



TorZo Fabrication Guide: Indure

Material Composition and Handling

All TorZo products, including Indure, are infused with an acrylic resin material that can be cut, machined and sanded with standard tooling. Even with this infusion process, material composition is still between 50-75% cellulose based.

Similar to other surface materials, including wood, rock, granite, and all other 100% acrylic resin based materials, TorZo recommends the fabricator wear a dust mask to prevent inhalation of any fine particles generated during the fabrication process. The MSDS is available online at www.torzosurfaces.com or can be provided by the distributor.

Material should be kept flat at all times, with a top and bottom cover sheet, to prevent the introduction of “bowing” to the panels.

Material should be kept clean from particles that could cause small nicks or scratches to the material surface during the fabrication process, and/or be included into a surface coating if coating is to be conducted post fabrication.

Material should be kept from all contact with water prior to fabrication. This will prevent any discoloration or warping due to water spot damage.

Material Properties

All boards are sanded to 220+ grit and have a tolerance of +/- 1/5,000 inch. Hence material thickness is relatively very uniform.

TorZo materials can have a certain amount of flex associated with the sheets. It is recommended when fabricating transaction tops, tabletops or countertops with the Indure panels that are 1/2” or thinner, that the fabricator glues the material to a 3/4” plywood or MDF sub-deck in order to insure a flat surface.

There can be some modeling that occurs on the Indure product surface. TorZo QC's the Indure panels and puts the best face up. For best results, the fabricator should use the face up side as exposed side. Some panels will have mild modeling even on the face up side and these panels are still considered good.

Cutting

Material can be cut using standard carbon tip blades. Avoid feeding the material too fast to prevent binding or too slow to prevent burning.

Machining

Material can be routed using standard carbide router tips. Material can be hand routed or routed on a C&C machine. Also, standard V-groove units with carbide tips can be used for drop edge applications.

Following the fabrication process the material should be sanded (see below) before the coating process.

Sanding

We recommend that the material be sanded using a random orbital sander to a 220 or higher grit finish. This will fully eliminate sanding marks left by the belt sanding process.

Gluing

TorZo recommends using a solid surface epoxy or like product for edge gluing, which includes mitering or seaming applications. Gorilla Glue polyurethane adhesive or like products will also work well. Titebond II-III type adhesive products will also work but you need to allow for the longer dry times

As stated above, TorZo also recommends using a 3/4" sub-deck for all horizontal applications using Indure panels that are 1/2" or thinner. Liquid Nails, contact cement or silicon adhesive will work great for horizontal application.

Mitered Edge Application

All TorZo Surfaces surface products are capable of incorporating a mitered edge technique. CNC machines are great for this application, especially for larger jobs.

A clear or best color match solid surface 2-part epoxy system can be used to glue the drop edge pieces together. The clear epoxy system actually takes on the color of the panels being glued and thus eliminates or minimizes glue lines. Gorilla Glue polyurethane adhesive or similar products will also work.

Sink & Faucet Sealing/Installation Instructions

For undermount sink applications, it is important to fill the exposed edges with a clear, or best color match epoxy. Then sand smooth and coat with the same sealer and topcoat system that is being applied to the surface.

Installing a top sink mounted bowl would be identical to installing the faucet. After cutting out the hole with the appropriate size cutting bit, apply a liberal amount of silicon caulking on the exposed edge and then install the sink bowl, faucet, etc

Seaming Application

The Indure surface product can be seamed. For seams finished in the shop, using the recommended backer template, simply glue the two edge faces together using a solid surface epoxy that best matches the color of product being used. Because of the busy look, the seamed area will hardly be noticeable.

For cases where the seaming will be done at the installation site, a dry seam technique is recommended. For these situations, TorZo suggests using a dog bone clamp assembly; similar to what is used for prefab counters tops. After fabrication is complete, bring the edges together without applying any adhesive to the edges, sand the seamed area smooth and then complete the sealer and topcoat spray coats. Once the fabricated piece has dried, it can be transported to the installation site in pieces and assembled on site.

Finishing

As mentioned above, it is **imperative** for horizontal applications to have a full fill finish in order to maintain maximum protection of the surface. Though TorZo does include a fill/sand step to the manufacturing process, **there may still be a few surface voids that need to be filled for horizontal applications**. These minor surface voids can be filled using any type of “best color match” wood filler or solid surface epoxy.

TorZo recommends a minimum of one sealer coat and two topcoat applications for high wear applications such as transaction tops, countertops, vanities or tabletops. **TorZo recommends using a conversion varnish or polyurethane type coating that has good hardness and durability for high wear applications**. For low wear applications such as casework, a lacquer finish will work just fine.

Before applying any coating, it is important to lightly sand and wipe the material clean with a damp rag using mineral spirits. This will remove residual sanding dust and other type particle.

Note: In order to ensure product performance, TorZo Surfaces requires a single coat spray application for the back or underside of any fabricated projects. The reason for this is two fold: During our manufacturing process, we make sure to keep the boards balanced. What we do to one side, we do to the other. This includes the sanding step as well as the fill and sand step, when applicable. Second, the idea is to seal all six sides, regardless of the application (low wear vertical or high wear horizontal).