

**Technical Brief:** Collaborative for High Performance Schools (CHPS) and Indoor Air Quality

## **Interface Flooring Systems' Products Meet Section 01350 CHPS Criteria for Low-Emitting Carpet**

The Collaborative for High Performance Schools (CHPS) is a consortium of public agencies and California utilities that was formed with the goal of building the next generation of schools - facilities that improve the learning environment while saving energy, resources and money. High performance schools achieve these goals with an integrated design strategy that incorporates the best of today's ideas and technologies. From the beginning of the design process, each of the building elements (windows, walls, building materials, air-conditioning, landscaping, etc.) is considered part of a system of interacting components. Integrated design leverages these interactions to maximize the overall building performance.

CHPS, often referred to as "chips", aims to increase the energy efficiency of schools in California by marketing information, services, and incentive programs directly to school districts and designers. The Collaborative's goal is to facilitate the design of environments that are not only energy efficient, but are also healthy, comfortable, well lit and contain the amenities needed for a quality education.

### **Indoor Air Quality**

An important aspect of a High Performance School is the air quality of the indoor environment. In order to ensure good indoor air quality, CHPS has set criteria for low-emitting materials (Section 01350) - for use in a typical classroom, and lists products that are certified to meet these criteria. A school that specifies and installs these materials qualifies for points under Indoor Environmental Quality Credit 2: Low-Emitting Materials. See more about the compliant materials and other information about CHPS at [http://www.chps.net/manual/lem\\_table.html](http://www.chps.net/manual/lem_table.html).

As other states became interested in this standard for improved indoor air quality, the Carpet and Rug Institute (CRI) began to develop an enhanced indoor air quality criteria that would meet the CHPS requirement and create an industry-wide standard to reduce confusion surrounding various requirements for indoor air quality as it pertained to carpet.

CRI worked in partnership with the California Department of Health Services' Indoor Air Quality Program (DHS/IAQ) and the California Sustainable

Building Task Force to establish a testing protocol for total volatile organic compound (TVOC) emissions that was compatible with Section 01350. The Green Label Plus program is a 14-day test that follows the protocol of Section 01350 with stringent requirements for chemical emissions. The Green Label Plus program measures TVOC emissions as well as setting a maximum concentration level for a number of "Chemicals of Concern" as defined by the State of California's OSHA Proposition 65. The test goes beyond the requirements of Section 01350 to test emissions of six additional chemicals as well as requiring quarterly tests to ensure VOC compliance throughout the year. Any carpet product that passes the Green Label Plus program is being accepted by CHPS.

All Interface® brand carpet product types have been independently tested and verified to meet the requirements of Section 01350 as part of Interface's Environmentally Preferable Product (EPP) certification from Scientific Certification Systems. The Re:Source Technologies™ brand Grid-Set Green Glue™ has also been independently tested and verified to meet the requirements of Section 01350. All Interface® brand carpet products meet the requirements of both Section 01350 and the CRI Green Label Plus certification.

### **Testing Protocol**

The CRI Green Label Plus logo displayed on carpet samples informs customers that the product type has been tested and certified by an independent laboratory and has met stringent criteria for low emissions. Carpet samples are tested by facilities that use the most up-to-date, dynamic environmental chamber technology. The test methodology was developed in cooperation with the Environmental Protection Agency (EPA) and has been adopted by the American Society for Testing and Materials (ASTM) as D5116 - Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Materials/Products.

California's Indoor Air Quality Program and the Sustainable Building Task Force approve the Green Label Plus certification in alignment with Section

01350 protocols as long as the products meet the following standards:

1. Pass testing for specific compounds as outlined in Section 01350.
2. Pass subsequent annual testing for 13 specific chemicals of concern.
3. TVOC emissions less than 0.5mg/m<sup>2</sup> tested quarterly and annually.

Carpet manufacturers are permitted to use the Green Label Plus logo for product types that meet the stated emission criteria. Products are re-tested quarterly to monitor continued compliance with the test program requirements. Customers can feel confident selecting a carpet that bears the CRI Green Label Plus logo. The label assures that the carpet is a low-emitting product.