

Herman Miller’s environmental advocacy is long-standing and comprehensive. Since the 1950s, we have been, in the words of founder D.J. De Pree, “stewards of the environment.” Today over 400 employees play a direct role in the work of 9 different environmental groups engaged in efforts from improving air quality and reducing waste to green energy, LEED certification, and design for the environment.



Environmental Product Summary
MIRRA® CHAIR

Design Story: The Art and Science of Seating

The Mirra chair extends both the performance and aesthetics of ergonomic work seating to new levels. Introduced in 2003, Mirra resulted from years of careful research into fit, ride, tilt mechanisms, materials, aeration, adjustments, and design for the environment

The German firm Studio 7.5 designed Mirra, determined to create a chair that as much as possible mimicked the motions of a human body at work. Mirra’s organic look, feel, and material content reflect the designers’ dedication to advancing both the art and science of seating.

Herman Miller’s Design Protocol

Our commitment to corporate sustainability naturally includes minimizing the environmental impact of each of our products. Our Design for the Environment team (DfE) applies environmentally sensitive design standards to both new and existing Herman Miller products, utilizing the McDonough-Braungart Cradle-to-Cradle Protocol.

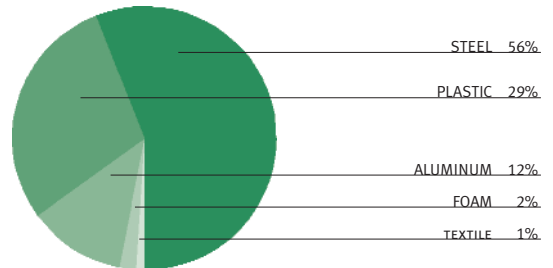
Cradle-to-Cradle goes beyond regulatory compliance to thoroughly evaluate new product designs in three key areas:

- *Material Chemistry and Safety of Inputs*—What chemicals are in the materials we specify, and are they the safest available?
- *Disassembly*—Can we take products apart at the end of their useful life, to recycle their materials?
- *Recyclability*—Do the materials contain recycled content, and more importantly, can the materials be recycled at the end of the product’s useful life?

The Mirra chair is the first office product to be developed from the beginning under the guidance of our DfE team. Bill McDonough believes Mirra represents the most advanced and thorough application of Cradle-to-Cradle principles a furniture maker has ever brought to the market.

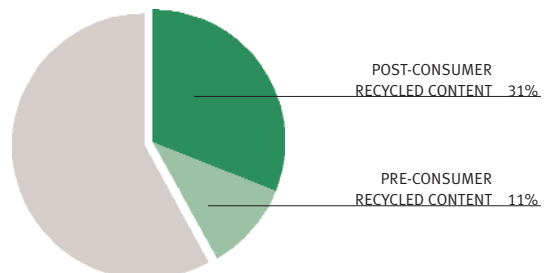
Material Content

The Mirra chair’s components are constructed from steel, plastic, aluminum, foam, and textile.



The Mirra chair is up to **96 percent recyclable** at the end of its useful life.

Mirra is comprised of **42 percent recycled** materials. The recycled content breaks down by 31 percent post-consumer and 11 percent pre-consumer content.



- Every material has been scrutinized down to the molecular level.
- Steel components can be segregated and returned to the recycling stream as a technical nutrient.
- Most metal components are powder-coated, which eliminates solvents and volatile organic compounds (VOCs) from the finishing process.
- Plastic components are identified with an ASTM recycling code whenever possible, to aid in returning these materials to the recycling stream.
- No polyvinyl chloride (PVC) used; thermoplastic elastimer is used for arm skin.
- Molded polymer back can be recycled up to 25 times.
- Aluminum can be recycled in a closed-loop system similar to steel.
- Foam and textile materials are part of an open-loop system and can be recycled into everything from automotive components to carpet padding at the end of their current life.
- Textiles used in Herman Miller products can be made from natural or synthetic fibers. Several textiles are available with 100 percent recycled content.
- *Returnable/Recyclable Packaging*—Packaging materials include corrugated cardboard and a polyethylene plastic bag; each is part of a closed-loop recycling system, for repeated recycling.
 - Whenever possible, shipments between Herman Miller and its suppliers include the use of pallets and other returnable packaging to minimize waste.
 - On large North American orders, disposable packaging can be replaced with reusable shipping blankets.

Manufacturing Process

- *Green Energy and Emissions*—Mirra is manufactured on a production line that utilizes 100 percent green power, 50 percent from wind turbines, and 50 percent from captured landfill off-gassing. No air or water emissions are released in Mirra's production.
- *Waste*—All solid wastes are recycled to the greatest extent possible.
- *Worker Health and Safety*—Herman Miller strives to meet or exceed OSHA standards.
- *ISO*—Mirra is manufactured in West Michigan at an ISO 14001-certified site.

Product Performance

- Easy assembly for cost-efficiency and quick parts replacement.
- Easy disassembly for recyclability.
- Number One design and environmental criteria: Durability.
- Backed up by Herman Miller's 12-year, 24/7 warranty.

Indoor Air Quality

- The Mirra chair is GREENGUARD™ certified as a low-emitting product that meets current indoor air quality standards. GREENGUARD-certified products also meet the emissions requirements of the State of Washington Furniture Systems criteria and the U.S. EPA Procurement Guidelines for Office Furniture.

Corporate Environmental Policy

For more information on Herman Miller's Corporate Environmental Policy and other environmental efforts, see our Environmental Advocacy booklet ([link](#)), or visit the "Environment" section of www.HermanMiller.com.

Supplier Support

At Herman Miller, we are committed to working closely with our suppliers to reduce our collective impact on the environment. We not only encourage our suppliers to minimize their operations' environmental impacts, but require they assist us in decreasing our facilities' negative environmental effects, as well.

LEED

Mirra may contribute to LEED credits due to its returnable/reusable packaging, durability, pre-consumer and post-consumer recycled content, and GREENGUARD certification. Depending on project location, Mirra also may qualify to contribute to a LEED Regional Materials credit. Please contact your Herman Miller representative for detailed LEED credit sheets.

It's important to note that no interior furnishings, individually or collectively, can guarantee a specific number of points for LEED certification.

Herman Miller complies with the Federal Trade Commission's Part 260 Guides for the Use of Environmental Marketing Claims.