



Design for the Environment Textiles

The Design for the Environment protocol is a fundamental part of the Herman Miller product development process. The foundation of the DFE protocol is the McDonough Braungart Design Chemistry (MBDC) Cradle to Cradle Design Protocol which supports the development of environmentally intelligent products.

Every new textile is developed using three environmental lenses and all existing textiles have been assessed following the same criteria:

Material Health & Safety

Is the chemical content of all fibers, dyes, and finishes safe for human health and the environment?

Material Content & Disposal

Does the fiber contain recycled or renewable content? Is the complete textile made of homogenous or compatible components, hence recyclable or compostable at the end of its useful life?

Energy Consumption

Is the textile made at a carbon neutral facility and/or one that uses renewable energy? Is the textile itself carbon neutral?

Useful links and additional reference:

Crypton Green

Crypton Green is a stain resistant, antimicrobial and breathable moisture barrier technology. Woven textiles are immersed in a formula that permanently encases each individual fiber in a protective coating that becomes part of the textile itself.

<http://www.cryptonfabric.com/crypton/about.do?wtabld=3>

GreenShield

GreenShield is a nanotechnology finish that mimics the surface of the lotus leaf using the principle of “micro-roughness” to reduce the use of chemicals on fabrics. Undetectable to the human touch, “micro-roughness” works at a molecular level and induces water and oil to ride on a pocket of air, never penetrating the fabric.

<http://www.greenshieldfinish.com/>

YES Essentials

YES Essentials provides stain resistance and ease of maintenance. The antimicrobial additive is silver based and inhibits the growth of mold, mildew and other microorganisms. The moisture barrier keeps liquids from penetrating the fabric.

<http://www.yesessentials.com/>

High Performance Textiles Brochure

Our Materials offering includes a number of textiles with performance qualities which make them appropriate for special applications. These include textiles that are engineered to be stain resistant, water resistant, antimicrobial, or antimony free.

<http://www.hermanmiller.com/Design-Resources/Materials/High-Performance-Textiles>

ACT Green Glossary

ACT (Association for Contract Textiles) is a professional trade association comprised of companies involved in the design, development, production and promotion of textiles for commercial interiors. ACT has compiled a glossary of environmental terms that are used in reference to the textile industry in an effort to demystify environmental jargon.

http://www.contracttextiles.org/glossaries.jsp?Glossary_param=2&navigation=22

MBDC Cradle to Cradle Implementation

McDonough Braungart Design Chemistry (MBDC) is a global sustainability consulting and product certification firm founded in 1995 by world-renowned architect William McDonough and chemist Dr. Michael Braungart. MBDC consults clients on leaving a ‘positive footprint’ on the planet (instead of reducing a negative footprint) by implementing the Cradle to Cradle framework. In action, the Cradle to Cradle framework can be applied to assessing the human and environmental health characteristics of materials throughout their life cycles.

<http://mbdc.com/detail.aspx?linkid=1&sublink=7>

FTC Guides for the Use of Environmental Marketing Claims

FTC guides represent administrative interpretations of laws administered by the Federal Trade Commission for the guidance of the public in conducting its affairs in conformity with legal requirements. These guides specifically address the application of Section 5 of the FTC Act to environmental advertising and marketing practices. They provide the basis for voluntary compliance with such laws by members of industry.

<http://www.ftc.gov/bcp/grnrule/guides980427.htm>

		Content	Finish	Backing	Fiber Content	End of Life	Dyes/Treatments	Energy
Seating								
<i>Price Category 1</i>								
AireWeave	3Q00/7Q00	67% elastomeric, 33% polyester			○	○	●	○
ColorGuard	3P00	100% vinyl		88% polyester, 12% cotton	○	○	○	○
Crossing	8T00	87% antimony-free polyester, 13% polyester			●	●	●	●
Echelon	3S00	100% polyester			○	●	●	●
Flexnet	6V00	69% elastomeric, 31% polyester			○	○	●	●
Lyris	4W00	67% elastomeric, 33% polyester			○	○	●	○
Pellicle Classic	3D00/3V00	70% elastomeric, 30% polyester			○	○	●	○
Slideshow	2Z00	56% pre-consumer recycled polyester, 44% polyester			○	●	●	●
<i>Price Category 2</i>								
Crepe	9200	100% pre-consumer recycled polyester			●	●	●	●
Moiré	3A00	55% post-consumer recycled polyester, 45% pre-consumer recycled polyester			●	●	●	○
Pellicle Tuxedo	4M00/4Q00	64% elastomeric, 36% polyester			○	○	●	○
Pellicle Waves	4E00/4F00	68% elastomeric, 32% polyester			○	○	●	○
Railroad	8V00	94% pre-consumer recycled polyester, 6% post-consumer recycled polyester			●	●	●	○
Rhythm	3000	100% polyester			○	●	●	●
Square Peg	3B00	100% pre-consumer recycled polyester			○	●	●	●
Twist	8R00	80% antimony-free polyester, 13% pre-consumer recycled polyester, 7% polyester			●	●	●	●
<i>Price Category 3</i>								
Bento	7000	100% antimony-free polyester			●	●	●	●
Checkmate	5G00	100% pre-consumer recycled polyester	YES Essentials		●	○	○	●
Coil	8S00	100% pre-consumer recycled polyester			●	●	●	●
Latitude	8M00	100% polyester			○	●	●	○
Stitches	8U00	54% polyester, 46% post-consumer recycled polyester			○	●	●	●
Wickendon	5K00	100% polyester			○	●	●	○
<i>Price Category 4</i>								
Bingo	7Y00	100% polyurethane	Antimicrobial	100% polyester knit	●	○	●	●
Cygnus	5400	69% elastomeric, 31% polyester			○	○	○	○
Jump Rope	5J00	100% polyester	YES Essentials		○	○	○	●
Plateau	6J00	100% polyester			○	●	○	●
Quilty	6S00	100% antimony-free polyester	GreenShield		●	●	●	●
Spools	8Y00	49% polyester, 45% pre-consumer recycled polyester, 6% post-consumer recycled polyester	Crypton Green		○	○	●	○
<i>Price Category 6</i>								
Balance	3500	100% polyester			○	●	●	●
<i>Price Category 9</i>								
Leather	2100	100% leather			●	●	○	●

Fiber Content

- Renewable or 100% recycled or green/yellow chemistry
- 50%+ of textile any combination of these
- Below 50%

End of Life

- Recyclable or compostable
- Not recyclable or compostable

Dyes/Treatments

- Dyes/treatments are optimized per Cradle to Cradle design protocol
- Dyes/treatments are assessed, but not optimized
- Dyes/treatments are not assessed

Energy

- Carbon neutral product
- Renewable energy used to manufacture or carbon neutral facility
- Product and facility not carbon neutral or using renewables

