



Colin Blackford, Director of Strategy & Innovation, Mermet USA

Selecting the right windows is an important step in designing an energy-efficient building. But windows alone won't create an exterior facade solution, explains Colin Blackford of Mermet **USA**. To ensure optimal thermal performance, you also need to consider how your shade solution works together with the windows. That's a message he shares far and wide when working with customers. The global leader in Sun Control Textiles, Mermet offers a wide range of fabrics that offer both energy-saving benefits as well as adding aesthetic appeal. Here, Blackford explains just how important these fabrics are in creating sustainable environments.

Ask the **Expert**

How do shade fabrics affect thermal performance? How effective is the window and shade in blocking solar energy? Mermet partnered with the Lawrence Berkeley National Laboratory to find out. The scientists used the RAT equation which measures reflection, absorption, and transmission—to determine the combined solar heat gain

coefficient of the glass and shades. Compared to a low-e double-glazed window without a shade, the same window with a light color E Screen shade in a 3% openness factor improves the SHGC by 59%. That's a lot less heat in your building that you then have to cool. So how do you capitalize on these

ings? Start by considering the space. How much protection from the sun do you need? Is it a north-facing window? You won't face direct sunlight, therefore, you won't need the highest level of shading. A standard E Screen shade is probably a great choice. If it's a south- or west-facing one, however, you may face a constant flood of light. That will require a shade solution that blocks that energy, preventing it from heating up your room. A high-performance fabric, such as Mermet's KOOLBLACK

Technology fabrics, can block more of those rays. The key is to put the right performance shade exactly where you need it. As with every consideration, you need to choose the one fabric, or combination of fabrics, best suited for your situation. Tailoring your window treatments to your specific situation will result in a well-managed, energy-efficient solution.

Check out the November+December issue of gb&d, when Blackford explores occupant comfort.







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