

CARE THE FIRESLATE - 2 COUNTERTOP

Daily . . . wash the surface with soap and water . . . follow with a clean water rinse.

Clean up spills quickly with a liquid cleaner followed with a clean water rinse. Restrained use of abrasive cleaners . . . COMET, SCOTCHBRITE PADS, STEEL WOOL . . . is OK - but they do remove the surface and with it the impregnating sealer applied in manufacturing and thereby reducing its effectiveness.

THE FINISH What has been done to it?

FIRESLATE has been sealed with a stone treatment product that penetrates its surface and forms a molecular barrier inhibiting the absorption of water, oils, and grease. This sealer is designed for use in commercial laboratories and kitchens and has a projected life of 5 years between renewals. Renewal is a simple process. A dry countertop is flooded with sealer using a cloth or paint roller . . . the application is allowed to stand for 10 minutes and then any excess is blotted dry. Two applications are recommended with a one hour interval between each. The counter is ready for service two hours after the final application. It takes 48 hours for the sealer to reach full effectiveness.

In addition, owners have . . .

Treated their countertops with 100% PURE TUNG OIL to darken the surface, give it a slight luster and reduce surface absorption. This approach is akin to treating a wooden salad bowl. When using 100% PURE TUNG OIL, apply 3 light coats with Cheese Cloth or Fine SCOTCH BRITE ABRASIVE Cloth . . . wait 24 hours between coats. Keep the coats light . . . heavy coats will leave you with 10 days of tacky countertops. To assure light coats, do your top in 8-12 square foot sections . . . apply, rub in, and then try to remove it with a clean cloth or paper towel before moving to the next section. The typical period between applications is 4-6 months. If you elect to use TUNG OIL, and we recommend that you do, be certain that it is 100% PURE; much of what is available at local sources is cut with varnish or shellac components . . . fine for wood but it ends up blotchy on FIRESLATE and leaves it with a surface that scratches white.

Apply BUTCHER'S WAX to darken the surface, create a high luster, and have liquids bead on it. Waxes have melting fractions in the low 100 degree range and when they re-crystallize after melting, the crystals are larger and appear white . . . so this approach is not a good idea where hot things are custom.

Apply acrylic polish such as PLEDGE or FUTURE for a slight luster and enhanced shedding. Here, lower temperature tolerance and maintenance are issues to consider.

TRY TO AVOID . . .

Cutting on the surface . . . it will scratch the surface and dull the blade.

Letting citric acid and vinegar spills stand on the counter . . . they do stain.

Dragging cast iron vessels across the surface . . . it will scratch. Lower the potential of this happening by sanding or filing the scratches off the bottom of these tools.

Dropping heavy objects on the countertop . . . it will dent or if it is on the edge, it will chip.

Solvents on the surface . . . Drain Cleaners, Paint Thinners/Removers, Ether, Acetone . . . these will reduce the effectiveness of the sealer.

RECOVERY . . .

Stains and scratches can be removed through the following steps, moving from minor to major. COMET or similar abrasive cleaner on a moist cellulose sponge - rub aggressively . . . 3M SCOTCHBRITE pad, medium coarse followed by fine - keep the surface damp and rub in random patterns . . . 400 Grit abrasive cloth on an orbital palm sander - keep the surface damp and use moderate pressure . . . 100 Grit followed by 220 and finished with 400 Grit on a damp surface with a palm sander.

The need has yet to occur through use on an installed countertop, but you should know that stone maintenance techniques include the ability to patch and resurface.

SOURCES . . .

100% PURE TUNG OIL . . . WOODWORKERS SUPPLY
800.645.9292 #849-2091 pint . . . #849-2161 quart

SCOTCH BRITE/ NYLON ABRASIVE PAD . . . WOODWORKERS SUPPLY 800.645.9292
#850-518 extra fine . . . #850-52 fine

SEALER . . . LITHOFIN PSI SEALER . . . VIC INTERNATIONAL
800.423.1634 #25072

WORKING WITH FIRESLATE

TOOLS & ACCESSORIES . . .

FIRESLATE can be worked with stone and/ or woodworking tools . . . stone tools are preferred. Those who have worked with FIRESLATE find it tolerant and responsive.

Circular Saw . . . Diamond or Masonry Blade cut dry with multiple passes.

Jig Saw . . . Diamond or Carbide Grit Edged Blade.

Drill . . . Masonry or High Speed Drill Bits work for small holes. Butterfly/ Spade or Forstner bits and Hole Saw blades, preferably Carbide Grit Edged, can be used to do pipe and faucet holes.

Plugs can be cut from the back surface with a plug cutter to top countersunk screws.

Router . . . Diamond or Carbide Bits can be used to create an edge profile. The carbide will have a short life in this application . . . slow RPM's and patient approach are key to avoiding heat build-up . . . FIRESLATE is very abrasive.

Sanding . . . Use Diamond, Silicon Carbide, or Aluminum Oxide sanding medium in preference order with belt and random orbital sanders.

INSTALLATION . . .

Countertops . . . 1/2" dots of polyurethane caulk at 12" intervals on the frame of the cabinet combined with FIRESLATE'S weight secures the top and accommodates the differences in the coefficients of expansion. For a mechanical bond use right angled brackets screwed into the counter. Tap into the FIRESLATE with a 5/32" bit and use a #10 sheet metal screw. Threads of the screw will rifle into the FIRESLATE, creating a solid hold.

Backsplashes . . . the approach is to use caulk in the seam between the countertop and backsplash and carpenters adhesive to bond the backsplash to the supporting wall. When caulking the seam between the countertop and backsplash, put low adhesive painters tape on the bottom edge of the backsplash's front face and along the back of the countertop just in front of the backsplash countertop intersection to keep these surfaces free of any caulk ooze as this right-angled interface is installed. Run a thin bead of caulk behind the masking tape along the back of the countertop where the backsplash will rest. Put carpenters adhesive on the back face of the backsplash and put it in place. To pressure the backsplash against the wall, "C" Clamp 2" x 4"s along the front edge of the counter parallel to the backsplash to serve as a foot for braces wedged between them and the backsplashes.

Smooth any caulk ooze at the juncture of the backsplash with the countertop surface with a wet finger . . . remove the masking tape, pulling it at a 45 degree angle. Wait 24-36 hours for the caulk to set and then trim any excess with a razor blade. Use the same approach on the vertical backsplash seams . . . mask, caulk, position, smooth, remove the mask, wait 24-36 hours and razor off the whiskers.

Non-Rigid Seams . . . mask both sides of the counter adjacent to the seam to protect it from excess caulk. Spread seam 1/8", run a bead of polyurethane caulk in the seam . . . force it back together . . . smooth with a wet finger . . . remove the masking tape . . . wait 24-36 hours and do final clean up with a razor blade.

Rigid Seams . . . Epoxy, SMOOTH-ON, is used to make a solid seam. Clean the surfaces to be joined . . . paint thinner will do the job. Mask the surfaces adjacent to the seam for protection. Dry fit shim, as needed, for a flush alignment. Mix the A-B Epoxy 50:50. Apply the epoxy to one side of the seam, be sure the top, exposed edge gets covered. Push the panels together leaving a 1/16+" seam, You may want to clamp across the seam to hold the alignment; this is not always necessary. Remove excess epoxy with a moist cloth, leave only a slight bulge above the plane of the countertop along the seam. Remove the masking tape before the epoxy sets. Wait 24 hours for the epoxy to set. You can reduce the set time to about 1 hour using a heat gun; it only requires moderate heat . . . too much and you will have a melt down . . . practice on the epoxy left from your mix.

With the epoxy hard, use a razor blade to shave the excess. For final finish and alignment, sand the seam with an orbital sander using 100 Grit 220 and then 400 Grit sanding cloth. Keep the surface damp when sanding for cooling and dust control. After sanding, dry the countertop and reseal the sanded area with 2 coats of FLEXSTOP/PSI. The sanding sealing steps are not always needed.

Sealing Countertops . . . The counters are sealed as part of the production process this information applies to renewal efforts after years of use. Flood the area to be sealed with FLECKSTOP/PSI using a cloth or paint roller. Allow the application to stand for 10 minutes and blot dry any excess. Repeat this process after waiting one hour. The

countertop is ready for service 2 hours after the final application. It takes 48 hours for sealer to reach full effectiveness.

MORE STUFF

Caulk . . . Polyurethane, SIKAFLEX 240 black, is our preference . . . silicone and latex will work, but we have found SIKAFLEX with its boatbuilding heritage to be a better performer in our applications.

Mechanical Joining . . . for joining panels in intersecting planes, use WEDGIT or similar expansion type masonry hardware to assemble pieces. When doing an edge, leave 3/8" on either side of the tap hole. Use only moderate expansion pressure to avoid busting out the sides of the hole. Drill a 9/32nd" hole for a .25" WEDGIT. For additional strength, add epoxy or SIKAFLEX Caulk on the interface of the panels. Sills . . . secure using carpenters adhesive or polyurethane caulk.

Sealing . . . it is a good idea to seal FIRESLATE with a stone or cement sealer to help it shed water . . . seal both sides to inhibit warping. CONPRO SHIELD M performs well . . . on countertops we recommend FLECKSTOP/PSI.

Setting in Mortar . . avoid this . . . FIRESLATE will absorb water out of the mortar resulting in a poor bond and the possibility of the FIRESLATE bowing. We recommend LATAPOXY 300 in lieu of mortar.

SOURCES

SMOOTH-ON epoxy - PC-3 Black for "Grey" countertops - EA-40 for "Light Grey" and Pistachio -- SMOOTH-ON Inc. 908.647.5800 note the Light Grey & Pistachio will require a coloring agent. We color the EA-40 with EVERCOAT COLORING AGENT -- white as a base then grey or green to tint. These can be found where fiber glassing materials are stocked and from Hamilton Marine . . . see next item. SIKAFLEX polyurethane sealant 241 . . 231 & 240 are as effective, but they take longer to set. Hamilton Marine 800.639.2715 Item # sik-241-B .. black or - W for white. LATAPOXY SP 300 . . . Latacrete International . . 203.393.0010 for local sources. FLEXSTOP . . Lithofin PSI Sealer . . Vic International Corporation 800.423.1634 Item # 25072