SINK AND LAVATORY INSTALLATION GUIDE
This guide describes how to install sinks and lavatories in countertops and vanities of DuPont CORIAN®. For fabrication information, including safe practices, recommended tools and procedures, please refer to the Fabrication Manual, C956-H71343.

The information in this guide is given by DuPont free of charge. It is intended for professional use by installers of CORIAN®. The procedures described herein have been shown to be appropriate for the applications described; however, no warranty, expressed or implied, is intended or given. Moreover, the user of this guide is cautioned to be familiar with and to adhere to manufacturers’ operating instructions, especially those relating to safety, usage and limitations, for tools and other appliances used in the installation and fabrication of CORIAN®. In addition, the user is urged to become familiar with and adhere to all applicable local, state and federal health and safety regulations.

References to products not made by DuPont suggests neither endorsement of said products nor unsuitability of other products.

CORIAN® is a DuPont registered trademark for its surfacing material. Only DuPont makes CORIAN®.

Copyright 1997 by DuPont, Wilmington, Delaware 19898
Contents

4 Introduction

5 Safety

6 Designing with Corian®

8 General Guidelines
   Checking for Color Match
   Locating Cutouts
   Supporting Cutouts
   Locating Faucets
   Designing Multi-Bowl Installations

9 Templates, Tooling and Accessories
   Using Templates
   Selecting Tooling and Accessories

10 Installing Self-Rimming Sinks and Lavatories

11 Fabricating and Installing
   Bevel Mount ("A") Sinks and Lavatories
   Flush-Mounting Sinks or Lavatories
   Recess-Mounting Sinks or Lavatories

13 Fabricating and Installing Traditional
   Undermount Sinks and Lavatories
   Fabricating and Installing
   Undermount Kitchen Sinks
   Fabricating and Installing
   Undermount Bar/Vanity Sinks and Lavatories

17 Fabricating and Installing
   Seamed Undermount ("S") Sinks and Lavatories
   Constructing a Bowl Cutout Template
   Fabricating and Installing Seamed Undermounts

20 Routing Drainboards into Corian® Countertops
   Selecting a Design
   Making Templates
   Fabricating Drainboards
   Routing the Interior
   Finishing
**Introduction**

CORIAN® is a solid material. CORIAN® is neither coated nor laminated; its color, texture and pattern run all the way through the material.

Combining the best qualities of wood and man-made building materials, CORIAN® offers unusual workability with distinctive design versatility.

CORIAN® can be cut, shaped, edged, routed, drilled and sanded to create customized designs. It can also be molded into sinks and lavatories.

Its hard, nonporous surface is stain-resistant, exceptionally durable and repairable, and can be cleaned easily with abrasive cleansers.

**About This Guide**

This guide contains instructions and ideas for fabricating and installing sinks and lavatories of CORIAN®, including:

- Bevel (“A”) mount (flush or stepdown)
- Traditional undermount,
- Seamed (“S”) undermount and
- Self-rimming.

It also lists recommended templates, tooling and accessories, and suggests a procedure for routing custom-designed drainboards in CORIAN® countertops. In addition, in this guide you will see ideas for combining, sculpting and detailing sinks, lavatories and countertops of CORIAN® to create unique work surfaces.
Safety

Safety information is provided to assist you in developing or modifying your shop safety program. You may wish to consult your insurance company, local, state and federal regulations, and equipment supplier to be sure your safety practices comply with all relevant safety and environmental regulations.

Material Safety Data Sheets for CORIAN® and CORIAN® adhesives outlining health and safety information are available through your Authorized Distributor of CORIAN®.

Safe Practices for Lifting and Handling CORIAN®

- To lift pallets of CORIAN®, use either a forklift or hand-operated lift of appropriate capacity.
- To load and unload pallets of CORIAN®, use a lift with fork extenders to prevent dragging or damaging the material.
- When handling CORIAN® manually, workers should:
  —Wear heavy-duty work gloves and safety shoes.
  —Grasp sheets of CORIAN® by the edges, not by the smooth surface areas or the nylon straps.
  —Carry single sheets vertically to prevent flexing.

Safe Practices for Working with CORIAN®

- When working with CORIAN®, workers should:
  —Wear safety shoes, safety glasses with side shields, goggles or face shields for eye protection.
  —Use ear protection if noise levels from sawing, routing or other machining operations exceed federal or local safety levels.
  —Wear a dust mask when fabricating CORIAN® if ventilation is inadequate to keep dust levels below acceptable limits. Refer to Technical Bulletin, CTDC-111, CORIAN® Safety Information for Dust and Fumes, E-97371, for details.
  —Provide adequate ventilation when using all adhesives and denatured alcohol.

Because state and federal regulations vary, DuPont recommends that you consult local, state or federal health and safety agencies, insurance companies, and industrial hygiene consultants for assistance in measuring noise levels.

Safe Practices for Ventilation and Dust Control

Fine particles that may be generated during fabrication operations for CORIAN® are classified according to OSHA standards as Particulates Not Otherwise Regulated. Use local ventilation and dust collection to minimize dust concentrations in the work areas. Workers sensitive to dust should wear NIOSH-MSHA–approved dust masks.

Explosion

Dust from CORIAN® does not present a danger of explosion. Independent laboratory tests at Factory Mutual Research and by DuPont’s Engineering Test Center confirm that even when dust from CORIAN® is finely divided and mixed with air, chances of an explosion occurring are remote.

Flammability

Deposits of dust from CORIAN® will burn when exposed to a flame or other ignition source. However, the fire will not spread and goes out when the ignition source is removed.

Fumes

Frictional heat generated from sawing and routing CORIAN® can reach or exceed temperatures of 570°F (300°C). This is high enough to release small amounts of methyl methacrylate vapors that can be smelled in concentrations as low as one part per million. Vapors can also be present at the cutting tool face that exceed the threshold limit value (TLV) of 100 ppm. They dissipate with good ventilation, however, to very low levels only a foot or two from the tool. For this reason, localized ventilation should be provided where extensive cutting operations are done.

People with unusually high sensitivity may experience eye, nose or throat irritation from dust and fumes from CORIAN® and should take proper precautions.

Always follow the manufacturer’s safety precautions when using panel adhesive, alcohol and silicone.
Designing with Corian®

Corian® offers unlimited design possibilities in residential and commercial applications. You can select from a full line of sinks and lavatories, including single-bowl, double-bowl and double-bowl with molded drainboard designs. To create a look of your own, single-bowl sinks and lavatories can be combined to give you unique double- and even triple-bowl designs.

And, nothing completes a sink or lavatory of Corian® like a Corian® countertop. You can select from a variety of colors and textures, plus many inlay colors and materials, to make a work surface that's as pleasing to look at as it is to use. For the finishing touch, team up your imagination with Corian® to create a unique design statement, such as a custom-crafted drainboard, a monogrammed soap dish or a thermoformed pedestal stand.
Checking for Color Match

Before installing bowls and sheets of CORIAN® check for color match. The best method for doing this is to place the sheets and bowls next to each other and examine them under lighting similar to that found at the final installation site.

Adding a shadow line to the bowl area can disguise a shade difference. For example, recess mounting a bevel (“A”) mount bowl or routing the inside edge of a seamed (“S”) undermount bowl can hide slight color differences. Inlays can help, too. Using different color bowls and sheets is another design alternative.

Locating Cutouts

Locate cutouts in accordance with the design specifications and the following guidelines. Keep cutouts for sinks and lavatories away from cooktops, stoves and other electrical appliances. The possibility of water spilling into the appliance could present a safety hazard. You can locate seams in sink cutouts, as long as the seam is fully reinforced along its entire length.

Supporting Cutouts

Support sink cutouts like cooktop cutouts. Locate strips between 1” and 3” (25 mm and 76 mm) from the edge of the cutout. Use a support material that will provide minimum flex, such as structural lumber or minimum five-ply plywood.

Locating Faucets

Locate faucets in accordance with the design specifications for the installation. Unusual faucet placements can add a touch of distinction. For an interesting look, spread out the controls or offset the spout to one side.

Designing Multi-Bowl Installations

Sinks and lavatories of CORIAN® can be installed in an almost infinite variety of combinations.

Self-rimming bowls can be placed as close together as possible. This leaves a clean, sanitary seam area.

To create an integral top-and-bowl look with two or more “S” bowls, trim the flanges to about 1/2” (12 mm) before mounting. This design is especially attractive in kitchen installations. To avoid “crack starters,” fill the gap between the bowls with Joint Adhesive.

Bevel (“A”) mount bowls require some space between them. A minimum of 1” (25 mm) of countertop is necessary between the flange edges, and support should be added. A 2 × 3 support on edge will fit between the bowls, even when bowls are placed at the minimum distance.

Special design features, such as drainboards and soap dishes, can be added to customize a counter or vanity top and give it that “signature” touch. These can be easily routed to give the consumer a truly unique installation.
Using Templates

When making cutouts, a template should be used. For undermount, self-rimming and seamed undermount sinks and lavatories, consult Technical Bulletin, CTDC-104, Making a Template from a Paper Pattern, E92464, for detailed instructions on making a hard template from a paper pattern. For bevel (“A”) mount sinks and lavatories of CORIAN®, Table I lists ordering numbers for hard templates. Because the bevel must be exact, do not attempt to make these templates. They are available from your Authorized Distributor of CORIAN® and should be used with a 30 mm template guide.

Table I. Hard Templates for Bevel (“A”) Mount Sinks and Lavatories of CORIAN®

<table>
<thead>
<tr>
<th>Sink/Lavatory Model Number</th>
<th>Template Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>802A/S</td>
<td>C991-00802</td>
</tr>
<tr>
<td>804A/S</td>
<td>C990-00019</td>
</tr>
<tr>
<td>805A/S</td>
<td>C990-00020</td>
</tr>
<tr>
<td>809A/S</td>
<td>C991-00809</td>
</tr>
<tr>
<td>810A/S</td>
<td>C990-00028</td>
</tr>
<tr>
<td>815A/S</td>
<td>C991-00815</td>
</tr>
<tr>
<td>816A/S</td>
<td>C991-00816</td>
</tr>
<tr>
<td>820A/S</td>
<td>C991-00820</td>
</tr>
<tr>
<td>830A/S</td>
<td>C990-00012</td>
</tr>
<tr>
<td>831A/S</td>
<td>C990-00027</td>
</tr>
<tr>
<td>850A/S</td>
<td>C991-00850</td>
</tr>
<tr>
<td>854RA/LA</td>
<td>C990-00011</td>
</tr>
<tr>
<td>857A/S</td>
<td>C990-00021</td>
</tr>
<tr>
<td>859A/S</td>
<td>C990-00023</td>
</tr>
<tr>
<td>871A/S</td>
<td>C991-00871</td>
</tr>
<tr>
<td>872A/S</td>
<td>C991-00872</td>
</tr>
<tr>
<td>874A/S</td>
<td>C990-00026</td>
</tr>
<tr>
<td>892A</td>
<td>C990-00031</td>
</tr>
</tbody>
</table>

Selecting Tooling and Accessories

Tables II and III list the tooling and accessories, respectively, needed for each type of installation. Refer to the CORIAN® Fabrication Manual, C956-H71343, for complete ordering information, including sources.

Table II. Tooling for Installing Sinks and Lavatories of CORIAN®

<table>
<thead>
<tr>
<th></th>
<th>Self-Rimming</th>
<th>&quot;A&quot; Mount</th>
<th>&quot;S&quot; Mount</th>
<th>Drainboard</th>
<th>Traditional Undermount</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 HP router</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>1¼ HP router</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>⅝&quot; (16 mm) single-flute, carbide-tipped router bit</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Belt sander</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Orbital sander</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>1&quot; (25 mm) template</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td></td>
<td></td>
</tr>
<tr>
<td>½&quot; (12 mm) double-flute, carbide-tipped router bit</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>30 mm template guide</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profiler bit</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>15° bevel bit</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Bevel bit with tapered nylon bearing</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Decorative bit</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Core box bit with altered tip</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Mortising bit</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
</tbody>
</table>

Table III. Accessories for Installing Sinks and Lavatories of CORIAN®

<table>
<thead>
<tr>
<th></th>
<th>Self-Rimming</th>
<th>&quot;A&quot; Mount</th>
<th>&quot;S&quot; Mount</th>
<th>Drainboard</th>
<th>Traditional Undermount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper or hard template*</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>DuPont Joint Adhesive</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Various grits of sandpaper</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Scotch-Brite® pads</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Assorted clamps</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Denatured alcohol and clean, white rags</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Color-matched Silicone Sealant</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Aluminum tape</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Undermount hardware</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

*For bevel mounts, order the hard templates listed in Table I on this page.

Scotch-Brite is a registered trademark of the 3M Company.
Installing Self-Rimming Sinks and Lavatories

1. Position and secure the template for the cutout.

2. Rout the cutout.
   • Make the cutout using a 2 HP to 3 HP router with a 1" (25 mm) template guide and a \( \frac{3}{8} \) (10 mm) carbide-tipped, single-flute bit (see Figure 1).

3. Trial-fit by positioning the bowl on the sheet.
   • Position the bowl on the sheet, checking for a tight fit (see Figure 3).

4. Use a hole saw to make the faucet holes.

5. Apply Silicone Sealant.
   • Clean the countertop around the cutout area with denatured alcohol and a clean, white cloth.
   • Rest the bowl upside down on a clean, smooth surface. Clean the underside flange area with denatured alcohol and a clean, white cloth (see Figure 4).
   • Apply a generous, continuous bead of color-matched Silicone Sealant to the underside flange area, making sure the adhesive extends to the outer edge (see Figure 4).

6. Position and secure the bowl.
   • Turn the bowl over.
   • Position the bowl on the sheet (see Figure 5).

7. Remove the excess sealant with denatured alcohol and a clean, white cloth.

8. Seal between the bowl and the sheet.
   • Use Silicone Sealant to caulk between the bowl and the sheet. Smooth the bead.
   • Clean the excess caulk with denatured alcohol and a clean, white cloth.

9. Let the sealant cure overnight.
NOTE

This procedure requires two installers to properly apply the adhesive.

Flush-Mounting Sinks or Lavatories

1. Make sure the countertop is completely level to ensure proper sink fit.

2. Position and secure the template for the cut-out. (Some “A” mount sinks are narrower than standard sinks. You may wish to ask your customers how they would like the sink positioned in the sheet.)

3. Rout the cutout. Use a \( \frac{3}{8} \)" (10 mm) single-flute bit and a 30 mm template guide.

4. Bevel the cutout edge with a 15° bevel bit (see Figure 6).
   - Install the 15° bevel bit in the router.
   - Set the router on the template.
   - Lower the bit until it touches the sheet.
   - Set the depth gauge to zero.
   - Adjust the bit down to a depth of \( \frac{1}{2} \)" (12 mm).
   - Rout around the inside of the cutout.

5. Trial-fit the bowl.
   - Position the bowl approximately \( \frac{1}{2} \)” to \( \frac{1}{16} \)” (1 mm to 2 mm) above the sheet surface (see Figure 7).
   - Make additional trim cuts as necessary, lowering the bit \( \frac{1}{16} \)” (2 mm) each time.
   - Remove the template.

6. Apply Joint Adhesive, using two people and two kits.
   - Form a tape dam underneath the cutout. Do not extend the tape more than \( \frac{1}{2} \)” (13 mm) into the opening (see Figure 8).
   - Clean the edges of the bowl and sheet with denatured alcohol and a clean, white cloth.
   - Turn the bowl over.
   - Apply a thick layer of adhesive to the bowl and to the edge of the cutout (see Figure 8).
7. Set the bowl in the cutout, aligning it with the sheet surface.
   - Make sure that the bowl edge is the same height on all sides (see Figure 9).
   - Make sure that the tape underneath the sheet has not peeled away.

8. Allow the adhesive to cure for 45 minutes.

9. Using a belt sander, level the edge of the bowl with the sheet (see Figure 10).
   - Remove scratch marks with an orbital sander.
   - Finish sanding with a Scotch-Brite® pad.

**Recess-Mounting Sinks or Lavatories**

1. Follow flush-mounting steps 1 through 7 exactly.

**NOTE**

To ensure exact repositioning of template, mark its position with two hot-melt glue blocks on the underside of the template and one block on the sheet of CORIAN® (see Figure 7).

2. Follow step 8 under Flush-Mounting; except, before using the belt sander, use a profiler bit and a 30 mm template guide to recess the edge of the bowl (see Figure 11).
   - Replace template.
   - Install the profiler bit in the router.
   - Set the bit on the lowest point of the bowl lip or 1/8” (3 mm), whichever is lower.
   - Rout the lip of the bowl. Check the rout for smoothness and to ensure enough material is removed. If necessary, lower the bit slightly and rerout.

**NOTE**

The flange on some “A” mount bowls is extra-wide and will require additional trimming. Rerout by using either the profiler bit slightly away from the template or by removing the template and making a pass with a 1/4” (6 mm) or 3/8” (10 mm) radius roundover bit. (This bit reduces sanding time.)
   - Remove the template.

3. Continue with step 8 under Flush-Mounting.
Fabricating and Installing Traditional Undermount Sinks and Lavatories

NOTE

The procedures for installing undermount kitchen (below) and bar/vanity (page 15) sinks and lavatories differ. Refer to the procedure that corresponds to the type of undermount sink or lavatory you are installing.

Fabricating and Installing Undermount Kitchen Sinks

1. Prepare the bowl.
   • Check to see if the faucet assembly can clear the combined thickness (1 1/4″ to 1 1/2″ [32 mm to 38 mm]) of the CORIAN® countertop and sink (see Figure 12). It may be necessary to change faucet sets.

2. Prepare the support frame for kitchen sinks.
   • Measure the size of the kitchen cabinet opening where the sink will be installed.
   • Construct a plywood frame, allowing adequate clearance between the strips running front to back. These will support the sink (see Figure 13). See recommended clearances on the templates.
   • Position the frame within the cabinet opening so that when the sink is installed, the top of the sink flange is level and flush with the top surface of the perimeter support at the cutout area.
   • Firmly attach the frame to the cabinet interior with screws (see Figure 13).

3. Install the sink in the frame.
   • Place a 1″ (25 mm) spot of Silicone Sealant at each corner of the frame where it will contact the sink.
   • Gently position the sink within the frame (see Figure 14).
   • Check the sink flange for levelness and for proper mating height with the perimeter support at the cutout area. Adjust or shim, if needed.

4. Prepare the sheet.
   • Cut the sheet for the countertop to the proper length and width.
   • Trial-fit and adjust, if needed.

5. Position and secure the template for the cutout.
   • Carefully measure the countertop to determine the exact location of the cutout.
   • Clamp the template in position.

continued
Fabricating and Installing Traditional Undermount Sinks and Lavatories (continued)

6. Rout the cutout.
   • Make the cutout using a 2 HP to 3 HP router with a 1″ (25 mm) template guide and a \( \frac{3}{8} \)″ (10 mm) carbide-tipped, single-flute router bit (see Figure 15).
   • Rout the faucet holes. (Faucet holes can be made using a hard template and router or a high-speed electric drill with either a spade bit, twist drill or hole saw. Do not use auger bits.)
   • To minimize sanding, smooth the inside of the cutout with a \( \frac{1}{2} \)″ (12 mm) double-flute, carbide-tipped bit and a 1″ (25 mm) template guide.
   • Remove the template.
   • Use an orbital sander to smooth the cutout area and to remove all router marks.
   • Rout decorative design into edge of cutout if desired.

7. Install the countertop over the sink.
   • Clean the top of the sink flange with denatured alcohol and a clean, white cloth (see Figure 16).
   • Clean the bottom of the countertop around the cutout area with denatured alcohol and a clean, white cloth.
   • Apply a generous bead of color-matched Silicone Sealant around the top inside edge of the flange (where sink wall and flange meet).
   • Position the countertop over the sink, being careful that the Silicone Sealant provides a complete seal where the surfaces mate.
   • Remove the excess sealant; then wipe the joint with denatured alcohol and a clean, white cloth.

Fabricating and Installing Undermount Bar/Vanity Sinks and Lavatories

1. Turn sheet upside down and position and secure the template for the cutout.

2. Rout the cutout.
   • Use a 2 HP to 3 HP router with a 1″ (25 mm) template guide and a \( \frac{3}{8} \)″ (10 mm) carbide-tipped, single-flute bit (see Figure 17).

   • Remove the template.
   • Use an orbital sander to smooth the cutout if needed (see Figure 18).
3. **Trial-fit the bowl.**
   - Position the bowl over the cutout, checking for a tight fit (see Figure 19).
   - Modify and re-sand the sheet, if needed.

4. **Make the faucet holes.**
   - Use a template and a router or a high-speed electric drill equipped with either a spade bit, twist drill or hole saw.
   - Do not use auger bits.

5. **Install brass inserts.**
   - Center the bowl face down over the cutout.
   - Locate the holes 1” (25 mm) from the side edges of the bowl flange and away from the bowl’s front and back edges to allow clips to clear the cabinet frame (see Figure 20).
   - Drill $\frac{1}{4}$” wide by $\frac{1}{4}$” deep (6 mm by 6 mm) holes into the sheet.
   - Remove the bowl and drive the brass inserts into the holes in the countertop, slotted end in first.

6. **Fasten the bowl to the top.**
   - Clean the bowl’s top flange and the cutout with denatured alcohol and a clean, white cloth (see Figure 21).
   - Assemble the undermount hardware (see Figure 20).
   - Screw the bolt assemblies into the brass inserts.
   - Apply a generous bead of color-matched Silicone Sealant to the inside edge of the bowl flange (see Figure 21).
   - Install the bowl over the cutout.
   - Tighten the wing nuts to secure the bowl.
   - Make sure that the joint is completely filled, then remove the excess sealant with denatured alcohol and a clean, white cloth.
Fabricating and Installing Traditional Undermount Sinks and Lavatories (continued)

7. Install the countertop and sink on the cabinet.
   - Place a 1” (25 mm) spot of flexible adhesive, such as Silicone Sealant for DuPont CORIAN®, every 12” (305 mm) around the top cabinet support (see Figure 22).

   ![Figure 22](image)

   • Position the bowl and countertop unit on the support.
Constructing a Bowl Cutout Template

A multifunctional bowl cutout template (see Figure 23) can be designed to accommodate:

- **Bowl cutout.** The template opening should be the same size and shape as the inside circumference of the bowl. Use a 1” (25 mm) template guide and a 3⁄8” (10 mm) bit to leave a 1⁄4” (6 mm) overhang. The overhang will be trimmed after seaming.
- **Faucet holes.**

Fabricating and Installing Seamed Undermounts

1. **Check bowl flange for flatness.**
   - Rub an aluminum level over the flange of the sink.
   - Hand-sand to level high spots (see Figure 24).

   **CAUTION**
   Be very careful when hand-sanding the bowl flange. Improper sanding may round the edge, resulting in a poor seam. As an alternative, turn the bowl upside-down and rub it on a flat surface, such as a bench or an old door, covered with sandpaper.

2. **Prepare the sheet.**
   - Check the back of the sheet for smoothness, and belt-sand, if needed (see Figure 25).
   - Remove the scratch marks with an orbital sander.

3. **Rout the cutout.**
   - Clamp the bowl cutout template in position (see Figure 26).
   - Make the cutout using a 2 HP to 3 HP router with a 1” (25 mm) template guide and a 3⁄8” (10 mm) carbide-tipped, single-flute bit.
   - Rout the faucet holes. (See “Constructing a Bowl Cutout Template” for template construction.)

   **continued**
Fabricating and Installing Seamed Undermount ("S") Sinks and Lavatories (continued)

4. Trial-fit by positioning the bowl on the sheet.
   • Position the bowl on the sheet, checking for a tight fit; sand sheet, if needed.
   • Use hot melt glue to adhere position blocks to the sheet (see Figure 27).

5. Apply Joint Adhesive.
   • Carefully inspect the inside bowl edge. For a good seam, it must be square, smooth and scratch-free.
   • Clean the flange surface and the sheet around the cutout with denatured alcohol and a clean, white cloth (see Figure 28).
   • Apply a generous, continuous bead of Joint Adhesive to the bowl flange \( \frac{1}{4} \)" to \( \frac{3}{8} \)" (6 mm to 9 mm) from the inside edge of the bowl (see Figure 28).
   • Apply radial lines of adhesive on the rest of the flange.

NOTE

To avoid trapping air in the seam when the bowl is set in place, make only one continuous bead around the bowl. Use only radial lines of adhesive on remainder of flange.

6. Position and secure the bowl.
   • Position the bowl on the sheet between the stop blocks (see Figure 29).
   • Secure the bowl firmly in place.
   • Inspect the seam area inside the bowl. Make sure adhesive is around the entire perimeter of the mounted bowl and sheet.

WARNING

Use caution when inspecting the inside of the bowl. Joint Adhesive vapors will be present in the bowl.
HELPFUL HINT

For clamping bowl to sheet until adhesive sets:
• Clamp the bowl to the sheet by placing a pipe clamp through the drain hole (see Figure 30) or use a bowl clamping jig. Heavy weight, such as 50-lb. bags of salt, can also be used.

Figure 30

• Allow the Joint Adhesive to cure for 45 minutes (see Figure 31).
• After curing, turn the unit over carefully.

Figure 31

HELPFUL HINT

Some bits rout the sheet back to the bowl and make a roundover in one step. This saves time by combining steps 7 and 8.
• Sand the inside seam with 120-grit sandpaper or 100-micron microfinishing film abrasive using a random orbital sander (see Figure 32).
• Finish-sand using 150-grit sandpaper or 60-micron microfinishing film (see Figure 32).

Figure 32

7. Prepare for finishing.
• Rout the sheet back to the bowl using a carbide-tipped bevel bit with a nylon bearing to reduce scoring (see Figure 32). This trim cut approximates the bowl angle.

8. Rout a decorative edge.
• Place masking tape around the bowl where the roller bearing of the router bit rides. This helps prevent scoring of the bowl and reduces the sanding needed for final finishing.
• Rout a decorative edge on the sheet, such as a chamfer, ogee or roundover.

• Finish-sand the edge and seam area with an orbital sander and 180- to 220-grit paper. This step is not needed if microfinishing films are used.
• Buff the entire top and bowl area with a Scotch-Brite® pad to produce a uniform, matte finish.
Routing Drainboards into CORIAN® Countertops

The following information can help you turn your drainboard designs into reality. The only restrictions on your imagination are:

- The maximum rout depth that can be used is \( \frac{3}{16} \)" (5 mm) and
- Routed drainboards cannot be used with self-rimming bowls.

Selecting a Design

Figure 33 illustrates just a few of the many drainboard designs that you can fabricate. Many times, the type of bowl selected dictates the outline of the drainboard; for example, whether the sides are straight or curve into the bowl.

You can select from three types of interior routing designs—ridged, grooved or recessed—all of which are described in this guide.

Making Templates

1. Make a full-scale drawing of the drainboard design on paper (see Figure 34).

...
Fabricating Drainboards

For bevel or submounted bowls, install the bowl before routing the drainboard.

1. Lay out the drainboard on the sheet of CORIAN® and carefully position the template.
   - Rest the template end near the bowl on the sheet (see Figure 36).
   - Clamp securely, being careful not to flex the sides of the template (see Figure 36).

2. Rout the perimeter.
   - Rout the perimeter design into the top using a core box bit with an altered tip (see Figure 36).

Routing the Interior:

For Grooved Designs

1. Make the template.
   - Lay out the design on the template material.
   - Mark the center line of grooves.
   - Enlarge the groove design to accommodate the template guide.
   - Cut on the template guide lines. If needed, add reinforcements inside. Make allowances for reinforcing pieces.
   - Add a strip underneath the open end to prevent spreading.

2. Mark the position and secure the template.

3. Adjust the bit height.

4. Rout the design (see Figure 37).

For Ridged Designs

1. Follow the same steps for making a grooved design; however, you must make the grooves much wider.

To do this:
   - Make the areas for the template guide wider, or
   - Move the template to rout wider grooves.

continued
**Routing Drainboards into CORIAN® Countertops (continued)**

**For Recessed Designs**

1. Leave the perimeter rout template in place (see Figure 38).

2. Use a hinge mortising bit in a router with an extended base plate (see Figure 38).

3. Make a grooving pass.
   - Make one right-to-left cut on the bowl edge of the sheet to prevent chipping along the edge while routing.

4. Complete the interior rout.

**CAUTION**

Do not apply downward pressure while routing. This causes an uneven rout, necessitating extra sanding.

**Finishing**

1. Hand-sand grooves to remove router marks.
   - Use 150-grit sandpaper, followed by finer grits, until all the scratches are removed.

2. Round the upper edges of the grooves to approximately a $\frac{1}{8}$" (3 mm) radius.

3. Use a random orbital sander and a Scotch-Brite® pad to finish-sand (see Figure 39).

**NOTE**

For recessed designs, use a belt sander gently to remove the router bit marks if needed. Then, finish-sand and buff with a Scotch-Brite® pad to a uniform matte finish.
For additional information or assistance, contact
DuPont CORIAN®
Wilmington, Delaware 19805
1-800-4-CORIAN® (1-800-426-7426).