

Manufacturer **Lindner AG**





Product Name **LMD-K - Metal-paneled ceiling**




Product Rating

- The product fulfills the requirements for paints and coatings and contribute to achieve one LEED credit within IEQ Credit 4.2.
- The product contains 24.5% 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 | 25% |
| MR Credit 5: Regional Materials | 1-2 Points | See Location |
| MR Credit 6: Rapidly Renewable Materials | 1 Point |  |
| MR Credit 7: Certified Wood | 1 Point |  |






Product Characteristics

Metal cassettes are economic ceiling solutions which are perfectly adaptable for every kind of building. Different cassette versions are available: Lay-On, Hook-On or even Swing-Down and Slide. As well as standard dimensions of 600 x 600 mm and 625 x 625 mm, we also offer special sizes to suit your needs. Our cassette ceilings combine tradition with innovation, suitability for daily use with high reliability and acoustic performance with aesthetics.

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 **LMD-K - Metal-paneled ceiling**

| 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 | Location Harvesting/ Extraction | Location Manufacturing | | |
| A1 | Metal ceiling, zink coated steel sheet | Lindner AG | 69.00 | 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 | 29.00 | N/A | N/A | N/A | N/A | 25%** | 0% | See detailed rating on next pages | Armstorf (D) | N/A | N/A |
| A3 | 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 |
| A4 | 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 |
| A5 | | | | | | | | | | | | | |
| A6 | | | | | | | | | | | | | |
| A7 | | | | | | | | | | | | | |
| A8 | | | | | | | | | | | | | |
| A9 | | | | | | | | | | | | | |
| A10 | | | | | | | | | | | | | |
| | | | | ✓ | | | | 24.5% | 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. | | | |
| | | | | | | | | 25% | | | | | |
| LMD-K - Metall-Kassetendecke | | | Lindner AG | 100.0 | | | | | | | | | |

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

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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 | Powder Coating | Lindner AG | IEQ Credit 4.2 | Flats (SCAQMD Rule 1113) | 50g/l | 0g/l | The product fulfills the requirements for paints & coatings. | ✓ |
| A4 | Acoustical Fleece | Lindner AG | N/A | N/A | N/A | N/A | The product is no adhesive, sealant, paint or coating. | ○ |

Manufacturer Lindner AG

Product Name LMD-K - Metal-paneled ceiling



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 | Powder Coating | Lindner AG | Not relevant | Not relevant | Recycled content is not relevant. | — |
| A4 | Acoustical Fleece | 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 | 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) |
| A4 | 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) |