

# KI Lightline Architectural Wall



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-05085 | Dates of Validity: August 14, 2018 to August 13, 2023



Furnishing Knowledge®

**Product:** Lightline architectural wall features pre-assembled construction with ½"-thick glass, seamless glass joints, passive top and bottom channels, and beautifully designed hardware, including full-height sliding glass door mechanisms. The thicker glass provides superior rigidity and sound attenuation. Glass edges are flat polished and chamfered to a precise angle, forming a virtually seamless fit when combined with the dry joint.

**Producer:** Since 1941, we've positioned KI as the furniture company that best understands the contract furniture industry and is committed to providing customers with the smart solutions. Our contract furniture innovations reflect a desire to be our customers' market resource and to help them make smart contract furniture decisions. KI manufactures innovative furniture and movable wall system solutions for educational, university, business and government markets. KI continues to differentiate itself and establish enduring relationships throughout the world by personalizing products and service solutions to the specific needs of each customer through its unique design and "Market of One" manufacturing philosophy.

**Independent Verification**

Independent verification of the declaration and data, according to ISO 14025:  internal  external

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**Summary of Life Cycle Impacts and Inventory**  
per m<sup>2</sup>-30 yr-meeting IBC requirements for interior walls

Climate Change	120	kg CO <sub>2</sub> -eq
Acidification	0.70	kg SO <sub>2</sub> -eq
Eutrophication	0.33	kg N-eq
Ozone Depletion	1.3x10 <sup>-5</sup>	kg CFC-11-eq
Photochemical Smog	8.2	kg O <sub>3</sub> -eq
Ecotoxicity	900	CTUe
Human Health – Air	7.8x10 <sup>-2</sup>	kg PM2.5-eq
Primary Energy Consumption	1,100	MJ non-renewable
	84	MJ renewable
Freshwater Consumption	5,000	L
Waste Production	8.7x10 <sup>-3</sup>	kg hazardous
	50	kg non-hazardous
Material Resource	INA	kg non-renewable
Consumption	2.2	kg renewable
Land Use	10	m <sup>2</sup> -yr

INA = Indicator not assessed

## LIFE CYCLE IMPACT ASSESSMENT RESULTS

For one square meter of interior wall conforming to the International Building Code for thirty years, using TRACI v2.1 Life Cycle Indicators (CML-IA v4.4 in parentheses):

Life Cycle Impact	Total	Stage I Production	Stage II Installation	Stage III Use	Stage IV End of Life	Units
 <b>Climate Change</b>	120	110	12	0.0	0.90	kg CO <sub>2</sub> eq
	(120)	(110)	(10)	(0.0)	(0.89)	kg CO <sub>2</sub> eq
 <b>Acidification</b>	0.70	0.62	5.3x10 <sup>-2</sup>	0.0	2.5x10 <sup>-2</sup>	kg SO <sub>2</sub> eq
	(0.67)	(0.62)	(4.5x10 <sup>-2</sup> )	(0.0)	(3.2x10 <sup>-3</sup> )	kg SO <sub>2</sub> eq
 <b>Eutrophication</b>	0.33	0.31	1.9x10 <sup>-2</sup>	0.0	3.6x10 <sup>-3</sup>	kg N eq
	(0.18)	(0.16)	(1.3x10 <sup>-2</sup> )	(0.0)	(1.9x10 <sup>-3</sup> )	kg PO <sub>4</sub> <sup>3-</sup> eq
 <b>Ozone Depletion</b>	1.3x10 <sup>-5</sup>	1.0x10 <sup>-5</sup>	2.8x10 <sup>-6</sup>	0.0	1.7x10 <sup>-7</sup>	kg CFC-11 eq
	(1.0x10 <sup>-5</sup> )	(7.9x10 <sup>-6</sup> )	(2.1x10 <sup>-6</sup> )	(0.0)	(1.3x10 <sup>-7</sup> )	kg CFC-11 eq
 <b>Photochemical Smog</b>	8.2	6.8	1.2	0.0	8.7x10 <sup>-2</sup>	kg O <sub>3</sub> eq
	(3.3x10 <sup>-2</sup> )	(3.0x10 <sup>-2</sup> )	(2.1x10 <sup>-3</sup> )	(0.0)	(1.9x10 <sup>-4</sup> )	kg C <sub>2</sub> H <sub>4</sub> eq
 <b>Ecotoxicity</b>	900	700	75	0.0	110	CTUe
	(9.3x10 <sup>5</sup> )	(7.4x10 <sup>5</sup> )	(5.7x10 <sup>4</sup> )	(0.0)	(1.4x10 <sup>5</sup> )	kg 1,4-DB eq
 <b>Human Health-Air</b>	7.8x10 <sup>-2</sup>	7.2x10 <sup>-2</sup>	5.8x10 <sup>-3</sup>	0.0	4.9x10 <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	1,100	MJ non- renewable
	84	MJ renewable
Freshwater Consumption	5,000	L
Waste Production	$8.7 \times 10^{-3}$	kg hazardous
	50	kg non-hazardous
Material Resource Consumption	INA	kg non-renewable
	2.2	kg renewable
Land use	10	m <sup>2</sup> -yr

INA = Indicator not assessed

## HAZARDOUS MATERIAL CONTENT

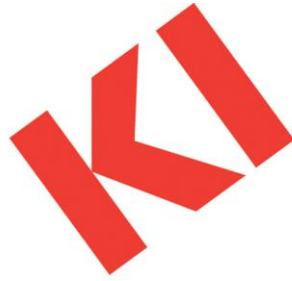
For one square meter of interior wall conforming to the International Building Code for thirty years (at least 0.1% using California DTSC Candidate Chemical List).

Material	CAS number	Amount (%)
Aluminum	7429-90-5	10.6%
Zinc	7440-66-6	0.188%

## ADDITIONAL ENVIRONMENTAL INFORMATION

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

VOC emissions per BIFMA X7.1	passed
Recycled Content	6.7% (pre-consumer)
	2.3% (post-consumer)
Organization's use of environmental management system	ISO 9001
Other environmental certification programs	Indoor Advantage™ Gold



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For more information contact:

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