



KnollTextiles and Environmental Sustainability

KnollTextiles

We want to make it easier for our customers to understand and identify our environmentally sustainable products and practices. This guide defines the qualities of specific textile products which result in an environmental designation. It also describes what we are doing as a company within the larger Knoll family, including our work to protect the biosphere, conserve natural resources, and reduce waste.

KnollTextiles Green Bar Fabrics

KnollTextiles has over seventy fabrics that are designated with a “green bar,” which indicates either recycled content, natural fiber, or eco-intelligent® fiber. These fabrics can help companies, healthcare organizations and educational institutions achieve leadership in Energy and Environmental Design (LEED®) workplace certification.

Recycled Content

Where applicable, KnollTextiles fabric tags designate specific percentages of recycled polyester. The categories for recycled polyester are post-consumer and post-industrial. What is the difference? Post-consumer recycled fiber is generated from residential and consumer waste, such as soda bottles. Post-industrial recycled fibers are recovered from industrial and manufacturing processes.

Recyclable Fabric

Recyclable products, such as 100% polyester fabrics, are capable of being diverted from waste streams for recycling.

Rapidly Renewable Materials

Where applicable, each tag also designates the percentage of natural fiber that is considered renewable. A renewable resource, such as wool, can be replenished at a rate equal to or greater than its rate of depletion.

Terratex™

Fabrics that bear the Terratex name are made from 100% recycled polyester and are recyclable. They include panel fabrics Ornament, Basket Draft, Foundation, Frequency, Micro, Mezzo, Macro, Raku Cloth, Reflect, and the upholstery fabric Ingot. Terratex branded products are also manufactured with continuously improved methods to reduce waste, emissions, energy, and water use. Plus, for all Terratex products in our line, 100% of the electricity used to make these products is matched by Green-e certified renewable energy certificates; these credits support clean wind energy.

Eco-Intelligent® Polyester

Eco-Intelligent polyester is produced and dyed with environmentally safe ingredients, including a catalyst that replaces the heavy metal antimony, a known carcinogen. The product is a “technical nutrient,” designed to be safely recycled into new fabric at the end of its life, with no hazardous by-products. It is Cradle-to-Cradle™ certified by the third party organization McDonough Braungart Design Chemistry (MBDC) for reduced environmental impact and human safety.



1. Monarch upholstery (recycled polyester)
2. Mini-stitch upholstery (eco-intelligent polyester)
3. Rapidly renewable upholstery fabrics
4. Enmesh upholstery (recycled polyester)



1. Lore upholstery with Crypton Green
 2. Star Struck upholstery with Nano-Tex
 3. Crypton Green Collection

KnollTextiles Environmentally-Sensitive Finishes

KnollTextiles is committed to bringing you high performance finishes that are also safe for the environment, including Crypton Green and Nano-Tex® with Durablock™.

Crypton Green

- + These fabrics combine post-consumer recycled polyester fibers with an optimized chemistry for reduced environmental impact and human safety.
- + The Crypton Green formula provides the same moisture, stain, odor, and bacteria resistance that you expect from KnollTextiles, with an added guarantee that each ingredient has low volatile organic compound (VOC) emissions.
- + The re-engineered fabric system underwent evaluation to prove its safety, resulting in Cradle-to-Cradle certification as well as SCS Gold Indoor Advantage™ certification. Crypton Green also supports renewable energy. In order to offset energy used for every yard produced, Green-e certified energy certificates are purchased to fund the expansion of renewable energy resources.

Nano-Tex® / Nano-Tex® with Durablock™

- + Both Nano-Tex and Nano-Tex with Durablock products are Cradle-to-Cradle certified by the third-party organization MBDC for reduced environmental impact and human safety.
- + Additionally, this fabric system is recyclable when used on a 100% polyester product.
- + Nano-Tex provides long-lasting spill resistance. Durablock is a moisture barrier that can be combined with Nano-Tex for added performance benefits.
- + Within the KnollTextiles line, Nano-Tex is standard on several upholstery products. In addition, Nano-Tex and Nano-Tex with Durablock can be added to over 60 fabrics for an additional cost and lead time.



1. KnollTextiles sampling
 2. Cato upholstery (rapidly renewable material)
 3. Glisten wallcovering (recycled polyester)

Knoll, Inc. and Environmental Sustainability

Today, Knoll focuses on three key environmental areas: Climate Change; Third-Party Certification; and Environmentally-Friendly Materials, Products, and Manufacturing Processes.

Climate Change

- + Through our membership in the Chicago Climate Exchange (CCX®), we have developed a comprehensive energy management program, which includes a legally binding commitment to reduce our greenhouse gas emissions in North America. In 2006, Knoll became the first company in the contract furniture industry to join the CCX.
- + Knoll participated in the 2006 and 2007 Clinton Global Initiative meetings, which brought together global leaders to devise and implement innovative solutions to some of the world's most pressing challenges, such as global warming.

Third-Party Certification

- + We reach out and align with third party certification organizations that share our commitment to sustainability. All Knoll facilities worldwide are ISO (International Organization for Standardization) 14001 certified for environmental management.

- + All KnollTextiles upholstery, panel, drapery, and Imago™ products, and all Knoll office systems and furniture, are certified by the Greenguard Environmental Institute for reduced low chemical and particle emissions in interiors products.
- + Knoll has also achieved Forest Stewardship Council certification on all North American plants that manufacture wood products.

Environmentally-Friendly Materials, Products, and Manufacturing

- + Knoll has adopted the SMART® Consensus Sustainable Product Standard for furniture and systems.
- + SMART requires the completion of a Life Cycle Analysis (LCA), which ensures that all key materials and processes are captured and converted into environmental impacts.
- + Knoll has comprehensive programs to address issues such as water protection, waste reduction, recycling, and health and human safety.



1.



2.

3.

- 1. Harrison upholstery (rapidly renewable material)
- 2. Lore upholstery with Crypton Green
- 3. Knoll's LEED-certified Lubin building

KnollTextiles and LEED®

KnollTextiles products can help clients achieve Leadership in Energy and Environmental Design (LEED) certification for Existing Buildings, Commercial Interiors, and New Construction. The system is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings.

LEED credits apply to all of the materials within a building, with fabric being one potential component. Credits fall into the following categories:

Recycled Materials and Rapidly Renewable Materials

These credits involve the use of materials, including furniture and furnishings, with post-consumer and post-industrial recycled content or products made from natural fibers harvested within a 10-year cycle.

Regional Materials

This credit involves materials and products that are manufactured regionally within 500 miles of the project.

Indoor Air Quality

Credits are also available for furniture and textiles that can make a positive contribution in the Indoor Environmental Quality category. GREENGUARD certification contributes to this category.

Innovation Credits

Innovation credits can also be given for products that show exceptional performance above the standards requirements, including Cradle-to-Cradle certified products.

Knoll LEED Facilities

Knoll is committed to obtaining LEED certification when building or refurbishing our facilities and showrooms. Completed Knoll LEED projects include the San Francisco and Philadelphia showrooms and the Knoll Lubin manufacturing facility in East Greenville, PA. The Knoll Atlanta, Miami and Chicago showrooms are currently undergoing the certification process.