

# FOCUS on Sustainability

# 03

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## SUSTAINABILITY

All building materials have an environmental footprint. The most successful product manufacturers actively implement programs to continuously reduce that footprint over the product lifecycle. Increasingly, associations of vinyl building products are developing performance-based specification standards for sustainability. This and other forward-looking strategies are helping the vinyl industry take a giant leap toward securing its future.

### VALIDATED FOR USE IN SENSITIVE APPLICATIONS

Durable, water resistant and non-porous, the smooth surfaces of vinyl interior products are well known for being easy to clean and disinfect – making them especially suited to healthcare settings where infection control is paramount.

But there's also good news for designers challenged to specify low-emitting, low-odor wallcoverings and upholstery in critical applications and sensitive environments, because today's versatile vinyl products are increasingly meeting and exceeding some of the most stringent regulations governing indoor air quality as well.

It's a familiar refrain: if a product can be used in California, it can be used anywhere. Vinyl product manufacturers are demonstrating the ability to consistently make products that pass the Collaborative for High Performance Schools (CHPS) testing protocol – the basis for California's rigorous Section 01350 provision focused on limiting emissions of volatile organic compounds (VOCs).

A guide for specifiers concerned with selection of materials appropriate for sensitive environments, the 01350 standard established a high bar for decorative products manufacturers to continuously improve formulations and processes and reduce emissions. Listed products have been chamber tested and screened for use in a typical classroom based on compliance with emission levels of the nearly 80 VOCs identified by the California Environmental Protection Agency Office of Environmental Health Hazard Assessment.

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## JUST SOME OF VINYL'S SUSTAINABLE FEATURES

**Durable** – Vinyl's long service life conserves raw materials and prevents pollution associated with manufacturing and disposal of shorter-life alternatives.

**Lightweight** – Fuel consumption in transport is greatly reduced.

**Safe disposal** – Vinyl products will not break down in landfills, which are often lined with vinyl to prevent groundwater contamination. They can be safely incinerated, and the energy recaptured and reused.

**Maintenance-free** – There's no need for paints, coatings or harsh cleansers.

**Recyclable** – 99% of manufacturing waste is reprocessed; millions of pounds of post-consumer vinyl are recycled.

**Cleanable** – Hard smooth surfaces suppress bacteria and allergens.





## SUSTAINABILITY *continued*

But manufacturers are going beyond merely responding to government regulations. Trade industry groups for interior products are establishing their own labeling or rating programs designed to promote and encourage this level of achievement.

Vinyl wallcoverings can meet the standards of voluntary programs, too, such as GREENGUARD, whose Indoor Air Quality Certified® designation for products with low VOC emissions can help achieve certification under the U.S. Green Building Council's (USGBC) LEED Green Building Rating System®.

### EXAMINING VINYL'S FOOTPRINT

In its exhaustive examination of the impact of vinyl building materials, USGBC reviewed 2,500 lifecycle analyses and risk assessments and concluded, "No single material shows up best across all human health or environmental impact categories, nor worst." In fact, highly durable vinyl products have a relatively low impact on the environment compared to alternatives, and offer a number of other benefits compared with those alternatives.

Chief among these is that the raw material itself is resource efficient. Unlike other plastics, vinyl resin is derived from the abundant and renewable natural resource salt. Its other component, petroleum or natural gas, comprises less than 3/10 of one percent of all fossil fuel consumption, and the process is essentially enclosed and computer-controlled to safeguard worker and public health and the environment. And with a long manufacturing history, vinyl products can meet strict production specifications while ensuring worker safety. It's also important to note that vinyl is an extremely small source of dioxin, so small that levels in the environment would be essentially unchanged even if vinyl were not being manufactured. In fact, vinyl manufacturing creates only grams of dioxin per year. For more information visit [www.dioxinfacts.org](http://www.dioxinfacts.org).

All products have environmental impacts resulting from manufacturing and shipping. Few, however, can match the benefits of vinyl's long and low-impact service life. With an average lifespan of more than 10 years in many applications, vinyl interior products are taking their rightful place in the palette of sustainable options specifiers can consider.

## FOR MORE ON SUSTAINABILITY ...

- For the most up-to-date GREENGUARD certification information, refer to the Environmental Institute Product Guide at [www.greenguard.org](http://www.greenguard.org).
- For the list of products that have been certified by manufacturers and an independent laboratory to meet the CHPS Low-Emitting Materials criteria, go to [www.chps.net/manual/lem\\_table.htm](http://www.chps.net/manual/lem_table.htm).



## DID YOU KNOW?

- Vinyl is inherently fire resistant and doesn't support combustion due primarily to its chlorine content.
- Chlorine is a vital building block for many products. It disinfects 98% of the U.S. drinking water supply, and goes into 85% of all pharmaceuticals.
- Finished vinyl products don't emit chlorine either.



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