



Environmental Purchasing Bulletin

The Monthly News Bulletin for Purchasing Staff

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CARPET FLOOR COVERING

Carpets do a lot more than just cover the floor. Carpets improve the look and feel of a room by adding color, texture and warmth. Carpets also reduce noise, provide traction, and even reduce glare.

Carpet brings added value to a space, which is why you will find it almost anywhere that you can find a floor. Carpet's universal use and appeal require it to serve a variety of functions and to withstand varying degrees of punishment. For this reason, carpet is made with several different types of materials and comes in different levels of fiber density.

CARPETING AND THE ENVIRONMENT

Carpeting, its cushion backing, and the adhesive to glue it down, emit Volatile Organic Compounds (VOCs). Because these compounds can have an adverse effect on indoor air quality, carpet manufacturers have now taken steps to produce carpets that emit less VOCs and other pollutants. These low VOC carpets are specifically marked with a **Carpet and Rug Institute (CRI) green label**. All of the carpeting products reviewed in **Green Seal's Choose Green Report *** meet the requirements for the CRI green labeling program. Green Seal criteria also specifically require some recycled fiber content (except when using natural materials) as well as repairability and recyclability.



What to look for in an Environmentally Preferred carpet

- CRI green labeled carpet
- CRI green labeled adhesive for installation
- CRI green labeled cushion
- Some recycled fiber content (unless natural fibers)
- Repairable carpet
- Recyclable carpet
- Manufacturer who uses a code for the materials used on the backing*
- Manufacturer who maintains a take-back program (Michigan has a take-back clause written into its contract with Lees Carpets)

*Recognizing the difficulty in separating the yarn material from a wide variety of carpet backing, some manufacturers have developed a coding system with a bar code on the back of the carpet to identify all of the materials used in it.

FAST FACTS

Approximately 5 billion pounds of used carpet are disposed of in landfills each year.

An EPA study estimated that poor indoor air quality costs the nation billions of dollars each year in lost work hours

Activities such as painting or carpeting can raise indoor air pollution levels to 100 times higher than outdoor

APPROPRIATE CARPET APPLICATIONS

Carpet fiber density is an indicator for carpet quality and durability. Carpet density is affected by several factors, such as, **gauge** (the stitches per inch across the carpet) **yarn thickness** and **pile height**. Higher traffic areas require higher density carpets.

Extremely heavy traffic areas would usually require a high density, synthetic, low pile height carpet in loop- pile form. Common synthetic carpet fibers are nylon, olefin, and polyester. Nylon is most often used in commercial applications because of its long lifetime and reasonable price. Nylon is also lightweight and can easily be cleaned. A **loop-pile** is a continuous string of yarn worked into the backing and is more luxurious and durable than the **cut-pile**, which has been cut at the end of the loop. **Pile height** is the height of the yarn from the backing to the surface.

For lower traffic areas a cut- pile or a loop-pile/cut –pile combination is appropriate. Executive offices or meeting places would not require a high density synthetic carpet fiber and may use a less durable natural fiber like wool.

CARPET INSTALLATION TIPS

Carpet is known to emit up to 200 different Volatile Organic Compounds within the first 72 hours of installation. Some low VOC installation techniques to consider are:

- Carpet should be unrolled and aired-out off site for 72 hours.
- Fresh air ventilation should be maintained for at least 72 hours after installation.
- CRI labeled low–emitting (non-solvent) adhesives should always be specified.
- Carpet cushion should also bear the CRI label.
- Perimeter/seam Hook tape is another low VOC installation option to consider,
- Another option is a releasable adhesive coating on the carpet back that sticks directly to the floor.

CARPET MANUFACTURERS AND RECOMMENDATIONS

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MANUFACTURER	FIBER TYPE	RECOVERED FIBER (%)	TRAFFIC	REPAIRABLE/ RECYCLABLE
Brintons U.S.Axminster Stock	80% Wool 20% Nylon	0	HC/ EHC	Yes/ No
Brintons U.S.Axminster Custom Wool Blend	80% Wool 20% Nylon	0	HC/ EHC	Yes/ No

MANUFACTURER	FIBER TYPE	RECOVERED FIBER (%)	TRAFFIC	REPAIRABLE/ RECYCLABLE
Collin Campbell & Sons Nature's Carpet	Wool	0	LR/ MR LC	Yes/ Biodegradable
J&J Commercial Carpet Carrara	Nylon	50% Min	EHC/ HC	Yes*/ Yes**
J&J Commercial Carpet Colours Supreme 32	Nylon	50% Min	EHC/ HC	Yes*/ Yes**
J&J Commercial Carpet Colours Supreme 38	Nylon	50% Min	EHC/ HC	Yes*/ Yes**
J&J Commercial Carpet Colours Supreme 48	Nylon	50% Min	EHC/ HC	Yes*/ Yes**
J&J Commercial Carpet Crosshatch	Nylon	50% Min	EHC/ HC	Yes*/ Yes**
Lees Carpets Unibond Broad Style: Faculty IV	Nylon	20%	HC	Yes/ Yes
Lees Carpets Unibond Broad Style: Check-Up	Nylon	20%	HC	Yes/ Yes
Lees Carpets Unibond Broad Style: Pebbleweave	Nylon	20%	HC	Yes/ Yes
Lees Carpets Unibond Broad Style: Accord	Nylon	20%	HC	Yes/ Yes
Lees Carpets Tile Style: Attribute	Nylon	20%	HC	Yes/ Yes
Lees Carpets Tile Style: Lineage	Nylon	20%	HC	Yes/ Yes
Lees Carpets Tile Style: Gulfstream	Nylon	20%	HC	Yes/ Yes
Lees Carpets Tile Style: Medical Arts	Nylon	20%	HC	Yes/ Yes
Mannington Commercial Carpets Broadloom Carpet Lines Six-Foot Vinyl Carpet Lines Vinyl Carpet Tile Lines	Nylon	Some	EHC/ HC	Yes/ Yes
Richmond Carpet Mills Beacon Hill	Nylon	Some	EHC/ HC	Yes/ Yes

MANUFACTURER	FIBER TYPE	RECOVERED FIBER (%)	TRAFFIC	REPAIRABLE/ RECYCLABLE
Richmond Carpet Mills Brookfield	Nylon	Some	EHC/ HC	Yes/ Yes
Richmond Carpet Mills Mesa Valley	Nylon	Some	EHC/ HC	Yes/ Yes
Richmond Carpet Mills Regency 11	Nylon	Some	EHC/ HC	Yes/ Yes
Richmond Carpet Mills Sisal Elite	Nylon	Some	EHC/ HC	Yes/ Yes

NOTES **LR** = Light Residential

MR = Medium Residential

LC = Light Commercial

HC = Heavy Commercial

EHC = Extra Heavy Commercial

* These carpets are repairable only when the following backings are used: Endure, Endure HPP, Lifespan/HPP-11 or Thermaloc.

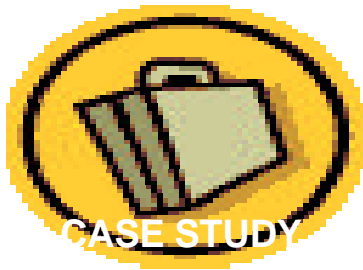
** Programs are available to divert carpet from the landfill. In some cases this may mean disposal through energy recovery activities.

MANUFACTURER CONTACT INFORMATION

Brintons U.S. Axminster Inc.....1-601-332-1581
 Collin Campbell and Sons.....1-800-667-5001
 J&J Commercial Carpet.....1-800-241-4586
 Lees Carpets.....1-336-379-2572
 Mannington Commercial Carpets.....1-800-241-2262
 Richmond Carpet Mills..... 1-800-241-2278

Purchasers, please feel free to share information about your successful environmental purchases. Send information to Bakerjj1@state.mi.us. We'll publish selected success stories to help transfer your valuable environmental purchasing information to others.

*Note: The Environmental Assistance Division partners with Green Seal and uses the Choose Green Report as a resource for this publication.



CASE STUDY

INTERFACE INC.

Interface is the largest commercial carpet manufacturer in the world. Headquartered in Atlanta, Interface celebrated its 25th anniversary in 1998. In December, 1997, and again in December, 1998, Interface, Inc, was named one of the Top 100 Companies to Work For in America by FORTUNE Magazine.

Interface is also a notable carpet manufacturing company due to their sustainable approach to manufacturing carpet products.

To Interface, sustainability means taking no more from the environment than they return.

Interface and its subsidiaries have adopted a simple yet effective model for the development of sustainable products: Here's how they're getting there:

REDUCE, REUSE AND RECYCLE

This is the first and most basic step: use less virgin material to deliver more value. To date, they have introduced dozens of products with 100% recycled content.

DESIGN FOR EASIER RECLAMATION

Conventional carpet products are designed never to come apart, making recycling expensive and energy-intensive. Interface is developing high-performing products that are “zippered,” with face and backing more easily separated for reclamation.

DESIGN WITH A SINGLE MATERIAL

Using single polymers in manufacturing avoids having to separate multiple polymers before recycling or composting. Instead, whole products can be directly recycled, or even composted, with greater energy efficiency and lower cost.

DESIGN WITH RENEWABLE MATERIALS

They are now developing products made with renewable materials such as PLA (polylactic acid, a carbohydrate derived from corn), wool, and hemp—offerings designed to deliver aesthetics and performance with radically reduced environmental impact.