

# Aline. LEED Contribution.

design made in germany

# Wilkhahn



Aline multi-purpose chairs support companies by allowing credit points to be achieved in the case of LEED certification (U.S. Green Building Council's Leadership in Energy and Environmental Design). The LEED Green Building Rating System is a voluntary, criteria-based national standard that is used to distinguish buildings in the USA that provide a "healthy" environment, that are water-saving and energy-saving and observe high environmental standards.

## Product category

Multi-purpose chair

## Certifications

GREENGUARD™ Indoor Air Quality Certified® (in North America)

## LEED Contribution

Recycling content, regional materials, low emitting materials, certified wood

## Environmental Facts

- Aline multi-purpose chairs comprises 13 % recycling material (steel).
- Aline multi-purpose chairs are 69 % recyclable. All components permit non-destructive disassembly.
- The Aline skid-base chair comprises three different materials: steel, polyamide and polyester fabric. At the end of a long product life, all materials may be sorted. The steel used already comprises at least 30 percent recycled steel and is 100 percent recyclable. The components in polyamide and polyester are returned to a proper recycling process for plastics.
- Prolongation of product life: the ingenious "tramline principle" protects the upholstery against damage. However, should any damage occur after a long service life, the covered seat and back frames can be exchanged.
- Use of re-usable, recyclable or compostable returnable transport packaging made from renewable raw materials.
- The Aline multi-purpose chair was launched in 2004. The Aline multi-purpose chair sets standards for product design that is "sustainable" in the most optimal way. The durability of the high-quality materials used, the innovative sitting concept and the classic design reduced to essentials guarantee usability for many decades.
- All Wilkhahn sites work in conformity with a uniform environmental management system that is validated at the Bad Münders site (Germany) and certified in accordance with EMAS ISO 14001.

Wilkhahn supports corresponding certification on the part of its suppliers.

Program	Category	Item	Potential Points	Contribution
<b>LEED-CI</b>	<b>Materials and resources</b>	<b>Construction waste management</b> MR 2.1	1	Use of re-usable, recyclable or compostable returnable transport packaging made from renewable raw materials. Guarantee that used products may be returned in their entirety, including disassembly, sorting and recycling. Due to the clear marking and identification of all materials, due to their nontoxicity and due to easy dismountability, we can today ensure that the components of a Wilkhahn product are returned to both decentral and local material and production cycles and are properly recycled and disposed of.
		MR 2.2	1	Use of re-usable, recyclable or compostable returnable transport packaging made from renewable raw materials. Guarantee that used products may be returned in their entirety, including disassembly, sorting and recycling. Due to the clear marking and identification of all materials, due to their nontoxicity and due to easy dismountability, we can today ensure that the components of a Wilkhahn product are returned to both decentral and local material and production cycles and are properly recycled and disposed of.
		<b>Resource reuse</b> MR 3.3	1	The enduring quality of the high-quality materials, the innovative functional concept, classic, understated design and easy reparability guarantee usability over a period of decades. There is a two-year manufacturers' guarantee. Wilkhahn service in terms of "ecological prolongation of service life" also includes general overhaul and maintenance of older chairs. Wilkhahn offers repair service for furniture units no longer produced for two further years following discontinuation.
		<b>Regional materials and manufacturing</b> MR 5.1	0 – 1	The determining factor for the LEED Contribution is a radius of 800 kilometres from Wilkhahn production or assembly facilities in Bad Münden (Germany), Castellon (Spain) and Sydney (Australia)
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	<b>Indoor environmental quality</b>	<b>Low emitting materials</b> E.Q 4.5	1	GREENGUARD™ Indoor Air Quality Certified®
	<b>Total (LEED-CI)</b>		<b>4 – 6</b>	

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		<b>Total (LEED-NC)</b>		<b>4</b>

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Program	Category	Item	Potential Points	Contribution
LEED-EB	Materials and resources	<b>Construction, demolition and renovation waste management</b> MR 1.1	1	Use of re-usable, recyclable or compostable returnable transport packaging made from renewable raw materials. Guarantee that used products may be returned in their entirety, including disassembly, sorting and recycling. Due to the clear marking and identification of all materials, due to their nontoxicity and due to easy dismountability, we can today ensure that the components of a Wilkhahn product are returned to both decentral and local material and production cycles and are properly recycled and disposed of.
		MR 1.2	1	Use of re-usable, recyclable or compostable returnable transport packaging made from renewable raw materials. Guarantee that used products may be returned in their entirety, including disassembly, sorting and recycling. Due to the clear marking and identification of all materials, due to their nontoxicity and due to easy dismountability, we can today ensure that the components of a Wilkhahn product are returned to both decentral and local material and production cycles and are properly recycled and disposed of.
		<b>Optimize use of alternative materials</b> MR 2.1 – MR 2.5	5	Re-use/longevity: the enduring quality of the high-quality materials, the innovative functional concept, classic, understated design and easy repairability guarantee usability over a period of decades. There is a two-year manufacturers' guarantee. Wilkhahn service in terms of "ecological prolongation of service life" also includes general overhaul and maintenance of older chairs. Recycling content: the materials used for multi purpose chairs from the Aline range are subject to stringent control. An ABC analysis is used to examine substances contained in these materials in terms of environmental and health compatibility. Prohibited chemicals are not used in the product at all. All manufacturing supplies are contained in a register of hazardous substances that forms a basis for further minimization or substitution in the case of potential problematic substances. The Aline range multi-purpose chair comprises 13 percent recycling material (steel).
<b>Total (LEED-EB)</b>			<b>7</b>	

# Aline. LEED Contribution.

## An Aline multi-purpose chair comprises the following materials.

The total weight of the chair is 5.5 kg.

<b>Metals</b>	kg	in %
Steel	3,57	64,91

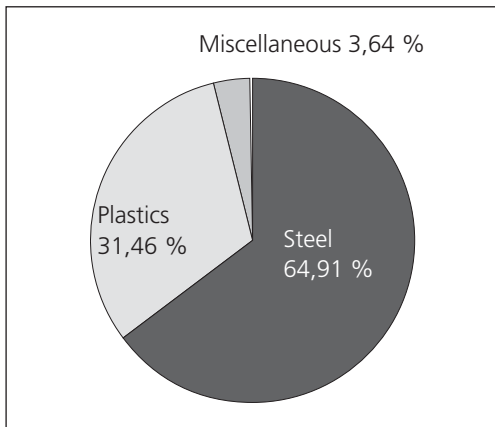
<b>Plastics</b>	kg	in %
Polypropylene	0,03	0,55
Nylon	1,70	30,91

<b>Others</b>	kg	in %
Others	0,20	3,64

<b>Total weight</b>	kg	in %
	5,50	100



The Aline multi-purpose chair comprises 13 % recycling material (steel). The materials used for Aline multi-purpose chairs are subject to stringent control. An ABC analysis is used to examine substances contained in these materials in terms of environmental and health compatibility. Prohibited chemicals are not used in the product at all. All manufacturing supplies are contained in a register of hazardous substances that forms a basis for further minimization or substitution in the case of potential problematic substances.

Calculations of recycled content are based on data provided by suppliers and other available information. This data may include industry averages, ranges or other broadly based information. Wilkhahn 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.