

Think

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

Think is a chair designed for the mobility of users in the workplace. It is smart, simple and sustainable.

Think is:

- Smart: because it does the Thinking for us. It fosters wellbeing through automatic ergonomic support thanks to its advanced weight activated mechanism and new membrane of flexors. It responds to our changing postures and body movements, allowing us to get to work faster, making the most of our valuable sit time.
- Simple: because it is very easy to use. It anticipates our postures, while still giving users the freedom to customize it to their own personal preferences.
- **Sustainable:** because it can be easily disassembled with common hand tools making it easy to recycle at end of life, and it has undergone materials chemistry and develop with a life cycle vision to understand and minimize its lifelong impact on the environment. In addition, its back frame and base are composed of recycled materials (PA6).

The model chosen for analysis is the most representative line (reference 465A300) from the Think range. Standard features on this model include:

- plastic base
- seat upholstery: "Atlantic"
- 4D armrests
- back upholstery without any foam: "3D"
- lumbar

Steelcase

Environmental Overview

Final Assembly Location

Final assembly of Think is in Reynosa, Mexico, by Steelcase, for the Americas 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 Think, 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 Think.

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

Think contains 28% recycled materials, by weight (10% pre-consumer + 18% post-consumer).

At the end of its useful life, Think is 95% recyclable by weight.

Certifications and Labels

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

- Cradle to Cradle Certified™ (Think 3D Knit only)
- SCS Indoor Advantage[™] Gold
- Environmental Product Declaration (EPD)
- BIFMA level®

LEED Contribution

Think may contribute in the following areas:

- Recycled content
- · Materials reuse
- Regional materials
- Rapidly renewable materials
- Low-emitting materials (in progress)
- Environmental Product Declarations
- Material Ingredients

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 28% recycled materials, by weight (10% pre-consumer + 18% post-consumer).
- Materials chemistry assessment completed for this product.
- Plastic parts do not contain pigments with Cadmium, Chrome VI and Mercury.
- Low formaldehyde & VOC emissions / concentration according to ANSI/BIFMA X7.1 and ANSI/BIFMA e.3 VOC's of concern.
- Eco-labelled textiles and rapidly renewable wool textiles available to specify with product.

Production

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

- Final assembly of Think is in Reynosa, Mexico, by Steelcase, for the Americas market.
- This plant is ISO 14001 and OHSAS 18001 certified.
- · Water-based adhesives used in assembly.

Transport

This phase includes upstream and downstream transports.

 Bulk packaging used for this product, wherever possible, to optimize volume in shipping.

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 AdvantageTM Gold.

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.
- 95% effectively recyclable by weight, according to the current waste disposal schemes.
- 100% effectively recyclable packaging.
- Primary plastic parts clearly labelled for easy sorting and effective recycling, according to ISO 11469.

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

Think materials composition is listed below*.



METALS

	kg	lb	%
Steel	4.6	10.2	28.9
Aluminum (cast)	4.5	9.9	28
Other	0.6	1.4	4
Zink (Zamak)	<0.1	0.1	0.4



PLASTICS

kg	lb	%
3.4	7.4	21
1.6	3.6	10.2
0.1	0.2	0.8
<0.1	0.1	0.3
<0.1	0.1	0.3
	3.4	3.4 7.4 1.6 3.6



OTHER MATERIALS

	kg	lb	%
Polyurethane foam	1	2.1	6
Fiberglass	0.1	0.2	0.6

TOTAL WEIGHT – incl. packaging	15.9	35.0
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*The list of materials does not contain all materials used in the product (adhesives, coatings, residuals, etc.).

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^{TM (1)} (Bronze) for Think 3D Knit.

Steelcase intends to refrain 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.

⁽¹⁾ Cradle to Cradle Certified™ 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.



THINK

	kg	lb	%
Pre-consumer recycled content	3.3	3.5	10
Post-consumer recycled content	1.0	6.3	18
Total recycled content	4.3	9.7	28

- 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.



95%

According to the available waste management infrastructures, we estimate that up to 95% is recyclable by weight.

^{*}Excludes packaging. 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 the actual availability of recycling services in the markets where the products are sold.

Certificates

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.

BIFMA level®

This product is level® 3 certified, BIFMA's sustainability certification program for furniture. This certification program assesses a products impact to materials, energy & atmosphere, human & ecosystem health, and social responsibility.

Cradle to Cradle Certified™

This product is Cradle to Cradle Certified™
Bronze, which assesses and rates products for material health, material reutilization, renewable energy and carbon management, water stewardship, and social fairness. (Think 3D Knit only)

SCS Indoor Advantage™ Gold

This product is Indoor Advantage™ 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 CertifiedTM textiles are available. Cradle to Cradle CertifiedTM products are evaluated for material health, material reutilization, renewable energy and carbon management, water stewardship, and social fairness.

ON THE PLANTS

ISO 14001

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

OHSAS 18001

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

¹ Cradle-to-Cradle Certified^{CM} 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

LEED, or Leadership in Energy & Environmental Design, is a green building certification program that recognizes best-in-class building strategies and practices. Think 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		VI	POTENTIAL CONTRIBUTION*
	ID+C	BD+C	O+M	
Materials & Resources				
		MRc4		
Recycled content	MRc4	Healthcare: MRc5 Option 3		Think contributes to the project recycled content criteria: post-consumer (18%) + ½ pre-consumer (10%) = 23%.
		MRc3	I MRc2 2:	
Materials reuse	MRc3.2	Healthcare: MRc5 Option 3		If chosen for reuse, this product can contribute to the 30% valuation of the furniture & furnishings budget
		MRc5	purchasing-	This is a second of a December of the Association o
Regional materials	MRc5	Healthcare: MRc5 Option 3	Furniture	Think is assembled in Reynosa, Mexico for Americas orders. Projects < 500 miles from this location qualify.
		MRc6		
Rapidly renewable materials	MRc6	Healthcare: MRc5 Option 3		Steelcase offers select textile and surface material options may contribute to this credit.
Indoor Environmental Quality				
Low emitting materials	EQc4.5	Healthcare: MRc5 Option 2	N/A	Think is SCS Indoor Advantage™ Gold (depending on options) certified for indoor air quality in North America.

^{*}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. Think 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		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.
		Option 2: Leadership extraction practices Option 2: Purchasing - facility maintenance	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).	
Building product disclosure and optimization - sourcing of raw materials	Option 2: Leadership extraction	Healthcare - Medical furniture &	and renovation Option 2: furniture	Bio-based materials - Steelcase offers select textile and surface material options that may contribute to this credit.
raw materials	practices	furnishings Option 3:	Turniture	Materials Reuse - If chosen for reuse, this product can contribute.
		Multi-attribute assessment		Recycled content - Think [contributes to the project recycled content criteria]: post-consumer (6.6%) + ½ pre-consumer (20.8%) = (17.0%).
		Furniture and medical furnishings		
Building product disclosure and optimization - environmental product declarations	Option 1: Environmental Product Declaration	Option 3: Multi-attribute assessment of products	N/A	A life cycle assessment has been performed on Think, the results of which are published through a Type III Environmental Product Declaration (available for viewing).
Deciaration	Option 1: Environmental Product Declaration			
	Option 1:	Option 1: Material Ingredient Reporting	Purchasing - facility maintenance	
Building product disclosure and optimization - material ingredients Material Ingredient Reporting	Furniture and renovat		Think 3D Knit is Cradle to Cradle Certified™, Bronze, which contributes to this credit.	
	Tioporting	furnishings Option 1: Minimal chemical content	Option 2: Furniture	
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			POTENTIAL CONTRIBUTION*
	ID+C	BD+C	O+M	

Pilot Credits: The following credits are poter	ntial contribution	on areas for St	eelcase produc	cts and applications
Environmentally preferable finishes and furnishings	MR Pilot	MR Pilot	N/A	Think is level® 3 certified, which contributes to this pilot credit.
Social equity in the supply chain	N/A	MR Pilot	N/A	Think is level® 3 certified, which contributes to this pilot credit which demonstrates compliance to ANSI/BIFMA e3 sustainability standard - social responsibility sections 8.7.2.1 and 8.7.2.2

^{*}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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