

Product pictured is not the exact style of the product studied in this document.

Ology

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

Ology is a desking family comprised of height adjustability options, work surfaces, desk organisation options and cable management. Ology offers various ergonomic and antimicrobial treatment options to create a more health-conscious work environment.

The model chosen for analysis is the most representative line (reference N111012700) from the Ology range. Standard features on this model include:

- 1600 x 800 mm top size
- 740 mm height
- facility manager sliding top function
- · cable brackets

Steelcase

Environmental Overview

Final Assembly Location

Final assembly of Ology is in Rosenheim, Germany by Steelcase, for the EMEA (Europe, Middle East and Africa) market.

Life Cycle Performance



To measure the environmental impacts of Ology, 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 Ology.

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

Ology contains 50% recycled materials, by weight (30% pre-consumer + 20% post-consumer).

At the end of its useful life, Ology is 98% effectively recyclable by weight.

Certifications and Labels

The environmental and social performance of Ology is communicated through the following voluntary labels/certifications:

- NF Environnement
- NF OEC
- PEFCTM
- Cradle to Cradle Certified™ Bronze
- SCS Indoor Advantage[™] Gold
- Environmental Product Declaration (EPD)
- Blauer Engel RAL-UZ 38

LEED Contribution

Ology may contribute in the following areas:

- · Recycled content
- Materials reuse
- Regional materials
- Rapidly renewable materials
- · Low-emitting materials
- Interiors life-cycle impact reduction
- Building product disclosure and optimization material ingredients
- Daylight and views
- Building product disclosure and optimization sourcing of raw materials
- Quality Views
- · 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 50% recycled materials, by weight (30% pre-consumer + 20% 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.
- · Packaged with 100% recycled cardboard.
- · No use of wood from genetically modified trees.
- 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.
- Low formaldehyde emissions of wood-based components, according to ISO 16000 (<20 µg/m3).
- No additional adhesives between edge band and particle board (seamless edge banding), depending on colours.
- Is made with wood sourced from responsibly managed forests

Production

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

- Final assembly of Ology is in Rosenheim, Germany by Steelcase, for the EMEA (Europe, Middle East, Africa) market.
- This plant is ISO 14001, OHSAS 18001, and EMAS certified.
- The coating systems operate in accordance with the requirements of the European VOC Directive.

Transport

This phase includes downstream transports.

· Made in Europe

 Optimized packaging to keep transport volumes as low as possible and improve filling rates.

Use

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

- **Designed for a long product life**, with replaceable parts that are easy to change.
- Product meets ANSI/BIFMA Standards M7.1/X7.1 for low- VOC emissions to indoor air quality- SCS Indoor Advantage™ Gold.
- · Clean with only soapy water.
- Maintenance information available upon request.

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 a quick and easy disassembly of materials with no permanent assembly.
- Disassembly and recycling directions available upon request, for a representative configuration.
- 98% recyclable by weight, according to the current waste disposal schemes.
- 100% recyclable packaging.
- Primary plastic parts clearly labelled for 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

Ology materials composition is listed below*.



WOOD BASED MATERIALS

	kg	90
Particle board	19.6	48
Melamine	0.2	0.5



METALS

	kg	%
Steel	17.5	42.9
Stainless steel	<0.1	<0.1



PLASTICS

	kg	%
Nylon 6 with glass beads (PA6-GB)	0.7	1.8
Polypropylene (PP)	0.3	0.8
Polyoxymethylene (POM)	<0.1	0.1
Nylon 6 (PA6)	<0.1	<0.1



OTHER MATERIALS

	kg	%
Powder coating	0.2	0.4



PACKAGING

	kg	%
Low density polyethylene (LDPE)	0.7	1.6
Expanded polyethylene (EPE)	0.3	0.7
Cardboard	1.3	3.2

TOTAL WEIGHT - incl. packaging

40.9

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 95% 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^{TM (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.

Technology components are RoHS compliant (Reduction of Hazardous Substances), meaning that Ology doesn't contain any of the six hazardous chemicals and chemical compounds listed by the RoHS European Directive.

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.

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

 $^{^{(1)}}$ Cradle to Cradle Certified $^{\text{CM}}$ is a certification mark licensed by the Cradle to Cradle Products Innovation Institute.

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.



OLOGY

Total recycled content	20	50
Post-consumer recycled content	7.9	20
Pre-consumer recycled content	12	30
	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.



98%

According to the available waste management infrastructures, we estimate that 98% is 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.

Blauer Engel RAL-UZ 38

This product is targeted for Blauer Engel RAL-UZ 38 certification, according to environmental and consumer health requirements.

Cradle to Cradle Certified™

This product is Cradle to Cradle Certified™ (¹) 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.

Office Excellence Certifié

This product is NF OEC (Office Excellence Certifie) certified, meaning it complies with safety, ergonomic, environmental and social requirements.

SCS Indoor Advantage™ Gold

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

ON THE MATERIALS

PEFCTM

At least 90% of the wood components in this product are PEFCTM (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

EMAS

The plant in Rosenheim, Germany is EMAS (European Eco-Management and Audit Scheme) certified.

ISO 14001

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

OHSAS 18001

The plant in Rosenheim, Germany is OHSAS 18001 (Occupational Health and Safety Assessment Series) management system certified.

⁽¹⁾ Cradle to Cradle Certified™ is a certification mark licensed by the Cradle to Cradle Products Innovation Institute.

⁽²⁾ Indoor Advantage™ and Indoor Advantage™ Gold are trademarks of Scientific Certification Systems.

LEED V3 - 2009

Daylight and views

LEED, or Leadership in Energy & Environmental Design, is a green building certification program that recognizes best-in-class building strategies and practices. Ology 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)

EQc8.1 & 8.2

- 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		POTENTIAL CONTRIBUTION*
	ID+C	BD+C	O+M	
Materials & Resources				
		MRc4		
Recycled content	MRc4	Healthcare: MRc5 Option 3		Ology contributes to the project recycled content criteria: post-consumer (20%) + ½ pre-consumer (30%) = 35%.
Materials reuse	MRc3.2	Healthcare: MRc5 Option 3	MRc2.2: Sustainable purchasing- Furniture	If chosen for reuse, this product can contribute to the 30% valuation of the furniture & furnishings budget.
Regional materials	MRc5	Healthcare: MRc5 Option 3		Ology is assembled in Rosenheim, German for EMEA orders. Projects < 500 miles from this location qualify.
		MRc6		Otaniana official and a sufficient and a
Rapidly renewable materials	MRc6	Healthcare: MRc5 Option 3		Steelcase offers select textile and surface material option that may contribute to this credit.
Indoor Enviromental Quality	·			
Low emitting materials	EQc4.5	Healthcare: MRc5 Option 2	N/A	Ology is SCS Indoor Advantage™ Gold (depending on options) certified for indoor air quality in EMEA.

EQc2.4

these credits.

Steelcase offers a range of products and application

thought starters to assist customers in achieving

EQc8.1 & 8.2**

^{*}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. Ology 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		М	POTENTIAL CONTRIBUTION*
	ID+C	BD+C	O+M	
Materials & Resources				
Interiors life-cycle impact reduction	Option 2: Furniture Reuse	N/A		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		Ology 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 - sourcing of raw materials	Option 2: Leadership extraction practices	Option 2: Leadership extraction practices Healthcare - Medical furniture & furnishings Option 3:	Purchasing - facility maintenance and renovation Option 2: furniture	Extended Producer Responsibility: Steelcase offers different end of use / end of life programs for different markets, to reuse, resell, refurbish, donate, or recycle the mix of existing assets – all in an effort to divert materials from the landfill (See notes below). Bio-based materials - Steelcase offers textile and surface material options that may contribute to this credit. Wood products- Steelcase offers FSC certified wood as an option, which contributes to this option. Materials Reuse: If chosen for reuse, this product can contribute.
		Multi-attribute assessment		Recycled Content: Product meets or exceeds the >10% post-consumer, or >20% pre-consumer criteria: Post-consumer (20%) + ½ pre-consumer (30%) = 35%.
Building product disclosure and optimization - environmental product declarations	Option 1: Environmental Product Declaration	Furniture and medical furnishings Option 3: Multi-attribute assessment of products Option 1: Environmental Product Declaration	N/A	A life cycle assessment has been performed on the Ology, the results of which are published through a Type III Environmental Product Declaration (available for viewing).
Building product disclosure and optimization - material ingredients	Option 1: Material Ingredient Reporting	Option 1: Material Ingredient Reporting Furniture and medical furnishings Option 1: Minimal chemical content	Purchasing - facility maintenance and renovation Option 2: Furniture	Ology is Cradle to Cradle Certified™ Bronze, (depending on options), which contributes to this credit.
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		И	POTENTIAL CONTRIBUTION*
	ID+C	BD+C	O+M	
Indoor Enviromental Quality				
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 content	Purchasing - facility maintenance and renovation Option 2: Furniture	Massaud Conference is SCS Indoor Advantage™ Gold certified for indoor air quality in North America.
Quality views	Credit	Credit	Daylight and quality views Option 2: Quality views	Steelcase offers a range of products and application thought starters, though several other factors play into achieving this credit, beyond the scope of furniture.

^{*}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. 💿



Visit Steelcase.com



f facebook.com/Steelcase



twitter.com/Steelcase



youtube.com/SteelcaseTV