

DUPONT™ CORIAN® Smart Countertop Manufacturing Guide

Smart Countertop Concept

Smart Countertops from Corian® stand out due to its design incorporated aesthetics, functionality and practicality, an exploration of the unique benefits only Corian® provides. Areas destined to washing and cleaning have incorporated sinks with sanitary corners that prevent filth accumulation, sliding boards through the wet zone and a channel furnished to dry dishes, cutlery and glasses. Surfaces intended for food preparation and cooking have incorporated stoves or grills and stainless steel brackets, assess the possibility of combining Corian® with other materials.

Project

Manufacturing of this kind of cover should follow some recommendations such as:

Whenever possible, develop the project bearing in mind the full width of the plate 76 cm or 75 cm eliminating potential dents or cracks due to handling and transportation, this way the use of materials will be more rational and it will reduce the number of joints in the parts.

Also in relation to the project's width, we shall bear in mind the user's height, because a very wide cover will render the back section hard to reach, where we usually find the channels furnished as drainers.

Faucets

Accessories, such as faucets, also occupy a lot of space among the cover components (sink and furnished channels). Depending on the model, at least a 70 mm space is required for setting-up and to tighten the mixer faucet lower nut. To gain more space, a wall faucet is a viable option (when projects/building allow it).

A faucet installed on the sink's side or between two sinks is also viable (Figure 01), gaining space on the cover's width. Another model, although unusual, is a retractable faucet, that can be stored after usage, leaving the cover completely closed and without perceived elements.

Drainer channels

The channel is usually comprised of individual modules to drain plates, glasses and cutlery. This duct shall have a water outlet that may be placed on one corner, in the middle of the channel or in some cases it may be connected to the sink through a slot/opening (Figure 01).

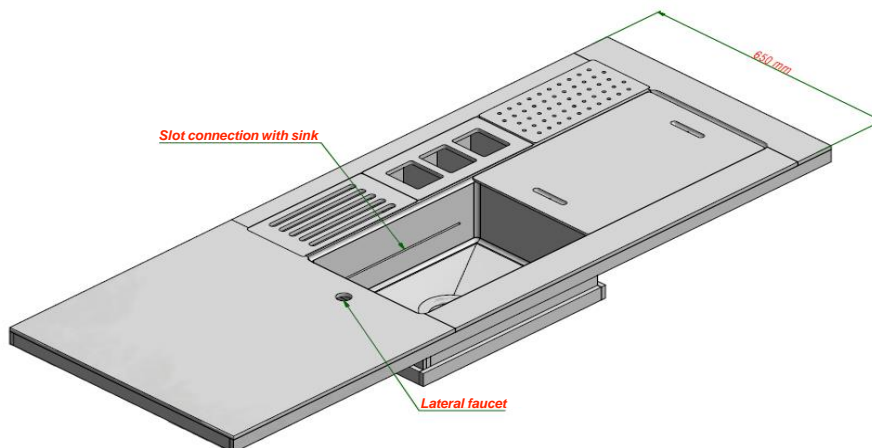


Figure 01: furnished channels connected to sink with lateral faucet

The channel may be planned in other positions in the cover such as the sink's sides or between two sinks, adjusting to the standard dimensions of the furniture modules which may change from 60 to 65 cm

Sink

The sink shall be placed as closest to the front part as possible, providing the user with a more ergonomic position. In establishing the distance, the lower elements of the cover must be taken into consideration, such as the furniture crossbars and the sink's edge (Figure 02). 80 to 100 mm is an acceptable range whenever possible.

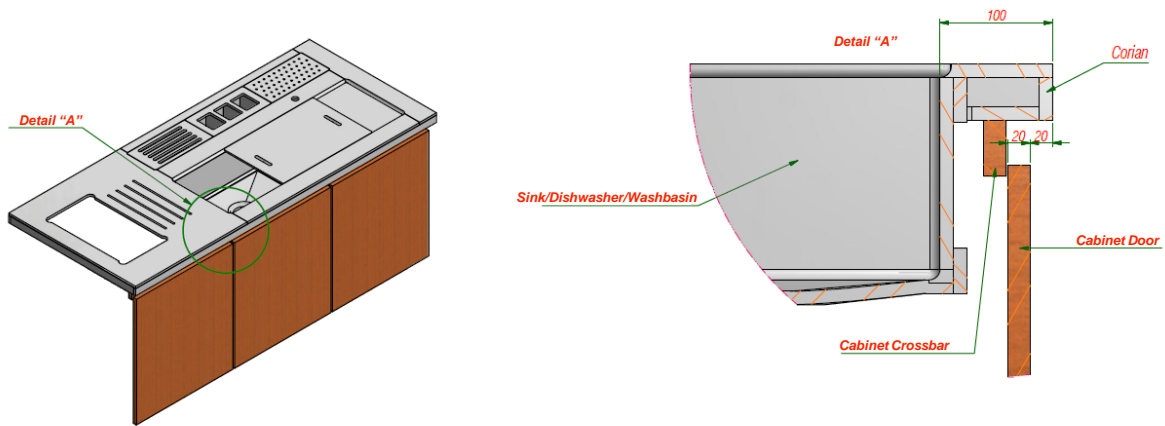


Figure 02: Cover and cabinet cut detail.

Pay attention to the selection of the sink's width to avoid using too much space and allow other elements to be placed.

Manufacturing

Generally, similar manufacturing recommendations for another Corian® products apply. All pieces must be cut and corrected¹ to achieve an invisible joint.

The use of a "wet zone" is a Brazilian practice not in use in other Latin American countries. It is an area around and slightly larger than the sink, lower than the rest of the cover, whose purpose is to retain water. In smart counters, this wet zone facilitates coupling of the sink sliding covers.

In case of sliding covers, friction among Corian® pieces must be avoided, otherwise, the cover will be dented on the contact points. To prevent this, the use of a sliding material insert under the cover is recommended, this allows an easier handling and considerably reduces dents on the cover. This insert may be a 2 to 3 mm Teflon® or Nylon® strip inserted in a slot on the cover (Figure 03). The slot may be around 4 mm.

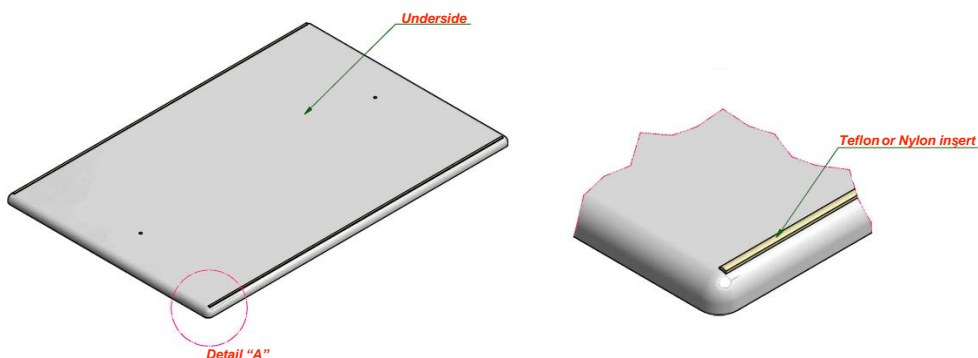


Figure 03: sliding cover with Teflon® or Nylon® insert.

Furnished channel

All inner corners from the furnished channel must be, preferably, sanitary corners, facilitating the cleaning process.

The dish drainer may have different shapes, such as simple slots to fit plates, thermoformed (above or below). Regardless of the shape, this accessory shall be developed taking into consideration different plate's sizes, otherwise, results may not be satisfactory.

The cutlery drainer consists of small parts difficult to finish. In addition, we need to find out how these pieces are cleaned on a daily basis.

1. To correct a Corian® piece, generally use a portable router. For large pieces, up to 20 cm, use the router with a ruler as a guide. For narrow pieces, the best technique is a router trapped with guides under a table (Figure 04).

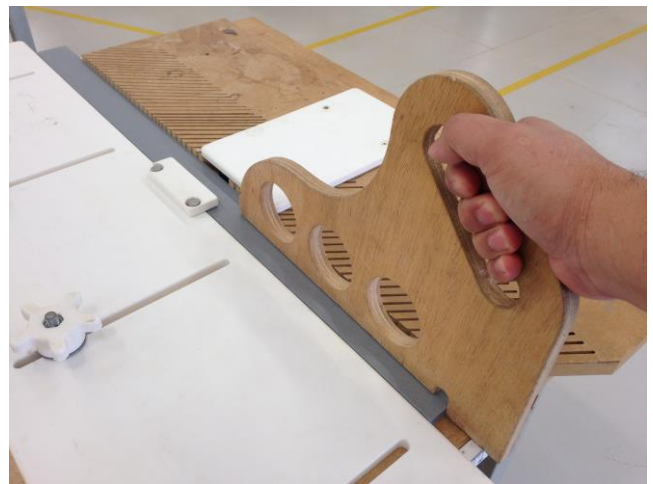


Figure 04: fixed router under working table to correct narrow pieces.

Points of Care

Dimensions of the sliding cover should be enough to cover the sink, avoiding excessive size reduces the possibility of piece distortion.

Opening and insulation for stoves installation must follow guidelines in manuals provided by DuPont.

Sanitary Corner

The sanitary corner is an important feature of products manufactured by Corian®, so always offer this possibility to clients. Products such as tubs, buckets, gables and wet zones with sanitary corners stand out from other products with straight corners.

The tool radius to manufacture a sanitary corner does not make a lot of difference, it may be 4, 6, 8 or 10 mm. Some customers prefer straight lines and request gables with straight corners. In this case, a small radius (3 to 4 mm) sanitary corners may be offered. The product will retain its clean features and will have a rectilinear appearance.

It is important to understand the sanitary corner manufacturing technique to obtain better results. DuPont recommends an undercut in one of the pieces to fit the curved piece. A technique without the undercut is also possible, however, sometimes the result is not so good. The adhesive line may be visible. See a comparison of both techniques. (Figures 05, 06, 07, 08 and 09):

Smart Countertop Model Suggestion

