

Ceiling Diffuser for efficient and draft-free air distribution.



KE FIBERTEC

AIR THE WAY YOU WANT



FBS Panels.



Ceiling panels for diffuse or directional ventilation.

A characteristic feature of textile duct ventilation is the use of the entire surface area for air distribution. KE Fibertec places great emphasis on supplying uniform and draft-free ventilated air.

KE Fibertec offers ceiling panels for diffuse or directional ventilation with DFC baffles. Creating a healthy indoor air quality in rooms with low ceilings can be a challenge, however, it is possible with FBS panels.



Why choose FBS ceiling panels?

- Fully integrated in suspended ceiling
- Quick and easy installation and maintenance
- A flexible solution that is supplied as single panels or combined into a set of panels to form a pressure chamber (up to 4 panels)
- Available in a variety of Cradle to Cradle approved colours
- Standard article for delivery at short notice

Efficient air distribution.

FBS panels are made of flame retardant textile materials with an impermeable panel top so that air is distributed in the room and not above the ceiling.

The panel top allows for directional control of air into the room.

The entire visible surface is used actively for air distribution which generates low inlet air velocities and thus draft-free air distribution and low pressure loss.

The FBS Panel design is a great advantage for solutions involving cooling or isothermal air distribution.

The panels are available in two types: Type 1, a pure low impulse solution and type 2, a solution with DFC baffles allowing for directional air distribution.

Suitable for rooms with low ceilings.

The panel top is made of textile material and is therefore flexible. That makes a panel solution ideal for rooms with limited headroom above the ceiling and for rooms with low ceilings. In addition, the panels are fully integrated into the ceiling.

Due to the low weight of the panels any additional ceiling suspension is unnecessary, and the panels are installed in the same way as a traditional ceiling panel.

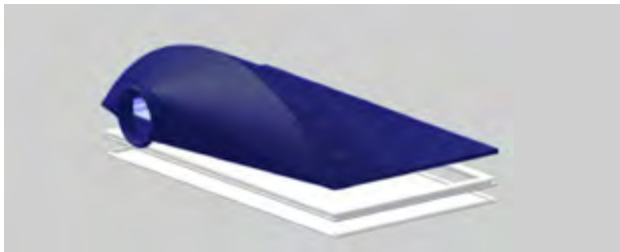
The panels are very suitable for schools, offices, and other comfort environments. Furthermore, they can replace traditional ceiling units.

Various types of suspended ceilings can be found at ke-fibertec.com/fbs.

Types.

The panels are made in sizes 600x600 mm, 625x625 mm, and 1200x600 mm for standard suspended ceilings and come with a flexible socket \varnothing 160-250 mm. 600x600 and 625x625 panels always come with a socket at the end of the panel.

1200x600 panels come with a socket at the side or at the end of the panel. All sizes are available in a version that by means of zippers offers combination options with up to four panels. The panel does not require more room above the ceiling than the socket.



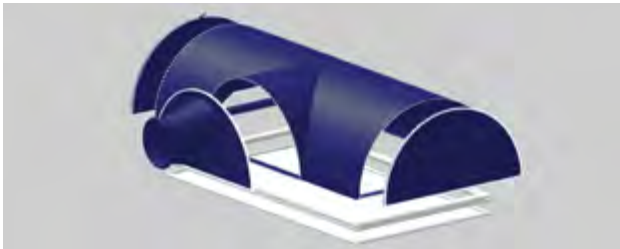
Side

1200x600



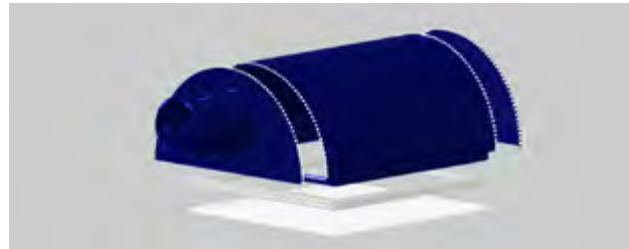
End

600x600 / 625x625 / 1200x600



Combi

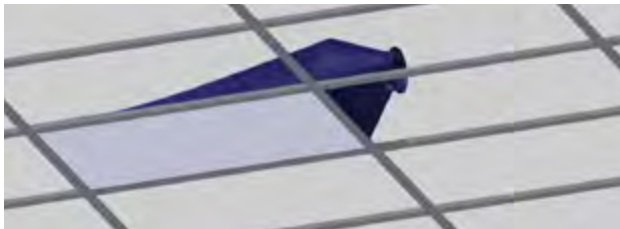
1200x600



Combi

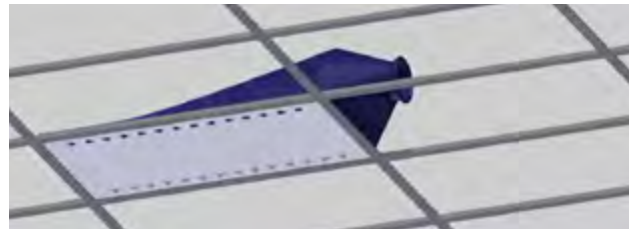
600x600 / 625x625

Side, End and Combi are available with DFC baffles and as a low impulse solution in three different permeabilities, respectively. KE Fibertec also offers other sizes and tailored solutions upon request.



Type 1 Permeable

550 / 775 / 1240



Type 2 DFC baffles

550

Colours.

Pantone/RAL



WHITE
11-0601-TP
/ 9010



BLACK
19-5708-TP
/ 9005



LIGHT GREY
12-4705-TP
/ 9002



DARK GREY
17-4402-TPG
/ 7042



DARK BLUE
19-3864-TP
/ 5002



YELLOW
14-0955-TP
/ 1028



RED
18-1655-TP
/ 3031



Washing.

For washing of the panels only the visible part (bottom) is to be removed from the panel. Tools are not needed. The textile material should be washed at 40°C according to the washing instructions for the material.



Single components.

The FBS Panels consist of three single components that can be easily disassembled and replaced, if needed, without the use of special tools. The flexible product structure makes it easy to change the design if the panels must be moved to another position in the ceiling.

If the top part no longer fits in relation to the supply air duct, you can order a new top part and replace it with another type.

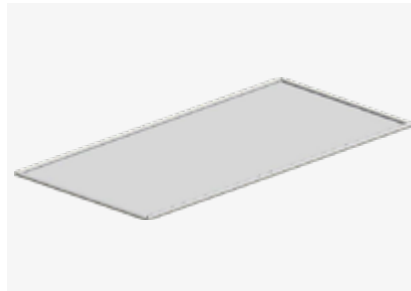
The same goes for the bottom. It can be easily removed and washed, or you can freshen up the design with a new bottom without having to buy a brand new panel.

The FBS Panels can also be used as a 100% diffusion ceiling, ie. where the air is blown into the chamber above the suspended ceiling to diffuse out through the air-permeable panel. In that case, you deselect the top part and only the frame and bottom part are supplied.

1200x600



Top Side / End / Combi



Bottom Type 1 / Type 2

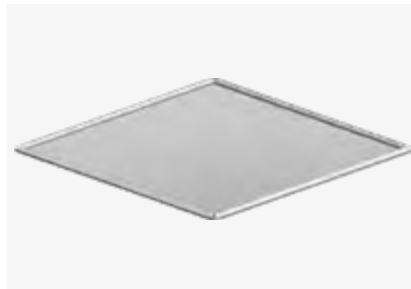


Frame

600x600 / 625x625



Top End / Combi



Bottom Type 1 / Type 2

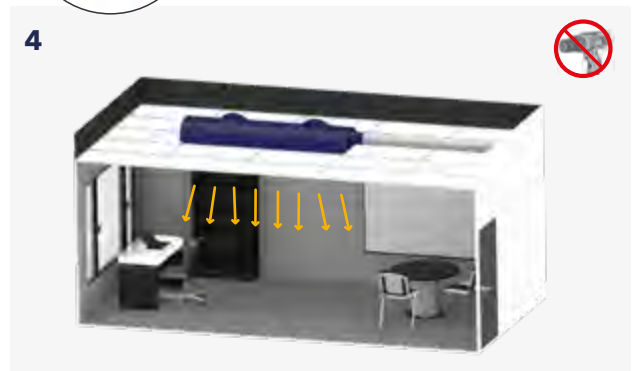
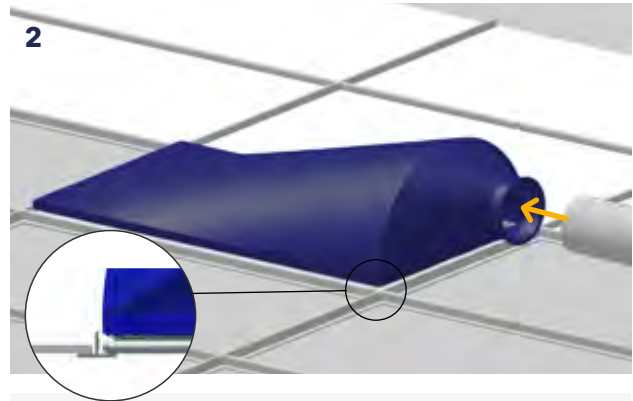


Frame

Installation.

It is important that the FBS Panel can be laid unhindered in the suspended ceiling and rest on the profiles that support the ceiling panels. In this way the FBS Panel will be flush with the ceiling panels.

Do not apply force when placing the panel. Tools are not necessary.

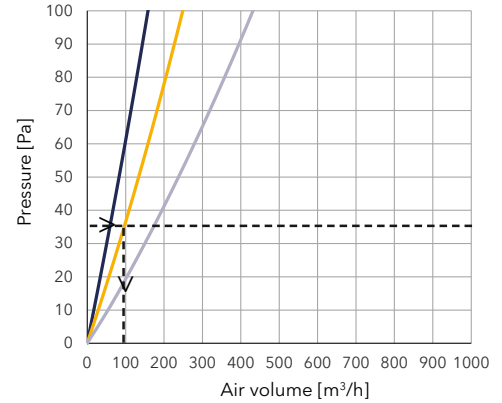
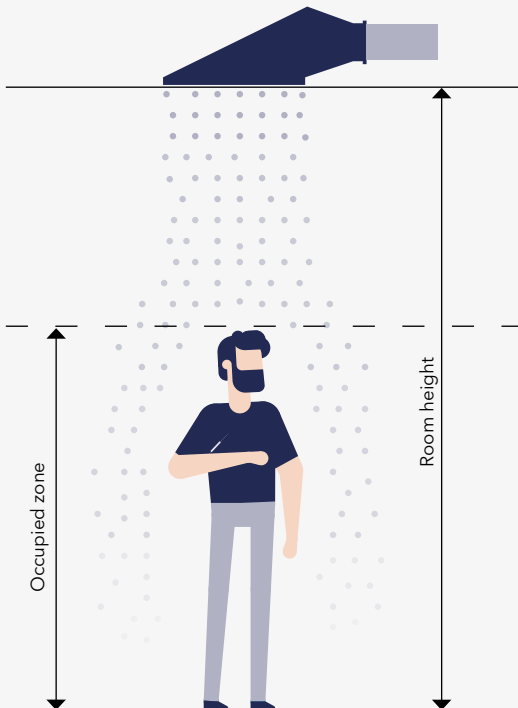


Technical data.

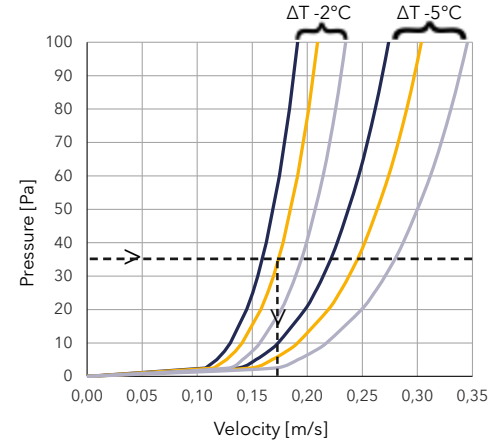
600x600

Example: Type 1 (775) - 600x600

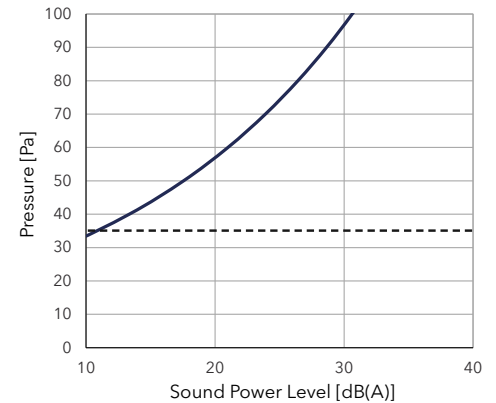
A pressure of 35 Pa and ΔT -2°C will generate an air volume of 100 m³/h, a velocity in the occupied zone of 0.17 m/s, and a sound power level of <10 dB(A), which means that this solution is consistent with the criteria of room category A acc. to EN 1752. Type 2 with baffles will generate a sound power level of 14 dB(A).



● 550 ● 775 ● 1240



● 550 ● 775 ● 1240



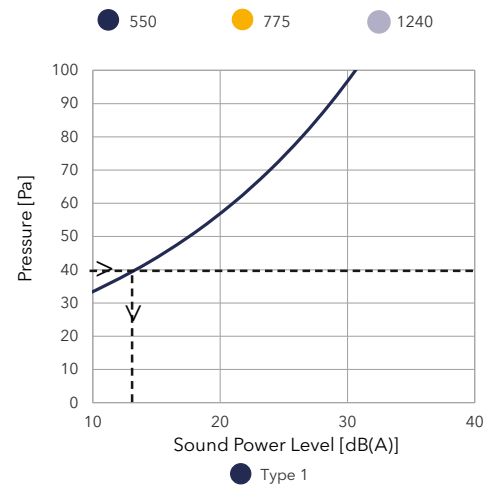
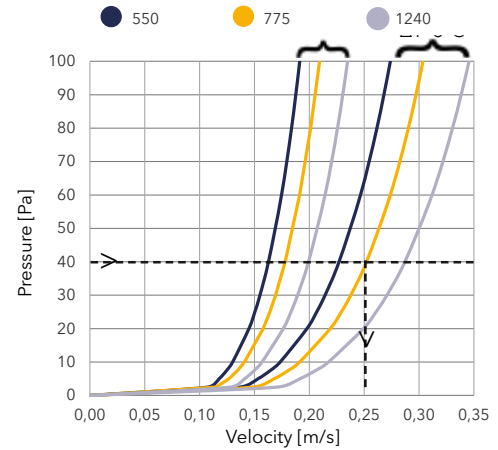
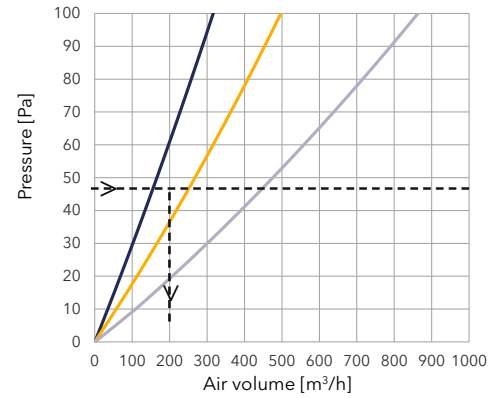
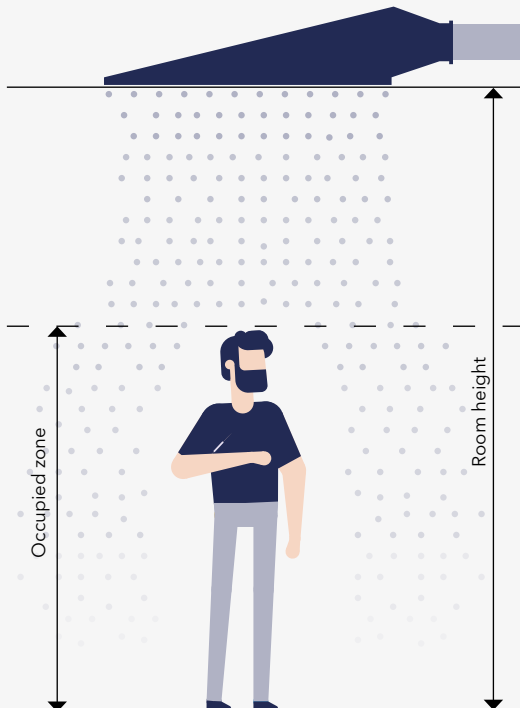
● Type 1

1200x600

Example: Type 1 (775) - 1200x600

A pressure of 40 Pa and ΔT -5°C will generate an air volume of 200 m³/h, a velocity in the occupied zone of 0.25 m/s, and a sound power level of 13 dB(A), which means that this solution is consistent with the criteria of room category B acc. to EN 1752.

Both examples are based on a room height of 2.5 m and an occupied zone of 1.8 m equivalent to a person standing upright.





Delivery.

When ordering FBS panel 1200x600 Side type 1 (775) and 600x600 End type 1 (775), we offer a 48 hour delivery option, i.e. the order is ready for delivery no later than 48 hours upon order confirmation.

Please, note that the maximum number of FBS Panels per delivery is 10.

For other types and/or for larger quantities than 10 panels, our general terms of delivery apply.





BIM components for Revit.

FBS Panels are available as components for Revit.

The components are available for Side and Combi in sizes 600x600 mm and 1200x600 mm and for Side in size 1200x600 mm. All models are made for type 1.

Contact KE Fibertec for further details.

Warranty.

FBS ceiling panels are covered by a 10-year product warranty that covers both materials and operation.

See KE Fibertec's warranty conditions at ke-fibertec.com or contact us for more info.

