

Concepts

Products

Service



## Quality Taped.

Lindner Cassette Ceilings



**Lindner**

Building New Solutions

# Building new solutions.

Lindner undertakes major projects worldwide in all areas of interior fit-out, insulation technology, industrial services and building facades. From pre-planning through to project completion Lindner is your partner of choice.

The Company's extensive manufacturing capability enables quality to be strictly maintained whilst allowing maximum flexibility to meet individual project requirements.

Environmental considerations are fundamental to all Lindner's business principles.

Through partnerships with clients Lindner turns concepts into reality.

## Choosing Lindner you have:

**Lindner Concepts:**  
Tailored solutions specifically geared to satisfy individual project requirements

**Lindner Products:**  
Quality materials and systems to the very highest industry standards

**Lindner Service:**  
Comprehensive project management services

# Lindner Cassette Ceilings

## The familiar size.

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.

## Value for money due to manufacturing efficiencies

Our metal cassettes are produced in a highly automated environment making production efficient and flexible to meet customer needs.



## Customer benefits at a glance

- Excellent aesthetics due to a wide range of surfaces and precise joint design
- Perfect for everyday use with easy access options such as Swing-Down cassettes

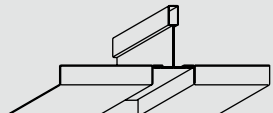
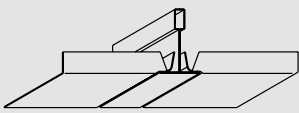
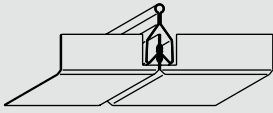
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# Cassette Range

These cassettes will never go out of fashion.

System			Page
LMD-K 400		<b>Lay-In cassette ceiling</b> Width of T-profiles: 15 mm, removable cassettes	9
LMD-K 403		<b>Lay-In cassette ceiling</b> Width of T-profiles: 24 mm, removable cassettes	10
LMD-K 420		<b>Clip-In/Swing-Down ceiling</b> Concealed Clip-In profiles, removable cassettes, with Swing-Down/Slide option	11

Additional options			Page
Lighting		<b>Lindner Lighting Systems</b>	16

## Tested quality



Building material class A2-s1, d0 tested to EN 13501-1  
Class A (IBC) tested to ASTM E 84  
Class 0 tested to BS 476 part 6/7



Light reflectance approx. 82 %  
9010 acc. to Lindner, unperforated  
tested to DIN 5033



Sound absorption  
up to sound absorption class A  
tested to ISO 11654



Durability  
exposure class A  
tested to EN 13964, table 8 and 9



Environmental product declarations  
validated to ISO 14025

## Certification/Regulations



Execution of the system ceilings  
tested to EN 13964



Quality standard according to the technical  
regulations of TAIM (Association of Industrial  
Metal Ceiling Manufacturers TAIM e.V.)

<b>Metal ceiling system</b>	
<b>Dimensions</b>	Ceiling cassettes 600 x 600 mm and 625 x 625 mm, made of zinc-galvanised steel
<b>Edges</b>	Square
<b>Perforation</b>	See Surface Brochure
<b>Surface</b>	Electrostatically applied powder-coating further surfaces see Surface Brochure
<b>Colour</b>	9010 acc. to Lindner, other colors in RAL and NCS available
<b>Substructure</b>	Profile manufactured from galvanised sheet steel, roll-formed or bent steel profile including suspension
<b>Relevant norms</b>	DIN EN 10152/10327, DIN EN 13964, DIN 18168, BS 2989, ASTM A 653



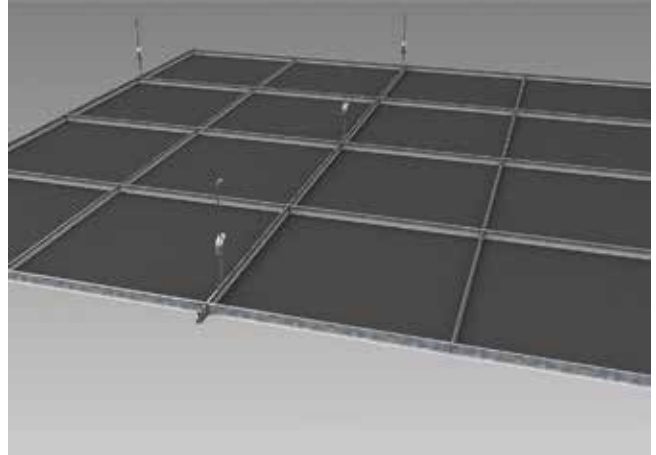
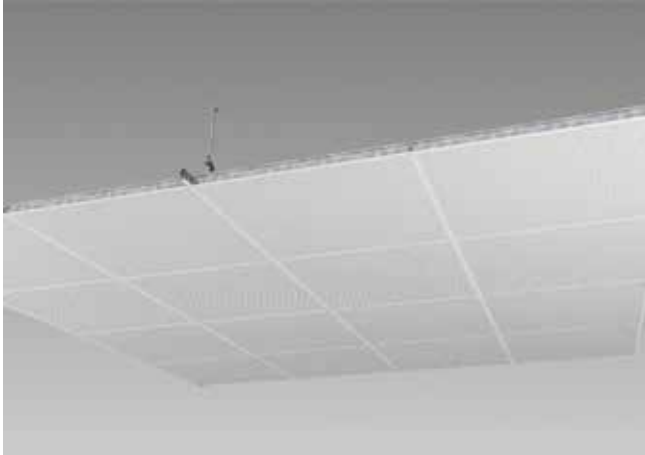
Sparkasse, Augsburg, Germany



# LMD-K 400

A popular choice.

Lay-In Cassette Ceiling – visible width of the T-profiles: 15 mm, removable ceiling panels



The T-profiles of LMD-K 400 outline a preset grid that structures the view of the ceiling. These special slimline profiles – with a visible width of 15 mm – are

available in different designs. The cassettes can be removed separately.

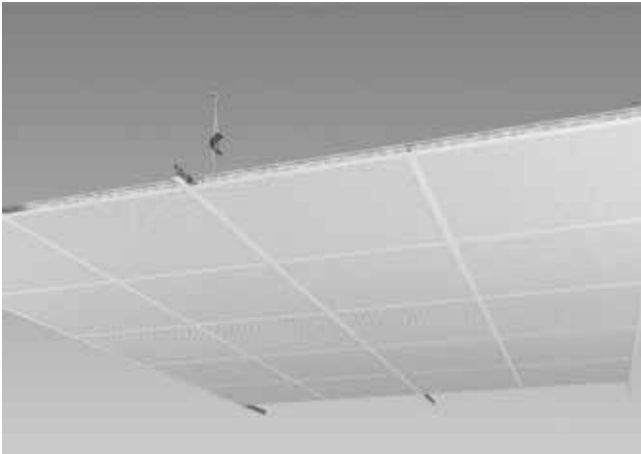
## Standard requirements

System	Perforation	Detail	Installation detail
LMD-K 400 Type K10 600 x 600 mm, steel 0.55 mm, aluminium 0.7 mm, for 15 mm profile.	Rg 2,5 - 16 Rv 1,8 - 20 Rd 1,6 - 25		

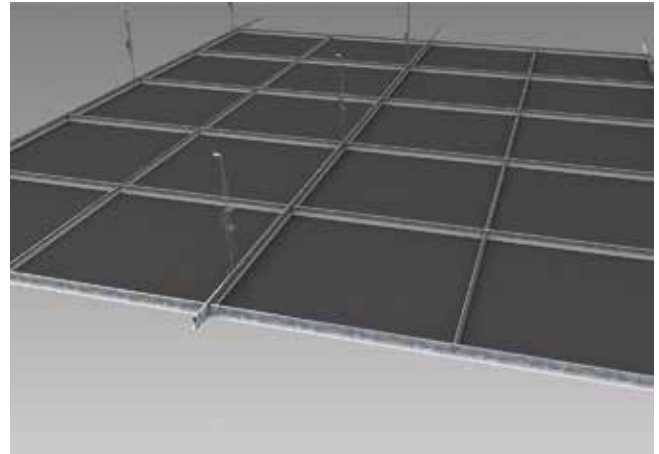
# LMD-K 403

The measure for quality: 24 mm.

Lay-In Cassette Ceiling – visible width of the T-profiles: 24 mm, removable ceiling panels

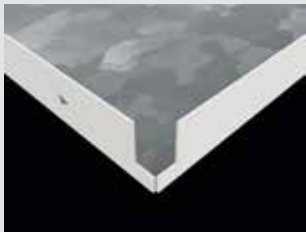
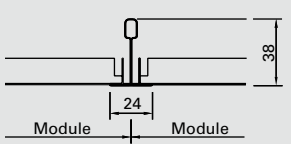

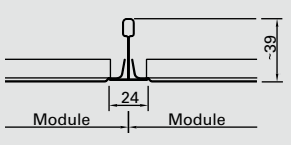


The T-profiles of LMD-K 403 outline a preset grid that structures the view of the ceiling. Our standard profiles come with a visible width of 24 mm.



The cassettes can be removed separately.

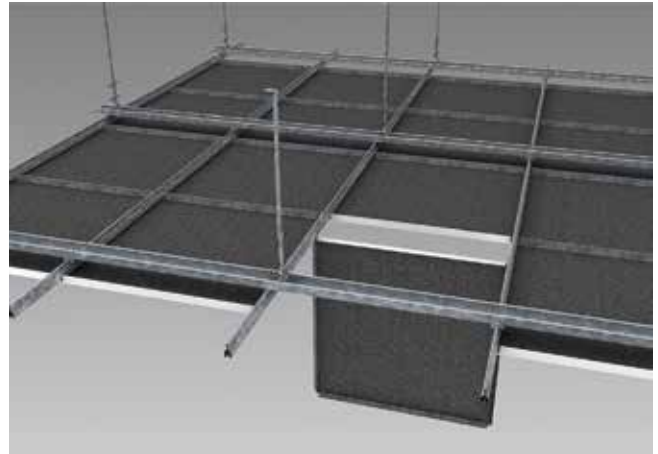
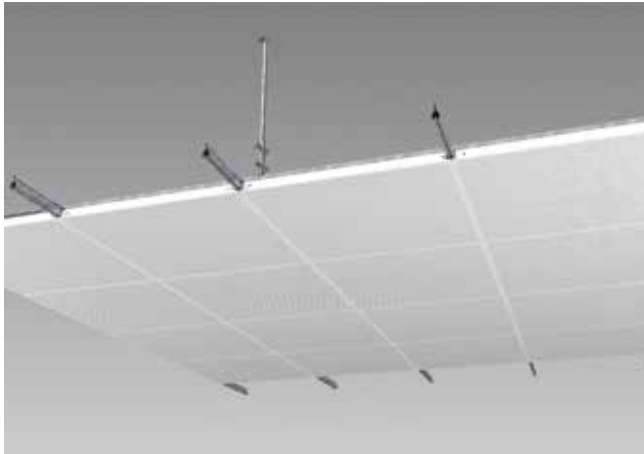
## Standard requirements

System	Perforation	Detail	Installation detail
LMD-K 403 Type K9 600 x 600 mm, 625 x 625 mm, steel 0.6 mm, for 24 mm T-profile. Further dimensions possible.	Available in all standard perforations		
LMD-K 403 Type K16 625 x 625 mm, steel 0.55 mm, for 24 mm T-profile.	Rg 2,5 - 16 Rv 1,8 - 20 Rd 1,6 - 25		

# LMD-K 420

## Wings clipped.


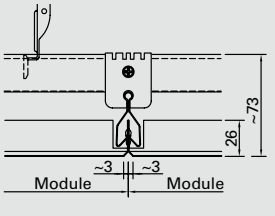
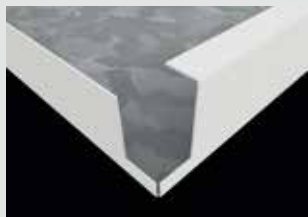
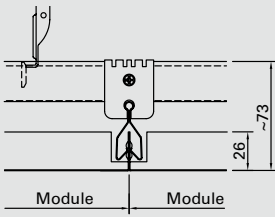

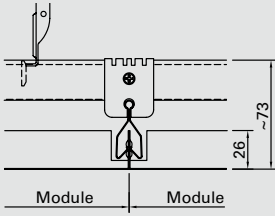
Clip-In/Swing-Down Ceiling – concealed Clip-In profiles, removable cassettes, optionally with Swing-Down/Slide operation



The uniform joint design structures the view of the ceiling. Due to its entirely concealed substructure, LMD-K 420 appears to be one smooth surface when seen from below. Metal cassettes that can be either

only removed and/or separately swung-down and slid along the clip-in profiles provide access the ceiling void in an extremely maintenance-friendly way.

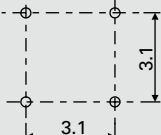
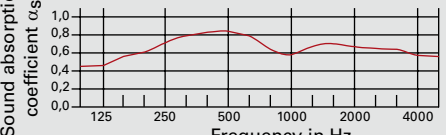
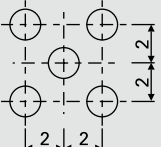
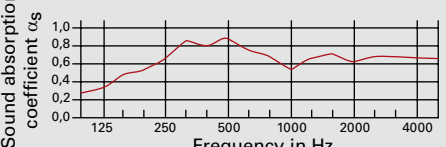
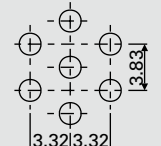
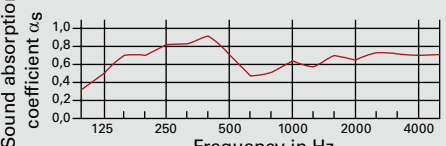
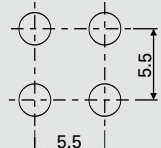
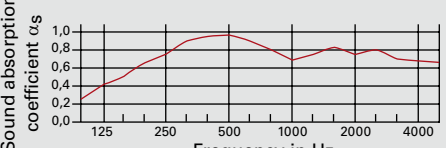
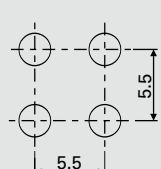
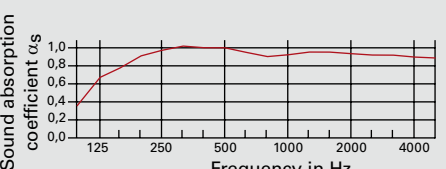
## Standard requirements

System	Perforation	Detail	Installation detail
LMD-K 420 Type K3 600 x 600 mm, 625 x 625 mm, steel 0.55 mm, with bevel, with Swing-Down option. Further dimensions possible.	Rg 2,5 - 16 Rv 1,8 - 20 Rd 1,6 - 25		
LMD-K 420 Type K4 600 x 600 mm, 625 x 625 mm, steel 0.6 mm, without bevel Further dimensions possible.	Available in all standard perforations		
LMD-K 420 Type K6 600 x 600 mm, 625 x 625 mm, steel 0.6 mm, without bevel, with Swing-Down option. Further dimensions possible.	Available in all standard perforations		



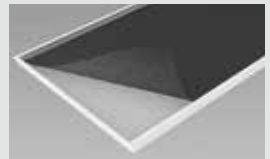
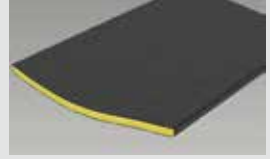
# Sound absorption

Example of the range of standard perforations available for ceilings **without** Heating and Cooling Technology

<p><b>Rg 0,7 - 4</b> Hole diameter 0.7 mm open area 4 % valid for steel 0.6 mm acoustic tissue</p>		<p><math>\alpha_w = 0.70</math> SAA / <math>\alpha_{s,m} = 0.71</math> NRC = 0.70</p>	
<p><b>Rd 1,6 - 25</b> Hole diameter 1.6 mm open area 25 % valid for steel 0.6 mm acoustic tissue</p>		<p><math>\alpha_w = 0.65</math> (L) SAA / <math>\alpha_{s,m} = 0.63</math> NRC = 0.65</p>	
<p><b>Rv 1,8 - 20</b> Hole diameter 1.8 mm open area 20 % valid for steel 0.6 mm acoustic tissue</p>		<p><math>\alpha_w = 0.75</math> (L) SAA / <math>\alpha_{s,m} = 0.73</math> NRC = 0.75</p>	
<p><b>Rg 2,5 - 16</b> Hole diameter 2.5 mm open area 16 % valid for steel 0.6 mm acoustic tissue</p>		<p><math>\alpha_w = 0.80</math> (L) SAA / <math>\alpha_{s,m} = 0.81</math> NRC = 0.80</p>	
<p><b>Rg 2,5 - 16</b> Hole diameter 2.5 mm open area 16 % valid for steel 0.6 mm acoustic tissue and Sound absorption inlay</p>		<p><math>\alpha_w = 1,0</math> (L) SAA / <math>\alpha_{s,m} = 0.92</math> NRC = 0.95</p>	



# Building material class

Product	Building material class	
<p><b>LMD Metal ceiling panel</b> Metal ceiling panel manufactured from galvanized sheet steel, including powder-coated surface in colour 9010 acc. to Lindner and bonded acoustic tissue on the reverse side</p>	<p>A2-s1, d0 tested to EN 13501-1</p>	
<p><b>Insula Mineral wool inlay</b> Mineral wool shrink-wrapped in acoustic transparent foil</p> <p>Insula A2 Insula I Insula Basic</p>	<p>A2-s1, d0 tested to EN 13501-1 B1 tested to DIN 4102-1 B2 tested to DIN 4102-1</p>	


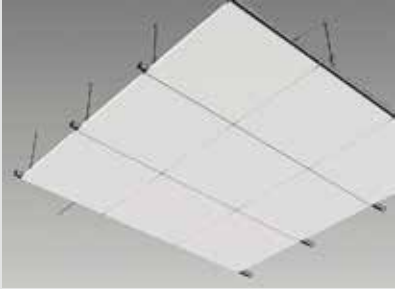
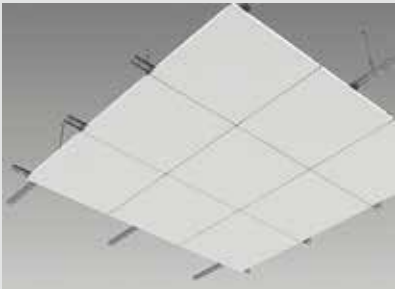
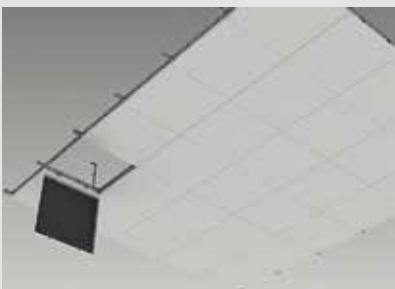


# System mix

## Explore the possibilities!

The square shape of cassettes is also applicable with a multitude of systems. Not only the cassettes specified below, but also even more options are possible.

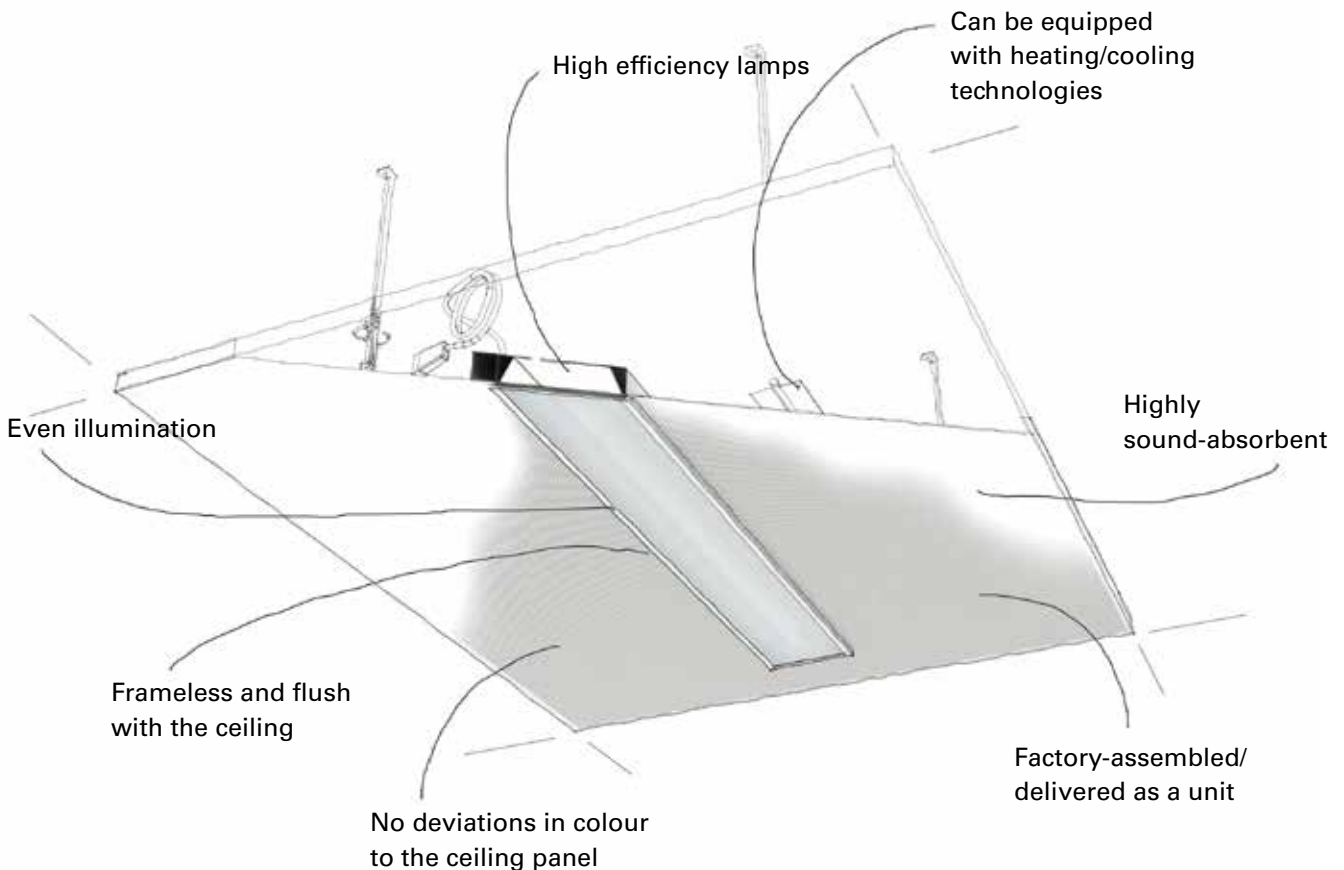
System	Detail	View
<b>LMD-B 100</b> Linear Post Cap Ceiling – cassettes with Swing-Down option on longitudinal side.		
<b>LMD-B 111</b> Post Cap Ceiling with Cros- sing Boxes – construction with post cap profiles and cross noggins, mega Lay-In cassettes.		
<b>LMD-E 200</b> Hook-On Ceiling – concealed hook-on profiles, removable mega cassettes.		
<b>LMD-E 210</b> Hook-On Ceiling – concealed T-profiles, remo- vable mega cassettes.		

System	Detail	View
<p><b>LMD-E 213</b> Hook-On Ceiling with accentuated joints – concealed hook-on profiles with Hook-On and/or Swing-Down cassettes.</p>		
<p><b>LMD-E 214</b> Hook-On Ceiling with open joints – concealed hook-on profiles with Hook-On and/or Swing-Down cassettes.</p>		
<p><b>LMD-TS 100</b> Torsion Spring – cassettes with Swing-Down option.</p>		

# Lindner Lighting systems

Integration is our passion.

Lindner has a wide range of lighting fixtures that fulfill even the most demanding requirements.



## Downlights

Downlights give light a special shape and a sophisticated interior design is created. The wide range is based on energy efficiency and offers the perfect downlight for every application.

## Integrated Luminaires

A wide range of integrated luminaires is available. These luminaires are shapely integrated into ceiling panels. Moreover, they are adapted to the room concept and the lighting quality.

## System Luminaires

A multitude of system luminaires which are perfectly adapted to the ceiling systems regarding dimensions, installation and colour deviation are available.



# Wall connections

Wall connections can be realised in different ways – with and without shadow gap. If cut panels are used, perimeter trims with hold-down function are available. Specially designed perimeter trims for pillar semirings provide for a clean connection to curved shapes.



L-perimeter trim



Shadow gap trim



Shadow gap pillar semiring



Further wall connections available on request.

# Surfaces

Lindner has a wide range of ceiling surfaces for different demands – so that your rooms are not only extraordinary but unique. We apply various colours, patterns, graphics, 3D textures and perforations to your metal ceiling. In particularly challenging areas, we furnish our systems with coatings that are more than just eye-catchers: They create a significant improvement of room quality.



Unilever, Hamburg, Germany



Tsvetnoy Market, Moscow, Russia  
© Chris Gascoigne



Dubai Metro Station, UAE



VR-Bank Heilbronn, Germany  
© Volker Erich Jahr

## Possible surfaces

- Powder Coating
- Design Surface
  - ARTline – Design Powder Coating
  - GRAPHICline – Print Technology
  - EFFECTline – Grinding Technology
  - SPREADline – Customised, image and scattered perforation
- Functional Surfaces
  - Meteo – Corrosion Coating
  - Mutex – Absorber Coating
- Special Surfaces
  - INOXlook – Aluminium with appearance of stainless steel
- Structured Surfaces
  - TOUCHdesign – 3D Surface
  - TOUCHdesign Lunar – 3D high-gloss Surface
  - TOUCHdesign Venas – 3D Structured Surface
- Expanded Metal
- Specific Perforations



# Green Building

A responsible approach to humans and nature is a matter of course for us as a manufacturer of long lasting ceiling systems in premium quality. We are continuously optimizing our wide range with the objective to further reduce their impact on the environment. Every production step is subject to a thorough control of the ambitious energy, material and quality requirements. This ensures that our clients do not only get a sophisticated product but that they can also rely on the ecological suitability.

Validated environmental product declarations according to ISO 14025 are available for the procedure of proof of the environmental performance of Lindner ceiling systems.



Unilever, Hamburg, Germany



Lindner is a founding member of the German Sustainable Building Council (DGNB) and member of the US Green Building Council. We are actively involved in building up awareness for the principles of sustainable construction and the development of relevant standards.

## Sustainable construction with Lindner ceiling systems:

- Extremely durable products with best functional characteristics and high economic efficiency
- End-to-end procedure of proof of the ecological material characteristics by environmental product declarations
- Consultancy service with all current building certifications, as for example according to DGNB, LEED, BREEAM

## Simply healthier: Lindner ceiling systems.

- High recycling percentage up to 45 %
- VOC values are considerably below the limit according to AgBB / DIBt
- Free from toxicological gases, thus it is toxicologically inoffensive in case of fire according to DIN 53436
- The substances used for pre-cleaning of powder coating are no hazardous substances according to the Ordinance on Hazardous Substances.
- Powder recovery of surface coating of approx. 25 %
- Reference useful life is 70 years according verified EPD
- Up to 30 % of the primary energy demand can be saved with Plafotherm® heated and chilled ceiling systems

## We can do it all for you.

### Lindner Concepts:

- Airports and Railways
- Clean Rooms and Operating Theatres
- Cruise Liner and Ship Fit-out
- General Contracting
- Hotels and Resorts
- Insulation and Industrial Service
- Interior Fit-out and Furnishings
- Special-Purpose Constructions and Stadiums
- Studios and Concert Halls

### Lindner Products:

- Ceiling Systems
- Doors
- Dry Lining Systems
- Facades
- Floor Systems
- Heating and Cooling Technologies
- Lights and Lighting Systems
- Partition Systems
- Roofing Systems
- Steel & Glass

### Lindner Service:

- Clearance of Harmful Substances
- Construction Management and Project Development
- Deconstruction and Interior Demolition
- General Planning
- Global Product Supplies
- Green Building
- Industrial Scaffolding
- Installation and Building Services
- Research and Development

### Lindner Group

Bahnhofstrasse 29  
 94424 Arnstorf  
 Germany  
 Phone +49 8723 20-3679  
 Fax +49 8723 20-2893  
[ceilingsystems-ps@Lindner-Group.com](mailto:ceilingsystems-ps@Lindner-Group.com)  
[www.Lindner-Group.com](http://www.Lindner-Group.com)