

## **Sustainability Brief: Indoor Air Quality**

### **At Interface, we share your concerns about IAQ, and we have solutions.**

#### **The IAQ Issue**

According to a 1984 survey by the World Health Organization, nearly 30% of our nation's buildings have poor indoor air quality. EPA studies indicate that indoor levels of pollutants may be 2 to 5 times, and on occasion 100 times higher, than outdoor levels. These levels of indoor air pollutants are of particular concern because most people spend about 90% of their time indoors.

A number of proactive steps can be taken to improve indoor air quality (IAQ) in buildings. The first is solid engineering and architecture that ensures that air intakes are located clear of contaminant sources (i.e., dumpsters, loading docks, standing water), and that the building is constructed to prevent the introduction of unintended moisture (due to pressure differentials, humidity, leaks, etc.). A good IAQ plan also considers the design and commissioning of HVAC systems and designing the workspace for maximize ventilation. In existing buildings, this may also include retrofitting air filtration systems. Other tools for ensuring good IAQ include continuous monitoring of carbon dioxide and humidity levels, as well as regular maintenance of air-distribution systems. A proactive IAQ plan also includes regularly scheduled maintenance practices for cleaning interior surfaces.

For many years, designers and facility professionals failed to realize that making the right choice of interior finishes, such as carpet, upholstery, wall coverings or paint, could improve the indoor environment. Today, collaborative efforts and initiatives like the U.S. Green Building Council's LEED™ Green Building Rating System are paving the way by showing specifiers the benefits of products that are engineered for improved IAQ. As a result, many interior products currently available are designed to minimize volatile organic compound (VOC) emissions and to inhibit microbial growth - two of the most common problems associated with IAQ.

#### **Interface's Solutions**

For more than a decade, Interface has been involved in research and educational efforts focused on improving indoor environmental quality. We founded the Envirosense® Consortium, a non-profit membership organization with a collaborative focus on a "Total Systems Approach" to addressing indoor environmental issues. The Consortium, which has a web site at [www.envirosense.org](http://www.envirosense.org), monitors legislative and regulatory activities relating to IEQ, gathers and disseminates knowledge and research on a variety of indoor environmental issues, and also serves as an information resource for the public.

#### **IAQ and Microbes**

Intersept® is an EPA registered and patented antimicrobial preservative. It is used in Interface carpet products as well as HVAC equipment, adhesives, air filters, paint and ceiling tiles. Intersept is effective against a broad spectrum of bacteria and fungi, protecting the carpet from the growth of mold, mildew, bacteria and odor-causing microorganisms. Despite its proven ability as a microbial inhibiting preservative, Intersept is low in toxicity and contains no arsenic, heavy metals, phenols or formaldehyde. Products with Intersept meet the stringent standards of the GSA Antimicrobial Certification.

Intersept is guaranteed to remain effective for the life of the carpet, assuming proper maintenance. Interface's Standard Warranty recommends the use of Re:Source Technologies adhesives.

Intersept isn't the only Interface innovation that addresses IAQ. Our floorcovering products also have a moisture impermeable backing system that prevents the absorption of liquids and ensures that spilled fluids and biological contaminants remain on the floor surface for efficient removal.

## **IAQ and VOCs**

Many specifiers are concerned about volatile organic compound emissions that can come from a variety of interior products, including carpet. All Interface Flooring Systems products are low-VOC products. The carpet industry has been in the forefront of addressing this issue, and Interface has a dedicated research and development team that is constantly focused on providing even more product solutions. All products manufactured by Interface Flooring Systems meet or exceed the stringent requirements of the Carpet and Rug Institute's Green Label Plus Test Protocol, the ASTM E2471 and the State of Washington Protocol.

Much attention has also been paid to the Collaborative for High Performance Schools (CHPS) initiative in California. The Carpet and Rug Institute worked in partnership with the California Department of Health Services' Indoor Air Quality Program (DHS/IAQ) and the California Sustainable Building Task Force to develop an enhanced industry wide standard to reduce confusion surrounding the various requirements pertaining to carpet and indoor air quality. As a result, the DHS/IAQ and the Sustainable Building Task force approved the Green Label Plus certification (a 14-day test) in alignment with the Section 01350 protocol, as long as the products meet the following standards:

1. Annually pass specific testing for compounds as outlined in Section 01350
2. TVOCs less than 0.5 mg/m<sup>2</sup> tested quarterly

The CA 01350 test protocol is a one time test that requires that the whole building assembly be tested (e.g., carpet and adhesive). As part of its certification to the Scientific Certification Systems (SCS) Environmentally Preferable Product (EPP) Certification, Interface conducted independent tests of all of its carpet products and the Re:Source Technologies Grid-Set Green Glue. All of these products met the CA 01350 requirements.

## **IEQ, Carpet and LEED™**

Much attention has also been paid to the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED™) Green Building Rating system. Indoor environmental quality is a very important part of LEED. LEED New Construction (LEED-NC) and LEED Commercial

Interiors (LEED-CI) both offer one point for low-emitting carpet that meets the original CRI Green Label Guidelines. All products manufactured by Interface Flooring Systems qualify for that point.

In the interest of further contributing to the development of low VOC product solutions, Interface recommends that installers use Re:Source Technologies adhesives in keeping with our Standard Warranty. All of the specified Re:Source Technologies traditional and spray adhesives are low VOC products manufactured without the use of solvents, and all of them meet the VOC requirements of the CRI's Green Label Plus Adhesive Testing Protocol as well as South Coast Air Quality Management District (SCAQMD) Rule #1168. LEED-NC and LEED-CI both require that all adhesive systems meet SCAQMD Rule # 1168.

For those projects in which wet adhesives cannot be specified, Interface offers a unique, dry adhesive system called GridStrip™, which can be used with our structured back products. It features a releasable adhesive in a peel-and-stick design that allows for quick installations. At Interface, we share your concerns about IAQ and we're ready to help.

To learn more, contact your local Interface Account Executive. Or visit us on the web at [www.interfaceflooring.com](http://www.interfaceflooring.com).