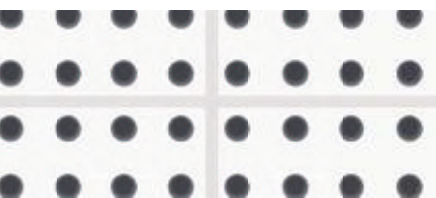


Visible Chamfer



Visible Joints

Clean Lines

Quick panel assembly without joint filling

with air purification
effect as a standard
feature

Easy, quick, reliable

Large-sized acoustic ceilings can finally be implemented completely without any joint finishing operations. The Visible Chamfer system from Vogl Deckensysteme now provides an economic solution for the acoustic design of particularly crack-prone ceilings. But the applicability of the Visible Chamfer is not limited to crack-prone areas; it can also be used to deliberately create a grid design of the ceiling which can, for instance, be mirrored in the greater room geometry. Gymnasiums with their extra-high ceilings now also benefit from a quick and clean solution that works without any joint finishing operations.



Benefits of the Visible Chamfer system:

The circumferential Visible Chamfer (2 x 2 mm) of the acoustic design ceiling enables fast and cost-efficient installation without joint finishing:

- Quick mounting of panels – "edge-to-edge"
- Significant time savings
- No joint finishing necessary
- Maximum crack resistance due to virtually jointless design
- With standard air purification effect
- Ceilings ready for painting within shortest time

Framework



Ceiling panel



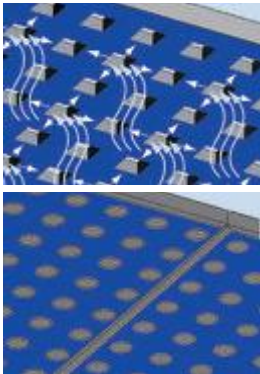
Finish



System-inherent reliability

Upon request, Vogl Deckensysteme will deliver all materials required to produce ceilings with finished surfaces. High-quality building materials from framework to finishing assure top results at the assembly site.





Vogl acoustic design panels of the Visible Chamfer system are perforated ceiling panels with high acoustic performance and air purification effect (adsorption).
 Black or white acoustic fleece backing (other fleece colours on request), four-side as a Visible Chamfer for installation by means of the quickest and most reliable "edge-to-edge" installation principle.

Other available options: Acoustic design panels with non-perforated edges, block perforation, applications, manufacture in accordance with customer designs and ceiling plans.

Based on standard: EN 14190 "Gypsum plasterboard products from reprocessing"
Fire rating: A2-s1, d0 (non-flammable) according to EN 13501-1
Long edge: Visible Chamfer 2 x 2 mm
Short edge: Visible Chamfer 2 x 2 mm



Illustration	Item number	Description	Details	m ² /pallet Pcs./pallet
	7101101110	Acoustic Design Panel Visible Chamfer 6/18R Acoustic fleece, black	1,188 x 1,998 x 12.5 mm	59.3 m ²
	7101101120	Acoustic Design Panel Visible Chamfer 6/18R Acoustic fleece, white	Perforated area: 8.7 % Mass: 9.1 kg/m ²	25 pieces
	7101102110	Acoustic Design Panel Visible Chamfer 8/18R Acoustic fleece, black	1,188 x 1,998 x 12.5 mm	59.3 m ²
	7101102120	Acoustic Design Panel Visible Chamfer 8/18R Acoustic fleece, white	Perforated area: 15.5 % Mass: 8.5 kg/m ²	25 pieces
	7101103110	Acoustic Design Panel Visible Chamfer 10/23R Acoustic fleece, black	1,196 x 2,001 x 12.5 mm	59.8 m ²
	7101103120	Acoustic Design Panel Visible Chamfer 10/23R Acoustic fleece, white	Perforated area: 14.8 % Mass: 8.5 kg/m ²	25 pieces
	7101104110	Acoustic Design Panel Visible Chamfer 12/25R Acoustic fleece, black	1,200 x 2,000 x 12.5 mm	60.0 m ²
	7101104120	Acoustic Design Panel Visible Chamfer 12/25R Acoustic fleece, white	Perforated area: 18.1 % Mass: 8.2 kg/m ²	25 pieces
	7101105110	Acoustic Design Panel Visible Chamfer 15/30R Acoustic fleece, black	1,200 x 1,980 x 12.5 mm	59.4 m ²
	7101105120	Acoustic Design Panel Visible Chamfer 15/30R Acoustic fleece, white	Perforated area: 19.6 % Mass: 8.0 kg/m ²	25 pieces
	7101106110	Acoustic Design Panel Visible Chamfer 8/12/50R Acoustic fleece, black	1,200 x 2,000 x 12.5 mm	60.0 m ²
	7101106120	Acoustic Design Panel Visible Chamfer 8/12/50R Acoustic fleece, white	Perforated area: 13.1 % Mass: 8.7 kg/m ²	25 pieces
	7101107110	Acoustic Design Panel Visible Chamfer 12/20/66R Acoustic fleece, black	1,188 x 1,980 x 12.5 mm	58.8 m ²
	7101107120	Acoustic Design Panel Visible Chamfer 12/20/66R Acoustic fleece, white	Perforated area: 19.6 % Mass: 8.0 kg/m ²	25 pieces
	7101108110	Acoustic Design Panel Visible Chamfer 8/18Q Acoustic fleece, black	1,188 x 1,998 x 12.5 mm	59.3 m ²
	7101108120	Acoustic Design Panel Visible Chamfer 8/18Q Acoustic fleece, white	Perforated area: 19.8 % Mass: 8.0 kg/m ²	25 pieces
	7101109110	Acoustic Design Panel Visible Chamfer 12/25Q Acoustic fleece, black	1,200 x 2,000 x 12.5 mm	60.0 m ²
	7101109120	Acoustic Design Panel Visible Chamfer 12/25Q Acoustic fleece, white	Perforated area: 23.0 % Mass: 7.7 kg/m ²	25 pieces
	7101110110	Acoustic Design Panel Visible Chamfer 8/15/20R Acoustic fleece, black	1,200 x 2,000 x 12.5 mm	60.0 m ² *
	7101110120	Acoustic Design Panel Visible Chamfer 8/15/20R Acoustic fleece, white	Perforated area: 9.5 % Mass: 9.1 kg/m ²	25 pieces
	7101111110	Acoustic Design Panel Visible Chamfer 12/20/35R Acoustic fleece, black	1,200 x 2,000 x 12.5 mm	60.0 m ² *
	7101111120	Acoustic Design Panel Visible Chamfer 12/20/35R Acoustic fleece, white	Perforated area: 11.0 % Mass: 8.9 kg/m ²	25 pieces

*Note: Despite being perforated irregularly, random perforation panels still yield a certain linear layout as the abutting panel edges must be non-perforated in any case. This is unavoidable and independent of the workmanship of the specialist contractor.

Primary profiles are rigidly hung from structural soffit with suspended brackets using fixing materials approved by the relevant building authorities. Centre distance and number of suspended brackets, as well as fixation, are subject to site requirements and EN 13964/DIN 18181. CD 60/27 secondary profiles are attached to CD 60/27 primary profiles using cross connectors.

CD 60/27 are extended using straight connectors. For primary grid profiles, always ensure that joint is close to a suspended bracket (max. 100 mm). Joints should generally be staggered.

Plasterboards should be installed in accordance with EN 13964/DIN 18181 and manufacturer's guidelines.

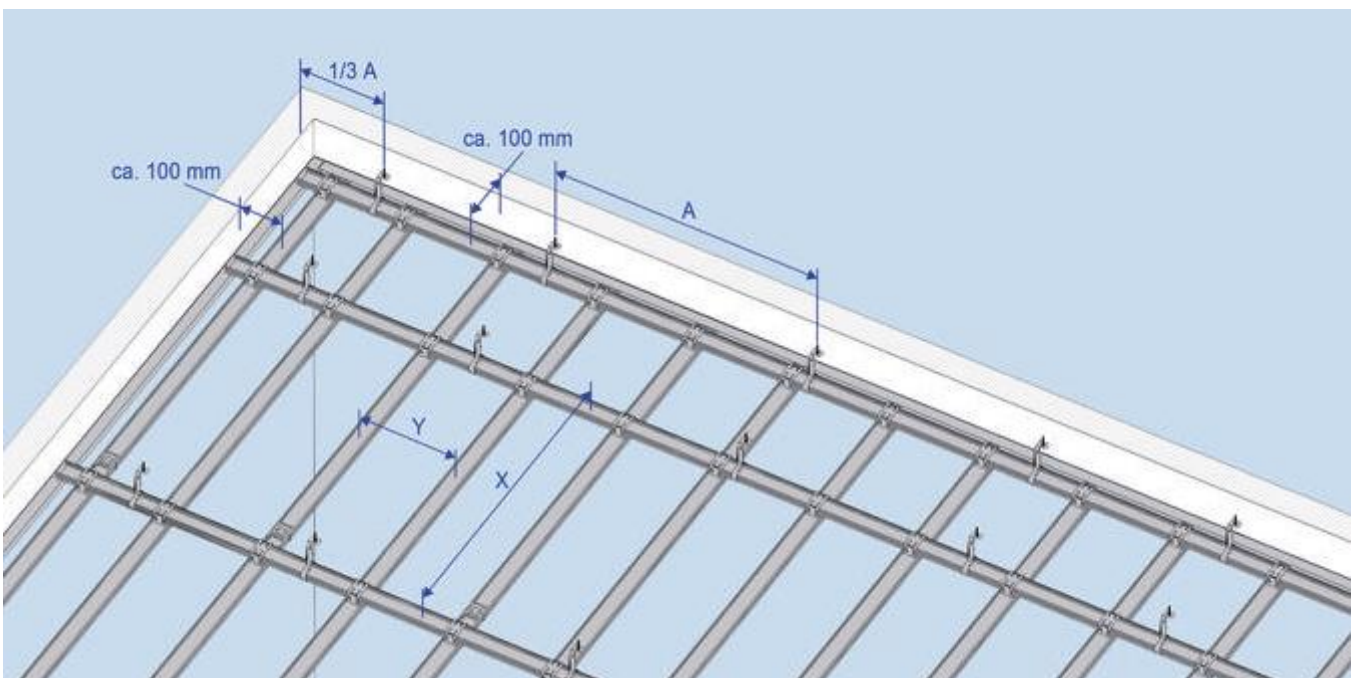
Additional items such as lighting, ventilation, sprinkler systems etc. must be individually suspended.

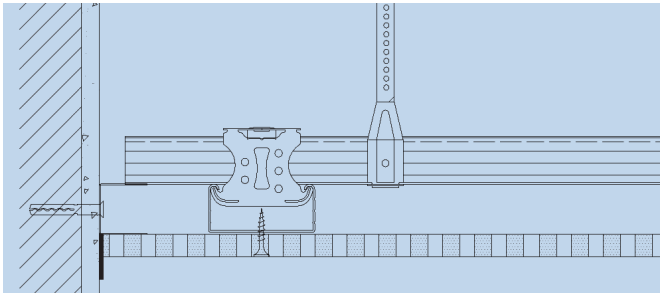
Any changes in the framework owing to integrated ceiling components must be considered.

Block perforations and block slotting require different secondary profile centre distances which are shown in our tables.

Visible Chamfer framework								
Technical data	Unit	Perforated panel ceiling						
Panel thickness	mm	12.5						
Distributed load	kN/m ²	≤ 0.15					≤ 0.30	
Centre distance of suspended bracket A	mm	1,150	1,050	1,000	950	900	900	750
Centre distance of primary profiles X	mm	600	800	900	1,000	1,100	600	1,000
Centre distance of secondary profiles Y	mm	see table below						

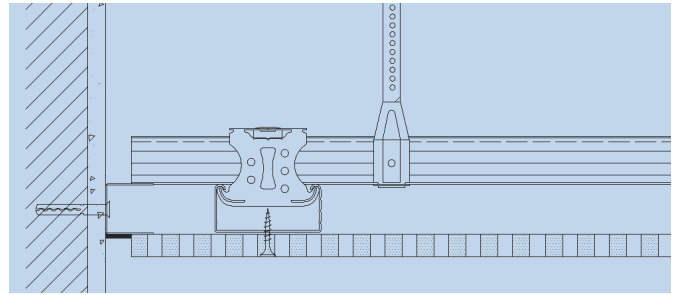
Item	Unit	Centre distance of secondary profiles Y
Acoustic Design Panel 6/18; 8/18; 8/18Q; 10/23; 12/25; 12/25Q; 8/12/50; 8/15/20; 12/20/35	mm	333
Acoustic Design Panel 15/30; 12/20/66	mm	330





Wall connection – rigid:

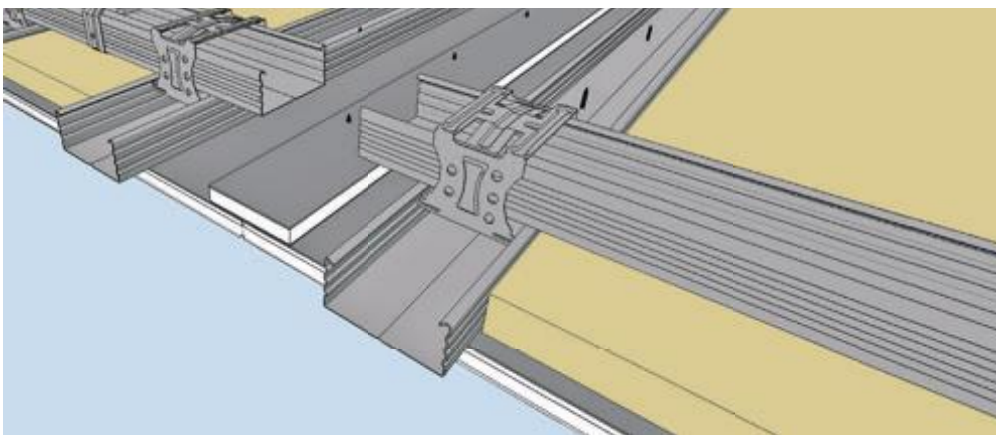
For rigid wall connections, a double layer fleece strip is used to separate acoustic ceiling from wall.



Wall connection – shadow gap:

For wall connections with a shadow gap, the panel is only installed up to the UD profile as this may be covered with a strip of adhesive double layer fleece in order to colour the shadow gap.

Please contact us if you require additional technical details on possible wall connections.



Expansion joints:

To prevent cracking in the ceiling surface, expansion joints have to be provided every 15 linear metres / 150 m² of the ceiling area.

The framework must be completely severed (see illustration) and the panel strips above the joint fixed to one side of the ceiling structure only.

Tip: The panel strip may be covered with adhesive double layer fleece on the visible side if colouring the expansion joint in either black or white is desired.

Material required per m² based on a ceiling of 100 m² (10 m x 10 m, not considering loss or waste, approximate values):

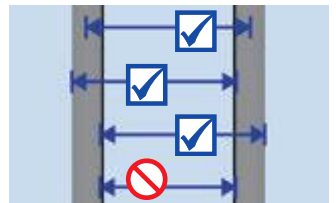
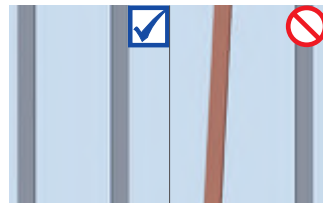
Metal framework, suspended bracket centre distance 1,000 mm, primary profile spacing 900 mm, secondary profile spacing 333 mm

Item number	Item description	Unit	Quantity
Fixation			
Standard	Safety nail, DN 6 x 35	piece	1.3
Suspended brackets			
2016X000	Direct suspended bracket 50/120/200 and	piece	1.3
50809000	Tapping screw LN 3.5 x 9.5	piece	2.6
or			
20128 / 20151	Vernier hanger / vernier bottom part and	piece	1.3
25501000	Vernier security pin and	piece	1.3
25XXX000	Vernier top part, 200 - 2,000 mm, custom lengths on request	piece	1.3
Profiles and connectors			
100XX000	CD profile 60/27/0.6 rK, l=XXX mm	m	4.1
10230000	UD profile 28/27/0.6, 3,000 mm	m	0.4
20159000	Connector, lengthwise, CD 60/27	piece	0.8
20135000	Cross connector, CD 60/27	piece	3.3
52130000	Perforated panel screw SN 3.5 x 30	piece	22

Check ceiling framework for rigidity and evenness (using a straight-edge).



Then check ceiling grid CD sections for centre distances and adjust, if necessary. Always mount straight connectors in a staggered manner (see figure). Measure centre distances accurately!



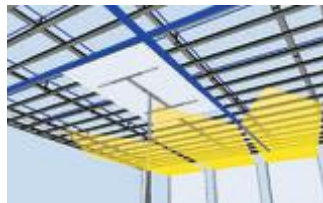
As viewed from entrance area, choose panel arrangement with short edges parallel to windows (main direction of light).



Locate centre of room to position first ceiling panel, also taking into account resulting ceiling perimeter to wall connections.



Get panel to correct position on framework using a panel lifter if working alone, or else another worker's help.



We recommend the following accessories for installation:

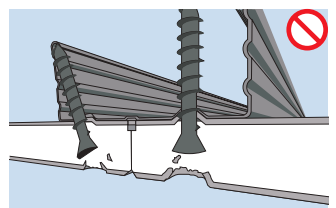
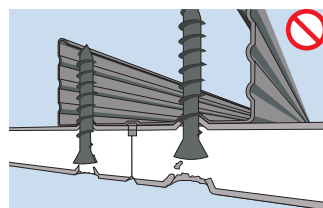
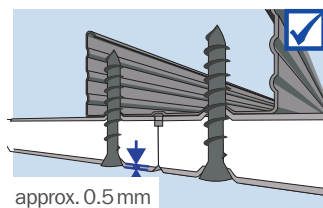
Perforated panel screws, including screw bit

Correct handling of ceiling panels:

- Always take into account the load carrying capacity of the building when storing ceiling panels
- Do not store ceiling panels upright, but always flat on panel pallets
- Always carry ceiling panels with short edges upright
- Protect ceiling panels from moisture; relative humidity should be 40 - 80 %
- Avoid major temperature fluctuations
- Do not expose stored ceiling panels to direct sunlight

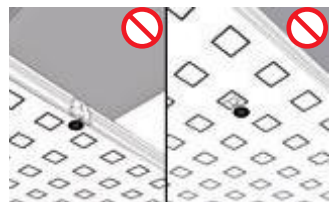
Perforation pattern	Centre distance
Straight round perforation 6/18, 8/18, 10/23, 12/25 Offset round perforation 8/12/50, Straight square perforation 8/18, 12/25, Random perforation 8/15/20, 12/20/35	333 mm
Straight round perforation 15/30 Offset round perforation 12/20/66	330 mm

Screws must be put into panel at right angles and countersunk head screwed down to 0.5 mm below visible surface of ceiling panel.



approx. 0.5 mm

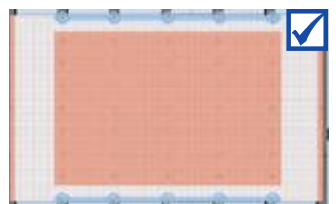
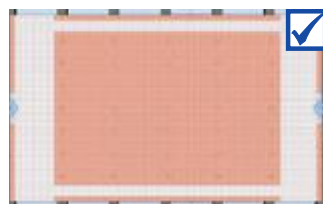
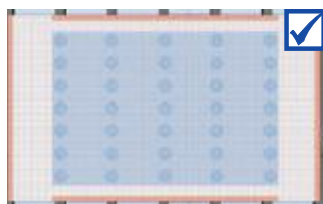
Screws should be spaced maximum 170 mm from fixing point to fixing point. Distance between screw and panel edge not to exceed 26 mm. Avoid damaging acoustic design panels by countersunk heads.



max. 170 mm

max. 26 mm

First, screw ceiling panel to framework in centre of panel, then lower panel lifter and fix a screw in centre of each short edge before finally screwing down long edges.



Take note of panel labelling (stamp and mount in direction of reading (all stamps should point in same direction).



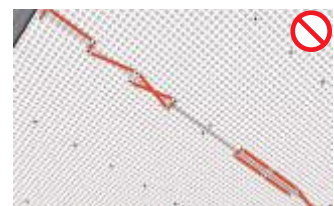
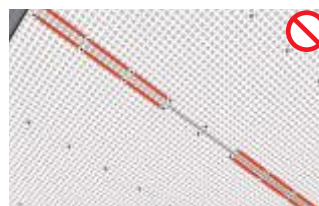
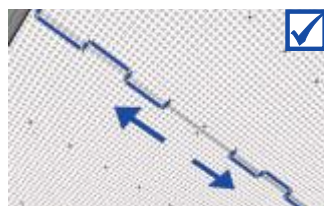
Use CD profile or straightedge as end stop. Position next panel by sliding it to first alongside CD profile / straightedge and fix in place.



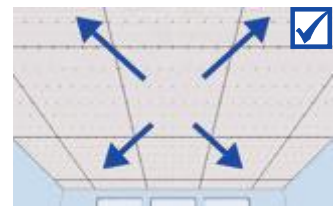
General site conditions / Manufacturer's instructions:

- Take movement joints of building structure into account
- Plan to include expansion joints after approx. every 15 m or approx. 150 m²
- Cardboard layer must not be penetrated by screws, but merely displaced downwards
- Working temperature should be at least +10 °C and job site temperature not below +5 °C
- Place any damping (mineral wool layer) directly onto the ceiling panels
- After installing the ceiling panels, screw heads have to be filled and sanded

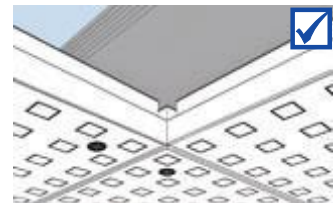
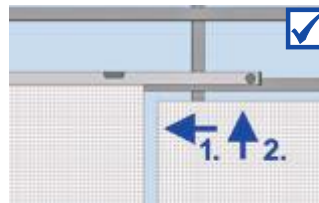
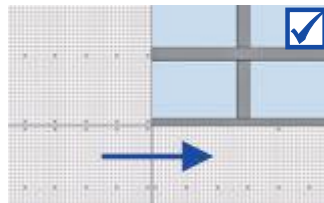
Fix screws in panel joint area using alternating pairs across panels ("zig-zag" principle), starting left or right next to screw which has already been fixed. This will create flush joint areas.



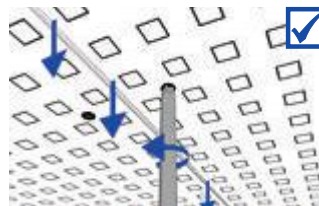
Install ceiling panels first lengthways, then crossways, resulting in cross arrangement on ceiling. Cover remaining areas in same manner, working from centre of room outwards.



Lay remaining ceiling panels edge-to-edge, always checking that joints are level and using "cross joint" system only.

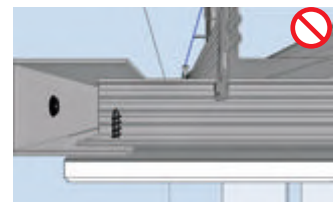
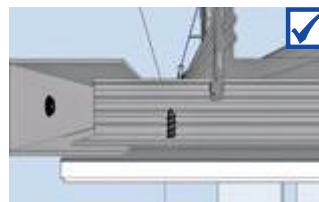
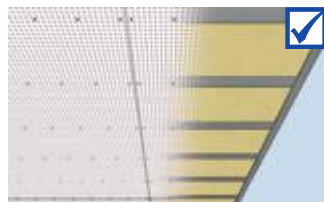


After all panels have been installed, recheck that all joints are level and adjust, if necessary, using a screwdriver. Then check with a straightedge.



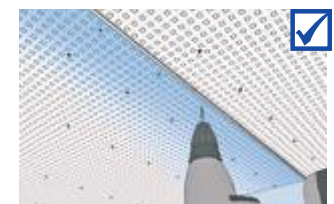
Place any damping layer directly onto back of ceiling panels.

Never screw into the UD28 profile when mounting panels at ceiling perimeter.



Provide for expansion joint of 5 to 10 mm every 15 linear metres / 150 m².

Additional board strip above joint must be screwed down on one side only.



Acoustic Design Panels
 (with air purification effect) – Visible Chamfer system

Suspended ceiling structure, one side clad with Vogl acoustic design panels, backed with sound absorbing fleece, mounted to a rigid ceiling framework of galvanised metal profiles, hung with flush and horizontally aligned suspended brackets and installed using fixing materials approved by building authorities, with or without damping layer depending on building physics requirements. Installation in accordance with manufacturer's instructions, including all connection and jointing work as well as connection and fixing materials.

System structure

Framework in accordance with DIN 18181:2007-02

Profiles:

Pressure-resistant design made from galvanised sheet steel profiles CD 60/27 as primary and secondary profiles in accordance with EN 14195

Suspended brackets:

- Suspend with vernier systems (top part, vernier hanger)*
- Suspend with vernier systems (top / bottom part)*
- Suspend with direct suspended brackets*
- Use fixing materials approved by relevant building authorities.

Connection:

For primary-secondary profile connection with cross connectors, use suspended brackets and cross connectors in accordance with EN 13964.

Suspended bracket centre distance: max. 900 mm,
 Primary profile centre distance: max. 1,100 mm,
 Secondary profile centre distance: 330/333 mm*

Covering:

Acoustic design panels with Visible Chamfer are perforated ceiling panels in accordance with EN 14190, one layer 12.5 mm, laid edge-to-edge and fixed to framework using SN 30 perforated panel screws, with screw spacing max. 170 mm. Vogl acoustic design panels with Visible Chamfer are delivered with a circumferential 2 mm chamfer at panel edges which allows them to be laid "edge-to-edge" without joints. When installing panels, room layout has to be planned carefully since laying grid will be visible after finishing drywall construction due to Visible Chamfer.

Perforation pattern / perforated area / mass per unit area:

- 6/18 round / 8.7 % / 9.1 kg/m²*
- 8/18 round / 15.5 % / 8.5 kg/m²*
- 10/23 round / 14.8 % / 8.5 kg/m²*
- 12/25 round / 18.1 % / 8.2 kg/m²*
- 15/30 round / 19.6 % / 8.0 kg/m²*
- 8/12/50 round / 13.1 % / 8.7 kg/m²*
- 12/20/66 round / 19.6 % / 8.0 kg/m²*
- 8/18 square / 19.8 % / 8.0 kg/m²*
- 12/25 square / 23.0 % / 7.7 kg/m²*
- 8/15/20 round / 9.5 % / 9.1 kg/m²*
- 12/20/35 round / 11.0 % / 8.9 kg/m²*

Distributed load:

- less than or equal to 0.15 kN/m²*
- less than or equal to 0.30 kN/m²*

Fleece backing:

Panels backed with sound absorbing fleece as:

- acoustic fleece, black*
- acoustic fleece, white*

Joint finishing / filling:

Fill screw heads with joint compound flush with the surface and sand. The Visible Chamfer system does not require any additional joint finishing.

Subbase:

- Suspension height: h = mm
- Installation height: h = mm
- Room height: h = mm
- Insulation thickness: th = mm

Complete system: Vogl Deckensysteme, or equivalent

* Delete as applicable

