



Installation and Maintenance Manual

For Epoxy Resin Worksurfaces, Sinks & Outlets

Preparation

A brief word before you begin

This information is intended to help you do your best work with reduced labor. For more detailed instructions, Durcon Inc.® provides an installation video upon request. Please use this guide as a reminder on the job site.

Once the tops have reached the job site please handle them with great care. Dropping or dragging could result in irreparable damage.

Epoxy resin worksurfaces should be installed in the final stages of construction. This will reduce the risk of damage by tradesmen using the countertops as workbenches or scaffolding. Be sure to store all worksurfaces and sinks according to the guidelines provided with each shipment.

The materials you will need

To make your installation go as smoothly as possible, be sure you have the necessary materials (listed below) before you begin.

- ✓ safety glasses
- ✓ putty knives
- ✓ a level
- ✓ 4 or more C-clamps
- ✓ 2 inch wide masking tape
- ✓ 2-part [A & B] epoxy adhesive
- ✓ 4 or more equal size applicator sticks
- ✓ lacquer thinner
- ✓ silicone sealant (lab grade)
- ✓ several pieces of hardwood blocking
- ✓ tapered shims made of wood or other suitable material
- ✓ several pieces of cardboard in varying sizes
- ✓ 2 or 3 pieces of lumber at least 1-1/2 times the width of the cabinet
- ✓ Scotchbrite® Light Duty white finishing pads
- ✓ distilled water
- ✓ several clean rags

Note: While epoxy adhesive is suggested, other sealants such as lab grade silicone are acceptable.

Leveling the cabinets

To avoid problems later in the installation, take the time to check all cabinet runs to insure that they are level.

“Dry-checking” the worksurfaces, curbs and sinks

Study the worksurface layout included with your shipment to properly place all the pieces. Each piece is labeled as marked in the layout.

Caution: Epoxy resin worksurfaces are heavy. Always have assistance when moving and placing them and always use proper lifting techniques.

- Place the worksurface pieces on the cabinets and slide them into place.

Note: Great care should be taken to prevent anything abrasive from coming into contact with worksurfaces.

- When installing worksurfaces with undermount sinks, line the sinks up below the proper cutouts with an even overhang on all sides.
- Put the curbs in place and make sure they are the correct length.

Note: If you find any damaged, incorrect fitting or missing pieces, notify Durcon immediately. Inspect each section of top before applying adhesive. Durcon will not be responsible for removal of defective tops.

- After you have checked the cabinets and inspected the sinks and worksurfaces you are ready to begin the installation.

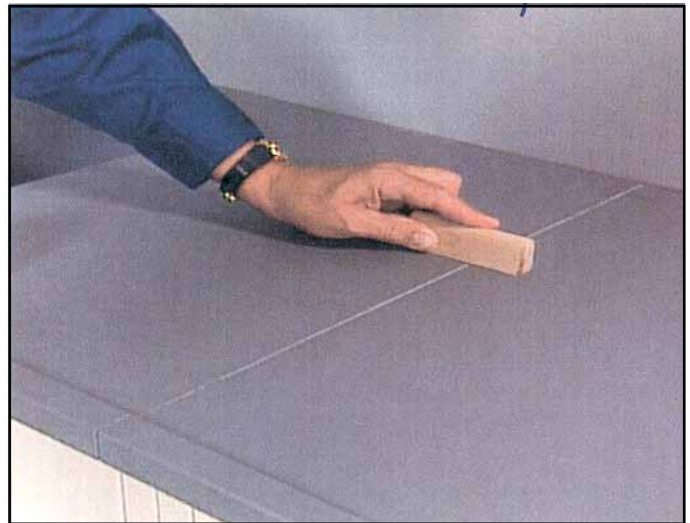
Mixing epoxy adhesive

The 2-part epoxy adhesive is the most important material you will use to install epoxy resin worksurfaces. *It is vital that you mix it properly.*

- Always use a separate stick to scoop each part of the epoxy adhesive and use the same stick each time to avoid “mixing” and contaminating the unused portion.
- Mix on a clean piece of cardboard only what you need for the number of pieces at hand.
- Begin with the dark pigment epoxy and mix the two parts thoroughly.
- Spread the mixed epoxy adhesive about 1/4” thick on the cardboard to prevent it from generating its own heat and drying too quickly.

Installing Durcon Worksurfaces

Setting the worksurfaces



- Using a straight edge or level, be sure that the two worksurface pieces form a flat surface. Use shims if necessary to adjust the height of either piece.
- Lift and prop up the first two worksurface pieces.
- Place small dabs of epoxy adhesive at 24” [610 mm] intervals along the front and back edges of the cabinet top below the first worksurface piece, remove the wood prop and lower the worksurface into place.
- Put a few dabs of epoxy adhesive along the lower edge of the first worksurface piece where the next worksurface piece will abut.
- Repeat the above steps for the second worksurface piece and carefully lower it into place leaving a 1/8” [3 mm] to 1/16” [1.5 mm] seam between pieces.
- Repeat this process for the remaining worksurface pieces in each run.

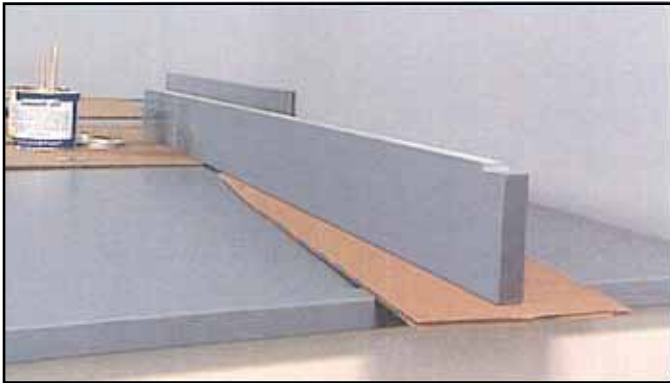
Filling the seams

- Apply a length of 2" [50 mm] wide masking tape to each side of the seam directly on the edge of the joint.
- Using a putty knife, press the epoxy adhesive down and into the seam. Using too much adhesive is better than not using enough.
- Beginning at the back of the worksurface, drag the putty knife toward you holding it at a 45° angle.
- Scrape the excess epoxy adhesive off of the masking tape approximately 1/16" [1.5 mm] from the center of the seam on both sides.
- Drag a clean putty knife across the masking tape one more time and then remove the tape.
- Use lacquer thinner on a clean rag to smooth out the epoxy adhesive for finished seams.
- Use a separate clean (damp or dry) rag to wipe away any excess adhesive.

Note: Never attempt to sand seams or scratches.

- Allow adhesive to harden overnight (at +77°).

Installing the curbs



- Cover the worksurfaces with cardboard to protect the top surfaces from scratching. Place the curbs upside down on the cardboard.
- Fill a putty knife with epoxy adhesive and use a smooth stroking motion to run a bead along the bottom of the curb and along the edge that abuts another curb.
- Set the curbs in their proper location and press in place.

Note: If you have uneven walls you will need to shim the curbs to have an even front. If you have a bow in the wall you can eliminate the problem with a prop and clamp (as demonstrated in the Installation Video).

- Wipe off excess epoxy adhesive at the bottom of the curbs with a rag wet with lacquer thinner.
- To insure that the worksurfaces and curbs will stay in place, block and clamp the seams and allow the adhesive to harden overnight (at +77°).

Installing Durcon Sinks

Installing a Durcon DropIn® Sink

- Using a rag wet with lacquer thinner, clean the rim of the Durcon DropIn Sink and the area around and inside the rabbeted worksurface cutout.

- Lower the sink into the cutout and inspect the fit.
- Remove the sink and apply epoxy adhesive around the surface of the rabbeted cutout.
- Carefully lower the sink back into the cutout.
- Gently press the sink rim until it is level with the bottom of the 1/8" [3 mm] cutout bevel.
- Use a wet rag with lacquer thinner to wipe away excess adhesive.
- Allow epoxy adhesive to harden overnight (at +77°).
- After the dabs of epoxy adhesive harden, fill the seam with epoxy adhesive.
- Using a rag wet with lacquer thinner, smooth off the seam.
- Use a separate clean (damp or dry) rag to wipe away any excess adhesive.
- Allow epoxy adhesive to harden overnight (at +77°).

Installing a cupsink



- Clean the rim of the Durcon Cupsink and the area around and inside the worksurface or fume hood base cutout with lacquer thinner.

Note: If installing Durcon Polypropylene Cupsinks, scuff the contact surfaces under the sink rim to increase adhesion.

- Position the blocking mechanism that will be used to hold the cupsink in place.

Note: Create a blocking mechanism by using wire to connect a large wood block and a smaller wood block through the cupsink outlet. Twist the smaller block to achieve enough tension to hold the cupsink level with the worksurface top when in place.

- Apply a dab of epoxy adhesive on all four sides of the cutout in the worksurface.
- Position the cupsink directly over the worksurface cutout and lower it into position.
- Center the sink (the blocks will hold it level) and allow the epoxy adhesive to harden overnight (at +77°).
- After the epoxy adhesive has hardened, remove the support blocks and carefully fill in the sealant seam with adhesive.
- Using a wet rag with lacquer thinner, smooth off the seam. Use a separate clean (damp or dry) rag to wipe away any excess adhesive and allow to harden overnight.

Installing Undermount Sinks

Setting an undermount sink



Note: Check to see that the sink fits properly on the sink supports provided by your cabinet supplier. Durcon does not provide sink supports.

- Using a level, check to make sure the top of the undermount sink is flush with the top edge of the cabinet.
- Adjust the sink supports if necessary from under the sink.
- After the sink is positioned be careful not to move it as you set the worksurface.
- Wipe the rim of the sink and the contact points on the bottom of the worksurface with a wet rag soaked with lacquer thinner.
- Apply a small bead of silicone sealant to the top edge of the sink.

- Apply a dab of epoxy adhesive at each corner of the sink cabinet.
- Carefully lower the sink worksurface into place.
- Follow the steps outlined on pages 2 and 3 for installing worksurfaces, filling the seams and installing curbs.

Installing Sink Outlets

Installing an epoxy sink outlet

- Clean both the outlet and the recessed hole in the sink with lacquer thinner.
- Apply silicone or epoxy adhesive to the outlet in a 1/4" [6 mm] bead around the bottom edge.
- Insert the outlet directly into the recessed hole in the sink.
- Give the outlet a 1/4 turn after you make contact.
- Be sure the outlet is centered in the hole.
- From under the sink, thread the retaining nut all the way up and carefully hand tighten until the upper outlet flange is flush with the sink basin.

Note: Do not use tools or over-tighten the plastic retaining nut.

- Wipe off the excess epoxy adhesive in the sink. Using a rag wet with lacquer thinner, smooth out the edges of the sealant seam.
- Clean excess sealant with a clean rag (wet or dry).

Installing a polypropylene sink outlet

- Scuff the contact surfaces under the outlet flange to increase adhesion.
- Follow the procedure shown above using silicone or epoxy resin adhesive.

Final clean-up after installation

- Wipe down all worksurfaces using Crystal Simple Green® or finishing oil. A white Light Duty Scotchbrite® Pad can be used with Crystal Simple Green® to gently rub out tough spots.

Note: Never use wax on epoxy resin worksurfaces or sinks.

- Protect the worksurfaces from construction damage. Cover all tops with clean cardboard or heavy brown paper.
- Under no circumstance should epoxy resin work surfaces be used as a platform for any overhead work or as a workbench for other tradesmen.

Preventative maintenance

- The performance of Durcon Epoxy Resin worksurfaces will not be compromised by normal marring, scratches or stains, but maintaining the appearance depends upon good housekeeping procedures.

- Promptly remove all spills to ensure a safe working environment.
- Do not use wax on epoxy resin worksurfaces or sinks.
- Clean and polish worksurfaces regularly using Crystal Simple Green® with a paper towel, clean rag or a white Light Duty Scotchbrite® Pad. Finishing oil may also be used.

Note: Never attempt to sand seams or scratches.

Preventing damage

- Epoxy Resin is the material of choice for the harsh chemical environment of the laboratory. However, epoxy resin products are subject to thermal shock and are not warranted against damage from liquid nitrogen or dry ice. Abuse caused by the improper use of these materials could cause cracking and sink failure.

