

Visible Chamfer



Visible Joints

Clean Lines

Quick panel assembly without joint filling

with air purification
effect as standard

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 grid design of the ceiling which can, for instance, be mirrored by other elements of the room. Gymnasiums with their extra-high ceilings now also benefit from a quick and clean solution that works without any joint finishing operations.

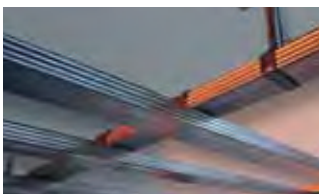


Benefits of the Visible Chamfer system:

The circumferential Visible Chamfer (3 x 3 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

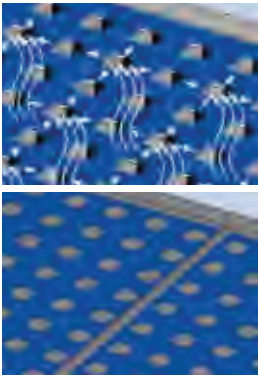


Finish



The all-in-one system 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.





Visible Chamfer acoustic design panels by Vogl 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 sharp-edged as a visible chamfer for installation by means of the quickest and most reliable edge to edge installation principle.

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

Standards: EN 14190 "Gypsum plasterboard products from reprocessing"
Material class: A2-s1, d0 (non-combustible) according to EN 13501
Long edge: Visible Chamfer 3 x 3 mm
Short edge: Visible Chamfer 3 x 3 mm

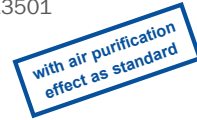


Illustration	Item number	Description	Details	m ² /pallet Panels/pallet
	7101101110	Acoustic design panel Visible Chamfer 6/18R Acoustic fleece, black	1188 x 1998 x 12.5 mm	59.3 m ²
	7101101120	Acoustic design panel Visible Chamfer 6/18R Acoustic fleece, white	Perforated area: 8.7% Mass: 9.1 kg/m ²	25 pcs.
	7101102110	Acoustic design panel Visible Chamfer 8/18R Acoustic fleece, black	1188 x 1998 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 pcs.
	7101103110	Acoustic design panel Visible Chamfer 10/23R Acoustic fleece, black	1196 x 2001 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 pcs.
	7101104110	Acoustic design panel Visible Chamfer 12/25R Acoustic fleece, black	1200 x 2000 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 pcs.
	7101105110	Acoustic design panel Visible Chamfer 15/30R Acoustic fleece, black	1200 x 1980 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 pcs.
	7101106110	Acoustic design panel Visible Chamfer 8/12/50R Acoustic fleece, black	1200 x 2000 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 pcs.
	7101107110	Acoustic design panel Visible Chamfer 12/20/66R Acoustic fleece, black	1188 x 1980 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 pcs.
	7101108110	Acoustic design panel Visible Chamfer 8/18Q Acoustic fleece, black	1188 x 1998 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 pcs.
	7101109110	Acoustic design panel Visible Chamfer 12/25Q Acoustic fleece, black	1200 x 2000 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 pcs.
	7101110110	Acoustic design panel Visible Chamfer 8/15/20R Acoustic fleece, black	1200 x 2000 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 pcs.
	7101111110	Acoustic design panel Visible Chamfer 12/20/35R Acoustic fleece, black	1200 x 2000 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 pcs.

The primary profiles are rigidly hung from the structural soffit with suspended brackets using fixing materials approved by the relevant building authorities.

The centre distance and the number of suspended brackets as well as the fixing material are subject to site requirements and EN 13964/ DIN 18181. The CD 60/27 secondary profiles are attached to the primary profiles CD 60/27 using cross connectors.

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

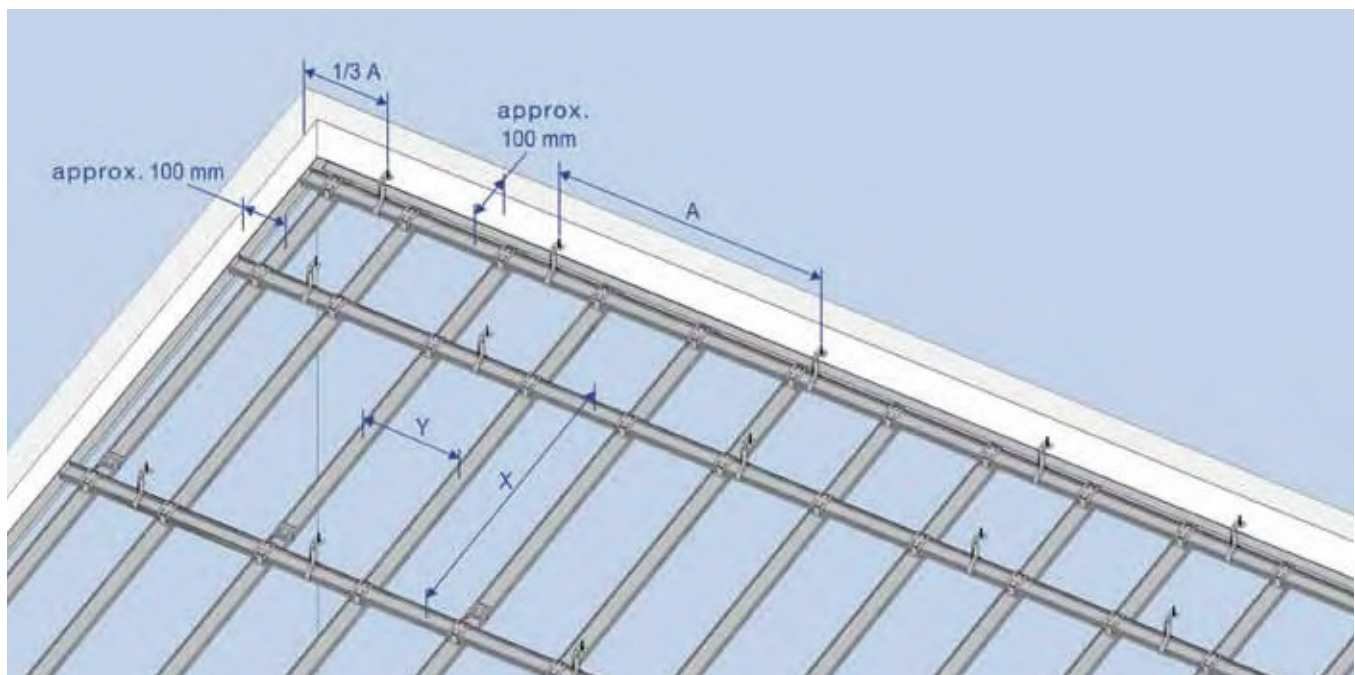
The plasterboards should be installed in accordance with EN 13964/ DIN 18181 and the manufacturer's guidelines.

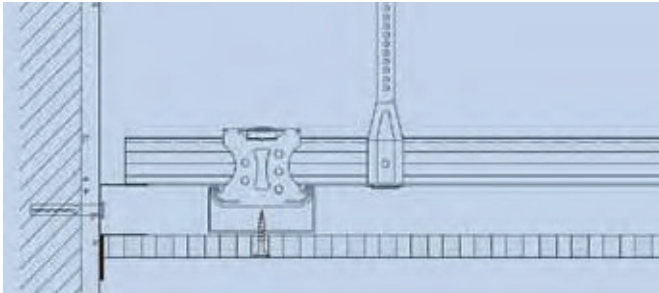
Additional items such as lighting, ventilation, sprinkler systems etc. must be individually suspended.

Any changes in the framework resulting from additional ceiling mounted items must be considered.

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	1150	1050	1000	950	900	900	750
Centre distance of primary profiles X	mm	600	800	900	1000	1100	600	1000
Centre distance of secondary profiles Y	mm	see table below						

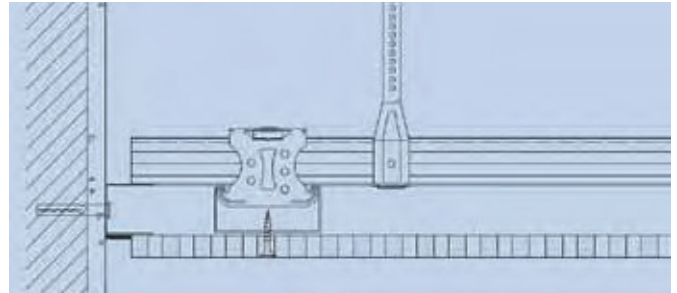
Article	Unit	Centre distance of secondary profiles Y
Acoustic design panel 6/18; 8/18; 8/18Q; 10/23; 12/25; 12/25Q; 8/12/50; 8/15/20; 12/20/35	mm	333
Acoustic design panel 15/30; 12/20/66	mm	330





Wall connection – rigid

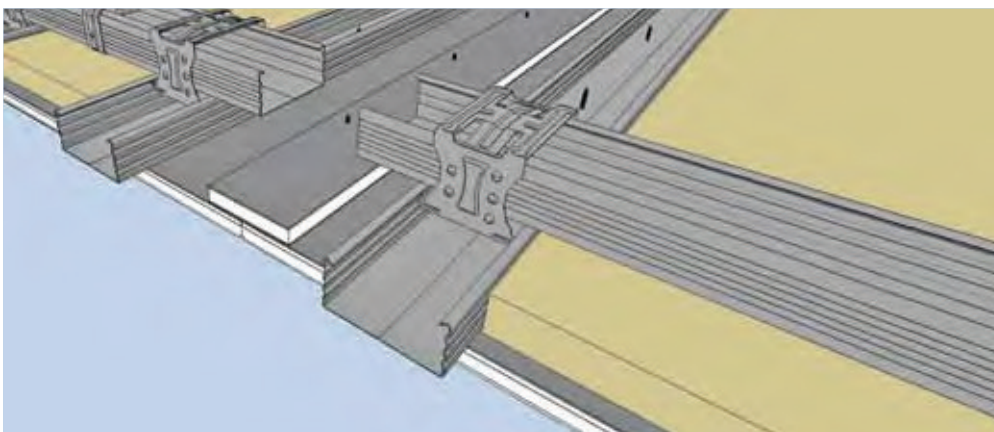
For rigid wall connections, a double layer fleece strip is used to separate the acoustic ceiling from the wall.



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 construction 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):

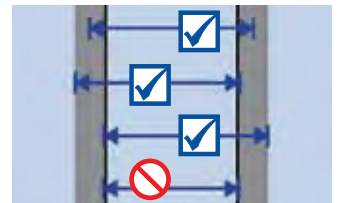
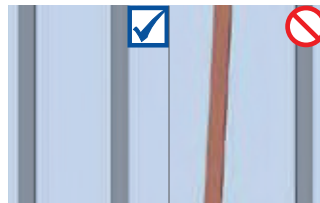
Metal framework, suspended bracket centre distance 1000 mm, primary profile spacing 900 mm, secondary profile spacing 333 mm

Article no.	Article description	Unit	Quantity
Fixation			
Standard	Safety nail, DN 6 x 35	pcs.	1.3
Suspended bracket			
2016X000	Direct suspended bracket 50/120/200 and	pcs.	1.3
50809000	Tapping screw LN 3.5 x 9.5	pcs.	2.6
or			
20128 / 20151	Vernier hanger/vernier bottom part and	pcs.	1.3
25501000	Vernier safety bolt and	pcs.	1.3
25XXX000	Vernier top part, 200 - 2000 mm, custom lengths on request	pcs.	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, 3000 mm	m	0.4
20159000	Connector, lengthwise, CD 60/27	pcs.	0.8
20135000	Cross connector, CD 60/27	pcs.	3.3
52130000	Perforated panel screw SN 3.5 x 30	pcs.	22

Check ceiling framework for rigidity and evenness (using a straightedge).



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 the entrance to the area, choose the panel arrangement with short edge parallel to the windows (main direction of light).



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



We recommend the following assembly accessories:

Perforated panel screws, including screw bit

Correct handling of ceiling panels:

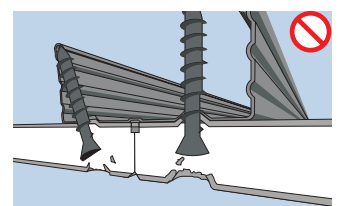
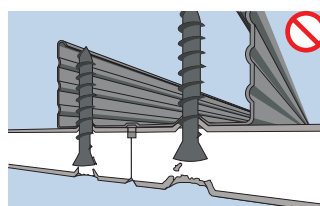
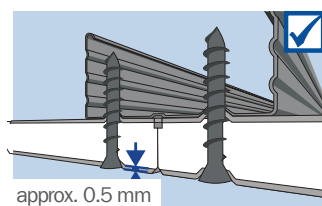
- Always take into account the load carrying capacity of the building when storing ceiling panels
- Do not store ceiling panels upright, but always flat on panel pallets
- Always carry ceiling panels with short edges upright
- Protect ceiling panels from moisture; relative humidity should be 40 - 80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

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

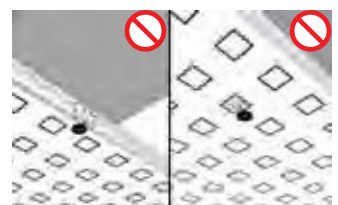


Perforation pattern	Centre distance
Straight round perforation 6/18, 8/18, 10/23, 12/25 Offset round perforation 8/12/50, Straight square perforation 8/18, 12/25 Random perforation 8/15/20, 12/20/35	333 mm
Straight round perforation 15/30 Offset round perforation 12/20/66	330 mm

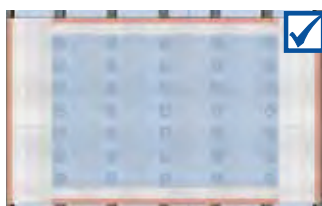
The screw shall be put into the panel at right angles, whereas the countersunk head shall be screwed below the visible surface of the ceiling panel except for 0.5 mm.



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



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



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



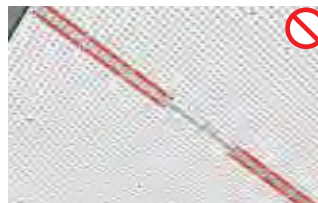
Use the CD profile or the straight edge as an end stop. To bring into position, slide the next panel alongside the CD profile/straight edge and fix.



General site conditions / Manufacturer's instructions:

- Take into account the expansion joints of the building structure
- 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 the screw which has already been fixed. This will create flush joint areas.



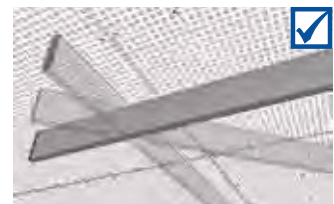
Install ceiling panels first lengthways, then crossways, resulting in a cross arrangement on the ceiling. Cover remaining areas in same manner, working from centre of room outwards.



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

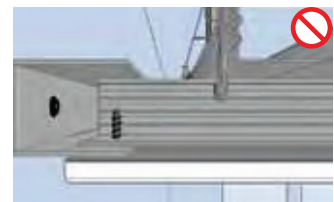
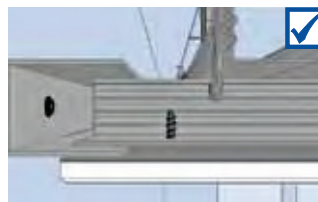


After all the panels have been installed, recheck that all joints are level and adjust, if necessary, using a screwdriver. Then check with a straight edge.



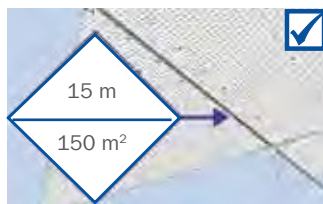
Place any damping layer directly onto back of ceiling panels.

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



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

The additional board strips above the joint must only be fixed on one side.



Acoustic design panels
(with air purification effect) – Visible Chamfer System

Suspended ceiling structure, clad with Vogl acoustic design panels on one side, 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 materials and fixtures approved by the building authorities, with or without damping layer depending on structural requirements, implemented 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:

- Suspended brackets with vernier systems (top, vernier hanger),*
- Suspended brackets with vernier systems (top, base),*
- Suspended brackets with direct suspended brackets, *
- Use fixing materials approved by the relevant building authorities.

Connection:

Use cross connectors for primary-secondary profile connection, suspended brackets and cross connectors in accordance with EN 13964,

suspended bracket centre distance: max. 900 mm,
primary profile centre distance: max. 1100 mm,
secondary profile centre distance: 330 mm / 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 the 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 3 mm chamfer at the panel edges which allows them to be laid edge to edge without joints. When installing the panels, the room layout has to be planned carefully since the laying grid will be visible after finishing drywall construction due to the 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

