



Kitchen & Bath design news

May 4, 2010

Green Professionals Seek to Raise IAQ Awareness

By Staff Writers
Cygnus Publications

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A 1985 study published by the United States Environmental Protection Agency's Office of Research and Development identified a serious air quality problem. Counter to what the general wisdom was at the time, the study revealed that it was indoor air quality, not outdoor, that was declining at a rapid rate.

The study found "levels of about a dozen common organic pollutants to be 2 to 5 times higher inside homes than outside, regardless of whether the homes were located in rural or highly industrial areas." Most alarmingly, it was noted that "while people are using products containing organic chemicals, they can expose themselves and others to very high pollutant levels, and elevated concentrations can persist in the air long after the activity is completed."

In the 25 intervening years, the sustainable building movement has grown from a mere trend to a recognized market segment of the building industry. While that might sound like a boon for indoor air quality, it is more of a mixed blessing, says Dr. Marilyn Black, Ph.D., LEED AP, founder of the industry-independent, third-party GREENGUARD Environmental Institute.

"The problem of IAQ has become even more pronounced with the green building community's focus on energy use reduction: we're tightening up our homes, or 'weatherizing' them, to save energy, but we're inadvertently allowing high levels of indoor pollutants to accumulate inside," says Dr. Black. "Key sources of VOCs are cleaners, built-in cabinetry, foam insulations, furniture, and remodeling materials like paints, adhesives, coatings, and other treatments."

GREENGUARD Environmental Institute was founded by Dr. Black in 2001. GEI is an ANSI Accredited Standards Developer, which means that it establishes acceptable product standards for building materials, interior furnishings, cleaners and products in other categories. The Institute establishes building standards with the aim of protecting the health of occupants through the control of mold, moisture and indoor pollutants.

Black's advice for kitchen and bath designers who wish to be mindful of indoor air quality is one of content control, rather than mitigation: "Source control is the most effective way to control indoor air pollution. As a practitioner, you should always select and use third-party certified, low-emitting and nontoxic products; as a manufacturer, you should make sure that you are supplying toxin-free products to the marketplace."

Product Placement

Volatile Organic Compounds are the root of the air quality issue. Think "new car smell" – the cocktail of aromas that are the result of the manufacturing process. Every product has them, whether or not our noses (and allergies) can

detect them. Some companies are actively responding to the call for cleaner indoor air by doing away with materials that cause the “new house smells” associated with kitchen and bath products.

“It’s an important topic. That ‘new house’ smell is actually quite bad for you,” says designer Brandy LeMae, CKD, LEED AP of Boulder, CO-based VaST Architecture. “You want to avoid harmful chemical outgassing for all clients, but especially developing children.”

Cosentino’s ECO countertop has received GREENGUARD certification, and Lorenzo Marquez, v.p./marketing, Cosentino Group North America, says that is one part of the company’s overall commitment to sustainability.

“Cosentino Group takes the role of environmental responsibility very seriously,” says Marquez. “We recognize the need for a sustainable product both high in design and performance. The company committed itself to a \$6 million R&D investment in the development of ECO by Cosentino, the surface composed of 75% post-industrial and post-consumer recycled raw material. This innovative product caters to the environmentally conscious and design-oriented architect, designer and consumer.”

Marquez says this movement is the reflection of a cultural shift. “We’re slowly becoming a culture that is focusing on value, sustainability and healthy living habits and, as a result, the demand for affordable, durable and eco-friendly products is high.”

LeMae agrees: “When we design ground-up homes or do major remodels, we do everything we can to ensure a very tight, thermal envelope. These tight homes make for very energy-efficient structures; however, they necessitate the need for products and materials that contribute to good IAQ. We, therefore, do our best to specify low- or no-formaldehyde cabinetry.”

In 1992, the California Air Resource Board designated formaldehyde a toxic air contaminant (or TAC). For substances labeled TACs, there is no safe level of exposure. Cabinet companies have come under scrutiny for the formaldehyde content of paints and finishes used; the industry has responded by actively reducing or eliminating the added formaldehyde to products and components, and labeling them.

Second- and Third-party certifiers, therefore, become a beacon to guide designers and consumers toward these products. The Kitchen Cabinet Manufacturers Association has helped to lead the way, establishing its Environmental Stewardship Program (ESP) in 2006 to “help cabinet manufacturers demonstrate their commitment to environmental sustainability and help consumers easily identify environmentally friendly products,” says the KCMA.

And in this area, the arguments against green’s added costs have little weight. Prices were acknowledged by designers surveyed on KBDN’s Web site, www.KitchenBathDesign.com, late last year to be coming in line with traditionally made products. Some manufacturers, though, are lower cost by design.

“We use a lot of IKEA because they conform to the European standard for formaldehyde content, which is much more stringent than the U.S. standard,” says LeMae.

Ultimately, all agree that education about the risks of poor IAQ should continue to be a focus.

Dr. Black concludes: “[GREENGUARD’s educational mission is] the goal of reminding young professionals that human health is a prerequisite for the future – not an option.”

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Business Media