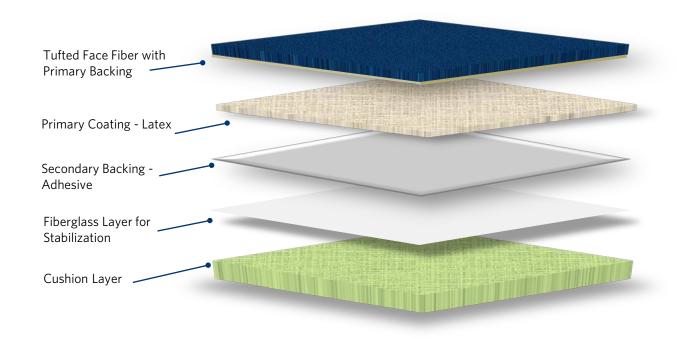


# Milliken BOOK 2017



### **CUSHION BACKING**

Comfort Plus® & Underscore™ are Milliken's latest generation cushion backing systems and come standard with Milliken modular carpet products. In addition to providing superior underfoot comfort and significantly improving durability, these cushion backings also offer ergonomic, acoustic, and environmental benefits.



Like an insulating shock absorber, Milliken cushion backings improve appearance retention and enhance comfort and safety. In addition to providing Severe TARR ratings, Milliken cushioned carpet tiles are unmatched in moisture management. They repel liquids at the surface and wick moisture away from the sub-floor, reducing conditions for mold and mildew growth. By allowing high levels of moisture to be transported through the tile, Milliken modular tiles can handle water vapor emissions up to 85% relative humidity. This unique feature eliminates one less worry about carpet in a high-humidity environment.



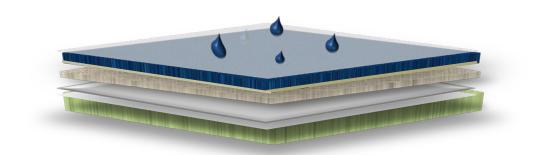




### MOISTURE + MILLIKEN = ZERO WORRIES

- Milliken carpet tiles have an unmatched moisture management system that works from the top & bottom.
- Liquid Barrier stops liquids at the surface
- Cushioned backing wicks moisture away from the subfloor, thereby reducing and controlling conditions for mold and mildew growth and preserving the adhesive bond to the sub-floor
- No Sealers needed! Sealers add time, cost, and VOCs which hurt Indoor Air Quality.
- PVC and plasticizer free to eliminate VOCs and create a stronger bond, compatible to all adhesives

StainSmart: Technology repels and beads surface moisture ALPHASAN® Antimicrobial Treatment inhibits mold, mildew and odor





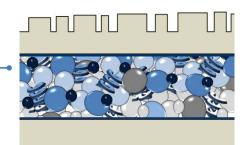




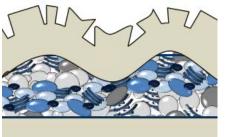
### **OPEN-CELLED FOAM VS. CLOSED-CELL FOAM**

### **OPEN-CELL URETHANE CUSHION**

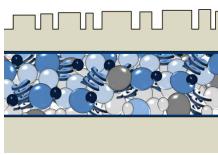
- Best cushioning (urethane is elastic, not plastic)
- Most durable
- Chemically inert & bonds to any surface
- Wicks away moisture



Micro-cellular open-cell urethane foam



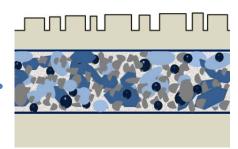
Open-cells or "Springs" recover after compression



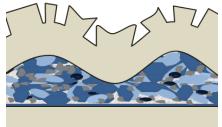
Cells **return to original** shape after compression

### **CLOSED-CELL THERMOPLASTIC CUSHION**

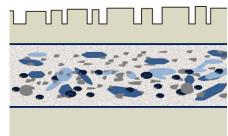
- Loss of performance over time
- Contains phthalates harmful to the environment
- Incompatible with some adhesives
- Traps moisture which can lead to mold/mildew issues



Closed-cell foam



Closed-cells or "Balloons" rupture under compression



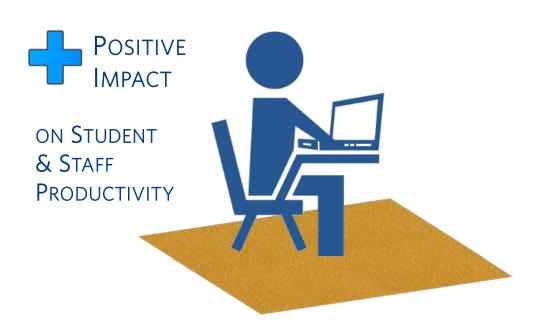
Loss of cushioning and reduced resiliency due to escaped air





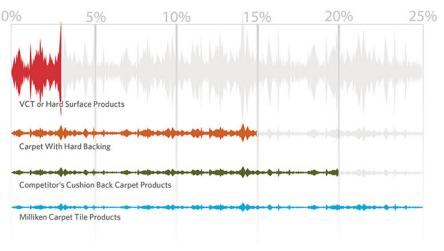
### **IMPROVED ACOUSTICS**

Noise has been repeatedly tied to reduced cognitive performance. Studies show office commotion impairs workers' ability to recall information, and even to do basic arithmetic. Listening to music to block out the office intrusion doesn't help: even that, impairs our mental acuity.



Carpet provides sound absorption and impact insulation to provide heightened privacy and fewer distractions from everyday foot traffic.

### NOISE REDUCTION COMPARISON



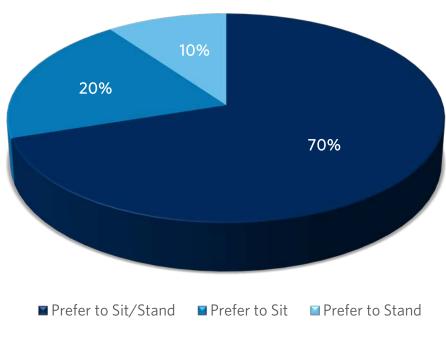
Mental arithmetic and non-speech office noise: an exploration of interference-by-content. Noise Health. 2013 Jan-Feb;15(62):73-8. doi: 10.4103/1463-1741.107160. Perham N1, Hodgetts H, Banbury S.







### **OPTIMIZING ERGONOMICS**



From a case study of musculoskeletal discomfort experienced by bank tellers. Conducted by A. Roelofs and L. Straker



**Ergonomics** is more than your desk and chair. Combining ergonomics with any academic setting allows educators to be more flexible in how they design coursework and better meet the educational needs of their students.



The key is to incorporate comfort and flexibility in the design, while Flexible learning environments require periods of standing and moving



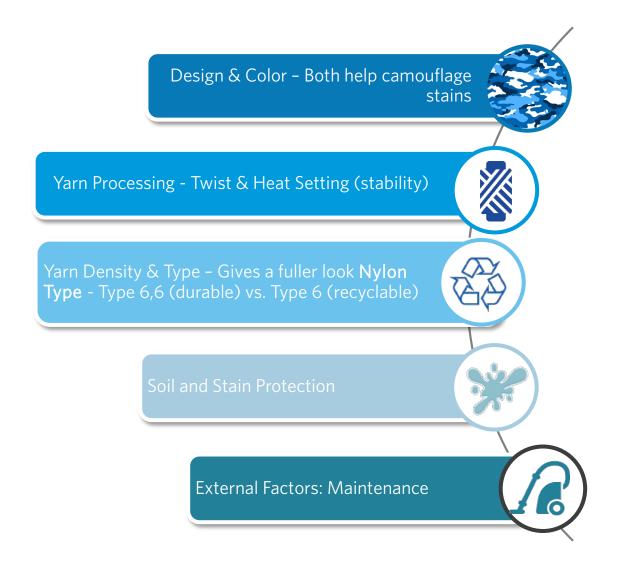
A research study conducted at the University of Pittsburgh, shows that Milliken attached cushion decreases muscle strain while standing by up to 24% versus competitor products.



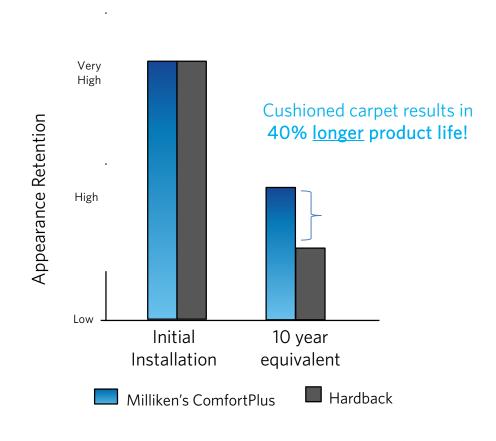
Research by Steelcase shows that changing postures is physically energizing, mentally stimulating and helps people stay refreshed and engaged.







### **APPEARANCE RETENTION & DURABILITY**



WHAT AFFECTS CARPET APPEARANCE, IN ORDER OF IMPORTANCE







TRACTIONBACK® is a remarkable bio-based, high-friction coating that keeps our PVC-free carpet tile securely in place without additional adhesives, floor sealers, or primers. Applied during the manufacturing process, carpet tiles with TRACTIONBACK® require no manipulation, additional taping, or gluing steps in the field. Just install carpet tiles directly out of the box.

### BETTER FOR THE ENVIRONMENT

Environmentally superior by every measure, TRACTIONBACK® consumes less raw materials and chemicals than 'peel and stick' products or wet adhesive systems. It eliminates the waste created by polyethylene films discarded at the installation site. And because no adhesives or floor sealants are used, TractionBack eliminates offgassing of volatile organic compounds (VOCs), improving air quality. Furthermore, the TRACTIONBACK® chemistry itself is bio-based. For all these reasons it's clearly better for the environment, indoors and out.

### TRACTIONBACK® Reduces or Eliminates:

- The need to prime or seal the floor
- Adhesive cost and installation labor
- Tools and labor to add other attachment mechanisms to the carpet tile
- Time spent spreading wet adhesives and waiting to dry
- Unnecessary waste, such as 'peel and stick' film covers
- VOC off-gassing typically associated with floor sealants and adhesives
- Traction concerns even in high-humidity environments
- Damage to raised access floors and high-quality sub-floors, leaving little or no residue
- Lost traction after lifting and replacing tiles multiple times







### **ENVIRONMENTALLY SUSTAINABLE**

Milliken has demonstrated a commitment to transparency by disclosing the components of our commercial carpet tile products through Declare®, a voluntary labeling program and database operated by the International Living Future Institute™, and complies with the Red List Imperative of the Living Building Challenge™. Our commitment to sustainable manufacturing includes:

- •Zero waste to landfill from our Milliken U.S. carpet manufacturing facilities since 1992
- •46% of energy used to manufacture Milliken carpet is renewable through company owned hydroelectric facilities and local landfill methane gas harvesting
- •Milliken modular carpet collections carry Environmental Product Declarations (EPDs)thirdparty certified by Underwriters Laboratory(UL)
- •All Milliken carpet is free of the 15 Red List chemicals defined in the Living Building Challenge™
- •All global Milliken products are carbon neutral and certified by the Leonardo Academy Cleaner and Greener® program. Carbon dioxide created in the manufacturing of all Milliken products globally is offset through company-owned sustainably managed forests and green energy producing facilities

- •Product Life Cycle Assessments (LCA) are used for new product development, as Milliken has used the Design for Environment (Dfe) process for commercial carpet since 2002
- •Our Comfort Plus® polyurethane cushion backing increases the first life of carpet more than 40%
- •All Milliken carpet is third-party certified to NSF 140 Gold or Platinum
- •All U.S. plants are certified as OSHA VPP STAR sites
- •All carpet manufacturing sites are ISO-14001 certified—the highest global standard for environmental responsibility
- •First U.S. carpet manufacturer to obtain the carpet manufacturing certification for the ISO 9000 series standard for quality



## PRODUCT PORTFOLIO



### REMIX 2.0 26% Recycled Content Available in 5 patterns and 24 colors Milliken

### REMIX 2.0

### PRODUCT AT-A-GLANCE

109
SCARLET

137
BOYSENBERRY

135
TANGERINE

138
PERIWINKLE

126
FRENCH BLUE

140
AZUL

Each pattern in the Remix 2.0 collection is available in 24 colors. The colors can be used without accents, or you can "Remix" them with one of 8, high-energy Vibes for an extra pop of color.

### Construction

Tufted, Loop modular carpet tile

Tile Sizes
50 cm x 50 cm

### Tufted Face Weight 28 oz/yd²

Stain Repel & Resist / Soil Release
StainSmart®

Total Recyclable Content (by total product weight) 100%

CRI Green Label Plus Rated

Contributes Maximum LEED Points for Carpet

Rated for Severe Traffic

### Milliken.

### RECOMMENDED PALETTE

REMIX 2.0 - BACKBEAT in Vinyl with French Blue



Backbeat in BKB129 -Upbeat



Backbeat in BKB109 -Etched



Freestyle in FRS129 -Upbeat



Freestyle in FRS109 - Etched



Mix Tape in MXT129 -Upbeat



Mix Tape in MXT109 -Etched











CFP70-122 Copper CFP122 Pale Gull Strand





CFP96-70-33 Iron Oxide

### **COLOR FIELD PAINTER**

PRODUCT AT-A-GLANCE

Color Field Painter is an additional pattern in the Color Field collection. It offers the same extensive standard colorline with the added benefits of a higher weight product, Comfort Plus® backing, and a bolder interpretation of the original pattern

Construction

Tufted, Textured Loop

Tile Size
25 cm x 1 m

Tufted Face Weight

20 oz/yd²

Stain Repel & Resist / Soil Release
StainSmart®

Yarn Type

Milliken-Certified WearOn®

Nylon Type 6,6

CRI Green Label Plus Rated

Contributes Maximum LEED Points for Carpet

Rated for Severe Traffic











COL60 Vinoso



COL60-120 Embers

### **COLOR FIELD**

### PRODUCT AT-A-GLANCE

With the ability to discern layers as if they were aged by nature, the collection offers 64 colors to create a quiet floor plane or allow punctuations of color with vibrant hues. This high performance, severe-rated modular plank allows Color Field to stand-up to the most extreme traffic while maintaining an imaginative color palette.

### Construction

Tufted, Loop modular carpet tile

Tile Sizes
50 cm x 50 cm

Tufted Face Weight 28 oz/yd²

Stain Repel & Resist / Soil Release StainSmart®

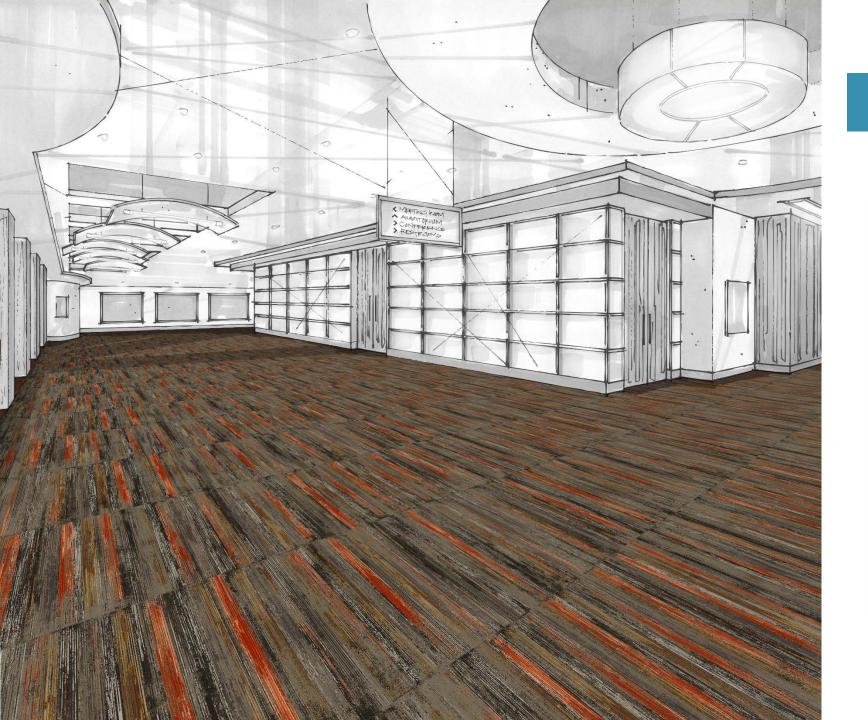
Total Recyclable Content (by total product weight) 100%

CRI Green Label Plus Rated

Contributes Maximum LEED Points for Carpet

Rated for Severe Traffic











### FIXATE LOOP

### PRODUCT AT-A-GLANCE

Quick Ship Available In Select Colors | PVC Free Cushion Backing System

Rows of bright color run parallel to one another, each trying to outrace the other. Varying width stripes introduce an organic quality to the classic precision of pinstripes while deeply saturated colors provide pure streaks of cheer. The feeling is dynamic, optimistic and fresh.

### Construction

Tufted, Textured Loop carpet tile

Available in 40 colors 50 cm and 1 meter modular tile

Total Recycled Content: 32%

Available with Milliken's TractionBack® technology







### **LYCEUM**

### PRODUCT AT-A-GLANCE

### Quick Ship Available In Select Colors

| PVC Free Cushion Backing System

. Plato becomes the foundation with a line of 16 neutrals and 36 bright accent colors for selected placement. With a choice of one, two, or three colors from the accent palette, Plato becomes the brilliant Aristotle, reflecting an individual's brand character or spirit of the interior.

### Construction

Tufted, Textured Loop

Digitally Patterned Print on X1

100% Milliken-Certified WearOn® Nylon Type 6,6

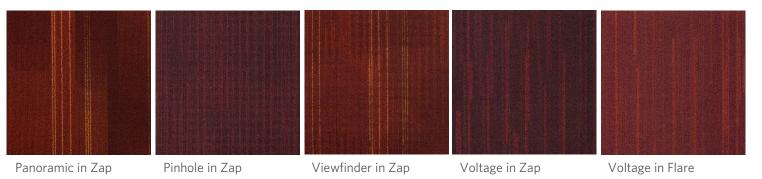
### Standard Tile Size:

1m x 1m for Plato and Aristotle (all standard colors) 25cm x 100cm for Plato (Brights only)

**Total Recycled Content: 26%** 







### SOUTHERN ANALOG

PRODUCT AT-A-GLANCE

Quick Ship Available | PVC Free Cushion Backing System In Select Colors

Southern Analog's variegated linear elements create a dreamlike impression of motion.

It's available in 3 designs and 6 colors (Viewfinder is only available in 2 colors)

Construction

Tufted, Textured Loop modular carpet tile

Tile Sizes

50 cm x 50 cm

Tufted Face Weight

 $15 \text{ oz/yd}^2$ 

Stain Repel & Resist / Soil Release

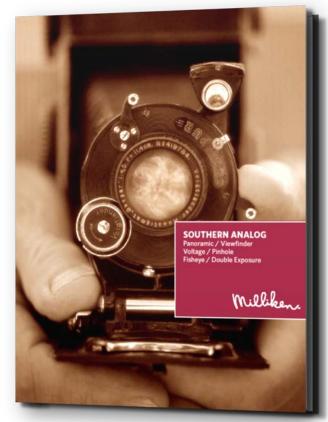
StainSmart®

Total Recycled Content 24%

Rated for Severe Traffic

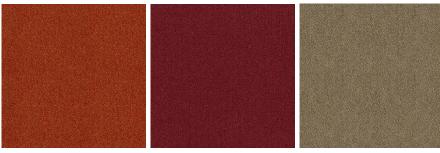












FWK102 Mezzanine

FWK109 Scarlet

FWK121 Torus

### **FORMWORK**

### PRODUCT AT-A-GLANCE

Quick Ship Available | PVC Free Cushion Backing System

Formwork provides a practical and timeless coordinate to a wide selection of Milliken collections globally—made easier by coordinating colors using our Color Reference system. The functional modular tile provides a full range of solutions. It can be used as a or act as a transition between patterns.

Construction

Tufted, Level Loop modular carpet tile

Tile Sizes

50 cm x 50 cm

**Tufted Face Weight** 

 $18 \text{ oz/yd}^2$ 

Stain Repel & Resist / Soil Release

StainSmart®

**Rated for Severe Traffic** 



## **GHOST ARTIST** Milliken SHADOWPOINT in Cache, monolithic tile installation

### **GHOST ARTIST**

### PRODUCT AT-A-GLANCE

Quick Ship Available | PVC Free Cushion Backing System

### Construction

Tufted, Level Loop modular carpet tile

### Tile Sizes 50 cm x 50 cm

### **Tufted Face Weight**

Facade: 21 oz/yd2 (712 g/m2) Semblance: 21 oz/yd2 (712

g/m2)

Shadowpoint: 23 oz/yd2 (780

g/m2)

Trace: 22 oz/yd2 (746 g/m2)

### Finished Pile Height

Facade/Shadowpoint: 0.109" (2.77 mm)

Semblance/Trace: 0.125" (3.18

mm)

Stain Repel & Resist / Soil Release StainSmart®

Rated for Severe Traffic

### RECOMMENDED PALETTE



**FAÇADE** in FAC124-94 Cache



FAÇADE in FAC60-82 Seclude



SEMBLANCE in SEM124-94 Cache



SEMBLANCE in SEM60-82 Seclude



SHADOWPOINT in SHA124-94 Cache



SHADOWPOINT in SHA60-82 Seclude





### CLICK TO VIEW THE COLLECTION

CLIENT: Splunk Seattle, Washington, USA

PRODUCT: Formwork Ghost Artist





### PARTNERING FOR THE FUTURE OF EDUCATION

Milliken's cushioned Floor Coverings provide students and staff with unparalleled acoustics, indoor air quality, and comfort to significantly enhance their learning environment. With over 149 years of experience designing sustainable textiles, colorants, and composites, Milliken's innovative designs transform a school's image, performance, and safety to improve student performance and teacher retention. With our easy to use carpet tiles, cleaning kits, Moisture Pro adhesives, and on-site MilliCare cleaning services you can fast-track renovations and minimize maintenance costs

FAST DELIVERY
FASTER
INSTALLATION

BETTER ACOUSTICS

BETTER LEARNING ENVIRONMENT

MOISTURE + MILLIKEN = ZERO WORRIES



Millien