How Cold and Hot Temperatures Effect Your Quartz Countertops

Quartz is one of the strongest stones you can have for your countertops. Its high durability and heat resistance allows it to withstand almost anything you can throw at it. Quartz is a manufactured stone built from 90% mineral quartz, combined with resin and dye to mimic the appearance of natural stone. In recent years, quartz manufacturers perfected their craft to the point where, in some cases, stone experts have a hard time telling the difference between artificial and natural stone. With the advancement of new slab making techniques, some manufacturers have built quartz capable of outdoor use when typically, they are exclusively installed indoors.

However, quartz does have a few weaknesses when it comes to temperature, especially heat and the cold. Before installing a quartz countertop, take a moment to understand how it handles high and low temperatures.

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Quartz Durability

Quartz is a very strong material to have for your countertops. It has excellent scratch, stain and chip resistance and as specified before, very capable of managing heat. Being manufactured, it is non-porous, so liquids are easier to clean than natural stone with miniscule grooves and indents which allows food waste to get stuck. Its solid surface also means it is amazingly easy to clean. Quartz manufacturers recommend using a combination dish soap, warm water, and soft cloth when cleaning quartz countertops.

Quartz Feels Cold

Because quartz countertops are not completely made from natural stone, it behaves slightly differently. Quartz often feels cold to the touch because it pulls in more heat from the surrounding area. This means your countertops will feel colder throughout the year compared to other stones.

This could be perfect during a hot summer day, where you could just place a hand on your quartz countertop and feel cooler without blasting the air conditioner. On the other hand, it will feel very chilly during the wintertime and pull heat away from warm beverages like coffee, tea, or hot chocolate.

Quartz Temperature Limits

Quartz is consistent with its overall durability and resistances. However, the quality of quartz can affect the limits of how much it can withstand. The demand for quartz countertops has increased over time and the quality of quartz can vary depending on the manufacturer. For instance, if you buy quartz from one of the big-name companies like Silestone or Caesarstone, you know you are getting high-quality quartz. Caesarstone has an outdoor quartz with a warranty stating it can withstand -13 to 122 degrees Fahrenheit for residential use.

When purchasing from a less reputable brand, the quartz could be less durable and can become damaged, have its color fade when exposed to UV rays or high-heat for too long.

The quality of quartz is measured by the quartz to resin ratio in the slab making process. A good ratio is well-balanced and will not fade when exposed to heat or sunlight. Lower quality quartz will have a lower quartz to resin ratio, making the stone durable, but not as resilient as it could be. Improper balance in the slab making process could have your quartz countertop stain more easily, have its colors fade faster, or crack under temperature changes.

What Can Damage Quartz

No one wants their quartz countertops to get damaged. Quartz is so strong, that aside from smashing it with a hammer, it truly can withstand a lot of use. Cutting knives will get dull before it damages your quartz countertop. This doesn't make quartz invulnerable though and it can still be damaged.

Thermal Shock: Thermal shock is the process when an object experiences a sudden change in temperature which puts stress on the object. For example, pouring hot water on an icy windshield will stress the glass, causing it to crack or shatter. Because quartz is often a colder stone, you need to take care in not placing severely hot objects directly on its surface. In lower quality quartz, the change in temperature could form resin burn or crack the stone.

Prolonged UV Exposure: When exposed to UV rays for long periods of time, the resin within the quartz will fade and turn a yellow-ish brown.

Hot Metals: Quartz has a strong resistance to heat, but that doesn't make it impervious. Hot metals like hot pans and pots can burn the countertop, causing stains or permanent damage. Resin burn can be possible to fix, depending on severity of damage.

Harsh Chemicals: Strong cleaners containing bleach can damage the surface of your quartz, leading to permanent discoloration.

In general, quartz should not be used for outside design or layout. Quartz is mostly unaffected by rain and snow because of its non-porous properties, but quartz is better used indoors. Most manufacturers instruct owners to install quartz indoors and warn that using it outdoors will void its warranty. Only quartz specifically designed for outdoor use should be used outdoors.

What Damages Quartz	Effect
Thermal Shock	Discoloration or breakage of stone
UV Exposure	Discoloration of resin

Hot Metal Placement	Discoloration, resin burn staining
Harsh Chemicals	Discoloration, dulling

Protect Your Quartz Countertops

Quartz does not need a lot of extra care to keep it durable and shining. Avoid heat and cold damage by:

· **Coasters:** Use coasters for hot objects like tea and coffee cups.

· **Hot Pads / Trivets:** Use hot pads and trivets for pots, pans and dishes taken out of the oven to reduce the risk of causing resin burn.

· **Clean Spills Quickly:** An accident is bound to happen where something gets spilled. Simply cleaning it up with soap, water, and a soft cloth will keep your quartz healthy. Acidic liquids like juices can cause damage to quartz countertops over time if left to linger.

Quartz countertops are strong, but not indestructible. Be gentle with your quartz and avoid placing any hot objects directly on it, especially in the wintertime.