

Zenolite® HC Installation Guide

Bathroom Applications

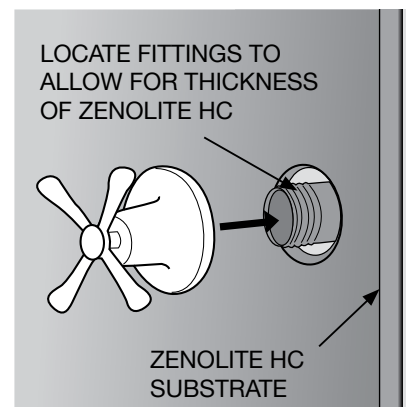
Introduction

Zenolite® HC is the superior high gloss acrylic panel featuring a high performance hard-coated surface. Ideal for heavy-duty vertical applications, it is especially suited for shower walls and bathroom partitions in residential or commercial environments. Zenolite HC is completely inert. It will not release any emissions to the environment. The non-stick outer surface does not harbour mould or calcium build-up. The material is ultra hygienic and does not promote bacterial growth or transmission.



Warnings

- Zenolite HC is not to be used directly behind or adjacent to a heat source above 70 deg C.
- Zenolite HC will expand and contract with temperature at the rate of 0.7 mm / 1000 mm / 10 deg C so its very important to allow expansion gaps at the perimeter of each panel
- When using Zenolite HC for renovation over existing tiles or other wall finish, it may be necessary to reposition the taps and outlets to align with the finished surface of the Zenolite HC panel
- Do not store or transport Zenolite HC sheet outdoors or in direct sunlight or in extreme heat
- Sheets must be stored inside, and stacked horizontally to avoid any bowing of the sheet
- Zenolite HC may have sharp edges, so always wear gloves and other appropriate clothing and footwear for your protection during the installation process
- The surface of Zenolite HC is very hard and scratch resistant. If severe damage does occur and the surface coating is compromised, the panel cannot be refinished and should be replaced



Tools and materials

Some or all of the following tools may be required depending on the scope of the installation.

MEASURING

- Measuring tape
- Soft pencil or felt tipped marker pen
- Carpenters square

CUTTING

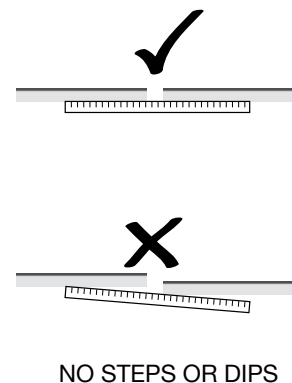
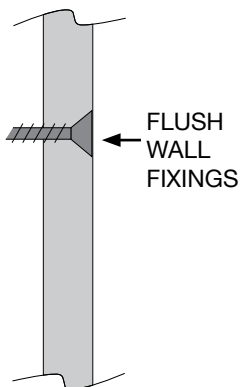
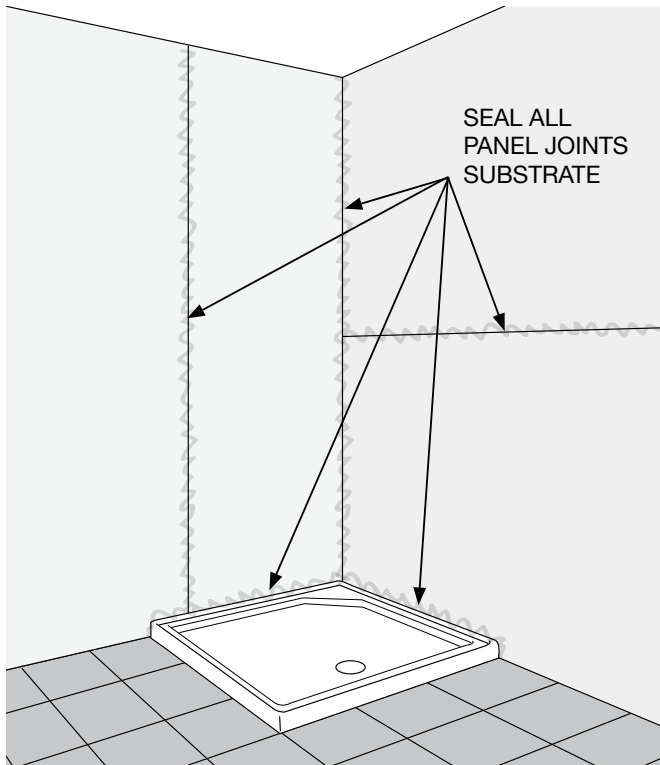
- Power saw and or jig saw with fine tooth carbide tipped blades
- Power or battery drill and slightly blunt twist drills and/ or step drills
- Medium and fine grit sandpaper and sanding block or power planer
- Personal eye, hearing, hands, and footwear protective equipment

INSTALLATION

- Silicone caulking gun
- 12mm x 1.6mm thick double coated polyethylene foam tape with synthetic rubber adhesive, mirror mounting tape is suitable
- Neutral Cure Silicone
- Soft flexible plastic spatula
- 20mm rubber based adhesive masking tape

Area Preparation

- Ensure the walls are smooth, clean and dry
- All substrate wall panel fixings must be set flush or recessed
- For wall lining, use waterproof fibre cement or plasterboard only in accordance with local building regulations for shower or bath areas
- All substrate wall linings must be sealed at the joints with a generous silicone or waterproofing compound
- For best results, mark out where the joints are going to be placed and paint the wall surface with a colour similar to the Zenolite HC colour you intend to install to ensure consistent colour at the joints

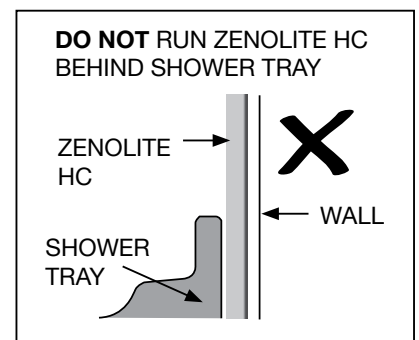
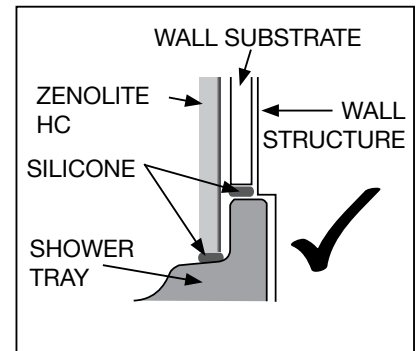
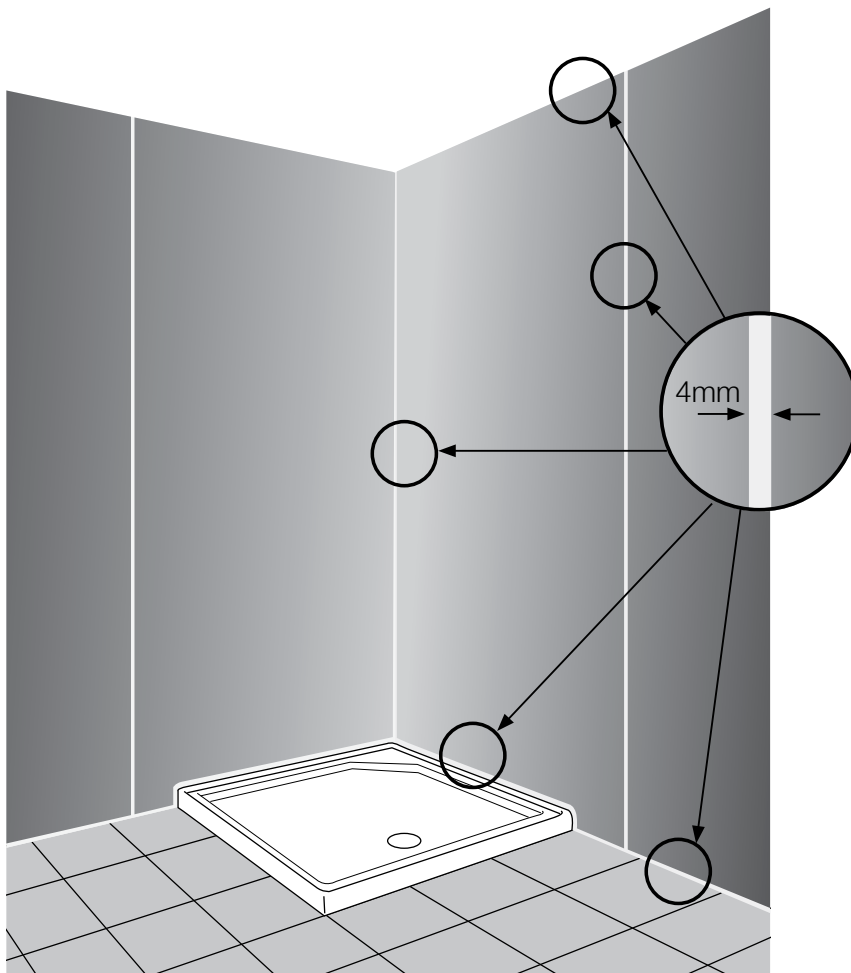


Tiled Walls

- Zenolite HC panels can be easily installed over existing tiled walls as long as the tiles are securely attached and thoroughly cleaned before installation.
- Ensure the tiles are free of soap or other build up by cleaning and scrubbing with recognized bathroom cleaning product. Conduct a final clean using with a degreaser such as “Sugar soap” and rinse well with clean water and allow to dry.
- Check the walls carefully for high spots and remove any tiles or fittings that may interfere with Zenolite HC panel or may create a wavy result when panel is installed.
- Exposed edges can be sealed with silicone. A finishing trim can also be used to create a neat appearance covering both the tile and Zenolite HC panel edge.

Measuring

- Measure each wall area and decide on suitable panel size
- Avoid large cut outs for windows or other features and use panel joins for these areas instead
- For large panels allow for 4 mm joints at each corner and between panels
- Check that the installation area is square. If the area is not square or an odd shape, we recommend fabrication of a template and trial fitting. Use the template to cut the Zenolite HC sheet to achieve a good result.



Marking Out

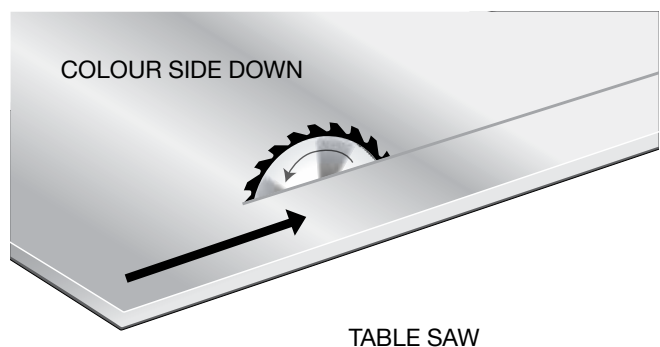
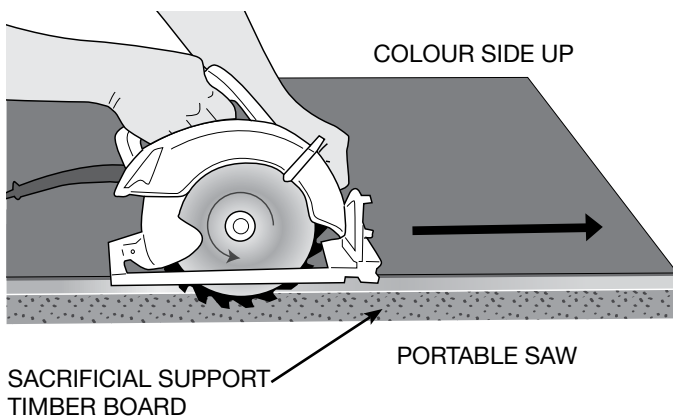
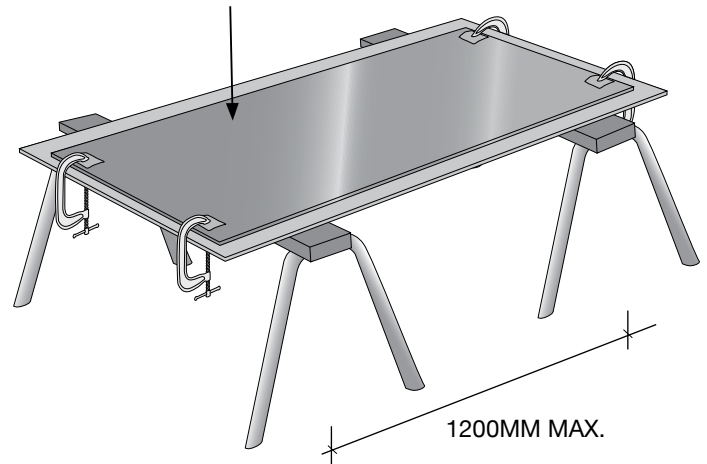
- Zenolite HC is supplied with a protective film on both sides of the sheet. Do not remove either at this stage
- Mark all holes and cut lines on the film using a felt tip pen, do not use metal scribes
- Do not mark out the sheet in direct sunlight or very cold conditions as thermal expansion/contraction could affect final panel size prior to installation
- Do not remove the protective film on the front of the panel until after the installation



Cutting

- When cutting or drilling Zenolite HC, always wear appropriate personal protection equipment
- Appropriate clamping and support is essential to avoid vibration and potential chipping of the edge. Always protect the panel using a soft material between the clamp and the sheet surface
- Using a circular saw will deliver a straight and accurate cut. Best results will be achieved by cutting through the Zenolite HC and into the sacrificial support timber board
- Use a fine cut blade that is suitable for plastic or aluminium cutting
- Sharp blades should always be used to avoid chipping or burning the Zenolite HC
- Best results will be achieved using carbide tipped blades with 60 to 80 teeth
- Do not allow the blade to overheat
- To reduce the risk of chipping, when using a portable circular saw, cut with the colour side of the Zenolite HC sheet facing UPWARDS. If using a fixed table circular saw, cut with the colour side of the Zenolite Plus sheet facing DOWNWARDS

SUPPORT ZENOLITE HC PANEL BACK ON PLYWOOD OR MDF SHEET OR SOLID WORK TOP

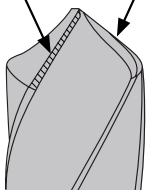


- Jigsaws can be used for cutting short distances such as power point openings. You must only use Jigsaw blades that are suitable for aluminium or plastics. Cut with the colour side of the Zenolite HC sheet facing UPWARDS with a jigsaw
- Do not use Jigsaws to make long cuts. The blade may overheat and melt the sheet at the edge resulting in a poor finish
- Clean swarf away frequently after cutting to avoid damage to the protective film

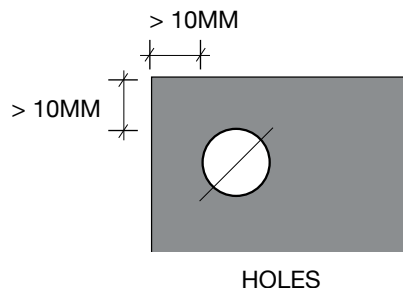
Drilling and Openings

- Drilled holes should be no closer than 10mm to the edge of the panel sheet
- Do not create long openings close to the edge of the sheet, as the sheet will be difficult to handle during the install
- Always drill a hole at the corner of any cut-out or notch. Avoid cutting square inside corners
- Slightly blunt drill bits work better as they cut through the material more slowly. To blunt the drill bit, rub the cutting edges with 100 grit sandpaper
- Drill from the face side (clear side) of the Zenolite HC sheet to reduce the risk of chipping. Best results will be achieved with a slow to medium drill speed
- Fine toothed hole saws can be used for larger holes. Cut from the **clear side** and then from the **colour side** to achieve the best finish
- Step drills are ideal for mid size holes and also making smaller holes into larger ones
- When attaching screws or other fittings, drill a hole with a minimum of 1mm clearance between the fixing and the Zenolite HC panel. Fix into the substrate and structure behind. **DO NOT SCREW INTO THE ZENOLITE HC PANEL**

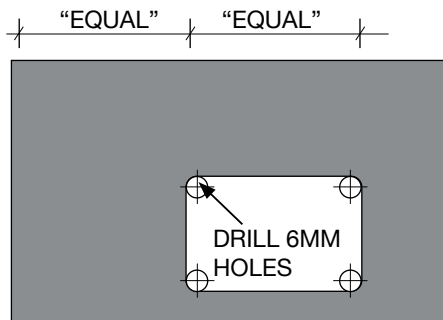
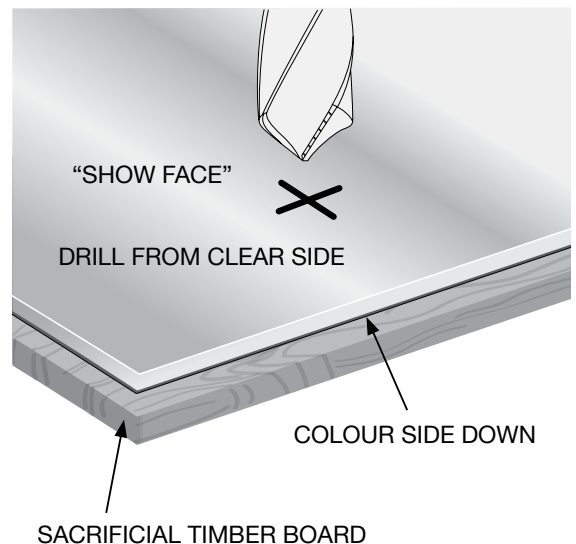
SAND BOTH
CUTTING EDGES



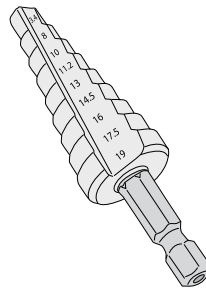
DRILL BIT



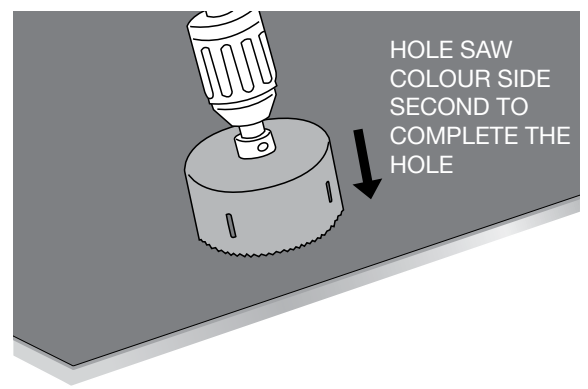
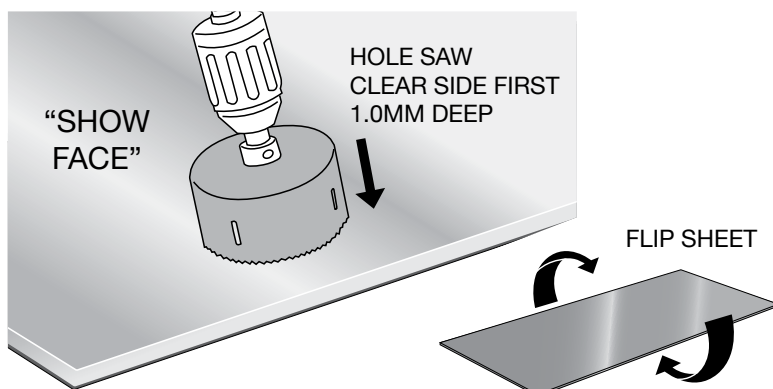
HOLES



OPENINGS



STEP DRILL

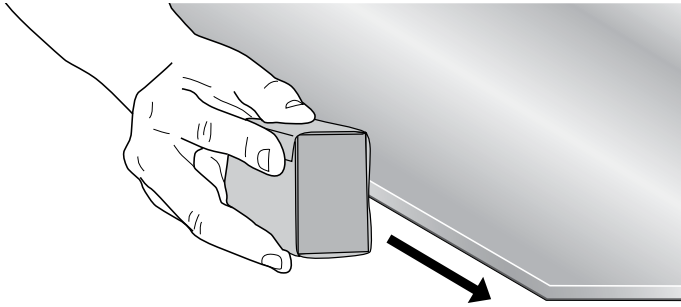


Edge Finishing

- All Sawn edges must be sanded or planed prior to installation of Zenolite HC panels
- Edges can be sanded using medium (100 grit) and then fine (240 grit) sand paper. Use a sanding block to give a smooth flat edge finish
- A single pass with an electric planer will provide a smooth edge and neat appearance

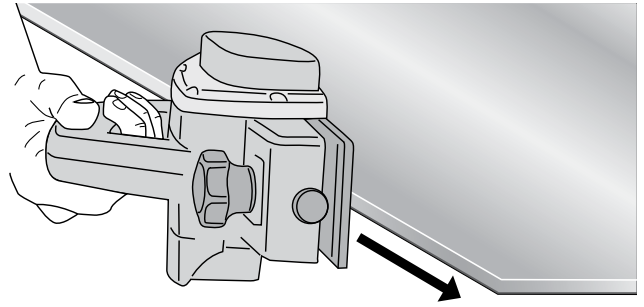


NOTE - Do not use flexible PVC edge trimming or gaskets at any time as they contain chemical agents that could damage the sheet.



BLOCK SANDING

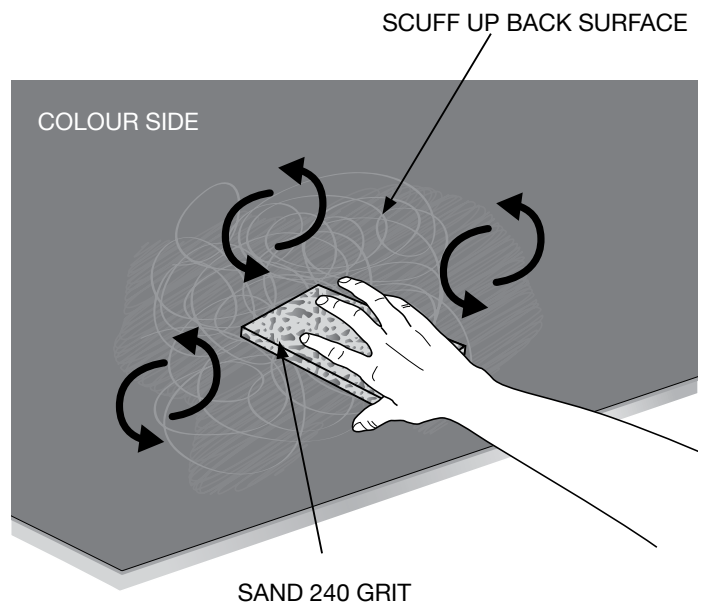
STEP 1: MEDIUM 100 GRIT
STEP 2: FINE 240 GRIT



ELECTRIC PLANER

Panel Installation

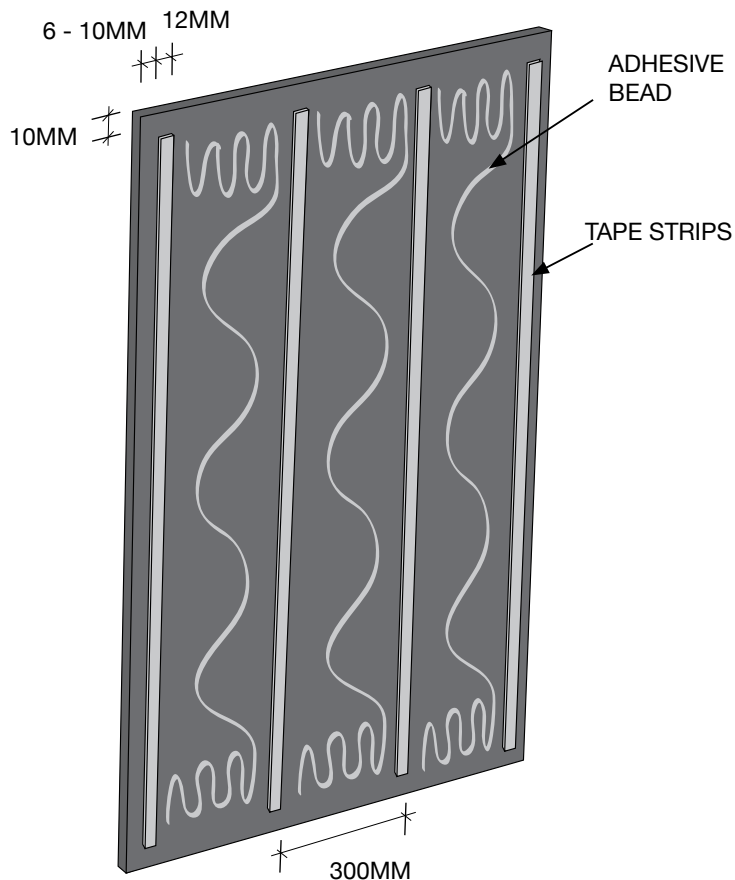
- Remove the protective film from rear surface (the colour side). DO NOT remove the protective film on the front (clear side) of the panel at this time
- Scuff the rear surface with coarse scouring pad or 240 grit sandpaper
- Remove sanding dust with clean cloth or tack rag



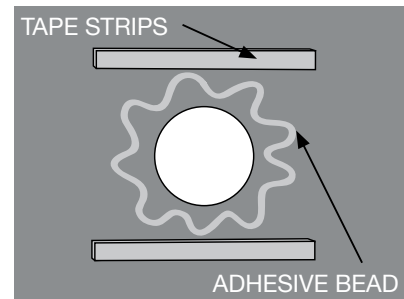
Panel Installation

- STEP 1 Ensure the rear surface is clean and free of dust or any other substance before applying the tape and silicone adhesive
- STEP 2 Apply 12mm x 1.6mm thick double-coated polyethylene foam tape with synthetic rubber adhesive on the rear surface of each Zenolite HC panel, along the long sides at approximately 300mm spacing. Note: The silicone and tape are applied to the **COLOUR SIDE**. The clear side “show face” must face outwards
- STEP 3 Trial fit each panel with tape applied to ensure trim size and expansion gaps are correct

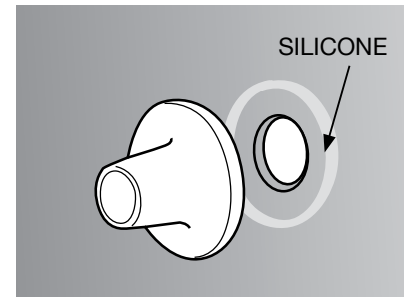
FOR LARGE PANELS



FOR HOLES AND OPENINGS



REVERSE SIDE



FRONT SIDE

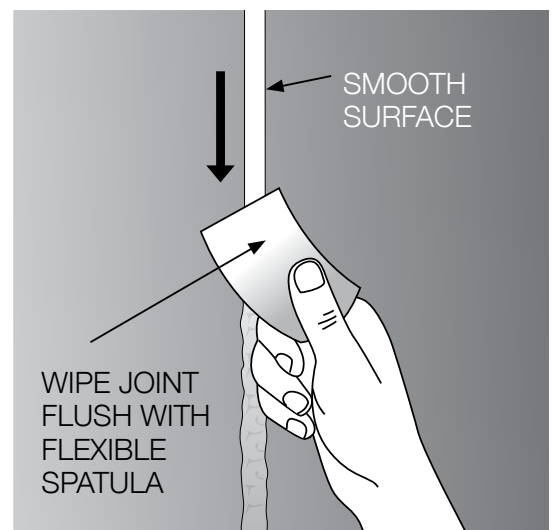
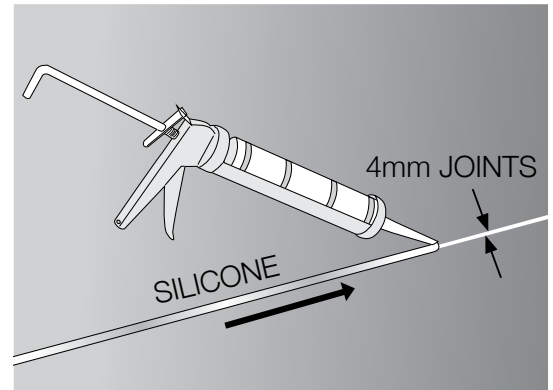
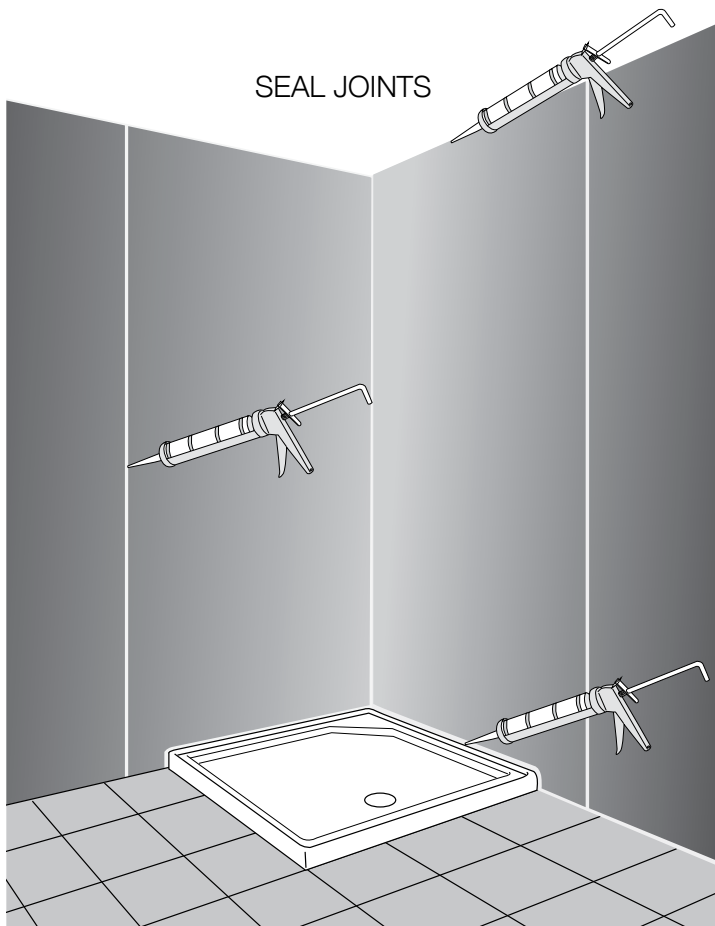
- STEP 4 Apply a 6 mm bead of translucent neutral cure silicone in a wavy pattern between each tape strip. Near the edges of the panel, increase the wavy pattern as show in the figure. Run a bead of silicone on the rear of the panel around any holes or cut outs. Always use a neutral cure silicone
- STEP 5 Remove tape liner
- STEP 6 Install the panel by resting on removable spacers at the bottom and between panels
- STEP 7 Firmly rub down panel to ensure tape bonds and adhesive contacts the wall. Allow to cure for 12 hours

STEP 8 Remove the spacers and seal the joints with neutral cure wet area silicone. If the outer protective film of the panel is damaged or not adhered well, peel approximately 40mm of the protective film from panel edges and carefully apply 20mm masking tape either side of the joint. Once gap is filled, remove excess silicone using a soft flexible plastic spatula

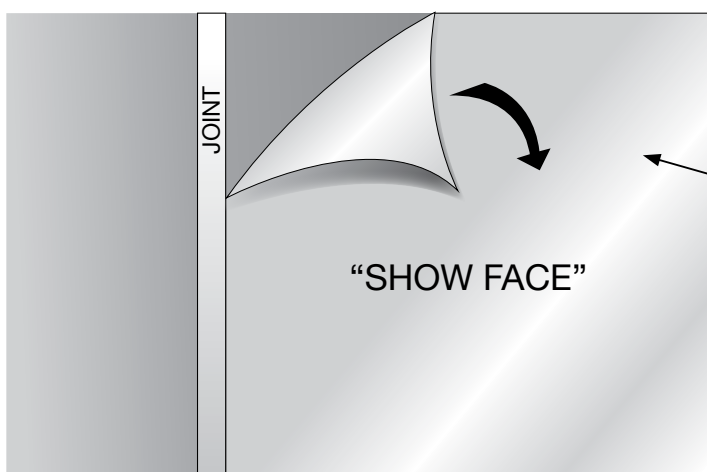
NOTE: To achieve a smooth finish on the silicone, mix up a 10% solution of mild dish washing liquid and water. Spray the solution over the silicone bead before wiping off with the spatula



Do not use Acetic cure silicone



- Immediately after the silicone is applied, carefully remove the outer protective film or masking tape in one continuous movement to achieve the best finish



REMOVE PROTECTIVE FILM
OR MASKING TAPE
IMMEDIATELY
AFTER SILICONE
IS MADE FLUSH

Cleaning

Best results are achieved using a soft microfibre cloth or chamois with non-abrasive detergent in warm water. Grease or oil can be removed with Kerosene and a microfibre cloth. Always rinse off with clean water.



Do not rub the Zenolite HC surface when it is dry.



Do not use brushes or scouring pads on the Zenolite HC as prolonged use may damage the high gloss surface.

Zenolite HC has high chemical resistance and is not affected by organic or general kitchen and shower cleaners. Always rinse off the cleaning solution with water within 1 hour of application.

Do not use cleaners with high alkalie content.

Mineral Turpentine can be used to clean off excess silicone after install if necessary.

Chemicals Tested

Zenolite HC is suitable to use with typical soap, liquid soap, shampoo and conditioners. Zenolite HC is compatible with cleaners such as Windex®, BAM®, Spray & Wipe®, Domestos®, Shower Power®, Bleach & Cloudy Amonias, Citric Acid and Acetic Acid 5%.



Technical Table

		METRIC	
GENERAL PROPERTIES		DATA	UNIT
Water Absorption	ASTM D-570	< 0.5	%
Gloss	AS/NZS 1580.602	> 90	%
Abrasion (Taber, 10 rots. CS10F 500g)	ASTM D-1044	< 10	% Gloss
Pencil Hardness	ASTM D-3363	> 6	H
Thermal Expansion & Contraction		0.7mm/1000mm/10 °C	
HDT, 264psi, 1.82MPa	ASTM D-648	96	°C
CTE, -30 to 30C	ASTM D-696	7	mm/(mm.°C)x10 ⁻⁵
Continuous Service Temperature		77	°C
Fire Behaviour - Australia BCA 2006	AS/NZS 13837:1998	Rating 4	

10 Year Limited Warranty

Zenolite HC panels are warranted for faulty materials for a period of 10 years, with 10% reducing value per year after the first 3 years. The warranty is void if incorrect installation or cleaning procedures have been used. The warranty does not include fabrication, installation, transportation, trade services or other consequential costs or damages of any kind.

The Zenolite warranty specifically excludes any claims based on poor handling, incorrect fabrication or installation techniques, abrasion or surface damage from inappropriate cleaning chemicals or methods, surface damage caused by contact with cookware or utensils under any circumstances, and colour change or variation less than a Delta E or 5.

The responsibility for the removal and installation of a replacement product is with the owner and/or installer of where the manufacturer accepts that the product is completely at fault, a maximum contribution of \$200.00 towards the removal and installation will be made.

For more information visit www.zenolite.com

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