

Felt Tips

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De-Bugging Your Buildings

Bugs been getting to you? No, not Bugs Bunny, Doc! Were not referring to those bugs in your computer, or those very discrete listening devices, either. Bugs — as in insects, microbes, fungi, and bacteria. Stuff that's icky and yucky. Things which can make you sick. Stuff that can make the buildings you design (and work in) sick. But, we're not going to have a biology class here. As with everything else, the design and construction industry is finally reacting to the problem in an earnest manner. Products are becoming available which can be used to counter the effect of the "bugs".

Many companies are offering products which have integral anti-bug qualities. Other companies are introducing materials which can added and applied to other products to provide anti-bug qualities. What should you look for when reviewing product literature and selecting products? Read on!

They come with various qualities: Anti-microbial (gram-negative and gram-positive bacteria), fungicide, mildewcide, and insecticide. The idea is that the material prevents growth of some kind of "bug".

If you are doing certain types of projects, it is more important than in others. Manufacturers are targeting certain parts of the construction market: Health care, retirement, lodging, food service, and other public use facilities.

How the bug killers work varies from product to product. Some operate like poisons, others attack the biological structure of microbes. Check for low human toxicity [it sound obvious, but you never know]. Does it contain poisonous metal elements: Arsenic, tin, lead, mercury, copper, zinc? Copper and arsenic are combined together for use in preservative pressure-treated lumber [but remember, you are not supposed to burn it]. Mercury has been banned by the EPA from paint. How about the halogen elements of fluorine, chlorine, bromine, and iodine? Chlorine is a popular disinfectant in cleaning solutions; its used to disinfect the water you drink [but there is some controversy about this]. What about disinfecting chemicals like formaldehyde? Is it a phenolic? Phenols are poisonous. And for you clean air fiends, does it contain volatile organic compounds, or use VOC's during application? The concern with these questions is whether the products you are considering are toxic to applicators and to building occupants. Confirm that the product is registered with the Environmental Protection Agency and the Food and Drug Administration for the intended use.

Mode of toxic action is one concern. Length of toxic viability is another. Basically, how long [time] does the anti-bug quality last? The longer the better. One way of answering this question is to find out what can dissolve the treatment. Is it water soluble? The issue of time effectiveness is like the specifier's lament about warranties: *"The company offers a twenty year warranty, but has only been in the business for two years."* Make sure it has a true track record of use, in actual building conditions. That's right, check out those testimonials!

Most of the problems these anti-bug products are supposed to cure [let's be honest — kill] live on the surfaces of building materials. Fungi grow on surfaces, microbes dwell on the outside of things, and insects love to live in cracks and crevices. Check on the availability of products with these anti-bug qualities already manufactured into the product, and the ability to apply the anti-bug products to existing surfaces. Verify that products can provide protection to exposed (interior and exterior) surfaces. Check to determine if you can use the materials on food-contact surfaces.

When checking on the toxicity of products, ask if they kill good bugs in addition to the bad bugs. [Just for argument's sake] If you consider an insecticide admixture for paint to kill spiders and mites, does it also kill bees?

When considering the bug killers, is it available integrally in the manufactured -product, or is it a separate material to be applied. Interface Research Corporation is offering coordination among several major manufacturers of numerous finish products with an integral anti-microbial agent.

Information Sources:

Envirosense™ Consortium
c/o Interface Research Corporation
100 Chastain Center Boulevard; Suite 165
Kennesaw, GA 30144
404-421-9555

Enviro-Chem, Inc.
4 West Rees Ave
Walla Walla, WA 99362-1298
509-552-0490

Sylgard® Anti-Microbial Treatment by Dow Corning Corporation
Chemspec
3001 East Madison Street
Baltimore, MD 21205
410-675-4800

Who knows, maybe they'll find something that will kill those nasty cockroaches! [Not!!!]

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