Lustrolite®

Lustrolite® Installation Guide

EDITION 2
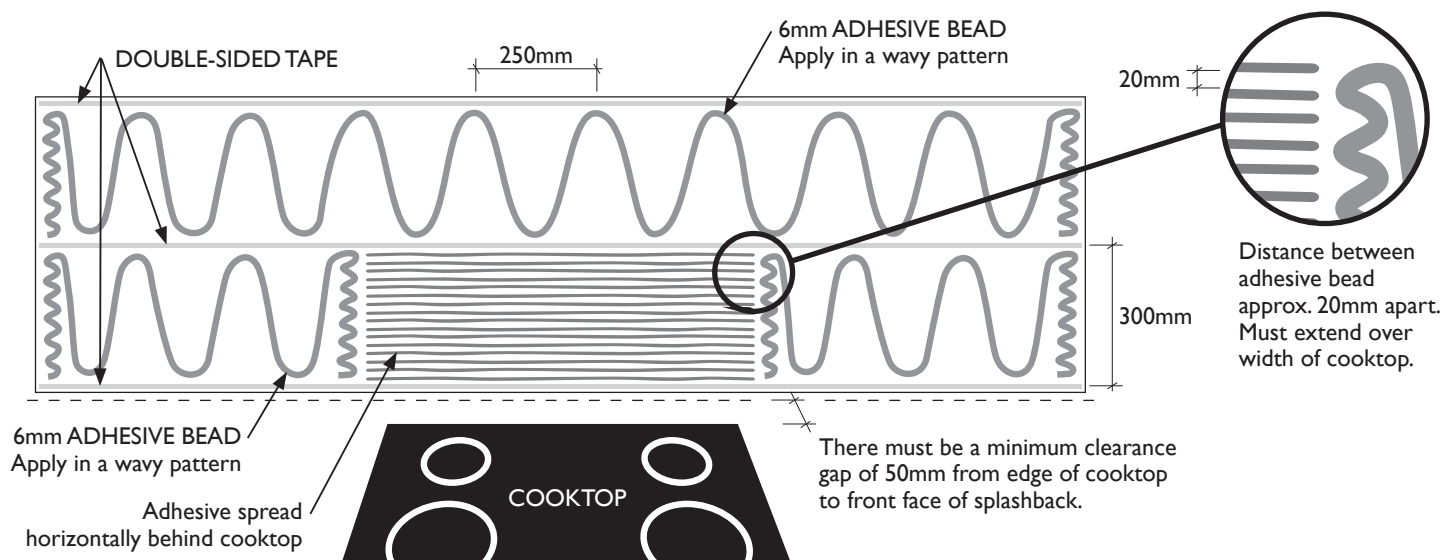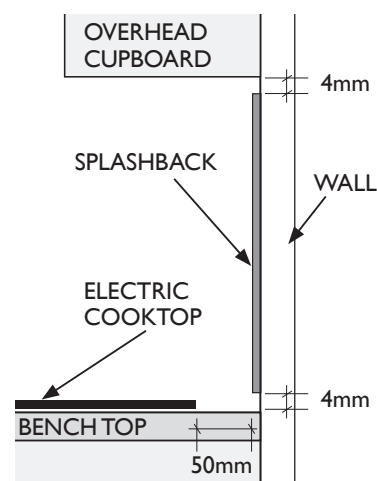
lustrolite.com

EGR

Introduction

Lustrolite® 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. Lustrolite 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

- Lustrolite is not to be used in direct contact with any heat source above 70 deg C.

- Lustrolite panels are not suitable as a wall finish behind gas cooktops. They can be used as a splashback behind electric and induction cooktops with a minimum clearance of 50mm between rear edge of cook top and the face of the Lustrolite panel.

- Horizontal spread of adhesive is necessary to ensure the section behind the cooktop is firmly secured to the wall.

DOUBLE-SIDED TAPE
250mm
6mm ADHESIVE BEAD
Apply in a wavy pattern
20mm
Distance between adhesive bead approx. 20mm apart. Must extend over width of cooktop.
300mm
6mm ADHESIVE BEAD
Apply in a wavy pattern
Adhesive spread horizontally behind cooktop
COOKTOP
There must be a minimum clearance gap of 50mm from edge of cooktop to front face of splashback.

- Lustrolite will expand and contract with temperature at the rate of 0.7 mm / 1000 mm / 10 deg C so it's very important to allow expansion gaps at the perimeter of each panel. Expansion gaps of 4mm are recommended.

- When using Lustrolite 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 Lustrolite panel

- Do not store or transport Lustrolite panel outdoors or in direct sunlight or in extreme heat

- Panels must be stored inside, and stacked horizontally to avoid any bowing of the panel

- Lustrolite may have sharp edges, so always wear gloves and other appropriate clothing and footwear for your protection during the installation process

- The surface of Lustrolite 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

- Avoid direct contact by hot cookware or utensils, or the face of the panel may be damaged

OVERHEAD CUPBOARD
4mm
SPLASHBACK
WALL
ELECTRIC COOKTOP
4mm
BENCH TOP
50mm

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 jigsaw 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
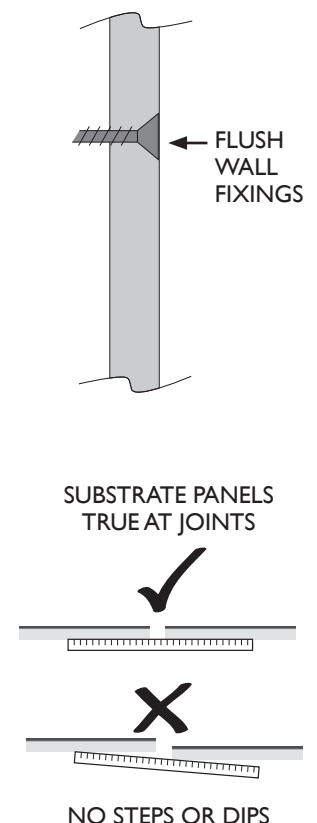- Personal eye, hearing, hands, and footwear protective equipment
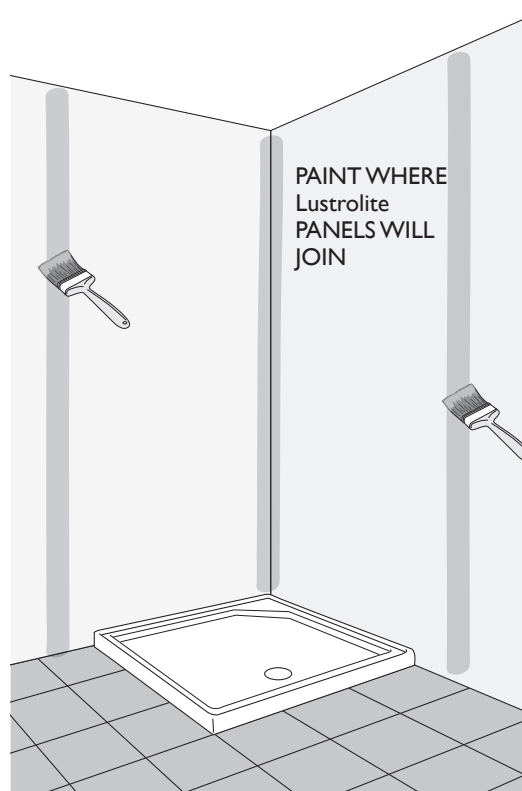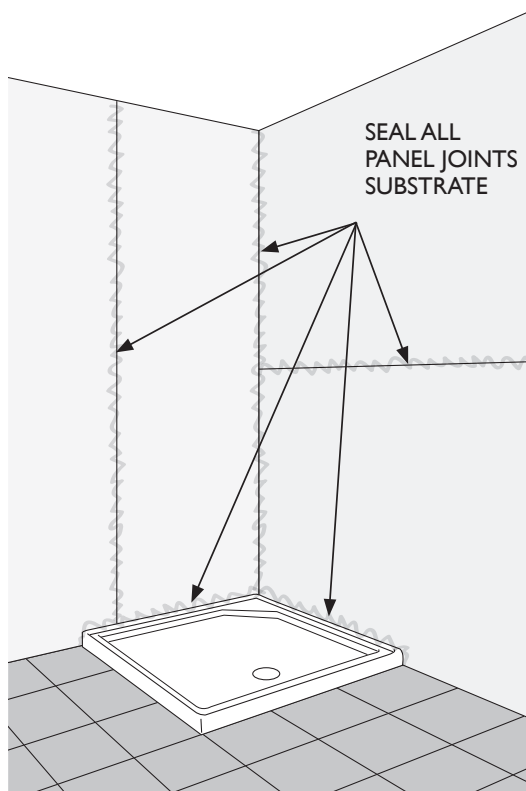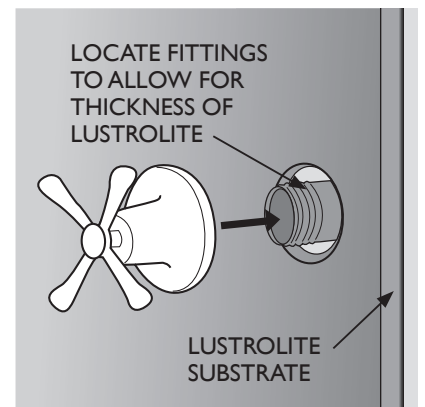
INSTALLATION

- Silicone caulking gun
- 12mm x 1.6mm thick double-sided polyethylene foam tape with synthetic rubber adhesive. Mirror mounting tape is suitable but ensure it's not a colour that could be seen through the panel after installation.
- 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 Lustrolite colour you intend to install to ensure consistent colour at the joints

LOCATE FITTINGS TO ALLOW FOR THICKNESS OF LUSTROLITE

LUSTROLITE SUBSTRATE

SEAL ALL PANEL JOINTS SUBSTRATE

PAINT WHERE Lustrolite PANELS WILL JOIN

FLUSH WALL FIXINGS

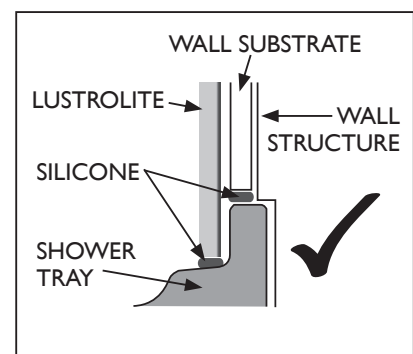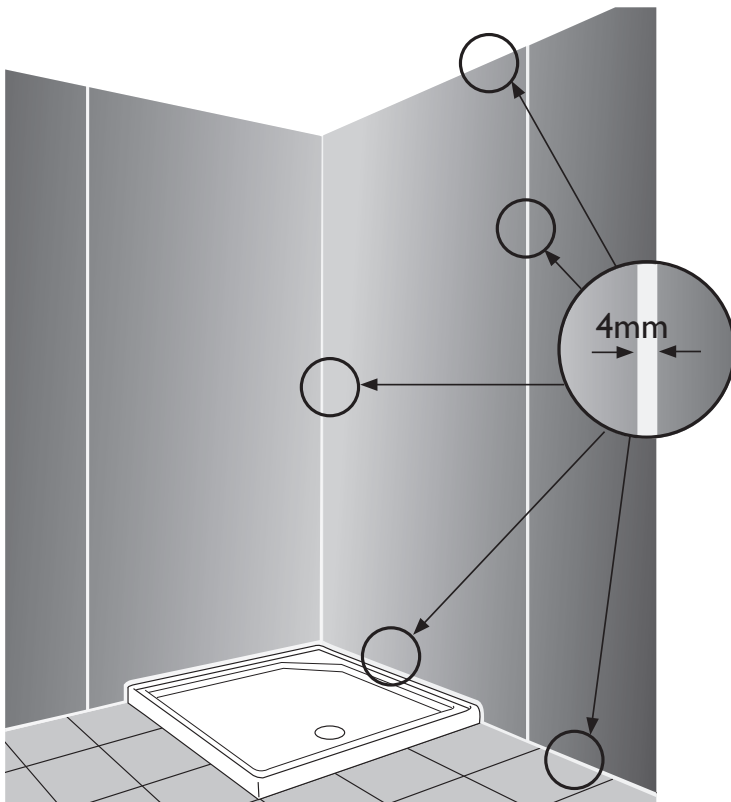SUBSTRATE PANELS TRUE AT JOINTS

✓

✗

NO STEPS OR DIPS

Tiled Walls

- Lustrolite 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 recognised 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 Lustrolite 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 Lustrolite 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 Lustrolite panel to achieve a good result.

4mm

WALL SUBSTRATE

LUSTROLITE

WALL STRUCTURE

SILICONE

SHOWER TRAY

DO NOT RUN LUSTROLITE BEHIND SHOWER TRAY
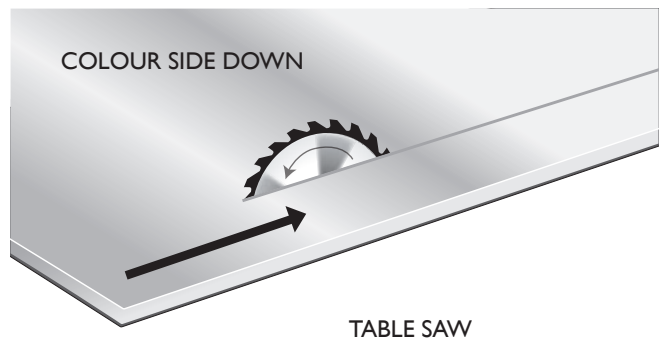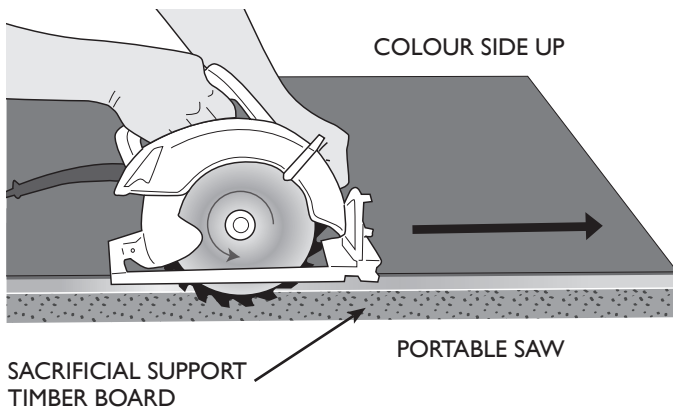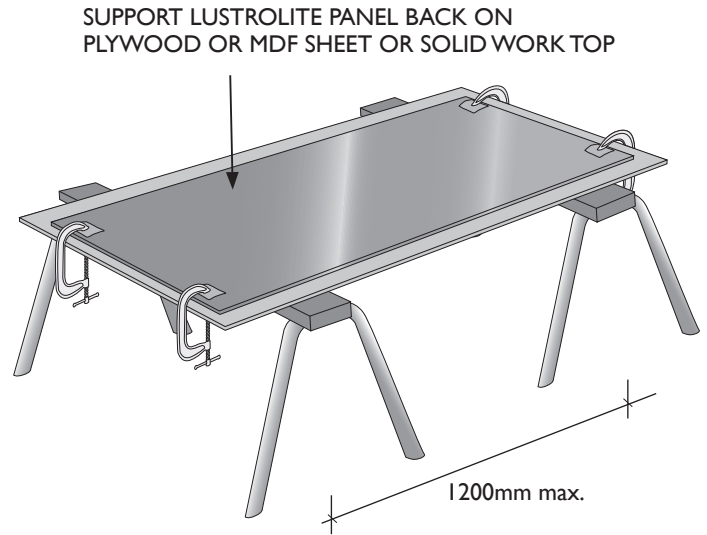
LUSTROLITE

WALL

SHOWER TRAY

Marking Out

- Lustrolite is supplied with a protective film on both sides of the panel. 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 panel 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

- Take care when storing panels on the edge. Use protective medium to avoid damage

COLOUR SIDE REAR

"SHOW FACE"

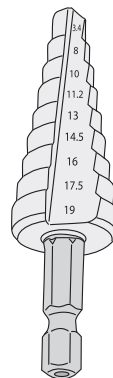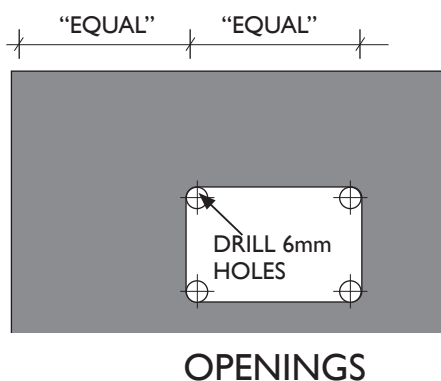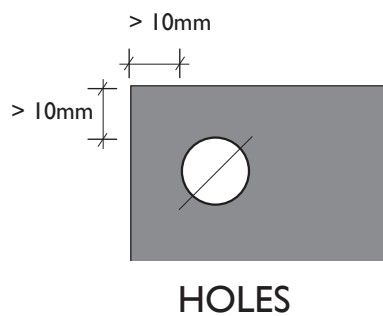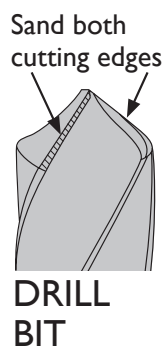CLEAR SIDE FRONT

Cutting

- When cutting or drilling Lustrolite, 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 panel surface

- Using a circular saw will deliver a straight and accurate cut. Sacrificial timber board support must be used when cutting Lustrolite panels.

- 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 Lustrolite

- Carbide tipped blades with a minimum of **60** teeth must be used

- Do not allow the blade to overheat, work at a moderate speed and pressure

- To reduce the risk of chipping, when using a portable circular saw, cut with the colour side of the Lustrolite panel facing UPWARDS. If using a fixed table circular saw, cut with the colour side of the Lustrolite panel facing DOWNWARDS

SUPPORT LUSTROLITE PANEL BACK ON PLYWOOD OR MDF SHEET OR SOLID WORK TOP

1200mm max.

COLOUR SIDE UP

SACRIFICIAL SUPPORT TIMBER BOARD
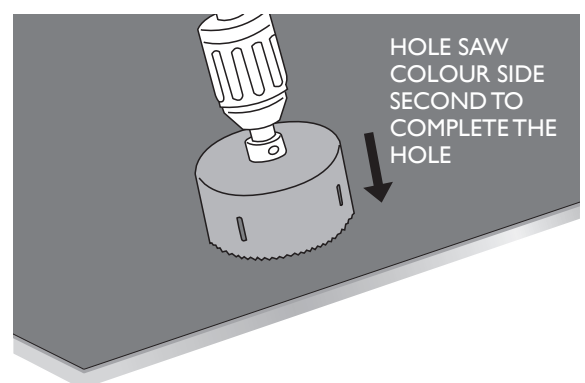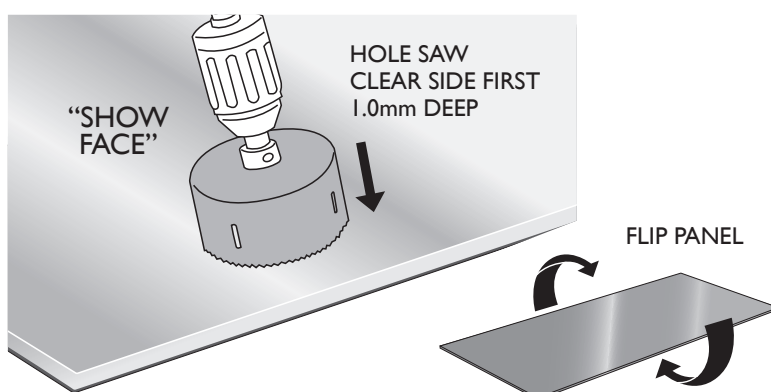
PORTABLE SAW

COLOUR SIDE DOWN

TABLE SAW

- 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 Lustrolite panel facing UPWARDS with a jigsaw

- Do not use Jigsaws to make long cuts. The blade may overheat and melt the panel 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 panel, as the panel 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

- Do not use sharp drill bits; slightly blunt drill bits must be used as they cut through the material more slowly. To blunt the drill bit, rub the cutting edges with 80 grit sandpaper

- Drill from the face side (clear side) of the Lustrolite panel to reduce the risk of chipping. Best results will be achieved with a slow to medium drill speed, use only light pressure

- Always use a sacrificial support board when drilling

- Fine toothed hole saws can be used for larger holes. Start 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 Lustrolite panel. Fix into the substrate and structure behind. DO NOT SCREW INTO THE LUSTROLITE PANEL

Sand both cutting edges

DRILL BIT

> 10mm
> 10mm

HOLES

"EQUAL"   "EQUAL"

DRILL 6mm HOLES

OPENINGS

3.4
8
10
11.2
13
14.5
16
17.5
19

STEP DRILL

"SHOW FACE"
DRILL FROM CLEAR SIDE

COLOUR SIDE DOWN

SACRIFICIAL TIMBER BOARD

HOLE SAW CLEAR SIDE FIRST 1.0mm DEEP

"SHOW FACE"

FLIP PANEL

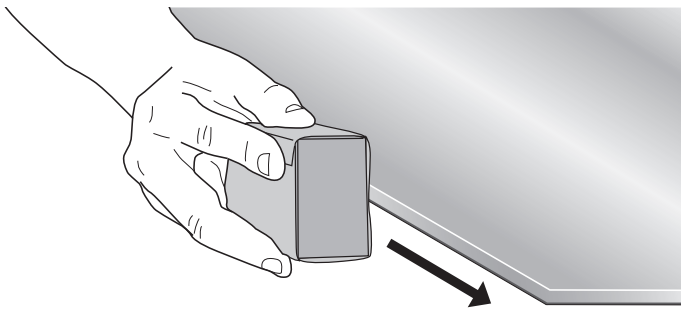HOLE SAW COLOUR SIDE SECOND TO COMPLETE THE HOLE

Edge Finishing

- All sawn edges must be sanded or planed prior to installation of Lustrolite panels

- Edges can be sanded using medium (120 grit) and then fine (240 grit) sandpaper. 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
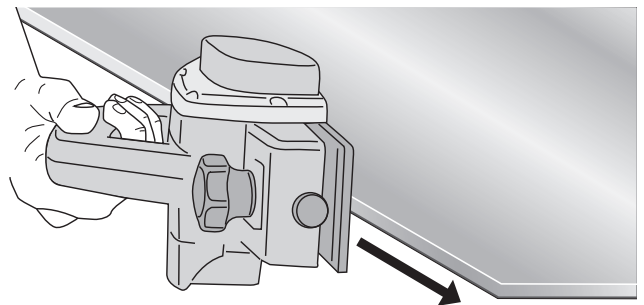
⚠ NOTE - Do not use flexible PVC edge trimming or gaskets at any time as they contain chemical agents that could damage the panel.
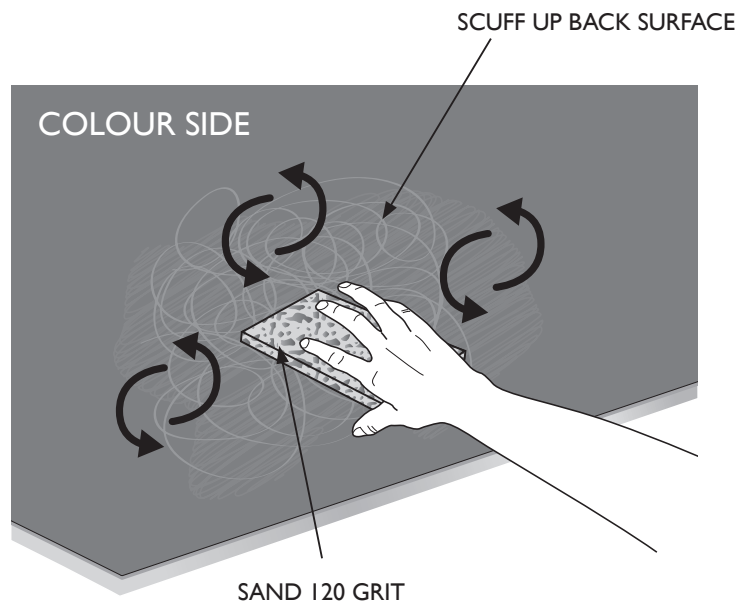
BLOCK SANDING

STEP 1: MEDIUM 120 GRIT
STEP 2: FINE 240 GRIT

ELECTRIC PLANER
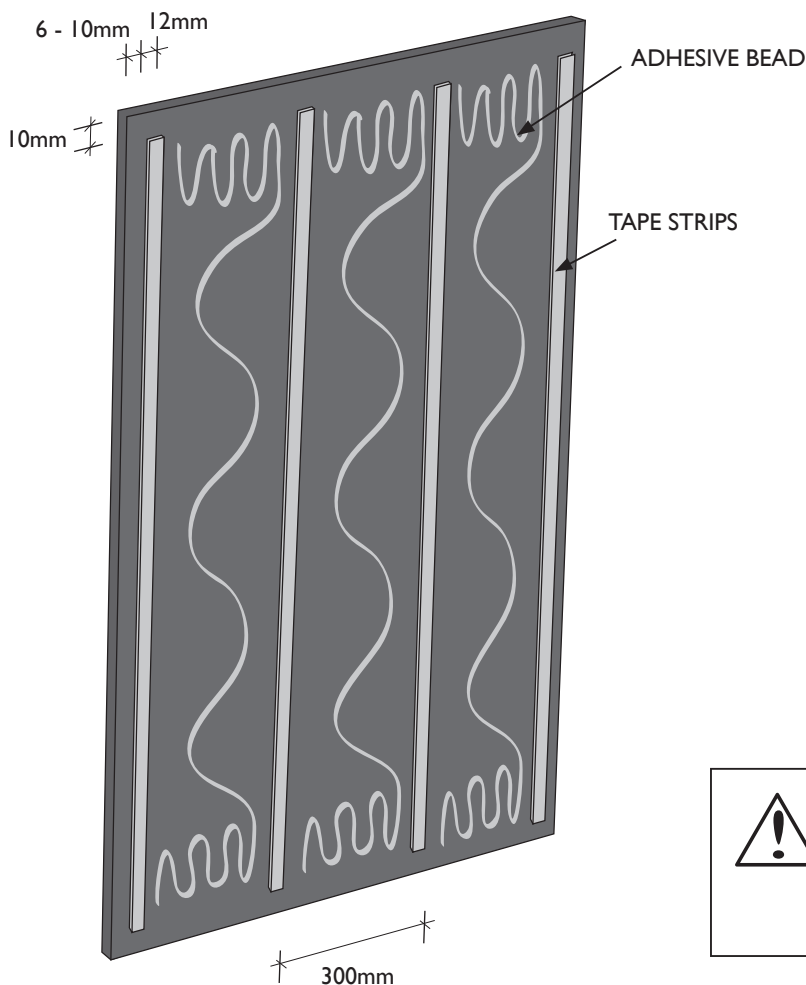
Panel Preparation

- 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 120 grit sandpaper

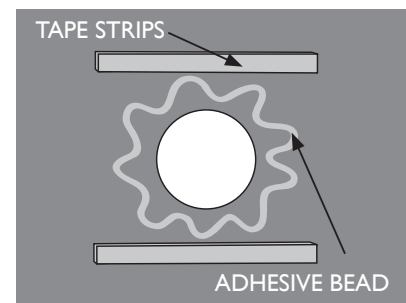- Remove sanding dust with clean cloth or tack rag

SCUFF UP BACK SURFACE

COLOUR SIDE

SAND 120 GRIT

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 Lustrolite panel, along the long sides at approximately 300mm spacing. Use a roller to firmly secure the tape to the panel. Note: The silicone and tape are applied to the COLOUR SIDE. The clear side "show face" must face outwards

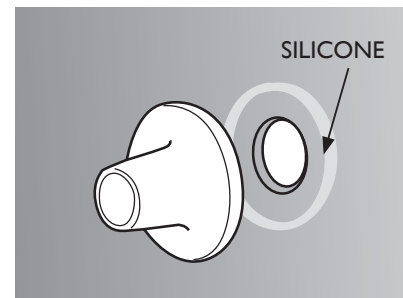**STEP 3** Trial fit each panel with tape applied to ensure trim size and expansion gaps are correct

FOR LARGE PANELS

6 - 10mm   12mm

10mm

ADHESIVE BEAD

TAPE STRIPS

300mm

FOR HOLES AND OPENINGS

TAPE STRIPS

ADHESIVE BEAD

REVERSE SIDE

SILICONE

FRONT SIDE

⚠ Please ensure you choose a tape colour that won't be seen through the panel after installation.

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 24 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
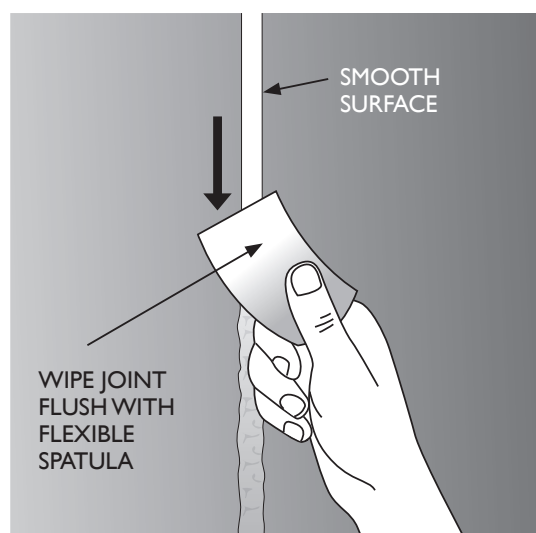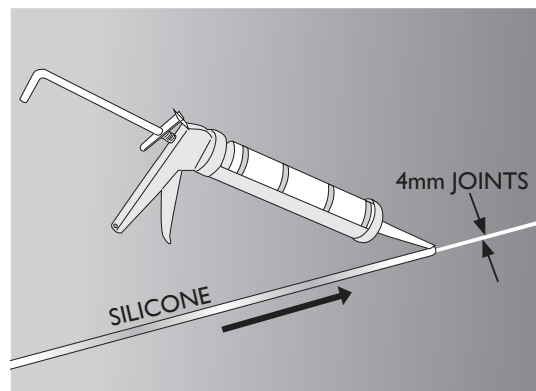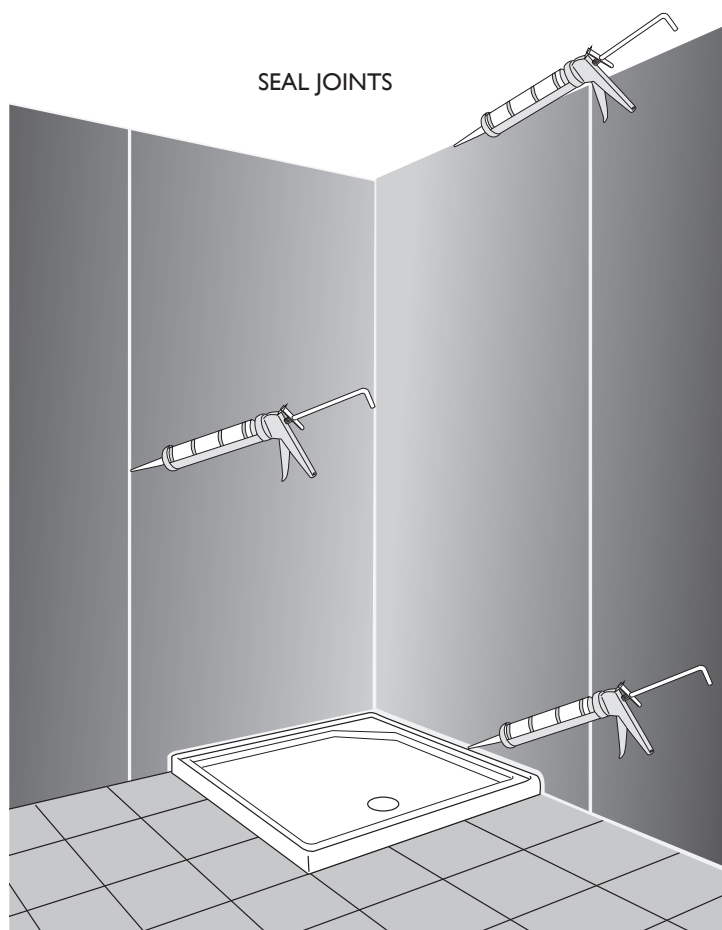
NOTE: To achieve a smooth finish on the silicone, mix up a 10% solution of mild dish washing liquid and water. Spray the solution over the silicone bead before wiping off with the spatula

⚠ Do not use Acetic cure silicone

⚠ Do not use Acrylic sealant as it will not bond to the panels

SEAL JOINTS

4mm JOINTS

SILICONE

SMOOTH SURFACE

WIPE JOINT FLUSH WITH FLEXIBLE 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

JOINT

"SHOW FACE"

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

8

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 Lustrolite surface when it is dry.

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

Lustrolite 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 alkali content.

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

Chemicals Tested

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

Technical Table

GENERAL PROPERTIES		METRIC	
		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

Lustrolite panels are warranted for faulty materials and workmanship 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, trade services or other consequential costs.

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 (AU) towards the removal and installation will be made.

For more information visit www.Lustrolite.com

© Copyright / Patent Pending

Oakmoore Pty Ltd, ABN: 13 056 159 570

1. Oakmoore expressly disclaims any representations or warranties of any kind, whether express or implied, as to the accuracy, currency, completeness and/or the merchantability or fitness for a particular purpose of any information contained in or provided via this documentation and/or any service or product described or promoted in this document. 2. It is the customer's responsibility to thoroughly examine Lustrolite by a qualified person, to determine whether it is suitable for the application it was purchased for. 3. The receiver of our products is fully responsible to check and to take into account possible third party's patent rights, as well as the existing laws in the country of installation prior to installing our product. 4. No liability may be derived from these images or statements nor from our free technical advice. 5. Printed images are to be used as a guide only.

Lustrolite®

lustrolite.com