

# CUSHION EXTENDS LIFE

Tiny cells in high-performance polyurethane cushion act as miniscule shock absorbers, both to the carpet and to the human foot

By Julie Goodman

Facilities managers are well acquainted with the benefits of carpet, but market research reveals that as many as half of all FMs are unaware that, when it comes to carpet's performance in the workplace, what counts is "what lies beneath." Designed with new technology, today's carpet cushion has been proven to extend a carpet's life, making replacement less frequent and therefore, less costly. Versatile polyurethane cushion, manufactured in a variety of grades and thicknesses, can be used for stretched-in or double glued carpet installations. Some broadloom carpet and carpet tiles are manufactured with cushion already attached to the backing.

Almost universally used in homes, cushion has been underused in the contract market, largely because the initial costs—of installing carpet over cushion or of purchasing attached cushion carpet products—are higher. More relevant, however, is the long-term view and a concern for what the carpet will look like a few years down the line. According to Terri Ianni Driscoll, ASID, IIDA, director of marketing, interior/architectural studio, KA Inc. Architecture, Cleveland, Ohio,

"The use of a quality underlay can prolong the life of a carpet from 50 to 75 percent."

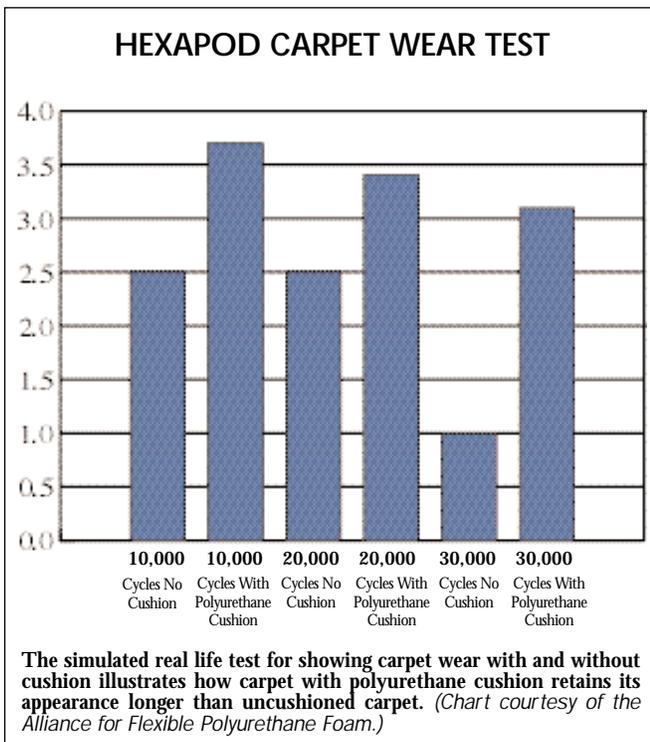
Appearance retention is the key to a carpet's life expectancy. Crushing, matting, fuzzing, and loss of definition of the tuft tips can cause appearance change to the surface of the carpet. Long before the actual fibers begin to break down, foot traffic can make carpet "ugly out," becoming matted and looking worn. But the tiny cells in a high-performance polyurethane cushion act as miniscule shock absorbers, both to the carpet and to the human foot. "If you lay carpet directly on the floor, the full force of the foot traffic causes it to get matte more quickly," says Robert Lockwood, a carpet performance researcher with Huntsman Polyurethanes, Auburn Hills, Michigan. "Cushion absorbs the energy of impact. It reduces matting and can double the wear years performance of carpet in the workplace."

## Wear tests confirm benefits

Two significant studies of the effect of cushion on carpet wear have been conducted recently using the Hexapod Drum test, which simulates aggressive walking and is widely used by the carpet industry to rate commercial carpet for appearance change due to foot traffic. "Many people don't realize the extent of the impact of a cushion on improving the long-term life of a carpet," says William Wald, technical director, Carpet Cushion Council, Old Greenwich, Connecticut ([www.carpetcushion.org](http://www.carpetcushion.org)), who conducted wear tests on its behalf. Wald's research, published in *On Carpet* in June, 1999, rated carpet appearance using the numerical system employed by the International Standards Organization (ISO) for carpet certification in Europe. The results of one test component focusing on the contract market showed that after 12,000 hexapod test cycles, a 36-oz. cut pile nylon carpet, representing an industry standard, averaged one full ISO appearance unit better than uncushioned carpet. The uncushioned carpet performed so poorly that it would not have met ISO's minimum standards for general contract use.

Lockwood presented his results earlier this year at the Dalton, Georgia-based Carpet & Rug Institute's (CRI), ([www.carpet-rug.com](http://www.carpet-rug.com)), technical conference. Lockwood's wear tests, although they were conducted using a standard-grade, 25-oz. cut pile residential carpet, have unmistakable implications for contract carpet installations. Lockwood used CRI's Performance Ratings (PR), which also rate changes in surface appearance on a one to five scale, with one registering severe change and five negligible change. At 30,000 Hexapod Drum Test cycles, all of the different cushions tested under carpet achieved distinct superiority in carpet appearance retention—2.5 to 3.5 PR with cushion, as compared with 1.0 PR for the no-cushion samples.

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\*Key to Overall Appearance/Wear Rating  
 5 - Negligible/no change, 4 - Slight change, 3 - Moderate change,  
 2 - Considerable change, 1 - Severe change

*Carpet Cushion extends life*  
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It is important to specify the appropriate grade of cushion for the application. Most polyurethane cushion is made from recycled, shredded polyurethane cushioning compressed into “bonded” polyurethane foam. Newly manufactured or “prime” polyurethane is also recyclable, after a long lifetime, into bonded cushion foam. For commercial applications, prime cushion should have a minimum 3.2-pound density; 6.5-pound density is the minimum for bonded polyurethane. While thicker cushion is favored for many residential applications, commercial grade polyurethane cushion should in most cases not exceed 3/8-in. in thickness.

Specifiers should note it is not enough to make sure the product is appropriate to the application. The professional quality of installation should be an important part of the spec, from how the floor is prepared to the preferred method of installation. Work with a reputable floor covering contractor whose installers are experienced with carpet cushion for commercial applications.

FMs who want to use commercial polyurethane carpet cushion can obtain information and technical guidelines for specifying carpet cushion for the workplace from the Alliance for Flexible Polyurethane Foam (AFPF) at 800/696-AFPF; or on the web: [www.afpf.com](http://www.afpf.com). □

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## On the Market

# BROADLOOM & CARPET TILE



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**1. ATLAS.** The Atelier Collection consists of six new patterns—Contour, Perspective, Element, Expression, Freehand and Surface—inspired by light and shadow. Manufactured on the 5/64th gauge Interloop tufting machine for enhanced performance, Atelier is presented in 24 tinted neutral colorways. Custom color is available at a minimum order of 45 lineal ft. **Circle 21.**

**2. BONAR FLOORS.** Neither a carpet nor a vinyl, Flotex Tile combines the advantages of both: the warmth and comfort of a textile

floorcovering with the durability and hygiene properties of resilient flooring. Available in sheet or tile, its unique features include durability and appearance retention, cleanability, spot release properties, ability to fight bacteria and styling options. **Circle 22.**

**3. CAMBRIDGE COMMERCIAL CARPETS.** The romance of the British Isles has been captured in St. Andrews, Aberdeen, and Royal Troon, three coordinated styles from this Beaulieu Commercial brand. Available in 13 colorways, all are durably crafted of 28-oz. Diatron “R”

solution-dyed nylon in 1/10 gauge loop graphic construction for lasting beauty and performance. **Circle 24.**

**4. COLLINS & AIKMAN.** Ancient Greek style is back with Corinth. The 16 choices of colorations, ranging from more neutral to brighter colors, make this floorcovering adaptable to a variety of environments. Its curvilinear elements provide a sense of openness and balance, and it is available in all standard roll goods and modular tile backings. **Circle 25.**



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**5. LEES.** An upgrade to its offerings from June 1999, the Celtic Collection now contains three designs—Wexford, Kinsale and Kerry—available in both 12-ft. broadloom and 18-in. by 18-in. modular carpet tiles. The colors and face weight have been adjusted since the product's initial launch. The Celtic Collection is ideal for corporate and retail settings in addition to large public spaces. **Circle 26.**

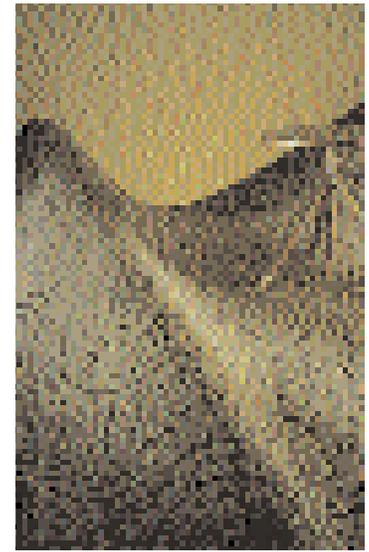
**6. EUROTEX.** Tretford wall carpet is now available in 52 heathered colorways, featuring superior sound absorption and wall protection. Tretford is available in 2-meter width and 50-cm. carpet tile, providing ease of use in elevators and corridors. Carpet tiles lift free to give access to cables set in the subfloor. The carpet's fusion bonding allows it to be cut in any direction without raveling. **Circle 27.**



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**7. MANNINGTON COMMERCIAL.** Gyro broadloom carpet has a large-scale spiral design available in 16 colors. The color palette features warm and cool colors that mix well with other architectural materials. Featuring a NeoTec cut and uncut tufting technology for high-quality patterning, the carpet is also durable and provides resistance to wear and tear, making it ideal for corporate, retail and hospitality use. **Circle 28.**

**8. MOHAWK INDUSTRIES.** Made with Savant fiber, a new BCF nylon product that is superior to other premium branded yarn systems, the French Collection offers a combination of stain resistance, ozone protection, and color flexibility. The collection comprises a four-product series of coordinated carpets including Avignone, Provence, Calais and Cannes. **Circle 29.**



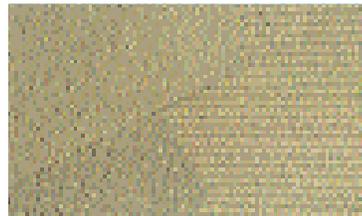
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**9. PACIFICREST MILLS.** Meridian is a tailored pinstripe design for a contemporary linear look. Polaris takes its inspiration from the northern sky, offering a pindot cut pile carpet of colorations and classic style. Greenwich blends pattern and color to produce a dense, cut pile carpet. Dupont Antron Legacy nylon fiber with built-in DuPont DuraTech soil resistance and antistatic properties are used in construction. **Circle 31.**

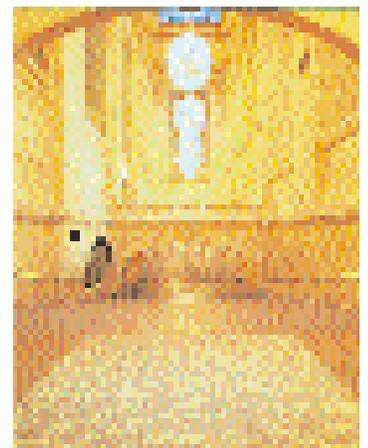
**10. SHAW CONTRACT.** The book ends modular collection features large-scale patterns and small-scale textures in an array of colors. Flexible design capabilities, EcoWorx backing, and the 24-in. component size make the collection useful and innovative. EcoWorx is an environmentally friendly backing system that is completely recyclable. **Circle 32.**



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