

MACH-EX SOLID CAST EPOXY

Mach-Ex epoxy is monolithic and combines excellent chemical resistance with the possibility of having flush-fit sinks and integral marine edging. Joints are connected with an epoxy grout, with the same material properties as the worktop to create a continuous, impervious work surface. Solid cast epoxy is suitable for microbiological and radioactive areas where ease of decontamination is essential.



TECHNICAL SPECIFICATIONS

- **Certified chemical resistance** (ASTM D3023, ASTM C1378)
- **Certified physical performance** (ASTM D792, ASTM D785, ASTM D648, ASTM D635, ASTM D570, ASTM D695, ASTM D790)
- **Thickness:** 15mm, 19mm, 25mm
- **Colours:** Black, Grey, White
- **10 years** manufacturer warranty

Square Edge Profile



PROJECT SPECIFICATION

Solid cast epoxy resin worksurface shall be monolithic and machined from a hot-casted epoxy resin block. Thickness variance shall be ± 0.5 mm. The surfaces shall be polished to a smooth but non-glossy finish. Any connecting joints/grouts between worksurfaces shall be formed using only Mach-Ex epoxy cement to create a continuous, impervious work surface. No silicone should be used. Worksurfaces must be installed with a 20 – 50mm overhang on all exposed sides with a continuous 2x2mm drip groove on the underside of all exposed edges. The edge profile shall be squared with a 2mm bevel on all edges.

The **Backsplash** shall be the same material and thickness as the worksurface, rising to a minimum of 100mm height above the worksurface. The backsplash shall be fixed to the worksurface using Mach-Ex epoxy cement or any Machlab-approved adhesives. Any gaps between the backsplash and building walls shall be sealed using Machlab-approved sealants.

Sinks shall be the same material as the worksurface and size as indicated on drawings. All rectangular sinks shall be furnished complete with an 1-1/2" (38mm) SO-3R outlet. Sinks shall be casted in one piece with the corners coved and bottoms sloped to outlet to prevent any liquid retention.

CERTIFIED TEST REPORTS ARE AVAILABLE UPON REQUEST

MAINTENANCE & CARE GUIDINES

Maintenance

We recommend instituting a regimen of monthly or quarterly inspections of all surfaces, sinks and joints, plus daily or weekly cleanings to maintain your epoxy resin's original finish and to help ensure a safe, uncontaminated working environment. The following list contains items you may wish to have on-hand for regular cleaning and to handle most problems that may occur.

- Acetone or Paint Thinner
- Finishing oil (Mineral oil)
- Clean rags or sponges (always use moist or wet)
- Mild soap or household cleaners

Note: Never use wax or polish containing wax on epoxy resin work surfaces or sinks. Also never use abrasive pads, sponges, powders or liquids (such as Soft Scrub) as surface damage will occur.

Epoxy Resin Sink Care

Laboratory sink areas usually present the greatest cleaning and maintenance challenges. Sinks are a collection point for dirty and wet lab ware which leaves liquids, residue and chemicals on the surface for extended periods of time. Sink areas will require a more thorough cleaning regimen than dry bench tops as well as more frequent inspections. Sink inspections should include all sink surfaces and joints in sink area including the outlet joint and the sink rim joint above and below the work surface. Cracked or pitted joints should be filled immediately with two-part Smooth-On epoxy grout to prevent leaking and damage to the supporting casework. If there is a more serious cleaning issue it is important to identify the problem before trying to remedy it.

Marring

Most metals are softer than the work surfaces and can leave a mar if pulled across the top. Marring is matter left on the surface that appears as a line and remains smooth to the touch. Marring can almost always be removed with acetone or with mild cleaning products and elbow grease. Always try the softest cloth and the weakest solution (soap and water) first. If marring persists, progress to a white Light Duty Scotch brite Pad moistened with stronger solutions. Never use a dry Scotch brite pad or a more abrasive pad and always apply the minimum amount of pressure required on the surface to remove the mar.

Scratches

Harder metals, abrasives and heavy or sharp items can dig into the surface resulting in a scratch. Scratches usually appear as a lighter shade of the surface and will be rough to the touch. Scratches in epoxy resin are permanent but will not affect work surfaces performance. An aesthetic remedy for scratches is colouring in the void with a permanent marker. This option will never perfectly match the colour and gloss of the surrounding surfaces.

Stained Surfaces

Staining can be caused by chemicals left to dry on the surface. Chemical stains usually lighten or bleach the surface but can also roughen and even crack the top. Like scratches, chemical stains are permanent and, if they have caused too much damage, you may need to replace the top.

Special Care Issues

Epoxy resin products (especially glued in sinks) are subject to thermal shock and are not warranted against damage from liquid nitrogen or dry ice. Possible effects caused by the improper disposal of these materials include joint failure and/or sink fractures.

By following these simple guidelines your laboratory work surfaces will look good for the life of the lab. Please take time to share this document with your lab workers and cleaning personnel and institute a maintenance program to help ensure the safety and beauty of your lab.