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

Main photo: Tsvetnoy, Central Market, Moscow, Russia

Surfaces and Perforations for Lindner Ceiling Systems

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

Contents

Tested quality

Building material class A2-s1, d0
tested to EN 13501-1
Class A (IBC) tested to ASTM E84

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

Sound absorption
up to sound absorption class A
tested to EN ISO 354

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

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.)

Powder Coating

In standard configuration, Lindner Metal Ceilings are furnished with a powder coating in white colour 9010 acc. to Lindner or grey colour 9006 acc. to Lindner. 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" tested to EN 13501-1 and class A (IBC) tested to ASTM E84 are also rated as harmless in case of fire.


Heinemann Shops Vienna Airport, Austria

Emphasis on a clean powder coating:
No waste air* and no effluents!

- Solvent and VOC-free (volatile organic compounds)
- 800 m³ of contaminated water recycled every year
- 25 tons of powder saved yearly thanks to powder recycling

* Except from steam during pre-treating

Design Surfaces

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.

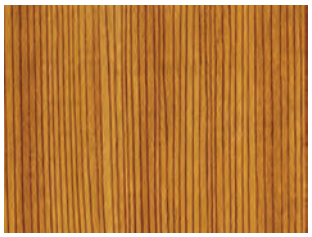
This special powder coating is suitable for indoor application as well as for Plafotherm® Heated and Chilled Ceilings and Suspended Fireproof Ceilings. Moreover, its outstanding resistance against UV radiation, solvents and chemicals of many kinds is quite impressive.

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

Extract from possible designs

Acacia 2

Black Cherry 1

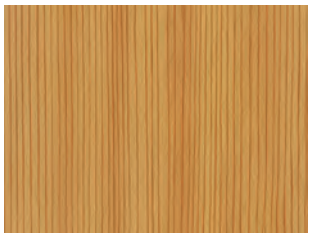


Douglas Fir 3

Oak 2

Acacia 3

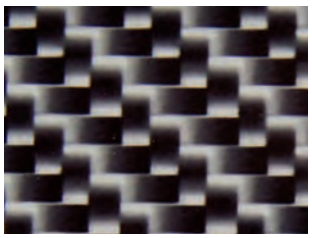
Beech 1



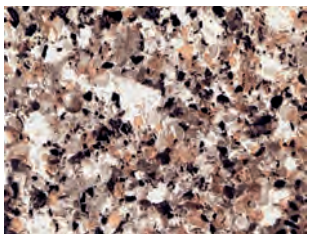
Douglas Fir 4

Oak 3

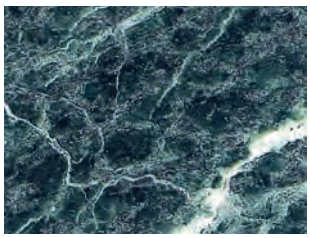
Copper



Carbon 1



Granite 115



Green Marble

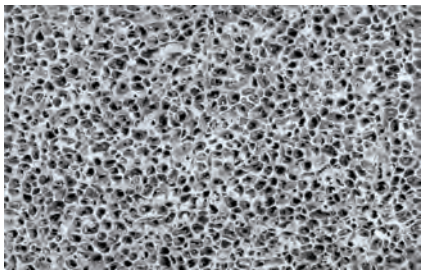
As with all natural products, wood and concrete vary slightly in colour and structure. Printer inks cannot match the colour tones perfectly:
minor differences in colour are therefore possible.
Other wood coverings and patterns are available on request.

Dubai Metro Station, U.A.E.

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.

Volksbank Meinerzhagen, Germany


Aluminium foam


Meshwork

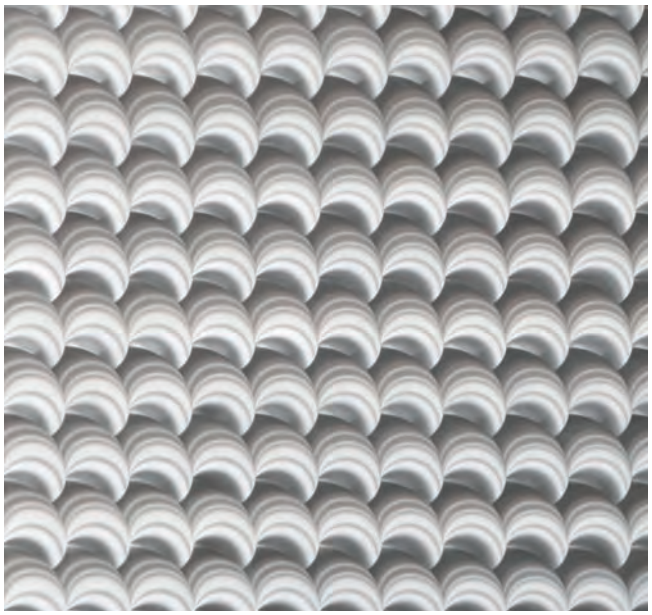

Heaven

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.

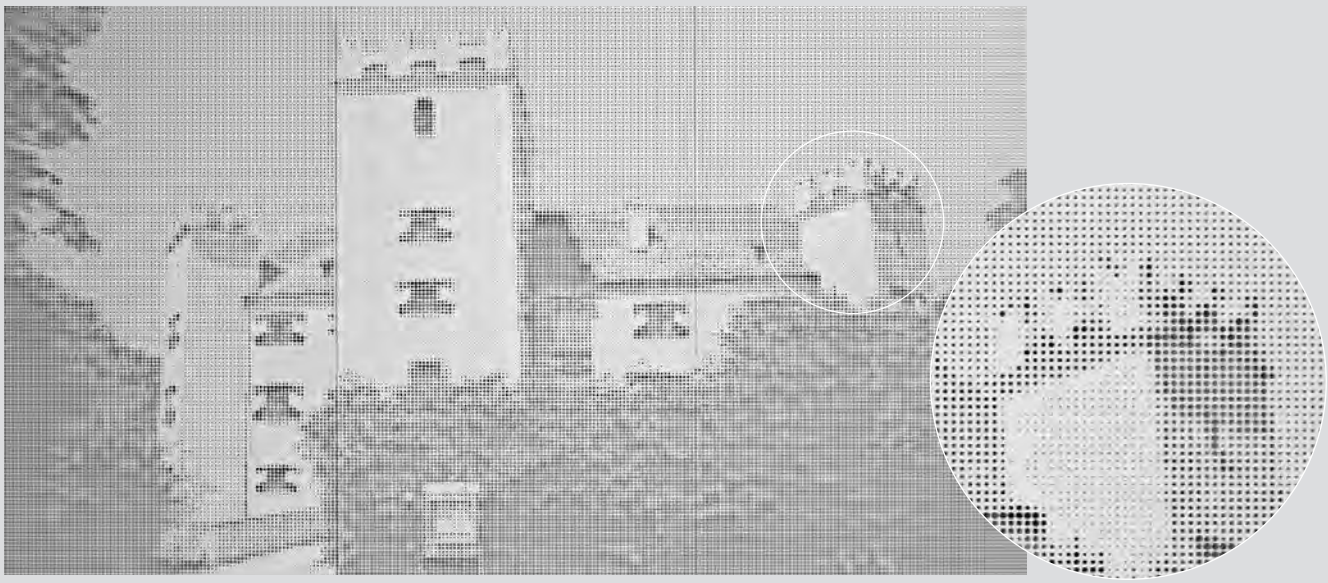
Advantages

- 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.

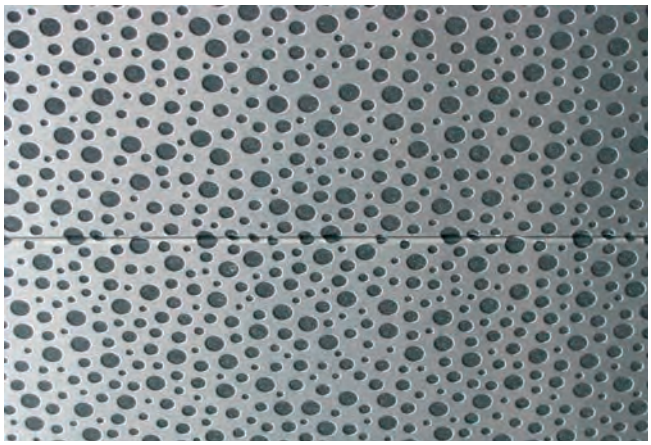
You receive a remarkable metal ceiling when combining different perforation designs. Customised perforations can specifically be used for an effective combination of luminaires and loudspeakers.



Scattered perforation – SPREADline

Detail

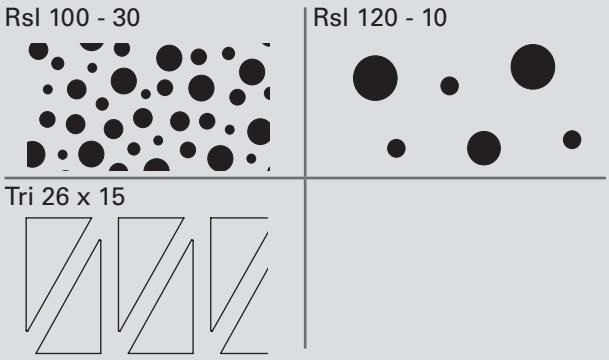
Scattered perforation – SPREADline



Scattered perforation – SPREADline

Possible application areas

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



Stockholm Waterfront, Sweden
© Michael Perlmutter

Functional Surfaces

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.

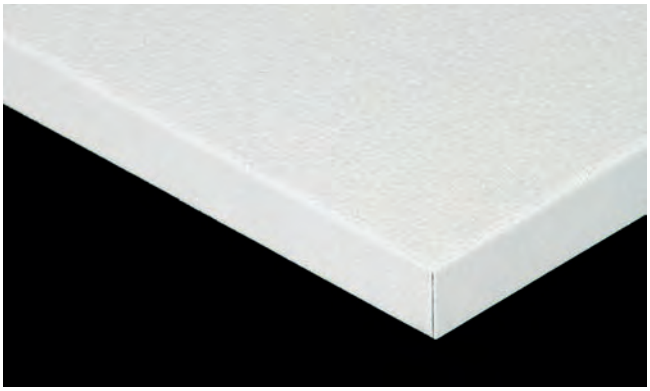
Possible application areas
- Swimming pools
- All kind of outdoor areas
- Railway stations and airports

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 (IBC) 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.

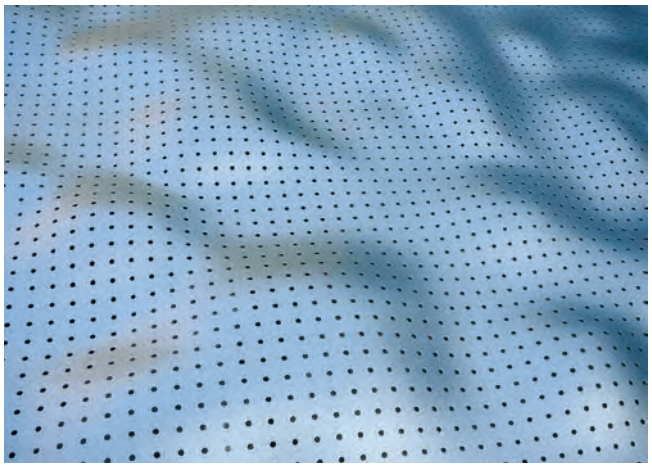
Advantages
- Significant weight savings compared to steel
- Easy cleaning
- High corrosion resistance
- Optionally sterilisable

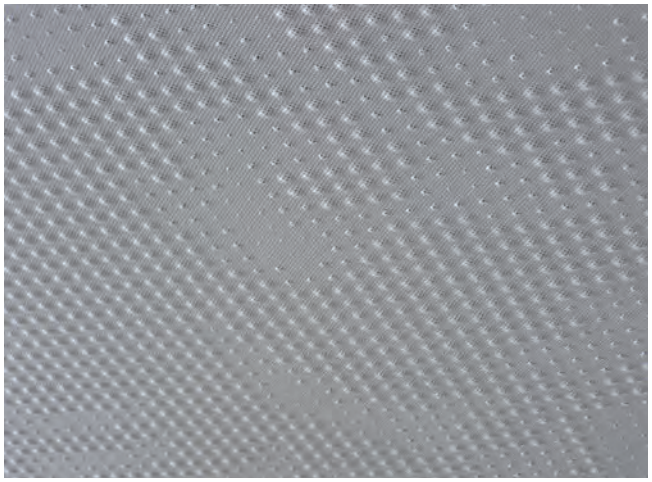
Structured Surfaces

TOUCHdesign – 3D 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 – 3D High-Gloss Surface

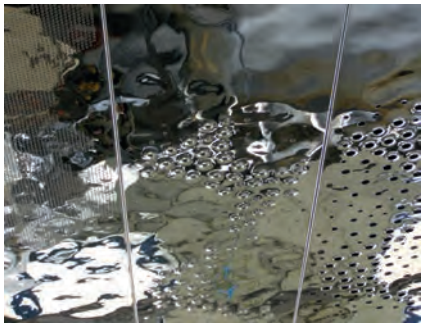
The metal ceiling TOUCHdesign Lunar with three-dimensional optics consisting of matted and high-gloss areas as well as the combination of perforation and punching gives a special character to the surface.

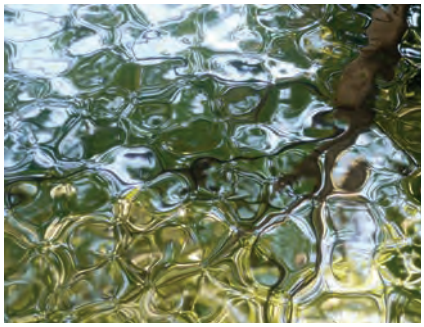
TOUCHdesign Lunar made of hammered, highly polished stainless steel reflects a fragmented image of the room.

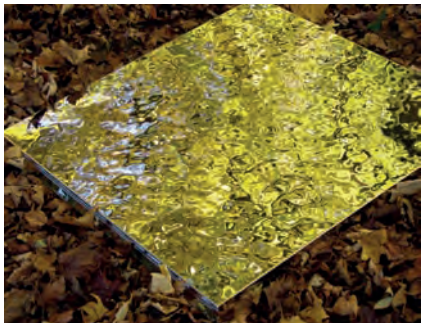
Stockholm Waterfront Lobby, Sweden
© Michael Perlmutter

Tsvetnoy, Central Market, Moscow, Russia
© Chris Gascoigne

Extract from possible optics made from highly polished stainless steel



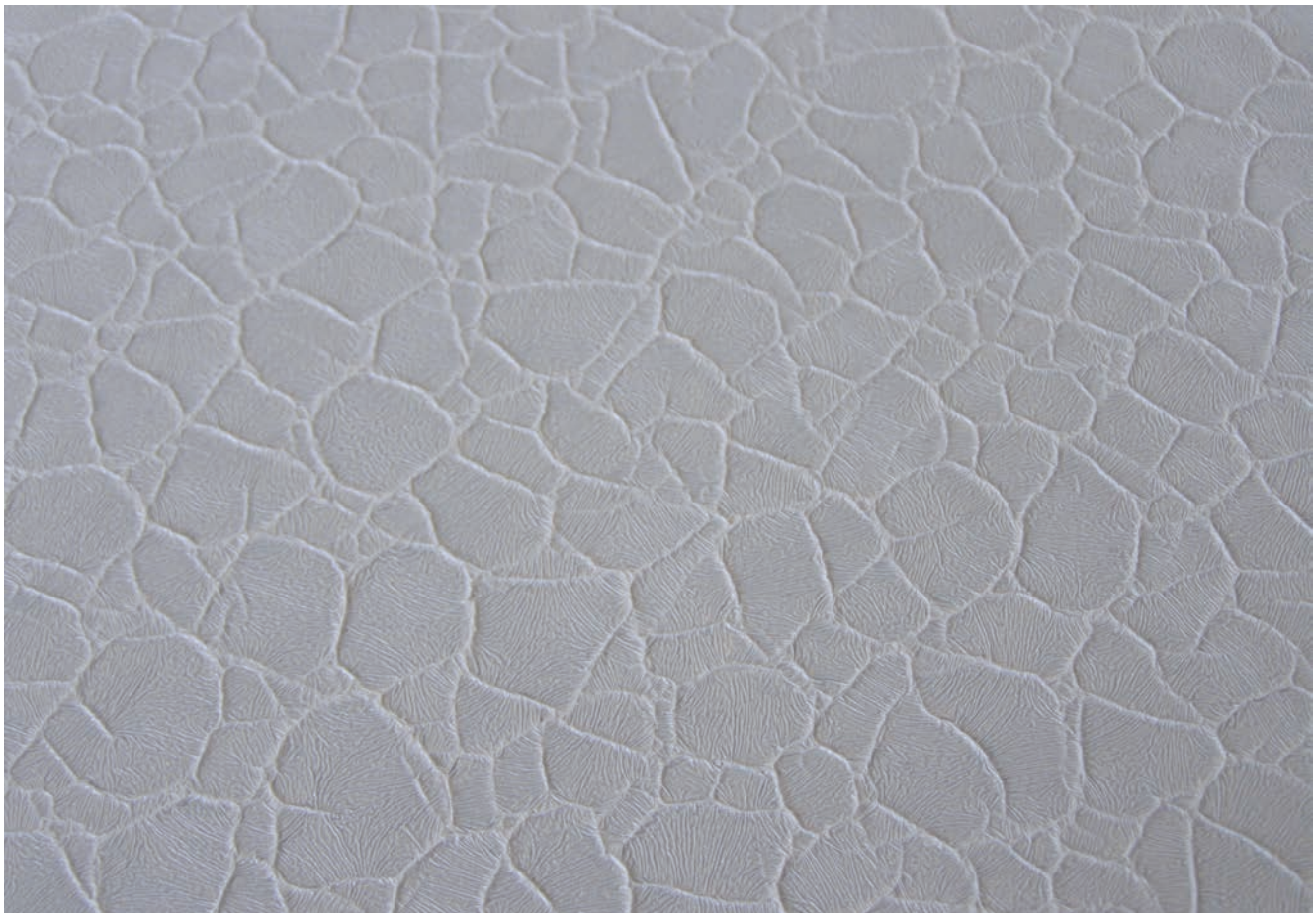




Eurogress Aachen, Germany

TOUCHdesign Venas – 3D Structured Surface

The high quality design variant TOUCHdesign Venas makes a special highlight of a classic white surface of metal ceilings: thanks to a unique coating that spreads netlike in fine lines, the effect of a leaf vein structure is created. We realize this fascinating leaf vein design on plain metal ceiling panels. The three-dimensional character is emphasized depending on the perspective and light irradiation.



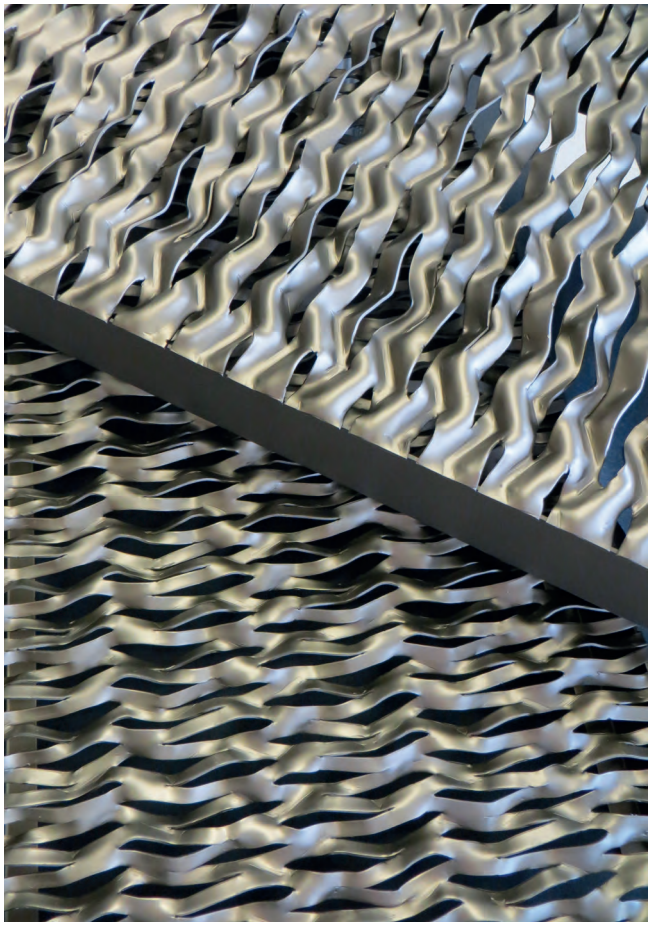
Advantages

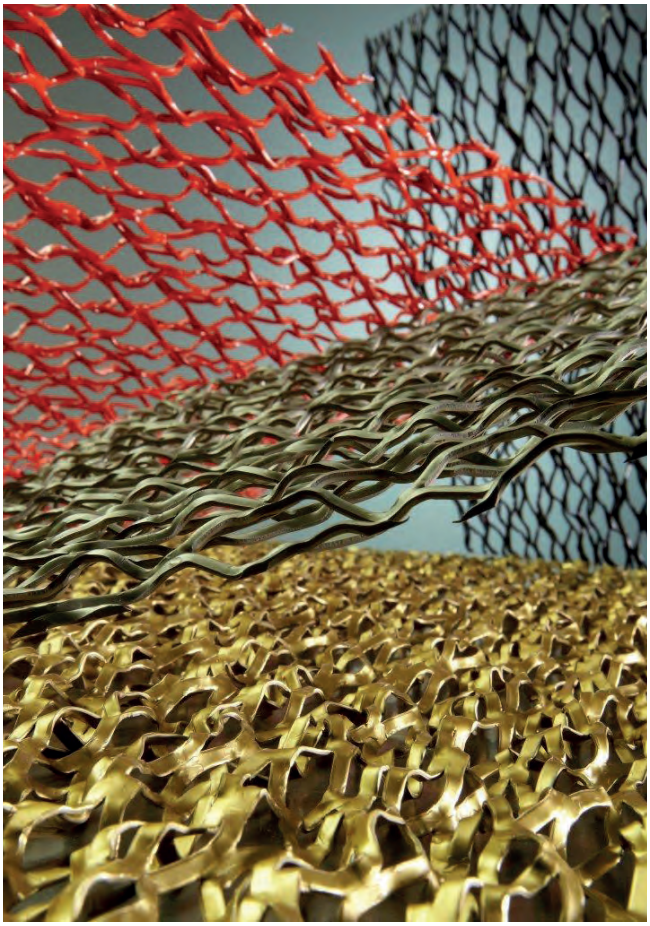
- Individual structures make every ceiling panel unique
- Design effect due to matt and shiny spots, depending on the light irradiation

TOUCHdesign Viva – 3D Expanded Metal Surface

Due to the open character, the expanded metal ceiling elements are especially suitable for representative and public areas. The folded expanded metal grants free view into the ceiling void and creates at the same time living, three-dimensional effects.

A high number of sizes, forms and geometries of meshes offer an individual, unique appearance of the ceiling. The structure surface of expanded metal is available in many different colours.





Advantages

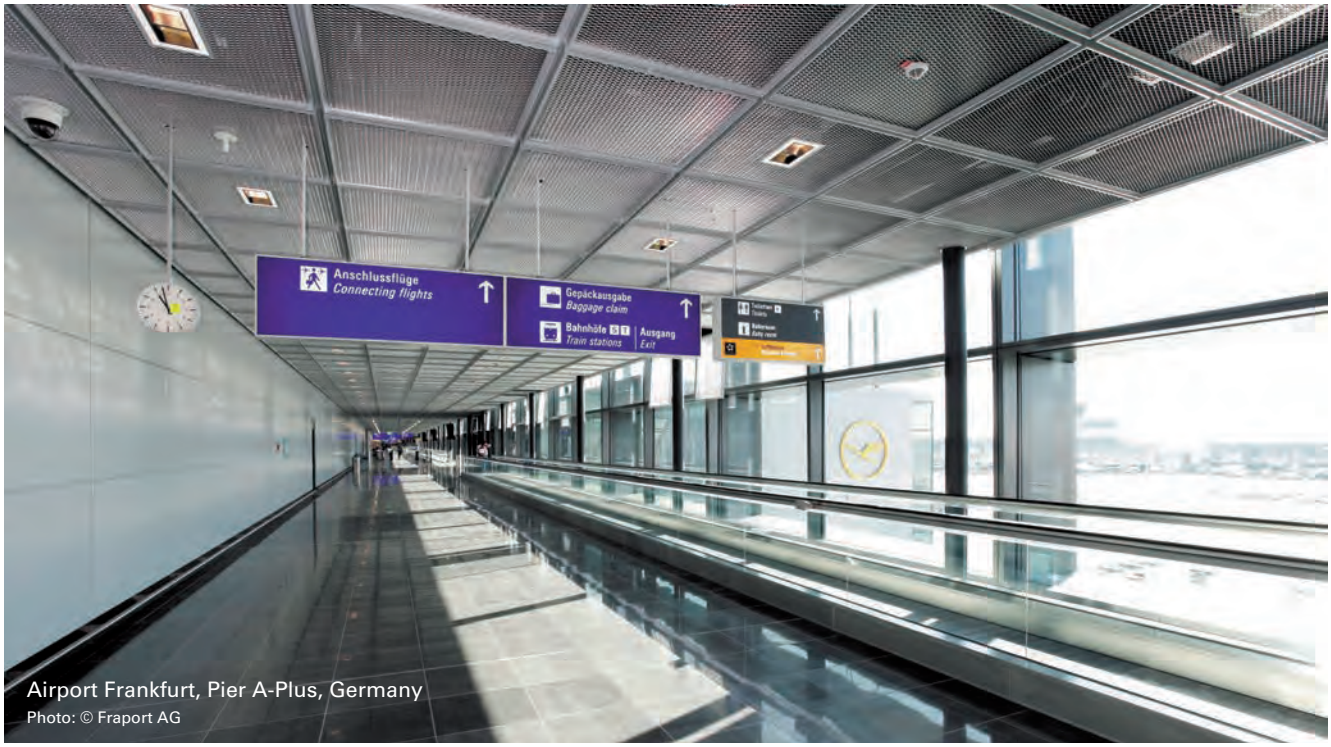
- Unique design by individually folded expanded metal
- Structured surface on demand with high open area to have a wide view into the ceiling void
- The incidence of light creates varied, diverse looks

Expanded Metal

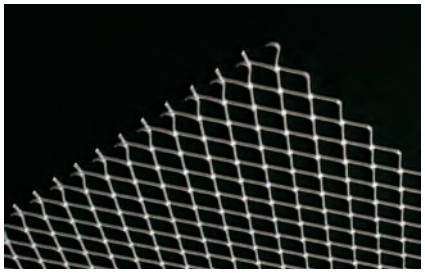
Individuality in material and shape.

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.

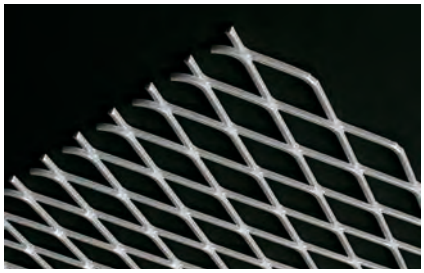
The light weight of the material, together with its accentuated structured appearance, opens up many new design opportunities.
A wide range of expanded metal meshes is available for your choice.



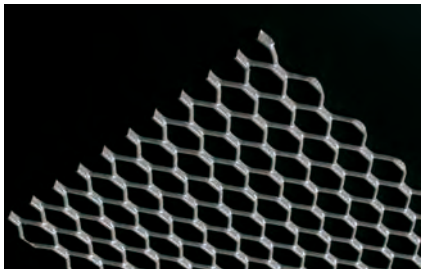
Airport Frankfurt, Pier A-Plus, Germany
Photo: © Fraport AG



Square mesh



Diamond mesh



Long-link 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

Gensler LA Office, Los Angeles, USA

Expanded Metal Meshes

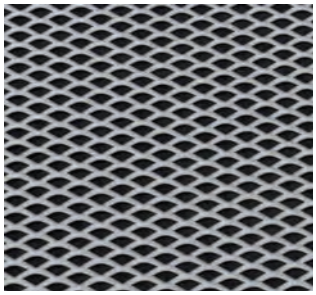
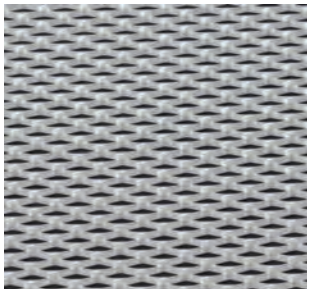
Extract from possible expanded metal meshes, further meshes on request

Diamond meshes

12.7 x 6 x 2.0 x 1.0

Expanded metal thickness approx. 3.5 mm
33 % open area

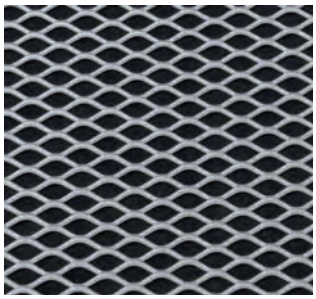
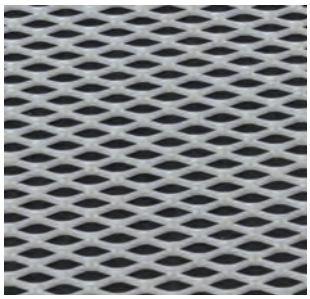
Mesh length	Mesh width	Strand width	Strand thickness
12.7 mm	6 mm	2 mm	1 mm

16 x 8 x 2.0 x 1.5

Expanded metal thickness approx. 3.5 mm
50 % open area

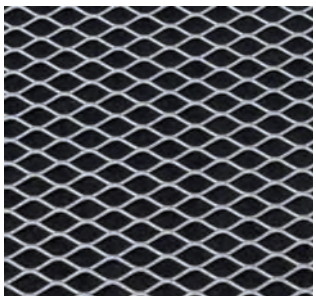
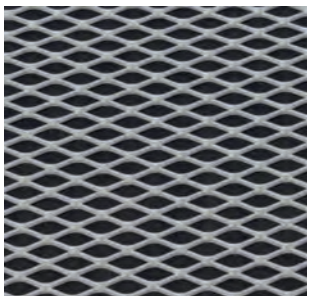
Mesh length	Mesh width	Strand width	Strand thickness
16 mm	8 mm	2 mm	1.5 mm

16 x 8 x 2.5 x 1.0

Expanded metal thickness approx. 3.0 mm
37 % open area

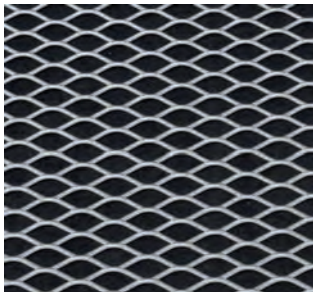
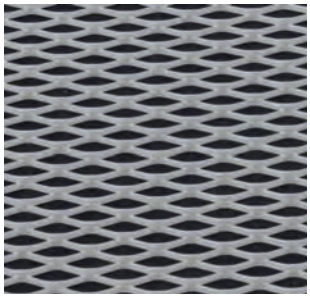
Mesh length	Mesh width	Strand width	Strand thickness
16 mm	8 mm	2.5 mm	1 mm

20 x 8 x 2.0 x 1.0

Expanded metal thickness approx. 3.5 mm
50 % open area

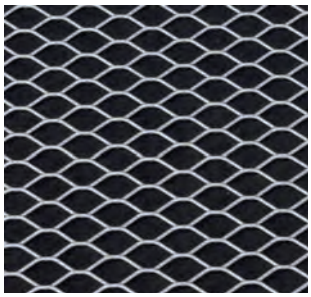
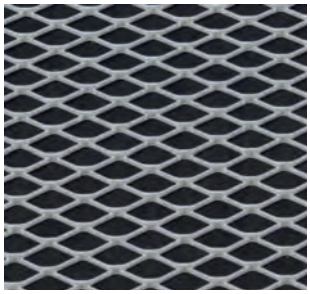
Mesh length	Mesh width	Strand width	Strand thickness
20 mm	8 mm	2 mm	1 mm

20 x 10 x 2.0 x 1.0

Expanded metal thickness approx. 3.5 mm
60 % open area

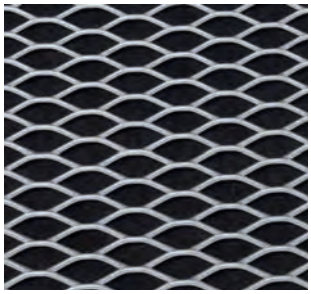
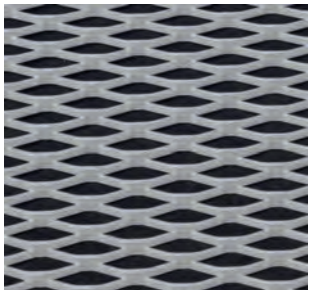
Mesh length	Mesh width	Strand width	Strand thick-ness
20 mm	10 mm	2 mm	1 mm

28 x 10 x 2.5 x 1.5

Expanded metal thickness approx. 5.0 mm
50 % open area

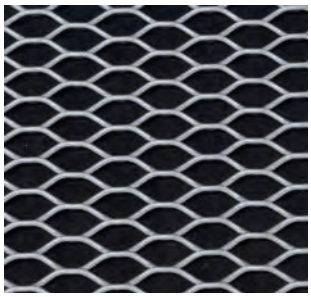
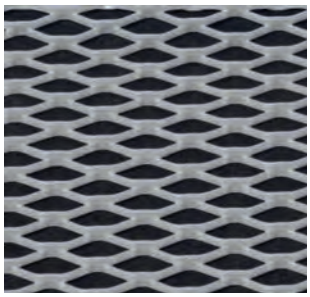
Mesh length	Mesh width	Strand width	Strand thickness
28 mm	10 mm	2.5 mm	1.5 mm

28 x 12 x 2.5 x 1.5

Expanded metal thickness approx. 5.0 mm
58 % open area

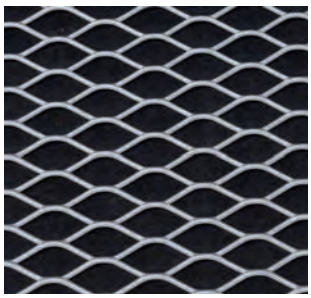
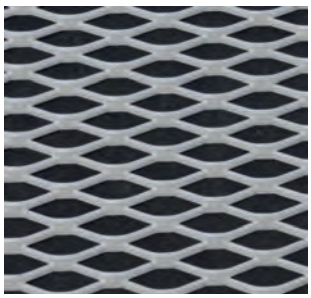
Mesh length	Mesh width	Strand width	Strand thickness
28 mm	12 mm	2.5 mm	1.5 mm

30 x 12 x 2.5 x 1.5

Expanded metal thickness approx. 4.0 mm
58 % open area

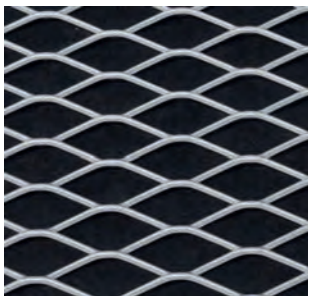
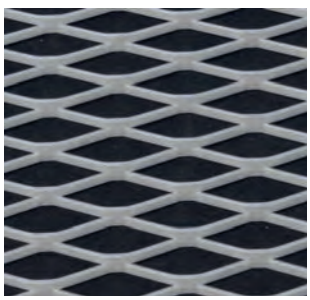
Mesh length	Mesh width	Strand width	Strand thickness
30 mm	12 mm	2.5 mm	1.5 mm

42 x 16 x 3.0 x 2.0

Expanded metal thickness approx. 6.0 mm
62 % open area

Mesh length	Mesh width	Strand width	Strand thickness
42 mm	16 mm	3 mm	2 mm

Expanded Metal Meshes

Extract from possible expanded metal meshes, further meshes on request

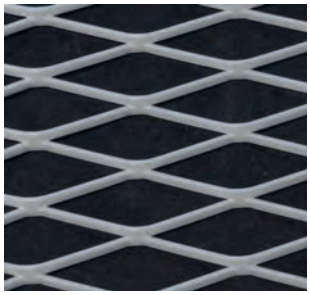
Diamond meshes

50 x 25 x 3.0 x 2.0

Expanded metal thickness approx. 6.0 mm
76 % open area

Mesh length	Mesh width	Strand width	Strand thickness
50 mm	25 mm	3 mm	2 mm

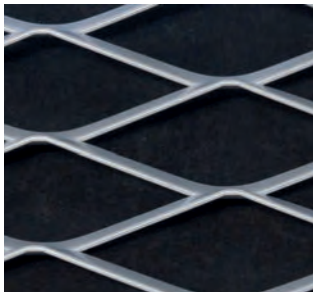
62 x 23 x 3.0 x 2.5

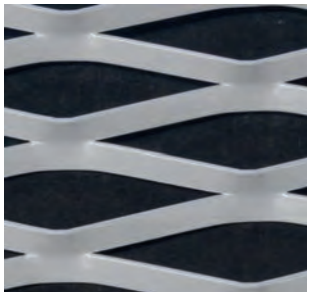


Expanded metal thickness approx. 6.0 mm
73 % open area

Mesh length	Mesh width	Strand width	Strand thickness
62 mm	23 mm	3 mm	2.5 mm

115 x 40 x 9.0 x 2.0





Expanded metal thickness approx. 18.0 mm
55 % open area

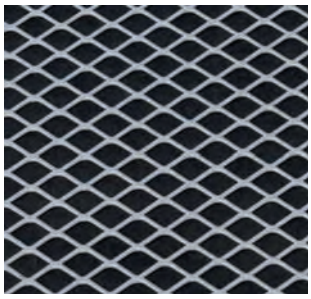
Mesh length	Mesh width	Strand width	Strand thickness
115 mm	40 mm	9 mm	2 mm

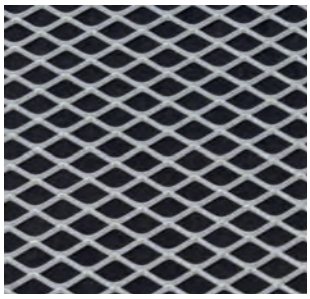
Square meshes

16 x 11 x 1.5 x 1.0

Expanded metal thickness approx. 3.0 mm
73 % open area

Mesh length	Mesh width	Strand width	Strand thickness
16 mm	11 mm	1.5 mm	1 mm

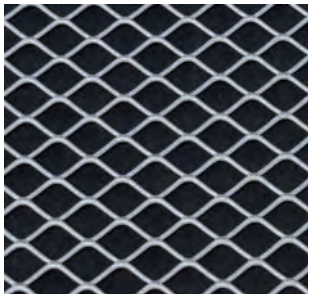


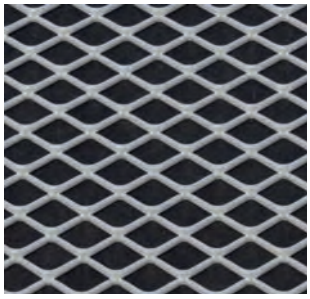


20 x 15 x 2.0 x 1.5

Expanded metal thickness approx. 4.0 mm
73 % open area

Mesh length	Mesh width	Strand width	Strand thickness
20 mm	15 mm	2 mm	1.5 mm





Oberrheinhalle, Offenburg, Germany

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

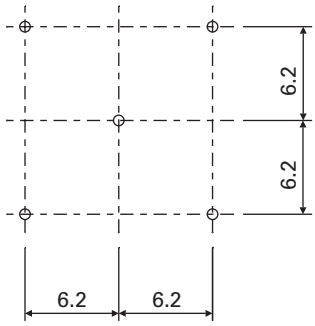
Torre Espacio, Madrid, Spain

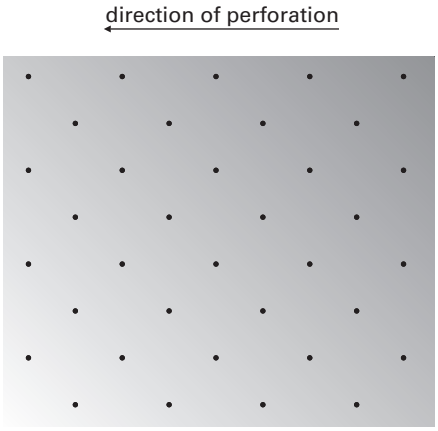
Standard Perforations

Rd 0,7 - 0,5

Hole Ø 0.7 mm diagonal pitch (45°)
0.5 % open area

Material	Thickness	Width of perforation
Steel	0.6 mm	860 mm

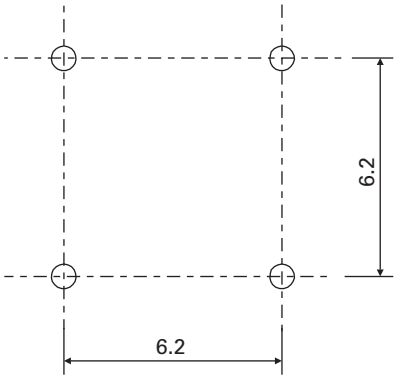


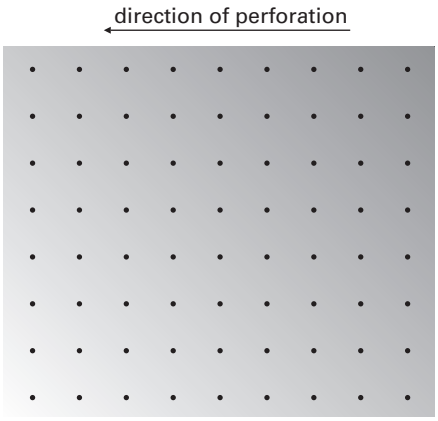


Rg 0,7 - 1

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

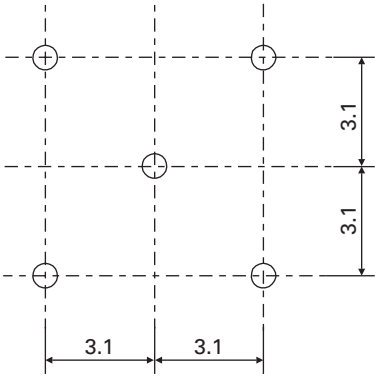


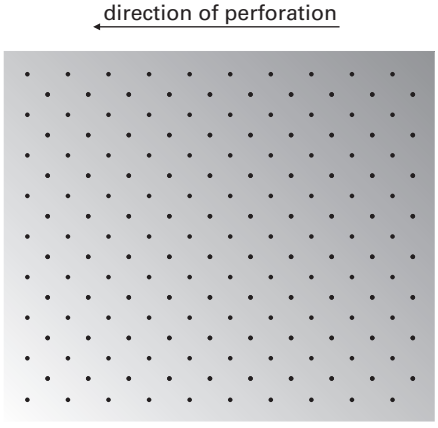


Rd 0,7 - 2

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

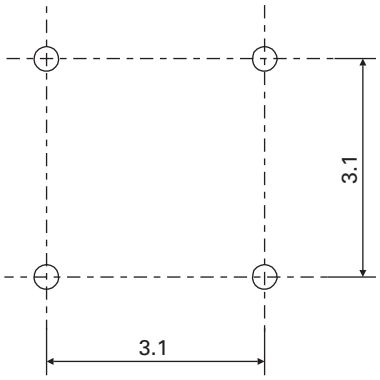




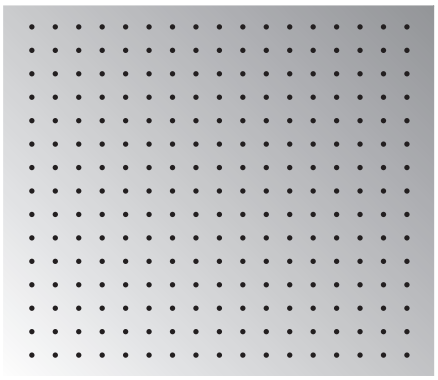
Rg 0,7 - 4

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



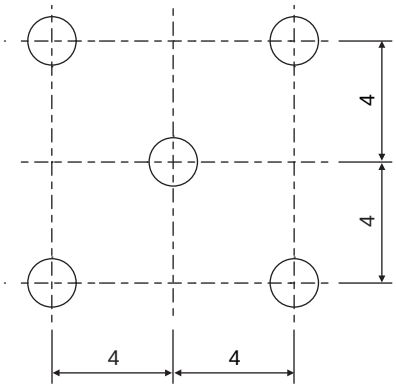
direction of perforation



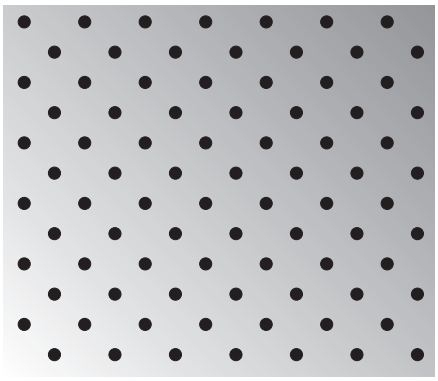
Rd 1,6 - 6

Hole Ø 1.6 mm diagonal pitch (45°)
6 % open area

Material	Thickness	Width of perforation
Steel	0.6 mm	860 mm
Steel	0.7 mm	1,630 mm



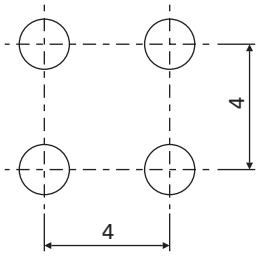
direction of perforation



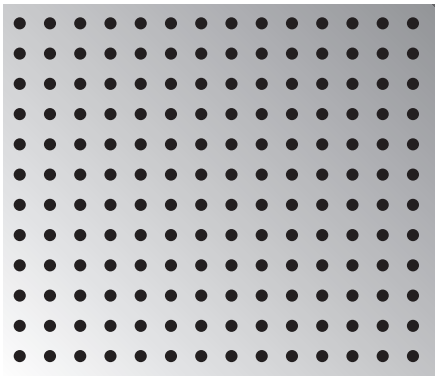
Rg 1,6 - 13

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



direction of perforation

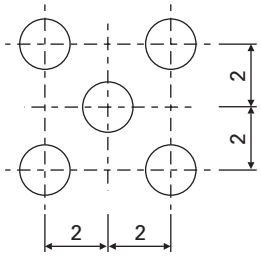


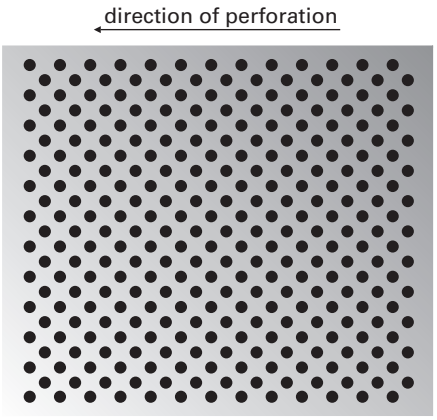
Standard Perforations

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

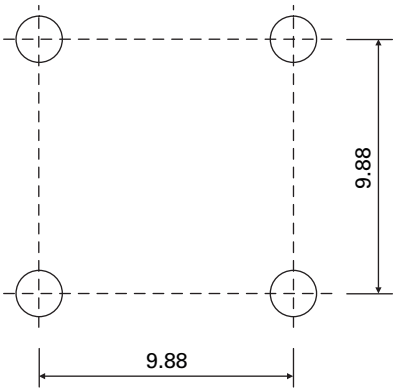


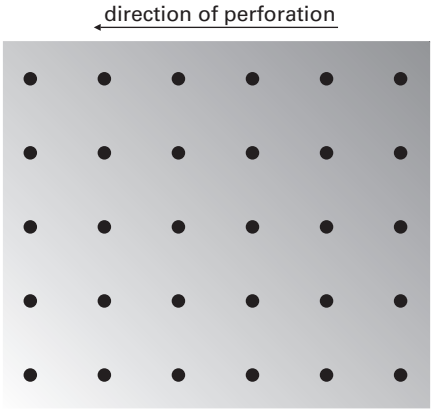


Rg 1,8 - 3

Hole Ø 1.8 mm, straight pitch
3 % open area

Material	Thickness	Width of perforation
Steel	0.7 mm	1,310 mm

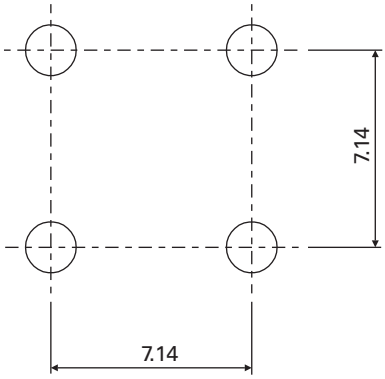


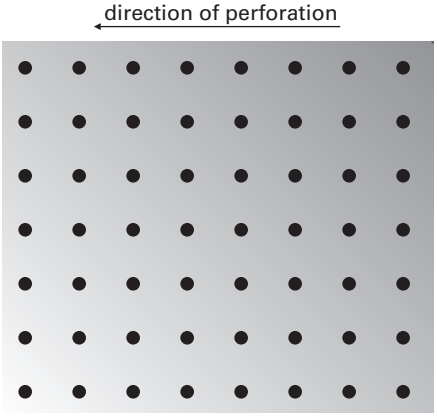


Rg 1,8 - 5

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

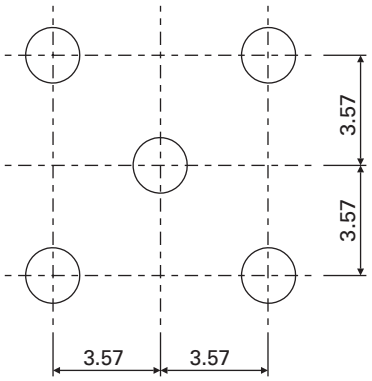


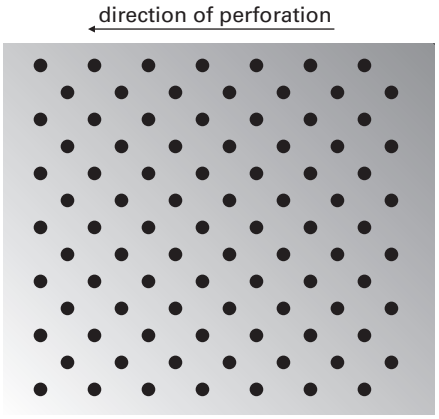


Rd 1,8 - 10

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

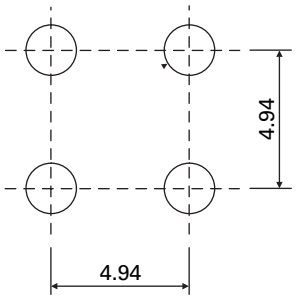


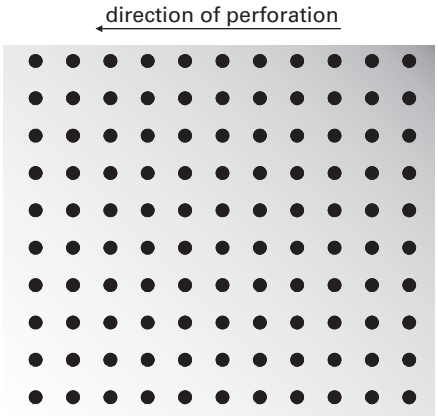


Rg 1,8 - 11

Hole Ø 1.8 mm, straight pitch
11 % open area

Material	Thickness	Width of perforation
Steel	0.7 mm	1,310 mm

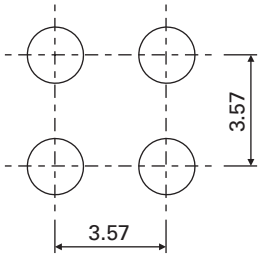


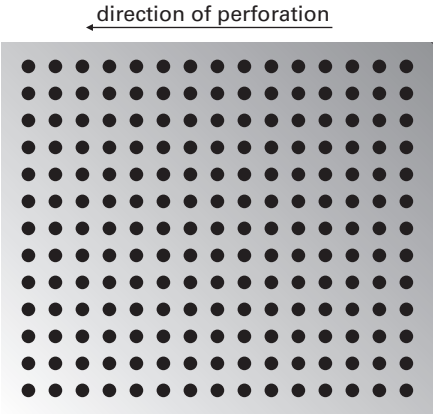


Rg 1,8 - 19

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



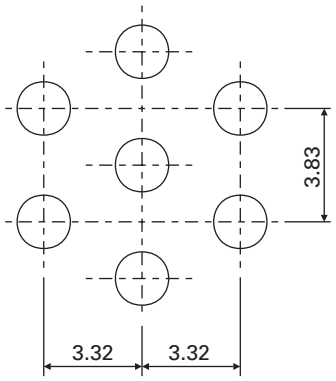


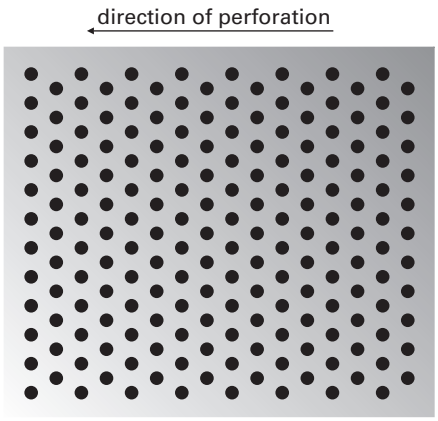
Standard Perforations

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

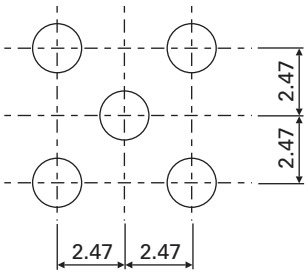


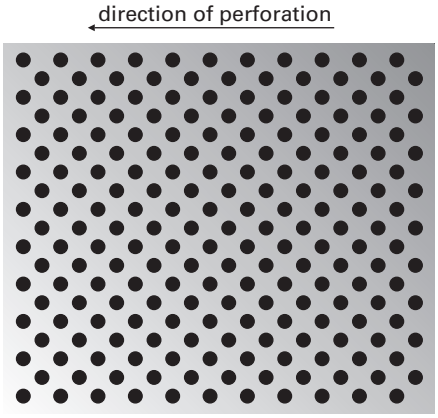


Rd 1,8 - 21

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

Material	Thickness	Width of perforation
Steel	0.7 mm	1,310 mm

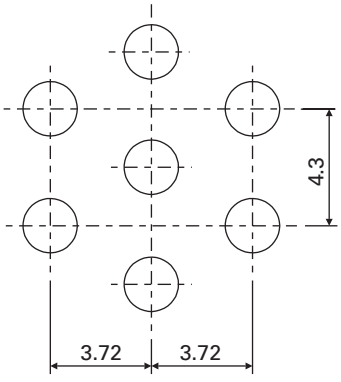


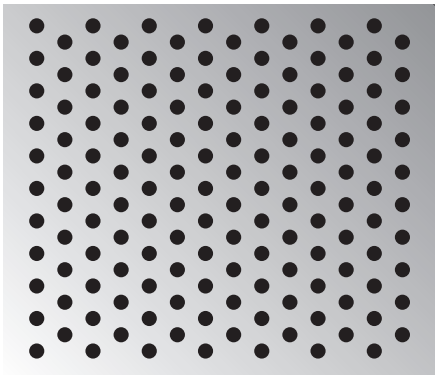


Rv 2,0 - 20

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

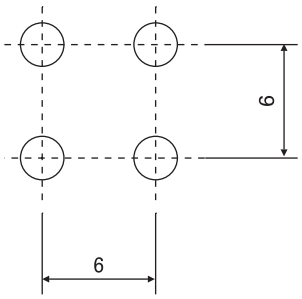


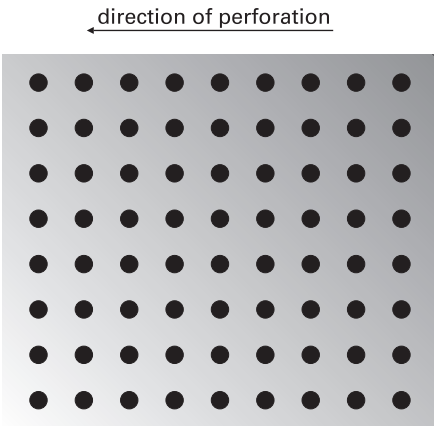


Rg 2,3 - 11

Hole Ø 2.3 mm, straight pitch
11 % open area

Material	Thickness	Width of perforation
Steel	0.6 mm	1,250 mm

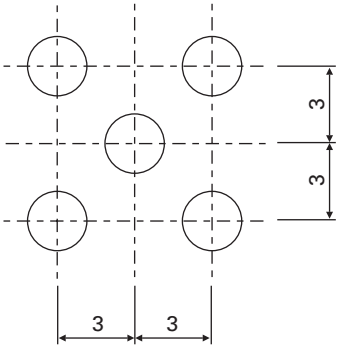


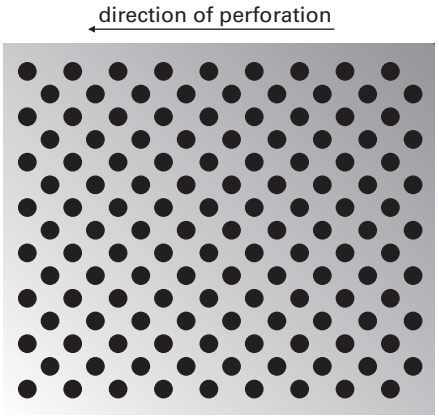


Rd 2,3 - 23

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

Material	Thickness	Width of perforation
Steel	0.6 mm	1,250 mm

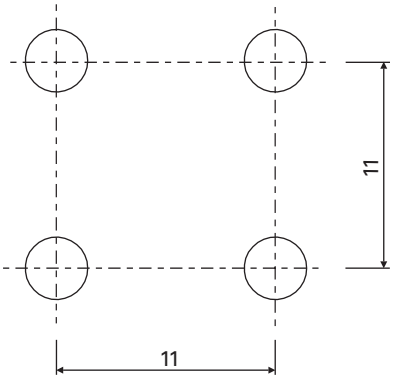


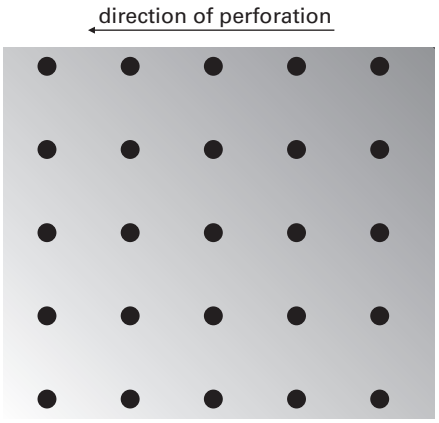


Rg 2,5 - 4

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



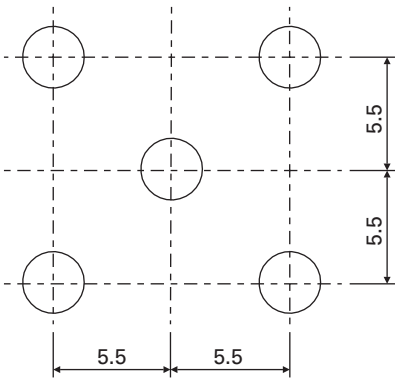


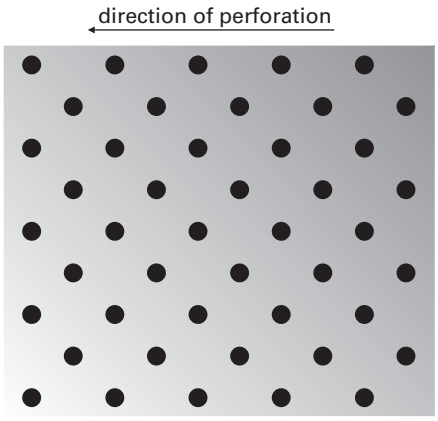
Standard Perforations

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

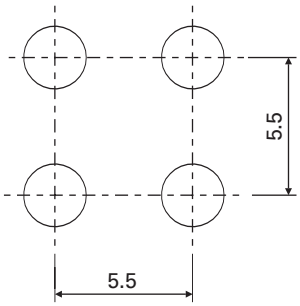


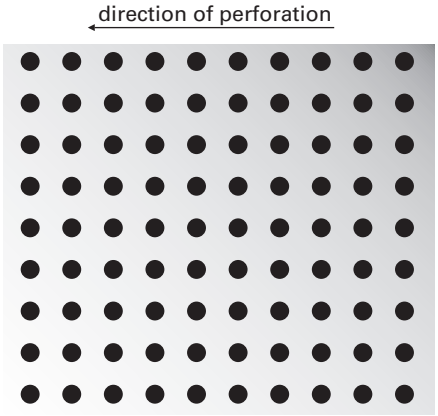


Rg 2,5 - 16

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

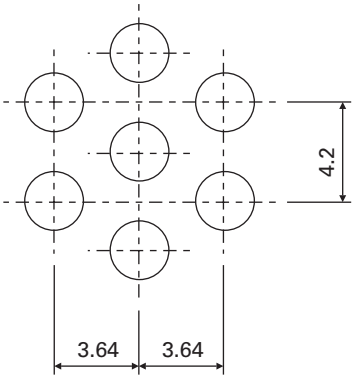


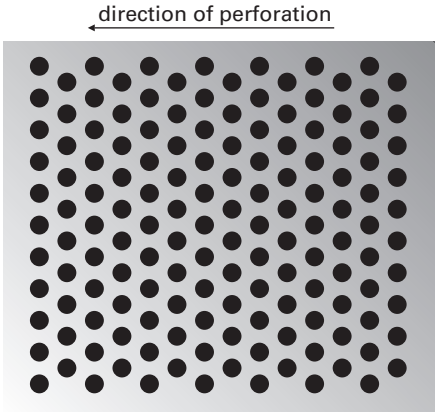


Rv 2,5 - 32

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

Material	Thickness	Width of perforation
Steel	0.6 mm	790 mm

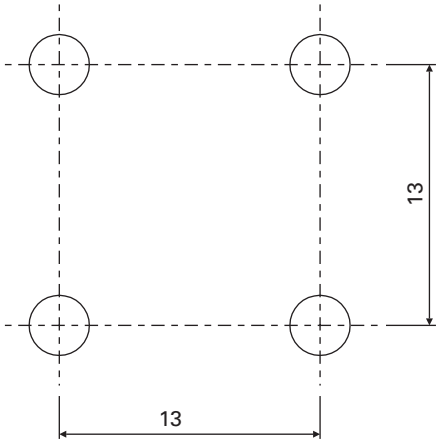


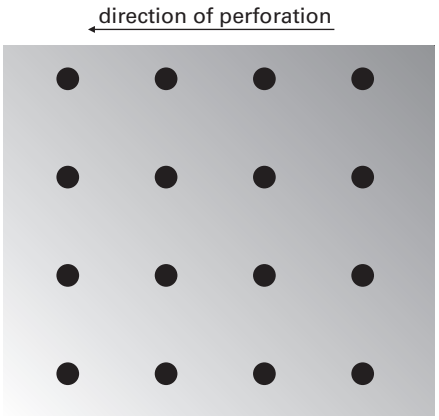


Rg 3,0 - 4

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

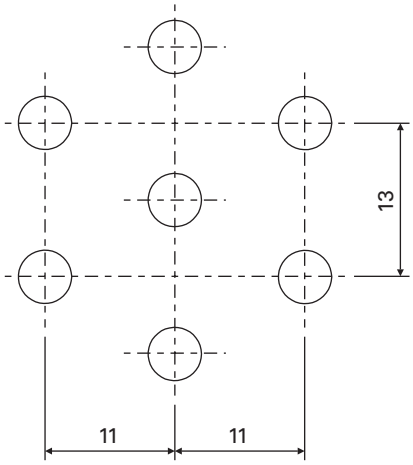


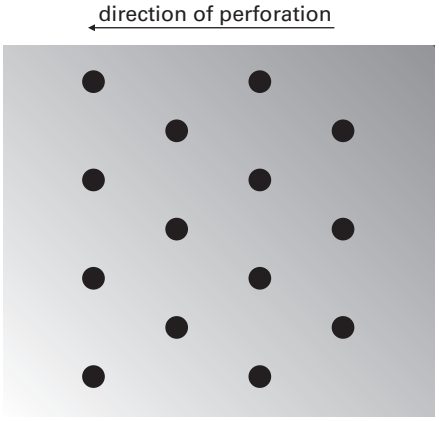


Rv 3,0 - 5

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

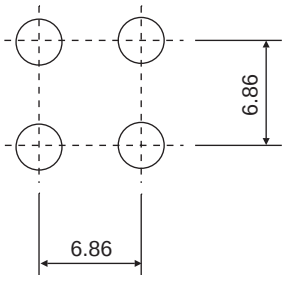


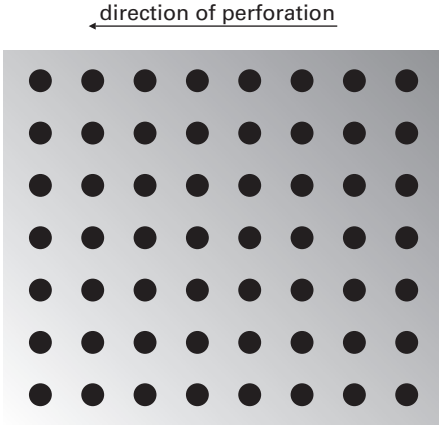


Rg 3,0 - 15

Hole Ø 3.0 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



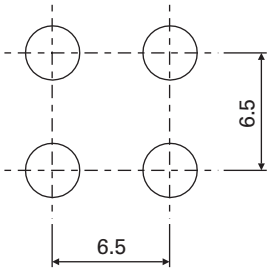


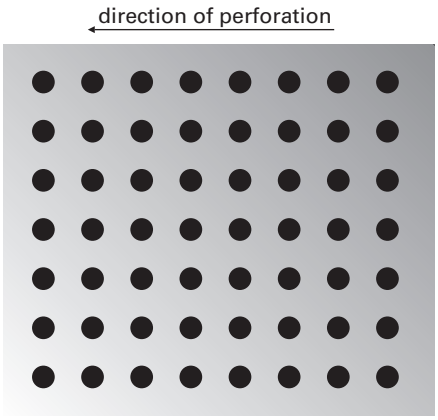
Standard Perforations

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

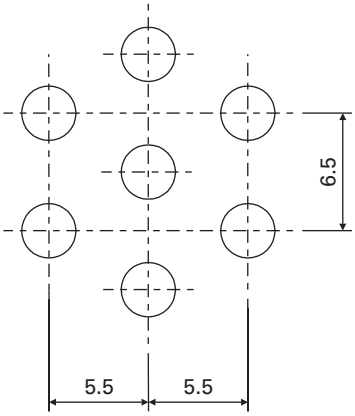


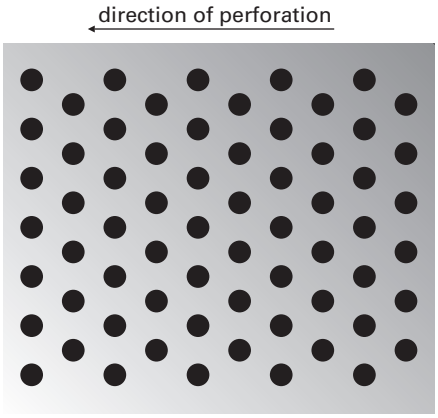


Rv 3,0 - 20

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

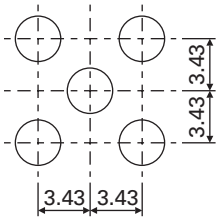


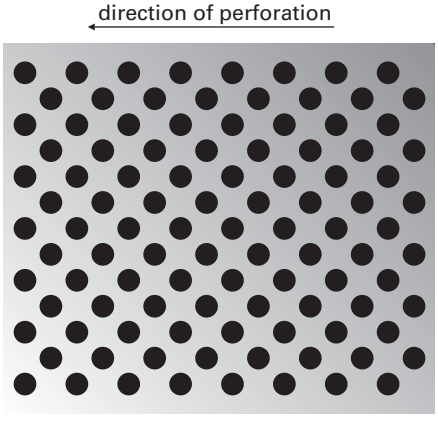


Rd 3,0 - 30

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

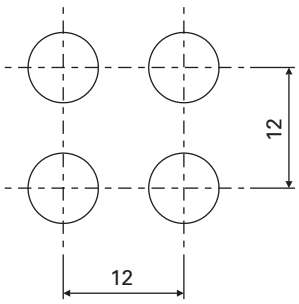


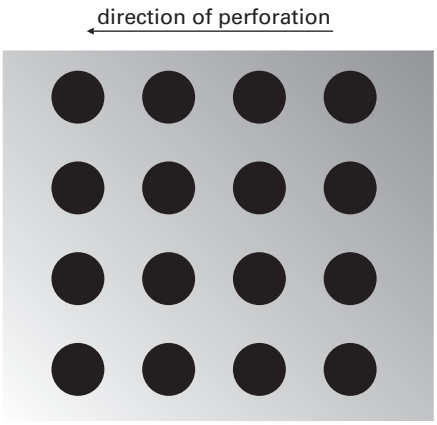


Rg 7,0 - 27

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

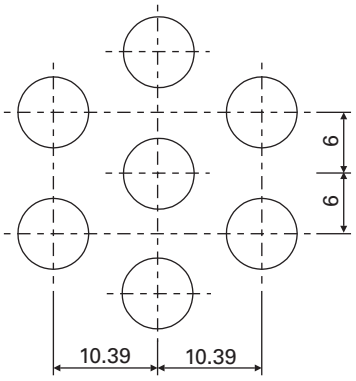


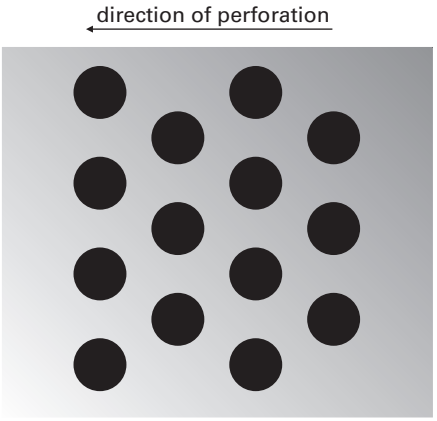


Rv 7,0 - 30

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

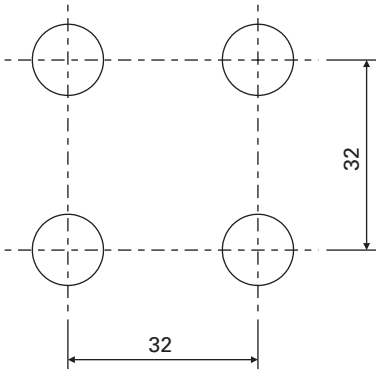


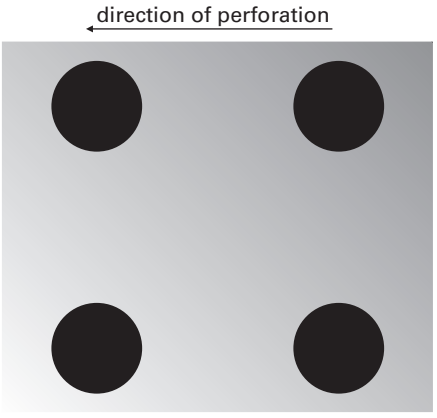


Rg 12,0 - 11

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



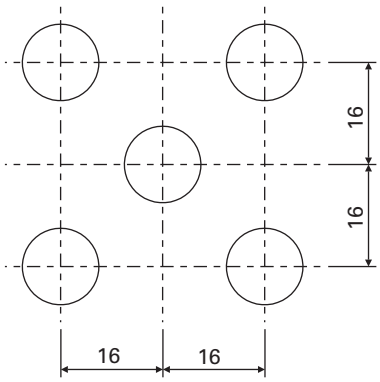


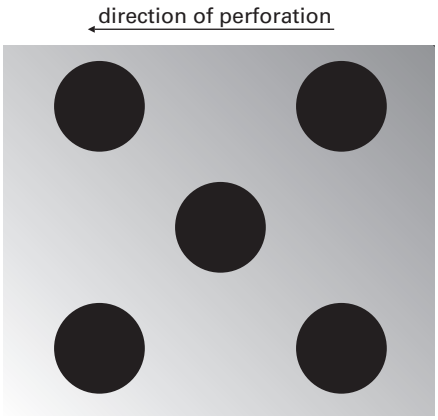
Standard Perforations

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

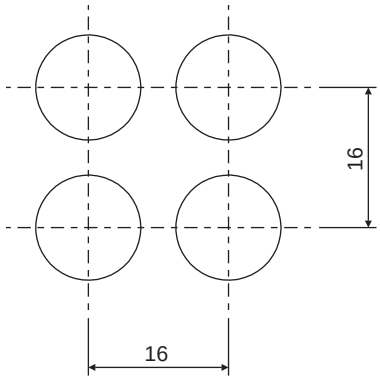


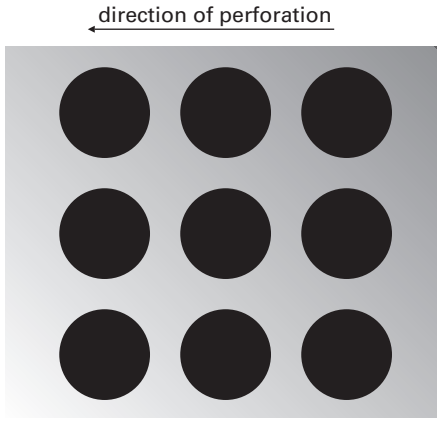


Rg 12,0 - 44

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

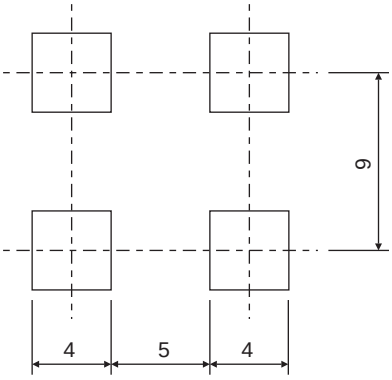


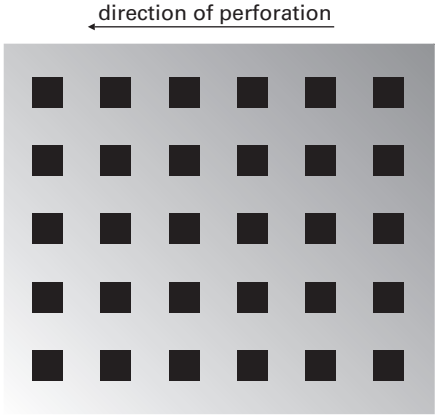


Qg 4,0 - 20

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

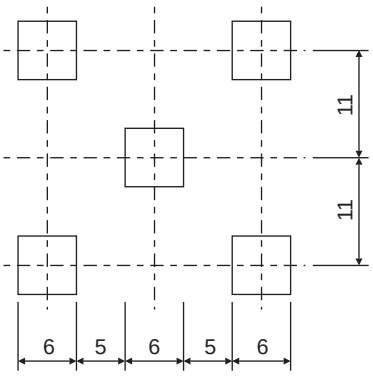


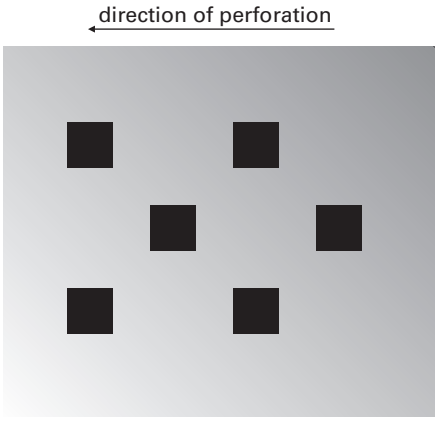


Qd 6,0 - 15

Square hole □ 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

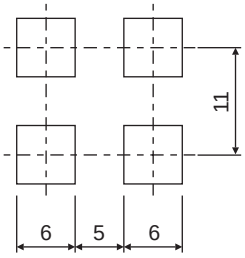


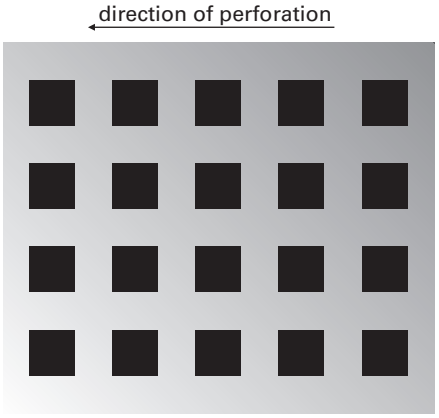


Qg 6,0 - 30

Square hole □ 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

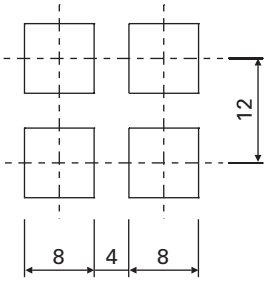


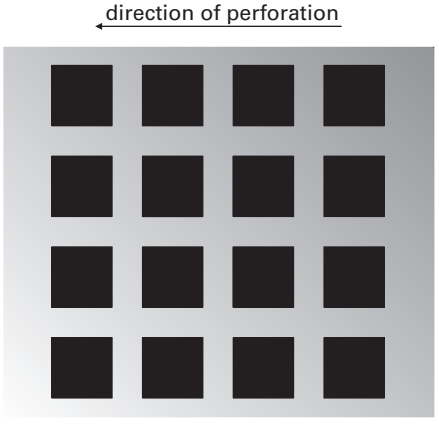


Qg 8,0 - 44

Square hole □ 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



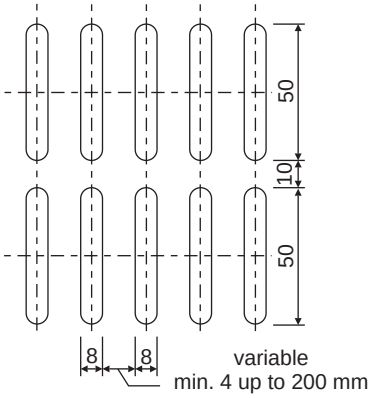


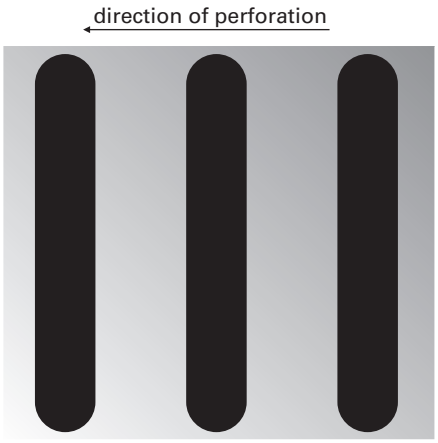
Standard Perforations

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

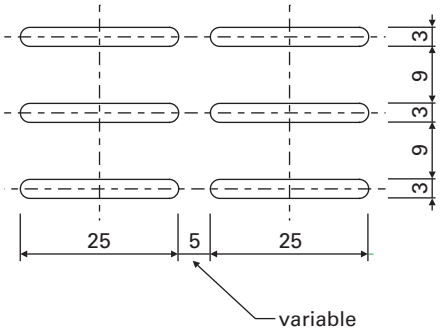


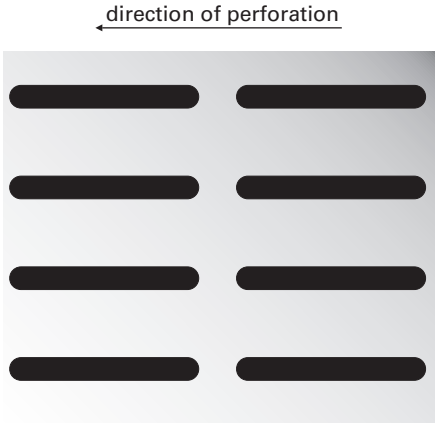


Lg 25 x 3

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

Material	Thickness	Width of perforation
Steel	0.6 mm	636 mm

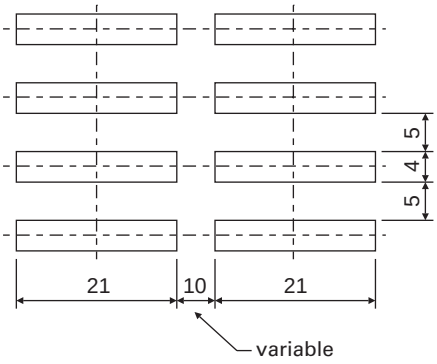


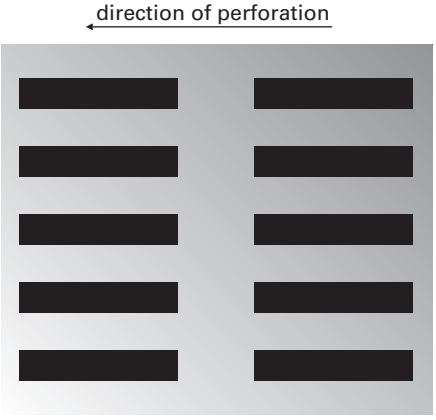


Lge 21 x 4

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

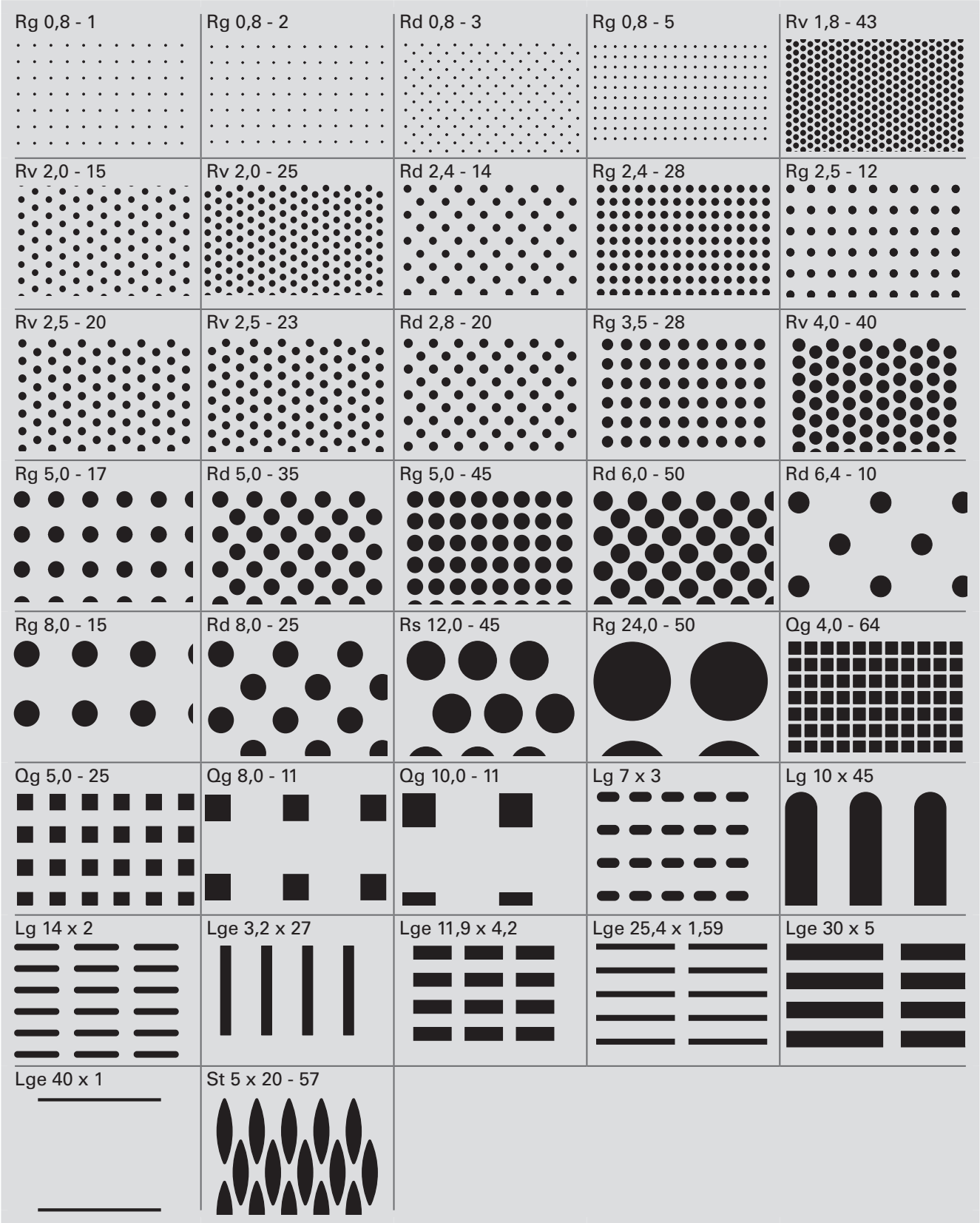
Material	Thickness	Width of perforation
Steel	0.6 mm	616 mm
Steel	0.7 mm	616 mm





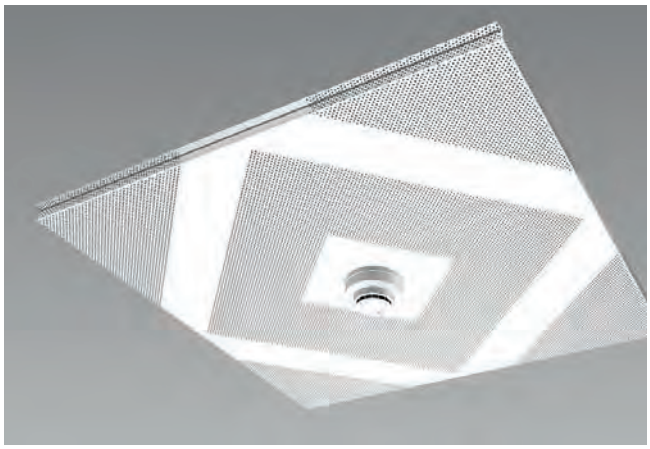
Special Perforations

In addition to the previously shown standard perforations, a multitude of further perforations is possible after clarification.

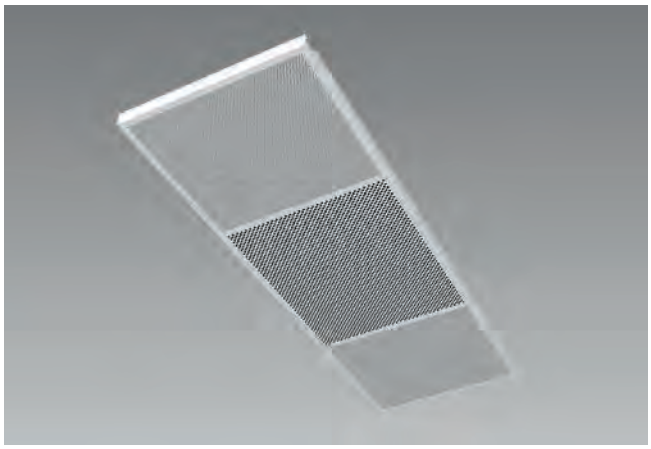


Specific Perforations

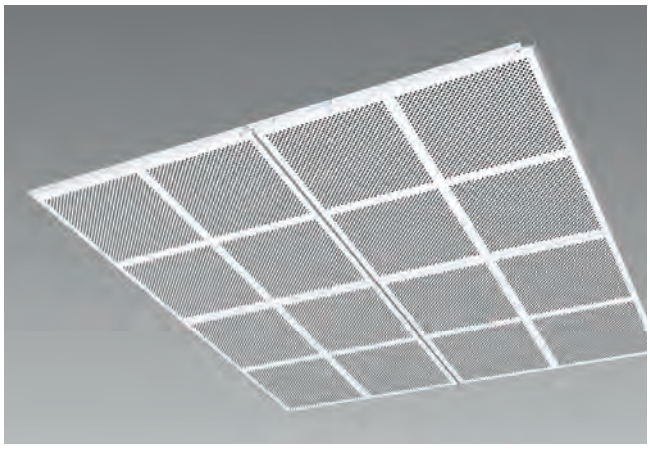
Your metal ceiling is given a particular character due to individual perforations.



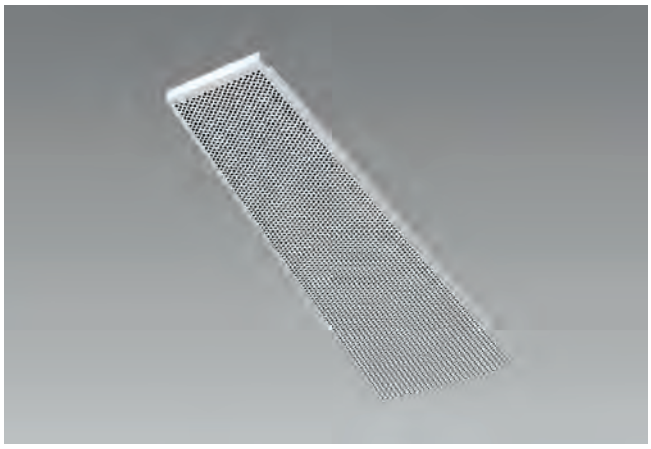
Individual perforation layout



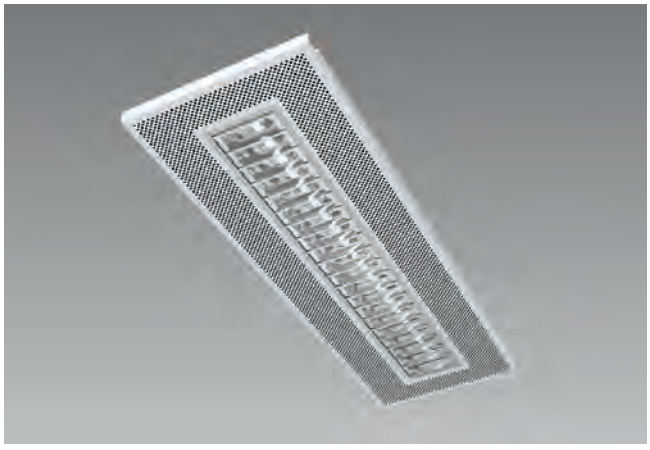
Perforation with multi-panel look.
Increased open area in the central part of the panel (for ventilation purposes)



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

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

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 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

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