



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

# **A**mia

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

Amia is a hardworking, versatile ergonomic office chair that adds an element of sophistication to any workspace.

The model chosen for analysis from the Amia range is reference # 4821410. Standard features for Amia include:

- Plastic Base
- 360 arms
- Seat and Back Upholstery: "Buzz 2"

**Steelcase** 

# **Environmental Overview**

## **Final Assembly Location**

Final assembly of Amia 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 Amia, 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 Amia.

## **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**

Amia contains 26% recycled materials by weight (15% post-consumer + 11% pre-consumer).

At the end of its useful life, Amia is 89% recyclable by weight.\*

# Certifications and Labels

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

- Environmental Product Declaration (EPD)
- BIFMA level® 3
- SCS Indoor Advantage™ Gold
- Cradle to Cradle Certified<sup>™</sup> textiles available

# **LEED Contribution**

Amia 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
- Certified Multi-attribute Products and Materials
- Social equity within the supply chain

<sup>\*</sup>In locations where recycling is available. Steelcase offers services to assist customers with end-of-use options including resale, refurbishment, charitable donation, and recycling.

# 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.

- Amia contains 26% recycled materials by weight (15% post-consumer + 11% pre-consumer).
- · Materials chemistry assessment completed for this product.
- Low formaldehyde and VOC emissions when Amia tested in accordance with ANSI/BIFMA M7.1 following the criteria detailed in ANSI/BIFMA e3 Sustainability Standard, Low Emitting Furniture credit 7.6.
- Cradle to Cradle Certified<sup>™</sup> textiles available to specify with product. (Amia Air only)
- · Product comes standard without PVC.

- Amia may meet the Healthier Interiors goal of Healthier Hospitals, depending on options. Please visit the Healthier Hospitals website for a complete list of Steelcase products that may contribute to the Safer Chemicals Challenge.
- Amia may meet the Red List Imperative requirements of the Living Building Challenge Materials Petal, depending on options.
- Amia may meet the Toxic Material Reduction Optimization Feature of the WELL Building Standard depending on options.

### **Production**

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

- The plant in Reynosa, Mexico is ISO 14001 certified.
- · Water-based adhesives used in assembly.

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

# **Transport**

This phase includes downstream transports.

- Optimized packaging to keep transportation volumes as low as possible and improve filling rates.
- Bulk packaging used for this product, wherever possible, to optimize volume in shipping.
- 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™ Gold.
- Designed for a long product life with replaceable parts that are easy to change.
- Cleaning instructions available.
- 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.
- 89% of the materials by weight can be recycled, according to the current waste disposal schemes.
- 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**

Amia materials composition is listed below.\*



## **METALS**

	kg	lb	%
Steel	14.0	30.9	52.8
Aluminum (cast)	3.1	6.8	11.8
Zinc (Zamak)	<0.1	<0.1	0.1
Bronze	<0.1	<0.1	<0.1



## **PLASTICS**

	kg	lb	%
Polypropylene (PP)	3.6	7.9	13.5
Glass-filled nylon 6 (PA6-GF)	2.8	6.2	10.4
Nylon 6 (PA6)	0.6	1.3	2.1
Nylon 66 (PA66)	0.2	0.4	0.8
Polyoxymethylene (POM)	0.2	0.4	0.8
Glass-filled nylon 66 (PA66-GF)	<0.1	<0.1	0.2
Acrylonitrile butadiene styrene (ABS)	<0.1	<0.1	<0.1
Low density polyethylene (LDPE)	<0.1	<0.1	<0.1
Polyester (PET)	<0.1	<0.1	<0.1
Synthetic rubber	<0.1	<0.1	<0.1



## OTHER MATERIALS

	kg	lb	%
Polyurethane foam	1.6	3.5	6.1
Polyester fabric	0.3	0.7	1.1



# PACKAGING

	kg	lb	%
Low density polyethylene (LDPE)	0.1	0.2	81.0
Blanket wrap	<0.1	<0.1	19.0

TOTAL WEIGHT - incl. packaging	26.8	59

<sup>\*</sup>The list of materials does not contain all materials used in the product. (e.g. 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.

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>TM</sup> Bronze (Amia Air only).<sup>(1)</sup>

<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.



#### AMIA

Total recycled content	6.9	15.3	26
Post-consumer recycled content	3.9	8.6	15
Pre-consumer recycled content	3.0	6.7	11
	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.



# 89%

According to the available waste management infrastructures, we estimate that 89% is recyclable.

<sup>\*</sup>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 level® is 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<sup>TM (2)</sup> Bronze which assesses and rates products for material health, material reutilization, renewable energy and carbon management, water stewardship, and social fairness. (Amia Air only)

## SCS Indoor Advantage™ Gold

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

## ON THE MATERIALS

### Cradle to Cradle Certified™ Textiles

A selection of Cradle to Cradle Certified<sup>TM</sup> textiles are available to specify with the product. Cradle to Cradle Certified<sup>TM (2)</sup> products are evaluated for material health, material reutilization, renewable energy and carbon management, water stewardship, and social fairness.

### ON THE PLANTS

## ISO 14001

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

<sup>(</sup>¹) Indoor Advantage™ and Indoor Advantage™ Gold are trademarks of Scientific Certification Systems.

<sup>(2)</sup> Cradle to Cradle Certified™ is a certification mark licensed by the Cradle to Cradle Products Innovation Institute.

# **LEED Contribution**

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

# **LEED V3 - 2009**

Daylight and views

CREDITS	EDITS RATING SYSTEM		М	POTENTIAL CONTRIBUTION*
	ID+C	BD+C	O+M	
Materials & Resources				
		MRc4		Amia contributes to the project recycled content criteria:
Recycled content	MRc4	Healthcare: MRc5 Option 3		post-consumer (15%) + ½ pre-consumer (11%) = 20.5%.
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		Final assembly of Amia is 100.0% in Reynosa, Mexico for North American orders. Projects <500 miles (800 km) from this location qualify.
		MRc6		
Rapidly renewable materials	MRc6	Healthcare: MRc5 Option 3		Steelcase offers select textile and surface material options that may contribute to this credit.
Indoor Environmental Quality				
Low emitting materials	EQc4.5	Healthcare: MRc5 Option 2	N/A	Amia is SCS Indoor Advantage™ Gold (depending on options) certified for indoor air quality in NA.

EQc2.4

EQc8.1 & 8.2\*\*

Steelcase offers a range of products and application thought

starters to assist customers in achieving these credits.

<sup>\*</sup>For Potential Contribution: These are the probable contributions; exact contributions will be dependent on the LEED rating system and the specific product.

<sup>\*\*</sup>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 is a rating system that drives integrated design thinking as it relates to various aspects of green buildings. Amia 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

## **LEED V4**

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.
Interiors life-cycle impact reduction	Option 3: Design for flexibility	N/A		Amia 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.
		Option 2: Leadership extraction practices	Purchasing - facility maintenance and renovation	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	Option 2: Leadership	Healthcare -	Option 2: furniture	Bio-based materials - Steelcase offers select textile and surface material options that may contribute to this credit.
and optimization - sourcing of raw materials	extraction practices	Medical furniture & furnishings		Wood products - Steelcase offers FSC™ certified wood as an 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 - (15%) post-consumer + ½ pre-consumer (11%) = 20.5%.
		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 Amia, the results of which are published through a Type III Environmental Product Declaration (available for viewing).
	200.00.00.00	Option 1: Environmental Product Declaration		
		Option 1: Material Ingredient Reporting	Purchasing -	Amia Air is Cradle to Cradle Certified™ Bronze, which
Building product disclosure and optimization - material ingredients  Option 1:  Material Ingredient Reporting	Furniture and medical furnishings	facility maintenance and renovation	contributes to this credit.  Amia has achieved ANSI/BIFMA e3-2014 credit 7.5.1.3 at 90%	
	6.00	Option 1: Minimal chemical content	Option 2: Furniture	or greater 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.

<sup>\*</sup>For Potential Contribution: These are the probable contributions; exact contributions will be dependent on the LEED rating system and the specific product.

## **LEED V4 Continued**

CREDITS	RATING SYSTEM			POTENTIAL CONTRIBUTION*
	ID+C	BD+C	O+M	

Indoor Environmental Quality				
		Required		
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	Purchasing - facility maintenance and renovation	Amia is SCS Indoor Advantage™ Gold (depending on options) certified for indoor air quality in NA.
		Furniture and medical furnishings	Option 2: Furniture	
		Option 2: testing and modeling of chemical content		
	_	Daylight and quality views	Steelcase offers a range of products and application thought	
Quality views	Credit Credit	Great	Option 2: Quality views	starters, though several other factors play into achieving this credit, beyond the scope of furniture.

## **Other Potential LEED V4 Contributions**

Pilot Credits: The following credits are potential contribution areas for Steelcase products and applications				
Certified Multi-attribute Products and Materials	Pilot	Pilot	Pilot	Amia is level® 3 certified, which will contribute to this pilot credit.
Social equity in the supply chain	N/A	MR Pilot	N/A	Amia 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

<sup>\*</sup>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. 💿



# Steelcase<sup>®</sup>

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