

Designing Aesthetics

Using Composite Materials Makes Sense for Many Residential or Commercial Outdoor Living Spaces

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Composite decking has gained popularity in recent years as a smart alternative to wood decking. But with the contemporary conveniences of composites, it's important to understand the different types of composites, and to know which one will suit your design perfectly.

The majority of composite decking is made up of "traditional composites." These are primarily made from a mixture of sawdust and recycled plastic, have an embossed "wood grain," and overall have decent mechanical strength and stiffness. The caution is color change. These types of boards will fade in time, and if there is an important color match or aesthetic of the structure, you may have trouble over time. The other downside on using recycled plastic is the potential for contamination, which can lead to heavy mold growth over time.

Cellular PVC is another option. It's made from foamed vinyl and typically also has an embossed surface. If you are looking for ultra-low maintenance and low color-fading, then cellular PVC is a good choice. The compromise that you make is in the strength and stiffness of the board. In some cellular products, there are also reports of color "bleeding" issues with dissimilar plastics and also household cleaners.

For decking materials, a good overall route is to specify engineered composite decking. Engineered composites are designed with a "multi-I-beam" profile structure to maximize performance. Another is to look at what is used inside. Traditional composites using wood residue may have issues related to moisture and freeze-thaw, which can cause a number of problems in wet or cold areas of the country. Engineered composites are made using

agricultural residues or paper waste. When used properly, these reinforcements can provide better color stability, decay resistance, and mechanical stiffness over traditional composites.

One such engineered composite decking is finished with a brushed surface to emulate the look of rough cut quarter-sawn wood. For design flexibility, the decking can be available in a traditional board, a heavy-duty commercial board, or a tongue-and-groove system, allowing for hidden fastening of the product. When joined with available railing styles, along with options for balusters, many different styles can be accommodated.

Overall, there is a plethora of design and aesthetic options when it comes to composite decking. What it ultimately comes down to is, "what best incorporates into the design theme and meets the client's wants and needs."

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