

Commercial Food Service Installation Guidelines

General Information

PentalQuartz provides a beautiful and durable surface for a wide variety of applications, including those for commercial food service. PentalQuartz can provide a lasting and low maintenance surface for commercial food service installations if the proper methods of fabrication and installation are followed by a properly trained professional. This instructional bulletin will provide details and guidelines for the proper fabrication and installation of PentalQuartz in commercial food service locations.

PentalQuartz should only be fabricated and installed by a professionally trained stone fabricator and/or installer. A detailed knowledge of the properties of PentalQuartz and the proper installation practices will reduce the probability of any improper installation.

PentalQuartz provides these guidelines to stone fabricators and installers as a guideline for commercial food service applications. Due to the wide variety of specific circumstances that can potentially exist in any specific situation PentalQuartz takes no responsibility for design, fabrication, or installation of materials. PentalQuartz is designed as countertop or finishing material only and in no way should be used as any type of structural support. PentalQuartz is backed by a 10 year commercial limited warranty and can be reviewed by visiting the Resources page of our website at <http://pentalquartz.com/resources/>

Design

As a material supplier, PentalQuartz does not approve, deny, endorse, or assume liability of any design, use, or installation of material. All designs and structural calculations should be provided by and/or reviewed by a qualified architect, designer, or engineer as necessary for the specific application. PentalQuartz assumes no liability for improper design or structural support.

Requirements

- Commercial food service installations that utilize hot and/or cold service areas, or cutouts for food storage containers should use only PentalQuartz material in 3cm thickness.
- Dining areas or simple food storage may utilize PentalQuartz 2cm material.
- PentalQuartz should never be used as structural support in an installation. Installer must confirm that adequate structural support exists for PentalQuartz and any load designed to rest on the surface.
- All designs must allow for thermal expansion and contraction of PentalQuartz material.
- Appropriate clearance between PentalQuartz and all surrounding walls, cabinets and structures should be maintained. Minimum 1/8" clearance should be maintained.
- Compressive loads shall not exceed those limits provided in PentalQuartz compressive strength technical specifications.
- No bending or shear loads should be supported by any PentalQuartz material.
- All inside corners of cutouts for ambient temperature cutouts must be made with a minimum ¼" radius. Square inside corners must be avoided.
- All top and bottom edges of cutouts should be eased to avoid sharp corners, even when being covered by other inserts.

Hot or Cold Cutouts

- All cutouts for hot or cold applications must have a minimum ½" radius on all inside corners.
- All edges for hot or cold cutouts must be eased to avoid sharp corners.
- All similar temperature cutouts should be a minimum of 2" apart.
- Hot and cold well cutouts should be separated by a minimum of 12".
- Clearance of at least 1/8" must be provided between any installed heating or cooling appliance and the edge of the cutout to allow for expansion and contraction.
- Sealing of these expansion gaps can only be done with 100% heat resistant silicone.
- Additional countertop support should be installed within 2" of the edges of all cutouts to avoid additional stress and weight being supported by PentalQuartz material.
- All cutout surfaces should be smooth; with no chips or cut marks to avoid possible stress points.
- All hot/cold cutouts should have a layer of insulation and a heat/cold reflective tape to minimize the transfer of heat and/or cold to the PentalQuartz material. These items should be available from a local building materials supplier. Follow directions of insulation and reflective tape manufacturer.

- Reflective tape should not be wrapped under in direct contact with PentalQuartz to avoid direct transference.
- Contact should only occur between tape and substrate.
- No under mount hot/cold wells should be installed with PentalQuartz that puts the material in direct contact with the hot/cold container.

Seaming

- Surface seams should have structural support that is flush with the supporting substrate. Support may be provided by cabinetry, wood, plywood, or metal.
- Seaming for countertops containing hot or cold wells should be done only using 100% silicone.
- Seams should be a maximum of 1/8" wide.
- Seams should not be placed through cutouts or near inside corners to avoid potential weak points in the top.
- Substrate under seams should be level and provide direct support to the seam. Shimming may be necessary to assure level of substrate.

Mounting of Equipment

- No equipment such as sneeze guards, heat lamps, support pillars, or area dividers should be directly attached to any PentalQuartz material. All equipment should be mounted directly to the supporting structure with cutouts or properly drilled holes through the PentalQuartz material according to the guidelines listed above.

Surface Heat

- Precautions should be taken to avoid direct contact with the PentalQuartz surface from any items used to hold or transport food that may produce excessive heat. The use of an insulating pad or tray can prevent damage to the countertop.
- Heat lamps should be placed at a distance that can safely maintain the necessary temperature to meet food safety requirements (typically 140°F) without excessive heat to the PentalQuartz surface.
- Heat lamps should never be placed in direct contact with PentalQuartz.

Care and Maintenance

PentalQuartz care and maintenance instructions can be found by visiting the Resources page of our website at <http://pentalquartz.com/resources/>

Honed and Satin Finish:

Pentalquartz offers you not only a wide range of colors, but of finishes as well; including polished, honed, satin, and brushed. Just as each finish has a different look; it also has slightly different characteristics.

PentalQuartz is a beautiful and durable non-porous surface. Some colors are available in our HONED or SATIN finish which offers the soft appearance of a lower sheen compared to the POLISHED finish. The HONED and SATIN finishes require slightly more maintenance than our polished finished materials. Since the honed or satin finish actually creates more surface area to the material it has the potential to show more signs of living from daily use. Possible marks from metal cookware or utensils; fingerprints, food and beverages, and other items placed on, or moved across the countertop, may be visible on the surface. Most marks can be easily removed with a cloth or sponge; or by using household cleaners such as a cleaning eraser or carefully scrubbing with a sponge and a non-abrasive cleaner such as Soft Scrub Advanced Cleaner®. Over time the Honed or Satin finish will develop character and a patina unique to each customer.

Honed and satin finishes can be cleaned using the same products and methods as other finishes, please see our care and maintenance guide at: <http://pentalquartz.com/resources/>

The warranty issued by Pental Surfaces for PentalQuartz covers manufacturing defects, however the temporary marks that commonly occur on honed and satin finishes, are inherent to the material, and are not covered under the terms of the warranty.