



Shaw Industries Group, Inc.
Corporate Sustainability
PO Drawer 2128 Mail Drop: 071-01
Dalton, GA 30722-2128

March 28, 2019

Dear Valued Customer:

We carefully consider the impact of our products throughout their lifecycle on the environment and on society. For Shaw that means we examine the ingredient materials, the impact of our supply chain, our use of natural resources and the ability to recover and recycle our products. We were among the first to embrace and implement this new way of thinking about environmentally and socially responsible flooring design nearly a decade ago.

A product's Sustainability & material health attributes includes more than the materials that go into manufacturing a flooring product to also include the Volatile Organic Compounds (VOCs) that are emitted from the product. To demonstrate our commitment to providing flooring products that are low-emitting, Shaw participates in a number of 3rd party emissions certification programs. For our diverse hard surface flooring portfolio, we participate in FloorScore®, GREENGUARD, and GREENGUARD Gold emissions certification programs. Depending on the manufacturing facility and the range of products made there, Shaw may elect to use FloorScore or GREENGUARD emissions certification criteria. In all cases, the product is sampled and tested at an external lab for compliance to the emission program requirements.

As requested, please see below for a side-by-side comparison of specific 3rd party emissions certification programs.

Criteria / Description	FloorScore®	GREENGUARD	GREENGUARD Gold
Program Certifier	SCS Global Services	UL Environment	UL Environment
Program Owner	Resilient Floor Covering Institute	UL Environment	UL Environment
Test Standard	California Department of Public Health (CDPH) Standard Method V1.2-2017 (CA Section 01350)	California Department of Public Health (CDPH) Standard Method V1.2-2017 (CA Section 01350)	California Department of Public Health (CDPH) Standard Method V1.2-2017 (CA Section 01350)
Data Analysis for Chamber	ASTM D5116	ASTM D5116	ASTM D5116
Site Audit	Required	Required	Required
Test Duration	14 days	7 days	7-14 days
Total VOC limit	No	500 µg/m ³	220 µg/m ³
Formaldehyde*	9 µg/m ³	61.3 µg/m ³	9 µg/m ³
Total Aldehydes*	--	100 ppb	43 ppb
4- Phenylcyclohexane (4-PCH)*	--	6.5 µg/m ³	6.5 µg/m ³
Individual VOCs*	½ CREL [34 individual chemicals]**	1/10 TLV [33 individual chemicals]***	1/100 TLV [33 individual chemicals]*** & ½ CREL

*Maximum allowable predicted concentrations); ** ½ CREL = Chronic Reference Exposure Levels: Reference <https://oehha.ca.gov/CRELs>

***TLV = Threshold Limit Value



Shaw Industries Group, Inc.
Corporate Sustainability
PO Drawer 2128 Mail Drop: 071-01
Dalton, GA 30722-2128

For an additional reference, industry established green building certification programs like LEED v4 and WELL v1 require indoor air quality testing along with 3rd party emissions certifications. Specifically, please refer to the exact credit language required by these programs.

**LEED v4 IEQ (Indoor Environmental Quality) Credit, Low Emitting Materials - Option 1.
Product Category Calculations:**

Flooring must satisfy the general emissions evaluation criteria detailed herein.

Building products must be tested and determined compliant in accordance with California Department of Public Health (CDPH) Standard Method v1.1–2010, using the applicable exposure scenario. The default scenario is the private office scenario. The manufacturer's or third-party certification must state the exposure scenario used to determine compliance. Claims of compliance for wet-applied products must state the amount applied in mass per surface area.

Manufacturers' claims of compliance with the above requirements must also state the range of total VOCs after 14 days (336 hours), measured as specified in the CDPH Standard Method v1.1:

- 0.5 mg/m³ or less;
- between 0.5 and 5.0 mg/m³; or
- 5.0 mg/m³ or more.

WELL v1 Feature 04, VOC reduction:

The VOC emissions of all newly installed interior flooring meet all limits set by the following, as applicable:

- California Department of Public Health (CDPH) Standard Method v1.1-2010.

The common benchmark used in emissions testing is California Department of Public Health (CDPH) test criteria. As demonstrated in the comparison chart, both FloorScore and GREENGUARD programs utilize the CDPH test standard and are recognized pathways of credit in LEED v4 & WELL building certifications.



Shaw Industries Group, Inc.
Corporate Sustainability
PO Drawer 2128 Mail Drop: 071-01
Dalton, GA 30722-2128

In conclusion, Shaw's legacy of a strong commitment to sustainability, coupled with our passion for our customers, ensures that we deliver safe products in the marketplace by meeting or exceeding our own stringent requirements, as well as those of regulators and third party organizations.

Kindest regards,

Corporate Sustainability & Product Stewardship Group
Shaw Industries Group, Inc.