## **AERON® CHAIR**

## Herman Miller

### **Overview**

- ----> McDonough-Braungart Cradle-to-Cradle protocol
- ----- Aeron contains 66% recycled material
- ----- Manufactured to ISO 14001
- --- 12 year, 24 hour warranty

POLICY
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In 1953 our founder, D J De Pree, stated 'We will be good stewards of the environment.' Since then accountable practice and production has been and always will be our policy. 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.

# Environmental Product Summary

#### **Design story:**

Shifting paradigms with plastic bottles Herman Miller's Aeron chair rewrote the book on office seating with its distinctive look and high-performance design. In addition to its well-known ergonomic and functional qualities, Bill Stumpf and Don Chadwick designed the Aeron chair to be sparing of natural resources, durable and repairable, and constructed for ease of disassembly and recycling.

From its earliest developmental stages, the Aeron's raw material selection and sourcing process emphasised environmental friendliness, with a preference for renewable, sustainable, and recycled source materials, including recycled plastic bottles.

#### Herman Miller's design protocol

Our commitment to corporate sustainability naturally includes minimising 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, utilising 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?

#### **Material content**

The Aeron chair's components are constructed from aluminium, steel, plastic, and foam/ textile.



Aeron is comprised of **66 percent recycled** materials. The recycled content breaks down to 44 percent post-consumer and 22 percent preconsumer content.



The Aeron chair is up to **94 percent recyclable** at the end of its useful life.

• All die cast aluminium components are made from 100 percent recycled material.

• Aluminium components can be segregated and returned to the recycling stream as a technical nutrient.

• Steel components contain approximately 25 percent recycled content and are 100 percent recyclable as a technical nutrient.

• Most metal components have a powdercoat paint finish that emits negligible volatile organic compounds (VOCs).

• Plastic components are identified with an ASTM recycling code whenever possible, to aid in returning these materials to the recycling stream.

• The seat frame and back contain over 60 percent recycled content, made from approximately 50 recycled two-litre plastic beverage bottles per chair.

• 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/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 orders, disposable packaging can be replaced with reusable shipping blankets.

#### **Manufacturing process**

• Green Energy and Emissions—Herman Miller is committed to the use of 100 percent renewable energy by the year 2020. The company is similarly committed to achieving a goal of zero air and water emissions from manufacturing by 2020.

• *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*—Aeron is manufactured in West Michigan and UK at ISO 14001-certified sites.

#### HMPS

Herman Miller's commitment to operational excellence lead to an aggressive drive to reinvent its operations and established a fruitful relationship with the Toyota Supplier Support Centre. Through the Herman Miller Production System (HMPS), the company has dramatically reduced manufacturing space and inventories, cut lead times for standard product, and grown sales and profitability. HMPS minimises wasted effort, energy and materials, and plays an important part in Herman Miller's ongoing commitment to a better environment.

#### **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 hour warranty (Pellicle 5 yrs, gas lift 3 yrs).

#### **Corporate envronmental policy**

For more information on Herman Miller's Corporate Environmental Policy and other environmental efforts, visit the 'Environment' section of www.hmeurope.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 minimise their operations' environmental impacts, but require they assist us in decreasing our facilities' negative environmental effects as well.