

### Note on English translation / Hinweise zur englischen Fassung

This is a translation of the technical data sheet valid in Germany.

All stated details and properties are in compliance with the regulations of the German standards and building regulations. They are only applicable for the specified products, system components, application rules, and construction details in connection with the specifications of the respective certificates and approvals.

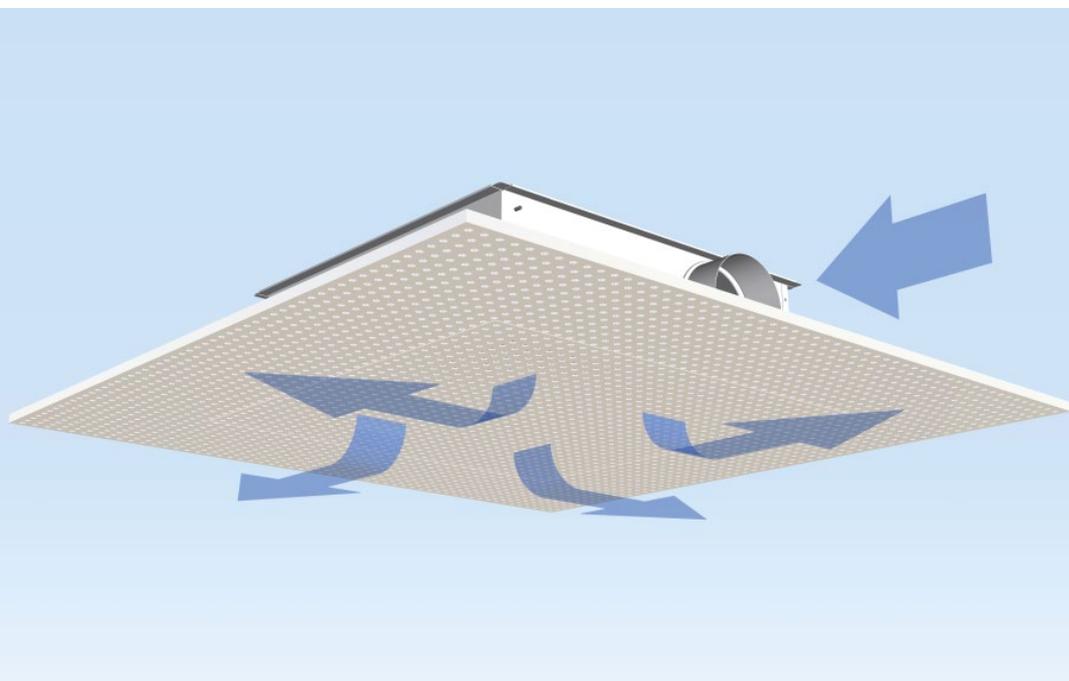
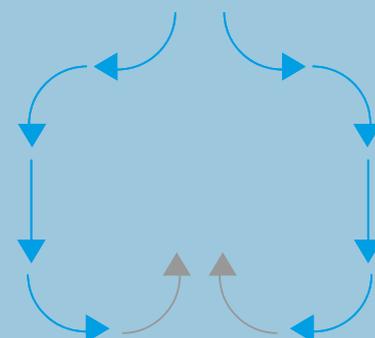
Knauf Gips KG denies any liability for applications outside of Germany as this requires changes acc. to the respective national standards and building regulations.

## Drywall Systems

# E171.de

Product Data Sheet

2017-06



# Air Panel

Design air diffuser for Knauf ceiling systems

### Product description

Air diffuser system especially for Knauf Cleaneo Acoustic board ceilings, consisting of Air Panel and LTG Air Panel Diffuser (available separately from LTG and not included in the scope of delivery).

Air Panel is an air diffuser ceiling element with a clearance of approx. 600 x 600 mm, consisting of:

- An anodised aluminium frame with openable and fully detachable hatch
- Integrated, paper liner laminated sheet metal perforated plate for centring and lateral sealing of the LTG Air Panel Diffuser. Surrounding slip mount matched to standard perforation pattern 12/25 R, 12/25 Q, 8/18 R or 8/18 Q. Further perforations on request.

Outer frame and hatch of the Air Panel are reinforced on the rear side using corner connectors. The hatch is fixed flush with the outer frame using special locks and hinge brackets. A joint width of only approx. 1 mm is visible between the outer frame and the hatch when fully mounted.

LTG Air Panel Diffuser is an air diffuser for effective ventilation and optimum comfort in rooms in conjunction with Air Panel.

### Properties and added value

- Almost invisible air diffuser element
- Effective and 360° draught-free ventilation of rooms
- Pleasant climate in the room with an even temperature distribution
- Perforated board design
- Low fitted height (210 mm)
- Easy to install
- System components of the suspended Knauf ceiling systems

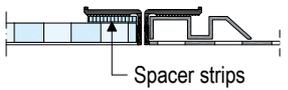
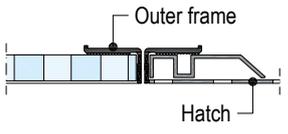
### Field of application

Installation, for example, in Knauf Cleaneo Acoustic Board Ceiling D127.de (with additional grid/trimmer) or Knauf board ceilings D11.de with a cladding thickness of 12.5 mm. The Knauf Cleaneo Acoustic boards must feature a black fibre fleece lining.

Connection to ventilation ducts with a nominal diameter of 125 mm.

**Application**

**Installation**

Air Panel cladding	
10 mm Knauf Cleaneo Acoustic Thermoboard	
12.5 mm Knauf Cleaneo Acoustic board	

**Air Panel**

It is installed together with the grid. Design the cut-out to be 4 mm larger than the dimension (= clearance) of the Air Panel. Arrange additional trimmers made of CD channels in accordance with the dimensions of the Air Panel, maintain distances between cut-out section and trimmer of 30 mm and maximum 50 mm. Mount 4 additional rigid suspenders in the corner areas of the Air Panel. Additional suspenders are required for trimmers on suspended ceiling profiles. Place outer frame of the Air Panel in the opening, lay it on the cladding, align and screw attach. Use counter-sunk screws TN for the attachment of the frame to the cladding. Subsequently, insert the hatch and check the lock for proper functioning.

**LTG Air Panel Diffuser**

Insert the LTG Air Panel Diffuser into the opening, place on the profiles of the furring channel of the ceiling grid and flap out the lateral safety supports. After connection of the ventilation duct (nominal diameter 125 mm), close the lateral safety supports and centre the LTG Air Panel Diffuser over the opening. When the hatch of the Air Panel is closed, the LTG Air Panel Diffuser is sealed by the slip mount.

**Joining**

Fill the joint to the exterior frame of the Air Panel with Uniflott.

**Cleaning**

Clean the outer frame and hatch thoroughly.

**Coatings and linings**

Surface treatment of the Air Panel hatch according to System Data Sheet D12.de Knauf Cleaneo® Acoustic Board Ceilings.

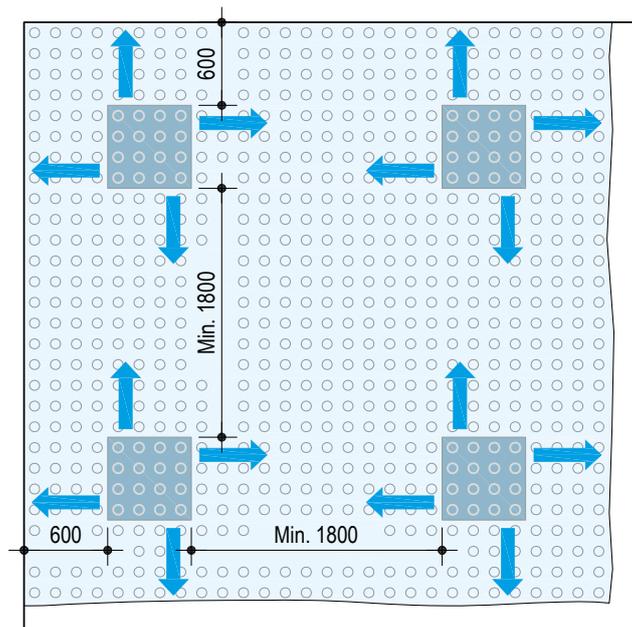
**Notes for the painter**

Generally remove the hatch before coating and paint separately using the same tool and the same paint so that no paint penetrates the narrow joint between the hatch and the outer frame. Paint the cover from below also. A short pile roller is recommended for applying the paint.

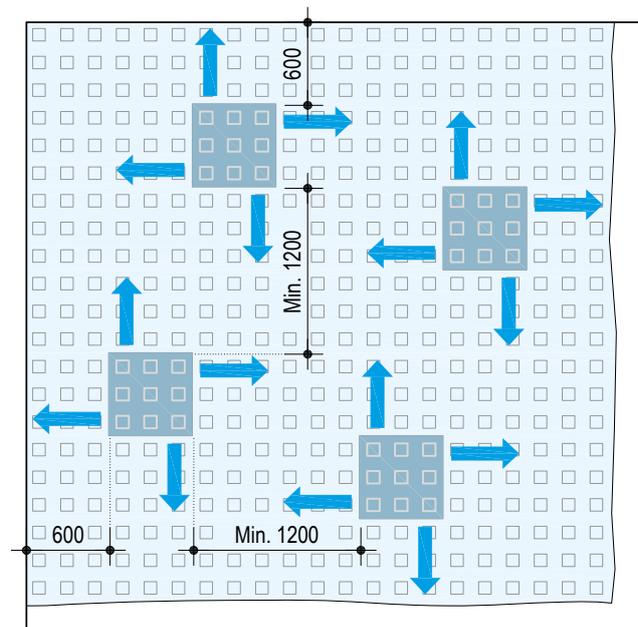
Notes
At least 4 screws per frame side. No cladding board joints are allowed near the Air Panel.
Observe the installation instructions enclosed with the product. Construct the Knauf systems in accordance with the currently valid Knauf System Data Sheets.

**Arrangement of the air outlets**

**Linear arrangement**



**Offset arrangement**



Scheme drawings, all dimensions in mm

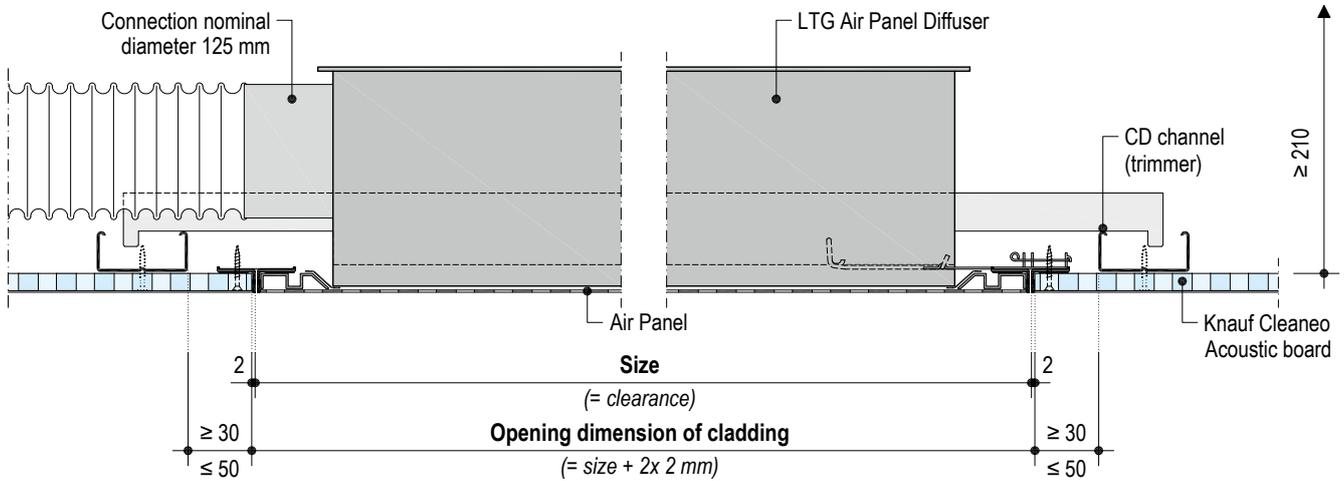
- Minimum clearances
- The number per room depends on the required air volume

Installation in Knauf Cleano Acoustic Design Ceilings D127.de

Scheme drawings, all dimensions in mm

E171.de-V1

e.g. Design 12.5 mm – with Knauf Cleano Acoustic board, vertical section, precise dimension dependent on the perforation

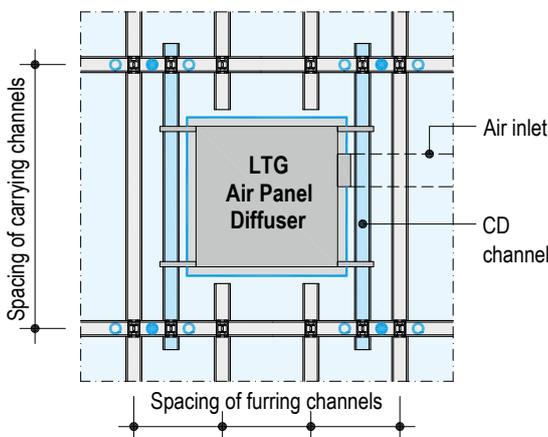
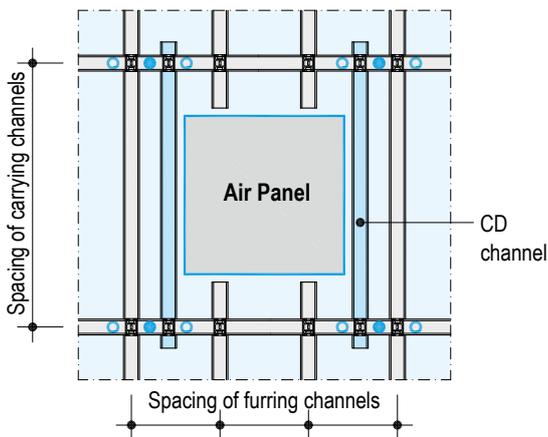


1) Clearance to basic ceiling / installations

Example, scheme drawing

Installation in Knauf ceiling system D127.de

Double layer profile grid



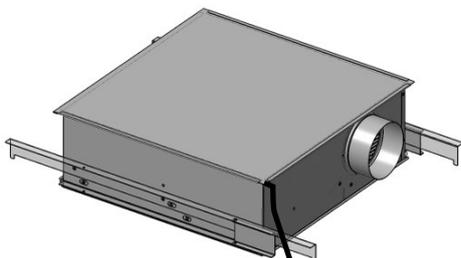
- Additional grid
- 4 additional suspension points (e.g. Nonius suspension)
- Alternative suspension points

Universal connectors are required for the trimmers. Further suspenders are required if the suspended profiles are to be exchanged.

View from underside of ceiling

Standard square perforation	
8/18 Q	12/25 Q
Standard circular perforation	
8/18 R	12/25 R

Determination of the air volumes via the static pressure



**Pressure measurement nipple**  
(Static pressure in air box)

- Static pressure measurement on measurement nipple indicates 10.8 Pa
- From diagram 1 the result is a flow rate of 170 m<sup>3</sup>/h
- From diagram 2 the result is a sound power level of L<sub>WA</sub> = 30 db(A)



Diagram 1

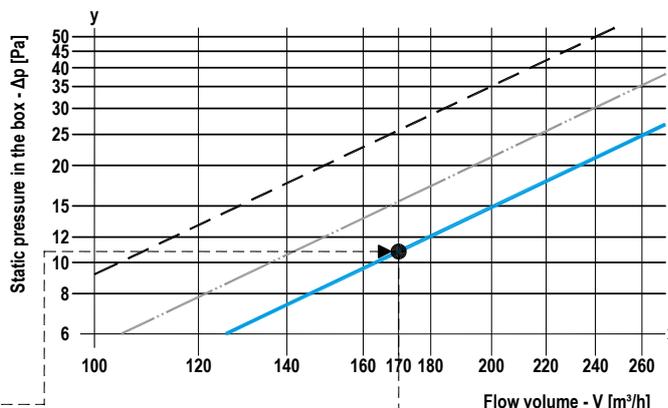
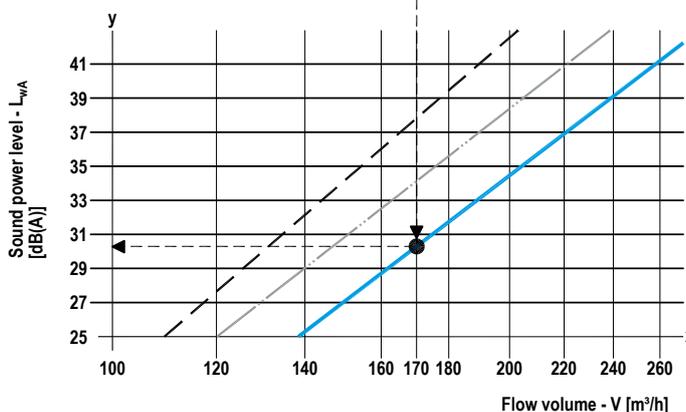


Diagram 2



- All restrictor elements open
- - - One restrictor element closed
- - - Two restrictor elements closed

Product range

Description	Width x length mm	Packaging unit	Material number	EAN
Air Panel 8/18 R	613 x 613	1 piece	00522775	4003982341730
Air Panel 8/18 Q	613 x 613		00522776	4003982341747
Air Panel 12/25 R	601 x 601		00522778	4003982341860
Air Panel 12/25 Q	601 x 601		00522779	4003982341754
Air Panel 8/18 R / 8/18 Q / 12/25 R / 12/25 Q	Customized		00522780	4003982341761

**Note** Address for purchase of LTG Air Panel Diffuser  
 LTG Aktiengesellschaft  
 Grenzstraße 7  
 70435 Stuttgart, Germany  
 Tel.: +49 (0)711/3142167 | Fax: +49 (0)711 / 8201720  
[www.ltg-ag.de](http://www.ltg-ag.de)



The iPad App Knauf Infothek now provides all the current information and documents from Knauf Gips KG at any time and in every location in a clear and comfortable way.  
**Knauf Infothek**

**Knauf Direct**  
 Technical Advisory Service:

▶ [knauf-direkt@knauf.de](mailto:knauf-direkt@knauf.de)

▶ [www.knauf.de](http://www.knauf.de)

**Knauf Gips KG** Am Bahnhof 7, 97346 Iphofen, Germany

All technical changes reserved. Only the current printed instructions are valid. The stated information represents current state-of-the-art Knauf technology. The entire state of approved engineering rules, appropriate standards, guidelines, and rules of craftsmanship are not included herewith. These and all application instructions have to be adhered to separately by the installer. Our warranty is expressly limited to our products in flawless condition. All application quantities and delivery amounts are based on empirical data that are not easily transferable to other deviating areas.  
 All rights reserved. All amendments, reprints and photocopies, including those of excerpts, require our expressed permission.