SPC vs WPC Overview

Before going into the details, it's important to understand the basics about stone plastic composite (SPC) rigid vinyl flooring and wood plastic composite (WPC) vinyl flooring. These two types of engineered vinyl flooring are quite similar, except for what composes their core layer.

For SPC floors, the core is comprised of natural limestone powder, polyvinyl chloride, and stabilizers. Our SPC lines are comprised of 65% to 68% stone or natural limestone powder. Our SPC floors have painted bevels for realistic wood look, also have a high performance registered embossing, and the patented Unilin locking system. We also offer an attached 1.5 mm high density pad.

Our WPC vinyl floors, the core is made of recycled wood pulp and plastic composites. We also use the patented Unilin locking system with our WPC lines. Our Crystal Cove collection has a pressed edge, and our Emerald Bay 9" wide has painted bevels. Both core layers are completely waterproof.

Besides the core, these two types of flooring are essentially the same makeup of layers. Here's how a rigid core flooring plank is constructed from top to bottom:

- **Wear layer:** This is the layer that provides resistance to scratches and stains. It is thin and completely transparent.
- **Vinyl layer:** The vinyl is durable and strong. It is printed with the flooring pattern and color.
- **Core layer:** This is the waterproof core made from either stone plastic composite or wood plastic composite.
- **Base layer:** EVA foam forms the base of the plank.

Main Differences between SPC and WPC Vinyl Floors

Besides the materials used to create the core of this flooring style, these are the key differences between WPC vinyl flooring and SPC vinyl flooring:

- **Thickness:** WPC floors have a thicker core than SPC floors. Plank thickness for our WPC floors is 6.5 millimeters, while our SPC floors are 4 millimeters thick.
- **Foot Feel:** When it comes to how the flooring feels underfoot, WPC vinyl has the advantage. Because it has a thicker core compared to SPC flooring, it feels more stable and cushioned when walking on it. That thickness also helps to provide insulation to keep the floors warmer.
- **Sound Insulation:** The thicker core of WPC floors also makes them superior when it comes to sound insulation. The thickness helps to absorb the sound, so it's quieter when walking on these floors.
- **Durability:** You might think that WPC flooring would offer improved durability since it is thicker than SPC flooring, but the opposite is actually true. SPC floors may not be as thick, but they are considerably denser than WPC floors. This makes them better at resisting damage from impacts or heavy weights. WPC is 10 times harder than laminate floors, and SPC is 10 times harder than WPC
- **Stability:** WPC floors and SPC floors can both be installed in any room with moisture exposure and temperature fluctuations. But when it comes to extreme temperature changes, SPC flooring tends to offer superior performance. The denser core of SPC floors makes them even more resistant to expanding and contracting than WPC floors.

Similarities between WPC and SPC Flooring

While there are some important differences between SPC vinyl floors and WPC vinyl floors, it's important to note that they also have quite a few similarities:

- **Waterproof:** Both of these types of rigid core flooring feature a completely waterproof core. This helps to prevent warping when exposed to moisture. You can use both types of flooring in areas of the home where hardwood and other moisture-sensitive flooring types are not typically recommended, such as laundry rooms, basements, bathrooms, and kitchens.
- **Durability:** While SPC floors are denser and resistant to major impacts, both flooring types are resistant to scratches and stains. They hold up well to wear and tear even in high-traffic areas of the home. If you're concerned about durability, look for planks with a thicker wear layer on top.

- **Easy Installation:** Most homeowners are able to complete a DIY installation with either SPC or WPC flooring. They are made to be installed on top of just about any type of subfloor or existing floor, as long as the subfloor is level. You won't have to deal with messy glues either, since the planks easily attach to one another to lock into place.
- **Style options:** Both WPC and SPC have a huge range of styles, widths, and colors available.





Make sure that when comparing our competition to us, that we educate our customers on the difference between what is being offered out there. Many companies do not offer a product with registered embossing, or with painted bevels. This brings the production cost down A LOT. Make sure that when they try to compare us to other companies, that they are indeed comparing apples to apples.