

PRODUCT INFORMATION AND GUIDELINES

GUAVA QUARTZ - PRODUCT INFORMATION

Guava Quartz is an engineered stone product that is made from 93% crushed natural quartz and 7% resin and pigments. The materials are mixed together and formed into slabs that are then pressed under extreme pressure and then baked, and finally polished. The slabs are then cut into countertops and other household surfaces. The material is inert and has much the same properties as granite or marble slabs.

Test Performed	Test Method	Results
Flexural Strength	ASTM C-880	5,453 - 7,430 psi
Compressive Strength	ASTM C-170	Wet: 29,298 psi Dry: 30,312 psi
MOHS Hardness	Scratch Test	6.0-7.0
Water Absorption	ASTM C-97	0.03%
Density	ASTM C-97	2.44 gr/cm ³
Surface Burning	ASTM E-84	Class A
Thermal Shock	ASTM C-484	Passes 5 cycles
Coefficient of friction	ASTM C-1028	Wet surface: .81 Dry surface: .63
Abrasion resistance	ASTM C-241	45.7
Freeze/Thaw	ASTM C-1026	Passed 15 cycles. No visible damage or discolouration was noticed
Coefficient of Thermal Expansion	ASTM C-531	1.31 x 10 ⁻⁶ inch per °F
Modulus of Rupture	ASTM C-99	Wet surface: 5,816 psi Dry surface: 7,019 psi
Antimicrobial	ASTM G21-96	No growth
Stain Resistance	ASTM 650	Not Affected

GLOSS RATING

Comparison to Granite polished surfaces do not apply. Gloss rating varies by finish. Guava Quartz countertops are available in polished, honed, leather finished or bush hammered finishes. In general, polished quartz countertops have a Gloss (% incident light reflected at 60° on polished finish) in excess of 47%.

OTHER RATINGS

Guava Quartz countertops meet or exceed industry standards, including CE, NSF and Greenguard, and are approved for food contact. MSDS sheets and warranty information are available upon request.

STORAGE/HANDLING RECOMMENDATIONS FOR GUAVA QUARTZ SURFACE MATERIAL

- 1) Fabricated material must be kept in shipping protective packaging prior to use to minimize any potential damage.
- 2) All material should be stored indoors in a dry area away from extreme temperatures and exposure to direct sunlight.
- 3) Guava Quartz fabricated countertops should be stored on edge or in a vertical position prior to installation.
- 4) Care should be taken to handle material so as not to damage the finished surfaces

PREPARATION INSTRUCTIONS

- 1) All recommended safety precautions should be adhered to including but not limited to proper eye, hearing and skin protection. Ensure adequate ventilation.
- 2) Work surfaces should be clean and dry during seaming and other joint work.
- 3) Install work should be done at temperatures above sixty-five (65) degrees F.
- 4) Guava Quartz countertops should be mounted on an even flat surface. Ensure surfaces are level using a 48" level and mark the areas which are uneven.
- 5) Shim the uneven areas so that a level surface is available for mounting the countertop.
- 6) Cabinets should be visually inspected to make sure they are free of defects prior to installation of the countertops.
- 7) Guava Quartz does not provide any substrate or support materials such as plywood, brackets, or protective coverings for the quartz.

INSTALLATION INSTRUCTIONS

 Countertops should be installed plumb and level according to the approved shop drawings.

- 2) Measure cabinet and countertop run. Pre-fit material in place and scribe as required to provide proper fit.
- 3) Provide additional supports for material seams as needed.
- 4) Field joints should be formed so that they are as inconspicuous as possible using recommended adhesives.
- 5) Place silicone in accordance with manufacturer's instructions.
- 6) Top mount sinks should be adhered to countertops using the manufacturer's recommended clear or color matched adhesive.
- 7) Under mount sinks should be adhered to countertop using the manufacturer's recommended adhesive and hardware (where applicable).
- 8) Backsplashes and side splashes should be installed as per approved drawings using manufacturers recommended adhesive.
- 9) Wipe off adhesives, sealants and other material and ensure surface area is clean, dry and not stained.
- 10) Guava Quartz is not responsible for providing sinks, other plumbing accessories, caulking to the wall, support structure or protection material unless specifically included in the contract.

MORE INFORMATION RELATED TO INSTALLATION

Adhesives

It is important that a flexible adhesive be used, such as 100% clear silicone adhesive be used to secure the countertops to the cabinets, substrate, or backsplashes to the wall. This will allow for some thermal expansion.

The use of non-flexible adhesives, such as epoxies or construction adhesives is not recommended, and will void the warranty if used.

Follow stone adhesive manufacturer's instructions. Observe good stone working and safety practices at all times and comply with applicable building codes and regulations.

Joint Adhesives

In order to achieve a minimally visible seam, the adhesive used must be pigmented to a color similar to that of the material being installed. This can be done using color paste pigments mixed with the adhesive to achieve a color match.

Seaming

Follow the individual manufacturer's instructions for the use of their seaming adhesives, including but not limited to the minimum working temperatures for their product. Failure to follow the prescribed instructions will void the warranty.

Use a seam setter tool to make seams as narrow and inconspicuous as possible. Seams should not be more than $\frac{1}{16}$ " wide. All seam surfaces should be smooth and free of debris. Colored glue should be used for all seams.

Grooves should be created in surfaces to be joined to allow space for glue. Extra glue should be placed at all corners and around joints.

Seam locations should be carefully planned to minimize visibility. Do not surface polish the seams, and never use mechanical fasteners (screws, nails, etc.).

<u>Laminations / Double Edges</u>

When laminating, it is important to make sure that the lamination piece is the full length of the top piece and cut at 45° on the corners. If this cannot be done and a joining of the lamination pieces is unavoidable, the joint must be cut at 45°.

The use of a mitered end cut reduces stress on the material that may cause stress fractures.

The lamination strip should be cut from the same slab as the counter top surface material to ensure a color match. It's recommended when cutting the piece to be laminated, to add the lamination piece size to your cutting measurements, ensuring that you will have the same length and same color piece for your lamination.

Cutting and Polishing

From time to time Guava Quartz material needs to be cut and/or polished to fit particular onsite situations. All cutting, grinding and polishing MUST be carried out with strict adherence to all pertinent safety rules and regulations from government authorities and applicable construction related safety policies. Guava Quartz and its related entities will not be held responsible for any safety related violations or claims regarding Silicosis or any other health related item due to these regulations not being followed (see "Silica Precautions" below).

CARE AND MAINTENANCE

Guava Quartz is a high quality, low maintenance surface that, if properly cared for, will last a lifetime. By following these few simple instructions, your Guava Quartz surface will be maintained in good condition and retain its original beauty.

- For general daily cleaning, use mild soap and warm water, and rinse thoroughly for the best result.
- For spots and products that may stain, use a soft cloth or a non-scratch scrub pad, and a mild non-abrasive cleanser, with a neutral PH. Excessively high or low PH might damage the surface. Try to remove all potentially staining products as soon as possible.
- For dried residue, a flat object such as a plastic knife can be used to gently scrape off the sticking material.
- Almost any material, no matter how tough, is susceptible to scratching, and Guava
 Quartz is no exception. Never chop or cut directly on the quartz surface, but always use
 a cutting board or some other protective surface to prevent scratching.
- Direct contact with extremely high heat can cause damage to Guava Quartz. Never
 place very hot pots, pans, kettles or other objects directly on the Guava Quartz surface.
 Always use a hot pad or trivet.
- Take care to avoid spilling harsh chemicals such as drain cleaners, paint strippers, oven cleaners, bleaches, etc on your Guava Quartz countertop. Guava Quartz can be permanently damaged by exposure to strong chemicals and solvents that undermine its physical properties. Should your surface accidently be exposed to any of these damaging products, rinse immediately with water to neutralize the effect.

SILICA PRECAUTIONS

Taken from the Natural Stone Institute (<u>www.naturalstoneinstitute.org/safety</u>)

Exposure to fine particles of silica has been shown to cause silicosis, a serious and sometimes fatal lung disease. Employees who inhale fine particles of silica may be at risk of developing this disease. There is no cure for silicosis. The only treatment for silicosis is prevention, or avoiding exposure to silica dust. The natural stone industry and its vendors have made great strides in this effort to eliminate unseen crystalline silica dust, but there is still a long way to go. One of the best methods to reduce the silica dust is through wet cutting and grinding.

Safety Precautions for Workers

In shops that are dry or partially wet, or where only sections of the facility are covered with dust collection systems, these precautions should be taken to minimize exposure to crystalline silica:

Do

- ✓ Be aware of the hazards of inhaling silica dust.
- ✓ Use an air monitoring system to ensure the PEL is not exceeded.
- ✓ Always wear a respirator when the need for one is indicated.
- ✓ Be sure your respirator fits properly and has been maintained properly.
- ✓ Use water or wet vacs to clean up dust never compressed air.
- ✓ Wear washable or disposable work clothes.
- ✓ Wash hands and face before eating, drinking or smoking outside of dusty areas.
- ✓ Always shower, if possible, and change to street clothes before leaving the work area.
- ✓ Park cars where they will not be contaminated with silica and other substances.
- ✓ Always report any symptoms of silicosis.
- ✓ Limit your exposure to the workplace. When you take silica dust home, you contaminate your house and your car.
- ✓ You will be exposing your family to crystalline silica dust as well.

Don't

- ✗ Ignore silica warning signs.
- **x** Work without a respirator when silica exceeds PELs.
- Eat, drink, smoke, or apply cosmetics in areas that contain crystalline silica.
- **×** Eat, drink, smoke, or apply cosmetics after silica exposure until you have washed your face and hands.
- Smoke if you are exposed to crystalline silica on the job.