

Concepts

Products

Service



## The perfect finish.

Surfaces and Perforations for Lindner Metal Ceilings and  
Plafotherm® Heated/Chilled Metal 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

# Surfaces and Perforations for Lindner Ceiling

The perfect finish.

Suspended metal ceilings are primarily known for their durability and functionality. Although, they enjoy this reputation, the material metal is ideally suited to the realisation of unique designs – especially as high-quality metal ceiling by Lindner.

Lindner Metal Ceilings epitomise the union of shape and surface. Discover our variety of functional and decorative finishes and new ways of stamping and perforation.



Airport Hotel, Dubai, U.A.E.

## Your advantages at a glance

- Richness of appearance due to unique surfaces
- Wide range of coatings for different requirements
- 3D effects with optional stamping

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## Tested quality



Building material class A2-s1, d0  
tested to EN 13501-1  
Class A (IBC) tested to ASTM E84  
Class 0 tested to BS 476 part 6/7



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



Sound absorption  
depending on the system  
tested to EN ISO 354



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

## 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.)

# Powder Coating

In standard configuration, Lindner Metal Ceilings are furnished with a powder coating in white colour RAL 9010 or gray colour RAL 9006. As a matter of course, all RAL and NCS colours are available.



Lindner Metal Ceiling panels with acoustic tissue and powder coating meet the building material class A2-s1, d0 "non-combustible" according to EN 13501-1 and are also rated as harmless in case of fire.



Unilever Hamburg, Germany

## Emphasis on a clean powder coating:

### No waste air\* and no effluents!

- Solvent and VOC-free (volatile organic compounds)
- 800 m<sup>3</sup> of contaminated water recycled every year
- 25 tons of powder saved yearly thanks to powder recycling

\* Except from steam during pre-treating

# Design Surface

## ARTline – Design Powder Coating

Applying our design powder coating ARTline, we can perfectly imitate wood surfaces of various kinds, and fantasy designs. Simultaneously, the familiar advantages of metal ceilings can be enjoyed without restrictions.

This special powder coating is suitable for indoor and outdoor application as well as for Plafotherm®

Heated and Chilled Ceilings and Suspended Fireproof Ceilings. Moreover, its outstanding resistance against UV radiation, solvents and chemicals of many kinds is quite impressive.

Fire behaviour of ARTline surface fulfils the building material class A2-s1, d0 according to EN 13501-1 and class A according to ASTM E 84.

### Extract from possible designs



Acacia 2



Black Cherry 1



Douglas Fir 3



Oak 2



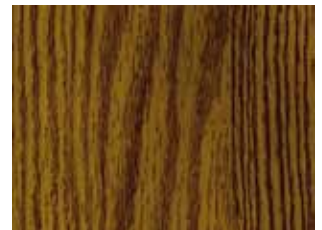
Acacia 3



Beech 1



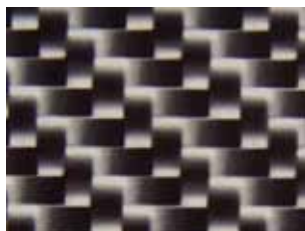
Douglas Fir 4



Oak 3



Copper



Karbon 3



Granite 115



Green Marble

As with all natural products, wood and concrete vary slightly in colour and structure. Printer inks cannot match the colour tones perfectly: minor differences in colour are therefore possible. Other wood coverings and patterns are available on request.

## STYLEline – Design Foil Coating

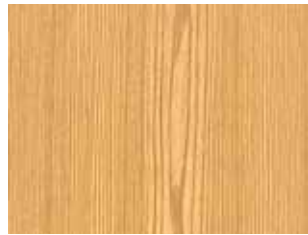
As a compelling alternative, the design foil coating STYLEline can perfectly imitate metallic surfaces besides its possibilities of wooden designs with enormous cost savings compared to the original surface.

Fire behaviour of STYLEline surface fulfils class A according to ASTM E 84.

### Extract from possible designs



Oak 500



Oak 501



Oak 502



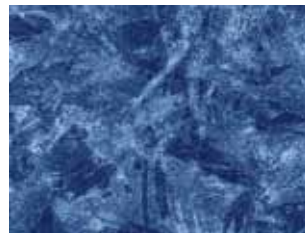
Oak 503



Walnut 500



Walnut 501



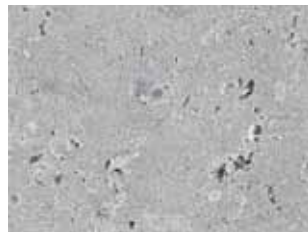
Structure 804



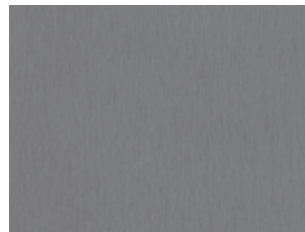
Structure 805



Concrete 600



Concrete 601



Metallic 101



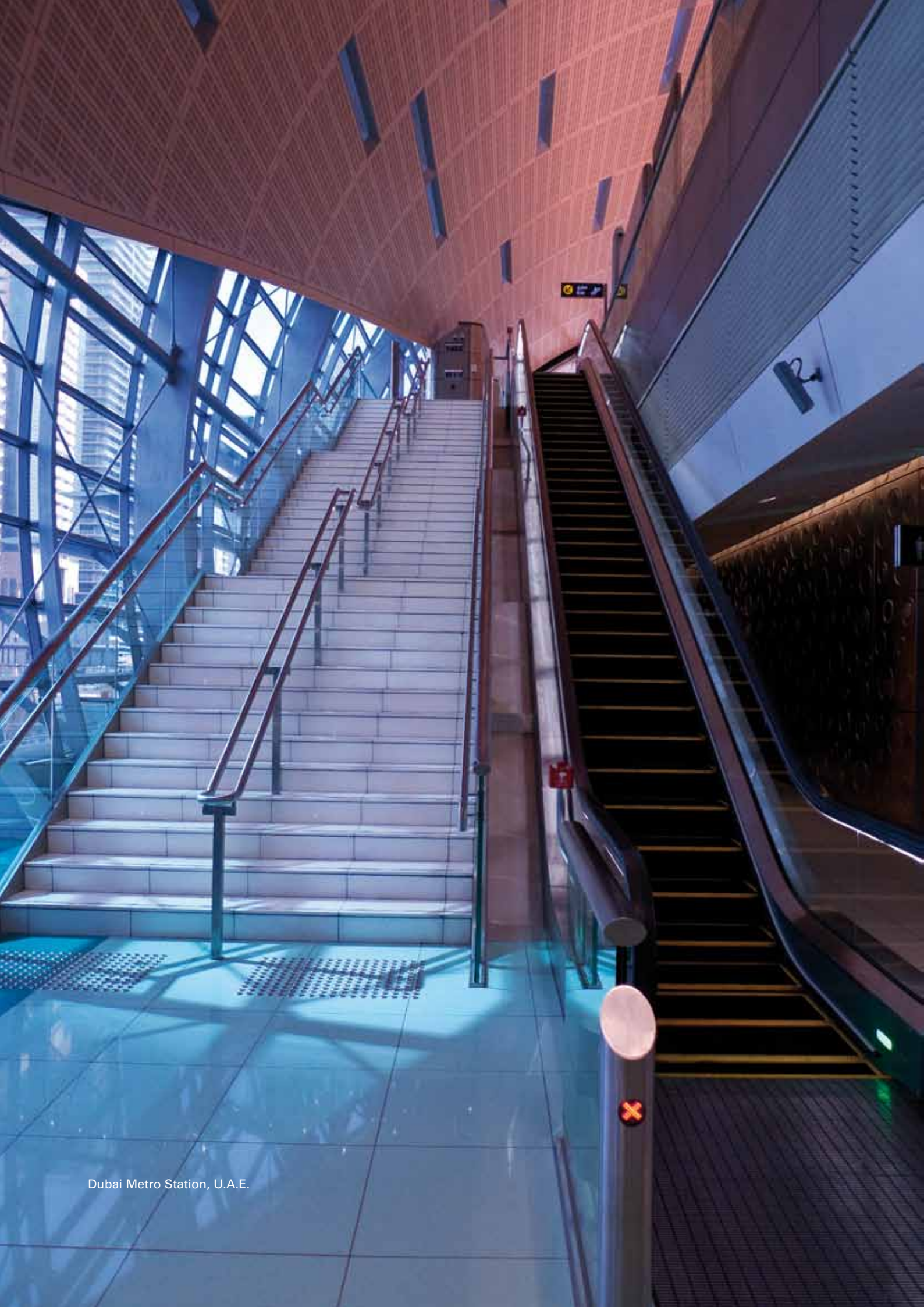
Metallic 200

### Possible surfaces

- Wooden decors
- Various metallic surfaces:
  - Stainless steel polished
  - Anodised aluminium as E6EV1
- Concrete surfaces
- Fantasy decors

As with all natural products, wood and concrete vary slightly in colour and structure. Printer inks cannot match the colour tones perfectly: minor differences in colour are therefore possible.

Other wood coverings and patterns are available on request.



Dubai Metro Station, U.A.E.



## PUREline – Genuine Wood Veneer

Genuine wood veneer on metal – an exclusive combination! PUREline is certainly the most outstanding way of surface refinement and unique in its possibilities.

The natural appearance of PUREline creates a pleasant club atmosphere in your rooms. Fire behaviour of PUREline surface fulfils class A according to ASTM E 84.



South Texas Blood & Tissue Center, San Antonio, Texas/USA

### **Genuine wood for highest demands.**

Using different types of wood, you can create a special and auspicious atmosphere in your rooms by giving them an individual optical touch. Realisation with all types of wood possible.

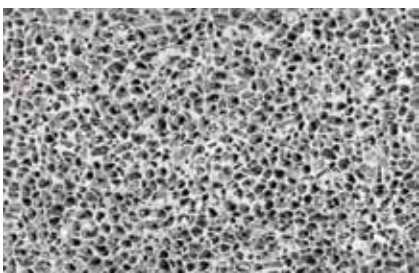


## GRAPHICline – Print Technology

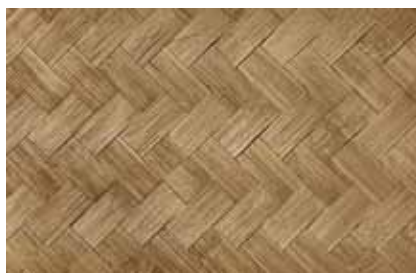
GRAPHICline offers complete freedom of design. This exceptional surface provides the opportunity to apply your desired image on different surface structures and materials by means of a model picture or illustration. All colours and images can be applied

colour-fast, gloss-fast and light-fast on an unlimited surface area due to a photorealistic resolution up to 1200 dpi!

All colours and images may be printed on panels of any required size.



Aluminium foam



Meshwork



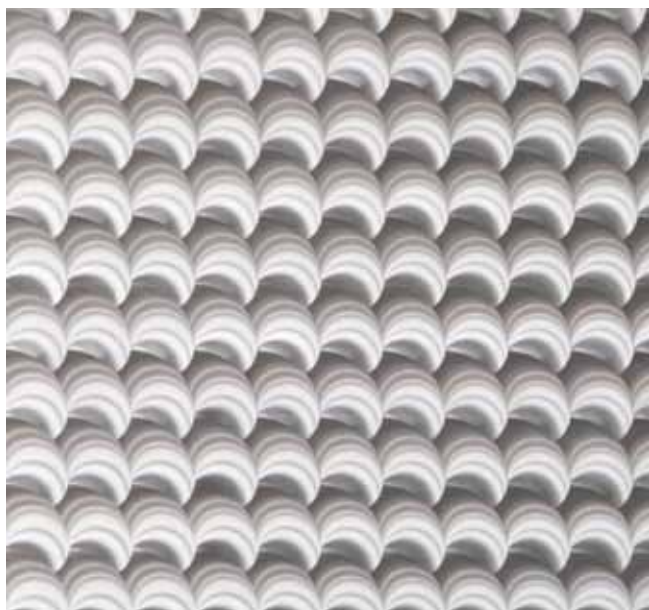
Heaven

Realisation in a variety of appearances possible. This kind of surface technology can be applied in different areas such as offices, foyers or moist rooms due to a special sealed finish and its UV resistance.

## **EFFECTline – Grinding Technology**

With the possibilities of EFFECTline, you create a special atmosphere in your rooms due to the variable design of your surfaces.

EFFECTline gives metal ceilings made of aluminium or stainless steel special optics. Choose your favourite design from our surface product line.



Extract of possible optics of the surface product line EFFECTline.

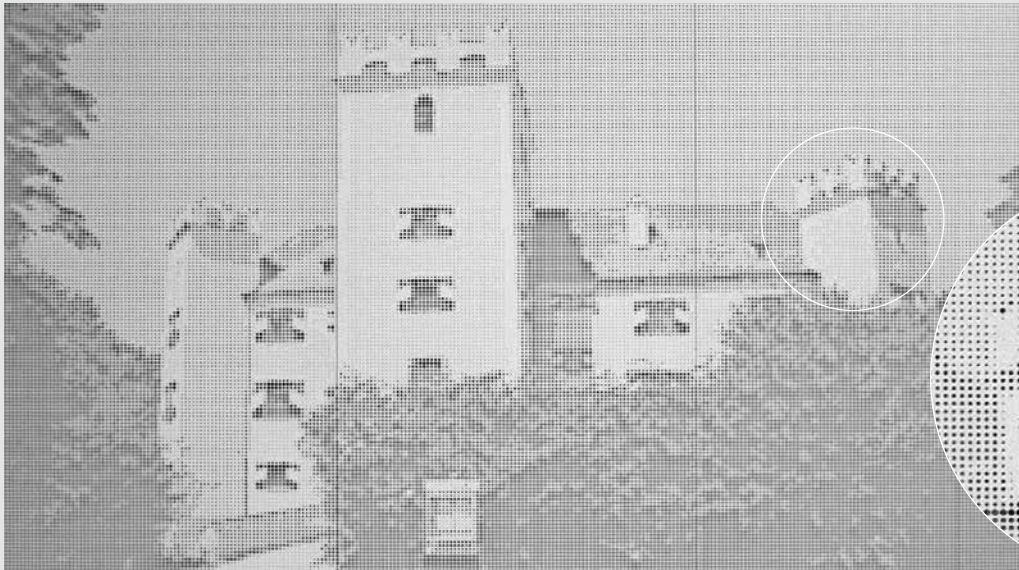
### **Advantages**

- Variations in grinded three-dimensional metal optics
- Useable in exhibition construction, hotel sector and bath
- Unique effects in combination with light

## SPREADline – Customised, image and scattered perforation

SPREADline offers an excellent design freedom due to an individual arrangement of the perforation with different perforation shapes, e.g. scattered perforation. The perforation design by transferring photos and images as image perforation is a striking eye-catcher.

You receive a remarkable metal ceiling when combining different perforation designs. Customised perforations can specifically be used for an effective combination of luminaires and loudspeakers.

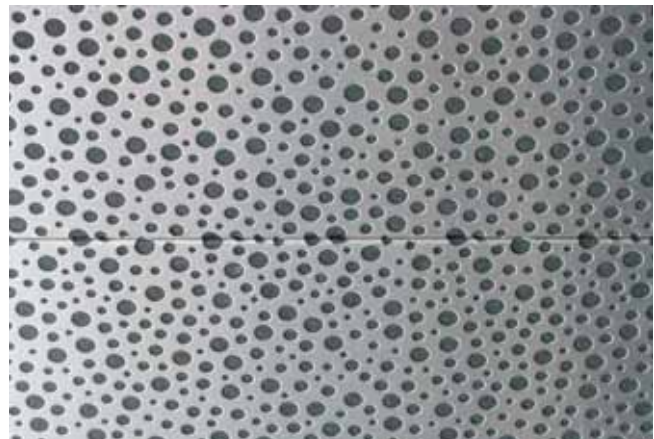


Scattered perforation - SPREADline

Detail



Scattered perforation - SPREADline



Scattered perforation - SPREADline

### Possible application areas

- Foyers
- Exhibition buildings
- Airports
- Railways
- Office buildings

# Functional Coatings

## Meteo – Corrosion Protection Coating

Meteo prevents your ceiling and corresponding substructure steadily from corrosion and protects sustainably. This coating is particularly suitable for metal ceilings in corrosive areas such as swimming pools or outdoor areas.

Depending on the requirements Meteo offers protection in an optimum way according to the required corrosion protection class.

Tested to DIN 55633, EN 13964 Table 8 Class D and DIN EN ISO 12944-6.



© Marco Rullkötter - Fotolia

### **Possible application areas**

- Swimming pools
- All kind of outdoor areas
- Railway stations and airports

## Mutex – Absorber Coating

Mutex is the return of silence in your rooms. This structured coating can contribute enormously, either alone or in combination with various inlays, to sound absorption and has almost equivalent properties compared to a conventional powder coating regarding fire protection, light reflexion and cleaning.

Mutex meets the building material class A2-s1, d0 “non-combustible” tested to EN 13501-1 and Class A tested to ASTM E 84.



Bundeswehrkrankenhaus Ulm, Germany



### Advantages

- Acoustically highly effective due to its structured surface and sound absorbing inlays
- Can be combined with various fine perforation patterns

# Special Surfaces

## INOXlook – Aluminium with appearance of stainless steel

INOXlook provides metal ceilings made of aluminium with the look of a stainless steel surface.

The surface INOXlook is achieved by special rolling and anodising processes and corresponds to a grinded stainless steel surface (grain 180).

Aluminium manufactured to EN 485-4 and EN 573-3, anodisation according to EN 12373.



### Advantages

- Significant weight savings compared to steel
- Easy cleaning
- High corrosion resistance
- High abrasion resistance
- Optionally sterilisable

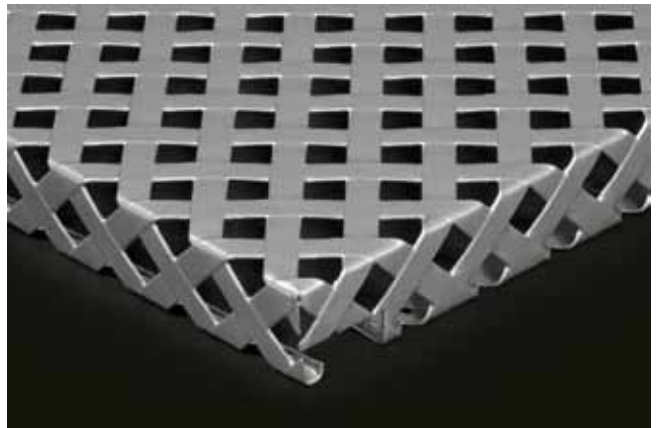


# Structured Surfaces

## CROSSdesign – Structured Surface

Your ceiling as a striking eye-catcher: Lindner offers the look of meshwork technology also in metal as a trend-setting design solution. This unique three-dimensional visual appearance is achieved using the combination of embossing and perforation. The metal ceiling panel with CROSSdesign surface can be equipped with different sound absorbing inlays depending on the demands concerning acoustics.

We recommend our common powder coating colours RAL 9006 or 'brillant metallic' as finish. Nevertheless, all colours from the RAL or NCS colour system can be chosen as finish.



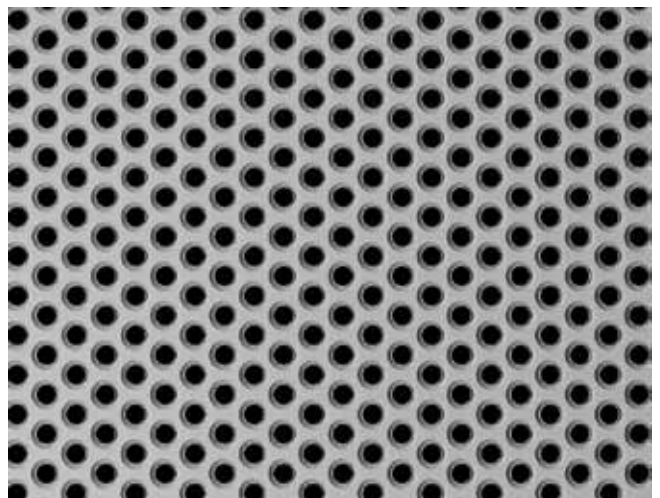
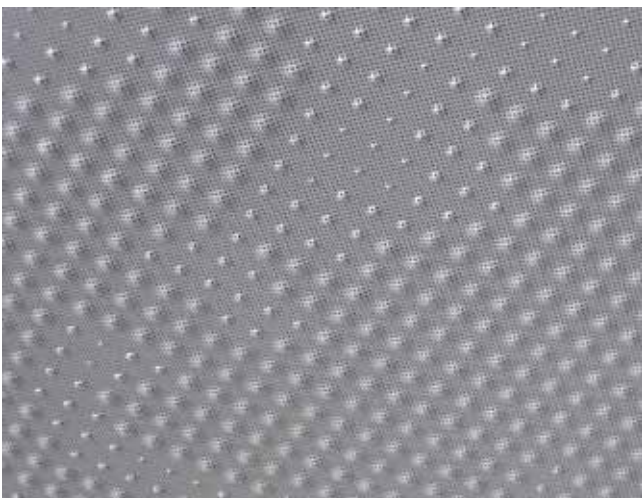
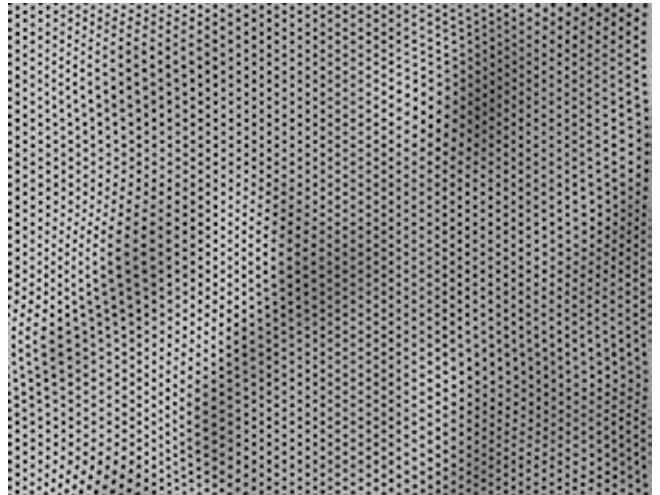
### Advantages

- Good air circulation properties due to high percentage of open area
- Variations in appearance for interior and exterior areas
- Unique effects in the interaction with light
- Application as acoustic lock at recording studios, photographic, film and TV studios

## TOUCHdesign – Three-dimensional Surface

Given the possibility of creating a living three-dimensional structure, TOUCHdesign represents an attractive alternative to metal ceilings with a plane surface. That involves furnishing those metal panels with stamping patterns and additionally with perforation.

Combine the different shapes and dimensions regarding stampings and perforations for a ceiling with a pleasant look that is second to none.



### Advantages

- Variations in appearance for interior and exterior areas
- Living three-dimensional effects
- Trend-setting combination of design and function

## TOUCHdesign Lunar – Three-dimensional Surface

The metal ceiling TOUCHdesign Lunar with three-dimensional optics consisting of matted and high-gloss areas as well as the combination of perforation and punching gives a special character to the surface.

TOUCHdesign Lunar made of hammered, highly polished stainless steel reflects a fragmented image of the room.

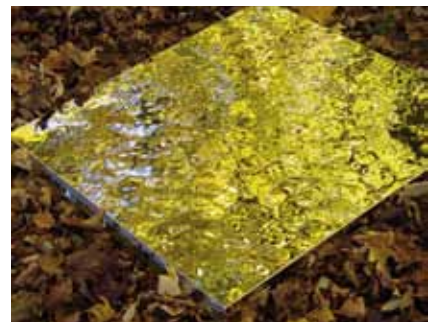
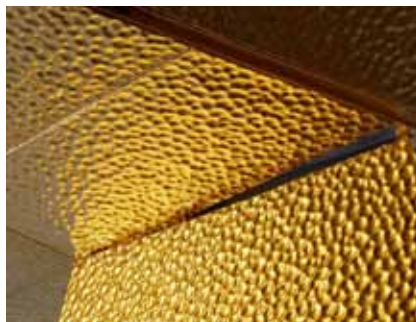


Stockholm Waterfront Lobby



Tsvetnoy, Central Market, Moscow

### Extract from possible optics made from highly polished stainless steel



# Expanded Metal

## Individuality in material and shape.

It is difficult to imagine today's modern architecture without Expanded Metal Ceilings. As well as providing an important function they also offer an almost infinite variety of structures, formats and surfaces.

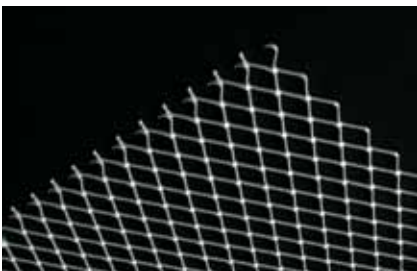
The light weight of the material, together with its accentuated structured appearance, opens up many new design opportunities.

A wide range of expanded metal meshes is available for your choice.

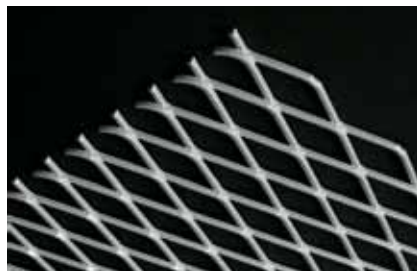


© Michael Perlmutter

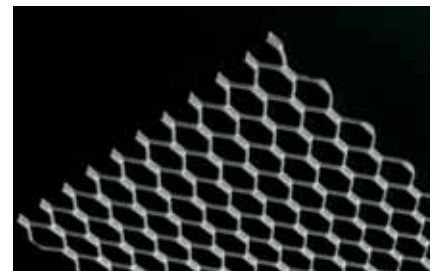
Oberreinhalle Offenburg, Germany



Square mesh



Diamond mesh



Long-link/hexagonal mesh

## Versatility at its best:

- Hook-On Type
- Lay-In Type
- With circumferential aluminium frame
- With Swing-Down Function
- With Drop-Slide Function
- As Post Cap Ceiling with Crossing Boxes



Torre Espacio, Madrid, Spain

# Lindner Perforations

## Perfectly closed ranks.

Lindner Metal Ceiling panels are primarily made with zinc-galvanized steel or aluminium products and they are finished with a powder coating process.

The perforations, described as holes by diameter size and open areas (as determined by the space between the holes), in this brochure are valid for metal ceiling panels consisting of zinc-galvanized steel. Only the perforated areas are taken into consideration for the assessment of measured open areas. Non-perforated areas, such as plain borders, are not considered.

Position and tolerances of perforations are defined according to the specifications of EN 13964. The hole diameters and the perforation patterns are measured before subsequent surface finishes. Depending on the type of surface finish, the hole diameters may vary.

Lindner offers a wide range of standard perforation patterns to meet various acoustical and aesthetic design demands; additionally, we gladly offer several special perforations if desired.

### Types of perforation patterns

- Rd** round holes arranged in diagonal pitch (45°)
- Rg** round holes arranged in straight pitch
- Rs** round holes, special arrangement
- Rv** round holes arranged in diagonal pitch (60°)
- Qg** square holes arranged in straight pitch
- Qd** square holes arranged in diagonal pitch (45°)
- Lg** slotted round holes arranged in straight pitch
- Lge** slotted square holes arranged in straight pitch
- St** elliptic holes (expanded metal sheet look)

### Your advantages at a glance.

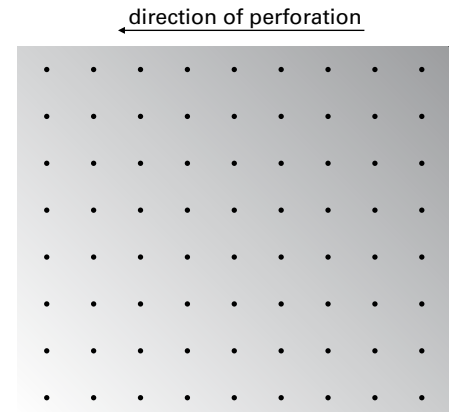
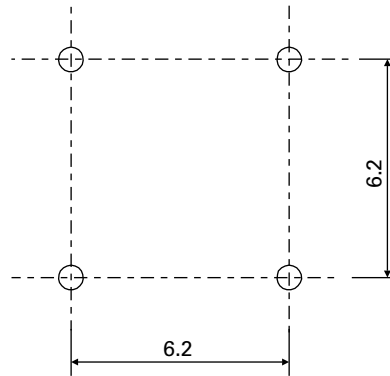
- Wide range of perforations starting from 0.7 mm hole size for different materials
- Various perforation designs and patterns available
- A variety of sound-absorbing inlays guarantees high acoustic performance

# Lindner Perforations

## Rg 0,7 - 1

Hole Ø 0.7 mm, straight pitch  
1 % open area  
(perforated over the edges)

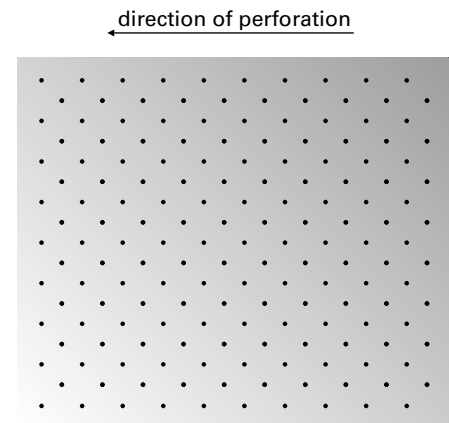
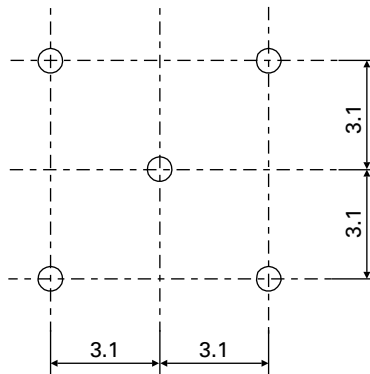
material	thickness	width of perforation
steel	0.6 mm	1,340 mm
aluminium	0.6 mm	860 mm
aluminium	0.8 mm	1,340 mm



## Rd 0,7 - 2

Hole Ø 0.7 mm, diagonal pitch (45°)  
2 % open area  
(perforated over the edges)

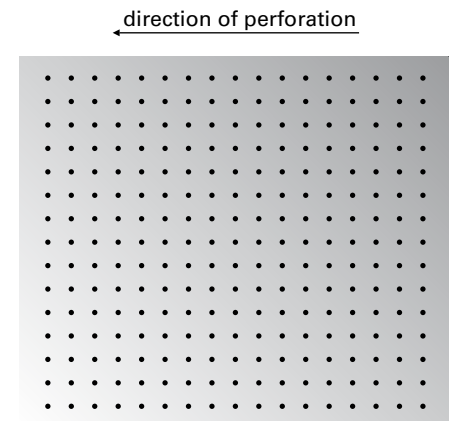
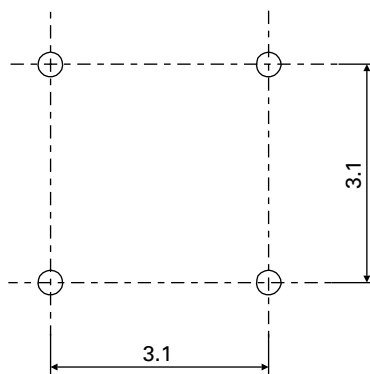
material	thickness	width of perforation
steel	0.6 mm	1,340 mm
aluminium	0.6 mm	860 mm
aluminium	0.8 mm	1,340 mm



## Rg 0,7 - 4

Hole Ø 0.7 mm, straight pitch  
4 % open area  
(perforated over the edges)

material	thickness	width of perforation
steel	0.6 mm	1,340 mm

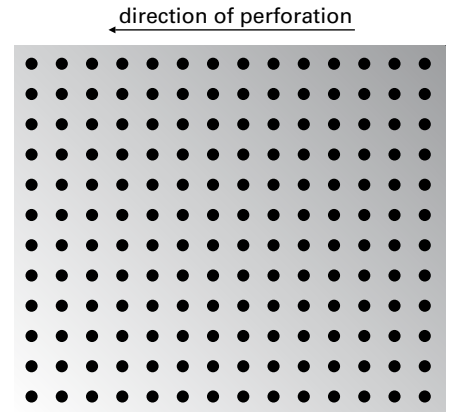
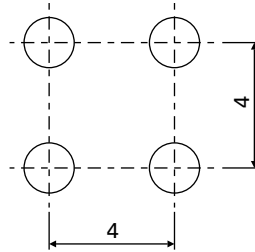


# Lindner Perforations

## Rg 1,6 - 13

Hole Ø 1.6 mm, straight pitch  
13 % open area

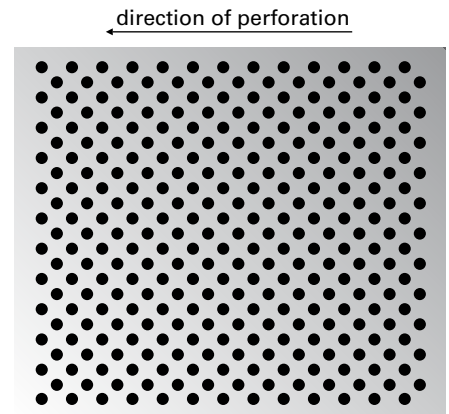
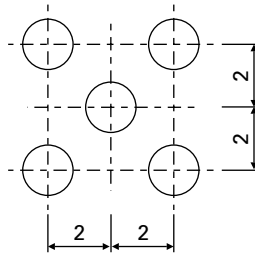
material	thickness	width of perforation
steel	0.6 mm	860 mm
steel	0.7 mm	1,600 mm



## Rd 1,6 - 25

Hole Ø 1.6 mm, diagonal pitch (45°)  
25 % open area

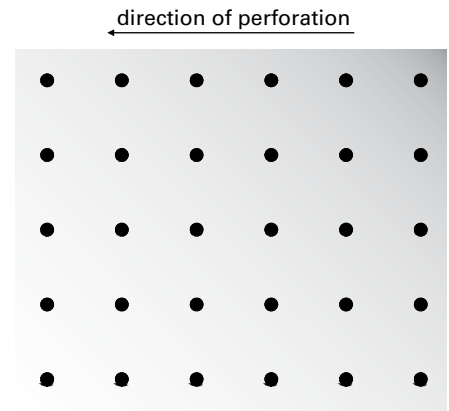
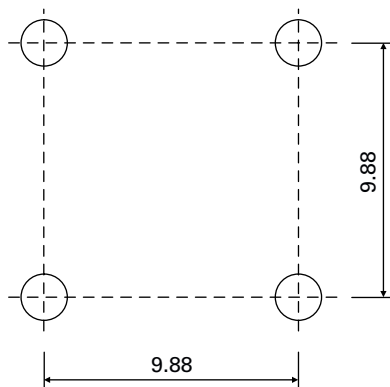
material	thickness	width of perforation
steel	0.6 mm	860 mm
steel	0.7 mm	1,600 mm



## Rg 1,8 - 3

Hole Ø 1.8 mm, straight pitch  
3 % open area

material	thickness	width of perforation
steel	0.6 mm	1,310 mm

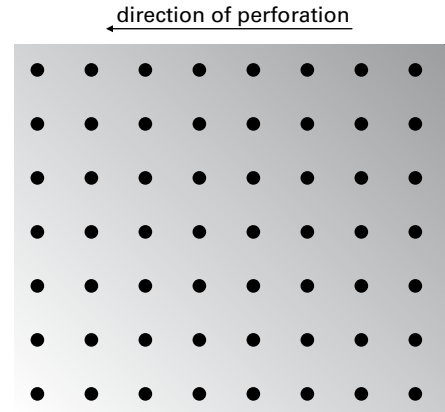
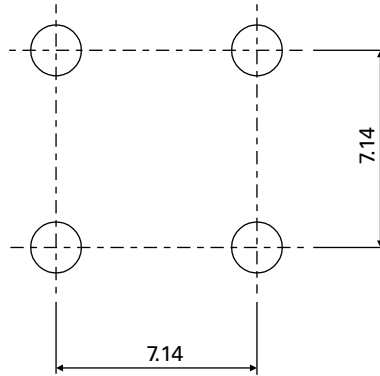




# Rg 1,8 - 5

**Hole Ø 1.8 mm, straight pitch  
5 % open area**

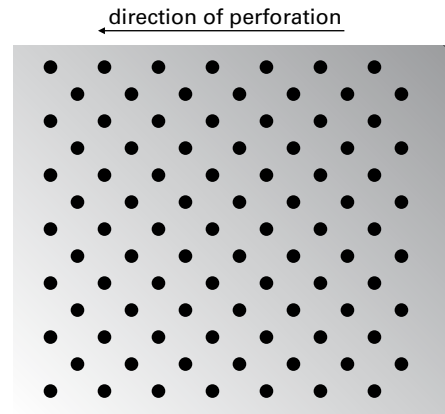
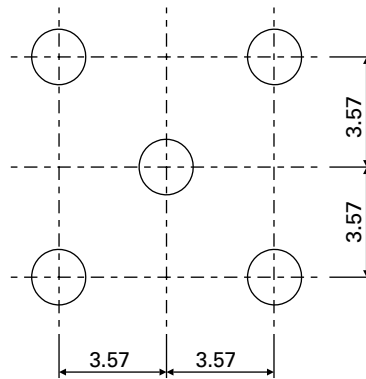
material	thickness	width of perforation
steel	0.6 mm	1,280 mm
steel	0.7 mm	1,280 mm



# Rd 1,8 - 10

**Hole Ø 1.8 mm, diagonal pitch (45°)  
10 % open area**

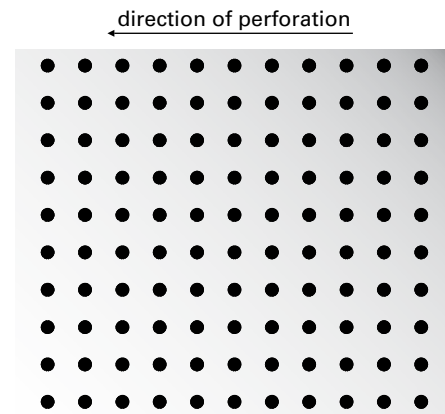
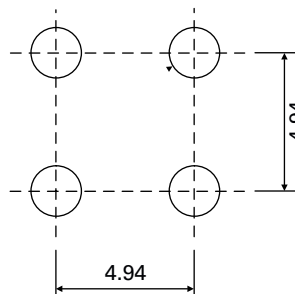
material	thickness	width of perforation
steel	0.6 mm	1,280 mm
steel	0.7 mm	1,280 mm



# Rg 1,8 - 11

**Hole Ø 1.8 mm, straight pitch  
11 % open area**

material	thickness	width of perforation
steel	0.6 mm	1,310 mm

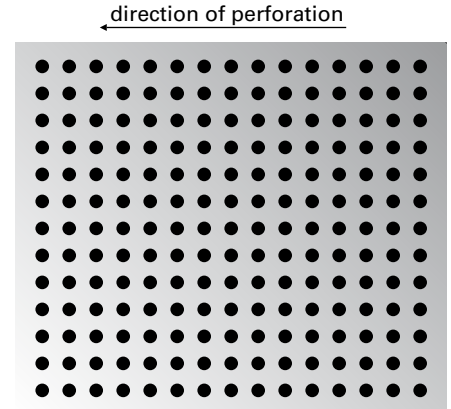
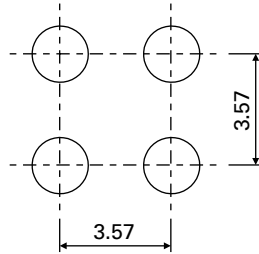


# Lindner Perforations

## Rg 1,8 - 19

Hole Ø 1.8 mm, straight pitch  
20 % open area

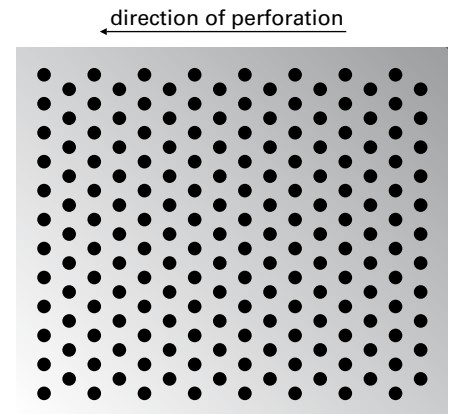
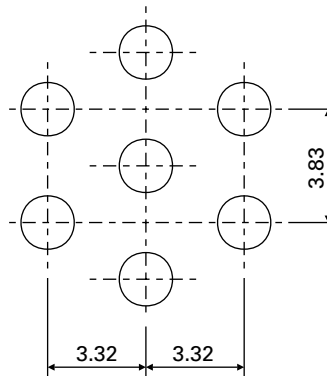
material	thickness	width of perforation
steel	0.6 mm	1,280 mm
steel	0.7 mm	1,280 mm
aluminium	1.25 mm	1,615 mm



## Rv 1,8 - 20

Hole Ø 1.8 mm, diagonal pitch (60°)  
20 % open area

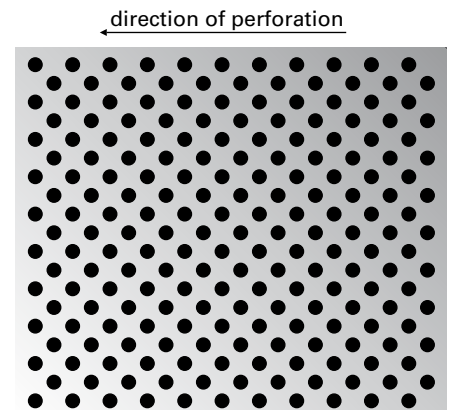
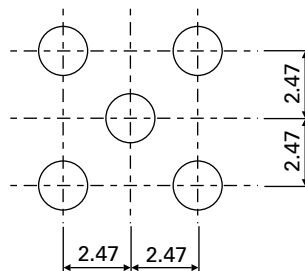
material	thickness	width of perforation
steel	0.6 mm	1,550 mm
steel	0.7 mm	1,550 mm
aluminium	0.6 mm	880 mm
aluminium	0.7 mm	880 mm
aluminium	0.8 mm	880 mm



## Rd 1,8 - 21

Hole Ø 1.8 mm, diagonal pitch (45°)  
21 % open area

material	thickness	width of perforation
steel	0.6 mm	1,310 mm

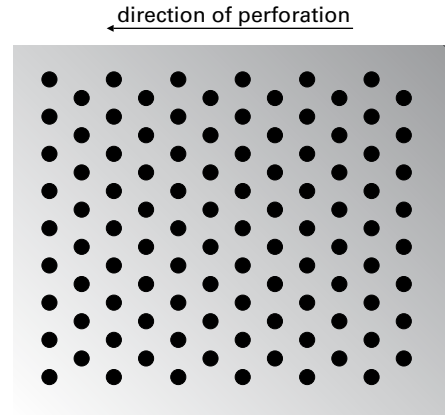
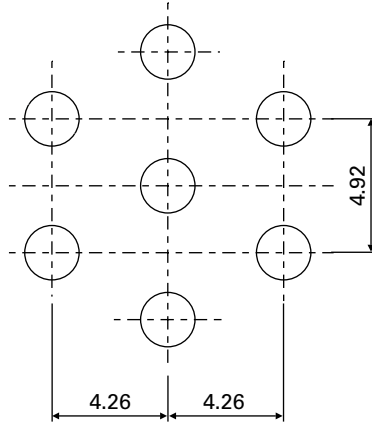


# Rv 2,0 - 15

## Special perforation

**Hole Ø 2.0 mm, diagonal pitch (60°)  
15 % open area**

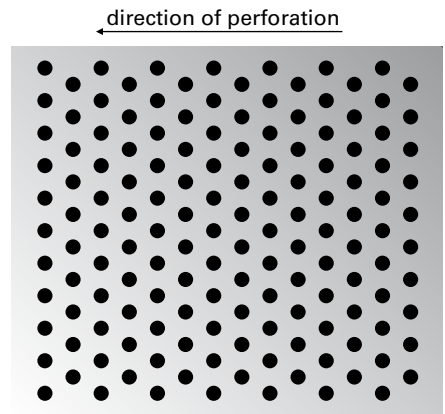
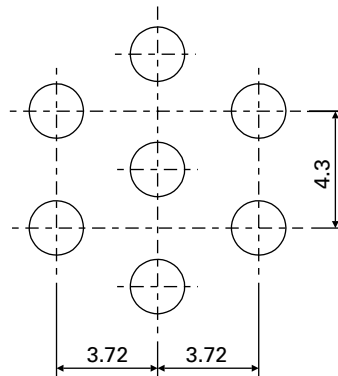
material	thickness	width of perforation
aluminium	2.0 mm	1,580 mm



# Rv 2,0 - 20

**Hole Ø 2.0 mm, diagonal pitch (60°)  
20 % open area**

material	thickness	width of perforation
steel	0.6 mm	1,250 mm
steel	0.7 mm	1,250 mm
aluminium	0.8 mm	1,000 mm
stainless steel	0.6 mm	1,200 mm
stainless steel	0.7 mm	1,200 mm

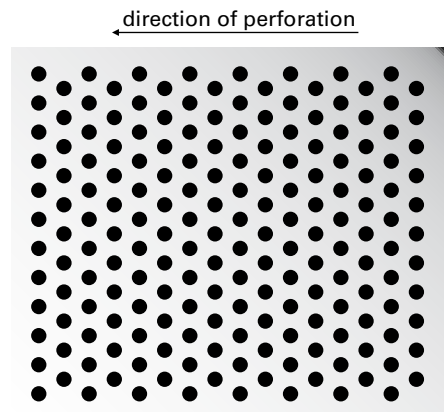
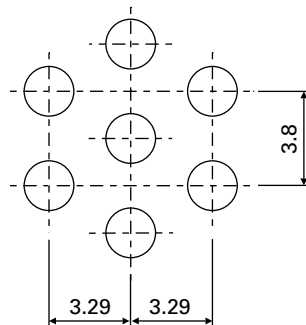


# Rv 2,0 - 25

## Special perforation

**Hole Ø 2.0 mm, diagonal pitch (60°)  
25 % open area**

material	thickness	width of perforation
steel	0.6 mm	1,270 mm
steel	0.7 mm	1,270 mm

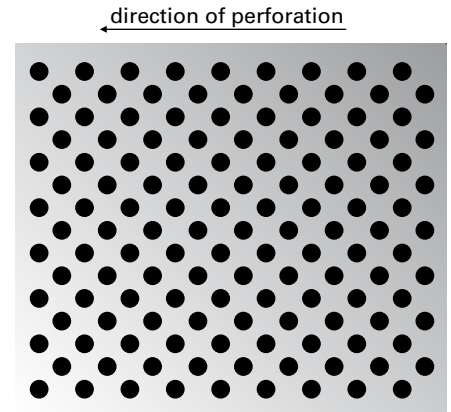
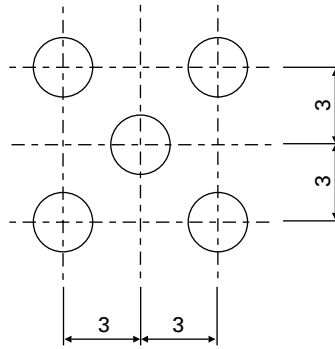


# Lindner Perforations

## Rd 2,3 - 23

Hole Ø 2.3 mm, diagonal pitch (45°)  
23 % open area

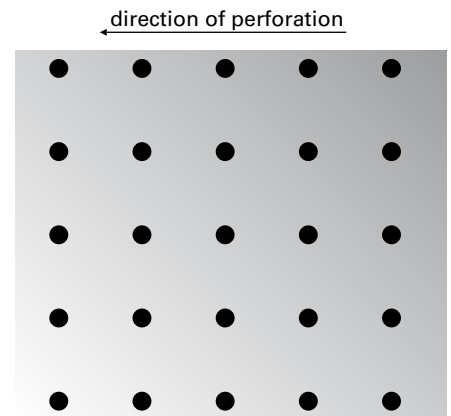
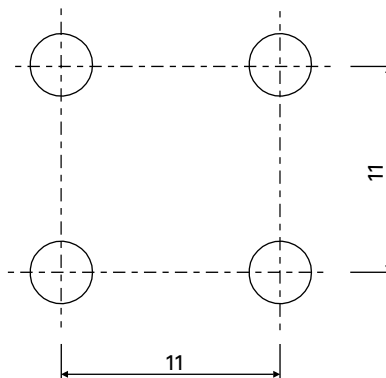
material	thickness	width of perforation
steel	0.6 mm	1,250 mm



## Rg 2,5 - 4

Hole Ø 2.5 mm, straight pitch  
4 % open area

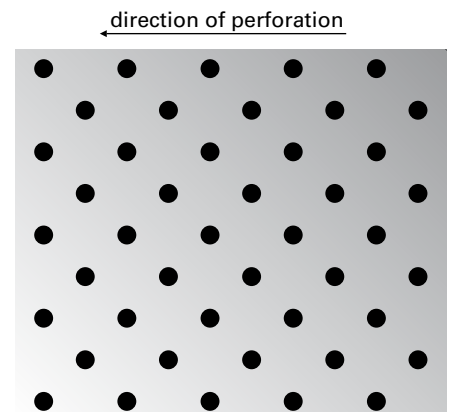
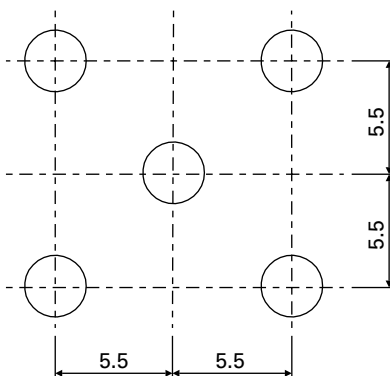
material	thickness	width of perforation
steel	0.6 mm	1,400 mm
steel	0.7 mm	1,400 mm



## Rd 2,5 - 8

Hole Ø 2.5 mm, diagonal pitch (45°)  
8 % open area

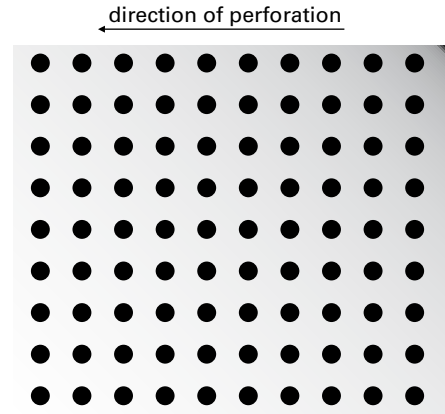
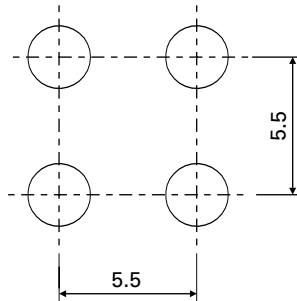
material	thickness	width of perforation
steel	0.6 mm	1,400 mm
steel	0.7 mm	1,400 mm



# Rg 2,5 - 16

**Hole Ø 2.5 mm, straight pitch  
16 % open area**

material	thickness	width of perforation
steel	0.6 mm	1,400 mm
steel	0.7 mm	1,400 mm
aluminium	0.8 mm	790 mm

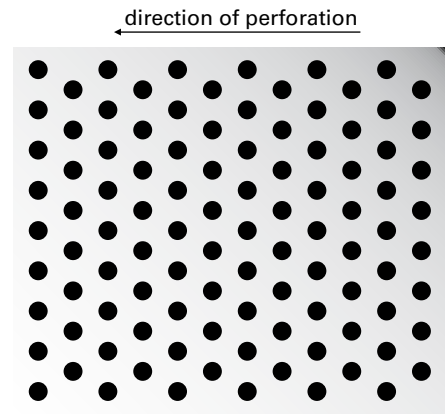
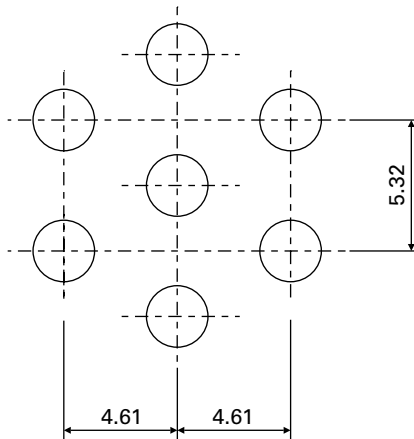


# Rv 2,5 - 20

## Special perforation

**Hole Ø 2.5 mm, diagonal pitch (60°)  
20 % open area**

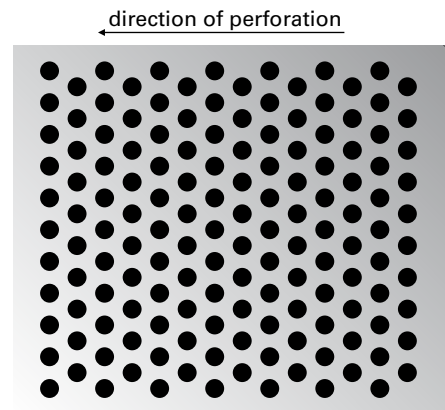
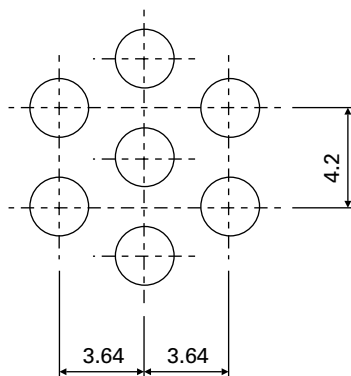
material	thickness	width of perforation
steel	0.6 mm	700 mm
steel	0.7 mm	700 mm



# Rv 2,5 - 32

**Hole Ø 2.5 mm, diagonal pitch (60°)  
32 % open area**

material	thickness	width of perforation
steel	0.6 mm	790 mm



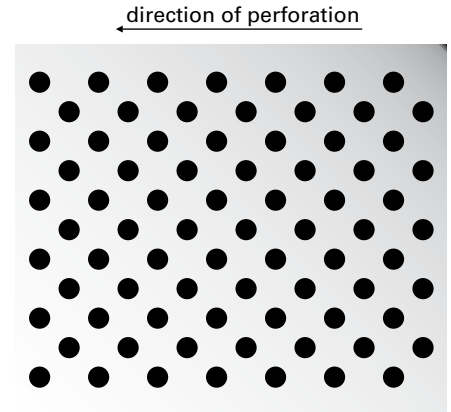
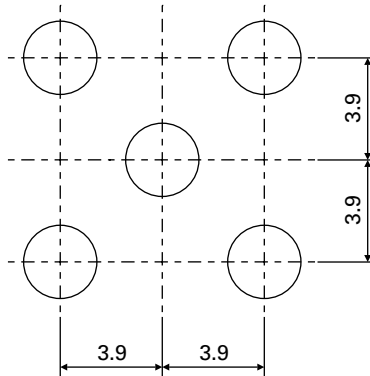
# Lindner Perforations

## Rd 2,8 - 20

### Special perforation

Hole Ø 2.8 mm, diagonal pitch (45°)  
20 % open area

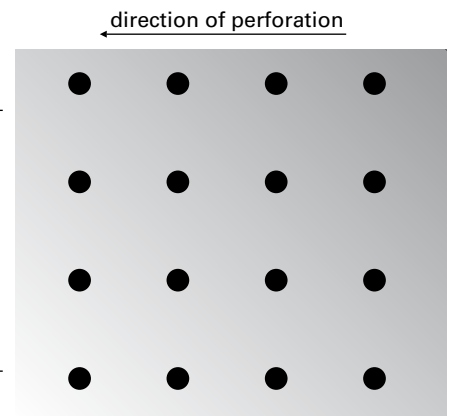
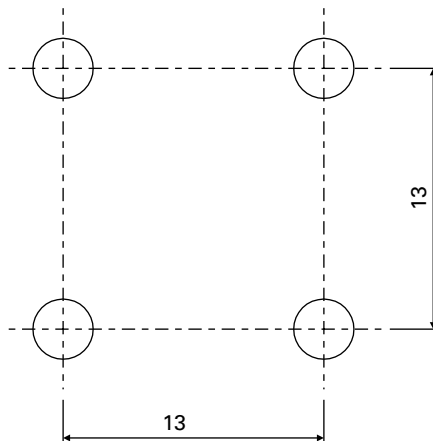
material	thickness	width of perforation
steel	0.6 mm	650 mm
steel	0.7 mm	650 mm



## Rg 3,0 - 4

Hole Ø 3.0 mm, straight pitch  
4 % open area

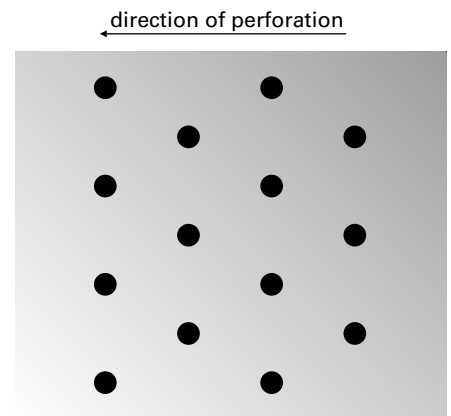
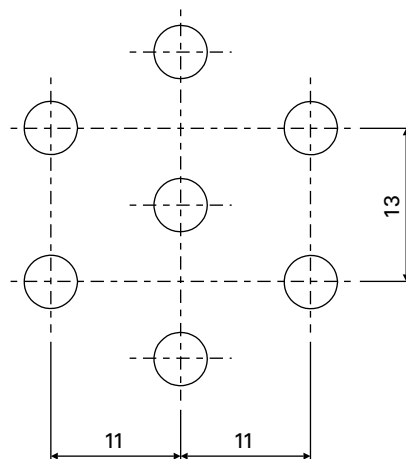
material	thickness	width of perforation
steel	0.6 mm	1,540 mm
steel	0.7 mm	1,540 mm



## Rv 3,0 - 5

Hole Ø 3.0 mm, diagonal pitch (60°)  
5 % open area

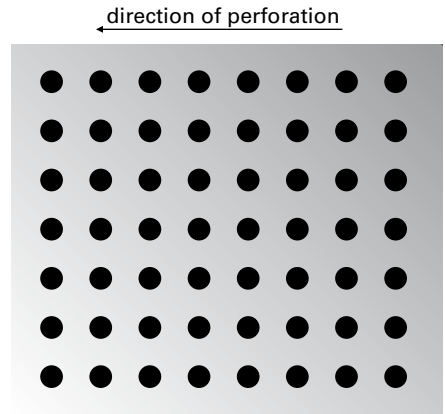
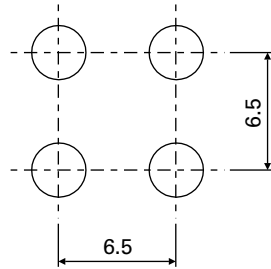
material	thickness	width of perforation
steel	0.6 mm	1,500 mm
steel	0.7 mm	1,500 mm



# Rg 3,0 - 17

**Hole Ø 3.0 mm, straight pitch  
17 % open area**

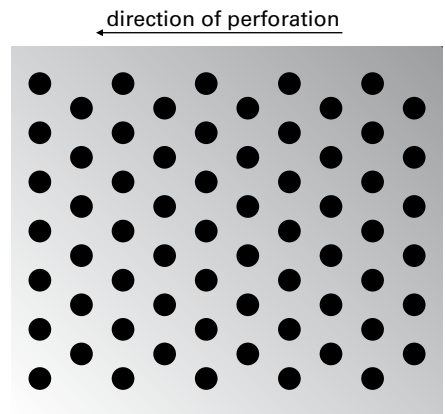
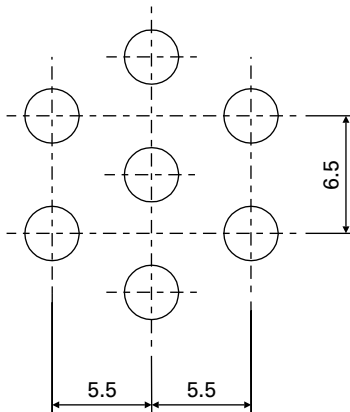
material	thickness	width of perforation
steel	0.6 mm	1,540 mm
steel	0.7 mm	1,540 mm
aluminium	0.7 mm	650 mm



# Rv 3,0 - 20

**Hole Ø 3.0 mm, diagonal pitch (60°)  
20 % open area**

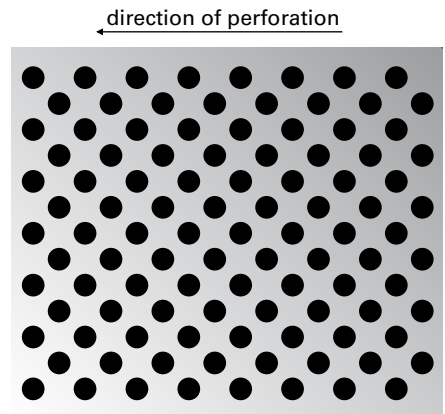
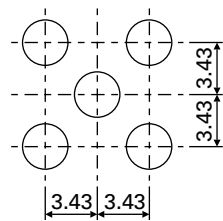
material	thickness	width of perforation
steel	0.6 mm	1,500 mm
steel	0.7 mm	1,500 mm



# Rd 3,0 - 30

**Hole Ø 3.0 mm, diagonal pitch (45°)  
30 % open area**

material	thickness	width of perforation
steel	0.6 mm	1,250 mm
steel	0.7 mm	1,250 mm
aluminium	2,0 mm	1,520 mm



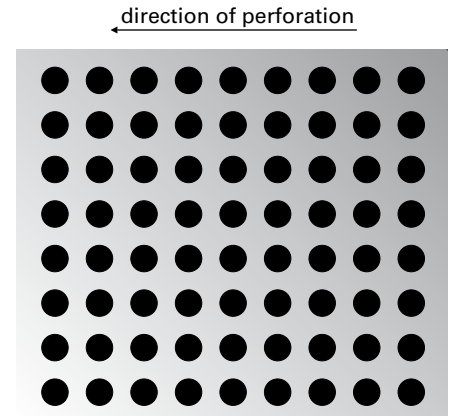
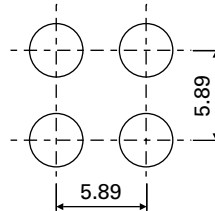
# Lindner Perforations

Rg 3,5 - 28

## Special perforation

Hole Ø 3.0 mm, straight pitch  
30 % open area

material	thickness	width of perforation
steel	0.7 mm	1,250 mm

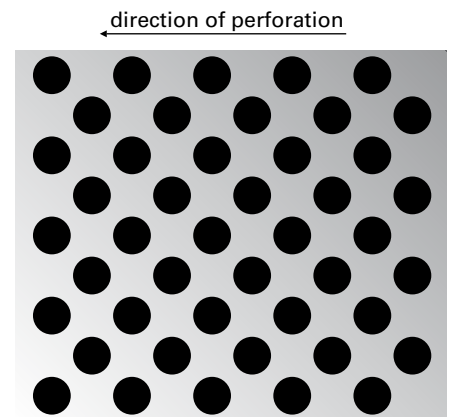
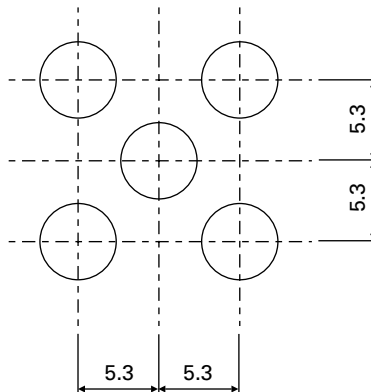


Rd 5,0 - 35

## Special perforation

Hole Ø 5.0 mm, diagonal pitch (45°)  
35 % open area

material	thickness	width of perforation
steel	0.6 mm	1,600 mm
steel	0.7 mm	1,600 mm

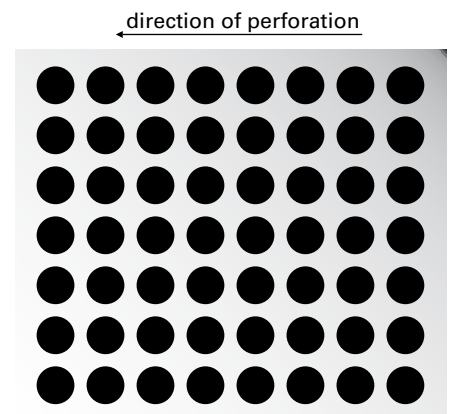
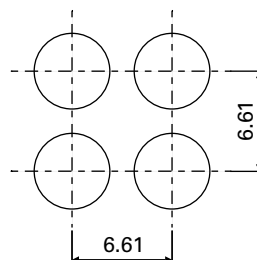


Rg 5,0 - 45

## Special perforation

Hole Ø 5.0 mm, straight pitch  
45 % open area

material	thickness	width of perforation
steel	0.7 mm	1,570 mm



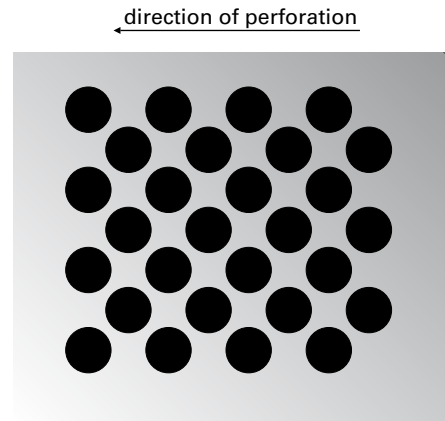
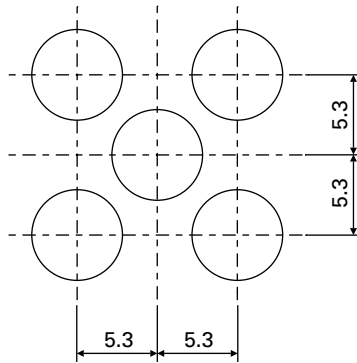


# Rd 6,0 - 50

## Special perforation

Hole Ø 6.0 mm, diagonal pitch (45°)  
50 % open area

material	thickness	width of perforation
steel	0.7 mm	1,270 mm
steel	0,9 mm	1,270 mm
Stainless steel	0.75 mm	1,270 mm
Stainless steel	0,9 mm	1,270 mm

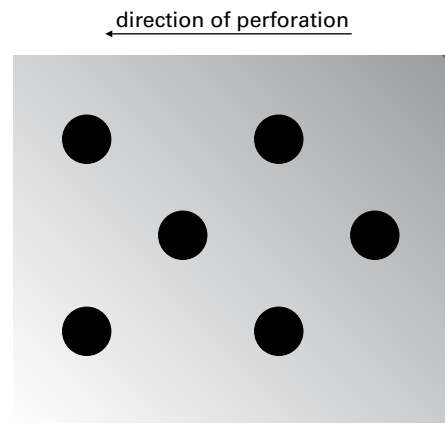
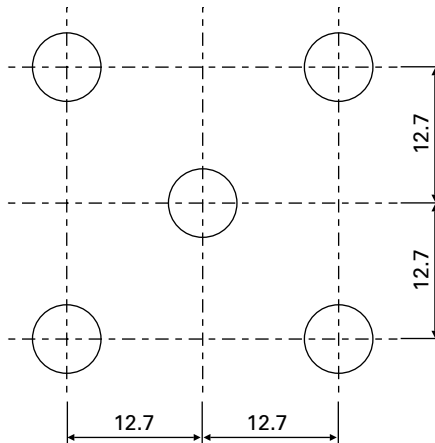


# Rd 6,4 - 10

## Special perforation

Hole Ø 6.4 mm, diagonal pitch (45°)  
10 % open area

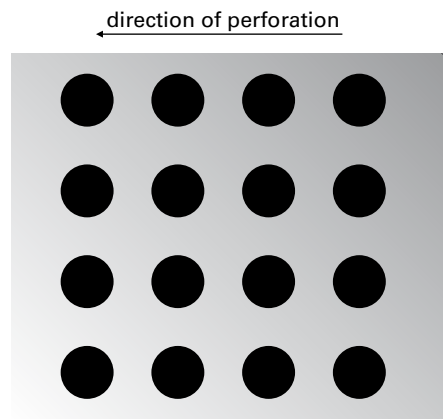
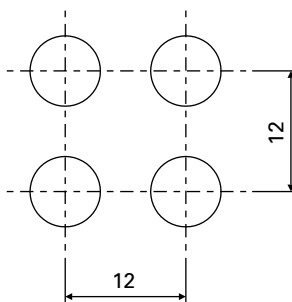
material	thickness	width of perforation
aluminium	1.0 mm	1,260 mm
aluminium	1,5 mm	1,260 mm



# Rg 7,0 - 27

Hole Ø 7.0 mm, straight pitch  
27 % open area

material	thickness	width of perforation
steel	0.6 mm	1,300 mm
steel	0.7 mm	1,300 mm

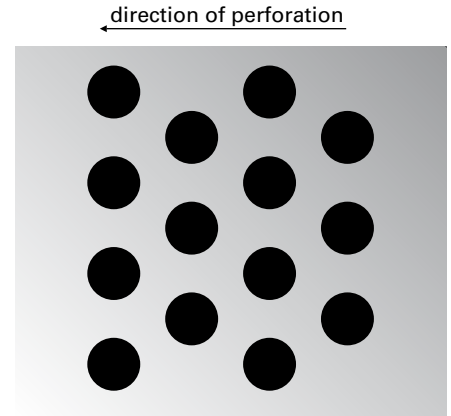
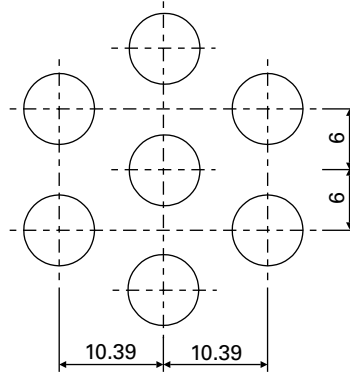


# Lindner Perforations

Rv 7,0 - 30

Hole Ø 7.0 mm, diagonal pitch (60°)  
30 % open area

material	thickness	width of perforation
steel	0.6 mm	1,300 mm
steel	0.7 mm	1,300 mm

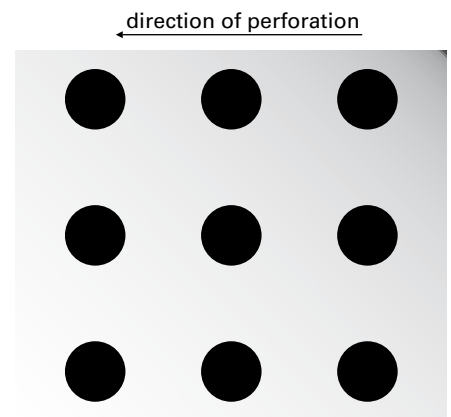
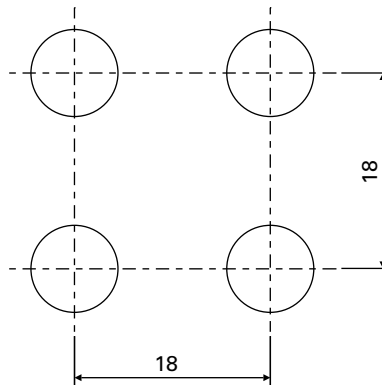


Rg 8,0 - 15

Special perforation

Hole Ø 8.0 mm, straight pitch  
15 % open area

material	thickness	width of perforation
steel	0.6 mm	1,250 mm
steel	0.7 mm	1,250 mm

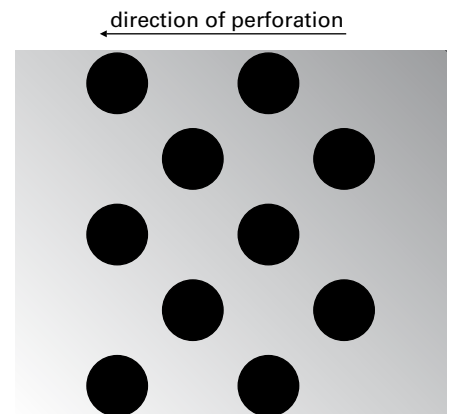
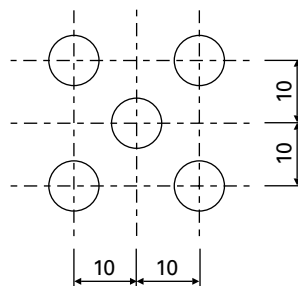


Rd 8,0 - 25

Special perforation

Hole Ø 8.0 mm, diagonal pitch (45°)  
25 % open area

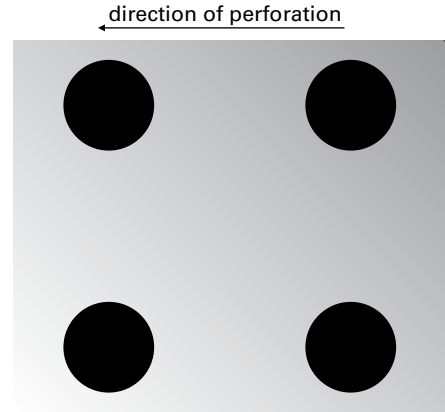
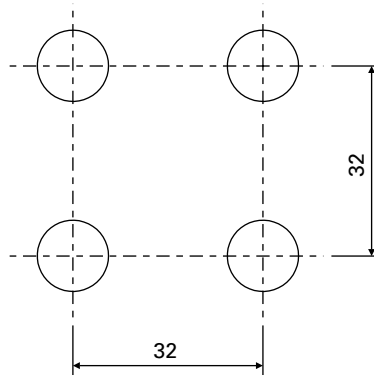
material	thickness	width of perforation
steel	1.0 mm	1,300 mm
steel	1.25 mm	1,300 mm



# Rg 12,0 - 11

**Hole Ø 12.0 mm, straight pitch  
11 % open area**

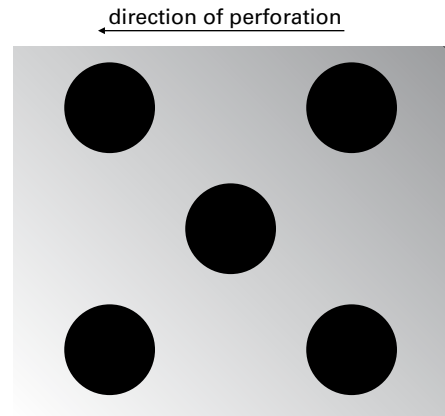
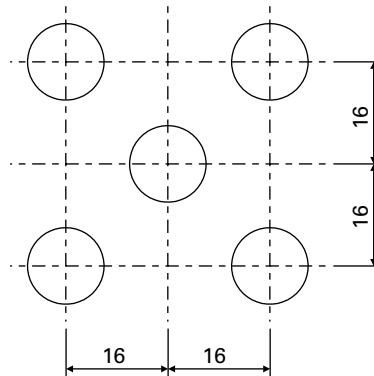
material	thickness	width of perforation
steel	0.6 mm	1,290 mm
steel	0.7 mm	1,290 mm



# Rd 12,0 - 22

**Hole Ø 12.0 mm, diagonal pitch (45°)  
22 % open area**

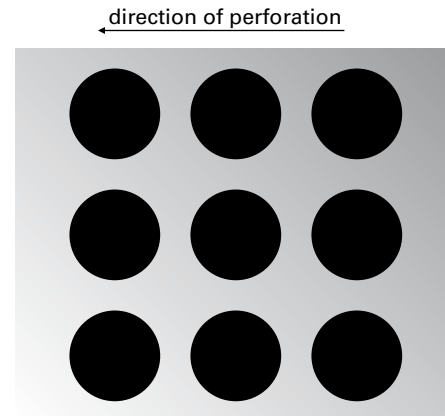
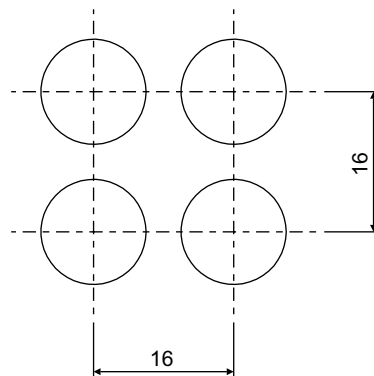
material	thickness	width of perforation
steel	0.6 mm	1,290 mm
steel	0.7 mm	1,290 mm



# Rg 12,0 - 44

**Hole Ø 12.0 mm, straight pitch  
44 % open area**

material	thickness	width of perforation
steel	0.6 mm	1,290 mm
steel	0.7 mm	1,290 mm



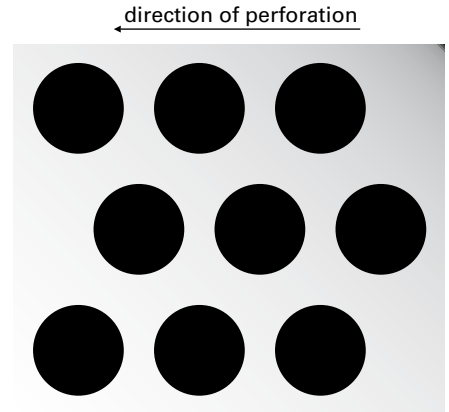
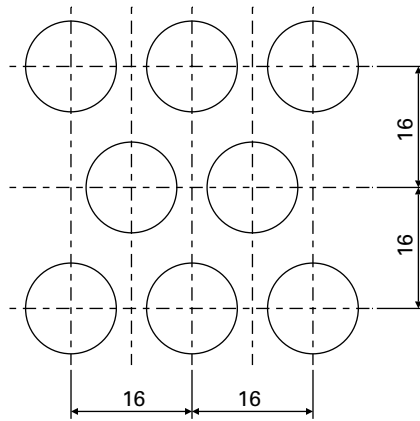
# Lindner Perforations

Rs 12,0 - 45

## Special perforation

Hole Ø 12.0 mm, diagonal pitch (63.4 %)  
44 % open area

material	thickness	width of perforation
steel	0.7 mm	860 mm

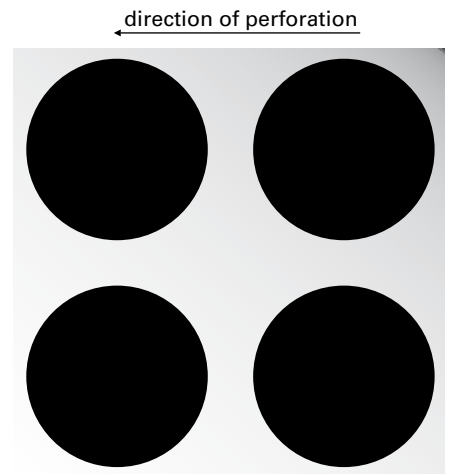
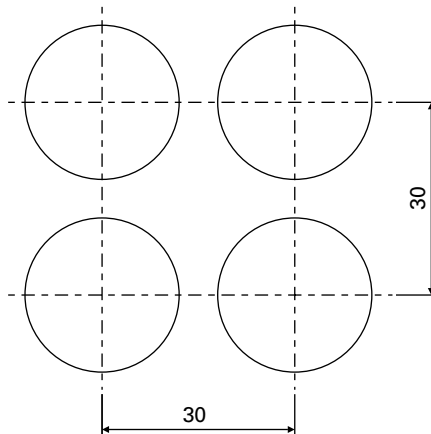


Rg 24,0 - 50

## Special perforation

Hole Ø 24.0 mm, straight pitch  
50 % open area

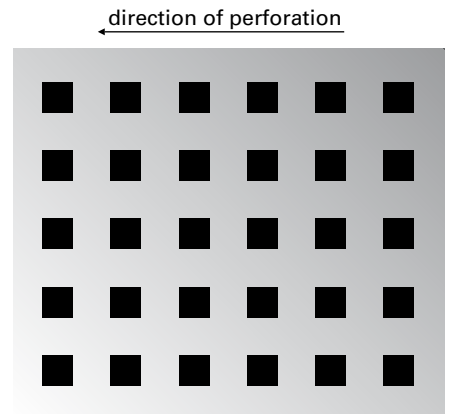
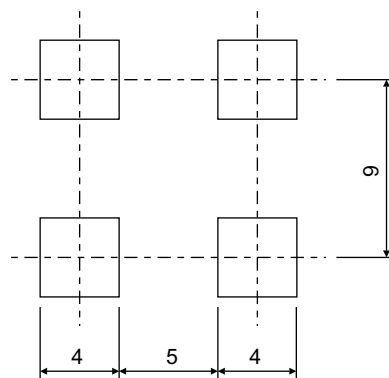
material	thickness	width of perforation
steel	0.6 mm	650 mm
steel	0.7 mm	650 mm



Qg 4,0 - 20

Square hole □ 4.0 mm, straight pitch  
20 % open area

material	thickness	width of perforation
steel	0.6 mm	1,600 mm
steel	0.7 mm	1,600 mm

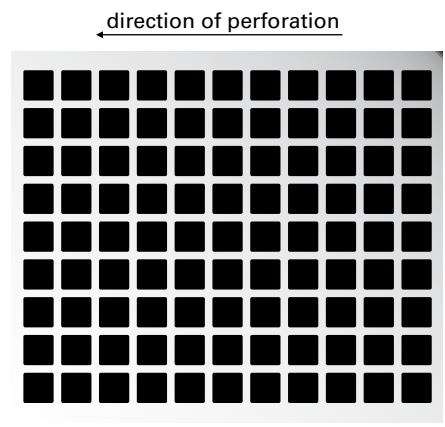
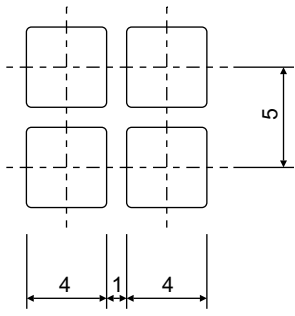


# Qg 4,0 - 64

## Special perforation

**Square hole  $\square$  4.0 mm, straight pitch  
64 % open area**

material	thickness	width of perforation
steel	1.0 mm	719 mm

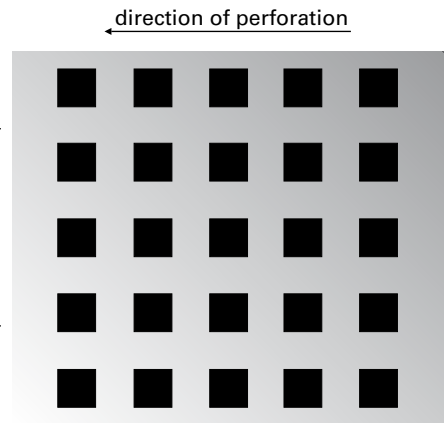
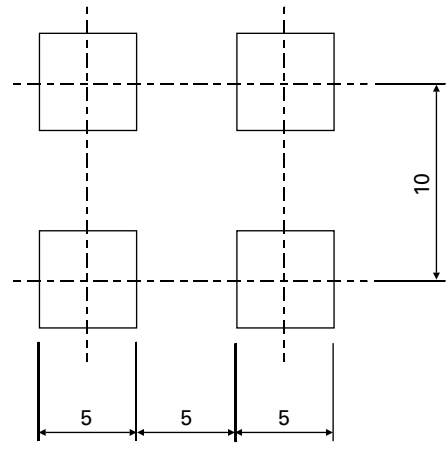


# Qg 5,0 - 25

## Special perforation

**Square hole  $\square$  5.0 mm, straight pitch  
25 % open area**

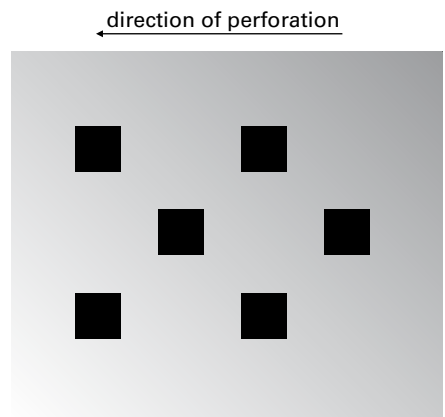
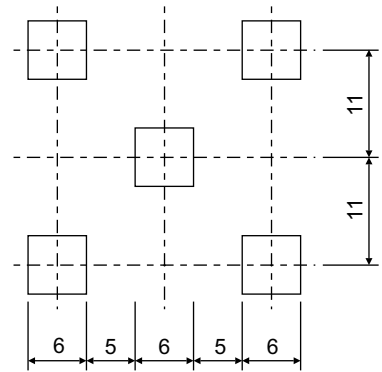
material	thickness	width of perforation
steel	0.6 mm	900 mm



# Qd 6,0 - 15

**Square hole  $\square$  6.0 mm, diagonal pitch (45°)  
15 % open area**

material	thickness	width of perforation
steel	0.6 mm	1,600 mm
steel	0.7 mm	1,600 mm

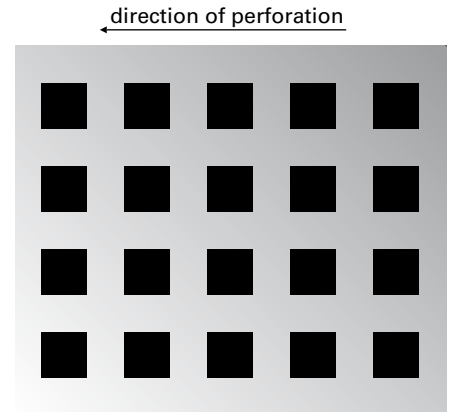
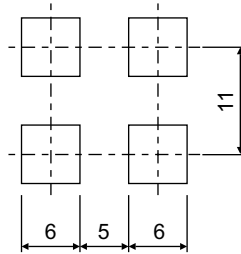


# Lindner Perforations

## Qg 6,0 - 30

Square hole  $\square$  6.0 mm, straight pitch  
30 % open area

material	thickness	width of perforation
steel	0.6 mm	1,600 mm
steel	0.7 mm	1,600 mm

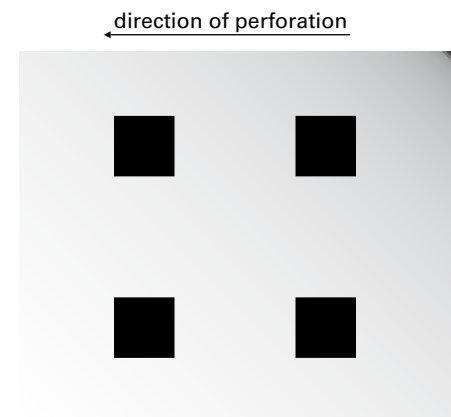
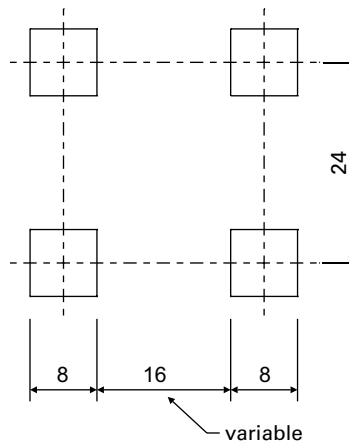


## Qg 8,0 - 11

### Special perforation

Square hole  $\square$  8.0 mm, straight pitch  
variable open area (standard 11%)

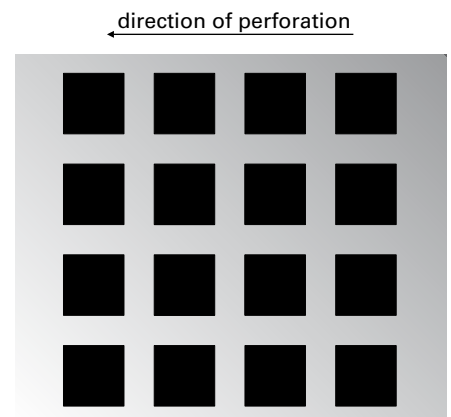
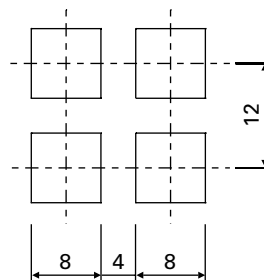
material	thickness	width of perforation
steel	0.6 mm	850 mm
steel	0.7 mm	850 mm
steel	1.0 mm	850 mm



## Qg 8,0 - 44

Square hole  $\square$  8.0 mm, straight pitch  
44 % open area

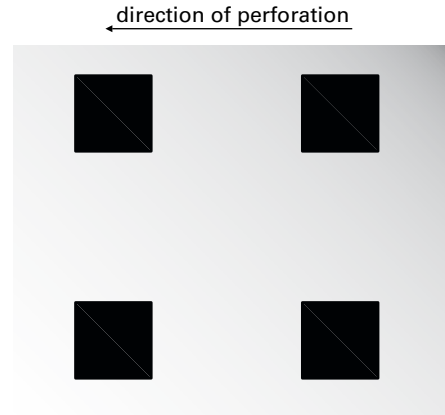
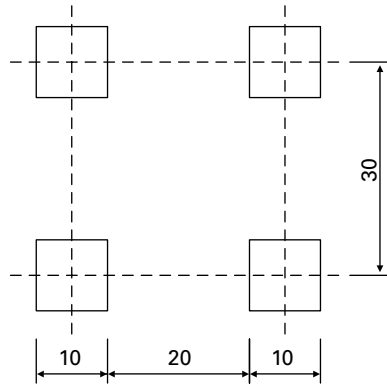
material	thickness	width of perforation
steel	0.6 mm	650 mm
steel	0.7 mm	650 mm



# Qg 10,0 - 11

**Square hole  $\square$  10.0 mm, straight pitch  
11 % open area**

material	thickness	width of perforation
steel	0.6 mm	610 mm
steel	0.7 mm	610 mm

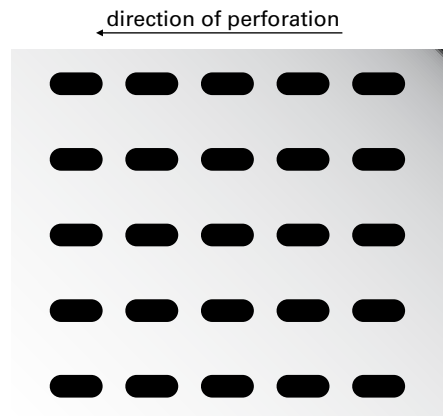
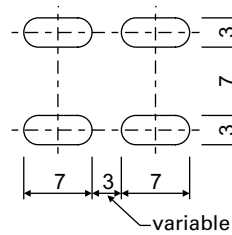


# Lg 7 x 3

## Special perforation

**Slotted round hole 7 x 3 mm, straight pitch  
variable open area (standard 19 %)**

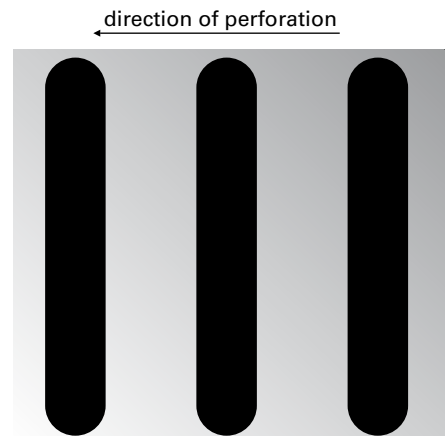
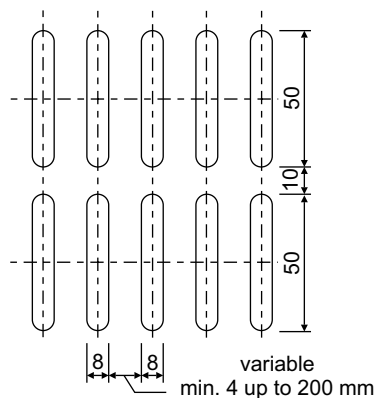
material	thickness	width of perforation
steel	0.6 mm	993 mm



# Lg 8 x 50

**Slotted round hole 8 x 50 mm,  
straight pitch, variable open area**

material	thickness	width of perforation
steel	0.6 mm	890 mm
steel	0.7 mm	890 mm



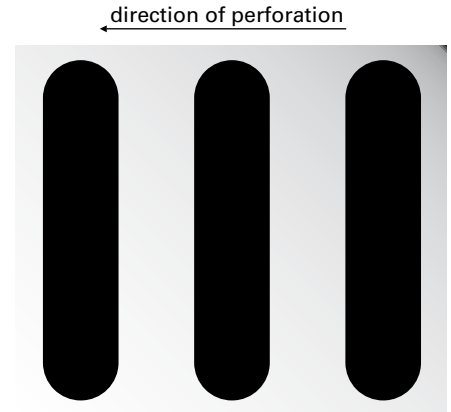
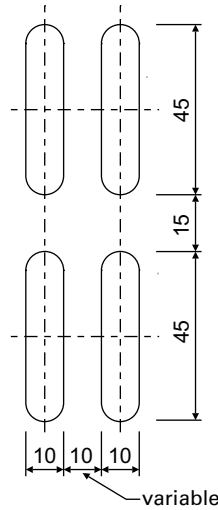
# Lindner Perforations

## Lg 10 x 45

### Special perforation

Slotted round hole 10 x 45 mm, straight pitch, variable open area (standard 36 %)

material	thickness	width of perforation
steel	0.6 mm	945 mm
steel	0.7 mm	945 mm

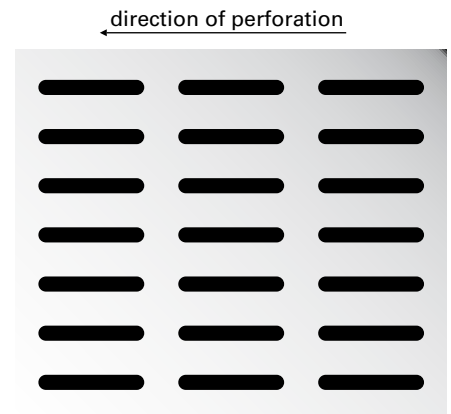
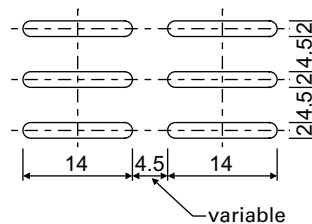


## Lg 14 x 2

### Special perforation

Slotted round hole 14 x 2 mm, straight pitch, variable open area (standard 23 %)

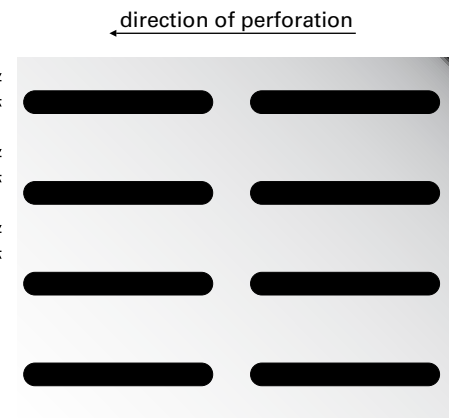
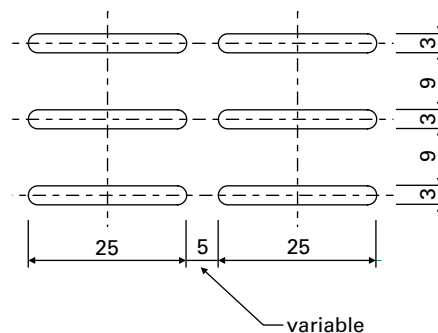
material	thickness	width of perforation
steel	0.6 mm	828 mm



## Lg 25 x 3

Slotted round hole 25 x 3 mm, straight pitch, variable open area

material	thickness	width of perforation
steel	0.6 mm	636 mm



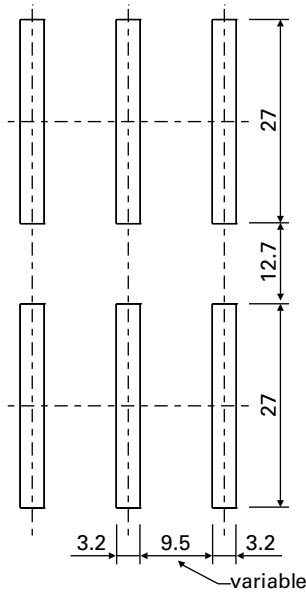


# Lge 3,2 x 27

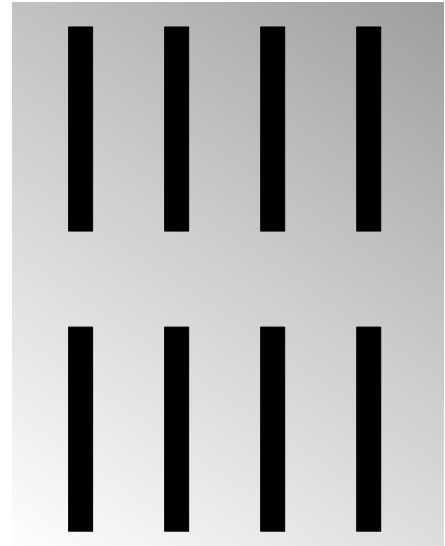
## Special perforation

Slotted square hole 3.2 x 27 mm, straight pitch, variable open area

material	thickness	width of perforation
steel	0.6 mm	1,500 mm
steel	0.7 mm	1,500 mm



direction of perforation

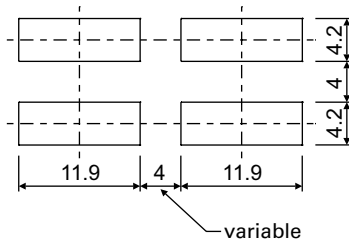


# Lge 11,9 x 4,2

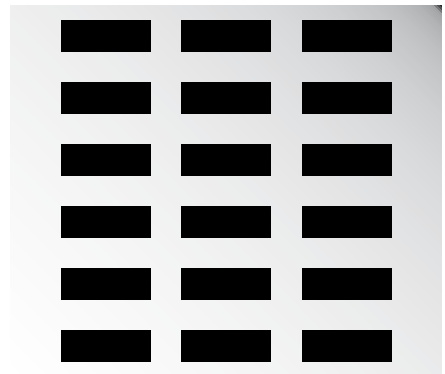
## Special perforation

Slotted square hole 11.9 x 4.2 mm, straight pitch, variable open area (standard 38 %)

material	thickness	width of perforation
steel	0.6 mm	720 mm



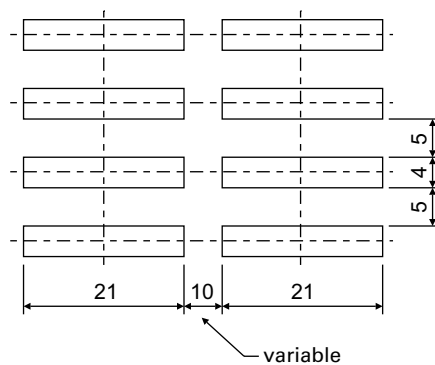
direction of perforation



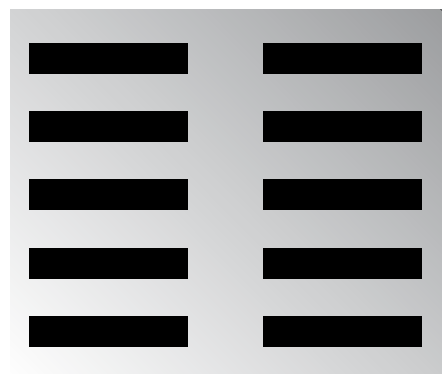
# Lge 21 x 4

Slotted square hole 21 x 4 mm, straight pitch, variable open area

material	thickness	width of perforation
steel	0.6 mm	616 mm
steel	0.7 mm	616 mm



direction of perforation



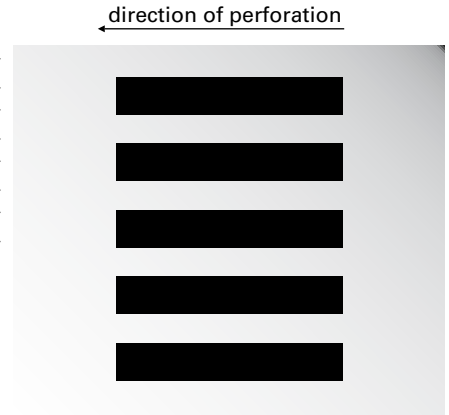
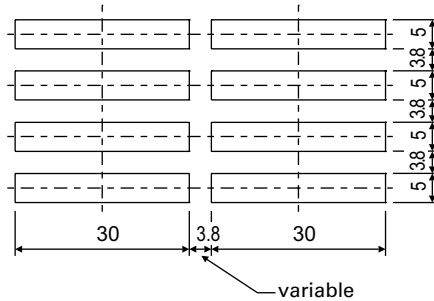
# Lindner Perforations

## Lge 30 x 5

### Special perforation

Slotted square hole 30 x 5 mm, straight pitch, variable open area (standard 50%)

material	thickness	width of perforation
steel	0.7 mm	800 mm
aluminium	0.8 mm	1,000 mm
Stainless steel	0.6 mm	1,200 mm
Stainless steel	0.7 mm	1,200 mm

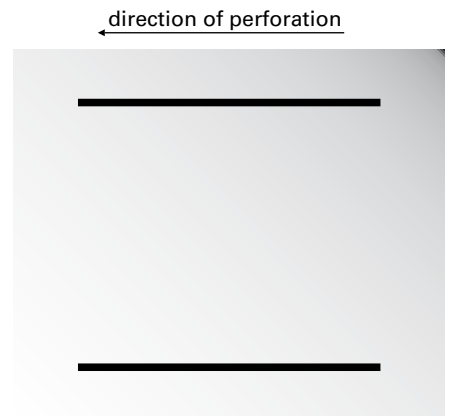
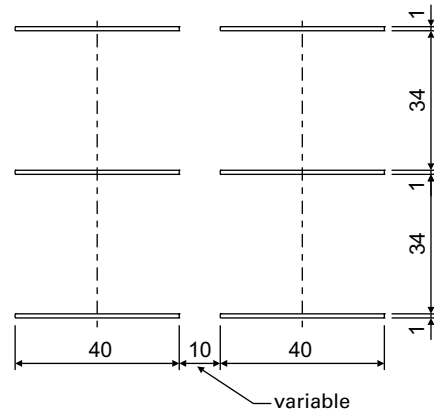


## Lge 40 x 1

### Special perforation

Slotted square hole 40 x 1 mm, straight pitch, variable open area (standard 2%)

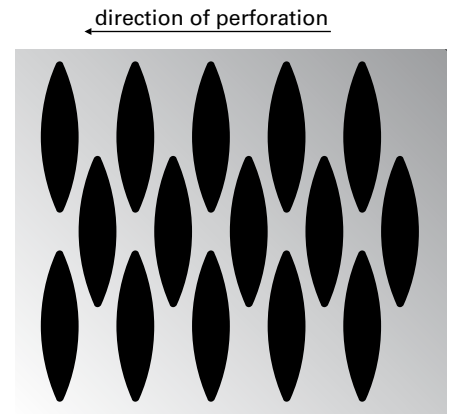
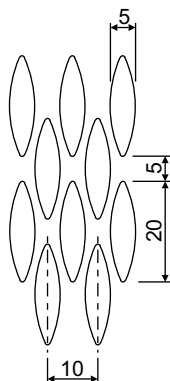
material	thickness	width of perforation
steel	0.6 mm	840 mm



## St 5 x 20 - 57

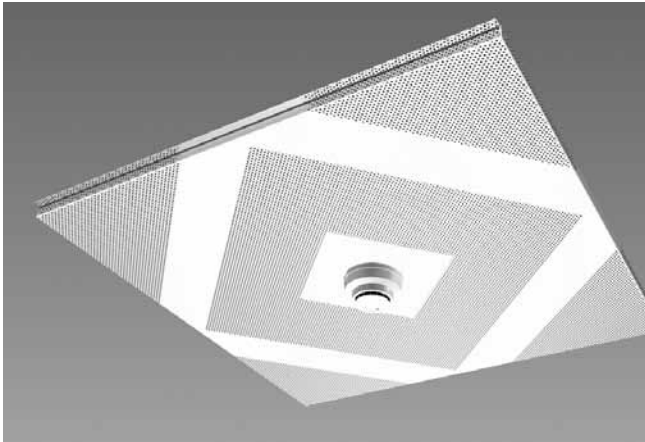
Elliptic hole 5 x 20 mm, diagonal pitch 57% open area

material	thickness	width of perforation
steel	0.7 mm	1,000 mm

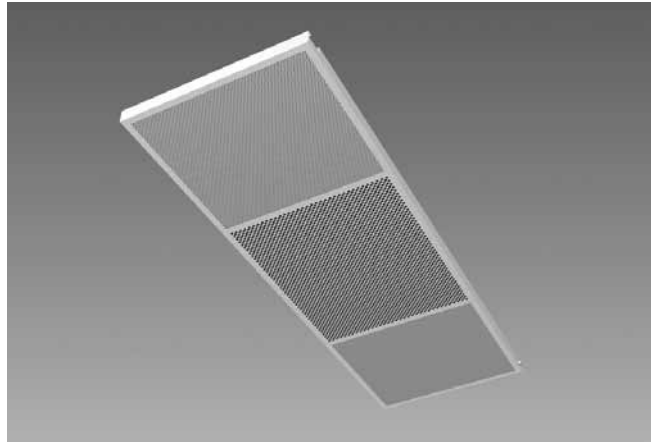


# Specific Perforations

Your metal ceiling is given a particular character due to individual perforations.

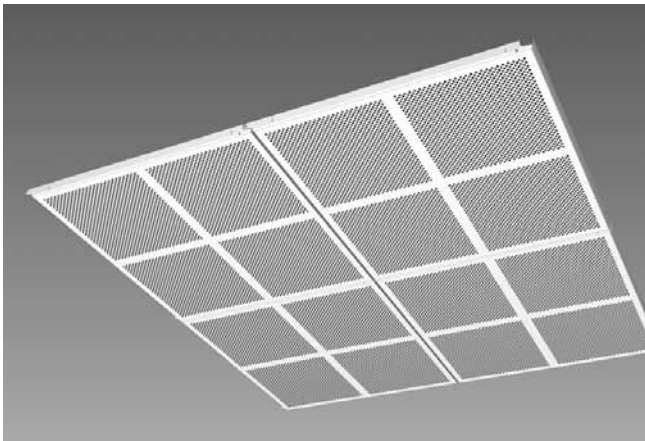


**Individual perforation layout**



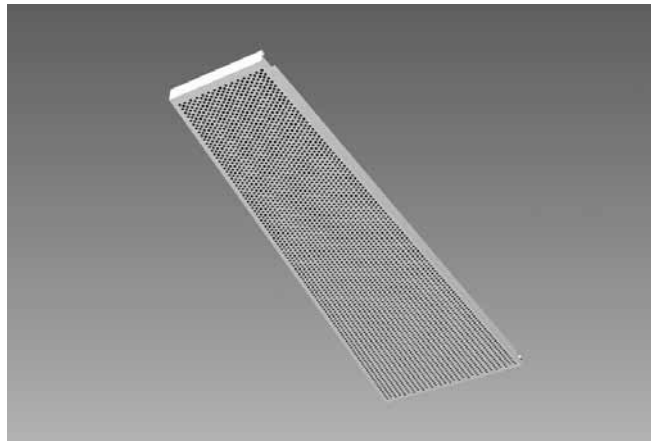
**Perforation with multi-panel look.**

Increased open area in the central part of the panel (for ventilation purposes)



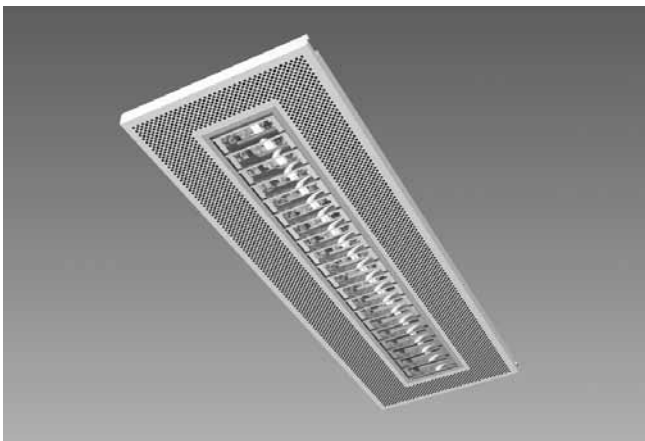
**Perforation with multi-panel look.**

plain borders dividing the ceiling panel visually into more panels



**Radial arrangement of perforation.**

For a consistently plain border with non-rectangular ceiling panels (not available for all perforation patterns)



**Plain zone within the perforated area of the panel.**

circumferential plain border around central aperture for light fixture

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### Lindner Group

Bahnhofstrasse 29  
 94424 Arnstorf  
 Germany  
 Phone +49 (0)8723/20-36 79  
 Fax +49 (0)8723/20-28 93  
[ceilingsystems-ps@Lindner-Group.com](mailto:ceilingsystems-ps@Lindner-Group.com)  
[www.Lindner-Group.com](http://www.Lindner-Group.com)