Their openness is remarkable.

Lindner Baffle Ceilings and Plafotherm® Baffle Heated/Chilled Ceilings

Lindner | Building New Solutions

Building new solutions.

Lindner undertakes major worldwide projects in all areas of interior finishes, 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

Main photo: Lithium Rehau, Germany
Photo: © Stefan Meyer

Lindner Baffle Ceilings

The sky is the limit. For your ideas.

The hard-walled surfaces of concrete ceilings can lead to bad room acoustical working conditions. Here, corrections are needed and required. Thus, use the exceptional area distribution of a Lindner Baffle ceiling to create a unique room atmosphere.

The baffle system of Lindner is optimally suitable for belated installation, in particular, where acoustical problems with concrete ceilings are noticed after completion. Profit of the amazing possibilities of room layout. Whether in a simple shape as linear grid, as cross grid with the shape of a honeycomb structure, with waved baffles or as a free canopy ceiling construction – the ceiling itself makes an effective contribution due to its acoustical performance.

Baffle ceilings can additionally be equipped with our efficient integrated heating and cooling technology to create a pleasant air condition.

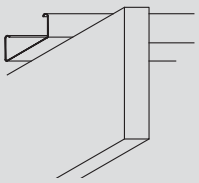
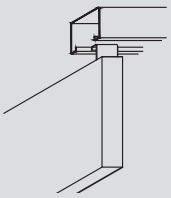
Maritime museum, Shanghai

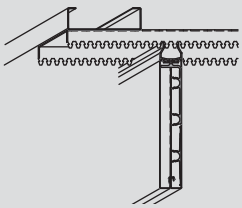
Customer benefits at a glance

- Considerable possibilities in execution and design
- High sound absorption
- Ceiling void is optimally suitable for the integration of luminaires, sprinklers or ventilation systems
- Design variety due to wide range of perforations and surfaces
- Our efficient Plafotherm® heating and cooling technology creates a pleasant temperature

Baffle Ceilings

Maintain silence.

System			Page
LMD-L 601		**Metal Baffle Ceiling in linear grid** Visible substructure made of CD profile grid	8
LMD-L 608		**Metal Baffle Ceiling in linear grid – Hook-On/ Slide baffles** Visible substructure made of double Hook-On profiles	9

Additional options			Page
Plafotherm® Z		**Heated/Chilled Baffle Ceiling**	12 - 16
Luminaires		**Lindner luminaires**	17

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

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

Environmental product declarations
validated to ISO 14025

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

Durability
exposure class A
tested to EN 13964, table 7 and 8

Certification / Regulations

CE

Execution of the system ceilings
tested to EN 13964

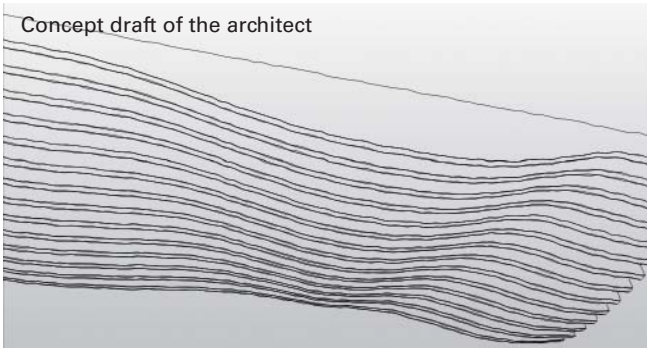
TAIM

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

Technical data

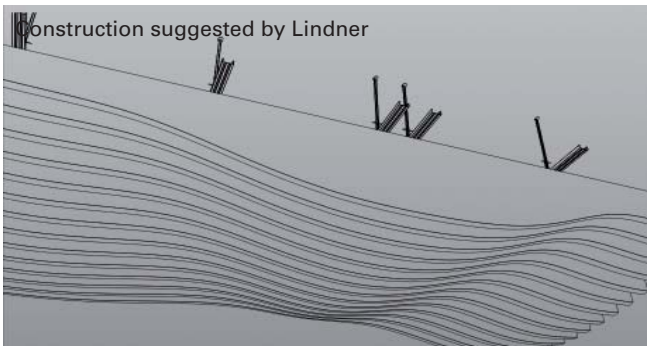
Dimensions	Baffles, length up to 3,000 mm, one-piece baffle height 80 to 260 mm, two-piece baffle heights > 260 mm also possible, made of zinc-galvanised steel
Edges	Square or wavelike
Perforation	See Surface Brochure
Surface	Electrostatically applied powder-coating further surfaces see Surface Brochure
Colour	9010 acc. to Lindner, other colors in RAL and NCS availabe
Substructure	Profile manufactured from galvanised sheet steel, roll-formed or bent steel profile including suspension
Relevant norms	DIN EN 10152/10327/13964, DIN EN ISO 12944, BS 2989, ASTM A 653

Package solutions from one source – example LMD-L LAOLA


Concept draft of the architect

Concept

Lindner offers not only suitable products but also the services you need to complete your project. Your visions become our goals which our highly skilled drafters implement by using state-of-the-art 3D visualizations.

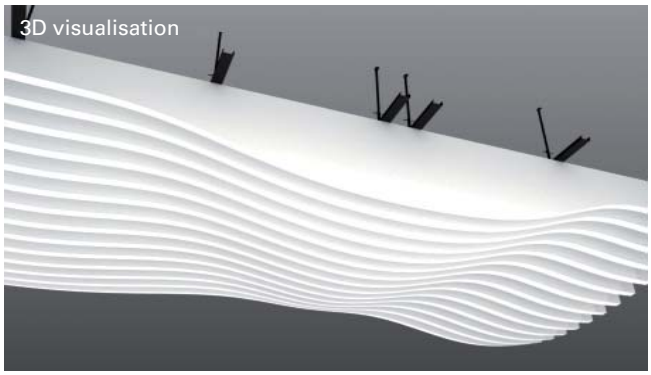

Construction suggested by Lindner

Design and Development

It goes without saying that we have the necessary equipment to test the design and functions of all our products in our own research and development facilities, thus preventing disturbances during the course of your project.

Production

Specialists in every department and ultramodern production lines enable us to manufacture large quantities. As a result, Lindner has constantly set new milestones in combining design, functionality and flexibility.


3D visualisation

Delivery and assembly

You need customised products and also someone who efficiently assembles them ? Then let us be your competent partner who is always close at hand and put your trust in Lindner's reliable assembly service.

Experience the utmost flexibility that only Lindner offers. We look forward to realising your extraordinary building.

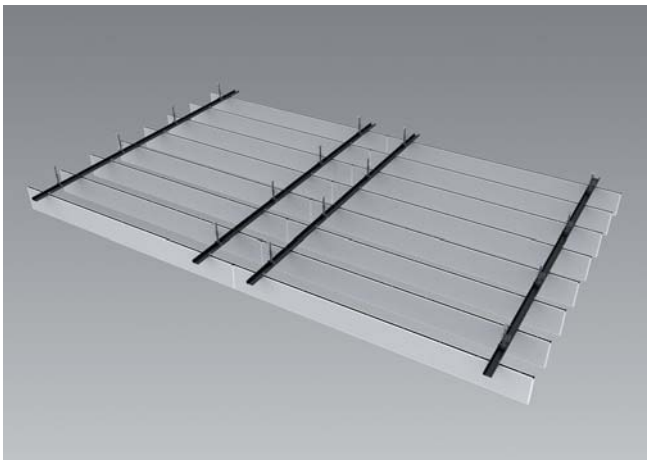

Finished product

Volksbank Raiffeisenbank Dachau, Germany

LMD-L 601

Metal Baffle Ceiling in linear grid – Visible substructure made of CD profile grid

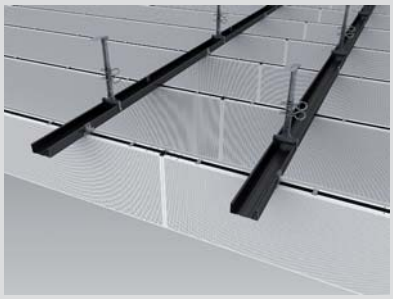
VU University Medical Center



The linear design of metal baffles offers sufficient scope for creative customised solutions due to their multifunctional possibilities of installation.
Thanks to the substructure by means of CD profile grid and individual baffle distances, the integration of necessary installations is possible without any problems. Due to the variation of the centre distance, both the sound absorption and the visual appearance can be changed.

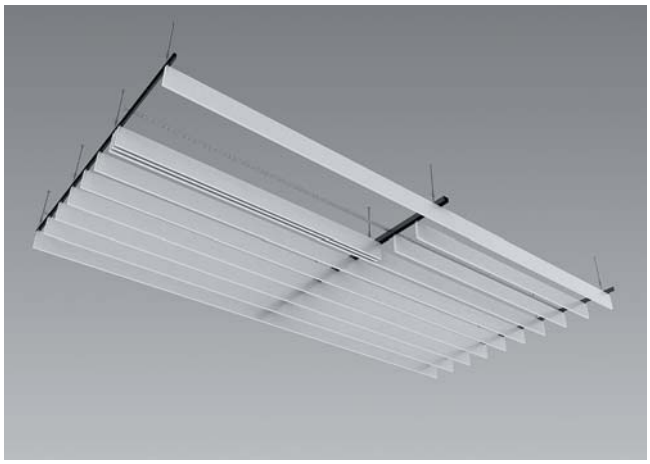
Advantages:
- Different centre distances possible
- Ceiling void can be used for ventilation systems
- Free spaces can be used for different installations, e.g. luminaires, sprinklers or for the suspension of signs
- Perforated baffles with inlays suitable for sound absorption
- Similar systems with heating and cooling technology can be supplied, see systems of the product family Plafotherm® Z

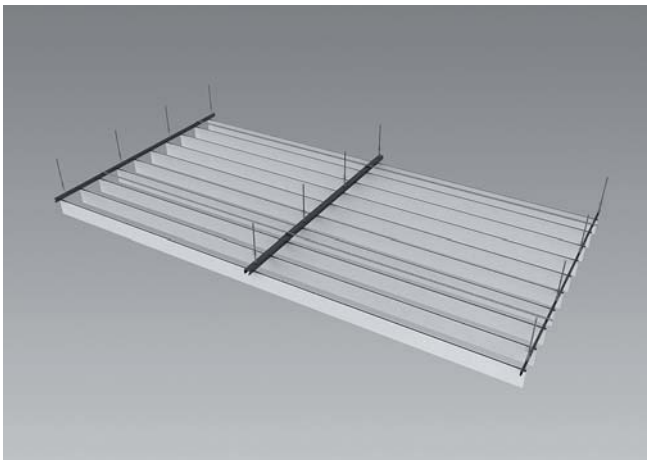
Standard requirements

Metal Baffles	Material	Installation situation
LMD-L 601 Type 1  LMD-L 601 Type 2 	Metal Baffles Made of steel, powder-coated Baffle length: max. 3,000 mm Baffle width: 30 – 55 mm **Baffle height Type 1:** one-piece, min. 80 mm, max. 260 mm **Baffle height Type 2:** two-piece, min. 260 mm, max. 600 mm Available in all standard perforations depending on panel dimensions resp. material	

LMD-L 608

Metal Baffle Ceiling in linear grid – Hook-On/Slide Baffles – Visible substructure made of double Hook-On profile

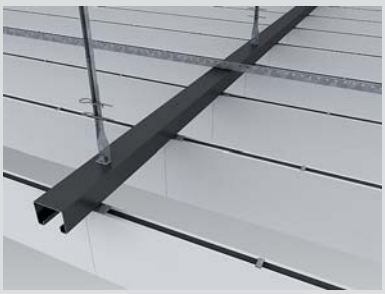




This high-grade baffle ceiling is especially suitable for areas with increased maintenance demands. Due to movable baffles, you can comfortably reach the ceiling void. The ceiling itself makes a contribution due to its acoustical performance. The waved metal baffle ceiling LMD-L LAOLA creates an especially vivid atmosphere.

Advantages:
- Especially maintenance-friendly
- Different centre distances possible
- Ceiling void can be used for ventilation systems
- Free spaces can be used for different installations, e.g. luminaires, sprinklers or for the suspension of signs
- Perforated baffles with inlays suitable for sound absorption
- Baffles with customised shapes possible, e.g. LMD-L LAOLA (waved)

Standard requirements

Metal Baffles	Material	Installation situation
LMD-L 608 Type 1  LMD-L 608 Type 2 	Metal Baffles Made of steel, powder-coated Baffle length: max. 3,000 mm Baffle width: 30 – 55 mm **Baffle height Type 1:** one-piece, min. 80 mm, max. 260 mm **Baffle height Type 2:** two-piece, min. 260 mm, max. 600 mm Available in all standard perforations depending on panel dimensions resp. material	

VIP Lounge, Munich, Germany

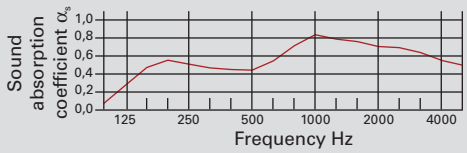
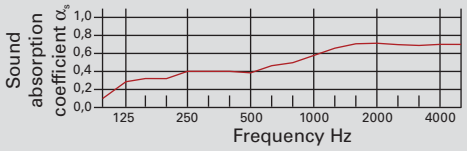
Photo: © Florian Holzherr

LMD-L LAOLA Shine with LED illumination

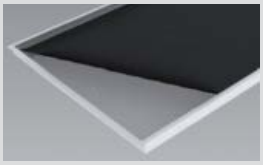
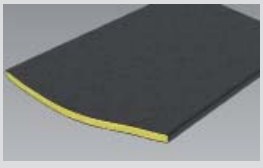
Sound absorption

Noise is inevitable but it can be reduced.

There are high demands on modern buildings. Besides design, safety, flexibility and function, a long-term economic efficiency has to be embedded. Moreover, the people inside the building should feel comfortable. Our large range of perforations improves both the acoustic and the visual appearance according to your demands. The use of ceilings from our range of products with different inlays provides you the required efficiency.

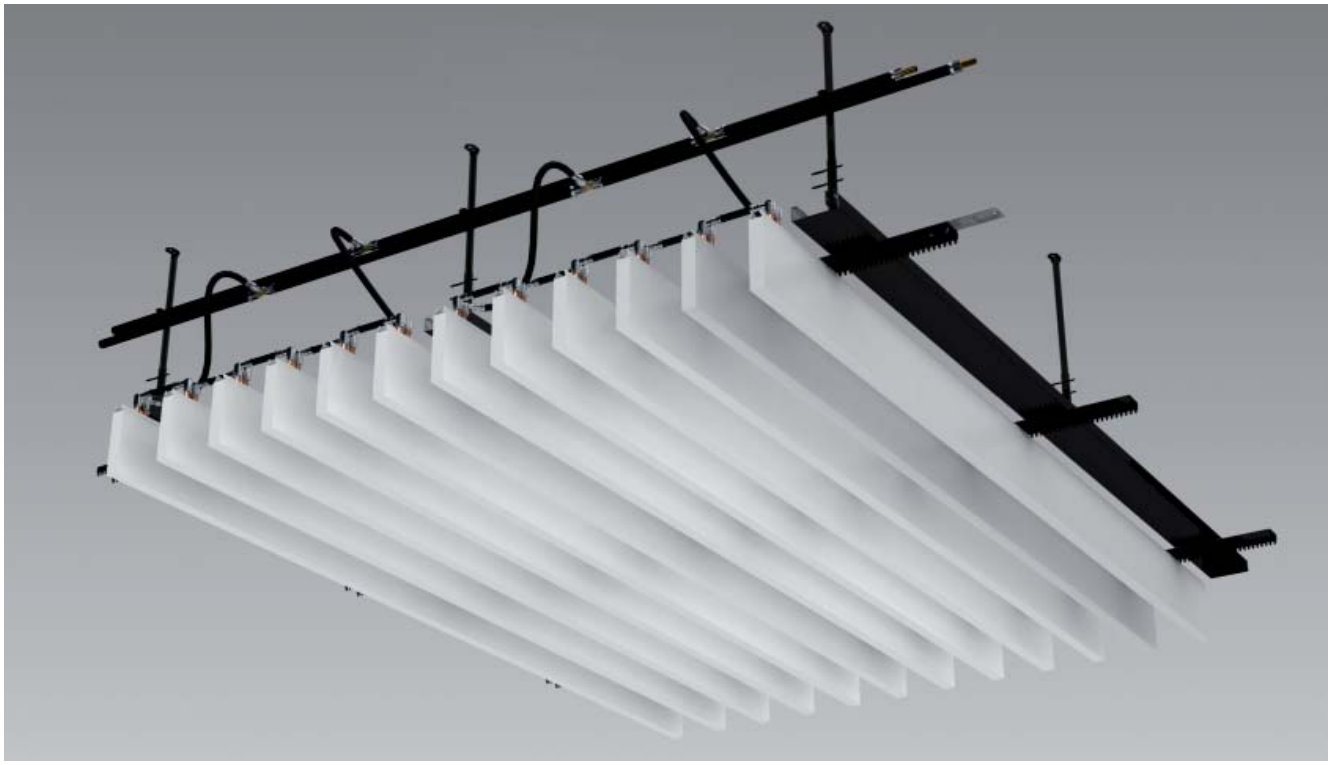
Rv 2,0-20 Acoustic tissue Sound absorption inlay Width: 55 mm, Height: 245 mm Centre distance: 300 mm	α_w = 0.60 $\alpha_{s,m}$ / SAA = 0.64 NRC = 0.65	
Rv 2,0-20 Acoustic tissue Sound absorption inlay Width: 30 mm, Height: 245 mm Centre distance: 300 mm	α_w = 0.50 (H) $\alpha_{s,m}$ / SAA = 0.52 NRC = 0.55	

Building material class

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

Plafotherm® Z

Heated/Chilled Baffle Ceilings

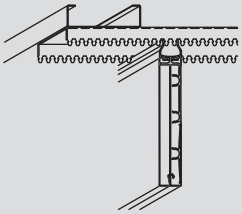
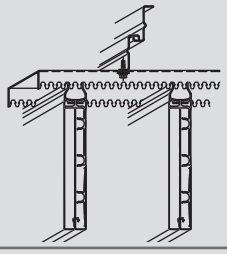
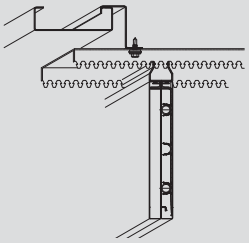


Ceiling systems of the range Plafotherm® Z are open heated/chilled ceilings in grid construction. Due to the open construction, maintenance works are possible at any time.
Plafotherm® Z has a chain profile which is a main part of the substructure.
In this chain profile, steel baffles are clipped-in.

Different systems of the Heated/Chilled Baffle Ceilings are available.

Due to variations of the centre distance, both the specific heating and cooling performance and the sound absorption as well as the visual appearance can be changed.

Programme

System	Detail	Description
Plafotherm® Z 901		**Heated/Chilled Grid Ceiling** Chain profile construction, Post Cap as primary grid, Clip-In Baffles
Plafotherm® Z 920		**Heated/Chilled Grid Ceiling, Modular Construction** Hook-On/Swing modules
Plafotherm® Z 940		**Heated/Chilled Grid Ceiling, Modular Construction** Hook-On/Swing modules, suitable for partitions

Tested quality

Building material class A2-s2, d0
tested to EN 13501-1

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

Environmental product declarations
validated to ISO 14025

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

Durability
exposure class A
tested to EN 13964, table 7 and 8

Nominal cooling capacity up to 169 W/m²
tested to DIN EN 14240 (10 K)
Nominal heating capacity up to 167 W/m²
tested to DIN EN 14037 (15 K)

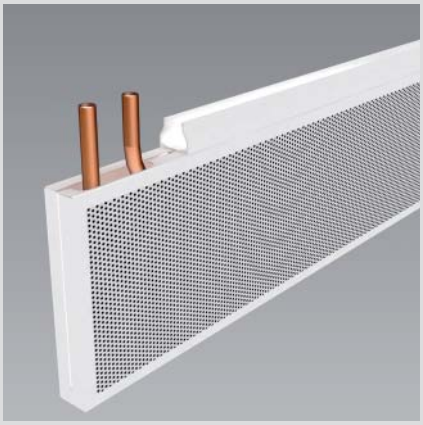
Certification / Regulations

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.)

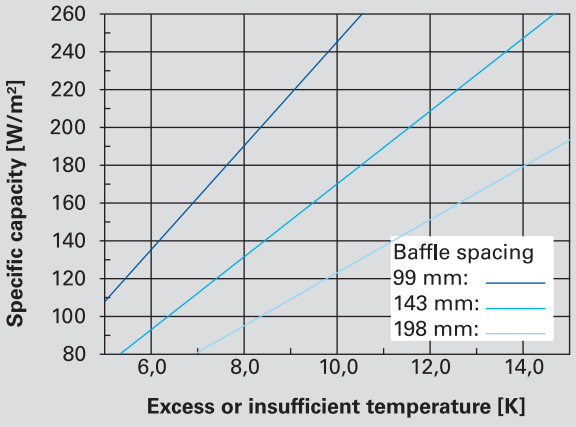
Steel baffle Plafotherm® Z Type 1

Material	Made from galvanised steel
Size	Length up to 3,000 mm, width 30 mm and height 150 - 300 mm
Edges	Square
Perforation	See Surface Brochure
Surface	Electrostatically applied powder-coating further surfaces see Surface Brochure
Colour	9010 acc. to Lindner, other colors in RAL and NCS availabe

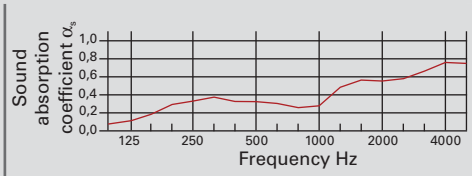
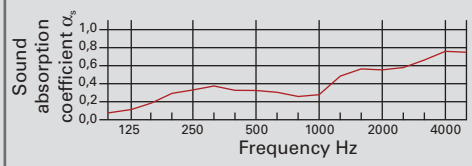
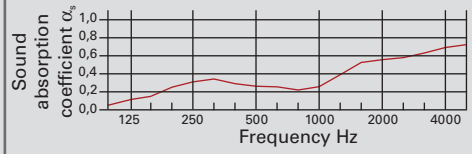
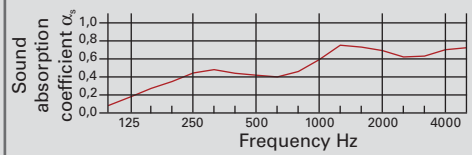
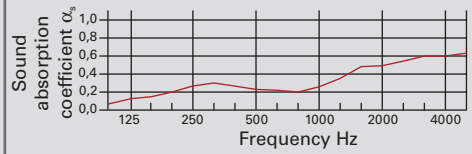
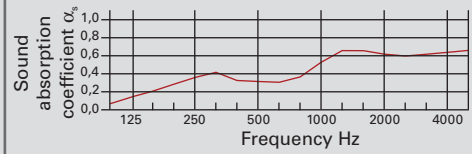
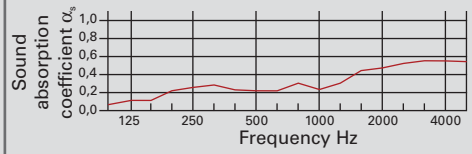
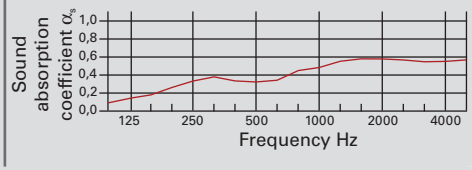


Heating and Cooling

Rated cooling capacity tested to DIN EN 14240 (10K) Baffle height 200 mm	
Baffle spacing 99 mm	244 W/m²
Baffle spacing 143 mm	169 W/m²
Baffle spacing 198 mm	122 W/m²
Depending on the height	24,2 W/lfm

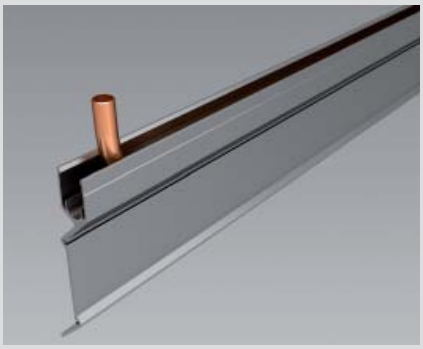


Sound absorption

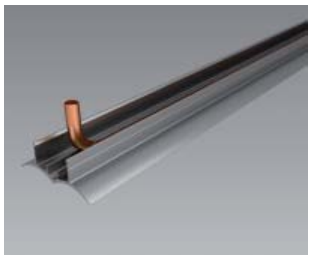
Rv 2,0-20 Centre distance: 99 mm Baffle height: 200 mm Acoustic tissue	αw = 0,35 (H) αs,m / SAA = 0,38 NRC = 0,35	
Rv 2,0-20 Centre distance: 99 mm Baffle height: 200 mm Acoustic tissue Mineral wool	α_w = 0,60 (L) $\alpha_{s,m}$ / SAA = 0,64 NRC = 0,65	
Rv 2,0-20 Centre distance: 143 mm Baffle height: 200 mm Acoustic tissue	αw = 0,30 (H) αs,m / SAA = 0,34 NRC = 0,35	
Rv 2,0-20 Centre distance: 143 mm Baffle height: 200 mm Acoustic tissue Mineral wool	αw = 0,50 (H) αs,m / SAA = 0,54 NRC = 0,55	
Rv 2,0-20 Centre distance: 198 mm Baffle height: 200 mm Acoustic tissue	αw = 0,30 (H) αs,m / SAA = 0,32 NRC = 0,30	
Rv 2,0-20 Centre distance: 198 mm Baffle height: 200 mm Acoustic tissue Mineral wool	αw = 0,45 (H) αs,m / SAA = 0,46 NRC = 0,45	
Rv 2,0-20 Centre distance: 253 mm Baffle height: 200 mm Acoustic tissue	αw = 0,30 (H) αs,m / SAA = 0,31 NRC = 0,30	
Rv 2,0-20 Centre distance: 253 mm Baffle height: 200 mm Acoustic tissue Mineral wool	αw = 0,40 (H) αs,m / SAA = 0,43 NRC = 0,45	

Aluminium baffle Plafotherm® Z Type 2

Material	Aluminium extruded profile
Size	Length up to 4,000 mm, width 40 mm and height 125 mm
Surface	Electrostatically applied powder-coating further surfaces see Surface Brochure
Colour	9010 acc. to Lindner, other colors in RAL and NCS availabe



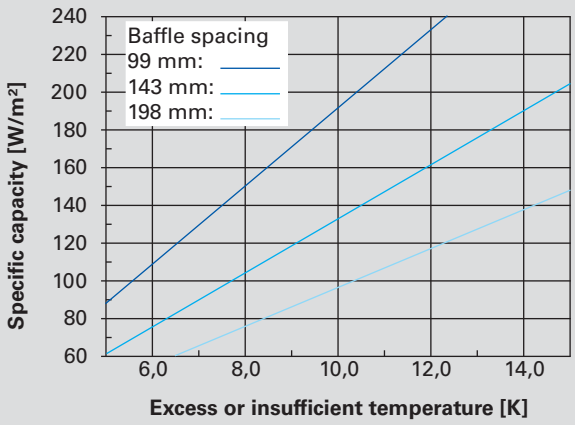
Different design options



Heating and Cooling

Rated cooling capacity tested to DIN EN 14240 (10K)
Baffle height 125 mm

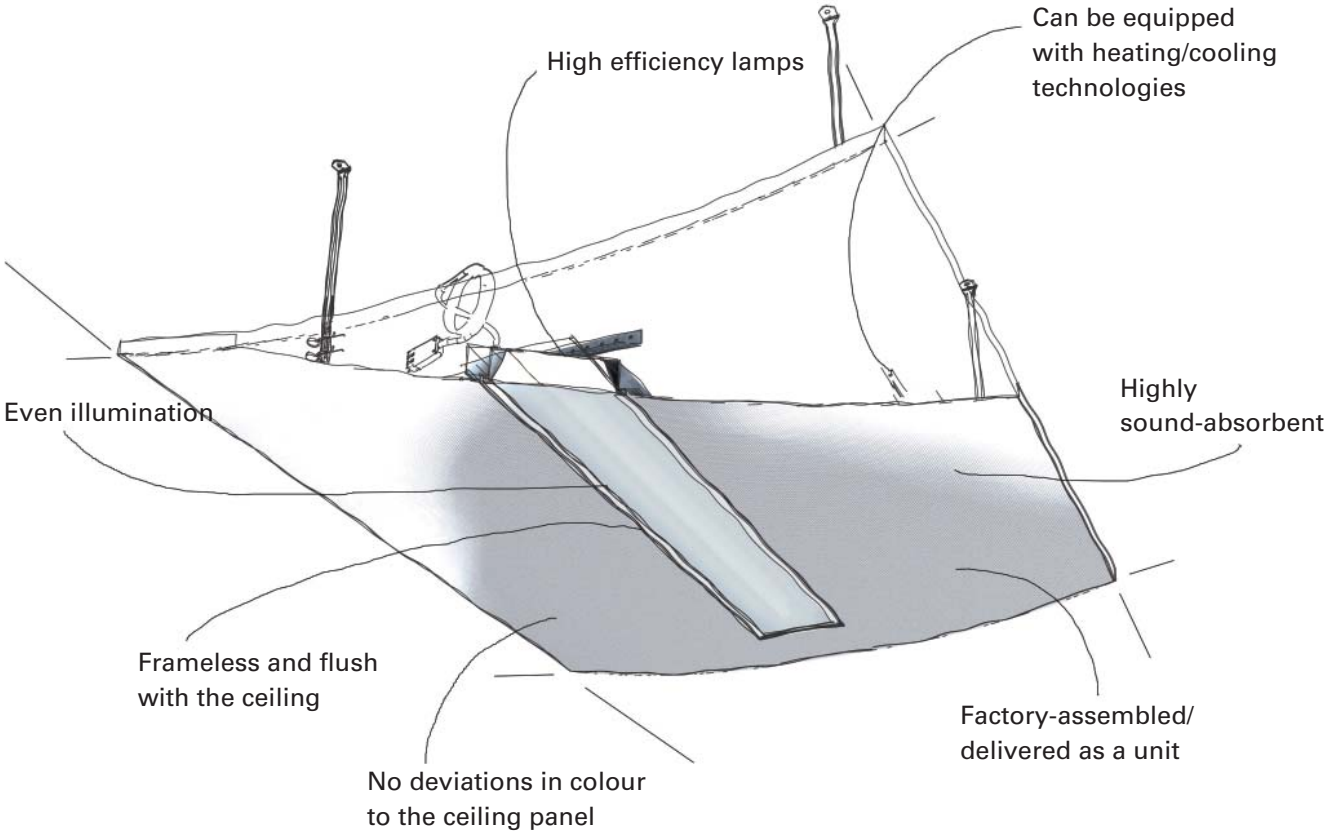
Baffle spacing 99 mm	189 W/m²
Baffle spacing 143 mm	131 W/m²
Baffle spacing 198 mm	94,9 W/m²
Depending on the height	18,8 W/lfm



Lindner Lighting systems

Integration is our passion.

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



Light Channels

The length and the execution of the light channels can flexibly be adapted to the room geometry. Moreover, they impress from the technology to the easy installation.

Pendant Luminaires

The light source can individually be positioned where you need the room to be illuminated.
All pendant luminaires are adapted to the geometry of your room.

Specialties

Our surfaces and designs – unrivalled choice.

ARTline	To create a top of the range visual effect your metal baffle ceiling is available with a choice of ARTline/STYLEline wood surfaces. The wood surfaces are also available tested to ASTM E 84 class A, regarding fire behaviour of surfaces.	
Meteo	We protect the substructure and suface of our systems against corrosion to allow them to be installed in external areas, swimming pools and underground car parks. The anti-corrosion coating Meteo is tested to EN 13964 table 8 / DIN 55928 part 8 / DIN EN ISO 12944.	
Baffle finish	On request, we offer different executions for the finish of the front side of baffle ceilings and ceiling offsets in your office building, production hall, assembly hall and manufacturing plant.	
Direct fixation	Especially in rooms with low heights, it is possible to directly fasten the baffles on the concrete slab by means of a special suspension. Thus, no additional substructure profiles are necessary resp. visible.	

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.

DGNB
Deutsche Gesellschaft für nachhaltiges Bauen e.V.
German Sustainable Building Council

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 of 25 – 30 %
- 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
- Approx. 20 % of the primary energy demand can be saved with Plafotherm® heated and chilled ceiling systems

We can do it all for you.

Lindner Concepts:

- Insulation Engineering
- Clean Rooms and Laboratories
- Airports and Airlines
- Railways and Tunnels
- Studios and Concert Halls
- Interior Fit-out and Furnishings
- Cruise Liner and Ship Fit-out
- Hotels and Resorts
- General Contracting

Lindner Products:

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

Lindner Service:

- Green Building
- Deconstruction and Gutting
- Clearance of Harmful Substances
- Industrial Scaffolding
- Research and Development
- Delivery
- General Planning
- Installation
- Maintenance and Industrial Service
- Public-Private Partnership (PPP)

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