

[MODEL SPECIFICATIONS »](#)

Product Subcategories Covered

- Institutional carpet: Broadloom carpet, carpet tiles, area rugs
- Furniture: Upholstered and un-upholstered seating, desks, tables, workstations and systems furniture, storage
- Resilient flooring

Issues and Impacts

Important and complicated products. Both flooring and furniture contain long lists of chemical ingredients, many of them hazardous and avoidable. Because they affect indoor air quality, furnishings are especially important for sustainable purchasing efforts: According to the US EPA, [indoor air quality can be two to five times worse than outdoor air quality](#). The availability of protective certifications and certified products has lagged behind our knowledge of these hazards, particularly with regard to fluorinated chemicals. Therefore, at this time the best purchasing specifications involve a combination of existing certifications and other requirements. Recyclability of carpets adds another complication, since carpet manufacturers (rightfully) avoid recycling materials containing chemicals like flame retardants or PFAS. For these reasons, safer product lists are especially helpful for purchasers.

Chemicals of Concern

Formaldehyde is an example of a harmful volatile organic compound (VOC) that is known to cause cancer, yet is still often used in adhesives found in wood furniture.

Fluorinated chemicals: Per- and poly-fluoroalkyl substances (PFAS) is a family of chemicals representing thousands of compounds. Some are very persistent in the environment and are linked to health impacts in women's reproduction and child development, hormone effects, and increased risk of cancer. PFAS is sometimes used as a surface treatment for carpets and upholstered furniture to increase stain, oil, and water resistance. Fluorinated chemicals have been found to migrate out of products and get into our air, dust, water and bodies.

Antimicrobial chemicals are sometimes added to furniture and promoted as protecting human health, however, these benefits are not supported by research. Antimicrobials may have adverse effects on beneficial microorganisms and other living things.



Low VOCs is not enough. Volatile organic compounds (VOCs), which escape from furniture and flooring into the air, are the most well known health issues associated with furnishings. Requiring low- and no-VOC certifications is a big step toward safer products, but given the many other hazardous chemicals involved, more restrictions are needed.

Carpet tiles are superior to broadloom (rolled) carpet for most situations. Repair is much simpler, involving the replacement of individual tiles, thus dramatically reducing waste (and hazardous ingredients) going to the landfill. Purchasers may need to accommodate certain special needs for broadloom products, for example, in historical buildings or on stairways.

For example, the antimicrobial chemical **triclosan** is commonly added to many consumer products, and easily absorbed through the skin at levels that can affect microbes in the body. Research has shown that long-term exposure may affect hormones, promote cancer, promote the development of antibiotic-resistant bacteria, and harm aquatic life.

Flame retardants are sometimes used in large quantities in upholstered furniture - up to 15% of foam cushions. Halogenated flame retardants have been linked to cancer and other serious diseases, yet government studies show that these chemicals do not provide added fire safety benefits in furniture. Flame retardants escape out of furniture and get into our air, dust, and our bodies, and are very persistent in the environment.

Vinyl, or polyvinyl chloride (PVC), is used in plastic parts of furniture and at times in fabric. PVC often includes harmful chemical additives like lead, flame retardants, or phthalates. Every stage in PVC manufacture and use involves health and environmental hazards.

SPLC Recommendations

Use third-party certifications. [Cradle-to-Cradle's](#) (C2C) new v. 4.0 certification covers a full range of environmental issues and offers rigorous chemical restrictions, when products become available. Until then, check Cradle-to-Cradle v. 3.1 carpet and furniture products ("Gold" or "Platinum" level) or [BIFMA Level 3 standard for furniture](#). Another broad and rigorous certification is the [Living Product Challenge \(LPC\)](#) for furniture and carpet products. LPC's Declare label and the new [Green Screen Certified](#) certification also include rigorous chemical restrictions, but do not address other environmental issues; if using Declare, check the boxes for "Red List Free" and "Third Party Verified." The [NSF/ANSI 140 Sustainability Assessment](#) is a broad-based, widely used standard for carpet only, however it is less stringent. Specify no PFAS or halogenated flame retardants separately if using C2C 3.1, BIFMA, or NSF certifications.

If possible, use safer product lists developed by Center for Environmental Health (CEH) ([carpet/flooring](#), [furniture](#)) or Health Care Without Harm ([carpet/flooring](#), [furniture](#)). GreenHealth ([carpet/flooring](#)) is a certification based on HCWH, and the product lists overlap.

Consult end users before finalizing bid documents. Show them the lists of safer products and ask if they meet their needs, for example, compatibility with existing designs, special contexts (like historic buildings), or special uses (like repairing existing carpet).

Avoid products advertised as "antimicrobial", "antibacterial", "antiviral" or "anti-odor". Despite marketing claims, the benefits are not supported by science.

Upholstery complicates furniture decisions. When furniture is listed as PFAS-free, it usually applies only to one kind of upholstery. If customizing upholstery, make sure to [check](#) that it is PFAS free also.

Health Product Declarations provide transparency on the health hazards of all ingredients, and push the industry in the right direction. Consider requiring [HPDs](#) for all purchases. Another alternative is requiring the [Declare label](#) with third-party certification.

Give preference to manufacturers committed to "circularity." This means that they provide take back programs, and that their products are made with safer materials and designed for disassembly/recycling.

SPLC Category Guidance

SPLC's [Sustainable Procurement Resources for Furnishings](#) offer in-depth information on strategies, case studies, trainings, community discussions and other resources.

Resources

Carpet and Flooring

- San Francisco's [carpet regulation](#), easily adaptable as model language
- San Francisco's [SF Approved carpets and adhesives list](#) meets the HCWH and the CEH criteria, and provides extensive details on product lines.
- The [CEH Healthier Flooring Purchasing Guide](#) is a searchable database that contains carpet and flooring products that have been self-reported by the manufacturer as being compliant with Healthcare without Harm's (HCWH) [Healthy Flooring and Healthy Carpet criteria](#). The guide also lists whether the product is available on the [NASPO contract](#). (National Association of State Procurement Officials).
- HCWH provides a [similar list](#) that is no longer updated by manufacturers; [Greenhealth Approved](#) is a new certification using the same criteria that is updated, but may have fewer listed products. (Note: Always verify these claims with the manufacturer.)

Furniture

- San Francisco's [model language for upholstered furniture](#)
- San Francisco's [SF Approved furniture list](#) meets the HCWH and CEH criteria, and also contains information on compliant textiles for upholstery.
- The [CEH Healthier Furniture Purchasing Guide](#) is a searchable database using the same criteria as HCWH.
- HCWH provides a list of eligible furnishings and textiles [here](#). Click on a manufacturer name to see their product lists and accompanying eco labels.