

MIXED FLOW VENTILATION – AIR TERMINAL DEVICE IN THE PARTITION WALL



SEF Engineers, Karlsruhe, Germany

For solid structures without suspended ceilings, or when an existing office building is to be refurbished, combined supply/extract air terminal devices are the ideal solution and economic at that.

Combined air terminal devices from TROX are available as mixed flow diffusers or as displacement flow diffusers. Combination units are typically installed in suspended ceilings, bulkheads or lightweight partition walls in the corridors of office buildings. This saves space. Optional or integral acoustic lining effectively prevents the transmission of noise or room-to-room crosstalk.

Type VSD35-3-AZ combination units make use of the Coanda effect. The supply air is discharged from the upper slot, moves along the ceiling and eventually fills the entire space. With an activated concrete ceiling, the airflow increases the component activation effect. The extract air is taken in through the two lower slots. With their compact, slim construction these diffusers ideally fit into restricted spaces.



Combination diffusers of Type VSD35-3-AZ 10 - 40 l/s 40 - 140 m³/h L: 600 - 1.200 mm H: 110 mm 3 slots





Combination diffusers of Type VSD50-1-LT 14 - 55 l/s 50 - 200 m³/h L: 550 und 1.175 mm B: 70 mm With integral acoustic lining



CAV controller of Type EN for higher volume flow rates 40 – 3.360 l/s 144 – 12.096 m³/h B: 200 – 600, H: 100 – 600 mm Δ p: 50 – 1.000 Pa Casing air leakage to EN 1751, class C