Tiles must be installed with a flexible tile adhesive that's also compatible with PRĨMA*aqua*™. Talk to your preferred adhesive manufacturer for recommendations.

> When specifying and installing PRĨMA*aqua*™ as a flooring substrate, the panels must be fully supported by a rigid flooring material.

2.5 SUPPORTING INFORMATION FOR PRĨMA*aqua*™

Supporting information for PRĨMA*aqua*™.

> This document must be read in conjunction with:

> **IBS PRĨMA*aqua*™ pass™ (Product Assurance Supplier Statement)**

> **IBS PRĨMA*aqua*™ Care & Maintenance Guide**

> **IBS PRĨMA*aqua*™ Warranty**

3 INFORMATION FOR DESIGNERS

3.1 SKILLS REQUIRED

The designer will need to have knowledge of the product and access to all the PRĨMA*aqua*™ technical information (see **www.ibs.co.nz** for details).

3.2 CONSIDERATIONS WHEN DESIGNING

When specifying PRĨMA*aqua*™ panels, the designer should consider the following:

> Use of the space in respect to fire, water splash, moisture and/or acoustics

> The supporting structure

3.3 SPECIFICATION DETAILS

When you specify PRĨMA*aqua*™ panels, make sure you identify the correct panel thickness and fixings. This will depend on the structure, use and method of installation.

3.4 REQUIRED DOCUMENTS

When you are applying for a building consent, include the following documents:

> **IBS PRĨMA*aqua*™ pass™ (Product Assurance Supplier Statement)**

> **IBS PRĨMA*aqua*™ Design & Installation Guide**

> **IBS PRĨMA*aqua*™ Care & Maintenance**

> **IBS PRĨMA*aqua*™ Warranty**

4 INFORMATION FOR INSTALLERS

4.1 SKILLS REQUIRED

PRÎMA*aqua*™ panels can be installed by a person with the appropriate skills and equipment, who has knowledge of the product and access to the relevant PRÎMA*aqua*™ technical information (see **www.ibs.co.nz** for details).

4.2 HEALTH AND SAFETY

When installing PRÎMA*aqua*™ take all steps to ensure your safety and the safety of others:

> Use safety glasses, ear protection, and wear appropriate clothing and footwear.
> Use all tools in accordance with the relevant instruction manuals.
> Do not cut indoors using a circular saw. Use a hand guillotine, fibre cement shears or a score and snap knife.
> Provide dust extraction if working in an enclosed space.

For further information refer to:

> **The Absolutely Essential Health and Safety Toolkit**
> **Worksafe New Zealand Quick Guide**

4.3 HANDLING AND STORAGE

Protect the panels from rain when they are transported.

When they arrive, remove the fixing strips to reduce the stress on the panels. Store the panels flat and on top of timbers to keep them dry.

To avoid chipping, make sure the edges and corners are protected.

4.4 GENERAL INSTALLATION

Tools you will need:

> Score and snap knife
> Circular saw with a suitable blade and dust extractor
> Hole saw
> Screw gun
> 150mm broad knife
> Hand guillotine & straight edge

Accessories you will need:

> 40 x 2.8mm galvanised / stainless steel fibre cement nails
> Joint reinforcing tape
> Bond breaker tape
> Flexible polyester filler

4.4.1 INSTALLING THE PANELS - FRAMING

For new buildings, PRÎMA*aqua*™ can be fixed to timber framing, light gauge steel frames or battens fixed over masonry.

On untiled walls the stud spacings must not exceed 600mm horizontal centres and 1200mm for nogs. On tiled walls stud spacings must be between 400-600mm.

Sheet joints must be centralised on a stud. For floor and ceiling junctions, ensure you provide a 6mm building tolerance gap.

4.4.2 STEEL FRAMING

For steel stud framing, the minimum size should be at least 64mm deep, 35mm wide and 0.55mm thick.

4.4.3 MANSONRY SUBSTRATE

Ensure the masonry substrate has sufficient time to dry out before you install PRIMA*aqua*™ panels. The surface of the masonry must also be clean and smooth so that it does not affect the batten alignment.

Make sure you install a damp proof course between the masonry and the battens.

4.4.4 FRAME TOLERANCES

Before you install the panel ensure all framing is square, straight and true.

4.4.5 INSTALLING THE PANELS - LAYOUT

› You can install PRIMA*aqua*™ panels both vertically and horizontally on the framing.
› Any sheet joints should meet at the centre of framing member that will support it.
› Ensure that sheet joints don't cover the edges of any door or window openings. The sheet joint must be at least 200mm away from the edge.

**Horizontal sheet fixing**
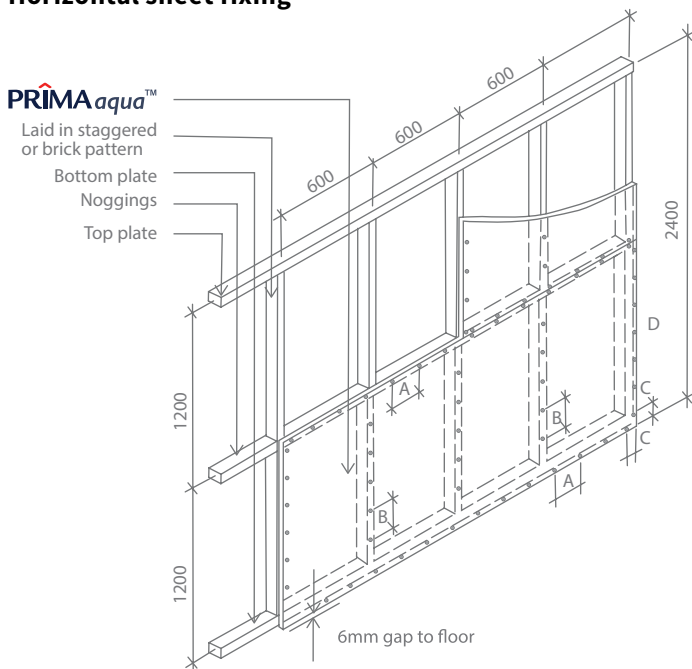
Vertical sheet fixing
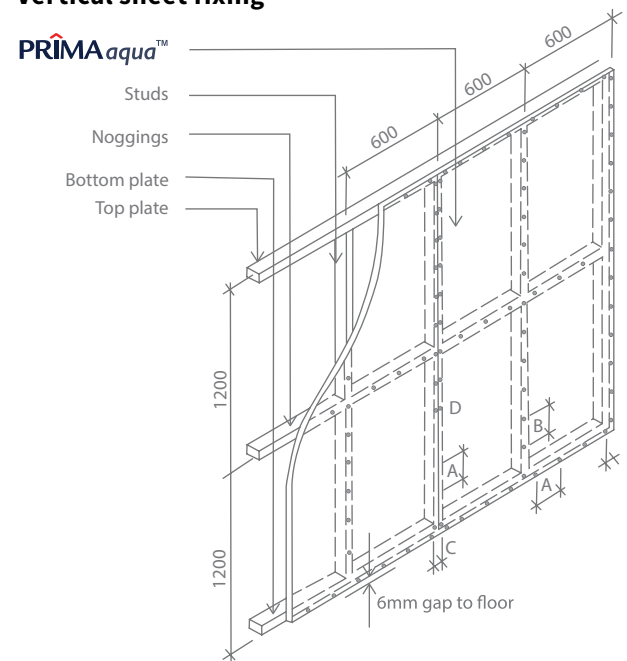
IMPORTANT TO NOTE
› For vertical installation use panels with two long rebated edges.
› If the space above a window or door is less than 250mm, you must install a control joint on either side of the opening.
› Joints can be staggered, but all panel edges must be supported by the framing.
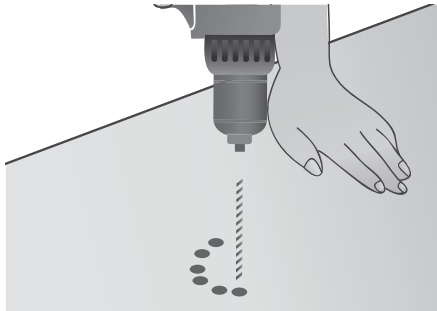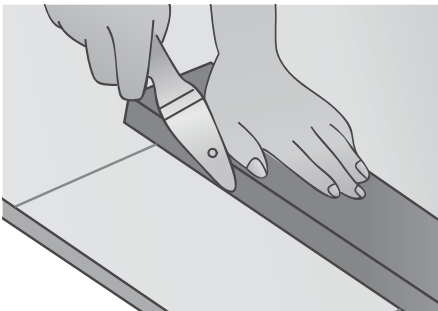
4.4.6 CUTTING AND PENETRATING THE PANELS

PRÎMA*aqua*™ panels can be cut with common power tools such as a circular saw equipped with a diamond-tipped cutting blade. This must only be done in a well-ventilated area. Do not wet the sheet or the saw blade during cutting process. We also recommend using power tools with dust-extracting attachments.

A dust mask and safety goggles must always be worn when cutting, drilling or grinding the sheet.
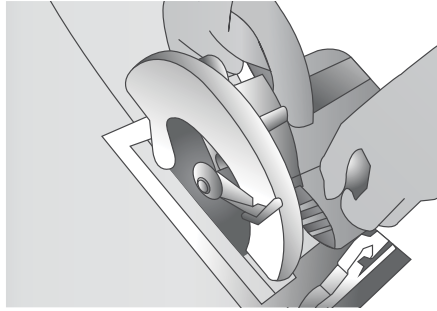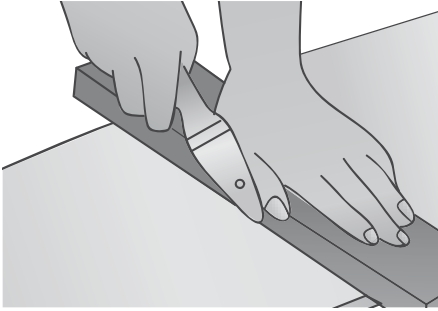
**Score and snap method (left),
Machine cut (right)**

You can form round holes by drilling a series of smaller holes around the perimeter of the new opening. Then carefully tap out the waste piece. Trim the rough edges with rasp if required. Use suitable high-speed heavy duty drill bit. Cut rectangular or square openings using a circular saw.

Notching and penetration (above)

5 INSTALLING THE PANELS - FIXING

5.1 RECOMMENDED FIXINGS

For timber frames: use 6g x 30mm screws or 40 x 2.8mm nails to fasten the panels. Nails must be finished flush with the panel. Screws can be driven up to 0.5mm below the surface of the panel. For 0.55-1.0mm steel frames: use 30mm Buildex FibreZip collated screws.

The screws must be driven in as closely as possible to the corners of the steel stud. This will prevent the screws hitting the flange.

Space 6mm packers along the floor to temporarily support each PRÎMA*aqua*™ panel. Once you are sure the panel is level, begin fixing it to the frame. Start from the centre of the panel and move outwards to the edge. At every vertical, horizontal and corner joint, make sure you leave a 1-2mm gap between each panel.

Skirting

PRÎMA*aqua*™

Timber framing

Galvanised fibre cement nail

Compressed fibre cement floor board

6mm gap
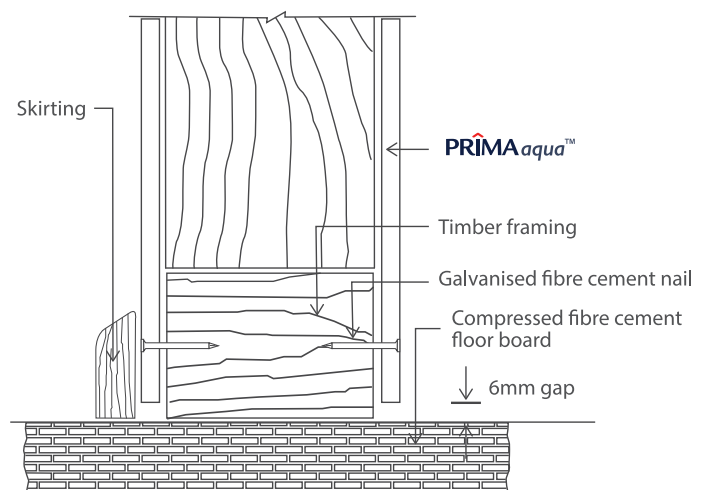
Typical section at wall to floor

5.2 FIXING FOR UNTILED WALLS

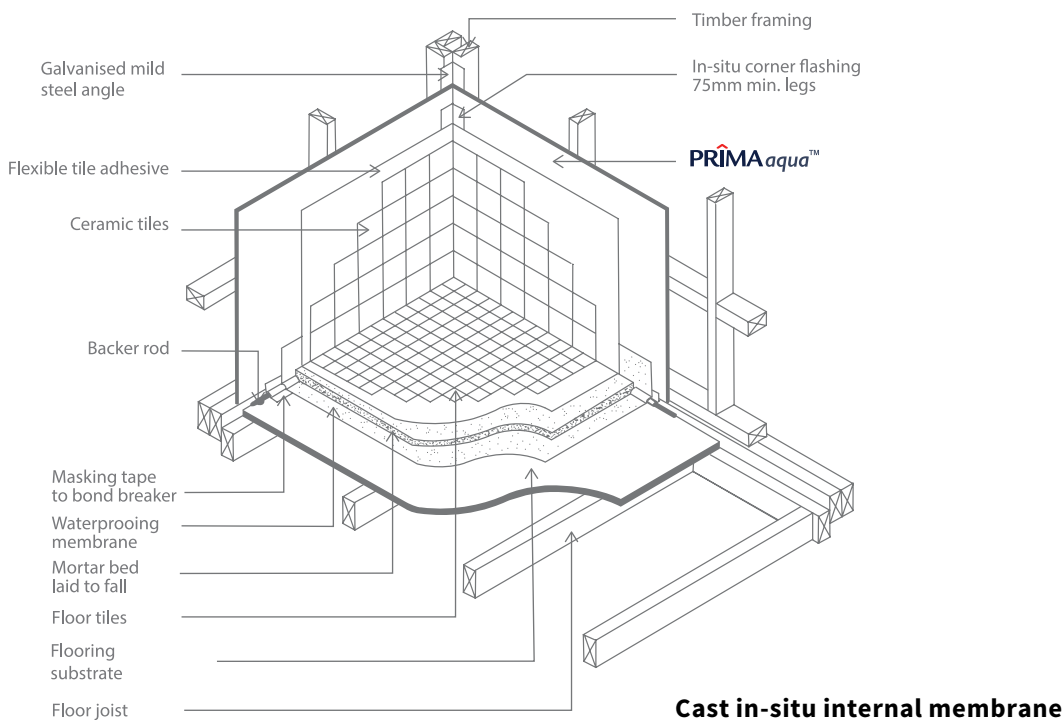If you are leaving the PRÎMA*aqua*™ panels untiled, you can fix them with fasteners (screws or nails) or a combination of fasteners and adhesive.

5.3 FIXING FOR TILED WALLS

If the PRÎMA*aqua*™ panels will be finished with tiles, you must fix them with fasteners only. The stud spacings should be between 400mm and 600mm.

Timber framing

In-situ corner flashing 75mm min. legs

PRÎMA*aqua*™

Galvanised mild steel angle

Flexible tile adhesive

Ceramic tiles

Backer rod

Masking tape to bond breaker

Waterprooing membrane

Mortar bed laid to fall

Floor tiles

Flooring substrate

Floor joist

Cast in-situ internal membrane

IMPORTANT TO NOTE

PRÎMA*aqua*™ panels should be installed horizontally on walls if they are going to be finished with tiles. If you do install the panels horizontally, they will need full perimeter support and fixings.

If you are tiling in wet areas, install a suitable waterproof membrane first. Ensure you follow the membrane manufacturer's instructions.

The rebated edges of each panel must be stopped with a base coat of interior grade, flexible polyester filler. A top coat is not required.
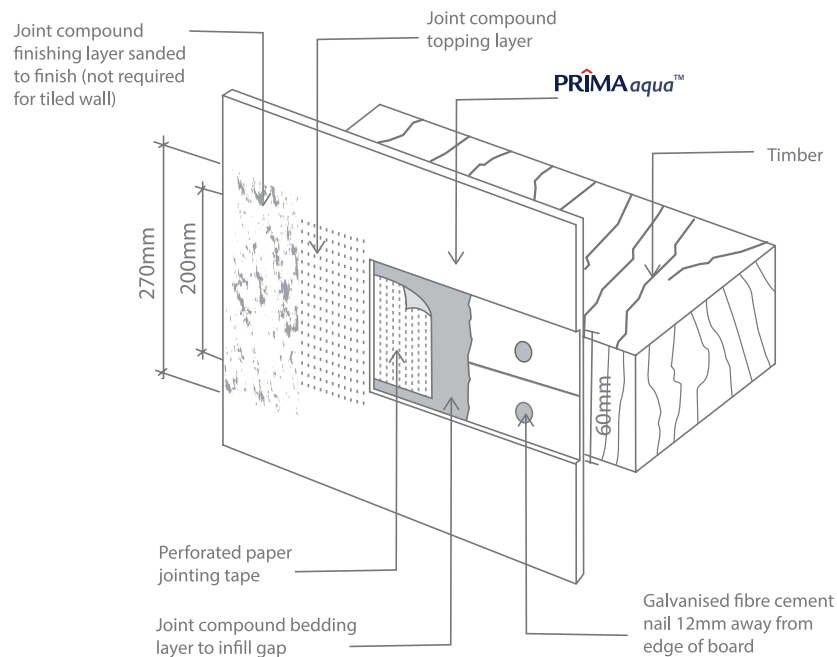
5.4 FIXING TO CEILINGS

Stagger the installation of the panels in a bricklaying pattern.

All panel edges must be supported and fixed with a maximum of 200mm between fixing centres around the perimeter and 300mm centres through the body of the sheet.

Leave a 1-2mm gap between each panel. Framing centres must be a maximum of 600mm.

5.5 PANEL JOINTS

All panel joints must be reinforced and filled using an approved interior grade flexible (polyester) filler.

Joint compound finishing layer sanded to finish (not required for tiled wall)

Joint compound topping layer

PRIMA*aqua*™

Timber

270mm

200mm

60mm

Perforated paper jointing tape

Joint compound bedding layer to infill gap

Galvanised fibre cement nail 12mm away from edge of board

6 INSTALLING THE PANELS - FINISHING

6.1 PAINTING

PRIMA*aqua*™ panels can be painted with a variety of water-based, acrylic or epoxy paint systems.

Before you begin painting, ensure all the panel joints are reinforced and the fixing holes are filled using an approved interior grade flexible (polyester) filler.

Once the joints are dry, sand level and remove any dirt or dust from the panel surfaces.

To clean or maintain the finish, follow any instructions from the paint manufacturer.

6.2 TILING

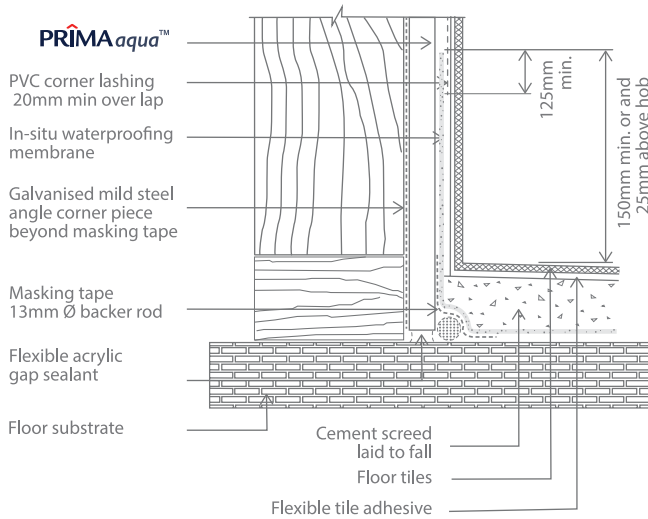Before you begin tiling, ensure all the panel joints are reinforced and the fixing holes are filled using an approved interior grade flexible (polyester) filler.
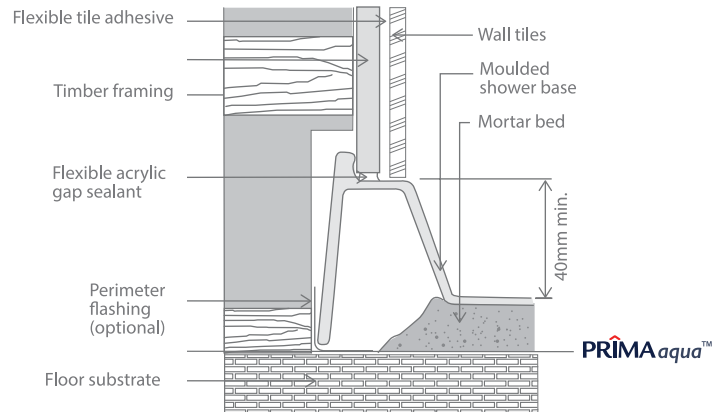
Once the joints are dry remove any dirt, grease or dust from the panel surfaces.

We'd also recommend reading the BRANZ 'Good Tiling Practice' guide to familiarise yourself with the correct techniques for preparing and installing tiles.
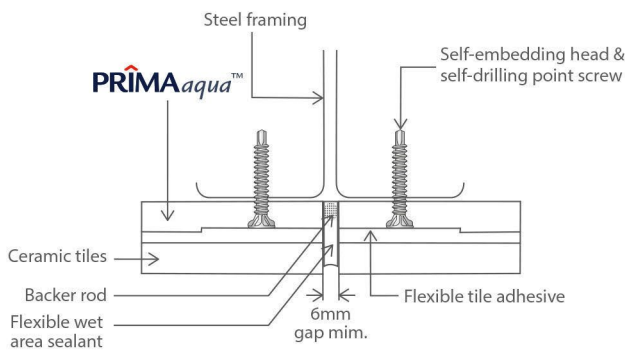
6.2 TILING CONTINUED

PRÎMA *aqua*™

PVC corner lashing 20mm min over lap

In-situ waterproofing membrane

Galvanised mild steel angle corner piece beyond masking tape

Masking tape 13mm Ø backer rod

Flexible acrylic gap sealant

Floor substrate

125mm min.

150mm min. or and 25mm above hob

Cement screed laid to fall
Floor tiles
Flexible tile adhesive

Typical floor/ wall cross-section for cast in-situ internal membrane

Flexible tile adhesive

Timber framing

Flexible acrylic gap sealant

Perimeter flashing (optional)

Floor substrate

Wall tiles

Moulded shower base

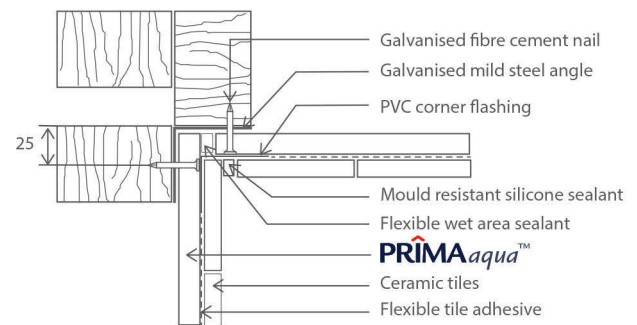Mortar bed

40mm min.

PRÎMA *aqua*™

Typical detail at shower recess

Use a flexible tile adhesive to fix the tiles. Talk to your preferred supplier for recommendations. You must install control joints to accommodate any thermal expansion or stresses that affect the building.

Steel framing

PRÎMA *aqua*™

Self-embedding head & self-drilling point screw

Ceramic tiles

Backer rod

Flexible wet area sealant

6mm gap mim.

Flexible tile adhesive

Detail at tiled expansion joint

25

Galvanised fibre cement nail
Galvanised mild steel angle
PVC corner flashing

Mould resistant silicone sealant
Flexible wet area sealant

PRÎMA *aqua*™

Ceramic tiles
Flexible tile adhesive

Vertical corner joint detail

7 CERTIFICATIONS HELD BY **PRÎMA** *aqua*™

› ISO 9001: 2008 Quality System (Ref-AR0430-IQNet Certification)
› ISO 14001: 2004 Environmental System (Ref- ER0642-IQNet Certification)
› BRANZ appraisal N:737 (2011)

8 USEFUL LINKS

For information on the design and specification of PRÎMA*aqua*™ panels, refer to:

❯ **IBS PRÎMA*aqua*™ pass™ (Product Assurance Supplier Statement)**

For information to help maintain PRÎMA*aqua*™ panels, refer to:

❯ **IBS PRÎMA*aqua*™ Care & Maintenance**

For the DIYer refer to:

❯ **IBS PRÎMA*aqua*™ Home Builder Info Sheet**

Our warranty for IBS supplied PRÎMA*aqua*™ panels refer to:

❯ **IBS PRÎMA*aqua*™ Warranty**

IBS
BUILDING PRODUCTS

Independent Building Supplies (IBS) has distributed panel products around New Zealand since 1993. Our focus is on sourcing the best panel products available from around the world using sustainable, renewable resources. IBS products are supported by full technical literature and assistance, providing our customers with the **Best Products**, the **Best Service**, and the **Best Experience**.

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