Node for Healthcare

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

Designed to remove barriers between patients, clinicians and family members, Node with ShareSurface nurtures human connection and enhances the use of technology in healthcare spaces. Exam room space is optimized by combining a worksurface for technology and information sharing with seating, all within an efficient footprint.

For clinicians, the Node design offers a flexible back and passive lumbar curve so they can transition between multiple postures comfortably, while a stable base and secure arm rest supports a natural range of motion. Whether reclined in a relaxed position or shifted forward to engage closely with the patient, Node with ShareSurface provides comfort from the first appointment to the last.

The model chosen for analysis is the most representative line (reference # 480280) from the Node range. Standard features on this model include:

• Curved lumbar-supported back with arm support

• ShareSurface moves right to left 138 degrees

• ShareSurface pivots 1.5" and swivesl 360 degrees

• Five-arm base offers easy maneuverability

• High back or mid back version available

Steelcase
HEALTH

1

Environmental Overview

Final Assembly Location

Final assembly of Node is in Zeeland, Michigan, USA 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 Node.

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
Node contains 21.0% recycled materials, by weight (8.0% pre-consumer + 13.0% post-consumer).

At the end of its useful life, Node is 93.0% effectively recyclable by weight.

Certifications and Labels ⊙
The environmental and social performance of Node is communicated through the following voluntary labels/certifications:

• SCS Indoor Advantage™ Gold

Other targeted labels and certificates:

• BIFMA level® 2
• Cradle to Cradle Certified™ Bronze

LEED Contribution ⊙
Node may contribute in the following areas:

• Recycled content
• Materials reuse
• Regional materials
• Low-emitting materials
• Interiors life-cycle impact reduction
• 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
• 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.

- **Node contains 21.0% recycled materials**, by weight (8.0% pre-consumer + 13.0% post-consumer).
- **Materials chemistry assessment in progress** 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.

- **Packaged with 17% recycled cardboard** and 25% recycled expanded PE.
- **Node 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.

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

- Final assembly of Node is in Zeeland, Michigan, USA for Steelcase for the NA (North America) market.

Transport
This phase includes downstream transports.

- **Optimized packaging** to keep transportation volumes as low as possible and improve filling rates.
- Flat / Optimized packaging.
- Lightweight and delivered stacked.

- Product is shipped knocked down 4 pieces in all possible scenarios - allowing for optimization of transport volume.
- 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.
- 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.
- **93% effectively recyclable by weight,** according to the current waste disposal schemes.
- **99% effectively recyclable packaging.**
- **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.
- **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.
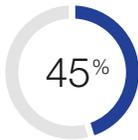
Materials

Node materials composition is listed below*.

55%

METALS

	kg	lb	%
Steel	4.77	10.5	44.25
Aluminum	1.12	2.5	10.39

45%

PLASTICS

	kg	lb	%
Polypropylene (PP)	2.4	5.3	22.26
Nylon (PA)	1.67	3.7	15.49
Polyoxymethylene (POM)	<0.1	0.1	0.37
Nylon 66 (PA66)	<0.1	<0.1	0.19
Glass-filled nylon (PA-GF)	<0.1	<0.1	0.09
Other:	0.73	1.6	6.77

<1%

OTHER MATERIALS

	kg	lb	%
Adhesive tape	<0.1	<0.1	0.19

TOTAL WEIGHT	**10.8**	**23.8**	

*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 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.
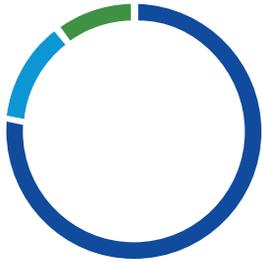
NODE

	kg	lb	%
Pre-consumer recycled content	0.9	2.0	8
Post-consumer recycled content	1.4	3.1	13
Total recycled content	**2.3**	**5.1**	**21**

- ■ 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.

93%
According to the available waste management infrastructures, we estimate that 92% 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 targeted for level® 2 certification, 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 targeted for Bronze Cradle to Cradle™ certification which assesses and rates products for material health, material reutilization, renewable energy and carbon management, water stewardship, and social fairness.

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.

Cradle-to-Cradle Certified [CM] is a certification mark licensed by the Cradle to Cradle Products Innovation Institute.

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. Node 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	
Materials & Resources				
Recycled content	MRc4	MRc4	MRc2.2: Sustainable purchasing-Furniture	Node contributes to the project recycled content criteria: post-consumer (13.0)% + ½ pre-consumer (8.0)% = 17.0%.
		Healthcare: MRc5 Option 3		
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
Regional materials	MRc5	Healthcare: MRc5 Option 3		Node is assembled in Zeeland, Michigan, USA for NA orders. Projects <500 miles (800 km) from this location qualify.
Indoor Enviromental Quality				
Low emitting materials	EQc4.5	Healthcare: MRc5 Option 2	N/A	Node is SCS Indoor Advantage™ Gold (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.
Node 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	Purchasing - facility maintenance and renovation Option 2: furniture	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		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 select textile and surface material options that may contribute to this credit. Wood products - Steelcase offers FSC™ certified wood as an option on select products, which contributes to this option. Materials Reuse - If chosen for reuse, this product can contribute. Recycled content - (13%) post-consumer + ½ pre-consumer (8%) = 17%.
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	Node is Cradle to Cradle Certified™ Bronze, which contributes to this credit. Node has achieved ANSI/BIFMA e3-2014 credit 7.5.1.3 at 90% 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.

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

CREDITS	RATING SYSTEM			POTENTIAL CONTRIBUTION*
	ID+C	BD+C	O+M	
Indoor Enviromental Quality				
Low emitting materials	Option 1: Product Category Calculations or Option 2: Budget Calculation Method	Required 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	Node is SCS Indoor Advantage™ Gold certified for indoor air quality in NA.
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.

Other Potential LEED V4 Contributions

Pilot Credits: **The following credits are potential contribution areas for Steelcase products and applications**				
Environmentally preferable finishes and furnishings	MR Pilot	MR Pilot	N/A	Node is level® 2 certified, which contributes to this pilot credit.
Social equity in the supply chain	N/A	MR Pilot	N/A	Node 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.** ⊘

Steelcase®

HEALTH

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