

# Zenolite<sup>®</sup>

## Zenolite Installation Guide

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## Introduction

Zenolite is an extruded, high gloss, rigid thermoplastic material made entirely of Acrylic (PMMA).

The clear and coloured layers are permanently fused during manufacture. Zenolite is completely inert and does not release any emissions to the environment. The material is ultra hygienic and does not promote bacterial growth or transmission.

## Warnings

- Zenolite sheet is designed for vertical surface applications only
- Zenolite 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
- Zenolite should be stored under cover, and covered when transported. Do not leave sheet exposed to direct sunlight for long periods of time
- Sheets must be stored inside and can be stored flat or vertically but must be well supported to avoid any deformation of the sheet
- Zenolite can be used as a wall finish behind electric induction and vitroceramic cooktops as long as there is a clearance of 50mm between the rear edge of the cooktop and the face of the Zenolite
- Zenolite is not suitable for use as a wall finish behind Gas Cooktops

## Tools and Materials

- Some or all of the following tools may be required depending on the scope of the installation.
- Measuring tape
- Soft pencil or marker
- Carpenters square
- Silicone cartridge gun
- Double sided tape
- Translucent Neutral Cure Silicone
- Power saw and or jig saw with fine tooth carbide tipped blades
- Power or battery drill and slightly blunt twist drills
- Power planer
- Medium and fine grit sandpaper and sanding block
- Personal eye, hearing, and footwear protective equipment
- Soft flexible spatula

## Area Preparation

- For best results, ensure walls are dry, smooth and clean
- All wall panel fixings must be set flush or recessed
- New fibre cement sheet, plasterboard or MDF walls should be primed or painted prior to installation
- Previously painted or tiled walls may be suitable if they are in sound condition and thoroughly cleaned with a detergent based de-greaser such as "Sugar Soap"

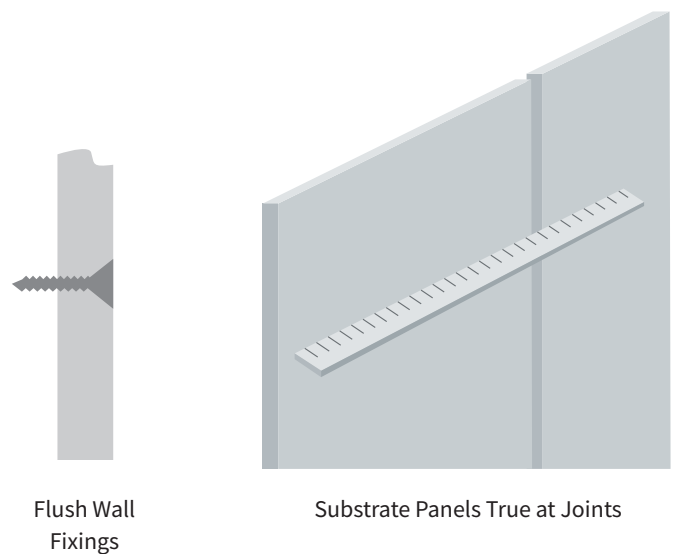
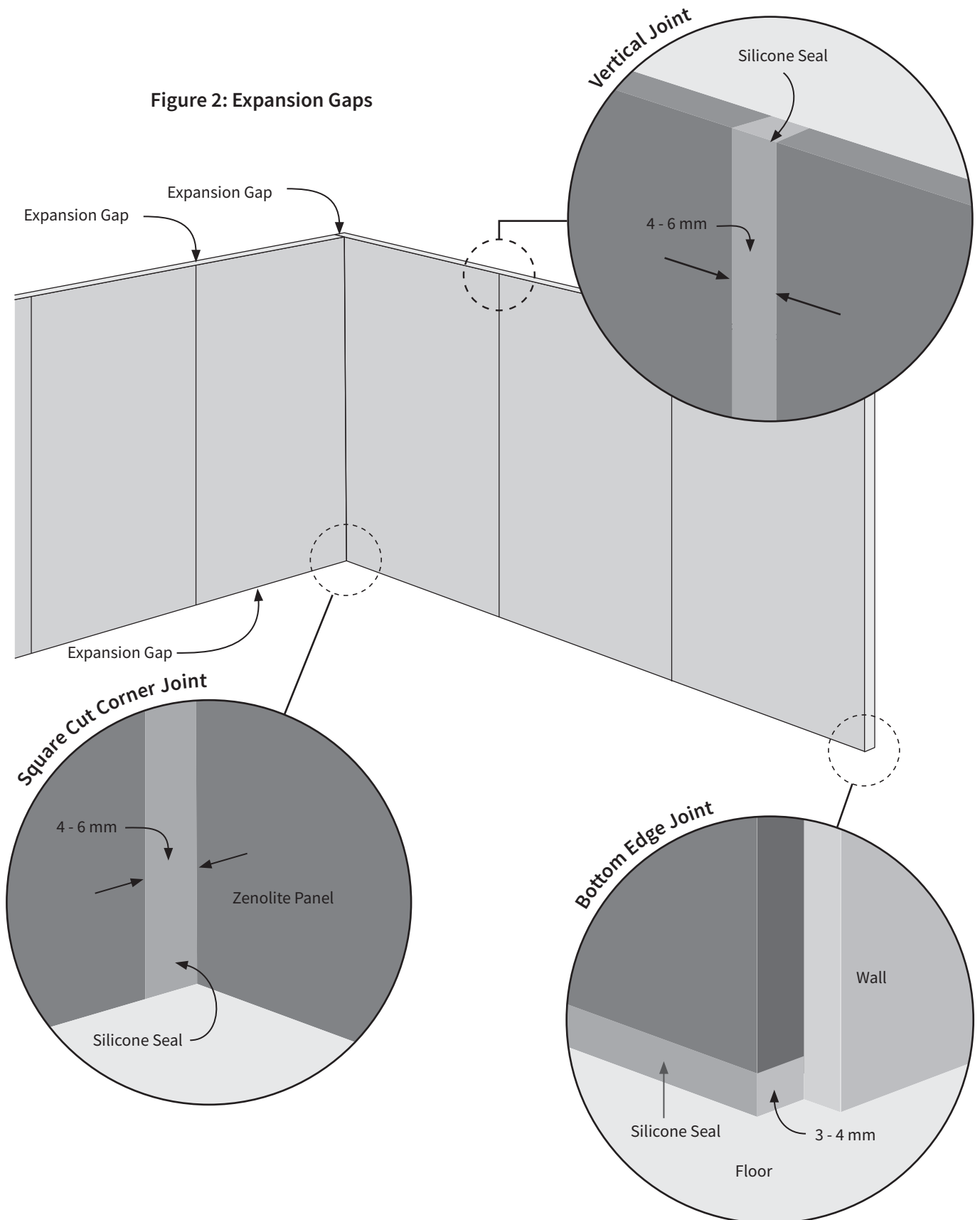


Figure 1: Ensure Flush

## Measuring

- Measure each wall area and decide on suitable panel size
- Avoid large cut outs for windows or other features and use panel joints for these areas instead
- Allow for 4 - 6 mm joints at each corner and 4 - 6 mm joints between panels
- Allow 3 - 4 mm sealant gap around the perimeter
- Check for square of each panel area, if the area is not square we recommend fabrication and trial fitting of a full size template before cutting the Zenolite sheet

Figure 2: Expansion Gaps



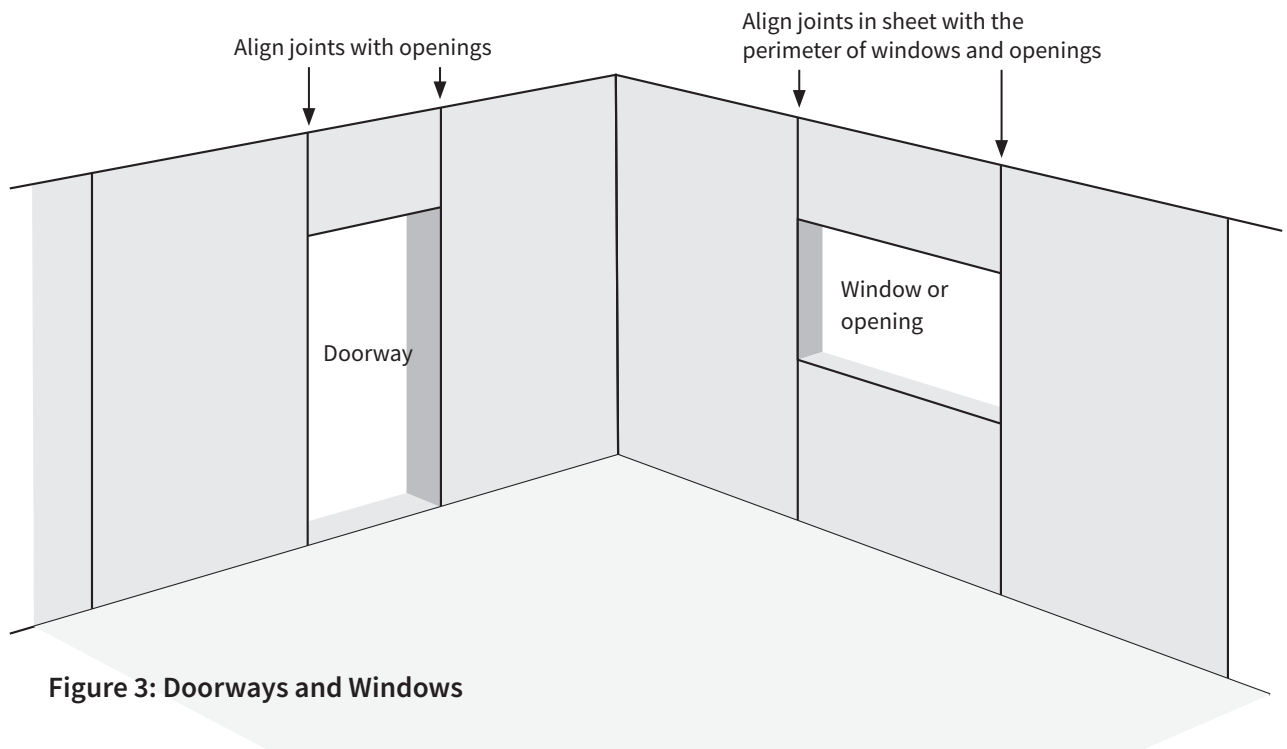


Figure 3: Doorways and Windows

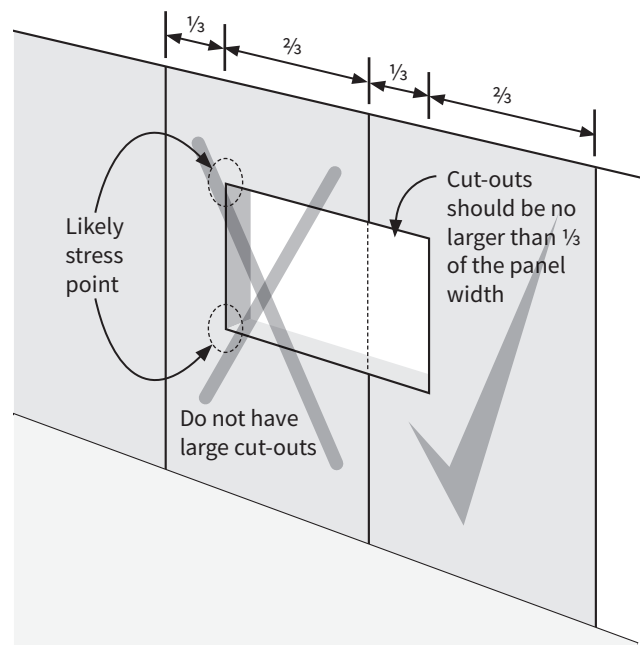


Figure 4: Cut-out Limitations

## Marking Out

- Zenolite is supplied with a protective film
- Mark all holes and cut lines on the film using a soft pencil or felt tip pen, do not use metal scribes
- Do not mark out in direct sunlight or very cold conditions as thermal expansion and contraction can effect panel size prior to installation
- Do not remove film on back side of sheet until just before installing the panel

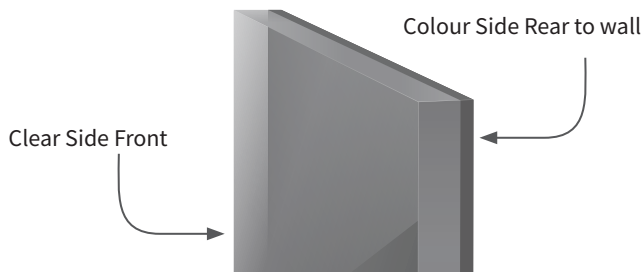


Figure 5: Colour Side to Wall

## Cutting

- When cutting or drilling Zenolite, always wear appropriate eye and ear protection
- Using a circular saw will deliver a straight and accurate cut. Best results will be achieved by cutting through the Zenolite and into the sacrificial support timber board
- Use fine cut blade for wood, plastic or aluminium. Always ensure they are new, sharp blades to avoid chipping the Zenolite
- Best results will be achieved using carbide tipped blades with 3 to 5 teeth per centimetre
- Do not allow blade to overheat, cooling by a jet of compressed air may be helpful for long cuts
- When using a portable circular saw cut with the colour side of the Zenolite sheet facing UP to reduce the risk of the cracking. If using a fixed table circular saw, cutting with the colour side of the Zenolite sheet facing DOWN will reduce the risk of the cracking
- A polished finish can be obtained in a single operation if diamond-tipped router tools are used
- Jigsaws with blades suitable for wood or plastics can be used for short distances such as power point openings. Do not allow blade to overheat. Cooling the blade by a jet of compressed air may be helpful
- Clean swarf away frequently after cutting to avoid damage to the protective film

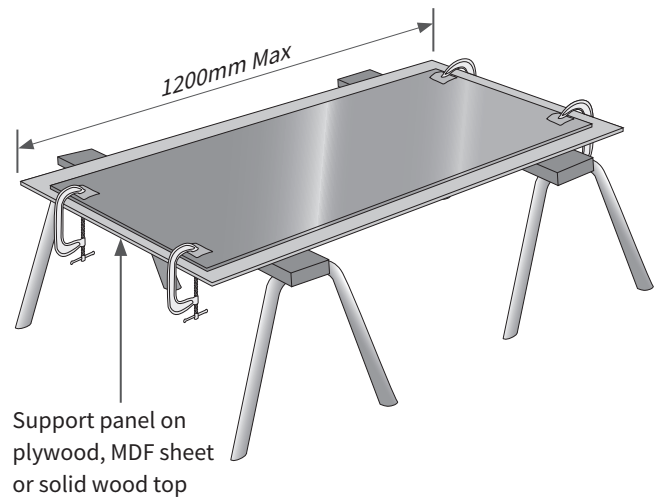


Figure 6: Sacrificial Support for Zenolite Panel

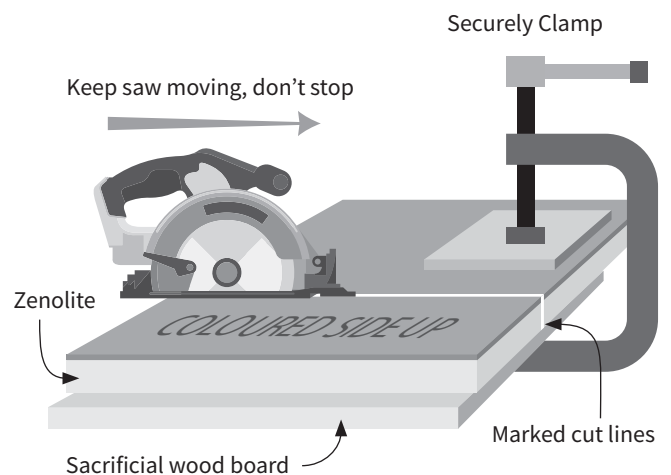


Figure 7: Cutting with Portable Power saw

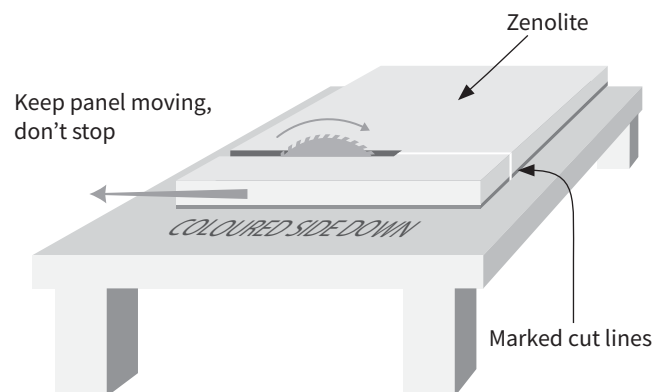


Figure 8: Cutting with Table saw

## Drilling and Openings

- Drilled holes should be no closer than 10 mm to the edge of the 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
- Prepare the drill bit by lightly sanding with 80 grit fine sand paper on both cutting edges of the tip of the drill bit
- Drill from the face side of the Zenolite sheet to reduce the risk of cracking. Best results will be achieved with a slow to medium drill speed
- Fine toothed hole saws can be used for larger holes, cut from one side and then from the other side to achieve the best finish
- Step drills are ideal for mid size holes and opening smaller holes into larger ones

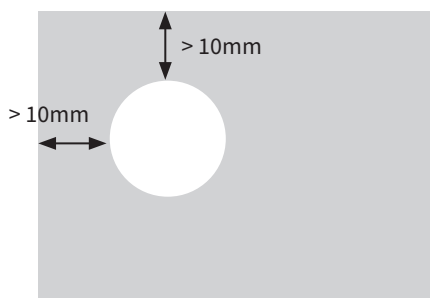


Figure 9: Holes  $>10\text{mm}$  from edge

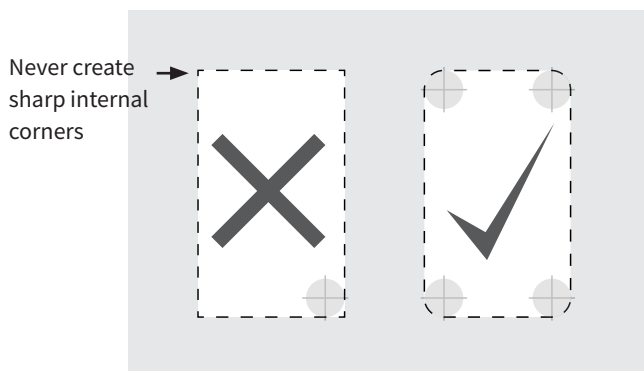


Figure 10: Internal Corners

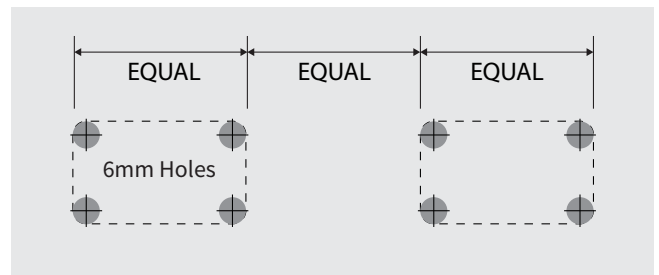


Figure 11: Power Outlets

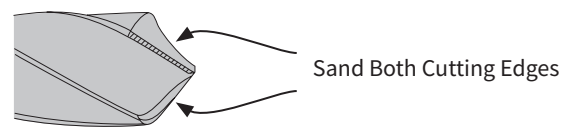


Figure 12: Drill Bits

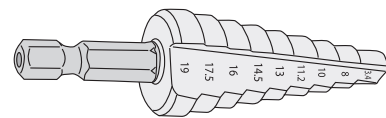


Figure 13: Step Drill

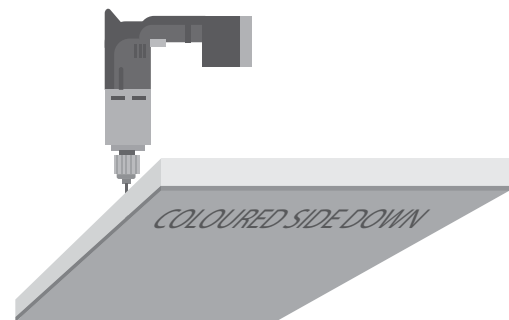


Figure 14: Drill with Colour Side Down

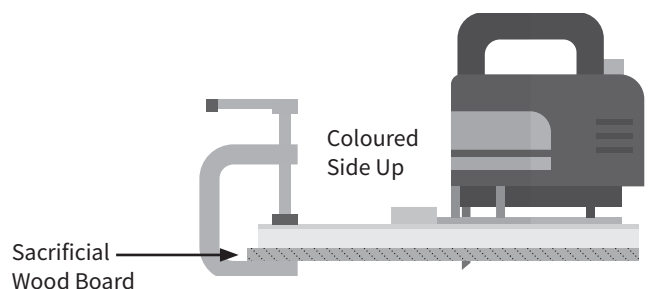


Figure 15: Cutting with Jigsaw Colour Side Up

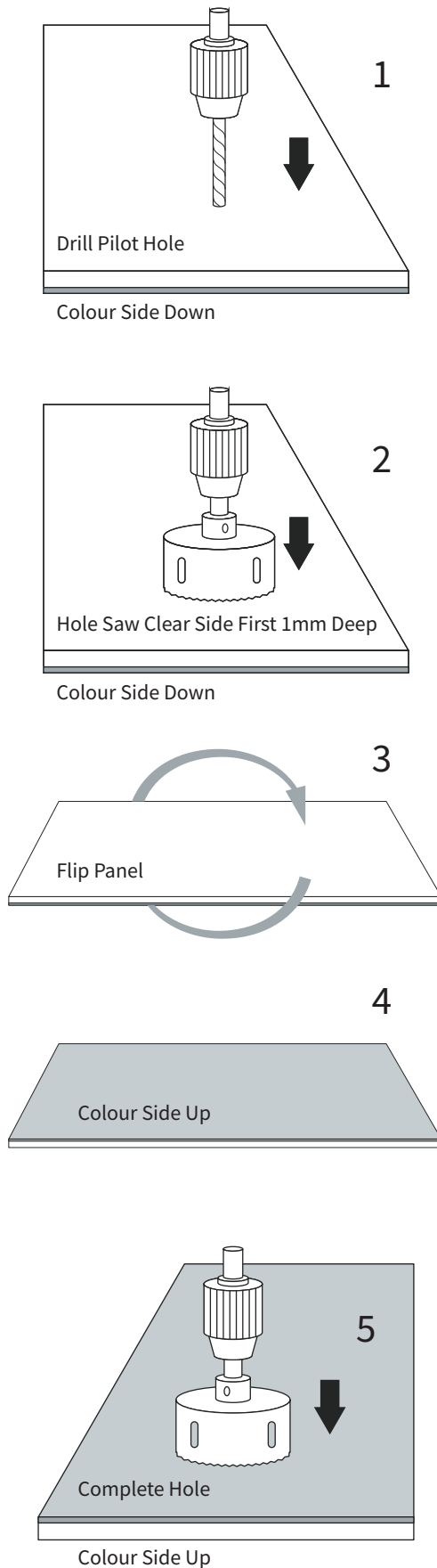


Figure 16: Drilling with Hole Saw

## Edge Finishing

- All sawn edges must be planed or sanded prior to installation
- A single pass with an electric planer will provide a smooth edge with a neat appearance
- Edges can also be sanded using medium and then fine sand paper
- Zenolite sheets are also compatible with many standard aluminium framed door systems for cabinets, wardrobes etc

**WARNING:** Do not use PVC edge trimming or gaskets at any time.

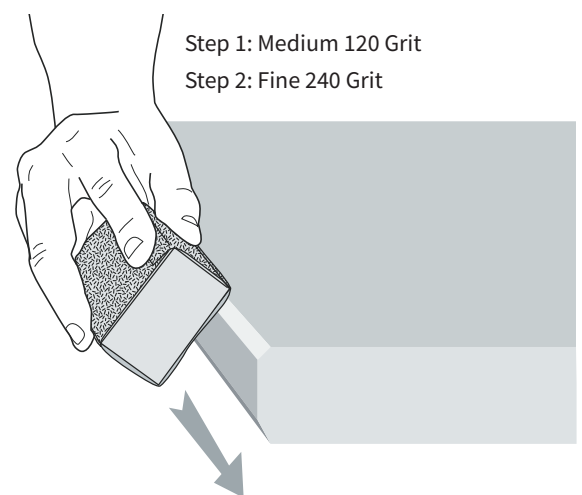
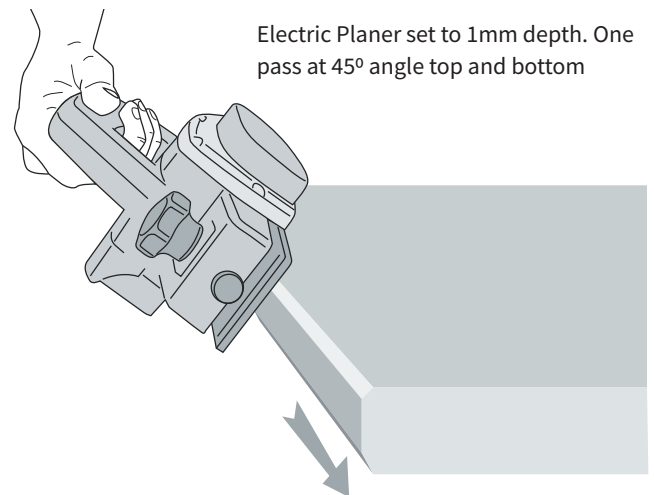


Figure 17: Finishing Exposed Edges



## General Panel Installation

- Remove protective film from rear surface (the colour side)
  - Scuff rear surface with 80 grit sandpaper
  - Remove sanding dust with clean cloth or tack rag
  - Ensure the rear surface is clean and free of dust or any other substance before applying the tape and silicone adhesive
  - Apply 12 x 1.6 mm thick double sided tape with synthetic rubber adhesive horizontally along the inside surface of each panel at approximately 300 mm vertical spacing
  - Dry fit each panel with tape applied to ensure trim size is correct
  - Apply a 6 mm bead of translucent **neutral cure silicone\*** in wavy pattern between each tape strip
- WARNING:** \*Do not use Acetic cure silicone.
- Remove tape liner and install panel resting on 3 - 4 mm

spacers at the bottom and 3 - 4 mm clear each end and 4 - 6 mm clear between panels

- Firmly rub down panel to ensure tape bonds and adhesive contacts the wall

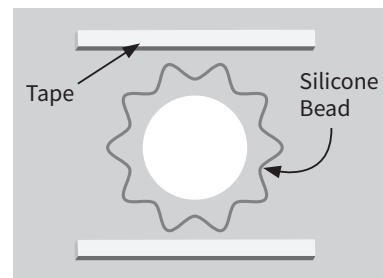


Figure 19: Silicone and Tape at Penetrations

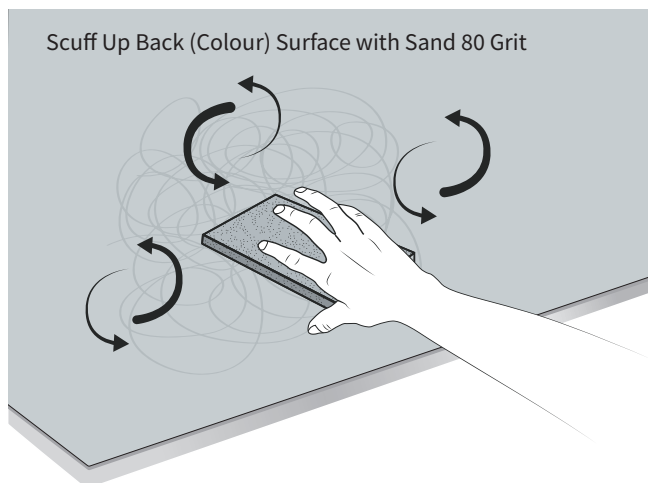


Figure 18: Rear Side Preparation

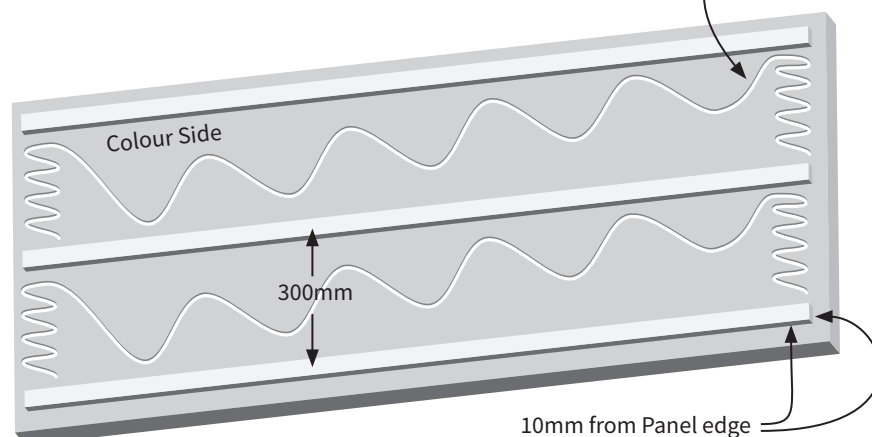


Figure 20: Apply Tape and Neutral Cure Silicone - Horizontal Panel

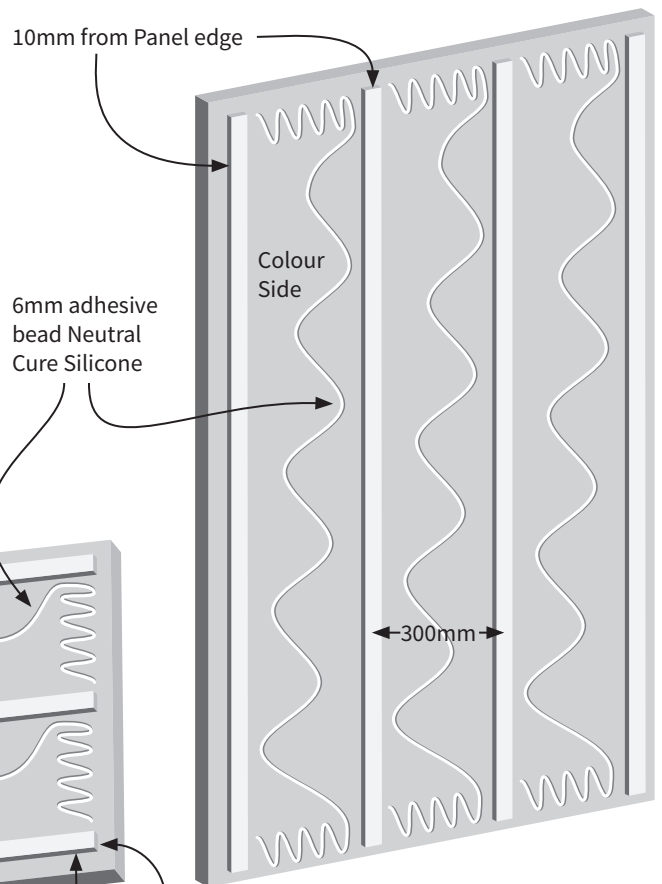


Figure 21: Apply Tape and Neutral Cure Silicone - Vertical Panel

## Panel Installation Continued

- Allow to dry for 24 hours before sealing all joints with neutral cure silicone
- 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
- Immediately after the silicone is applied, carefully remove the outer protective film or masking tape in one continuous movement to achieve the best finish

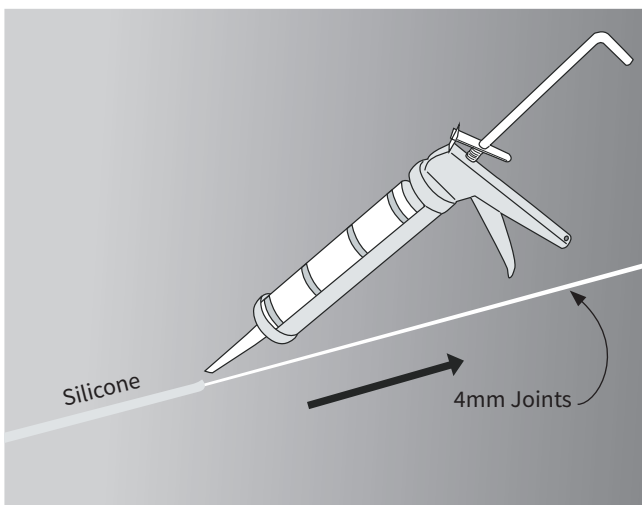


Figure 22: Sealing Joints

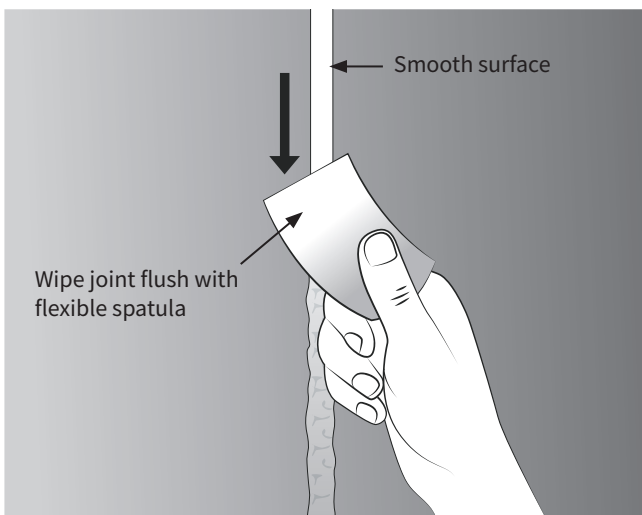


Figure 23: Finishing silicone at joints

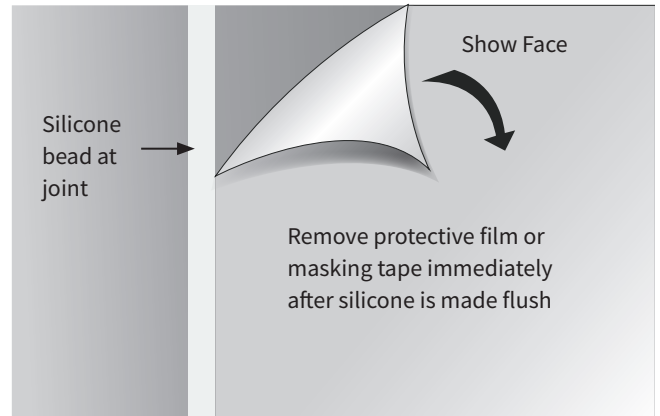


Figure 24: Removing Peel Coat

## 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.

### WARNINGS:

- Do not rub the Zenolite surface when it is dry
- Do not use brushes, scrapers or paper towels at any time
- Do not use window cleaners, acidic solutions, acetone, thinners, solvents, alcohol or other strong chemicals at any time

## Polishing and Refinishing

Minor scratches and scuffing can be easily removed from Zenolite by hand using selected liquid polishes and soft microfibre cloths. More severe damage can be restored using extra cut polish and or very fine grades of wet and dry sand paper by hand or by machine.

- Always use clean cloths for applying polish and final buffing
- Apply polish sparingly to avoid over buffing
- For manual buffing use a light circular motion
- Apply liquid polish to the target area using cloth one. Then remove the liquid polish whilst still damp using cloth two.
- Use soft felt, flannel or foam buffs for machine polishing
- Polishing machine speed should be below 3000 rpm to avoid overheating the material

## Splashback installation behind a cooktop

The following guidelines must be followed when installing Zenolite behind an electric or induction cooktop.

### CAUTION Zenolite should not be installed directly behind a GAS COOKTOP

Please note that Australian Gas Installation Standards AS/NZS 5601 precludes the installation of Zenolite (or any acrylic material) within 200mm of a gas burner.

#### Area Preparation

- Ensure the walls are smooth, clean and dry before installation
- Check your splashback location – the distance between the edge of the cooktop and the front face of the Zenolite (once installed) must be at least 50mm

#### Panel Installation

**All adhesives to be applied to rear of Zenolite panel – not the wall substrate**

- Apply 12mm x 1.6mm thick double-sided tape (with synthetic rubber adhesive) across the rear surface of the panel at approximately 300mm spacings

- Ensure 24 hours are left for the adhesive to dry before sealing all joints with neutral cure silicone. Do not use acetic cure silicone
- Immediately after joint sealing silicone is applied, carefully remove the protective film from the front face
- On all areas of the Zenolite, excluding the section that will be positioned directly behind the cook top, apply a 6mm bead of adhesive (neutral cure silicone) in a wavy pattern between each tape strip. Ensure that the beads are spaced no further than 250mm apart

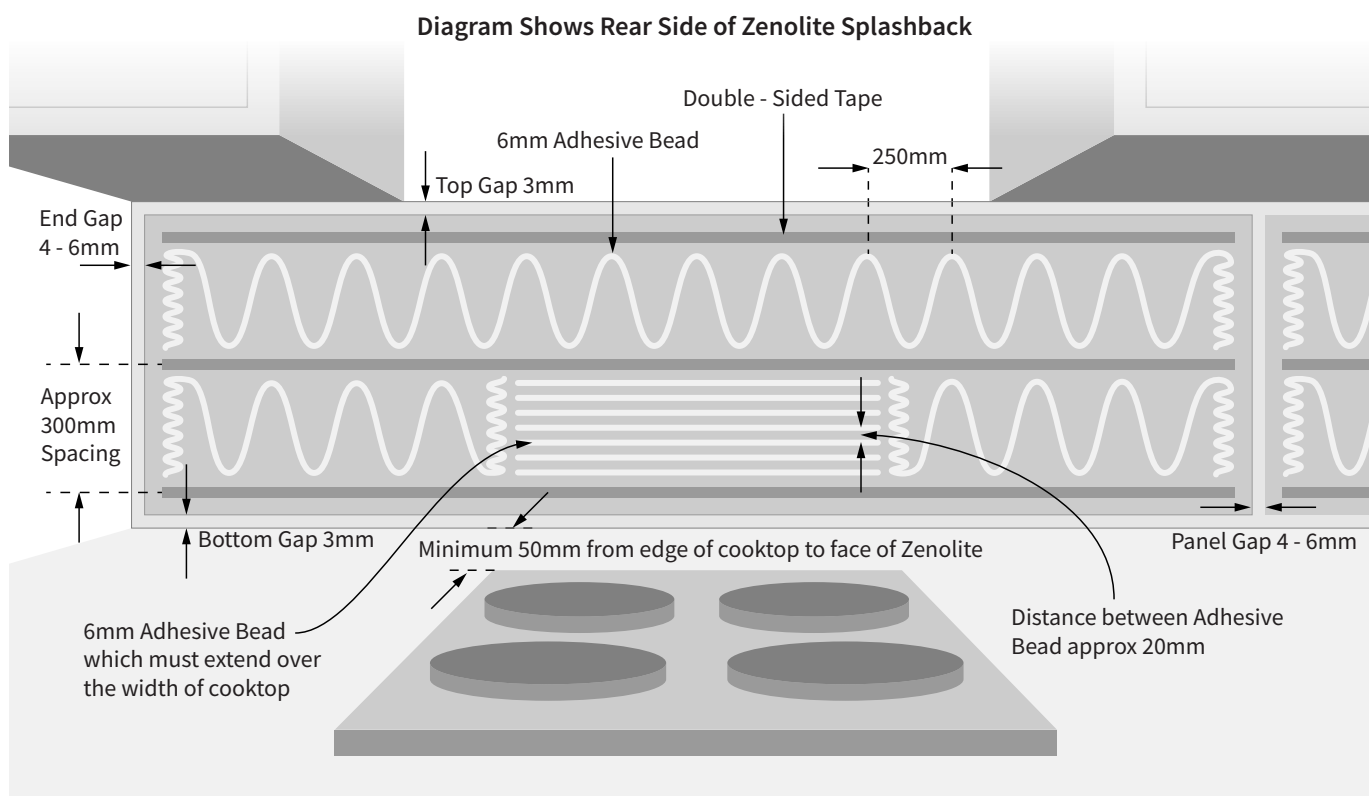


Figure 25: Splashback installation behind a cooktop

## 10 Year Limited Warranty

Zenolite 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 may be made.

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## For more information visit [www.zenolite.com](http://www.zenolite.com)

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