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### **Fabrication and Installation Requirements for Polarstone Surfacing**

- The fabricator must complete a visual inspection for defects before cutting Polarstone.
- The fabricator must check the color match on sheets to be used on the same job before fabrication.
- Cut to size, shape, and polish Polarstone with the appropriate diamond tooling.
- Join lamination seams with 2-part polyester, epoxy, or acrylic adhesives due to their strength & relative UV stability.
- Inside Corner Radius Criteria:
  - One section (e.g., L, U, etc.) shaped pieces to a minimum of 1/4 inch (6 mm) to reduce corner stresses.
  - Multiple section (e.g., two-piece L and three-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.

#### **Cut out Requirements**

- Radius corners are recommended on all cutouts minimum." (6mm).
- 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 under-mount sinks with brackets.
- Stainless steel and lavatory under-mount sinks must be attached with clips attached to the underside of the countertop or with cradles attached to the outer perimeter or cabinet.
- All other sink types must be supported with cradles attached to the outer perimeter or cabinet.



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#### **Installation - General Requirements:**

- Polarstone is not recommended for exterior applications. Exterior applications will be excluded from any warranty coverage.
- The tops of the cabinets must be flat and in the same plane within 1/8-inch of a flat surface over a 120-inch (3m) length.
- A minimum 1/16-inch gap is recommended between Polarstone and a wall.
- Seal and secure the front top edge of the cabinet to the underside of Polarstone top with a 1/16 to 1/8-inch diameter bead of flexible adhesive around the perimeter.
- Use only flexible adhesive to adhere Polarstone to wood, steel, ceramic, tile, etc. Do not rigidly adhere Polarstone to other materials.
- Apply backsplashes made of Polarstone to the surface using flexible adhesive.
- Never install mechanical fasteners directly into Polarstone. Inserts may be used, however, with Polarstone. If inserts are used, "slip fit and glue" inserts are required rather than pressure fit inserts.
- Do not install Polarstone over old countertops.

#### **Polarstone Installation Support Requirements**

- For structures with support on 4 sides and depths:
  - < 26 (66 cm) inches, outer perimeter support is sufficient (Maximum length up to 126")</li>
  - > 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, and frameless cabinets) the following is required:
  - 2 cm thick slabs <26inches (66 cm) deep, additional support is required at widths > 24"
  - o 3 cm thick slabs and < 26" (66 cm) deep, additional support is required at widths > 36"
  - 2 & 3 cm thick slabs & > 26" (66 cm) deep, additional support is required at widths > 24"



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#### Overhang Support Requirements for Standard Cabinets 24" in depth:

2cm (3/4")	2cm (3/4") with 5/8" sub top	3cm (1 1/4") Material	Support Requirements
Less than 8"	Less than 12"	Less than 15"	No additional support needed
8-15"	12-20"	15-24"	Brackets/Corbels Required
			<ul><li>Supporting no &lt; 2/3 of total overhang</li><li>Spaced no &gt; than 36" intervals</li></ul>
Over 15"	Over 20"-36"	Over 20"-36"	Legs, Columns or Panels Required
			<ul><li>Supporting no &lt; 2/3 of total overhang</li><li>Spaced no &gt; than 36" intervals</li></ul>

Half wall (AKA: knee wall, pony wall) overhang support requirements for both 2cm & 3cm slabs:

See Drawing 1 on next page:

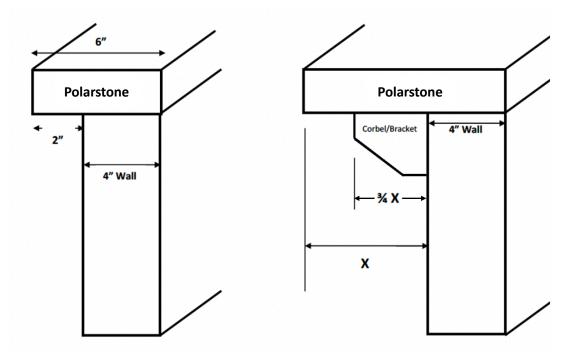
- Overhangs <1/3 the depth of the top. [e.g., support wall is 4" (10 cm), total top is 6" (15 cm), overhang 2" (5 cm)] no additional support required. (Figure 1)
- All other half wall overhangs, corbels are required to support the overhang where the bracket depth is 3/4 of the overhang depth & spacing is a max. of 36"; Corbels should be placed at wall studs.

<u>Please note:</u> Particle Board is NOT considered an acceptable support material by. The following are recommended and approved: MDF, quality plywood, hardwood, or structural steel.



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### DRAWING 1 - Half Wall Support Requirements



#### **Installation Seam Requirements**

- All deck seams must be filled with premium quality 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)</li>
  - Recommended height mismatch is < 1/64-inch (0.4mm)</li>