

# Flooring

## What are the key green issues?

- » **Human Health and Safety:** Carpets can harbour mold, dirt and dust mites within the fibres and backing that can lead to allergies and skin reactions. Some toxic chemicals and shampoos used in cleaning can affect the health of cleaning staff.
- » **Indoor Air Quality:** Carpets seam sealants, carpet padding and especially adhesives contribute to Volatile Organic Compounds (VOCs) off gassing. Anti-static, anti-soil, anti-stain, and anti-microbial coatings can also contribute to poor indoor air quality.
- » **Waste and Durability:** Carpets can be significant contributors to construction and demolition waste going to landfill.
- » **Materials/Energy Use and Emissions:** Carpets production of nylon based carpets is energy and water intensive. Dyeing by wet methods, steam fixing and drying consumes additional energy and water and result in wastewater releases to the environment.

## Myth Buster

It is not true that bamboo flooring is too soft and less durable compared to hard wood floors. The fact is that solid bamboo floors are quite hard and their strength is easily comparable to that of Northern Red Oak. Strand Woven bamboo flooring makes the hardest type of wood flooring on the market that responds well to frequent changes in temperature and humidity levels.

*Flooring includes indoor carpets, finished concrete, hardwood, linoleum and vinyl used in indoor offices, hallways, and common spaces and is typically installed as part of a new building or in a building improvement.*



## How does greener flooring advance Government's strategic priorities?

### ✓ Improving Human Health and Safety

Selecting a flooring material that has low or no VOCs and uses low VOC adhesives or non-toxic materials, finishes and cleaners will protect human health.

Materials such as finished concrete offer lower maintenance and lower total cost of ownership because of their ease of cleaning and durability.

### ✓ Reducing Emissions and Improving Air Quality

A flooring material that reduces the need for adhesives or chemically intensive cleaning solutions will improve air quality during installation and use.

Carpet tiles and finished concrete use either minimal or no adhesives at all, making installation easy while also having minimal impact on indoor air quality.

### ✓ Reducing Energy and Natural Resource Use

Carpeting that is made with natural and bio-based materials, recycled materials or hardwood from sustainably managed forests will help reduce energy and resource use.



Hard surface flooring such as finished concrete, hardwood, linoleum and vinyl are less energy, water and detergent intensive to clean and maintain. Some manufacturers of vinyl flooring use pre-consumer and post-consumer recycled content as well as bio based and sustainably sourced materials.

Polished and maintained concrete floors can be expected to last a hundred years or more, reducing the need for regular replacement and resource use.

### ✓ Reducing Unnecessary Waste

Carpet tiles and finished concrete have minimal installation waste.

Recycling of nylon carpet and use of postconsumer or post-industrial recycled material in their manufacture can also reduce waste. Many carpet manufacturers have carpet take back programs.

Recommended	Why is it important?	How do I know I am getting it?
<b>CARPETS</b>		
<p>✓ All carpets must be CRI Green Label certified</p>	<p>Substituting conventional carpets with green options is one of the most effective ways to reduce or eliminate exposure to chemicals that pose environmental and human health risks.</p>	<p> <a href="#">CRI Green Label</a>: Carpet and carpet cushion meet the requirements by the CRI Green Label Testing Program, which assures low VOC emissions and improved indoor air quality.</p>
<p>✓ Carpet must contain greater than 20 percent recovered material content (fibre and backing)</p>	<p>A greater recycled content ensures that resources and energy used to manufacture the carpet and backing are reduced.</p>	<p>Ensure with the supplier that the carpet contains greater than 20 percent recovered material content, preferably as post-consumer recycled content.</p>
<p>✓ Cushion/underlay must meet CRI Green Label Plus program requirements</p>		<p> <a href="#">CRI Green Label Plus</a> program assures that the cushion/underlay contain greater than 20 percent post-consumer post-industrial waste content and be 100 percent recyclable.</p>
<p>✓ Adhesive must be CRI Green Label Plus certified</p>	<p>Adhesives contribute to Volatile Organic Compounds (VOCs) off-gassing, often prompting asthma attacks and other health issues.</p>	<p>CRI Green Label Plus program assures that adhesives meet stringent total volatile organic compounds (TVOC) requirements.</p>
<p>✓ Carpet take back program</p>	<p>A take back program is a voluntary recycling program by a retailer or manufacturer that takes back the purchased product after its end of life to recycle and properly dispose of it.</p>	<p>Only choose a supplier with a carpet take back program.</p>
<p>✓ Carpet tiles should be standard</p>	<p>Allow for ease of maintenance and replacement of soiled areas.</p>	<p>Choose a supplier who offers tiles.</p>
<b>FINISHED CONCRETE</b>		
<p>✓ Low or no VOC finishes</p>	<p>Reduce impacts on indoor air quality during installation.</p>	<p>Choose a supplier who can verify low/no VOCs through a product specification or MSDS sheet.</p>

Recommended	Why is it important?	How do I know I am getting it?
<b>HARDWOOD</b>		
<p>✓ Wood must be sourced from sustainably harvested wood</p>	<p>Sustainable forest management addresses key environmental forest values—from water quality and biodiversity to harvesting and regeneration.</p>	<p>Wood is certified by one of the following internationally recognized forest certifications, which gives you assurance about the environmentally friendly management of forests as a source for the wood.</p> <p>  <a href="#">Forest Stewardship Council (FSC)</a>   <a href="#">Sustainable Forestry Initiative (SFI)</a>   <a href="#">Canadian Standards Association (CSA) Group Sustainable Forest Management System (SFM) standard</a> </p>
<p>✓ Low or no VOC finishes</p>	<p>Reduce impacts on indoor air quality during installation.</p>	<p>Choose a supplier who can verify low/no VOCs through a product specification or MSDS sheet or has the following certifications:</p> <p>  <a href="#">FloorScore</a>: Assures that your flooring promotes healthy indoor air quality and complies with the volatile organic compound (VOC) emissions criteria of the California Section 01350 standard.   <a href="#">GreenGuard</a>: Ensures a product has met some of the world's most rigorous and comprehensive standards for low emissions of volatile organic compounds (VOCs) into indoor air.                 </p>
<b>LINOLEUM</b>		
<p>✓ Low or non-toxic adhesives</p>	<p>Reduce impacts on indoor air quality during installation.</p>	<p>Choose a supplier who can verify low/no VOCs through a product specification or MSDS sheet or has the following certifications:</p> <p> <a href="#">FloorScore</a>  <a href="#">GreenGuard</a> </p>
<b>VINYL</b>		
<p>✓ Low VOC emitting materials</p>		<p>Choose a flooring that meets:</p> <p><a href="#">FloorScore</a></p>

## What else could I look for?

In addition to the minimum recommended criteria outlined above, there are stronger green attributes you can look for when making your purchasing decision.

Recommended	Why is it important?	How do I know I am getting it?
<b>Use Carpet Tiles</b>	Carpet tiles rather than roll carpets enable spot replacement of damaged tiles and thus increases the life of the whole carpeted area.	Ensure with your carpet supplier different carpet tile options and their service guarantees.
<b>Synthetic carpet fibres should be solution dyed</b>	Solution dyed carpet considerably reduces the amount of energy and water usage that is associated with wet dying. It is less prone to fading and side match problems thus increasing the life of the carpet and reducing carpet wastage during installation.	Ensure with the supplier that synthetic fibre carpets have been solution dyed.