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 diffused air or directional ventilation with DFC baffles. Creating a healthy indoor air quality in rooms with low ceilings can be a challenge, however, FBS Panels make this simple.

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 a non-permeable plenum (known as the "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 entirety of the panel's visible surface is actively distributing air, which generates low inlet air velocities and thus draft-free air distribution with low pressure loss.

The FBS Panel design is ideal 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 themselves 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.

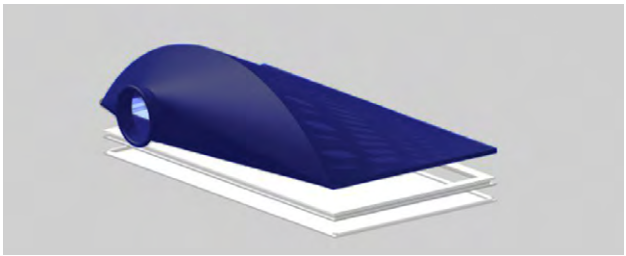
The panels are highly effective in schools, offices, and other comfort environments. Furthermore, they can replace traditional ceiling units.

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

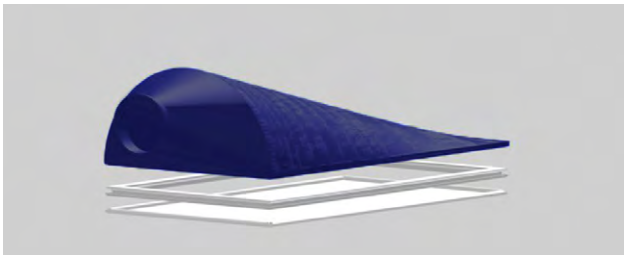
Types.

The panels come in sizes 600x600 mm, 625x625 mm, and 1200x600 mm for standard suspended ceilings and are fitted with a flexible socket Ø160-Ø250 mm. 600x600 and 625x625 panels always come with a socket at the end of the panel.

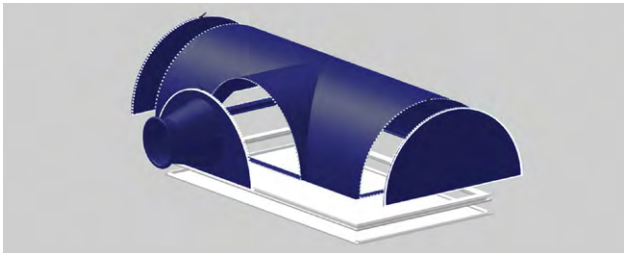
1200x600 panels are fitted with a socket at the side or at the end of the panel. All sizes are available in a version that by means of zippers offers combination options with up to four panels. The panel does not require more room above the ceiling than the socket.



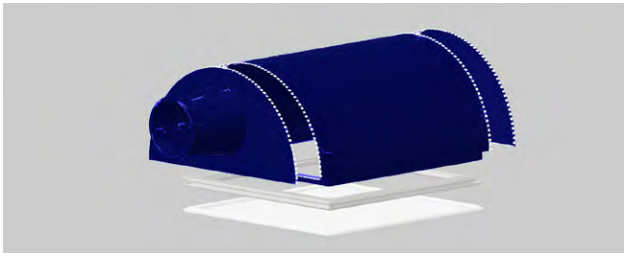
Side 1200x600



End 600x600 / 625x625 / 1200x600

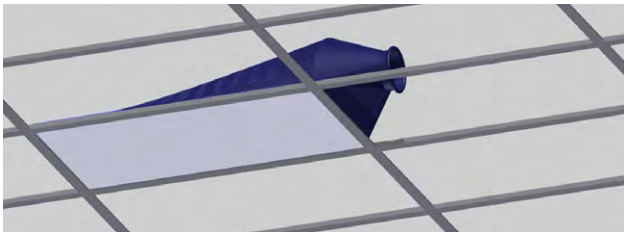


Combi 1200x600

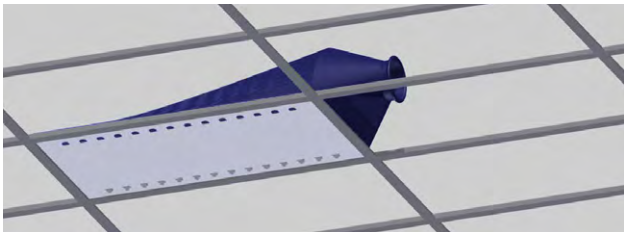


Combi 600x600 / 625x625

Side, End and Combi are available with DFC baffles and as a low impulse (diffusion) 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 (the permeable panel base, known as the "Bottom") needs to be removed from the panel. Tools are not required. 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.

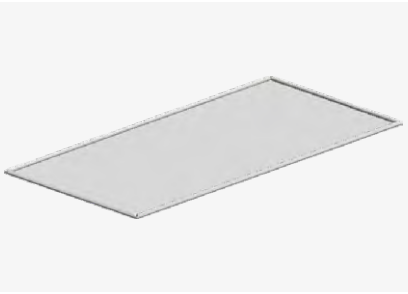
If the "Top" no longer fits in relation to the supply air duct, a new "Top" can be ordered to suit as these can be interchanged.

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.

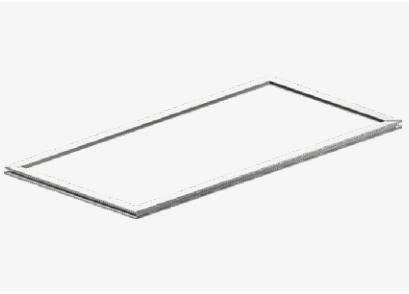
The FBS Panels can also be used exclusively as a diffusion ceiling, ie. where the air is supplied directly into the void above the suspended ceiling to diffuse out through the permeable "Bottom". In that case the "Top" would be removed and only the frame and "Bottom" part would be supplied.

1200x600

Top Side / End / Combi

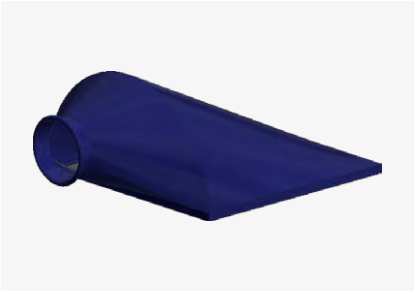


Bottom Type 1 / Type 2



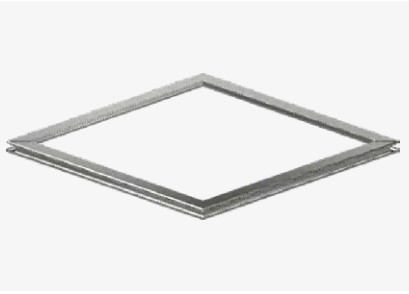
Frame

600x600 / 625x625



Top End / Combi

Bottom Type 1 / Type 2

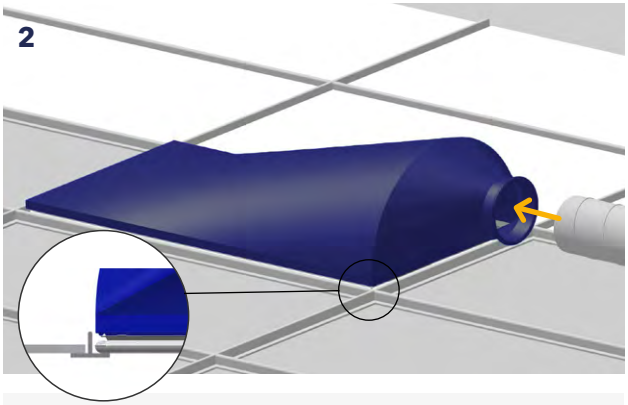


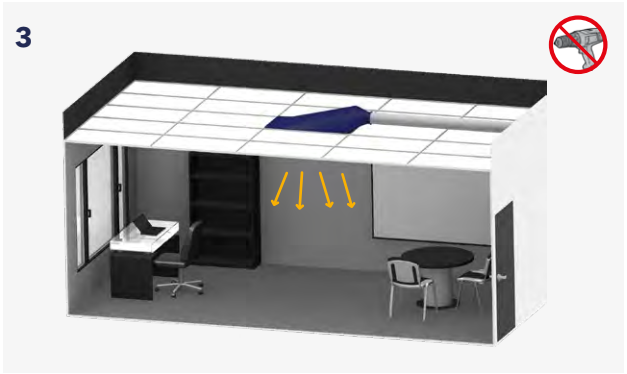
Frame

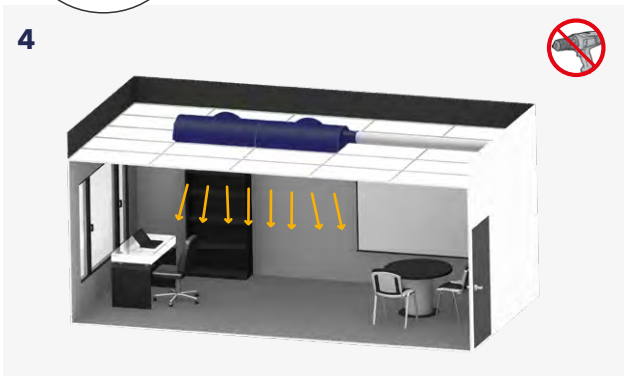
Installation.

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.





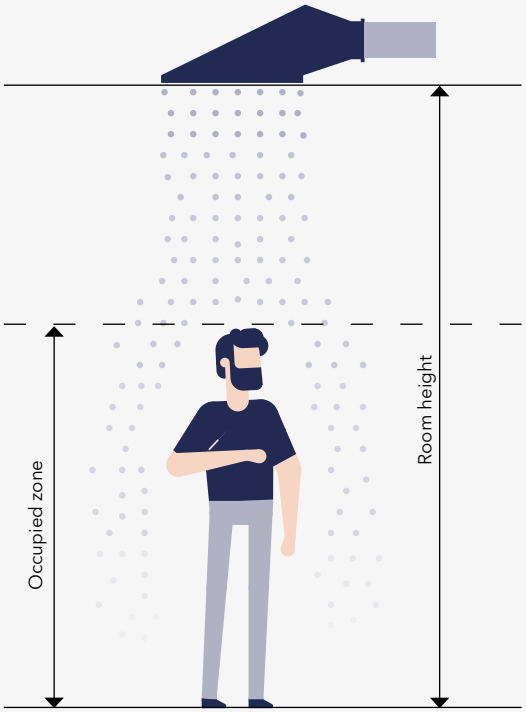


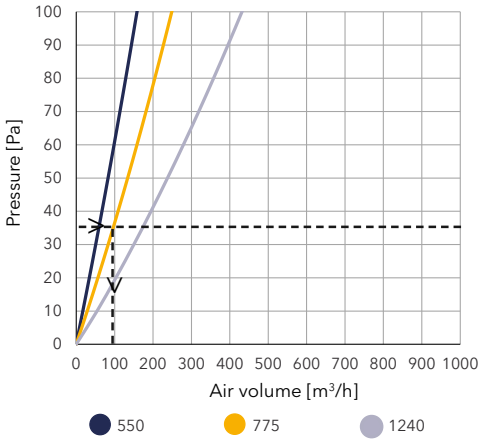
Technical data.

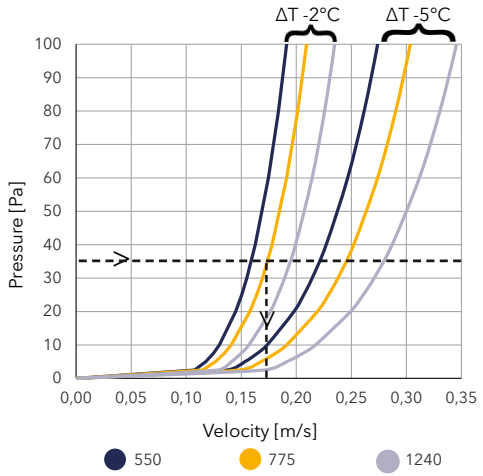
600x600

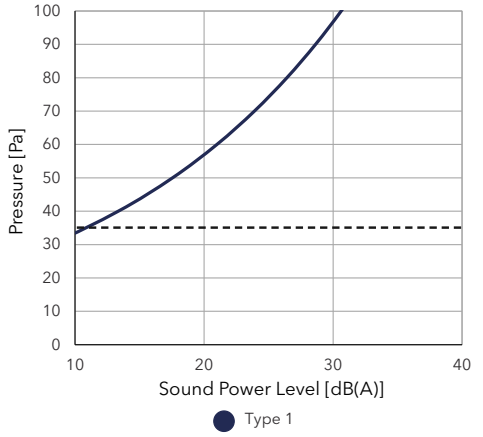
Example: Type 1 (775) - 600x600

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).







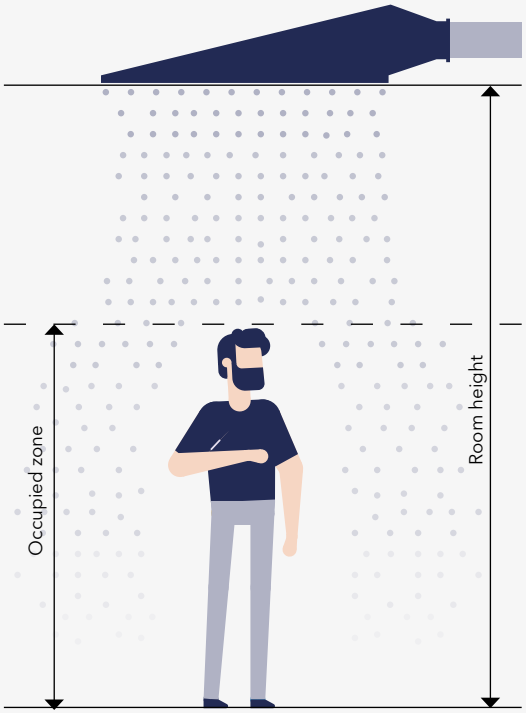


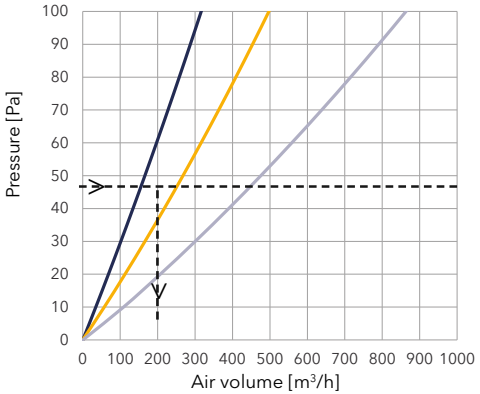
1200x600

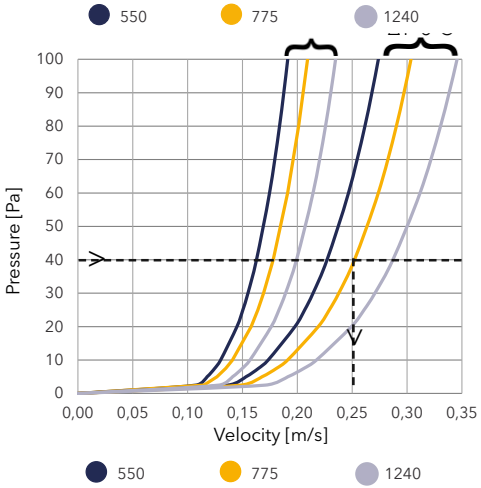
Example: Type 1 (775) - 1200x600

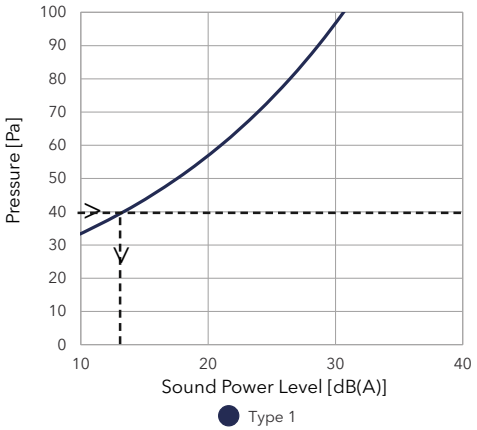
A pressure of 40 Pa and ΔT -5°C will generate an air volume of 200 m³/h, a velocity in the occupied zone of 0.25 m/s, and a sound power level of 13 dB(A), which means that this solution is consistent with the criteria of room category B acc. to EN 1752.

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.









Case.

Caverion in Sweden installed 12 FBS Panels in two conference rooms at the company Bulten, all in size 600x600 and in light grey.

The solution is nicely integrated into the ceiling and aesthetically matches the interior of the room.

Furthermore, FBS Panels are easy to install without any tools and can be easily relocated as necessary.

Project:	Bulten, Sweden
Solution:	Comfort
Customer:	Caverion
Ventilation:	FBS Panels
Material:	GreenWeave

TBV Designer.

With our advanced 3D software, TBV Designer, we are able to offer a tailored solution based on the dimensions of the room and the desired placement of the FBS Panels.

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 information.

KE FIBERTEC

AIR THE WAY YOU WANT

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