

polytec XENOLITH

Handling & Storage

- When moving sheets ensure care is taken to avoid scratching of decorative surface.
- Store in an enclosed area protected from moisture and heat.
- When storing vertically, place side exactly vertical and support over full height.
- When storing horizontally, support bearers should be no more than 600mm apart.
- Ensure the pooling of water on the surface cannot occur and allow sufficient ventilation and drainage in enclosed spaces.
- Maximum overhang must not exceed 300mm.

Tooling

Standard tools can be used for machining and processing such as sawing, drilling and routing.

Finishing

Neither the surface or exposed edges need to be protected or sealed.

Drilling and Screwing

polytec Xenolith is a very hard material. Use high quality screws and ensure to predrill pilot holes, or follow the directions as recommended by the screw manufacturer. Be cautious not to over tighten.

- The use of support sheets is recommended.
- When drilling parallel to the surface (edge drilling) at least 3mm must remain from the hole.
- When working with **polytec** Xenolith, the resilience of your tooling and hardware is very important. Discuss with your hardware supplier about suitable screws, hinges and brackets to provide the required strength and corrosion resistance.

Screw Location

Screws should be carefully positioned to prevent splintering (minimum 20mm to edge). Screwing directly into the edge of a panel is not recommended. Metal brackets are recommended when fixing two panels together. Mitring of edges should be avoided as they are vulnerable to damage, a chamfered edge or crescent shaped edge will avoid edge chipping.

Sawing

To achieve optimum finishing always use trial pieces to test before actual operation. Always ensure the decorative surface is facing upwards to prevent damage and chipping edges of the surface. A carbide or diamond tipped saw blade should be used.

Saw blades must always be sharp and if necessary, remove the blade to sharpen or change to a new blade before continuing. All sharp sawn edges should be removed with fine sand paper or router to achieve a smooth finish.

Routing

Routing of edges require hard metal or diamond cutter at slow speed to achieve proper finishing without burn marks. Routing can be done with either a CNC machine or manual operated tooling.

Manual operated Routing

Bit Diameter (mm)	No. of Revolutions (rev/min)	Speed (m/s)	Feeding Speed (m/min)
20	18000	20	5
25	24000	30	

Gluing and Mechanical Fixing

- The under-bench cabinets must be manufactured with supports no larger than 600mm apart at the top of the cabinets. Xenolith should not be installed on large flat panels as air is required to flow freely around the top and bottom of both surfaces.
- The supporting cabinets must be manufactured in a ladder style, Xenolith should not be installed on large flat panels as air is required to flow freely around the top and bottom surface.
- Xenolith must be held in place by pre-drilled 10 gauge screws as mechanical fasteners in final application no more than 600mm apart.
- All joints must be mechanically fixed together and screwed to the supporting substrate at each end and throughout the joint.
- Slightly roughen the surface and ensure all foreign matter (dust, grease, etc) has been removed before applying adhesive.
- Xenolith panels must be glued with a suitable high-strength flexible adhesive. The snaking of flexible adhesive over all cabinet surfaces in contact with the Xenolith top is required.
- Pressure must be applied using a mechanical fastener for approximately 4–8 hours at 20°C as recommended by the adhesive manufacturer to ensure proper adhesion to the joining part. For added strength, adjoining parts can be channelled prior to gluing.