

Environmental Product Declaration

- An environmental declaration according to the objectives of ISO/TR 14025.
- A presentation of the Life Cycle Assessment results (ISO 14040 / 14044) based on the 2010 recommendations of the European Commission.

ENVIRONMENTAL
PRODUCT
DECLARATION

EPD

Product Description

Share It is a modular storage system. It offers personal storage, team storage, meeting point solutions and lockers.

Share It can be also used as space dividers, structuring workspaces.

- It is modular and offers endless planning possibilities.
- The range enhances collaboration providing communication platforms.
- It helps people concentrate thanks to acoustics absorbing surfaces.
- It offers wide range of finishes for different workplace ambiances.

The model chosen for analysis is the most frequently ordered one:

Share It side opening tambour door - reference W9Q3S1500.

Standard features on this model include:

- Side opening tambour door
- Single unit
- Dimensions : W 1200 mm x H 1165 mm (3FH) x D 434 mm
- Equipment: plinth, end to end handle, 2 metal shelves (thickness 24 mm)



Manufacturer

Share It is manufactured in Durlangen, Germany, by Steelcase, for the EMEA (Europe, Middle East and Africa) market.

Since 1912, Steelcase has been committed to continually reducing the environmental impacts of its products and activities on a global scale, by constantly seeking more effective ways to conserve resources, prevent pollution and nurture environmental consciousness in its people every day.

Steelcase has management systems for quality (ISO 9001) and for the environment (ISO 14001 and/or EMAS II), ensuring that our customers are guaranteed the same level of product performance, wherever they are in the world.

Steelcase has a multi-site PEFC (Program for the Endorsement of Forest Certification schemes) certification for four of its production facilities in Europe. The certification acknowledges that the wood used in the products has been sourced from forests managed in a sustainable way. In the USA, Steelcase was given the FSC (Forest Stewardship Council) certification.

To show continuous improvements, Steelcase communicates the environmental performance of its products through voluntary environmental labels and declarations. Sustainability related actions and results are annually communicated in the annual Steelcase Corporate Responsibility report.

For further information see www.steelcase.com

Steelcase

Material Declaration

Share It consists of the materials listed below. The total weight is 52.221 kg including packaging.

Metals	kg	%
Steel	8.987	17.21
Aluminium	0.515	0.99
Zinc alloy	0.020	0.04

Plastics	kg	%
PP – polypropylene	4.219	8.08
PA6 – polyamide 6	0.252	0.48
LDPE – low density polyethylene	0.205	0.39
PA6 GB30 – polyamide 6 (30% glass ball)	0.024	0.05

Other materials	kg	%
Particle board	35.663	68.30
Cardboard - for packaging	1.820	3.49
Melamine	0.276	0.53
Glue high term	0.080	0.15
Powder coating	0.075	0.14
Paper	0.050	0.10
Beech dowels	0.024	0.05

Environmental Product Declaration

The potential environmental impacts of **Share It** (incl. packaging) throughout its entire life cycle – including raw materials extraction, production, transport, use, and end of life – were assessed using Life Cycle Assessment (LCA – ISO 14040 / 14044) in May 2011. This product declaration is valid for the production site mentioned on page 1. Those measurements are the starting point for the continuous improvement of our product. Both method and product may have been subject to modifications since then. Different Environmental Product Declarations may not be comparable. **The functional unit** – i.e. the quantified performance of the product for use as a reference unit – used in the Life Cycle Assessment was chosen as «Provision of flexible and comfortable office storage – with the features stated in the product description – for 8 hours a day, 5 days a week, over 15 years, in a building office compliant with the GS quality and security certification (certificate number 59 33 259)».

Life Cycle Inventory Analysis

The Life Cycle Inventory Analysis covers all life cycle stages as shown below.



Materials

This stage includes raw materials extraction and transformation into material ready to be used. Benefits of recycled materials are considered.



Production

This stage comprises all production and assembly processes taking place at Steelcase or at their suppliers and sub-suppliers.



Transport

The following transports are considered: transport from sub-suppliers to Steelcase production site(s), from Steelcase to the EMEA market (Europe, Middle East and Africa) and transport for end-of life treatments.



Use

During the use stage of the product - the longest stage of the life cycle - no relevant environmental impacts occur.



End of life

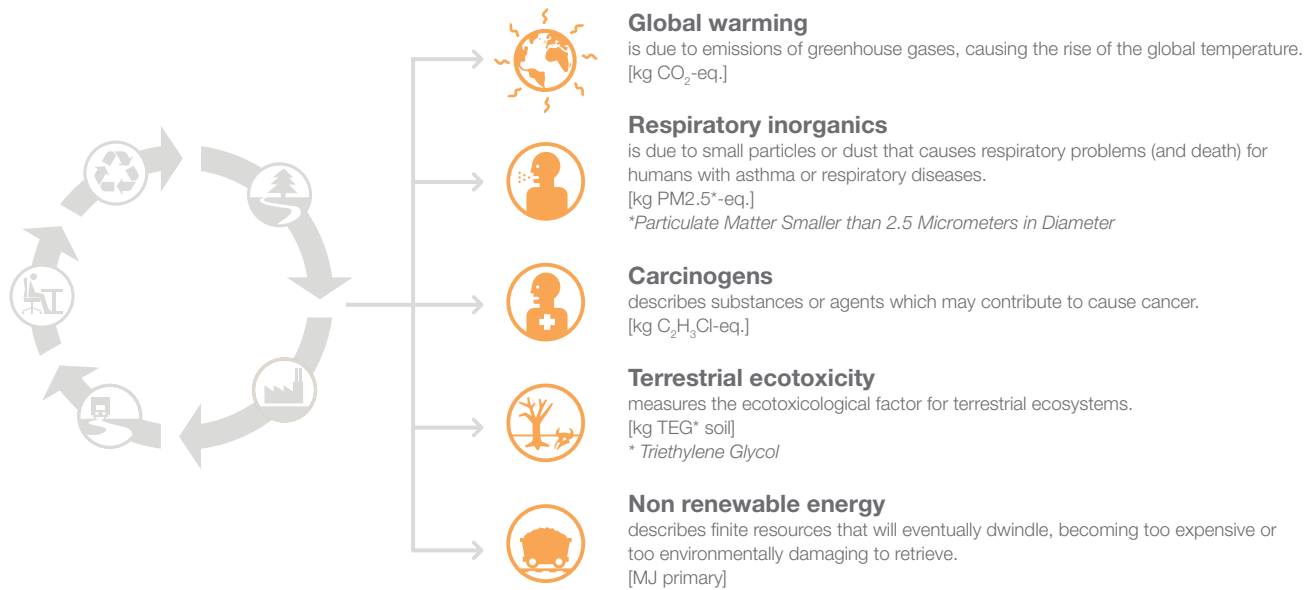
End-of-life products treatments are included: based on current European averages and the specific abilities for disassembly of this product, it was assumed that about 4.9% of the products are sent to landfill, 81.4% are incinerated and 13.7% are recycled at the end of their useful life. Benefits from recycling are considered as neutral to avoid double counting.

Distribution of the environmental impacts for the relevant life cycle stages

Category	Unit	Total	Materials	Production	Transport	Use	End of life
Global warming	[kg CO ₂ -eq.]	110.8	42.4	45.9	10.8	No relevant environmental impacts occur	11.7
Respiratory inorganics	[kg PM2.5-eq.]	0.083	0.041	0.029	0.010	No relevant environmental impacts occur	0.003
Carcinogens	[kg C ₂ H ₃ Cl-eq.]	4.54	3.31	0.58	0.05	No relevant environmental impacts occur	0.60
Terrestrial ecotoxicity	[kg TEG soil]	2679.4	1110.5	1064.5	481.9	No relevant environmental impacts occur	22.4
Non renewable energy	[MJ primary]	1983.2	1008.2	784.8	173.4	No relevant environmental impacts occur	16.8






Life Cycle Assessment

Environmental impact categories.



Environmental aspects of Share It's life cycle

The contributions of inventory parameters to different impact categories throughout the entire life cycle of Share It are listed below.

Category	Inventory parameter*		Inventory value**	Unit	Characterised impact value	Unit
Global warming 	CO ₂	Carbon dioxide, fossil	105 564	g	Total	110.8 kg CO₂-eq.
	CH ₄	Methane, fossil	254	g		95 %
	CF ₄	Methane, tetrafluoro-, CFC-14	0.151	g		2 %
						1 %
Respiratory inorganics 	PM _{2.5}	Particulates < 2.5 µm	35.3	g	Total	0.083 kg PM_{2.5}-eq.
	NO _x	Nitrogen oxides	258.1	g		42.6 %
	SO ₂	Sulfur dioxide	172.2	g		39.7 %
						16.2 %
Carcinogens 	HC	Hydrocarbons, aromatic	1.17	g	Total	4.539 kg C₂H₃Cl-eq.
		Dioxins, measured as 2,3,7,8-tetrachlorodibenzo-p-dioxin	4.34E-07	g		71.9 %
	PAH	PAH, polycyclic aromatic hydrocarbons	0.074	g		16.5 %
						5.0 %
Terrestrial ecotoxicity 	Zn	Zinc	0.513	g	Total	2 679 kg TEG soil
	Al	Aluminium	4.330	g		36.8 %
	Cr	Chromium	0.744	g		31.9 %
						10.8 %
Non renewable energy 	Oil, crude, in ground		14.1	kg	Total	1 983 MJ primary
	Gas, natural, in ground		15.1	m ³		32.6 %
	Coal, hard, unspecified, in ground		16.2	kg		30.7 %
						15.6 %

* In each category, we considered the three most important inventory parameters.
 ** The inventory value represents the total emissions of a substance or resource input.

Additional environmental information

Environmental labels and declarations on products and materials.



This product is **Indoor Advantage Gold** certified in Europe, certifying compliance with the indoor air quality emission requirements defined by the ANSI/BIFMA M7.1-2007 standard.



The wooden components of this product are labelled with **PEFC** (Programme for the Endorsement of Forest Certification), ensuring that wood originates from sustainably managed forests.



The particle board of this product complies with the **"E1 standard"** guaranteeing a low level (less than 8 mg / 100 g) of formaldehyde emissions.

Actions for reducing the environmental impacts at each stage of the environmental life cycle.

End of life

Share It (excluding packaging) is theoretically 97% recyclable by weight. According to the current waste disposal schemes, we assume that 26% can be effectively recycled.

The cardboard and LDPE film used for packaging are 100 % recyclable.

Share It is quick and easy to disassemble using normal hand tools. It contains only a few different materials, making sorting for recycling easy. Plastic parts are clearly labelled for easy sorting and an effective recycling.

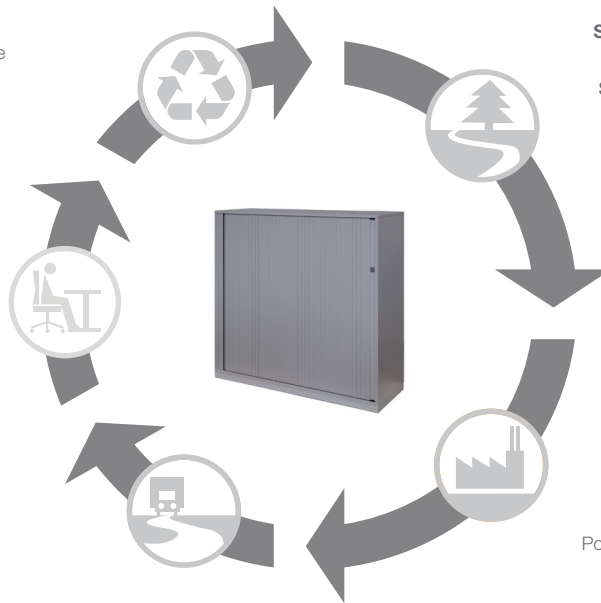
Use

Share It was designed for a long product life. The interior can adapt to users' needs over time.

Maintenance information is available in the Steelcase website.

Transport

Share It is manufactured close to customers in Europe.



Materials

Share It contains 17% recycled materials, by weight.

Share It contains no hazardous materials nor dangerous materials.

The packaging consists of 30% to 100% recycled cardboard.

Paper and packaging have prints with water-based inks i.e. without solvent.

Production

The production site in Durlangen has an ISO 14001 and EMAS II certified environmental management system.

Powder-coat painting is VOC-free and free of heavy metals; unused paint that does not attach to the product can be directly reused in the process.

Compilation and Verification Process

- The LCA study of **Share It** (code: W9Q3S1500) was carried out by Steelcase, according to ISO 14040 / 14044 and based on previous collaboration with Quantis (located in Lausanne, Switzerland and Boston, USA). It was then critically reviewed by the consulting firm EVEA Conseil (Lyon, France).
- To be compliant with ISO/TR 14025, the environmental impacts and inventory values used in this environmental product declaration (EPD) have been reviewed by the consulting firm EVEA Conseil (Lyon, France) through their critical review of the LCA study.

References

Related ISO standards

- ISO/TR 14025 Environmental labels and declarations – Type III environmental declarations.
- ISO 14040:2006 Environmental management -- Life cycle assessment -- Principles and framework
- ISO 14044:2006 Environmental management -- Life cycle assessment -- Requirements and guidelines

LCIA method and LCI database

- ILCD HANDBOOK, European Commission, Joint Research Centre, Institute for Environment and Sustainability. ILCD Handbook: General guide for Life Cycle Assessment – Detailed Guidance. European Union, March 2010, 394p.
- IMPACT 2002+ method: JOLLIET, O., MARGNI, M., CHARLES, R., HUMBERT, S., PAYET, J., REBITZER, G. et ROSENBAUM, R. (2003a). IMPACT 2002+: A New Life Cycle Impact Assessment Methodology. International Journal of Life Cycle Assessment 8(6) p.324-330.
- Eco-Invent v2.0 LCI database: Swiss Centre for Life Cycle Inventories, Duebendorf, CH - www.ecoinvent.ch

End-of-life scenario

- Global data: U.S. Environmental Protection Agency (EPA): Office of Solid Waste, 2007 - <http://www.epa.gov/osw/>
- Specific data: Steelcase Inc. Environmental Partnership and Environmental Performance departments, 2009.

Contact

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