



### **Quartz Based Sandstone**

Quartz-based sandstones include sandstones, quartzitic sandstones, and quartzite.

Sandstone is a sedimentary stone composed mainly of sand-size mineral grains. Most are composed of quartz and/or feldspar, the most common minerals in the Earth's crust. Like sand, sandstone may be any color, but the most common colors are tan, brown, yellow, red, gray and white. Quartzitic sandstone grains are mainly quartz with silica, a bonding agent that fuses the stone together.

Quartzite is a hard, metamorphic stone which was originally sandstone. Through heating and pressure the quartz sand grains and quartz silica fuse into one.

Factors that distinguish the classification of quartz-based sandstone:

Sandstone: 60 percent minimum free silica content and 135 -150 pounds per cubic foot.

Quartzitic Sandstone: 90 percent minimum free silica content and 150 - 160 pounds per cubic foot.

Quartzite: 95 percent minimum free silica content and 160 or more pounds per cubic foot.