

Jenny Low Chairs

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

The Jenny product line is being expanded with the addition of Jenny Low. Jenny Low chairs for lounging and working. The seat angle and overall height support the user in a recline position. This is an upholstered chair.

The model chosen for analysis is the most representative line (reference # TS31413) from the Jenny range. Standard features on this model include:

- · low feet in black plastic
- · fully upholstered

Steelcase

Environmental Overview

Final Assembly Location

Final assembly of Jenny Low Chairs is in Tijuana, Mexico for Steelcase for the NA (North America) 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.

Materials

Materials Composition

A break down of the basic materials in Jenny Low Chairs.

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

Jenny Low Chairs contains 0.0% recycled materials, by weight (0.0% pre-consumer + 0.0% post-consumer).

At the end of its useful life, Jenny Low Chairs is 26% effectively recyclable by weight.

Certifications and Labels

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

- SCS Indoor Advantage™
- BIFMA level® 1

Other targeted labels and certificates:

• BIFMA level® 2

LEED Contribution

Jenny Low Chairs may contribute in the following areas:

- · Recycled content
- · Materials reuse
- · Regional materials
- · Low-emitting materials
- Interior life cycle impact reduction
- · Design for flexibility
- · Daylight and views
- · Sourcing of Raw Materials
- Quality Views
- Planning
- Management
- · Environmentally Preferable finishes and furnishings

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.

- **Jenny Low Chairs contains 0.0% recycled materials,** by weight (0.0% pre-consumer + 0.0% post-consumer).
- · Materials chemistry assessment in progress 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.
- Low formaldehyde & VOC emissions / concentration according to ANSI/BIFMA X7.1 and ANSI/BIFMA e.3 VOC's of concern.

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 certified.
- Final assembly of Jenny Low Chairs is in Tijuana, Mexico for Steelcase for the NA (North America) market.

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 Advantage[™].
- Packaged with 55% recycled cardboard.

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** reselling, refurbishing, charitable donation or recycling.
- 26% effectively recyclable by weight, according to the current waste disposal schemes.
- · 55% effectively recyclable packaging.

 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

Jenny Low Chairs materials composition is listed below*.



WOOD BASED MATERIALS

	Kg	ID	%
Plywood	16.7	36.8	73.5
Solid wood	<0.1	<0.1	<0.1



OTHER MATERIALS

	kg	lb	%
Polyurethane foam	3.6	7.9	15.8
Other fabric	0.9	2.0	4.1



PLASTICS

	kg	lb	%
Polyester (PET)	1.1	2.3	4.7
Nylon (PA)	0.2	0.5	1.5



METALS

	kg	lb	%
Steel	<0.1	0.1	0.6

TOTAL WEIGHT	00.6	40.7
TOTAL WEIGHT	22.6	49.7

^{*}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 is conducting an internal evaluation of this product's materials based on the Steelcase Reportable Substance list.

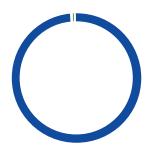
Steelcase is working with our supply chain to inventory and assess materials in this product down to 0.01% (or 100 ppm) in each homogeneous material with the intent to eliminate chemicals of concern and optimize with healthier materials of equal or greater functionality.

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.



JENNY LOW CHAIRS

Total recycled content	0.1	0.2	0
Post-consumer recycled content	0	0	0
Pre-consumer recycled content	0.1	0.2	0
	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.



26%

According to the available waste management infrastructures, we estimate that 26% 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® 1 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™

This product is SCS Indoor Advantage[™] certified according to the indoor air quality emissions requirements defined by the ANSI/BIFMA M7.1-2011.

ON THE PLANTS

ISO 14001

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

¹ Indoor Advantage™ and Indoor Advantage™ Gold are trademarks of Scientific Certification Systems.

LEED 2009

LEED, or Leadership in Energy & Environmental Design, is a green building certification program that recognizes best-in-class building strategies and practices. Jenny Low Chairs 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		Jenny Low Chairs contributes to the project recycled content	
Recycled content	MRc4	Healthcare: MRc5 Option 3	MRc2.2:	criteria: post-consumer (0%) + $\frac{1}{2}$ pre-consumer (0%) = 0.0%.	
Materials reuse	MRc3.2	Healthcare: MRc5 Option 3	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		Jenny Low Chairs is assembled in Tijuana, Mexico for NA orders. Projects <500 miles from this location qualify.	
Indoor Enviromental Qual	itv				
Low emitting materials	EQc4.5	Healthcare: MRc5 Option 2	N/A	Jenny Low Chairs is SCS Indoor Advantage™ (depending on options) certified for indoor air quality in NA.	
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. Jenny Low Chairs 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					
Interior life cycle impact reduction	MRc2 Option 2: Furniture Reuse	N/A	MRc2.2:	Steelcase products are designed to be long lasting and durable often making reuse a feasible option, depending on project needs and desirability.	
Interior life cycle impact reduction	MRc2 Option 3: Design for flexibility	N/A	Sustainable purchasing- Furniture	If chosen for reuse, this product can contribute to the 30% valuation of the furniture & furnishings budget.	
				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).	
	MRc4 Option 2:	MRc3 Option 2: Leadership extraction practices	MRc5	Bio-based materials - Steelcase offers select textile and surface material options that may contribute to this credit.	
Sourcing of raw materials	Leadership extraction practices		on extraction	Option 2: Furniture	Wood products - Steelcase offers FSC™ certified wood as an option on select products, which contributes to this option.
	practices				Materials Reuse (See MRc2) - If chosen for reuse, this product can contribute.
				Recycled content - Jenny Low Chairs [contributes to the project recycled content criteria]: post-consumer (%) + ½ preconsumer (%) = 0.0%.	
Indoor Enviromental Quality					
		EQc2			
Low emitting materials	EQc2	Healthcare MRc7 Option 2:	MRc5 Option 2: Furniture	Jenny Low Chairs is SCS Indoor Advantage™ certified for indoor air quality in North America.	

testing and modeling of chemical content Furniture

^{*}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	EDITS RATING SYSTEM		POTENTIAL CONTRIBUTION*	
	ID+C	BD+C	O+M	
Construction & Demolition Waste Planning & Managemen	t			
Planning	MR p2	MR p2	N/A	Steelcase uses several innovative packaging initiatives
		MRc5		to minimize our waste impact (see transport section).
Management	MRc6	Healthcare: MRc9	N/A	These efforts may help to contribute, in part, towards achieving this prerequisite or credit.
Quality views	EQc8	EQc8	General	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 contributio	on areas for St	eelcase produc	cts and applications
Environmentally preferable finishes and furnishings	MR Pilot	MR Pilot	N/A	Jenny Low Chairs is level® 1 certified, which contributes to this pilot credit.

^{*}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