RESILIENT FLOORING

A Guide to Comparing Chemical and Material Criteria of Product Certifications and Eco-Labels

This guide will enable purchasers to compare criteria of the most chemically rigorous multi-attribute eco-labels for resilient flooring in the U.S., so they may choose which best aligns with their organizational needs.

Multi-attribute eco-labels include numerous requirements within one host certification, reducing purchaser burden as they seek to understand the full environmental story of a product. We did not evaluate the rigor and methodology of how product compliance is determined among these eco-labels.

This guide does not include any manufacturer or industry-created eco-claims or labels nor does it address environmental factors outside of toxics such as water usage, recyclability, and manufacturer take back requirements.

Many multi-attribute eco-label systems for resilient flooring do not address fair or safe labor and manufacturing practices nor issues related to a product's carbon footprint. We therefore could not compare their performance in these areas.

The chemicals and materials in the comparison criteria are those known to be used, or could potentially be used, in the manufacturing of resilient flooring and known to be toxic to human and environmental health.

RESILIENT FLOORING Product Certifications and Eco-Labels

COMPARISON CRITERIA	Greenhealth APPROVED GOLD	SILVER	cradle to cradle CERTIFIED PLATINUM and GOLD	SILVER	BRONZE	Red List Free	Blue Angel
CHEMICALS AND MATERIALS OF CONCERN *Product does not contain:*							
Alkylphenols, alkylphenol ethoxylates, or related compounds, total amount above 100 ppm	✓	✓	✓[1]	✓[1]	✓[1]	✓	✓
Added antimicrobials or preservatives of any kind	✓	✓				✓	✓[2]
Asbestos	✓	✓	✓	✓	✓	✓	✓
Bisphenol A (BPA) and its structural analogs above 1000 ppm	✓	✓				✓	✓
Epichlorohydrin-based formulations	✓	✓					
Flame retardants above 100 ppm	✓	✓	✓[3]	✓[4]	✓[5]	✓	✓
Added formaldehyde or formaldehyde-based formulations	✓	✓	✓[6]	✓[6]	✓[6]	✓	✓[7]
Isocyanate-based formulations and unreacted ('free') isocyanates	✓	✓					
The following metals lead, mercury, cadmium, hexavalent chromium (chromium VI), or organotins above 50 ppm	✓	✓	✓[8]	✓[8]	✓[8]	✓[8]	✓
Nanomaterials: deliberately engineered	✓	✓					
Total ortho-phthalates above 50 ppm	✓	✓	✓[9]	✓[9]	✓[9]	✓[10]	✓
Perfluorinated and Polyfluorinated (PFAS) chemicals above 100 ppm	✓	✓	✓	✓[4]	✓[5]	✓	✓
Persistent, bioaccumulative, and toxic (PBT) chemicals above 1000 ppm	✓	✓	✓	✓			✓
Intentionally added chemicals listed in CA Proposition 65 at levels requiring a warning in California	✓	✓					✓[11]
Polyvinyl chloride (PVC) or other chlorinated polymers	✓	✓	✓	✓	✓	✓	
Recycled tires	✓	✓					
Volatile methylcyclosiloxanes D4, D5, or D6 above 100 ppm	✓	✓					
Styrene-butadiene rubber (SBR)-based formulations	✓						

1 Restricts Phenol derivatives above 1000ppm
2 Allows for list of approved preservatives
3 Restricts only organohalogen above 100 ppm
4 Restricts only organohalogen exceeding 1% by weight
5 Restricts only organohalogen above 1000ppm
6 Restricts only formaldehyde, oligomeric reaction products with aniline
7 Restrics formaldehyde above 0.05 ppm
8 Restrics lead, mercury, and hexavalent chromium (chromium VI) at 1000ppm & cadmium at 100ppm
9 Restricts ortho-phthalates above 100 ppm
10 Restricts ortho-phthalates above 1000 ppm
11 Restricts substances under EU REACH

RESILIENT FLOORING Product Certifications and Eco-Labels

COMPARISON CRITERIA	Greenhealth APPROVED		Cradle to Cradle			Red List Free	Blue Angel
	GOLD	SILVER	PLATINUM and GOLD	SILVER	BRONZE		
PRODUCT CONTENT TRANSPARENCY							
The product must have either 1) a complete Health Product Declaration (HPD) with all substances characterized and screened at or above 1000 ppm, or 2) a fully disclosed Declare label that is Red List Free at 100 ppm, and with no proprietary information claimed for any ingredient above 1000 ppm	✔	✔	✔ [12]	✔ [13]	✔ [14]	✔	
VOLATILE ORGANIC COMPOUND (VOC) CERTIFICATIONS							
The product must be certified as meeting one of the following: California 01350 (California Department of Public Health (CDPH) Standard Method v1.2-2017) GREENGUARD Gold, SCS Indoor Advantage Gold, FloorScore, Blue Angel, Cradle to Cradle Gold or Platinum	✔ [15]	✔	✔	✔			✔
INSTALLATION							
The adhesive used to install the flooring must be certified as meeting California 01350 (California Department of Public Health (CDPH) Standard Method v1.2-2017), GREENGUARD Gold, SCS Indoor Advantage Gold, FloorScore, Blue Angel for Low-Emission Floor Covering Adhesives, or Cradle to Cradle Gold or Platinum; or the flooring must be attached mechanically without a chemical adhesive. If a wet adhesive is used, it also must meet South Coast Air Quality Management District (SCAQMD) Rule 1168 (2005)	✔	✔					✔
WOOD FINISHING							
Wood flooring must be pre-finished	✔	✔					
MAINTENANCE							
Does not require the periodic use of strippers, sealants, or floor finishes to maintain the product	✔	✔					

12 Requires 100% of all ingredients are analyzed for human and ecological toxicity.

13 Requires 95% of ingredients are analyzed for human and ecological toxicity.

14 Requires 75% of ingredients are analyzed for human and ecological toxicity.

15 California 01350 does not meet Greenhealth Approved Gold criteria

NSF We did not include NSF/ANSI 332 for resilient flooring because it is a point-based system that awards points across a variety of criteria, possibly resulting in a product earning the certification without addressing chemicals of concern.

CERTIFICATION AND ECO-LABEL VERSIONS:
Greenhealth Approved 2020 v.1   Cradle to Cradle 2020 v.4
Declare Red List 2020 v.3   Blue Angel 2020 v.2

CEH