

#### Our sustainability goals by the year 2020:

- Zero carbon footprint
- Zero landfill
- · Zero hazardous waste generation
- Zero air emissions (VOCs)
- Zero process water use
- 100 percent renewable electrical energy use via renewable energy credits and a power purchase agreement
- Company buildings constructed to a minimum LEED Silver certification
- 100 percent of sales from DfE approved products

## **Environmental Product Summary**

# Swoop Lounge Furniture



# **Design Story: Swoop Lounge Furniture**

Designer Brian Kane created Swoop lounge furniture based on the needs he observed in public seating areas. He realized that people don't sit in traditional ways—they occupy their seating environment with a variety of postures. This led him to design a versatile and fluid lounge seating and table solution that supports the ways people sit and move.

Swoop offers a different kind of lounge seating construction. Its sweeping curves and modular components provide multiple configuration options for variety of spaces—large or small, individual or group. The result is a comfortable and inviting seating solution for areas where people learn, meet, and work. Freestanding tables round out the collection and can function as desks or stools. The square box table is available with power access to accommodate technology needs. Traditional lounge furniture inhibits movement. Swoop encourages it. Swoop takes the edge off lounge furniture.

# Herman Miller's Design Protocol

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

The DfE Design Protocol goes beyond regulatory compliance to thoroughly evaluate new product designs in four key areas:

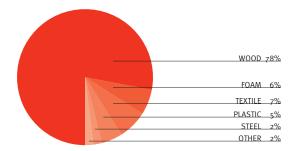
- Material Chemistry and Safety of Inputs— What chemicals are in the materials we specify, and are they the safest available?
- Disassembly—Can we take products apart at the end of their useful life, to recycle their materials?

- Recyclability—Do the materials contain recycled content, and more importantly, can the materials be recycled at the end of the product's useful life?
- LCA—Have we optimized the product based on the entire life cycle?

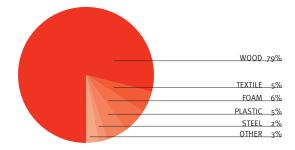
### **Material Content**

Swoop's components are constructed from wood, steel, plastic, foam, textile and other materials.

#### Club Chair



### Ottoman



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GREENGUARD is a registered trademark of the GREENGUARD Environmental Institute.
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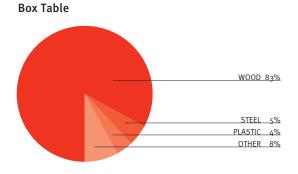
<sup>®</sup> and HermanMiller are among the registered trademarks of Herman Miller, Inc.

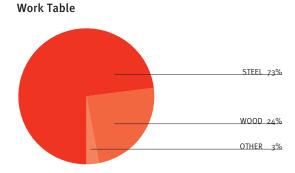


# **Environmental Product Summary**

# Swoop<sup>™</sup>Lounge Furniture

# Plywood Lounge WOOD 65% STEEL 25% FOAM 5% TEXTILE 2% OTHER 3% Plywood Ottoman WOOD 50% STEEL 43%





Swoop's components are up to **73 percent recyclable** at the end of their useful life.

- Club Chair—11% recyclable
- Ottoman—7% recyclable
- Plywood Lounge—31% recyclable
- Plywood Ottoman—47% recyclable
- Box Table—5% recyclable
- Work Table—73% recyclable

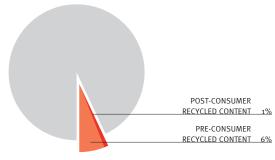
Swoop's components are comprised of approximately **7-percent to 75-percent recycled** materials. This figure breaks down as:

- Club Chair—1% post-consumer and 6%pre-consumer
- Ottoman—1% post-consumer and 5% pre-consumer
- Plywood Lounge—10% post-consumer and 1% pre-consumer
- Plywood Ottoman—14% post-consumer and 3% pre-consumer
- Box Table—2% post-consumer and 73% preconsumer
- Work Table—21% post-consumer and 4% preconsumer

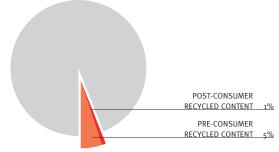
## Club Chair

TEXTILE 1%

OTHER 2%



# Ottoman

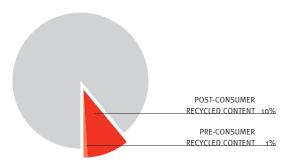




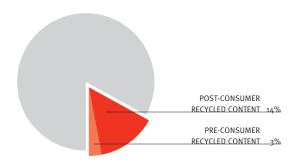
# **Environmental Product Summary**

# Swoop Lounge Furniture

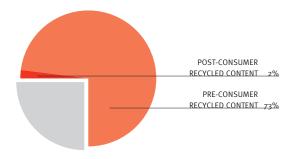
# Plywood Lounge



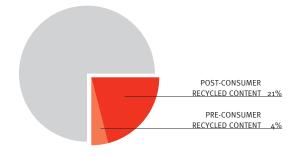
### **Plywood Ottoman**



**Box Table** 



Work Table



- Steel components contain approximately 35 percent recycled content and are 100 percent recyclable.
- Wood, while not technically recyclable, can be cycled back to the natural environment, such as through composting. The wood content in our work surfaces and storage unit substrates is comprised of 100-percent reclaimed wood, as certified by the Composite Panel Associations EPP. This wood content is made primarily of sawdust generated by other wood process operations. Additionally, wood waste from our operations can be burned in our energy center, which generates steam that we use in our operations facilities.
- All veneers used are purchased from suppliers practicing responsible forestry techniques.
  - -Approximately 60-80 percent of veneers are derived from domestically grown woods, notably cherry.
  - -Responsibly harvested, rapidly renewable bamboo work surface veneer is also available.
  - -All veneers are adhered to the substrate with water-based glues to minimize air emissions.
- 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.
- Textiles used in Herman Miller products can be made from natural or synthetic fibers. Several textiles are available with 100 percent recycled content.
- 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.
- Returnable Packaging—Swoop's packaging materials include corrugated cardboard and expanded polystyrene foam. These materials are part of a closed-loop recycling system, meaning they can be recycled repeatedly.
  - -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**

- ISO—Swoop is manufactured in West Michigan at an ISO 14001-certified site.
- Worker Health and Safety—Herman Miller strives to meet or exceed OSHA standards. Swoop is manufactured at an OHSAS 18001-certified site.



# **Environmental Product Summary**

# Swoop<sup>™</sup>Lounge Furniture

#### **Product Performance**

- Designed for minimal material use, reduced energy requirements, easy reconfiguration, and durability.
- Backed by Herman Miller's 12-year, 24/7 warranty.

### **Indoor Air Quality**

Swoop Club Chair, Ottoman, Box Table and Work Table are GREENGUARD® certified as a low-emitting product that meets current indoor air quality standards.

#### Corporate Environmental Policy

For more information on Herman Miller's Corporate Environmental Policy and other environmental efforts, see our Environmental Advocacy brochure, or visit the "Environmental Advocacy" section of 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**

Swoop may contribute to LEED credits due to its returnable/reusable packaging, durability, pre-consumer and post-consumer recycled content. Depending on location, Swoop also may contribute to a LEED Regional Materials credit. Please refer to http://hermanmiller.com/ecoScorecard or contact your Herman Miller representative for detailed LEED information.

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