PRODUCT	TYPE OF PRODUCT	
INFORMATION	2 31 11100001	Office Furniture
	COMPANY NAME	Steelcase
	PRODUCT/COLLECTION NAME	Wood Solution
	DESCRIPTION	Wood desks and office furniture
MATERIAL FEEDSTOCK	MATERIAL CONTENT	At some wood manufacturing facilities, you need to wear a respiratory mask just to take a tour. At our wood furniture plant, we switched to water-based finishing processes. So our wood furniture is certified as low-emitting, our plant uses 30% less energy, and we've reduced hazardous chemicals of concern used in wood manufacturing by 96%. Steelcase accomplished this goal by developing new technologies to convert solvent-based painting operations to powder coat finishing. Steelcase is also converting to powder coat finishing in other manufacturing facilities located in the United States, Canada, and Europe. When the conversions are complete, the company's global VOC emissions will be reduced even further.  Steelcase surface materials are designed for ease of coordination and use, abundance of choice and thoughtfulness to the environment. The offering consists of a wide array of textiles, paints, laminates, woods, metals, plastics, and other finishes. Antimony is a heavy metal used in production of most conventional polyester. It can bio-accumulate and impact humans and the environment. Obviously, if they can develop a
	RECYCLED CONTENT %	way to phase out antimony they will, they're making progress.  The percentage of post-consumer recycled materials 10%; 38.8 (lbs.) The percentage of pre-consumer recycled materials 44%; 153.5 (lbs.) Post-consumer: materials that have been discarded after fulfilling their intended use. ex. Used milk bottles. Pre-consumer: materials that have entered a waste stream before reaching their intended use. ex. Paper trimmings from a paper plant that will not be recycled into the paper industry. We select materials that can be recycled at the end of a product's use and then design in such a way that they can be easily disassembled and separated. To simplify recycling, we minimize co-mingled components, consider the number and type of fasteners and are committed to making disassembly easy with common hand tools. Adhesives are eliminated if possible.
	RAPIDLY RENEWABLE CONTENT %	Are wood products Forest Stewardship Council (FSC) certified for sustainable forestry practices? There are no rapidly renewable materials but they do use wood products that are sustainable sources are excellent choices for customers seeking to make good decisions - good for the planet. Steelcase supports chain of custody programs as a way to ensure our customers receive wood from sustainable sources. The Wood Manufacturing Facility is FSC Chain of Custody certified to provide customers with FSC certified products. View the FSC Chain of Custody Certificate (FSC-C020349).  They carefully analyze the environmental impact of every phase of the product life-cycle, from raw materials through the end of a product's useful life. The results are environmentally responsible methods of wood furniture craftsmanship that have set the standard for the industry.
	HARMFUL ADDITIVES	See above and below
	HARMFUL EMISSIONS	See above and below
	EMISSION STRENGTH OVER TIME	Not applicable, low voc
	TREATMENTS	Steelcase accomplished this goal by developing new technologies to convert solvent-based painting operations to powder-coat finishing. Over the last 25 years, Steelcase has managed to reduce VOC emissions in its Michigan metal-finishing operations by 97%. Further, Steelcase was able to accomplish this milestone for approximately \$25 million less than originally predicted. Steelcase is also converting to powder-coat finishing in other manufacturing facilities located in the U.S., Canada, and Europe. When the conversions are complete, the company's VOC emissions will be reduced even further.
MANUFACTURING	MANUFACTURING PROCESS	Wood manufacturing facility in Michigan is the first manufacturing facility

in the U.S. to receive LEED® certification from the U.S. Green Building Council. Our water-based glues, stains, topcoats and UV finishes are nearly VOC-free.

Parts washing is typically the largest water consumer in production. They knew they wanted to reduce water and eliminate phosphate chemicals during pre-treatment. But they needed help. When given access to the manufacturing system, DuBois was able to develop a new pre-treatment process. The results were astounding: 60% energy savings, 80% reduction in the water in pre-treatment process alone. The net impact was a 20 to 30% reduction in water usage overall, and a waste stream discharge reduction of approximately 85%. And they learned that this process would save Steelcase \$1 million annually. You can't call this one a wash.

This created a lean and green program in the manufacturing operations - aimed at eliminating waste, and expanding and further embedding sustainable practices in their own facilities as well as the supply chain.

Earlier this year, Steelcase and The Designtex Group introduced the Environmental Impact Collection, an abundant array of environmentally responsible seating and panel fabrics. Steelcase implemented sustainable manufacturing processes in the production of these textiles that allowed for reductions in energy use, greenhouse gas emissions, waste sent to landfills, process-water consumption, and consumption of petroleum.

## HARMFUL EMISSIONS

They work together with hundreds of suppliers to meet their sustainability and lean goals – and their partners. They partner on critical sustainability initiatives like materials assessment, worker safety, chemicals of concern avoidance and elimination, energy and material reduction and technology and process improvements. Major waste, cost and impact reductions result as they learn from others and advance new processes and materials

Climate Counts uses a 0-to-100 point scale and twenty-two separate criteria to score and rank companies to determine how their corporate climate responsibility compares to sector competitors. The scorecard measures a company's efforts to assess their own climate footprint, reduce their emissions, support (or block) progress on major climate legislation, and publicly disclose their actions clearly to consumers.

In the most recent scorecard, Climate Counts evaluated 47 companies in the pharmaceutical, home and office furnishing, toys and children's equipment and large appliance sectors. Rankings of companies in 12 other sectors will be released in November. The scorecard, developed along with oversight from a panel of business and climate experts, helps identify the innovative leaders dedicated to tackling global warming. They received a 61.

"At Steelcase we are constantly mining for new ideas that will help us reduce our impact on the environment. We celebrate this ranking because it's a signal that we are continuing our forward progress -- one person, one idea at a time. It's an achievement but also a reminder that our work in this area will never be complete – and we look forward to continuing our journey," said Angela Nahikian, director, Global Environmental Sustainability, Steelcase Inc.

Since 2006, Steelcase has reduced its greenhouse gas emissions by 37%. One way the company has achieved this is by utilizing an energy purchase strategy with a significant commitment to renewable technologies that do not produce greenhouse gases. One example of this is the company's investment in a wind energy farm in Panhandle, Texas. In 2009, Steelcase became the first renewable energy buyer to sponsor an industrial-scale wind farm in the United States. The project capacity represents 20% of its US electricity usage and more than 17% of its global fossil fuel-generated electricity usage. It will prevent more than 61 million pounds of carbon dioxide being emitted into the atmosphere each year. As the sole sponsor of this farm, Steelcase is the largest investor in wind power in the furniture industry.

## LOCATION OF MANUF. PLANT

TESTS/CODES

Grand Rapids, MI, also other plants such as High Point, NC

Steelcase meets all testing requirements for distribution around the globe

		including ASTM in the US
	3 <sup>RD</sup> PARTY CERTIFICATION	Carpet and Rug Industry: Green Label certification, Green Seal, EcoLogo, GreenStar, GreenGuard for many of its products, see the list online at www.greenguard.org
INSTALLATION	INSTALLATION PROCEDURE	Designed for a long life, furniture is reconfigurable for reuse and modular segments can be replaced. Water-based UV finish technology gives an extremely durable finish that is repairable should anything happen. Steelcase offers many products that are GREENGUARD Indoor Air Quality Certified®. For a complete listing, visit www.greenguard.org.
	INSTALLATION ADHESIVES  UNIT COST	Manufacturing processes by eliminating the emissions of almost all volatile organic compounds (VOCs) from its metal-finishing operations in Michigan. VOC emissions can produce ground-level ozone, which contributes to the creation of smog.  Varies with options and product specified.
	LIFE CYCLE ANALYSIS	Sustainable production, focus on recycling along with durability allows for
	EXTRACTION	more sustainable life cycle analysis.
	END OF SERVICE LIFE	The Steelcase Environmental Partnership Program helps connect customers to environmentally responsible methods of managing products at the end of life phase, keeping products out of landfills.
MISC. PROPERTIES	QUALITIES/PROPERTIES OF PRODUCT	This product has a very high durability. Lifetime warranty on most products
	MISC. COMMENTS	They source almost all of the wood from forests in North America, reducing shipping distances for raw materials. Products can be shipped to customers blanket and stretch wrapped to minimize packaging. Pallets enable more products per shipment.
	CONTRIBUTION TO LEED POINTS	LEED-CI Materials & Resources
		Materials & Resources
		Indoor Environmental Quality
		Innovation & Design
		MR 4.1 & 4.2 (recycled content)
		MR 5.1 (regional materials)
		EQ 4.5 (low emitting materials)
		ID 1 (innovation in design – Cradle to Cradle)
		Post-consumer (10%) + 1/2 pre-consumer (44%) = 32%
		Tour is manufactured in Grand Rapids, MI. Projects ≥ 500 miles qualify.
		Tour is SCS Indoor AdvantageTM Gold certified in North America.
		Tour is a C2C certified product. C2C certified products can contribute to Innovation in Design credits. Check LEED C2C CIR for details and specific requirements.
		LEED-NC Materials & Resources
		Innovation & Design
		MR 4.1 & 4.2 (recycled content)
		ID 1 (innovation in design – Cradle to Cradle)
		ID 1 (innovation in design low emitting furniture)
		Post-consumer (10%) + 1/2 pre-consumer (44%) = 32%

1		LEED-EB Materials & Resources
		Indoor Environmental Quality
		MR 2.1 – 2.5 (recycled content)
		(low emitting materials)
		(low critically)
		Exceeds the 10% post consumer or ≥ 20% pre- consumer criteria.
		These standards do not currently include furniture in the appropriate EQ credit; however USGBC has allowed equivalent credit for furniture/furnishings when submitted as an Innovation and Design credit
COMPANY PROFILE	GREEN PHILOSOPHY	"By aligning our goals for people with our planet and profit aspirations, we're building the foundation for gains that we hope will be far-reaching and enduring. Steelcase is dedicated to diversity and cultural acceptance in business relationships and the workplace. We donate our time, talent and treasure to programs that specifically focus on the things we value most: education, community and economic development, human services, arts and culture, and sustainability."  Land Conservancy Habitat for Humanity, United Way are non-profits they support.
	CONTACT	Steelcase® 800.333.9939 www.steelcase.com
		Local dealer info
MAINTENANCE	AFTER INSTALLATION	Steelcase Seating Products
		Basic maintenance should be done on chair upholstery, finishes,
		controls, base, and other moving parts once a year.
		Maintenance should be done more frequently if the chair is subjected to heavy use.
		Cleaning painted, plastic, and vinyl and chrome surfaces
		Clean frequently by applying a household cleaner (such as Fantastik® or 409®) and wipe dry with a clean, soft cloth.
		2. For stubborn chrome marks, use a non-abrasive chrome cleaner.
		3. On high-gloss, smooth plastic finishes (such as the Player™ chair frame), use a light rubbing compound (such as Turtlewax® rubbing compound) to erase minor surface marks.
		Cleaning wood finishes
		Steelcase wood products are protected by a stain-resisting finish.
		2. For normal cleaning, wipe surface with a soft, damp (not wet) cloth.
		Maintaining fabric upholstery
		Use a vacuum cleaner for regular cleaning. Do not steam clean.
		Periodic professional dry cleaning is recommended.
		Removing fabric upholstery stains or heavy soil
		Soak up excess any stain with a cloth. Do not dry the stain completely or it may set.
		For most water-borne stains (coffee, fruit juice, washable ink), use an upholstery cleaning solution (such as BISSELL Upholstery Shampoo® or Guardsman Fabri-Kleen®) and follow package

directions.

- 3. For oil-borne stains, use a dry-cleaning solution at room temperature (never hot) and allow solution to work into stain. Using quick, light strokes, brush stain with a soft bristle brush. Work from outside toward the center to prevent rings. Avoid vigorous rubbing which may damage the nap or force the stain more deeply into the material. Soak up remaining dry-cleaning solution and sponge the fabric with cool water.
- Allow fabric to dry completely, then vacuum thoroughly. If stain is still
  evident, repeat procedure. Several light applications of cleaning
  solution are more effective/less damaging than one heavy
  application.
- Maintaining leather upholstery
- 1. Dust occasionally with a clean, dry cloth.
- Remove most stains by applying a mild soap to a damp cloth, working up thin suds, then rubbing it gently over the stain. Rinse with a clean damp cloth then wipe dry.
- 3. Never use furniture polishes, oils, varnishes or ammonia on leather.

Some cleaning products may cause discoloration and should be tested in an inconspicuous area before using.