

***Z-1, Manufacturing and Installation Requirements
for DuPont ZODIAQ® Quartz Surfaces***

Z-2006-002

This technical bulletin covers the quality standards that must be adhered to when manufacturing and/or installing DuPont Zodiaq® quartz surfaces. Adherence to the requirements contained in this bulletin is required under the terms of the applicable agreement entered into between DuPont and your firm and is the basis upon which DuPont offers a limited installed warranty to residential customers of DuPont Zodiaq®.

Definition of Terms & Measurements

Manufacturer – Any company engaging in the fabrication or conversion of Zodiaq® slabs into finished goods.

Common Metric Measurements into SAE Units

1.5 mm = 1/16 inch	12 mm = ½ inch
3 mm = 1/8 inch	2 cm = ¾ inch
6 mm = ¼ inch	3 cm = 1-1/8 inch

Manufacturing Requirements

- The manufacturer must check the sheet for defects before manufacturing.
- The manufacturer must check the color match on sheets to be used on the same job before manufacturing.
- Cut to size, shape and polish Zodiaq® with the appropriate diamond tooling.
- Join lamination seams with 2-part polyester, epoxy, or acrylic adhesives.
 - Note: Traditionally, lamination seams have been joined using color matched 2 part epoxy adhesives due to their strength and UV stability.
- Inside Corner Radius Criteria:
 - One section (e.g., L, U, etc.) shaped pieces to minimum of ¼ inch (6 mm) to reduce corner stresses.
 - Multiple section (e.g., two piece L and 3 piece U) shaped pieces with seams in the corners (i.e., full 45° miter or mason’s miter) do not need to have a radius in the corner.
- Break all top and bottom edges of straight edge profiles to a minimum of 1/16-inch (1.5 mm) radius or chamfer.
- Radius all outside corners of straight edge profiles to a minimum of 1/8-inch (3 mm) radius.
- Never hone Zodiaq® quartz surfaces.

Cutout Requirements

- Radius corners are recommended on all cutouts. However, square corners are permitted on cooktop and sink cutouts as long as they are square and the cut does not extend past the cutout perimeter into the material including the topside and backside of the slab. (Note: The larger the radius, the less likely the corner will fail.)

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- Cutouts in backsplashes (e.g., electrical outlets) that extend past the cutout perimeter must be filled with 2-part epoxy adhesive and a flexible adhesive must be used around the entire cutout to secure the backsplash to the wall.
- Leave at least 1/8-inch clearance space on all sides to allow cooktops/sink expansion.
- Support cutouts on all sides within 3 inches (7.6 cm) of the edge of the cutout.
- Support undermount sinks with brackets.
 - Stainless steel and lavatory undermount sinks must be attached with clips attached to the underside of the countertop or with cradles attached to the outer perimeter or cabinet.
 - All others sink types must be supported with cradles attached to the outer perimeter or cabinet.

Installation General Requirements

- Zodiaq® is not recommended for exterior applications. DuPont excludes from warranty coverage any exterior applications.
- The tops of the cabinets must be flat and in the same plane within 1/8-inch of a flat surface over a 118-inch (3 m) length.
- A minimum 1/16-inch gap is recommended between Zodiaq® and a wall.
- Seal and secure the front top edge of the cabinet to the underside of the Zodiaq® top with a 1/16 to 1/8-inch diameter bead of flexible adhesive around the perimeter.
- Use only flexible adhesive to adhere Zodiaq® to wood, steel, ceramic, tile, etc. Do not rigidly adhere Zodiaq® to other products.
- Apply backsplashes (maximum 6" strips) of Zodiaq® to the deck using flexible adhesive.
- Apply Zodiaq® tiles (pieces smaller than 24 inch x 24 inch) using tile adhesive. Maximum gauge for all vertical tiles shall be 3/4 inch (2 cm) or less.
- Never install mechanical fasteners (screws, nails, etc.) directly into Zodiaq®. Inserts may be used with Zodiaq®. If inserts are used, slip fit and glue inserts are required rather than pressure fit inserts.
- Do not install Zodiaq® over old countertops.
- In wet wall installations, Zodiaq® must be applied using traditional mud wall installation techniques or adhered to cement board screwed to the stud. Zodiaq® must be applied to the cement board with thin set structural adhesive as approved by the Marble Institute of America.

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Installation Support Requirements

- For structures with support on 4 sides and depths:
 - <26 (66 cm) inches, outer perimeter support is sufficient (Maximum length is 118" or 300 cm)
 - >26 inches (66 cm), additional front to back support is required every 36" (90 cm) in addition to the outer perimeter support.

- For structures with support on 3 sides (e.g., dishwashers, desks, and frameless cabinets) the following is required:
 - 2 cm thick slabs <26inches (66 cm) deep, additional support is required at widths > 24 inches (60 cm).
 - 3 cm thick slabs and<26" (66 cm) deep, additional support is required at widths > 36 inches (90 cm).
 - 2 and 3 cm thick slabs and >26" (66 cm) deep, additional support is required at widths > 24 inches (60 cm).

- For 2 cm Zodiaq®, Provide additional support for cabinet overhangs exceeding 12 inches (30 cm) as follows:
 - Overhangs 12-18 inches (30-45 cm) use solid substrate and corbels evenly spaced at no greater than 36 inch (90 cm) intervals
 - Overhangs >18 inches (>45 cm) use solid substrate along with a leg or column(s)

- For 3 cm Zodiaq®, Provide additional support for cabinet overhangs exceeding 15 inches (40 cm) as follows:
 - Overhangs 15-24 inches (40-60 cm) use corbels evenly spaced at no greater than 36 inch (90 cm) intervals
 - Overhangs >24 inches (>60 cm) use a leg or column(s).

- Half wall (AKA: knee wall, pony wall) overhang support requirements for both 2 cm and 3 cm slabs:
 - Overhangs <1/3 the depth of the top. [i.e., support wall is 4" (10 cm), total top is 6" (15 cm), overhang 2" (5 cm)] no additional support required. (Figure 1)
 - For all other half wall overhangs, corbels are required to support the overhang where the bracket depth is 3/4 of the overhang depth and spacing is a maximum of 36 inches. Corbels should be placed at wall studs. (Figure 1)

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- Acceptable support materials are MDF board, plywood, structural steel, and wood. **Particleboard is not an acceptable support material.**

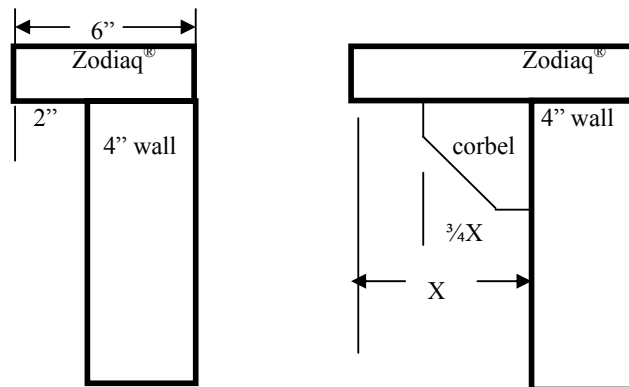


Figure 1
Half Wall Support Requirements

Installation Seam Requirements

- All deck seams must be filled with an approved DuPont designated color matched adhesive.
- Field seams must be filled through the entire seam thickness.
- At a minimum field seams must be supported on both sides of the seam in the front and back. In addition, any seams that extend into an overhang should be supported. Wherever possible, seam support on both sides of the seam is recommended.
 - Recommended seam width is < 1/16-inch (1.5mm)
 - Recommended height mismatch is < 1/64-inch (0.4mm)

If you have any questions after reading this Bulletin, contact DuPont at 1-877-229-3935 or www.zodiaq.com

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