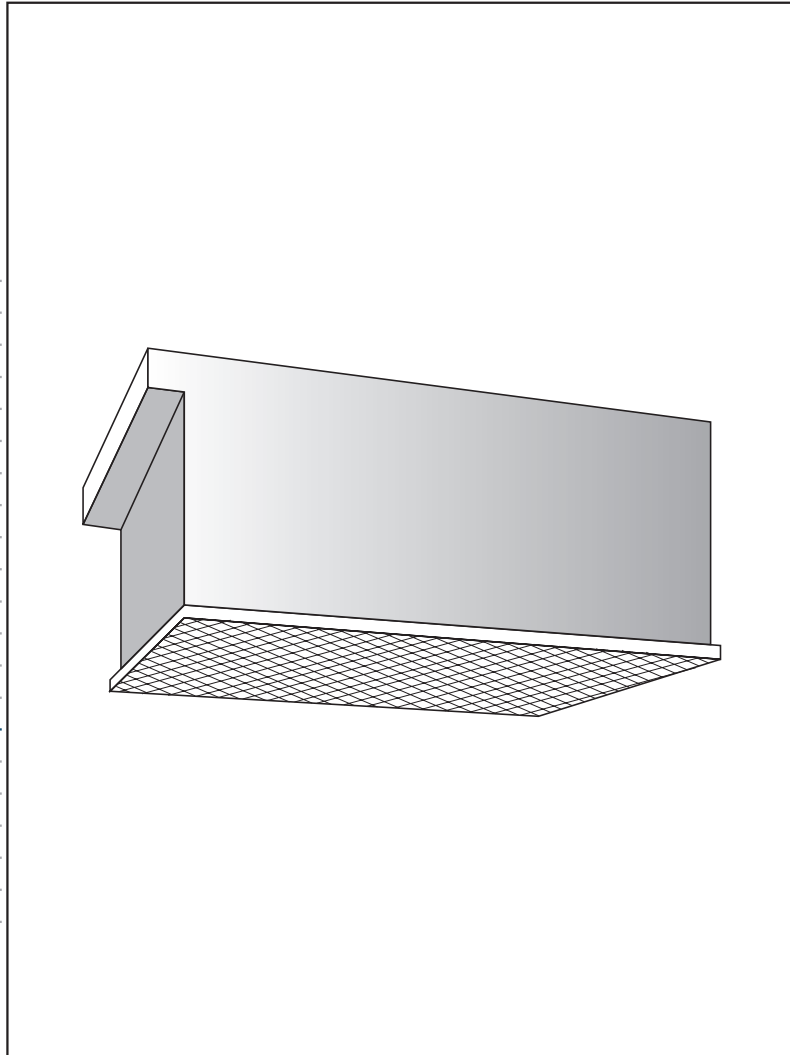


Technical Selection



Laminar outlet VA-L....

Preliminary remarks

The laminar outlet from KRANTZ KOMPONENTEN decontaminates work areas. It is placed above the workplace and supplied with filtered air via a duct connection from the air handling system.

The air outlet produces a top-down laminar downflow. Air pollutants and contaminants are displaced from the work area to the exhaust air openings and removed.

Construction design and function

The main components are the air discharge element 1 and the housing 2 with spigot 3 for air supply. The discharge element consists of a finely perforated metal sheet.

Guide vanes 4 are built into the housing for an even air supply to the discharge element.

The laminar displacement flow produced by the discharge element is directed vertically downward to the workplace. The displacement flow is already stable

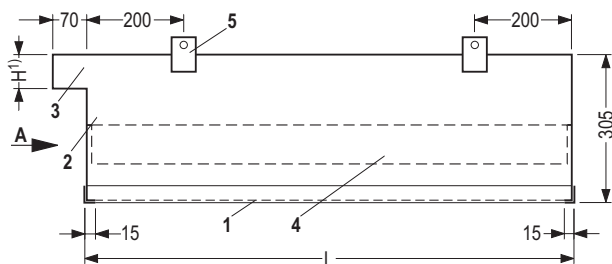
at an air velocity of 0.15 m/s. It is not disrupted by staff activities in the occupied zone below the laminar outlet.

The temperature difference between supply air and indoor air should amount to -1 to -3 K.

It is mounted lengthwise at two respective fastening points 5 with threaded rods or standard fast clamping elements.

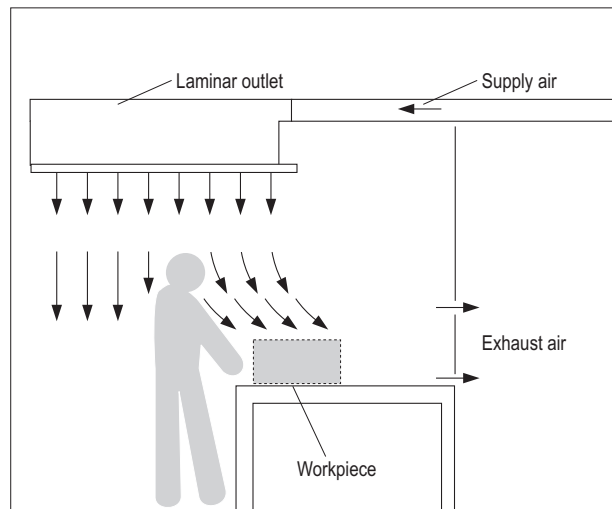
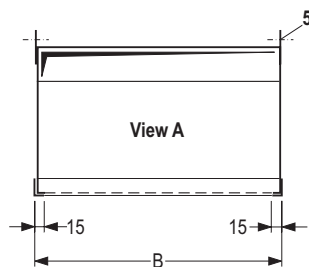
The circular connection spigot can also be placed above¹⁾.

The housing, guide vanes and air discharge element are made of galvanized steel.



Key

- 1 Air outlet element
- 2 Housing
- 3 Connection spigot
- 4 Distributor element (guide vanes)
- 5 Fastening points



Jet pattern of laminar outlet

Features

- For displacement of airborne pollutants from the work area
- Vertical, low-turbulence supply air flow
- Stable jet pattern already at air velocities of 0.15 m/s
- Low air velocities and temperature differences in the occupied zone
- Low air volume flow rate and low energy costs as a result
- Optional circular connection spigot and connection from above
- Various sizes

Length L	1000 - 2000 mm
Width B	500 - 1000 mm
Volume flow rate \dot{V}	80 - 800 l/s (300 - 3000 m ³ /h)
Velocity u, related to L x B	0.15 - 0.4 m/s
Pressure loss Δp	10 - 40 Pa
Temperature difference $\Delta\vartheta$ supply air - indoor air	- 1 bis - 3 K

1) The height H of the connection spigot or the spigot diameter with circular connection spigots must be selected to ensure that the air velocity in the spigot is under 4 m/s.

Subject to technical alterations!