

Manufacturer Lindner AG
Product Name Plafotherm® B - Post Cap Heated/Chilled Ceilings

Product Rating

- The product fulfills the requirements for adhesives and sealants and contribute to achieve one LEED credit within IEQ Credit 4.1.
- The product fulfills the requirements for paints and coatings and contribute to achieve one LEED credit within IEQ Credit 4.2.
- The product contains 28.7% recycled materials and contribute to achieve LEED credits within MR Credit 4.

Indoor Environmental Quality (IEQ) - LEED Category

 IEQ Credit 4.1: Low Emitting Materials: **Adhesives and Sealants** 1 Point 

 IEQ Credit 4.2: Low Emitting Materials: **Paints and Coatings** 1 Point 

 IEQ Credit 4.3: Low Emitting Materials: **Flooring Systems** 1 Point 

 IEQ Credit 4.4: Low Emitting Materials: **Composite Wood and Agrifiber Products** 1 Point 
Materials and Resources (MR) - LEED Category

 MR Credit 4: **Recycled Content** 1-2 Points 

 MR Credit 5: **Regional Materials** 1-2 Points 

 MR Credit 6: **Rapidly Renewable Materials** 1 Point 

 MR Credit 7: **Certified Wood** 1 Point 
Product Characteristics

Lindner Heated and Chilled Post Cap ceilings are the solid foundation for partitioning your rooms. Visible and concealed post cap profiles can be installed to align with mullions, reflecting exterior architectural design in the interior. Distances between post caps are variable. Provided additional bracing is in place.

Unmatched functionality and accessibility, ensured by Swing-Down mechanisms make this heated and chilled ceiling a secure choice.

The integrated Heating and Cooling Technologies of Plafotherm® B create a pleasant temperature for any living and working environment. We will be glad to give your metal ceiling a distinctive look by applying one of our many eye-catching Lindner surfaces.

About LEED & Products - www.usgbc.org

This declaration helps to assess products easily according the certification system LEED® 2009 New Construction and Major Renovations NC & CS (excluded SCHOOLS). Products are not reviewed or certified by LEED. LEED credit requirements cover the performance of materials in aggregate, not the performance of individual products or brands. For more information about LEED visit www.usgbc.org/leed. The project team or the manufacturer is responsible to declare the compliance with the project requirements to achieve LEED points.

Below you find an explanation of the symbols. Detailed information are on the next pages.

 **Credit requirements fulfilled - the credit point can be achieved**
 **Credit is not applicable to this product**
 **X% of the product comply with the credit requirement**
 **Required data not specified - for required data contact manufacturer**
 **Credit requirements are not fulfilled**

Manufacturer **Lindner AG**Product Name **Plafotherm® B - Post Cap Heated/Chilled Ceilings**

No	Product Name	Manufacturer	Mass per unit* [%]	VOC in g/l	VOC-Limit in g/l	Flooring Systems	Composite Agrifiber product	Recycled Content		Regional Materials		Rapidly Renewable Material	Certified Wood
								Post-Consumer	Pre-Consumer	Harvesting/ Extraction	Location Manufacturing		
A1	Metal ceiling, zink coated steel sheet	Lindner AG	46.50	N/A	N/A	N/A	N/A	25%**	0%	See detailed rating on next pages	Armstorf (D)	N/A	N/A
A2	Subconstruction, zink coated steel sheet	Lindner AG	18.00	N/A	N/A	N/A	N/A	25%**	0%	See detailed rating on next pages	Armstorf (D)	N/A	N/A
A3	CU-Pipes	Lindner AG	18.00	N/A	N/A	N/A	N/A	0%	0%	See detailed rating on next pages	Armstorf (D)	N/A	N/A
A4	Aluminium Profile	Lindner AG	14.00	N/A	N/A	N/A	N/A	90%	0%	See detailed rating on next pages	Armstorf (D)	N/A	N/A
A5	Powder Coating	Lindner AG	1.00	0	50	N/A	N/A	Not relevant	Not relevant	See detailed rating on next pages	Armstorf (D)	N/A	N/A
A6	Hot melt adhesives	Lindner AG	1.00	0	70	N/A	N/A	Not relevant	Not relevant	See detailed rating on next pages	Armstorf (D)	N/A	N/A
A7	Acoustical Fleece	Lindner AG	1.00	N/A	N/A	N/A	N/A	Not relevant	Not relevant	See detailed rating on next pages	Armstorf (D)	N/A	N/A
A8	Sealing strip	Lindner AG	0.50	N/A	N/A	N/A	N/A	Not relevant	Not relevant	See detailed rating on next pages	Armstorf (D)	N/A	N/A
A9													
A10													
Plafotherm® B - Bandrasterheiz-		Lindner AG	100.0	✓		○	○	28.7%	0.0%	If the location of 'Harvesting & Extraction' and 'Manufacturing' is within a radius of 500 miles of the project the subproduct contributes to the credit.		○	○
								29%					

*All values are based on the unit:1 m² **LEED default recycled content for steel

Manufacturer **Lindner AG**
Product Name **Plafotherm® B - Post Cap Heated/Chilled Ceiling**

Lindner
IEQ Credit 4.1: Low Emitting Materials: Adhesives and Sealants (1 Point)
Intent

Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants caused by adhesives and sealants applied on site.

Requirement

All adhesive, sealants and sealant primers used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) must comply shall comply with the VOC content limits of the following:

- SCAQMD Rule #1168 (effective date of July 1, 2005 and rule amendment date of January 7, 2005),
- Aerosol Adhesives must comply with Green Seal Standard for Commercial Adhesives GS-36 requirements in effect on October 19, 2000.

IEQ Credit 4.2: Low Emitting Materials: Paints and Coatings (1 Point)
Intent

Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants caused by paints and coatings applied on site.

Requirement

Paints and coatings used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) must comply with the VOC content limits of the following:

- Green Seal Standard GS-11, Paints Edition, May 20, 1993,
- Green Seal Standard GC-03, Anti-Corrosive Paints, Second Edition, January 7, 1997, and
- South Coast Air Quality Management District (SCAQMD) Rule 1113, Architectural Coatings, rules in effect on January 1, 2004.

Detailed Rating

No	Product Name	Manufacturer	Related Credit	Product Type	VOC-Content		Contribution of Product	
					Allowable	Product		
A1	Metal ceiling , zink coated steel sheet	Lindner AG	N/A	N/A	N/A	N/A	The product is no adhesive, sealant, paint or coating.	○
A2	Subconstruction, zink coated steel sheet	Lindner AG	N/A	N/A	N/A	N/A	The product is no adhesive, sealant, paint or coating.	○
A3	CU-Pipes	Lindner AG	N/A	N/A	N/A	N/A	The product is no adhesive, sealant, paint or coating.	○
A4	Aluminium Profile	Lindner AG	N/A	N/A	N/A	N/A	The product is no adhesive, sealant, paint or coating.	○
A5	Powder Coating	Lindner AG	IEQ Credit 4.2	Flats (SCAQMD Rule 1113)	50g/l	0g/l	The product fulfills the requirements for paints & coatings.	✓
A6	Hot melt adhesives	Lindner AG	IEQ Credit 4.1	Multipurpose construction adhesives (SCAQMD Rule 1168)	70g/l	0g/l	The product fulfills the requirements for adhesives & sealants.	✓
A7	Acoustical Fleece	Lindner AG	N/A	N/A	N/A	N/A	The product is no adhesive, sealant, paint or coating.	○
A8	Sealing strip	Lindner AG	N/A	N/A	N/A	N/A	The product is no adhesive, sealant, paint or coating.	○

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MR Credit 4: Recycled Content (1-2 Points)
Intent

To increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials.

Requirement

Use materials with recycled content* such that the sum of post-consumer** recycled content plus one-half of the pre-consumer*** content constitutes at least 10%/20% (based on cost) of the total value of the materials in the project.

The minimum percentage materials recycled for each point threshold is as follows:

- 10% Recycled Content -> 1 Point
- 20% Recycled Content -> 2 Points.

* Recycled content is defined in accordance with the International Organization of Standards document, ISO 14021 — Environmental labels and declarations — Self-declared environmental claims (Type II environmental labeling).

** Postconsumer material is defined as waste material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose.

*** Preconsumer material is defined as material diverted from the waste stream during the manufacturing process. Reutilization of materials (i.e., rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it) is excluded.

Detailed Rating

No	Product Name	Manufacturer	Recycled Content		Contribution of Product	
			Post-Consumer	Pre-Consumer		
A1	Metal ceiling , zink coated steel sheet	Lindner AG	25%**	0%	Accountable recycled content is 25% (1 x Post-Consumer + 0.5 x Pre-Consumer). **LEED default recycled content for steel	25%
A2	Subconstruction, zink coated steel sheet	Lindner AG	25%**	0%	Accountable recycled content is 25% (1 x Post-Consumer + 0.5 x Pre-Consumer). **LEED default recycled content for steel	25%
A3	CU-Pipes	Lindner AG	0%	0%	Accountable recycled content is 0% (1 x Post-Consumer + 0.5 x Pre-Consumer).	0%
A4	Aluminium Profile	Lindner AG	90%	0%	Accountable recycled content is 90% (1 x Post-Consumer + 0.5 x Pre-Consumer).	90%
A5	Powder Coating	Lindner AG	Not relevant	Not relevant	Recycled content is not relevant.	—
A6	Hot melt adhesives	Lindner AG	Not relevant	Not relevant	Recycled content is not relevant.	—
A7	Acoustical Fleece	Lindner AG	Not relevant	Not relevant	Recycled content is not relevant.	—
A8	Sealing strip	Lindner AG	Not relevant	Not relevant	Recycled content is not relevant.	—

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MR Credit 5: Regional Materials (1-2 Points)

Intent

To increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation.

Requirement

Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site for a minimum of 10% or 20%, based on cost, of the total materials value. If only a fraction of a product or material is extracted, harvested, or recovered and manufactured locally, then only that percentage (by weight) must contribute to the regional value. The minimum percentage regional materials for each point threshold is as follows:

- 10% Regional Materials -> 1 Point
- 20% Regional Materials -> 2 Points.

Detailed Rating

No	Product Name	Manufacturer	Location Harvesting/ Extraction	Location Manufacturing
A1	Metal ceiling , zink coated steel sheet	Lindner AG	All raw materials are manufactured by companies within a radius of 500 km, based on the company's headquarters in Amstorf (D).	Amstorf (D)
A2	Subconstruction, zink coated steel sheet	Lindner AG	All raw materials are manufactured by companies within a radius of 500 km, based on the company's headquarters in Amstorf (D).	Amstorf (D)
A3	CU-Pipes	Lindner AG	All raw materials are manufactured by companies within a radius of 500 km, based on the company's headquarters in Amstorf (D).	Amstorf (D)
A4	Aluminium Profile	Lindner AG	All raw materials are manufactured by companies within a radius of 500 km, based on the company's headquarters in Amstorf (D).	Amstorf (D)
A5	Powder Coating	Lindner AG	All raw materials are manufactured by companies within a radius of 500 km, based on the company's headquarters in Amstorf (D).	Amstorf (D)
A6	Hot melt adhesives	Lindner AG	All raw materials are manufactured by companies within a radius of 500 km, based on the company's headquarters in Amstorf (D).	Amstorf (D)
A7	Acoustical Fleece	Lindner AG	All raw materials are manufactured by companies within a radius of 500 km, based on the company's headquarters in Amstorf (D).	Amstorf (D)
A8	Sealing strip	Lindner AG	All raw materials are manufactured by companies within a radius of 500 km, based on the company's headquarters in Amstorf (D).	Amstorf (D)