

REQUIREMENTS

INTRODUCTION

This bulletin summarizes the fundamental quality standards that are required when fabricating and installing Corian® Solid Surface products.

OVERVIEW

Proper fabrication and installation of Corian® Solid Surface is essential. This bulletin addresses the minimum requirements. For further information on the requirements please review the relevant *Corian® Solid Surface Fabrication/Installation Fundamentals* bulletin.

Some products have unique characteristics that impact fabrication techniques. The specialized techniques are addressed in *Corian® Solid Surface Product Fabrication* bulletins.

Commercial applications often have specialized requirements. These are addressed in *Corian® Solid Surface Specialty Application* bulletins, which supersede the information provided in this document.

A. HARD SEAMING CORIAN® SOLID SURFACE

1. Use only DuPont™ Joint Adhesive, DuPont™ Joint Adhesive 2.0, or Corian® Joint Adhesive for rigid seams.
2. Reinforce seams using a full length Corian® Solid Surface seam reinforcement strip attached with Joint Adhesive. This reinforcement strip also serves as the seam support. Due to improvements in adhesive formulations, guidelines on seam reinforcement have changed.
 - Seam reinforcement is required when using DuPont™ Joint Adhesive for all horizontal applications.
 - Seam reinforcement is suggested but not required when using DuPont™ Joint Adhesive 2.0 for horizontal applications in general dry residential and commercial applications.
 - Seam reinforcement is not required when using Corian® Joint Adhesive for horizontal applications in general dry residential and commercial applications. Specialty applications may have different guidelines. For example, Food Service would require seam reinforcement for all adhesives where heavy equipment may be placed on the scene or near hot/wet applications such as heat lamps or hot food wells.

B. CUTOUTS IN CORIAN® SOLID SURFACE

1. Only use routers for cutouts. Use a minimum $\frac{3}{8}$ " (10 mm) or larger diameter bits. Round over top and bottom edges of the cutout to a $\frac{1}{16}$ " (1.5 mm) minimum radius.
2. Remove all cutting imperfections, e.g. nicks, tool marks, etc., to create a smooth surface. Final step should be 100 μ/P150 grade or fine .
3. Smooth out the back edge of horizontal tops behind cook-tops by sanding. Round over top and bottom edges to $\frac{1}{16}$ " (1.5 mm) radius.
4. Provide full cutout perimeter support within 3" (76 mm) from the edge of cutouts. The cutout support must be attached to the main support structure. For oval lavatories the support may be rectangular, with the distance measured from the closest points of the lavatory to the support. Supports for sinks and lavatories should leave at least an $\frac{1}{8}$ " (3 mm) gap between the support and the bowl flange. Supports for heat-generating appliances in residential applications should be no closer than 1" (25 mm) from the cutout.
5. High-strength cutouts are required for all residential heat-generating appliances.
6. For heat-generating appliances in residential applications apply 3M™ Aluminum Foil Tape 425 or 427 (DuPont stock code D11920096) around the perimeter of the cutouts. The tape should be applied so that it extends $\frac{1}{4}$ " (6 mm) below the top and across the top surface so that entire flange of the heat-generating appliance rests on the tape.

Commercial hot-cold horizontal applications require specialized fabrication and installation techniques. Contact an Authorized Distributor of Corian® Solid Surface for guidelines.

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C. CORIAN® SOLID SURFACE INSTALLATIONS

C.1. Support

1. Full perimeter support is required. Addition cross-span support may also be required. This support must satisfy the “zero load” test requirement. When a 300 pound (136 kg) weight is placed at the center-point of the support structure the span must deflect less than 1/8" (3 mm) over 10' (3 m). Permanently installed and heavy equipment will require dedicated support.
2. Horizontal support must be in plane and true to within 1/8" (3 mm) over 10' (3 m).
3. Use only dabs of flexible silicone adhesive no less than 12" (305 mm) apart to fasten Corian® solid surface to the support structure.
4. Support overhangs exceeding 6" (152 mm) for 1/2" (12 mm) Corian® sheet and 12" (305 mm) for 3/4" (19 mm) Corian® sheet.
5. For Residential Applications:
 - Provide perimeter support (top edges of cabinets, framing, etc.). Islands may require cross spans if they are not already present as part of the cabinetry.
 - Do not install Corian® Solid Surface over underlayment or over old countertops. Integral “dust covers” may be left in place if removal is unacceptable to the customer.

C.2. Clearances

1. Allow 1/16" (1.5 mm) minimum clearance between installations and any surface that could constrain expansion and contraction of the installation.
2. In wet wall installations, leave a 1/2" (13 mm) air gap at the bottom of the substrate wall to prevent water leaks from wicking up between the Corian® solid surface and the substrate.

C.3. Attachments

1. Corian® Solid Surface should not be rigidly adhered to other solid surface products. Use only silicone to adhere Corian® Solid Surface to any material other than itself. There is one approved exception; Corian® bowls may be mounted on Corian® Quartz Surfaces using DuPont™ Joint Adhesive, DuPont™ Joint Adhesive 2.0, or Corian® Joint Adhesive.
2. Never install mechanical fasteners (screws, nails, etc.) into Corian® solid surface. Brass and plastic inserts designed for solid surfaces are the only generally approved mechanical fasteners. Specialty applications may have other allowable fasteners. The design must accommodate thermal expansion in the structure to which the Corian® Solid Surface is fastened as the inserts will not accommodate any movement.

C.4 Inside Corners

1. All inside corners of L, U, etc., shaped installations require a minimum 1/2" (13 mm) radius to reduce corner stresses. V-grooved inside corner edges will require a 1" (25 mm) minimum radius.
2. Place seams in Corian® edge buildup strips a minimum of 1" (25 mm) past the end of the inside corner radius.

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