

Hardscape Material Temperature Comparison

The Experiment

There are many options for hardscape around pools, but little information available about just how hot the various surfaces will be on your bare feet. We decided to find out for ourselves by comparing the temperature of seven different surfaces: concrete, Kool Deck®, tile, travertine and three colors of concrete pavers.

Methodology

- Equipment: Infrared thermometer, blue masking tape.
- Process: Pavers were situated near a pool with Kool Deck®. Tape was applied to each surface to normalize the readings.* The pavers were left in place for several days. Readings were taken at 3 PM on June 22, 2017 in Tucson, Arizona. The outside temperature was 108 °F.

Results

Surface	Temperature (°F)
Kool Deck®	129
Belgard Quarziti Porcelain Tile	131
Travertine (Color: Light Rustic)	133
Concrete	137
Belgard Catalina Stone™ (Color: Sonoran Grey)	141
Belgard Catalina Stone™ (Color: Crema Luna)	143
Belgard Catalina Stone™ (Color: Sierra)	145

Conclusion

We wouldn't select a pool deck surface solely based on its daytime temperature. All of the surfaces, even the venerable Kool Deck® topping, were too hot to walk on barefoot or sit on, even with a wet bathing suit right out of the pool. However, the darker concrete pavers were 10° - 15° hotter than the lighter colored surfaces and this should be a part of your decision criteria.



*Notes

- Measuring different materials with an infrared thermometer (IRT) is subject to relative inaccuracies. An IRT measures the heat radiated by a material which can be different than its surface temperature, depending on the material's emissivity. One method to handle this is to apply a patch (like blue masking tape) to all the materials and measure the temperature of the patch.
- Other than the concrete and Kool Deck®, we measured the temperature of single pieces of hardscape (2' x 2' approximately) that were lying on rocky dirt. Hardscape that has been sand set or laid over concrete could show different readings.