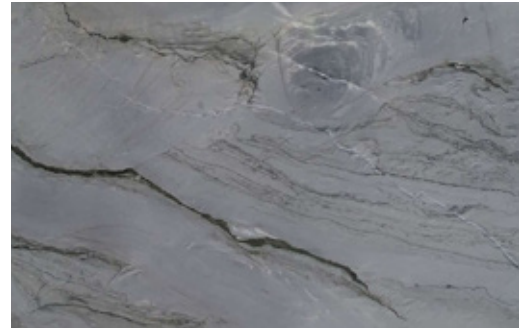


The Differences Between Natural Quartz (Quartzite) and Engineered Quartz

by Karin Kirk | Dec 6, 2019 | Use Natural Stone

Quartzite on one hand, contains minerals and nothing else. Quartz, the mineral, is the main ingredient. A quartzite stone is 100% natural and comes directly from the earth, made from geologic processes, over millions of years. Some types of quartzite contain smaller amounts of other minerals that give the stone color and character. The most well-known quartzite quarries are located in Brazil, though there are quarries along the planet including in Canada, India, Italy, Norway, and Sweden. Conditions such as the depth at which quartz is formed and the time it spends under the earth defines how porous a quartzite is, resulting in the conditions it can endure.



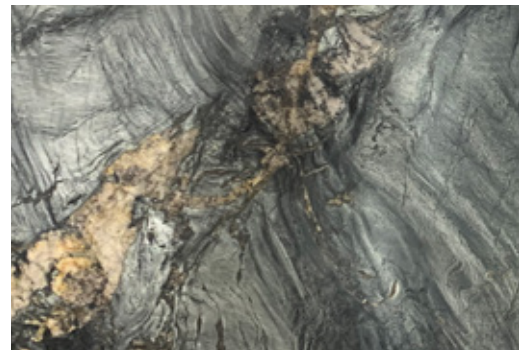
Deep Pearl Quartzite. Photo from Hilltop Surfaces.

On the other hand, even though the name “quartz” refers to a natural mineral, engineered quartz (sometimes referred to as “engineered stone”) is a manmade stone. It’s the product of bonding quartz particles together with resin, pigments, and other ingredients; in a mold. Manufactured quartz is made in factories in the United States, Europe, and Asia, among other locations. The mix in the mold is put under vacuum conditions, vibration, and pressure; this process is called “compaction by vibro-compression vacuum process.” The slabs are compressed at around 30 pounds per square inch, and heated up to 360° (around 180° C)F for around 40 minutes. The heat and pressure used to manufacture a slab are by far minor than the conditions that happen in nature.



Silk Quartzite. Photo from Hilltop Surfaces.

Due to the use of resin, engineered quartz results in having low porosity, nonetheless, this makes engineered quartz softer than natural quartzite.



Krypton Quartzite. Photo from Hilltop Surfaces.

For application purposes, quartzite can be used indoors and outdoors indistinctly. From countertops and flooring, to outdoor kitchens and cladding. Weather conditions and UV light won’t affect the surfaces. Engineered quartz is best for using indoors. The resins used in engineered stone, after exposed to UV rays for longer periods of time, will turn yellow.