

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

Massaud Work Lounge

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

Designed with a modern, residential sensibility, the Massaud Collection balances luxury and utility – beautifully crafted for comfort in the workplace. The collection provides design continuity with a global aesthetic across a range of seating solutions including lounge and conference seating.

Part Work. Part Refuge. Designed for comfort and connecting with technology, the Massaud Lounge, Work Lounge and Ottoman offer an alternative destination to work, contemplate or relax. The swiveling tablet brings work closer while settling back into a relaxed posture with the ottoman.

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

- · adjustable headrest
- · swivel tablet
- 41.3H x 41.3W x 32.9D

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Environmental Overview

Final Assembly Location

Final assembly of Massaud Work Lounge is in Reynosa, Mexico for Steelcase for the Americas and Asia Pacific markets.

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

Materials Composition

A break down of the basic materials in Massaud Work Lounge.

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

Massaud Work Lounge contains 11.3% recycled materials, by weight (4.5% pre-consumer + 6.8% post-consumer).

At the end of its useful life, Massaud Work Lounge is 68% effectively recyclable by weight.

Certifications and Labels

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

- SCS Indoor Advantage[™] Gold
- BIFMA level® 2

LEED Contribution

Massaud Work Lounge may contribute in the following areas:

- Recycled content
- Materials reuse
- · Regional materials
- Low-emitting materials
- · Interiors life-cycle impact reduction
- Daylight and views
- Building product disclosure and optimization sourcing of raw materials
- Quality Views
- Construction & Demolition Waste Planning & Management
- Environmentally Preferable finishes and furnishings
- · Social equity in the supply chain

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.

- Massaud Work Lounge contains 11.3% recycled materials, by weight (4.5% pre-consumer + 6.8% post-consumer).
- Materials chemistry assessment completed for this product.
- 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.
- Massaud Work Lounge may meet the Healthier Interiors goal of the Safer Chemical Challenge, depending on options.
 Please visit Healthier Hospitals for a complete list of Steelcase products that may contribute to the Safer Chemicals Challenge.
- Is made with wood sourced from **responsibly managed forests.**
- Eco-labelled textiles OekoTex / EU Ecolabel / Cradle to Cradle Certified™ 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.

- This plant is ISO 14001 and OHSAS 18001 certified.
- · Water-based adhesives used in assembly.

 Final assembly of Massaud Work Lounge is in Reynosa, Mexico for Steelcase for the Americas and Asia Pacific markets.

Transport

This phase includes downstream transports.

· Made in North America

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.

- 68% effectively recyclable by weight, according to the current waste disposal schemes.
- 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.
- The Steelcase Phase 2 Program provides end-of-use, end-of-need and end-of-life disposition solutions that align with your Corporate Social Responsibility Goals.
 For more information, and to see if this service is available in your area, please contact your Steelcase sales representative for more information.

Materials

Massaud Work Lounge materials composition is listed below*.



METALS

	kg	lb	%
Steel	17.4	38.4	35.8
Aluminum (cast)	8.2	18.1	16.9
Aluminum (extruded)	0.7	1.5	1.4
Bronze	0.3	0.7	0.6



PLASTICS

	kg	lb	%
Polyphenylene ether (PPE)	8.6	19	17.7
Low density polyethylene (LDPE)	4.5	9.9	9.3
Acrylonitrile butadiene styrene (ABS)	1.2	2.6	2.5
Polypropylene (PP)	0.8	1.8	1.6
Nylon (PA)	0.1	0.2	0.2
Polyoxymethylene (POM)	0.1	0.2	0.2



WOOD BASED MATERIALS

	kg	lb	%
Solid wood	2.6	5.7	5.3
Cardboard	0.9	2	1.9



OTHER MATERIALS

	kg	lb	%
Polyurethane foam	3	6.6	6.2
Natural rubber	<0.1	<0.1	< 0.1

TOTAL WEIGHT	48.4	107.1

^{*}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 have been evaluated or assessed for several human and environmental health criteria – all in an effort to understand and optimize the products throughout their life cycle.

Steelcase has conducted an internal evaluation of 90% of this product's materials based on the Steelcase Reportable Substance list.

Steelcase has worked with our supply chain to inventory and assess materials in this product down to 0.01% (or 100 ppm) in each homogeneous material with the intent to eliminate chemicals of concern and optimize with healthier materials of equal or greater functionality.

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.

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.



MASSAUD WORK LOUNGE

Total recycled content	25	55	23
Post-consumer recycled content	6.8	14.9	14
Pre-consumer recycled content	4.5	9.9	9
	kg	lb	%

- 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.



68%

According to the available waste management infrastructures, we estimate that 68% is effectively recyclable.

^{*}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

BIFMA level®

This product is level® 2 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.

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.

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

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. Massaud Work Lounge 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	F	RATING SYSTEM		POTENTIAL CONTRIBUTION*
	ID+C	BD+C	O+M	
Materials & Resources				
		MRc4		Massaud Work Lounge contributes to the project recycled
Recycled content	MRc4	Healthcare:		content criteria:
		MRc5 Option 3	MRc2.2:	post-consumer (14%) + ½ pre-consumer (9%) = 18.5%.
Materials reuse	MRc3.2	Healthcare:	Sustainable	If chosen for reuse, this product can contribute to
Waterials redse	1711 100.2	MRc5 Option 3	purchasing-	the 30% valuation of the furniture & furnishings budget.
		Healthcare:	Furniture	Massaud Work Lounge is assembled in Reynosa, Mexico for
Regional materials	MRc5	MRc5 Option 3		Americas and Asia Pacific orders.
				Projects <500 miles from this location qualify.
Indoor Environmental Quality				
macor Environmental Quanty				Massaud Work Lounge is SCS Indoor Advantage™ Gold
Low emitting materials	EQc4.5	Healthcare:	N/A	(depending on options) certified for indoor air quality in
		MRc5 Option 2	. 4/7 (North America.
Daylight and views	EQc8.1 & 8.2	2 EQc8.1 & 8.2* EQc2.4	Steelcase offers a range of products and application thought	
Daylight and views	LQC0.1 & 0.2	LQ00.1 & 0.2	LQ02.4	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.

Massaud Work Lounge 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 o 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.	
		Option 2: Leadership extraction	Purchasing - facility maintenance and renovation	IExtended Producer Responsibility - Steelcase offers differe 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	Option 2: Leadership	practices Healthcare -	Option 2:	Bio-based materials - Steelcase offers select textile and surface material options that may contribute to this credit.	
nd optimization - sourcing of aw materials	extraction Medical practices fur	Medical furniture & furnishings	xtraction Medical furniture &	Tarritare	Wood products - Steelcase offers FSC™ certified wood as a option on select products, which contributes to this option.
		Option 3: Multi-attribute		Materials Reuse - If chosen for reuse, this product can contribute.	
		assessment		Recycled content - Massaud Work Lounge contributes to th project recycled content criteria: post-consumer (14%) + ½ pre-consumer (9%) = 18.5%.	
Indoor Enviromental Quality					
maoor Environmental Quality		Required			
Low emitting materials	Option 1: Product Category Calculations or Option 2: Budget	Option 1: Product Category Calculations or Option 2: Budget Calculation Method Furniture	Purchasing - facility maintenance and renovation Option 2:	Massaud Work Lounge is SCS Indoor Advantage™ Gold certified for indoor air quality in North America.	
	Calculation Method	and medical furnishings Option 2: testing and	Furniture		

modeling of chemical content

^{*}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	F	RATING SYSTEM		POTENTIAL CONTRIBUTION*	
	ID+C	BD+C	O+M		
Materials and Resources					
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.	
Indoor Environmental Quality					
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.	

Pilot Credits: The following credits are poten	ntial contributi	on areas for St	eelcase prod	ucts and applications
Environmentally preferable finishes and furnishings	MR Pilot	MR Pilot	N/A	Massaud Work Lounge is level® 2 certified, which contributes to this pilot credit.
Social equity in the supply chain	N/A	MR Pilot	N/A	Massaud Work Lounge is level® 2 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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