

Theory 2.0

Manufacturing	
ISO 14001 Certified	All of Milliken's LaGrange, GA manufacturing locations are certified through third party auditors to ISO 14001, the highest global standard for environmental responsibility. Our recently acquired Calhoun and Dalton, GA facilities are in the process of being certified. This certification assures continual improvement and monitoring of all key environmental impact categories and processes.
OSHA VPP Sites	The Voluntary Protection Program (VPP) promotes effective worksite-based safety and health. In the VPP, management, labor and OSHA establish cooperative relationships at workplaces to implement a comprehensive safety and health management system. OSHA VPP approval indicates official recognition of the outstanding efforts of employers and employees who have achieved exemplary occupational safety and health. All Milliken U.S. manufacturing locations are OSHA VPP sites.
Corporate Social Responsibility Actions	
Carbon Negative Status	Milliken is the only carpet manufacturer to achieve carbon negative certification for operations worldwide without purchased carbon credits. This means we capture and offset more carbon dioxide than we emit. This status is based on quantified emissions that include energy reduction, renewable energy and carbon sequestration delivered by its forests as verified by the respected Leonardo Academy.
EPA Partnerships	The U.S. Environmental Protection Agency regulates, protects and educates concerning the environment. It offers many partnership opportunities for business to measure and reduce environmental impacts. Milliken participates in SmartWay™, WasteWise™ and the Landfill Methane Outreach Program (LMOP).
Green Energy	Milliken seeks renewable energy sources and burns methane harvested from two landfills replacing natural gas in boilers. The first use of landfill gas began in 2005 and the second in 2011. A hydroelectric plant that is part of the Milliken family of companies directly supplies electricity to a manufacturing location.
Life Cycle Analysis	We use Life Cycle Assessment (LCA) to track inputs and outputs of raw materials and energy to make our products and processes more sustainable and through vigilance and commitment, we continuously improve our products and processes to increase the value to our customers. Applying the Eliminate, Reduce, Reuse and Recycle pyramid and the principles of Design for the Environment, Milliken uses Life Cycle Inventories and LCA to comply with ISO 14040.
Reduced Packaging	Packaging reductions since 1991 have saved more than 250 million pounds of cardboard by shipping modular carpet on pallets versus boxes.
Water Reduction	Milliken recognizes that the quantity used as well as the quality returned are important, and we have lowered actual water usage by 67% from 1991-2011. Our eco-conscious dyeing technologies reduce water consumption and waste.
Zero Waste	Milliken has sent zero waste to landfill from our LaGrange, GA carpet manufacturing since 1999, from our China carpet manufacturing since 2010 and our Dalton and Calhoun, GA carpet manufacturing since 2011.

Certifications	
Carbon Neutral	Milliken professionally managed forests sequester more carbon dioxide than our facilities emit worldwide. All carpet collections are certified carbon neutral by the Leonardo Academy without purchased credits.
Cleaner and Greener®	Milliken & Company became a Cleaner and Greener® certified manufacturer in 2004, recognized for innovative renewable energy and emissions reduction strategies by the Leonardo Academy.
CRI Green Label Plus	All Milliken products are certified under the CRI Green Label Plus program - the higher standard for indoor air quality, a distinction awarded to products emitting very low levels of VOCs. More than 90 percent of our products are rated for "Severe Wear" (highest rating for appearance retention) by the Carpet and Rug Institute.
NSF 140 - 2007e	The ANSI/NSF 140-2007 Sustainable Carpet Assessment (NSF-140) is intended for commercial, hospitality, and similar carpets. Reliable third-party verification from reputable auditors provides assurance that product expectations are met. California standards have been incorporated into the final ANSI/NSF 140-2007 standard at Platinum certification levels. All Milliken commercial carpet collections are certified under the NSF 140-2007 Sustainable Carpet Assessment Standard.
Partnership for a Sustainable Georgia	The Partnership for a Sustainable Georgia assists Georgia businesses in using continuous improvement tools to reach better environmental results and a better bottom line. Milliken is a Gold Partner with Sustainable Georgia.
SMaRT®	SMaRT is one of the recognized Leading Sustainable Standards that may contribute an Innovation Design Credit for LEED. All Milliken products manufactured with Comfort Plus® ES, Comfort Plus® ESP, Underscore™ ES, Underscore™ ESP backing or lino woven latex broadloom backing are SMaRT certified. Milliken is the only carpet to earn SMaRT Sustainable Platinum certification.
Technologies	
AlphaSan®	AlphaSan®, launched in 2002, provides long-lasting antimicrobial protection that inhibits odors caused by mold and mildew. AlphaSan is a safe and effective technology that demonstrates efficacy against all bacteria.
ES and ESP cushion backings	For modular carpet, Milliken's Comfort Plus® cushion backing, introduced in 1989, and Underscore™ cushion backing extend your carpet's life by up to 50%. Acting like an insulating shock absorber, it protects against wear, improves appearance retention, conserves energy, and enhances comfort and safety. Milliken modular carpet customers have the option of ES backing with NSF-140 Gold ranking or ESP backing with increased post-consumer content and NSF-140 Platinum ranking.
MilliCare®	MilliCare® Textile and Carpet Care, a dry cleaning system, removes dirt and up to 99% of pollutants and harmful VOCs (Volatile Organic Compounds) when used with a properly functioning HVAC system. It requires up to 97% less water than wet cleaning methods. Wet carpet cleaning can drive up utility costs and negatively impact the environment. The chemicals used by MilliCare are both non-toxic and biodegradable. The system meets the California Code for low VOCs, plus Green Seal and CRI Seal of Approval certifications. Independent studies show indoor air quality improves when MilliCare is used as the maintenance program.
PVC-free systems	We started eliminating PVC from our products 25 years ago. To date, this change has kept more than a billion pounds of PVC out of production, and we continue to work to eliminate all PVC from our product portfolio.
StainSmart®	StainSmart® stain and soil resistance technology, introduced on carpet in 2004, is applied during manufacturing, becoming an integral component of the carpet that ensures long-term appearance retention.
TractionBack®	TractionBack® adhesive-free modular carpet installation system improves indoor air quality by eliminating off-gassing and Volatile Organic Compounds (VOCs). TractionBack was first introduced in 2003, then improved to Bio-Based TractionBack in 2005. It is offered on all Milliken tile products. The remarkable high-friction coating applied to carpet tile backing during manufacturing prevents lateral movement, even in high-traffic areas. Yet the tiles lift easily for underfloor access or replacement. A large majority of our tile products do not require a floor sealer.

Affiliations	
ASBE	The Alliance for Sustainable Built Environments represents global companies recognized for leadership in sustainability and committed to delivering high performance sustainable solutions for the built environment. Milliken is a founding member in 2003.
CARE	Carpet America Recovery Effort SM (CARE), a voluntary initiative of the carpet industry and government, focuses on developing carpet reclamation and recycling methods to prevent carpet from burdening landfills. Milliken is an actively supports this industry effort.
CRI	The Carpet and Rug Institute (CRI) is the science-based source for information about carpet and rugs. As a founding member, Milliken continues to support industry efforts to provide fact-based education.
EPA LMOP	The U.S. EPA's Landfill Methane Outreach Program (LMOP) is a voluntary assistance and partnership program that promotes the use of landfill gas as a renewable, green energy source. Milliken partners with the City of LaGrange to harvest methane from the local landfill and expects to launch its second project by year end.
EPA SmartWaySM	SmartWay SM is a voluntary collaboration between the U.S. EPA and the freight industry to increase energy efficiency while significantly reducing greenhouse gases and air pollution. Milliken joined the EPA SmartWay Transportation Partnership in 2006.
EPA WasteWiseSM	EPA WasteWise SM is a voluntary program through which organizations eliminate costly municipal solid waste and select industrial wastes, benefiting their bottom line and the environment
GFC	The Georgia Forestry Commission (GFC) provides leadership, service, and education in the protection and conservation of Georgia's forest resources. Milliken partnered with GFC to launch Making the Shade, a program to increase Georgia's playground safety by adding shade trees.
IFMA	Established in 1980, the International Facility Managers Association (IFMA) is dedicated to promoting excellence in the professional management of the built environment. Milliken is a founding Corporate Sustaining Member of IFMA.
IIDA	The International Interior Design Association (IIDA) was founded in 1994 to create an association that would represent interior designers worldwide. Milliken Contract maintains the highest level of industry membership status.
MTS	Sustainable products provide environmental, social and economic benefits while protecting public health, welfare, and environment over their full commercial cycle, from the extraction of raw materials to final disposition. MTS, the Institute for Market Transformation to Sustainability, develops standards for sustainable products.
National Arbor Day Foundation	The National Arbor Day Foundation is a nonprofit, environmental education organization of nearly one million members, with a mission to inspire people to plant, nurture, and celebrate trees. With a passion for trees, Milliken has a long history of partnering with NADF.
NEWH	Founded in 1984, the Network of the Hospitality Industry (NEWH) is the premier networking resource for the hospitality industry, providing scholarships, education, leadership development, recognition of excellence, and business development opportunities. Milliken supports the organization and is represented on the sustainability committee.
USGBC and WGBC	The non-profit U.S. Green Building Council is committed to a prosperous and sustainable future for our nation through cost-efficient and energy-saving green buildings. Milliken is a founding member of USGBC and supports the World Green Building Council.



LEED Contributions	LEED-NC	LEED-EB	LEED-CI
Materials Credit 2 - Construction Waste Management Divert construction, demolition and other debris from landfill disposal. Milliken's No Carpet to Landfill Pledge supports this credit and can contribute.	✓	✓	✓
Materials Credit 4 - Recycled Content Milliken carpet with pre-consumer and post-consumer content can contribute to this credit.	✓	✓	✓
Materials Credit 5 - Regional Materials Raw material extraction locations and finished product manufacturing within regional areas can contribute to this credit.	✓	✓	✓
Materials Credit 4.1 - Low Emitting Materials All Milliken carpet is certified to CRI - Green Label Plus and delivers the point associated with this credit.	✓	✓	✓
Materials Credit 4.3 - Low Emitting Materials All Milliken adhesives meet the requirements of the SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168 - ADHESIVE AND SEALANT APPLICATIONS and contribute to this credit.	✓	✓	✓
Design in Innovation Milliken products are third party certified by NSF 140 and SMaRT as Sustainable Products. Both of these certifications have been recognized as Design in Innovation credits and may be applicable to your project. All products are also third party certified as Carbon Neutral products.	✓	✓	✓



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