TOWN & COUNTRY PLASTICS
Customized For Precision

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GUARANTEE

T &C Products are warranted only to the extent that T&C will replace without charge, products proved to have manufacturing defects, within 12 months of the date of shipment thereof, and provided T & C has been given an opportunity to inspect the product alleged to be defective. No warranty is included against any expense for removal, reinstallation, or any other consequential damages arising from any defects of material, installation, abuse or misuse of products.

All technical advice, recommendations and services are rendered by the seller free of charge. While based on data believed to be reliable, they are intended for use by skilled persons at their own risk. Seller assumes no responsibility to buyer for events resulting or damage incurred for their use.

INSTALLATION PROCEDURE

Epoxy resin countertops are custom fabricated from your shop drawings, including sink cutouts, drillings and special cutouts. Each piece is numbered and should be installed exactly as per the shop drawings, to minimize normal variations. Tolerances in thickness and warpage (due to the very nature of resin) are held to a minimum, and are easily corrected in the field by shimming or sanding. **Note: Sanding of the top surface is not recommended.**

Epoxy resin tops should be cemented together using a black epoxy adhesive (in some instances, where flexibility is most important, a silicone adhesive should be used. This will facilitate breaking a joint for top replacement). The epoxy adhesive will set firmly, and breaking this bond is extremely difficult. Be sure the room temperature is 60° or warmer for better results.

The surface to be joined should be clean and free from coatings, dust or dirt. We recommend using acetone or lacquer thinners to wipe those edges in question. If a reduction in ultimate clean up time is desirable, masking tape can be used to mask adjacent areas, and then removed after final cementing.

Lay out the whole item before cementing. Shim where necessary, clamp and align all pieces carefully. Leave 1/16ò to 1/8ò between pieces at joints. Using a putty knife or plastic spreader, push the cement into the joints and smooth out. Wipe away any excess cement with a cloth moistened in cold water and then remove masking tape.

After a period of 1-2 hours (longer if colder than 60°) the joints can be dressed up. Let set overnight, for a bond of sufficient strength. It may be necessary to apply additional cement after the first application, as it sometimes shrinks in the joints. We recommend a thorough cleaning of the tops with detergent and water. If building construction is still in process, cover all tops with a suitable material to protect.

BONDING OF BENCH TOPS TO CABINETS

Epoxy adhesive or silicone is recommended. The area to be bonded on both the furniture and the underside of the top should be sanded with coarse sandpaper. As before, dust should be removed with acetone or lacquer. The adhesive may be applied to the tops and cabinets and fixed in place at the same time tops are being bonded together.

FIELD FABRICATION

If necessary, emergency field cuts can be made using a carborundum abrasive blade (masonry type). If the piece to be cut produces an exposed edge, it can be cleaned up with abrasive paper and then dressed with an oil based product (i.e. WD-40). Service holes can be drilled using a carbide masonry drill, which will require frequent sharpening. Diamond tools are recommended for best results.

NOTE

Due to the very nature of resin, tolerances in thickness and minor warpage can develop. It is not uncommon to have a 1/8ò warp in a 4 feet, or 1/16ò difference in thickness. Careful installation when aligning sections is recommended, we emphasize the importance of installing all tops in numerical order. T & C assumes no responsibility for the removal of material that has been cemented in place.

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Installation Instructions for Undermount Epoxy Resin Tub Sinks

Epoxy resin tub sinks are designed to be mounted from under the counter top work surface, and require a mechanical means of support. We recommend the following procedures be followed when installing sinks:

1. Locate all sink cabinets and install the manufacturerõs sink support assembly. In those cases where the cabinet manufacturer has not supplied a sink support, an assembly may be purchased from Prime Industries, Inc.

2. Once the sink support assemblies have been installed, place the required sink in the support assembly. The correct sink size and location should be noted on the shop drawings.

3. Raise the sink to a level 1/4ò-1/2ò below the top of the support assembly.

4. Repeat steps 1-3 at all sink locations.

5. Install the counter top material per manufacturerõs recommended procedures.

6. Once the counter tops have been set, apply a bead of sealant around the top edge of the sink; we recommend using silicon caulk. Epoxy counter top joint compound may be used is caulk is not available.

7. After the caulk has been applied, raise the sink until the top of the sink is flush with the bottom surface of the counter.

8. Immediately remove any excess material from the inside surface of the sink.

9. Install the sink outlet and connect waste lines.

Installation Instructions for
Lipped Epoxy Resin Sinks

Lipped epoxy resin tub sinks and cupsinks are designed to be installed as drop-in sinks. They are self-supporting and do not require the use of a mechanical sink support. We recommend the following procedures be followed:

1) Install all counter tops according to the manufacturerôs recommended procedures.

2) Distribute all sinks according to the shop drawings.

3) Clean the rabbetted sink cutout, removing any dust and/or oil film present.

4) Mix an appropriate amount of epoxy joint compound. (silicone is recommended)

5) Apply the joint compound around the entire perimeter of the cutout.

6) Gently lower the sink into the cutout and press into place.

7) Remove all excess joint compound from sink lip and surrounding counter surface using cold water and a sponge or rag.

8) Check entire perimeter of sink for any voids in the adhesive. Fill if required.

9) Let the sink set undisturbed 24 hours or until the adhesive has cured.

10) Install sink outlet and connect waste line.

CARE AND MAINTENANCE OF EPOXY RESIN TOPS

A regular schedule of maintenance is the most effective means to prolong the surface life and attractiveness of Epoxy Resin epoxy table tops. It is important that the counter top surface be protected during installation, after installation, and before acceptance. However, if some minor surface or edge damage does occur, we recommend the following procedures be used:

For light scratches and scuff marks, clean the area thoroughly with mild soap and water, then apply a light coat of an oil based product (i.e. WD-40). This will bring back the black color of the work surface.

For deep scratches on the work surface, clean the scratch or gouge thoroughly and remove any loose debris. Mix an appropriate amount of the two part black epoxy cement being used as a joint compound. Note: Follow mixing instructions on the label. Observe all cautions listed by the manufacturer. Using a putty knife, fill in the scratch until it is level with the surrounding top surface. Remove any excess epoxy cement from the working surface immediately adjacent to the scratch. Let the patch cure according to the directions on the can.

For chips on the front edge of the counter tops, clean and prepare the area to be patched as done for a deep scratch. A very small chip on the front edge can sometimes be sanded out. Mix an appropriate amount of epoxy cement and apply to the chip. The front edge is a sanded finish and the damaged area can be sanded to a 150 grit finish.

We do not recommend sanding the work surface itself, as this is a molded product, which has a matte finish by design and is very difficult to duplicate using sandpaper.

Chemical Spot Test for Modified Epoxy Resin

Procedure

With nonvolatile reagents, approximately ½ cc of the reagent was applied to the surface tested. The reagent was covered with a wide mouth bottle to retard evaporation. With volatile reagents, a 1ò(25mm) ball of cotton was saturated with the reagent and placed on the surface tested, then covered with a wide mouth bottle. All surface test spots were wet with reagent for a 16 hour period. After exposure, the surface was washed with soap and water, rinsed and dried before examination and evaluation.

Acetic Acid, 5%	Iso-Octane
Acetic Acid, Glacial	Kerosene
Acetone	Methyl Alcohol
Ammonium Hydroxide, 28%	Mineral Oil
Aniline Oil	Nitric Acid, 70%
Benzene	Nitric Acid, 10%
Carbon Tetrachloride	Oleic Acid
Citric Acid, 10%	Olive Oil
Cottonseed Oil	Phenol
Diethyl Ether	Soap Solution, 1%
Dimethyl Formamide	Sodium Carbonate, 20%
Distilled Water	Sodium Carbonate, 2%
Detergent Solution, ¼%	Sodium Chloride, 10%
Ethyl Acetate	Sodium Hydroxide, 10%
Ethyl Alcohol, 95%	Sodium Hypochlorite, 5%
Ethyl Alcohol, 50%	Sulfuric Acid, 60%
Ethylene Dichloride (Dichloroethane)	Sulfuric Acid, 33%
Heptane	Toluene
Hydrochloric Acid, 37%	Transformer Oil
Hydrochloric Acid, 20%	Turpentine
Hydrogen Peroxide, 20%	100 Hr Soaked Cellulose Sponge Test
Hydrogen Peroxide, 3%	Boiling Water, Trickling, 5 Minutes

SPECIFICATIONS FOR MODIFIED EPOXY RESIN

Epoxy Resin Work Surfaces shall be ¾ò (19mm), **1ò (25mm)** or 1 ¼ò (32mm) thick. Work surfaces shall be monolithic and molded from a modified epoxy resin. Work surfaces shall have a smooth, non-glare finish. Work surfaces shall be installed with a uniform 1ò (25mm) overhang on the front and exposed ends. Work surfaces shall have a continuous drip groove 1/8ò (3mm) wide on the underside of all exposed edges. All exposed edges shall be finished with a 1/8ò (3mm) bevel or a 3/16ò (4.7mm) radius. Work surfaces shall be provided in longest practical lengths to minimize joints.

Backsplashes shall be of the same material, thickness and finish as the work surface. Backsplashes are to be supplied loose for field application to assure proper fit at walls.

PHYSICAL PROPERTIES

Flexural Strength	ASTM-Method D790
Compressive Strength	ASTM-Method D695
Hardness, Rockwell M	ASTM-Method D785
Density GR/CC	ASTM-Method D792
Water Absorption	ASTM-Method D570
Flame Test	ASTM-Method D635

HEAT RESISTANCE

A high form porcelain crucible (size: 15ml capacity) was heated over a Bunsen burner until the crucible bottom obtained a dull, red heat. Immediately the hot crucible was transferred to the Prime work surface and allowed to cool to room temperature. Upon removal of the cooled crucible, there was no effect to the Prime work surface; no blisters, cracks or any breakdown of the work surface whatsoever.

The Prime work surface showed no blistering or cracking when exposed to direct flame. An overturned 3/8ò (9.525mm) Bunsen burner, adjusted to quiet flame with a 1 ½ò (38mm) inner cone, was allowed to remain on the work surface for a period of five (5) minutes with no effect.

CHEMICAL RESISTANCE

Tops shall be highly resistant to the normally used laboratory reagents. The following is the test that was performed at an independent test laboratory.