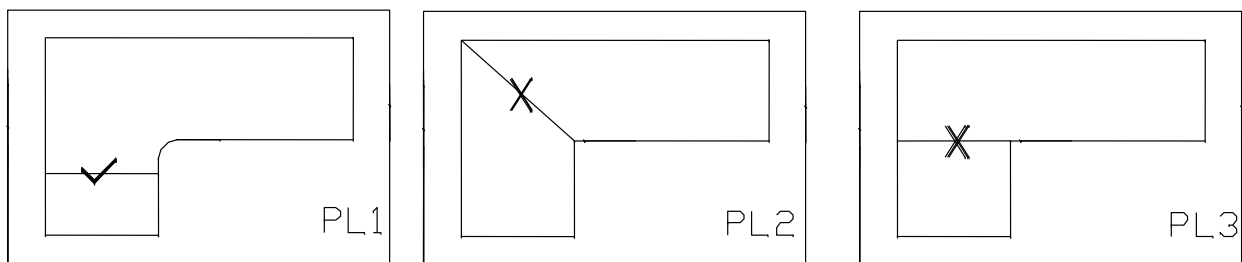


PLANNING

Before marking and cutting the sheet, always plan the work in totality rather than independent unrelated steps. Mistakes could be very expensive if proper planning does not precede the fabrication and installation. Read the drawings carefully to know exactly your requirement of sheets. It may not be possible to transport or handle very long or 'L' shaped tops to the final installation position and a site joint will become a necessity. The site measurements may vary from the drawing. It is advisable to use a template wherever possible. It is easier and less expensive to fabricate correct top in the workshop rather than carry out changes on site. For horizontal counter top applications, the recommended minimum Velstone sheet thickness is 13 mm.

LOCATION OF CUTS AND SEAMS

List out the different lengths and widths of the cuts required to make the top. Make sure all the top surfaces as well as the strips required for front edge, back splash, return end and reinforcement strips are calculated. Mark the sheets to minimize the cutting waste. Leave an allowance for the thickness of the saw blade, for final straight routing, sanding and finishing. All the seams and butt joints should be at least 50mm (2") away from any corner (Figure PL1). Never mitre the joints for 'L' shaped tops (Figure PL2) or plan the joint in the corner (Figure PL3). Do not plan the seams or joints in the Cut Outs or within 600 mm of any heat generating appliance.



CUTTING

WARNING: DO NOT USE A JIG SAW, SABRE SAW, OR HAND SAW!

Any one of the following saws, are suitable for the cutting of VELSTONE sheets: Beam saw, Vertical panel saw, Horizontal panel saw, or Portable Circular Saw used in conjunction with a straight edge or fence. The saw blades should have Tungsten carbide tipped teeth and must be maintained sharp at all times. Dull or worn out teeth may cause chipping of the edges. The saw diameter should be minimum 200~250 mm. The actual sawing operation is similar to cutting high pressure laminate or hard wood. Proceed accordingly.

ROUTING

TOOLS REQUIRED

Any standard router, with provision for dust extraction and 12.7mm collet, is suitable for routing Velstone. It is recommended that the router should have a minimum 1.75kw input power. The router bits should be Carbide tipped. Contact your local supplier for availability of various profiles for the bits. Additionally a Metal Straight Edge and Gripper Clamps with Nylon grip tips, Sliding or "G" Clamps may be needed.

EDGE ROUTING

The edges must be accurately finished as a first step to quality joints. A metal straight edge or fence is recommended to guide the router base plate along the straight line. The straight edge should be strong and should not sag in the centre as sagging will cause the cut to deviate from the straight line.

MIRROR CUTTING

Mirror cutting is a better option, whenever possible, to prepare the edges for joining. Place both the Velstone sheet pieces, with the edges separated by about 6 mm from each other, on the mirror cutting table (PCR4). Clamp the first piece to the table. Mount a 12.7 mm diameter, double fluted straight router bit in the router. Clamp the straight edge on the first piece and clamp the second piece to the table. Rout through the gap between the sheets by firmly pressing the base plate on the straight edge and moving along the edges of the sheets. This method automatically compensates for irregular hand movements, or a worn out straight edge. When the edges are dry fitted they will not show any gaps, which is ideal for seaming operation.

REBATING

Place the sheet, face down, on the work table and clamp it to the table. Clamp the straight edge to the sheet. Select the rebating bit for the router and rebate the sheet by 13 mm wide x 3 mm deep (Figure PCR4). It is recommended that all the perpendicular joints should have a rebate to give extra strength at the joint.

EDGE BUILD UP

It is recommended that the strips for the edge or up stand are cut from the same stock sheet and batch to avoid a colour mismatch. To construct a simple front edge, or return end for a 40 mm thick counter top, rout one edge of the 13 mm Velstone sheet and then cut a 30 mm wide strip (Figure PCR5). Clamp the sheet face down and rebate the edge 13 mm wide x 3 mm deep. The assembly of the edge is shown (Figure PCR6). For fascia height other than 40 mm, vary the strip width accordingly. The procedure remains the same.

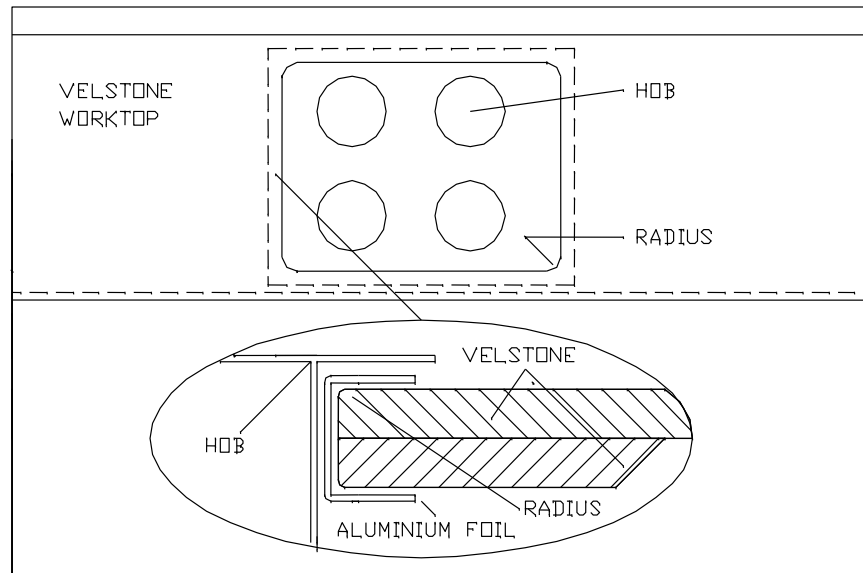
Note: The edge profile detail must be routed after the seaming operation.

CUT OUTS

WARNING: Any hand, or power tool other than a router, is prohibited!

Cut outs must never be made on the seams of the counter tops.

For Hot Appliances:



Hob Installation

1. Measure the Appliance dimensions.
2. The cut out dimension must be at least 6-12 mm greater than the Appliance dimension, i.e. a minimum gap of 3-6 mm must be maintained between the appliance and cut out. Flange permitting, a higher gap should be provided.
3. Turn over the Velstone counter and mark the cut out dimensions at the proposed Appliance location.
4. Cut a piece of 13 mm Velstone sheet at cut out dimension plus at least 100 mm.
5. Bevel the edges and bond the piece on Velstone counter. Spread the Velstone Adhesive at least 75 mm outside the marking and 25mm inside the cut out marking.
6. Clamp the piece and allow the adhesive to harden.

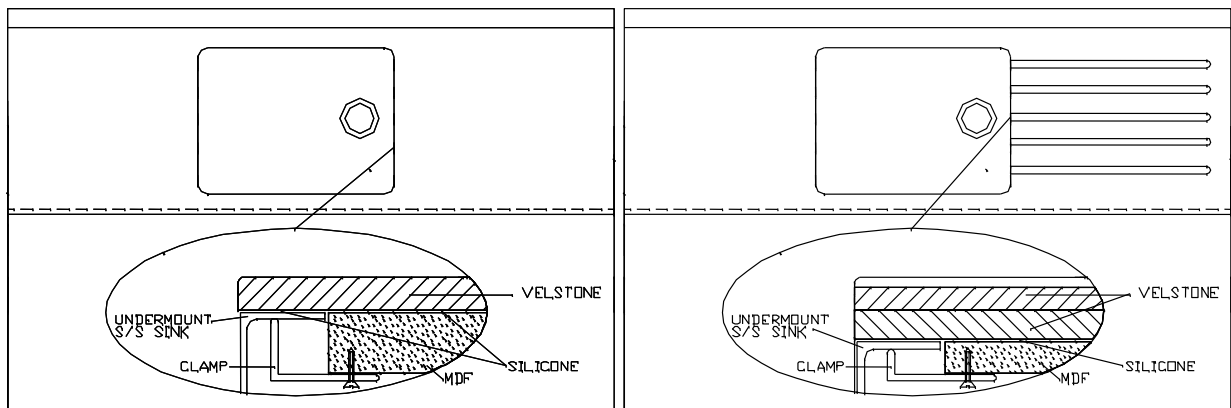
7. Prepare a template to suit the cut out dimension.
8. Turn over the counter and clamp the template in position.
9. Using a double fluted plunge routing bit in the router follow the template profile to make the cut out.
10. Remove the template and lightly sand to smooth the cut out profile. All sharp edges must be removed. Round off the top and bottom edges of the cut out.
11. Apply self adhesive, heat reflective Aluminium foil on the edge of the cut out before installation of the heat generating appliance.

For Vanity Bowl, Sink and other cut outs:

1. The cut out dimension must be 10-20 mm less than the Bowl or the Sink inside dimension.
2. Prepare a template to suit the cut out dimension.
3. Turn over the counter and clamp the template in position.
4. Using a double fluted plunge routing bit in the router follow the template profile to make the cut out.
5. Remove the template and lightly sand to smooth the cut out profile.

Undermount Sink Installation:

General arrangements are shown below. Additional Velstone reinforcement strip should be used when the drainer grooves are deeper than 3 mm.



Standard Installation

With reinforcement strip