



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

## Gesture

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

**Gesture** is the first chair designed to support our interactions with today's technologies. Inspired by the human body. Created for the way we work today.

- has a synchronized system moving with each user to provide continuous and persistent support
- offers unique arms which move like the human arm, allowing users to be supported in any position
- possesses a seat that brings comfort all the way to the edges
- features a wide variety of adjustments allowing it to fit a important palette of users and spaces

The model chosen for analysis is the most representative line (reference # 442A30) from the Gesture range. Standard features on this model include:

- Plastic base
- Seat upholstery: "Atlantic"
- 360 arms
- Back upholstery: "Atlantic"

This EPD – Environmental Product Declaration – is valid for the above reference.  
Date of critical review: 09/2014

# Environmental Overview

## Final Assembly Location

Final assembly of Gesture is in Sarrebourg, France by Steelcase for the EMEA (Europe, Middle East, and Africa) markets.

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## 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 Gesture, 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 Gesture.

### 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

Gesture contains 24.6% recycled materials, by weight (16.3% pre-consumer + 8.3% post-consumer).

At the end of its useful life, Gesture is 92% effectively recyclable by weight.

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## Certifications and Labels >

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

- Environmental Product Declaration (EPD)
- NF Environnement
- NF OEC
- Cradle to Cradle Certified™
- SCS Indoor Advantage™ Gold
- European Ecolabel
- Oeko-Tex

## LEED Contribution >

Gesture 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 - environmental product declarations
- 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.

- **Gesture contains 24.6% recycled materials**, by weight (16.3% pre-consumer + 8.3% post-consumer).
- **Materials chemistry assessment** completed for this product.
- **Plastic parts** do not contain pigments with Cadmium, Chrome VI and Mercury.
- **Eco-labelled textiles OekoTex / EU Ecolabel / Cradle to Cradle Certified™** and rapidly renewable wool textiles available to specify with product.
- **Packaged with 70% recycled cardboard**, and 25% recycled LDPE film.
- **No REACh Substances of Very High Concern (SVHC)** present at concentrations greater than 0.1% according to data/declarations provided by our suppliers.

## Production

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

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

## Transport

This phase includes downstream transports.

- Product is shipped knocked down pieces in all possible scenarios - allowing for optimization of transport volume.
- 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.
- Cleaning 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.

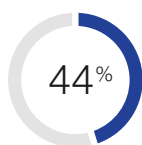
- **Designed to enable responsible end of use strategies** - re-selling, refurbishing, charitable donation or recycling.
- **92% effectively recyclable by weight**, according to the current waste disposal schemes."
- **100% effectively recyclable packaging.**
- **Designed for quick and easy disassembly of materials** - with no permanent assembly.
- **Primary plastic parts clearly labelled for easy sorting and effective recycling**, according to ISO 11469.
- **Disassembly and recycling directions available upon request**, for a representative configuration.

### 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.

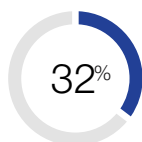
# Materials

Gesture materials composition is listed below\*.



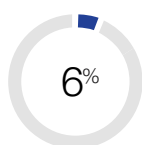
## METALS

	kg	%
Steel	12.6	39.8
Aluminum (cast)	1.3	4.0
Stainless Steel	0.1	0.4
Zinc (Zamak)	0.1	0.2
Bronze	<0.1	<0.1



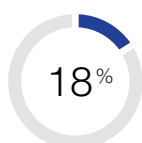
## PLASTICS

	kg	%
Polypropylene (PP)	3.7	11.9
Recycled glass-filled nylon 6 (PA6-GF)	3.7	11.6
Glass-filled nylon 6 (PA6-GF)	1.2	3.9
Polyoxymethylene (POM)	0.8	1.6
Nylon (PA)	0.4	1.2
Thermoplastic elastomer (TPE)	0.3	0.9
Nylon 66 (PA66)	0.1	0.4
Polybutylene terephthalate/ polycarbonate (PBT/PC)	<0.1	0.1
Glass-filled nylon (PA-GF)	<0.1	0.1
Polyethylene terephthalate (PET)	<0.1	<0.1
Polybutylene terephthalate (PBT)	<0.1	<0.1
Polypropylene/ethylene propylene diene (PP/EPDM)	<0.1	<0.1
Synthetic rubber	<0.1	<0.1



## OTHER MATERIALS

	kg	%
Polyurethane foam	0.8	3.6
Powder coating	0.3	1
Polyester fabric	0.2	0.7
Polyester wadding	<0.1	0.1
Fiberglass	<0.1	0.1
Natural rubber	<0.1	<0.1



## PACKAGING

	kg	%
Cardboard	5.6	17.8
Low density polyethylene (LDPE)	0.1	0.4

## TOTAL WEIGHT – incl. packaging

**31.3**

\*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™<sup>(1)</sup> (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.

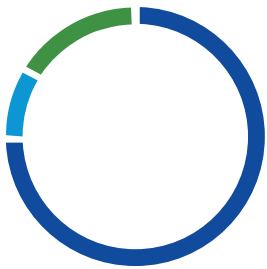
Steelcase intends to refrain purchasing products, components, or materials containing any "Democratic Republic of the Congo (DRC) Conflict Minerals" (coltan (from which tantalum is derived), cassiterite (tin), gold, wolframite (tungsten), or their derivatives), and any other minerals or derivatives which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

<sup>(1)</sup> 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.



### GESTURE

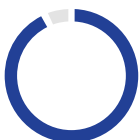
	kg	%
Pre-consumer recycled content	4.2	16.3
Post-consumer recycled content	2.1	8.3
<b>Total recycled content</b>	<b>6.4</b>	<b>24.6</b>

- 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.



**92%**

According to the available waste management infrastructures, we estimate that up to 92% is recyclable by weight.

\*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™ 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.

### NF Office Excellence Certifié

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

### SCS Indoor Advantage™ Gold

This product is SCS 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 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.

### Oeko-Tex

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

### European Ecolabel

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

## 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 is OHSAS 18001 (Occupational Health and Safety Assessment Series) management system certified.

<sup>1</sup> Cradle to Cradle Certified™ is a certification mark licensed by the Cradle to Cradle Products Innovation Institute.

<sup>2</sup> 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. Gesture 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			POTENTIAL CONTRIBUTION*
	ID+C	BD+C	O+M	
<b>Materials &amp; Resources</b>				
Recycled content	MRc4	MRc4 Healthcare: MRc5 Option 3	MRc2.2: Sustainable purchasing- Furniture	Gesture contributes to the project recycled content criteria: post-consumer (8.3%) + ½ pre-consumer (16.3%) = 16.5%.
Materials reuse	MRc3.2	MRc3 Healthcare: MRc5 Option 3		If chosen for reuse, this product can contribute to the 30% valuation of the furniture & furnishings budget
Regional materials	MRc5	MRc5 Healthcare: MRc5 Option 3		Gesture is assembled in Sarrebourg, France for EMEA orders. Projects <500 miles from this location qualify.
Rapidly renewable materials	MRc6	MRc6 Healthcare: MRc5 Option 3		Steelcase offers select textile and surface material options that may contribute to this credit.
<b>Indoor Environmental Quality</b>				
Low emitting materials	EQc4.5	Healthcare: MRc5 Option 2	N/A	Gesture is SCS Indoor Advantage™ Gold (depending on options) certified for indoor air quality in EMEA.
Daylight and views	EQc8.1 & 8.2	EQc8.1 & 8.2*	EQc2.4	Steelcase offers a range of products and application thought starters to assist customers in achieving these credits.

\*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. Gesture 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	
<b>Materials &amp; Resources</b>				
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		If chosen for reuse, this product can contribute to the 30% valuation of the furniture & furnishings budget.
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: Multi-attribute assessment	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 (See MRc2): If chosen for reuse, this product can contribute. Recycled Content: Product meets or exceeds the >10% post-consumer, or >20% pre-consumer criteria: Post-consumer (8.3%) + ½ pre-consumer (16.3%) = 16.5%.
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 Gesture, 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	Gesture is Cradle to Cradle Certified™, Bronze, 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			POTENTIAL CONTRIBUTION*
	ID+C	BD+C	O+M	
<b>Indoor Environmental Quality</b>				
Low emitting materials	Option 1: Product Category Calculations  or Option 2: Budget Calculation Method	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	Gesture is SCS Indoor Advantage™ Gold certified for indoor air quality in EMEA.
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](http://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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