

Environmental Product Declaration for

# Allsteel Beyond® Framed Glass Demountable Partition



This Environmental Product Declaration, covering all life cycle stages, was prepared in conformity with ISO 14025, ISO 14044, and ISO 21930, and in accordance with the Earthsure Product Category Rule 30162403:2014 for Interior Wall Systems. PCR Review Chair Thomas Gloria, LCACP# 2008-3. EPDs prepared under other programs may not be comparable.

SCS-EPD-05293 | Dates of Validity: January 14, 2019 to January 13, 2024  
Version: May 14, 2020



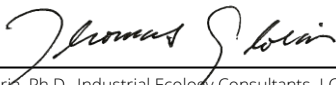
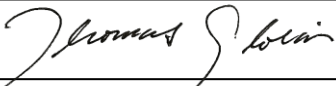
# Allsteel®

**Product:** Beyond offers built-in flexibility that responds to the constant rhythm of business change. With a large selection of aesthetic choices, move beyond permanent drywall solutions and create flexible workspaces that are ready to reconfigure for whatever change the future brings. This EPD is for a Beyond Framed Glass demountable partition.

**Producer:** At Allsteel, we demystify the office planning process by helping our customers align their workplace strategy with their business strategy. With an accessible team and an adaptable portfolio of systems, seating, casegoods, tables, collaborative furniture and architectural walls, we address our customers' needs for today and tomorrow.







Summary of Life Cycle Impacts and Inventory		
per m <sup>2</sup> -30 yr-meeting IBC requirements for interior walls		
Climate Change	73	kg CO <sub>2</sub> -eq
Acidification	0.43	kg SO <sub>2</sub> -eq
Eutrophication	0.27	kg N-eq
Ozone Depletion	8.2x10 <sup>-6</sup>	kg CFC-11-eq
Photochemical Smog	5.3	kg O <sub>3</sub> -eq
Ecotoxicity	390	CTUe
Human Health – Air	9.7x10 <sup>-2</sup>	kg PM2.5-eq
Primary Energy Consumption	720	MJ non-renewable
	130	MJ renewable
Freshwater Consumption	3,440	L
Waste Production	2.4x10 <sup>-2</sup>	kg hazardous
	32	kg non-hazardous
Material Resource Consumption	INA	kg non-renewable
	0.0	kg renewable
Land Use	110	m <sup>2</sup> -yr

INA: Indicator not assessed

Declaration Owner:	Allsteel
Address:	2210 Second Avenue, Muscatine, Iowa 52761
Declaration Number:	SCS-EPD-05293
Declaration Validity Period:	January 14, 2019 to January 13, 2024
Version:	May 14, 2020
Program Operator:	SCS Global Services
Declaration URL Link:	<a href="https://www.scsglobalservices.com/certified-green-products-guide">https://www.scsglobalservices.com/certified-green-products-guide</a>
LCA Practitioner:	Aditi Suresh
LCA Software:	openLCA 1.7.3 and ecoinvent v3.4 database
Independent critical review of the LCA and data, according to ISO 14044 and ISO 14071	<input type="checkbox"/> internal <input checked="" type="checkbox"/> external
LCA Reviewer:	 <hr/> Thomas Gloria, Ph.D., Industrial Ecology Consultants, LCACP#: 2008-3
Product Category Rule:	Earthsure Product Category Rule 30162403:2014 for Interior Wall Systems
PCR Review conducted by:	Thomas P. Gloria, Ph.D. (Chair), Industrial Ecology Consultants
Independent verification of the declaration and data, according to ISO 14025 and the PCR	<input type="checkbox"/> internal <input checked="" type="checkbox"/> external
EPD Verifier:	 <hr/> Thomas Gloria, Ph.D., Industrial Ecology Consultants, LCACP#: 2008-3
Declaration Contents:	Product and Company Information..... 1 Product Specifications..... 1 Summary of Life Cycle Impacts and Inventory..... 1 Life Cycle Impact Assessment..... 3 Life Cycle Inventory..... 4 Hazardous Material Content..... 4 Additional Environmental Information.....4 Additional Life Cycle Impacts..... 5
<p><b>Disclaimers:</b> This EPD conforms to ISO 14025, 14040, 14044, and ISO 21930.</p> <p><b>Scope of Results Reported:</b> The PCR requirements limit the scope of the LCA metrics such that the results exclude environmental and social performance benchmarks and thresholds, and exclude impacts from the depletion of natural resources, land use ecological impacts, ocean impacts related to greenhouse gas emissions, risks from hazardous wastes and impacts linked to hazardous chemical emissions.</p> <p><b>Accuracy of Results:</b> Due to PCR constraints, this EPD provides estimations of potential impacts that are inherently limited in terms of accuracy.</p> <p><b>Comparability:</b> The PCR this EPD was based on was not written to support comparative assertions. EPDs based on different PCRs, or different calculation models, may not be comparable. When attempting to compare EPDs or life cycle impacts of products from different companies, the user should be aware of the uncertainty in the final results, due to and not limited to, the practitioner's assumptions, the source of the data used in the study, and the specifics of the product modeled.</p>	

## LIFE CYCLE IMPACT ASSESSMENT RESULTS

For one square meter of interior wall conforming to the International Building Code for thirty years, using TRACI 2.1 Life Cycle Indicators (CML in parentheses):

Life Cycle Impact		Total	Stage I Production	Stage II Installation	Stage III Use	Stage IV End of Life	Units
	Climate Change	73	53	19	0.0	0.45	kg CO <sub>2</sub> eq
		(74)	(53)	(20)	(0.0)	(0.45)	kg CO <sub>2</sub> eq
	Acidification	0.43	0.34	9.0x10 <sup>-2</sup>	0.0	2.4x10 <sup>-3</sup>	kg SO <sub>2</sub> eq
		(0.42)	(0.34)	(8.2x10 <sup>-2</sup> )	(0.0)	(2.0x10 <sup>-3</sup> )	kg SO <sub>2</sub> eq
	Eutrophication	0.27	0.18	8.3x10 <sup>-2</sup>	0.0	1.9x10 <sup>-3</sup>	kg N eq
		(0.15)	(9.5x10 <sup>-2</sup> )	(5.0x10 <sup>-2</sup> )	(0.0)	(9.6x10 <sup>-4</sup> )	kg PO <sub>4</sub> <sup>3-</sup> eq
	Ozone Depletion	8.2x10 <sup>-6</sup>	5.1x10 <sup>-6</sup>	3.0x10 <sup>-6</sup>	0.0	1.1x10 <sup>-7</sup>	kg CFC-11 eq
		(6.2x10 <sup>-6</sup> )	(3.9x10 <sup>-6</sup> )	(2.3x10 <sup>-6</sup> )	(0.0)	(8.0x10 <sup>-8</sup> )	kg CFC-11 eq
	Photochemical Smog	5.3	3.6	1.7	0.0	5.2x10 <sup>-2</sup>	kg O <sub>3</sub> eq
		(2.0x10 <sup>-2</sup> )	(1.5x10 <sup>-2</sup> )	(5.4x10 <sup>-3</sup> )	(0.0)	(1.1x10 <sup>-4</sup> )	kg C <sub>2</sub> H <sub>4</sub> eq
	Ecotoxicity	390	280	94	0.0	6.7	CTUe
		(51)	(35)	(15)	(0.0)	(0.45)	kg 1,4-DB eq
	Human Health-Air	9.7x10 <sup>-2</sup>	6.9x10 <sup>-2</sup>	2.8x10 <sup>-2</sup>	0.0	3.4x10 <sup>-4</sup>	kg PM <sub>2.5</sub> eq

## LIFE CYCLE INVENTORY INFORMATION

For one square meter of interior wall conforming to the International Building Code for thirty years:

Inventory Item	Amount	Units
Primary Energy Consumption	720	MJ non- renewable
	130	MJ renewable
Freshwater Consumption	3,440	L
Waste Production	$2.4 \times 10^{-2}$	kg hazardous
	32	kg non-hazardous
Material Resource Consumption	INA	kg non-renewable
	0.0	kg renewable
Land use	110	m <sup>2</sup> yr

INA: Indicator not assessed

## HAZARDOUS MATERIAL CONTENT

For one square meter of interior wall conforming to the International Building Code for thirty years (at least 0.1% using California DTSC Candidate Chemical List).

Material	CAS number	Amount (%)
Aluminum	7429-90-5	12%
Zinc	7440-66-6	1.4%

## ADDITIONAL ENVIRONMENTAL INFORMATION

VOC emissions per BIFMA X7.1	Passed
Recycled Content	4.9% (pre-consumer)
	1.6% (post-consumer)
Other environmental certification programs	Indoor Advantage™ Gold; level@2

## ADDITIONAL LIFE CYCLE IMPACTS

Additional life cycle impact results are reported below as optional parameters of concern. These impacts are calculated using the LEO-SCS-002 framework, which complements the ISO 14044 standard for LCA with additional guidance on conducting a more comprehensive impact assessment. Results are shown for one square meter of interior wall conforming to the International Building Code for thirty years.

Category Indicator (LEO-SCS-002 Parameters)	Total	Units
Global Climate Change	69	kg CO <sub>2</sub> eq
Ocean Acidification	96	kg H <sub>2</sub> CO <sub>3</sub> eq
Energy Resource Depletion	350	MJ eq

Some equivalency factors were determined with the purpose of communicating and interpreting critical environmental impact results in simplified terms for better understanding. The table below provides a summary of select LCI inventory results and impact indicators translated to routine activities which will aid a consumer interpret the scale of potential environmental impact attributed to the product. For example, the primary energy demand for the 1 m<sup>2</sup> of the Allsteel Beyond movable wall system is equivalent to operating a refrigerator for approximately 45 days.

Category Indicator	Life Cycle Impact Assessment Results for 1 m <sup>2</sup> of wall system for 30 years	Basis of Equivalency Metric	1 m <sup>2</sup> of wall system maintained for 30 years
Global Warming Potential (IPCC 100 year time horizon)	73 kg CO <sub>2</sub> eq	Number of miles driven in a typical passenger vehicle	180 miles
Net Water Use	3,440 Liters	Number of cycles run in a dishwasher	77 cycles
Primary Energy Demand	850 MJ	Number of days operating a refrigerator	45 days
Global Climate Change (LEO-SCS-002)	69 kg CO <sub>2</sub> eq	Number of miles driven in a typical passenger vehicle	150 miles
Energy Resource Depletion (LEO-SCS-002)	350 MJ eq	Number of days operating a refrigerator	18 days

# Allsteel®

For more information contact:

**Allsteel Inc**

2210 Second Avenue, Muscatine, IA 52761  
800.255.7833 | <http://www.allsteeloffice.com/>



**SCS Global Services**

2000 Powell Street, Ste. 600, Emeryville, CA 94608 USA  
Main +1.510.452.8000 | fax +1.510.452.8001