



▲ INDULSNAP – EgeTrans, Marbach. Photo © EgeTrans Internationale Spedition GmbH

WALL AIR PASSAGE INDULSNAP



INDULSNAP is the first wall air passage with an integrated cross-talk silencer which is completely concealed in the drywall. Excellent absorption values fulfil the highest demands. The proven INDUL exhaust profile combines great performance with a high level of comfort.



Forum am Hirschgarten, München. Photo © Christian Hacker

WALL AIR PASSAGE INDULSNAP

A versatile ventilation system for supply and extract air with integrated cross-talk silencer

Above all, modern office buildings must be versatile. During the planning and construction phase it is usually not clear whether the office space will later be used as an individual, group or open plan office, or as a conference room. Because of this, the area has to be flexibly partitioned according to the axes of the building. The inlet of supply air and exhaustion of extract air must be correspondingly versatile.

To utilise the height of the building as efficiently as possible, suspended ceilings are often not present, in order to reduce the height between floors to a minimum.

In this instance the supply and extract ducts are usually installed in the hollow ceiling cavities of the corridors, in this case the inlet of supply air and the exhaustion of extract air is logically located in the partition wall to the corridor.

However, the confined space in the corridor cavity makes the use of conventional cross-talk silencers impossible, so that the air passage also has to ensure that cross-talk from one office to the next is absorbed.

The INDULSNAP Wall Air Passage has been designed to meet all of these requirements.

FUNCTION

The INDULSNAP wall air passage consists of a plenum box with an integrated cross-talk silencer and a highly inductive air guide diffuser. The plenum box with an installation depth of only 40 mm was designed so that it is completely concealed in a stud wall construction which is double-panelled on both sides. Due to the offset arrangement of the connection and the air guide rail in combination with an acoustically highly effective interior lining, this results in damping values, which in most cases eliminates the use of sound absorbers to reduce cross-talk noise from office to office. The installation length of 550 mm enables installation in a 625 mm dry-wall grid. INDULSNAP is used as an individual air inlet or exhaust diffuser. If a corridor cavity is constructed in an architectural grid, larger individual INDULSNAP lengths of 860 mm, 1000 mm or 1200 mm can be selected. In this case, INDULSNAP is usually configured as a combined air inlet and exhaust. The diffuser profile, which has been adopted from the INDUL Type V linear diffuser, ensures excellent airflow within the room and achieves air displacement in the entire office up to a room depth of 7 m. In spite of this, a draught-free airflow can be achieved due to the high inductive effect of the exhaust profile. With a possible temperature difference of up to -8 K between the supply air and the room temperature, this enables free cooling and therefore provides great potential for energy saving.



ENERGY

Owing to the high temperature difference, there is excellent energy-saving potential through the use of free cooling.



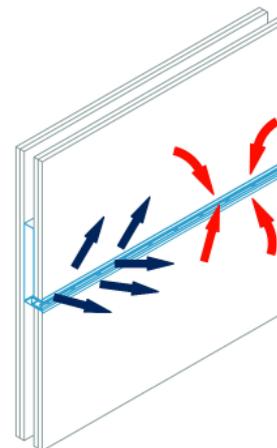
DESIGN

Integration of cross-talk sound attenuators means there is no requirement for corridor space, provision for flexible axes thanks to a combined diffuser for supply and extract air, low floor height as there is no need for suspended ceilings.



TECHNOLOGY

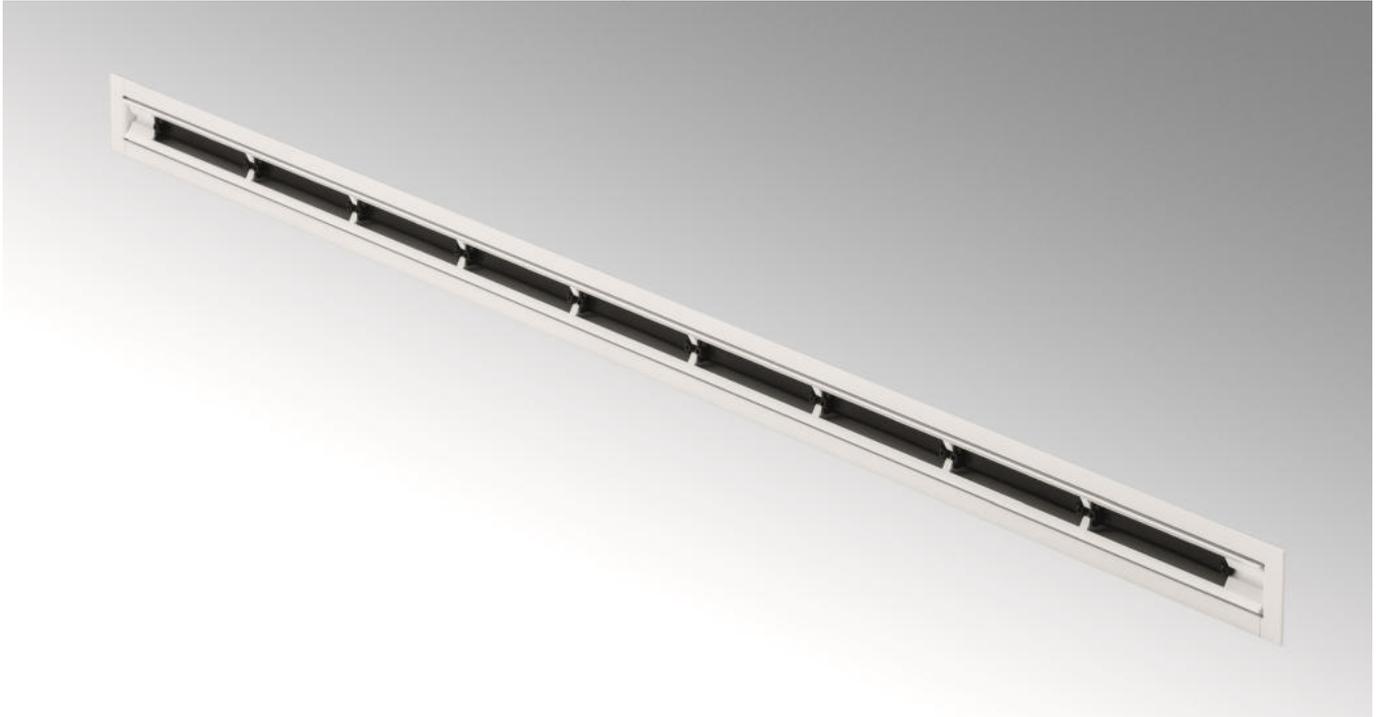
Draught-free air distribution and room flushing to a room depth of 7 m, input attenuation $\geq 34\text{ dB}$ between 125 and 8000 Hz, making cross-talk sound attenuators superfluous.



TECHNICAL DATA

Sizes	24/45 mm slot width
Installation lengths	550, 860, 1000, 1200 mm – standard length on stock special lengths on request
Temperature difference	up to -8 K
Input attenuation	$\geq 34\text{ dB}$
Air flow rate	70 - 250 m^3/hm

Further information can be found on www.kieferklima.de/en/indulsnap



INSTALLATION SITUATION INDULSNAP

As standard, INDULSNAP is intended for installation in drywalls with a wall thickness of more than 100 mm. However, greater wall thicknesses can be easily accommodated by using a support extension. Installation is carried out in two steps. First of all, the plenum box, which is equipped with dust protection, is integrated into

the wall structure during the drywall construction. Once the drywall construction and painting are complete, in the second step the air guide rail is simply inserted into the plenum box by means of a snap-in fastening. This eliminates entry of dirt into the INDULSNAP during the construction phase.



Type INDULSNAP V24

Single-slot version for flow rates of 70 to 150 m³/hm



Type INDULSNAP V45

Two-slot version for flow rates of 140 to 250 m³/hm

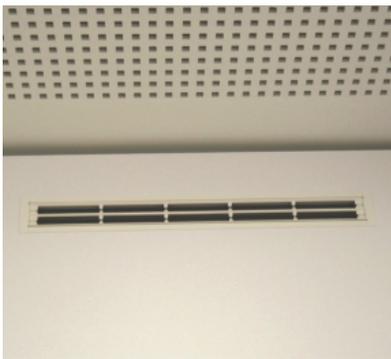
Available as individual or combined wall air diffusers for supply and extract air in drywalls or as air guide profiles without absorption boxes for direct installation in plasterboard panels.

INSTALLATION SITUATION

The decorative, high quality air guide profiles of the INDULSNAP can be fitted from within the room by means of a snap connector, and removed again just as easily. This facilitates faster progress in the construction work and provides easy access for cleaning purposes to VDI 6022.



INDULSNAP plenum box with dust protection in the completed drywall. The extended neck protrudes beyond the wall structure, because it must still be equipped with acoustic elements.



INDULSNAP with air guide rail in the completed state, including the attached acoustic element.



Installation in a furniture trim above a 60 cm deep built-in cupboard.



Installation in a furniture trim covering a built-in cupboard.



Photo © Dr. Frank Rothe / Metawell GmbH

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