

B-Free small cube

Product Environmental Profile is an environmental declaration according to the objectives of ISO 14021. Precise, accurate, verifiable and relevant information on sustainability attributes of B-Free small cube.

B-Free range welcomes varied work postures -reading, reclining, or leaning in to a conversation. From focused individual work to a casual meeting, B-Free provides thoughtful, comfortable support.

Small cube allows nearby informal seating during the work day.

The model chosen for analysis is the most representative one (reference N3L C00 010) from the B-Free range. Standard features on this model include:

- Gaja fabric (fabrics on the picture is not related to the analysis)
- non-adjustable glides

Steelcase

Environmental Overview

Final Assembly Location

Final assembly of B-Free small cube is in Sarrebourg, France, by Steelcase, for the EMEA (Europe, Middle East and Africa) market.

Life Cycle Performance 💿

Steelcase considers each phase of the life cycle: from materials extraction, production, transport, use and reuse, through the end of its life.

To measure the environmental impacts of B-Free small cube, Steelcase performed a Life-Cycle Assessment (ISO 14040-44), the results of which are disclosed in an Environmental Product Declaration (EPD – ISO 14025).

Materials 💿

Materials Composition

A break down of the basic materials in B-Free small cube.

Materials Chemistry

Steelcase's materials chemistry practice aims to design products with materials that support human and environmental health, throughout all phases of the life cycle.

Recycled Materials and Recyclability

B-Free small cube contains 2% recycled materials, by weight (2% pre-consumer + 0% post-consumer).

At the end of its useful life, B-Free small cube is 91% effectively recyclable by weight.

Certifications and Labels 💿

The environmental and social performance of B-Free small cube is communicated through the following voluntary labels/certifications:

- NF Environnement
- NF OEC
- PEFC™
- Cradle to Cradle Certified[™]
- SCS Indoor Advantage[™] Gold
- Environmental Product Declaration (EPD)

LEED Contribution

B-Free big cube may contribute in the following areas:

- Recycled content
- Materials reuse
- · Regional materials
- · Low-emitting materials
- · Interiors life-cycle impact reduction
- Building product disclosure and optimization environmental product declarations
- Building product disclosure and optimization material ingredients
- Construction & Demolition Waste Planning & Management

Life Cycle Performance

Steelcase considers each phase of the life cycle: from materials extraction, production, transport, use and reuse, through the end of its life.

Materials

This phase includes raw materials extraction and transformation into material ready to be used.

- **Contains 2% recycled materials**, by weight (2% pre-consumer + 0% post-consumer).
- Materials chemistry assessment completed for this product.
- No REACh Substances of Very High Concern (SVHC) present at concentrations greater than 0.1% according to data/ declarations provided by our suppliers.
- No flame retardants nor phthalates nor biocides added as defined by the requirements of NF Environnement and Blauer Engel RAL-UZ 38.
- Materials used in the manufacturing and assembly of our products are not specified to contain nanomaterials.
- **Plastic parts** do not contain pigments with Cadmium, Chrome VI and Mercury.

- CFC, HCFC and HFC are not used as blowing agents for PU foam.
- PU slab foam is Certipur or OekoTex 100 certified.
- Low formaldehyde emissions of wood-based components, according to ISO 16000 (<20 $\mu\text{g/m3}).$
- Is made with wood sourced from **responsibly managed** forests.
- No use of woods from genetically modified trees.
- Eco-labelled textiles OekoTex / EU Ecolabel / Cradle to Cradle Certified[™] and rapidly renewable wool textiles (LEED) available to specify with product.
- Packaged with 82% recycled cardboard and 25% recycled LDPE film.

Production

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

- Final assembly of B-Free small cube is in Sarrebourg, France, by Steelcase, for the EMEA (Europe, Middle East and Africa) market.
- This plant is ISO 14001 and OHSAS 18001 certified.

Transport

This phase includes downstream transports.

- **Optimized packaging** to keep transportation volumes as low as possible and improve filling rates.
- Made in Europe.

Use

During the use phase of the product - the longest phase of the life cycle - no significant environmental impacts occur.

- **Product meets** ANSI/BIFMA Standards M7.1/X7.1 for low- VOC emissions to indoor air quality SCS Indoor Advantage[™] Gold.
- **Designed for a long product life**, with replaceable parts that are easy to change.

End of Use

Any product can become a resource itself, or be responsibly disposed of in different ways.

- **Designed to enable responsible end of use strategies** re-selling, refurbishing, charitable donation or recycling.
- Designed for quick and easy disassembly of materials with no permanent assembly.
- Disassembly and recycling directions available upon request, for a representative configuration.
- 91% recyclable by weight, according to the current waste disposal schemes.

- Clean with only soapy water.Maintenance information available upon request.
- 100% effectively recyclable packaging.
- Primary plastic parts clearly labelled for an easy sorting and effective recycling, according to ISO 11469.
- Steelcase offers a comprehensive asset management service for furniture that is no longer needed. For more information, and to see if this service is available in your area, please contact Eco'Services at eco-services@steelcase.com.

For more information

Ask for the Environmental Product Declaration (EPD) (according to ISO 14025) which communicates the estimated environmental impacts of this product throughout its life cycle, using the life cycle assessment methodology ISO 14040/14044.

Materials

B-Free small cube materials composition is listed below*.

75%	
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	kg	%
OSB	6.4	47.6
Solid wood	3.4	24.9
Hardboard (pressure-molded	0.3	2.5
wood fibers)		
OTHER MATERIALS		
	kg	%
Polyurethane foam	0.8	5.9
Wool fabric	0.5	3.6
Recycled polyurethane foam	0.3	2.1
PLASTICS		
	kg	%
Polypropylene (PP)	0.3	2.3
Polyethylene terephthalate (PET)	<0.1	0.6
Polyethylene (PE)	<0.1	0.4
METALS		
	kg	%
Steel	<0.1	0.4
PACKAGING	ka	%
Cardboard	1.2	
		012

TOTAL WEIGHT - incl. packaging

*The list of materials does not contain all materials used in the product (adhesives, coatings, residuals, etc.).

13.5

Materials Chemistry

Steelcase's goal in its materials chemistry practice is to design products with materials that are ecologically sound, and that mitigate the risk to human and environmental health, throughout all phases of the life cycle.

At least 75 of the materials in this product have been assessed and rated against 24 human health and environmental criteria. As a result of the assessment, this product has been Cradle to Cradle Certified^{™ (1)} Bronze.

We have contacted our suppliers for all products sold in the European Union to ensure that our products are compliant with REACh (Registration, Evaluation, Authorization and Restriction of Chemicals). When information from suppliers is not available, we rely on testing to ensure that our products meet required standards.

Steelcase intends to avoid from purchasing products, components, or materials containing any "Democratic Republic of the Congo (DRC) Conflict Minerals" (coltan (from which tantalum is derived), cassiterite (tin), gold, wolframite (tungsten), or their derivatives), and any other minerals or derivatives which the U.S. Secretary of State determines to be financing conflict in the DRC or an adjoining country.

Recycled Materials and Recyclability

Recycled materials are determined by weight and defined in accordance with the ISO 14021. They may include pre- and post-consumer materials:

- Pre-consumer materials (or post-industrial recycled materials) are materials diverted from the waste stream during a manufacturing process. Excluded is reutilization of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it.
- Post-consumer materials are materials generated by households or by commercial, industrial and institutional facilities in their role as end-users of the final product, which can no longer be used for its intended purpose. This includes returns of material from the distribution chain.



B-FREE SMALL CUBE

Total recycled content	0.3	2
Post-consumer recycled content	<0.1	0
Pre-consumer recycled content	0.3	2
	kg	%

Pre consumer - Recycled content

Post consumer - Recycled content

Virgin material

*Calculations of recycled materials are based on data provided by professional organizations, suppliers and other available information. Recycled content figures are based off of product weight only, and exclude packaging for evaluation to LEED contribution and other purposes. This data may include industry averages, ranges or other broadly based information. Steelcase makes conservative assumptions when compiling this information to provide the most accurate recycled content calculations possible but variability in market conditions or manufacturing processes may result in higher or lower content. This document will be reviewed and updated periodically and is subject to change without notice.

Recyclability

Steelcase considers a material recyclable if it can be effectively collected, sorted, processed, and converted into raw materials to be used in the production of new products.*Recyclability calculation does not include packaging.



91%

According to the available waste management infrastructures, we estimate that 91% is effectively recyclable.

*To be compliant with applicable regulations, Steelcase calculations are based on the materials having physical properties that allow recycling, our evaluation of the ability to disassemble the products and that actual availability of recycling services in the markets where the products are sold.

Certifications and Labels

To show continuous improvements, Steelcase communicates the environmental and social performance of its products through voluntary labels and declarations.

ON THE PRODUCTS

EPD

This product has gone through the LCA methodology, which results have been communicated through a voluntary Type III Environmental Product Declaration, according to the objectives of ISO 14025.

Cradle to Cradle Certified™

This product is Cradle to Cradle Certified^{™ (2)} Bronze, which assesses and rates products for material health, material reutilization, renewable energy and carbon management, water stewardship, and social fairness.

NF Environnement

This product is NF Environnement certified, meaning it complies with 20 product lifecycle criteria.

SCS Indoor Advantage[™] Gold

This product is Indoor Advantage^{™ (2)} Gold certified, according to the indoor air quality emissions requirements defined by the ANSI/ BIFMA M7.1- 2011.

ON THE MATERIALS

Cradle to Cradle Certified™

A selection of Cradle to Cradle Certified[™] textiles are available. Cradle to Cradle Certified[™] products are evaluated for material health, material reutilization, renewable energy and carbon management, water stewardship, and social fairness.

European Ecolabel

A selection of pure wool fabrics are labelled with the European Ecolabel, guaranteeing that it meets stringent quality and environmental performance criteria.

Oeko-Tex

A selection of fabrics are certified with the Oeko-Tex 100 Standard, guaranteeing a limited presence of harmful substances.

PEFC™

At least 100% of the wood components in this product are PEFC[™] (Programme for the Endorsement of Forest Certification) labelled, ensuring that wood originates from sustainably managed forests. Chain of custody: FCBA/06-00787.

E1

The wood based materials of this product comply with the E1 standard of emissions / concentration of formaldehyde.

ON THE PLANTS

ISO 14001

The plant in Sarrebourg, France is ISO (International Organization for Standardization) 14001 - Environmental management system certified.

OHSAS 18001

The plant in Sarrebourg, France OHSAS 18001 (Occupational Health and Safety Assessment Series) management system certified.

⁽¹⁾Indoor Advantage[™] and Indoor Advantage[™] Gold are trademarks of Scientific Certification Systems.

LEED V3 - 2009

LEED, or Leadership in Energy & Environmental Design, is a green building certification program that recognizes best-in-class building strategies and practices. B-Free small cube may contribute to a project's pursuit of LEED certification across the three rating systems:

- LEED-ID+C Interior Design & Construction 2009 (formerly LEED-CI)
- LEED-BD+C Building Design & Construction 2009 (formerly LEED-NC, LEED-Core & Shell & LEED-Schools)
- LEED-O+M Operations & Maintenance (formerly LEED-EB)

CREDITS	RATING SYSTEM		Л	POTENTIAL CONTRIBUTION*
	ID+C	BD+C	O+M	
Materials & Resources				
		MRc4		B-Free small cube contributes to the project recycled
Recycled content	MRc4	Rc4 Healthcare: MRc5 Option 3		content criteria: post-consumer (0%) + $\frac{1}{2}$ pre-consumer (2%) = (1%).
Materials reuse		MRc3	Rc3 MRc2.2: hcare: Sustainable Option 3 Furniture Rc5 hcare: Option 3 Sustainable	
	MRc3.2	Healthcare: MRc5 Option 3		the 30% valuation of the furniture & furnishings budget
	MRc5	MRc5		B-Free small cube is assembled in Sarrebourg,
Regional materials		Healthcare: MRc5 Option 3		France for EMEA orders. Projects < 500 miles from this location qualify.
Indoor Enviromental Quality				
Low emitting materials	EQc4.5	Healthcare: MRc5 Option 2	N/A	B-Free small cube is SCS Indoor Advantage™ Gold (depending on options) certified for indoor air quality in EMEA.

*For potential contribution: These are the probable contributions; exact contributions will be dependent on the LEED rating system and the specific product.

**For LEED BD+C: New construction, these standards do not currently apply to furniture in the IEQ credit; however, the USGBC has allowed equivalent credit for furniture / furnishings when submitted as an Innovation in Design credit.

LEED V4

LEED is a rating system that drives integrated design thinking as it relates to various aspects of green buildings. B-Free small cube can contribute to a project's pursuit of LEED Certification across the three rating systems:

- LEED-ID+C Interior Design & Construction
- LEED-BD+C Building Design & Construction
- LEED-O+M Operations & Maintenance

CREDITS	RATING SYSTEM		N	POTENTIAL CONTRIBUTION*	
	ID+C	BD+C	O+M		
Materials & Resources					
Interiors life-cycle impact reduction	Option 2: Furniture Reuse	N/A	Purchasing - facility maintenance	Steelcase products are designed to be long lasting and durable often making reuse a feasible option, depending on project needs and desirability.	
Interiors life-cycle impact reduction	Option 3: Design for flexibility	N/A	and renovation Option 2: furniture	B-Free small cube is designed to be adaptable for design needs today and in the future and can easily be changed to remain on pace with evolving business needs.	
Building product disclosure and optimization - environmental product declarations	Option 1: Environmental Product Declaration	Furniture and medical furnishings	N/A	A life cycle assessment has been performed on B-Free small cube, the results of which are published through a Type III Environmental Product Declaration (available for viewing).	
		Option 3: Multi-attribute assessment of products			
		Option 1: Environmental Product Declaration			
Building product disclosure and optimization - material ingredients	Option 1: Material Ingredient Reporting	Option 1: Material Ingredient Reporting	Purchasing - facility maintenance and renovation Option 2: Furniture	B-Free small cube is Cradle to Cradle Certified™ Bronze, (depending on options), which contributes to this credit.	
		Furniture and medical furnishings			
		Option 1: Minimal chemical content			
Construction & Demolition Waste Planning & Management	Required	Required	N/A	Steelcase uses several innovative packaging initiatives to minimize our waste impact (see transport section). These efforts may help to contribute, in part, towards achieving this prerequisite or credit.	

*For potential contribution: These are the probable contributions; exact contributions will be dependent on the LEED rating system and the specific product.

Other Potential LEED V4 Contributions

CREDITS	RATING SYSTEM		M	POTENTIAL CONTRIBUTION*
	ID+C	BD+C	O+M	
Indoor Enviromental Quality	I		l.	1
Low emitting materials	Option 1: Product Category Calculations or Option 2: Budget Calculation Method	Required Option 1: Product Category Calculations or Option 2: Budget Calculation Method Furniture and medical furnishings Option 2: testing and modeling of chemical	Purchasing - facility maintenance and renovation Option 2: Furniture	B-Free small cube is SCS Indoor Advantage™ Gold certified for indoor air quality in EMEA.

*For potential contribution: These are the probable contributions; exact contributions will be dependent on the LEED rating system and the specific product.

Refer to www.usgbc.org for LEED Program details.

Steelcase sustainability related actions and results are communicated annually in the Corporate Sustainability Report. 🔊



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