

That sweet, sweet smell...of VOCs

MONITORING VOC-EMITTING PRODUCTS IN A BUILDING TAKES SOME WORK.

Keeping VOCs out of your building isn't easy. First, you need to be aware of and monitor the hundreds of products that are coming in and out of your building. Second, the VOC level stamped in micro-fine print onto the side of a product's packaging is nearly impossible to read — if it's listed at all. Otherwise, you're left searching through page after page of MSDS sheets and technical data sheets. Finally, VOCs turn up in the products you least suspect.

Learning the amount of VOCs in a brand of paint used throughout a building is pretty straightforward. It's typically one product, and it's easy to find and verify. When you get into adhesives, sealants and caulks, you're entering a whole other realm. LEED follows the South Coast Air Quality Management District's (SCAQMD) Rule 1168 — a multi-page file listing dozens of product categories and their corresponding VOC limits — and it's as good as any for a recommended allowable VOC level.

The problem comes when it's time to manage products in the field and make sure nothing inappropriate sneaks in. It comes down to figuring out which types of products are most likely used in your building. For example, if there are bathroom renovations or improvements, odds are the plumber is using PVC or CPVC cement — a product that can have extremely high VOC levels. Because CPVC cement is not a product that's commonly thought of when looking after caulks and glues, it often finds its way into buildings by slipping through the cracks. Others that are found in many offices for maintenance and build-outs include carpet adhesives, fire caulk, duct mastic, cove base adhesive, VCT adhesives, ceramic tile adhesive and dry-wall adhesives.

THE GOOD NEWS IS THAT THERE ARE HUNDREDS OF LOW-VOC PRODUCTS AVAILABLE ON THE MARKET THAT PERFORM JUST AS WELL AS THEIR CHEMICAL-LADEN COUNTERPARTS.

The good news is that there are hundreds of low-VOC products available on the market that perform just as well as their chemical-laden counterparts. Some are fortunately easy to spot. For example, a popular brand of PVC cement simply labels its compliant version "Lo-V.O.C." PVC cement. That's pretty easy to distinguish.

With other products, it takes quite a bit of label reading. If you walk into any home improvement store, you'll find VOC-compliant products sitting right next to non-



compliant counterparts — they're not labeled as low VOC and are often the same brand! Two weeks ago I was in just that situation, looking at a window and door caulk. Tube A had VOCs at nearly 100 g/L, while Tube B in the next bin was less than 10 g/L.

So, how do you know if it has low VOCs and where do you find that? Well, you have to scour the fine print on the container. What you're looking for is often at the end of all the application directions and safety precautions, and it's always listed in grams per liter, or g/L. The SCAQMD limits are always listed in maximum g/L and are broken out by category, so it's relatively easy to cross-reference your product. You can find a complete list by downloading Rule #1168 at <http://www.aqmd.gov/rules/download.html>, but it's easy to remember that the lower the better. If you're under 50 g/L for nearly any product, you're doing great.

Having a low-VOC policy in place is the easy part. Making sure the products that show up at your building actually comply, and finding out what their VOC limit is, is the real challenge. **SF**



>> TOMMY LINSTROTH,
LEED AP, is the principal of Trident Sustainability Group (www.tridentsustainability.com), a consulting firm focused on sustainable building design, construction and operation. He can be reached at tommy@tridentsustainability.com.