FOOD SERVICE COUNTERTOP DESIGN

A. General Overview
Hot and cold food wells require special fabrication and installation techniques. In properly operating systems, Corian® can survive the long heating and cooling cycles common to buffet operations. Unfortunately, it is common for hot wells to run out of water, resulting in high temperatures and stresses in the Corian®. This can lead to cracking failure of cutouts and seams. Even cold wells can create problems if they are not properly insulated and if the top is not properly installed. Certified Fabricators of Corian® surfaces are trained in the correct procedures for fabricating and installing food service counters so they look good and perform well.

B. Food Service Design Guidelines
These guidelines are for designing food service counters having hot and cold cutouts. There are several support and insulation drawings dealing with cutouts available to certified fabricators. The fabricator is free to choose whichever alternative fits the particular situation best. However, the fabricator is not free to ignore these design guidelines. By not incorporating these guidelines into the installation, the fabricator assumes all responsibility for any and all warranty claims. Adherence to these design guidelines is required for manufacturer support as defined in the manufacturer’s warranty documents.
FOOD SERVICE COUNTERTOP CUTOUTS AND GUIDELINES — continued

C. High-Strength Cutouts
Due to the prolonged exposures to heat and cold from food wells, cutouts in Corian® food service tops must be made to high-strength criteria. With larger corner radii and corner reinforcing blocks, high-strength cutouts can withstand the daily stresses that might cause cracking of standard cutouts. Indicate on your drawings that “cutouts are to be reinforced per manufacturer’s recommendations.”

D. Installing Food Wells
The weight and temperature of a drop-in food well (either hot or cold) is to be isolated from the Corian® top by use of supports and insulation. Indicate on your drawings that “cutouts are to be supported and insulated per manufacturer’s recommendations.”

E. Reinforcing Seams
Due to the prolonged exposures to heat and cold from food wells, seams in Corian® food service tops must be made to high strength criteria. With a reinforcing strip of Corian®, seams can withstand the daily stresses that would cause cracking of standard seams. Indicate on your drawings that “seams are to be reinforced per manufacturer’s recommendations.” Refer to drawing “Countertops — Reinforcing and Supporting Seams.”

F. Mounting Sneeze Guards
Sneeze guard mounting should always be done in a way that allows the Corian® countertop to freely expand and contract with temperature changes. NEVER bolt directly through Corian® into the subframe. This will prevent movement and may cause cracking of the top. Indicate on your drawings that “sneeze guards are to be supported per manufacturer’s recommendations.”

G. Heat Lamps
Heat lamps can generate extremely high surface temperatures and should never be used to heat a Corian® surface. Most health authorities require food to be kept a temperature of at least 165 degrees F. This should be accomplished by positioning the heat lamp directly over and aimed towards the food. The lamp should be at least 20” above the Corian® surface. This includes infrared bulb and hot-wire style heat lamps. NEVER use heat lamps to heat a Corian® surface. Mount heat lamps to allow expansion/contraction of the Corian® top.

H. Hot Pads
Because workers sometimes place hot trays of food on surfaces near food wells, we recommend installing some form of semipermanent hot pad. A loose hot pad will not be consistently used and should not be relied upon. If hot pads are to be used, indicate on your drawings that “hot pads are to be installed per manufacturer’s recommendations.” Stainless steel rods partially imbedded into the surface of the material are recommended. It is best to use silicone to seal/attach the rods to the grooves. This ensures that the rods stay in place but can be removed, if necessary, for periodic maintenance. Other hot pad materials/designs are permitted.

I. Tray Slides
Tray slides are typically at a different elevation than the primary food counter. It is wise not to hard-seam the tray slide to the primary counter. We recommend fabricating the tray slide with a coved backsplash and attaching the backsplash to the underside of the counter in a “reveal” style, using silicone to seal the backsplash to the underside of the counter.

The risers on the slide area can be Corian®, stainless steel rods, brass strips, etc. Corian® risers can be glued into routed slots in the slides with hard-joint adhesive. Any non-Corian® strips should be inserted into the routed grooves using silicone sealant. Indicate on your drawings that “tray slides are to be installed per manufacturer’s recommendations.” Refer to drawing “Food Service — Tray Slides.”
J. Dealing with the Unusual

Because we can’t predict every possible design of food service counter, you will likely be asked to do some things not covered in this manual. Key thoughts to keep in mind:

1. Avoid stress risers such as square inside corners and abrupt changes in thickness or width of the Corian®.

2. Avoid direct Corian® to hot water/steam contact. NEVER undermount hot wells to cause Corian® to become part of the steam tray. Corian® will whiten and crack when routinely exposed to live steam.

3. Always allow room for expansion and contraction of the Corian® top. Ensure that overhanging edges have 1/8” minimum clearance so they do not bind up when the top shrinks during shipment in cold weather or when the metal casework expands faster than the Corian®. Provide 1/8” clearance between the Corian® top and columns or brackets penetrating through the top.

4. Ideally, hot wells and cold wells should be separated by at least 12”, with a flexible expansion joint between wells.

   Typical design: 1/8” gap between sheet edges, filled with silicone sealant. There may be situations when the client will not accept exposed expansion joints. In these cases, joints can be covered with PVC “T” molding, flat strips, custom-made Corian® strips, etc. Attach the cover strips with silicone.

While the use of expansion joints is highly recommended, it is acceptable to omit this feature if these guidelines are followed:

For spacing less than 12” between adjacent hot/cold cutouts, add layers of NOMEX® insulation to the adjacent cutouts (entire cutout) as follows:

<table>
<thead>
<tr>
<th>SPACING</th>
<th>TOTAL LAYERS OF NOMEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 12”</td>
<td>1</td>
</tr>
<tr>
<td>More than 6”, up to 12”</td>
<td>2</td>
</tr>
<tr>
<td>Less than 6”</td>
<td>3</td>
</tr>
</tbody>
</table>

(Except: Similar temperature adjacent cutouts need only 1 layer of NOMEX.)

MINIMUM SPACING: Food well cutouts must be at least 2” apart. Do not install tops with Corian® webs between cutouts less than 2” in width. When closer spacing is required, use the stainless steel collar idea shown on drawing “Commercial Cooktop Installation — Stainless Steel Adapter,” adding NOMEX as shown in the chart above.