



Directional Flow Control (DFC) System



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Euro Air's DFC (Directional Flow Control) System has been designed so that the air coming out of the fabric duct is always perpendicular to it. The system is built thanks to our laser technology and consists of specially defined laser cut holes followed by a directional baffle.

This combination prevents entrainment (see explanation below) along the fabric duct and ensures a 100% uniform air distribution. Euro Air's DFC system is patented and covers all kinds of applications thanks to its flexibility from Comfort to Induction and Long Throw. This system can be used for almost all of our fabrics, be they permeable or not.

What is Entrainment?

Entrainment is an undesired parallel flow along the axial direction of the fabric duct and is a natural consequence of cutting plain holes directly into the fabric duct.

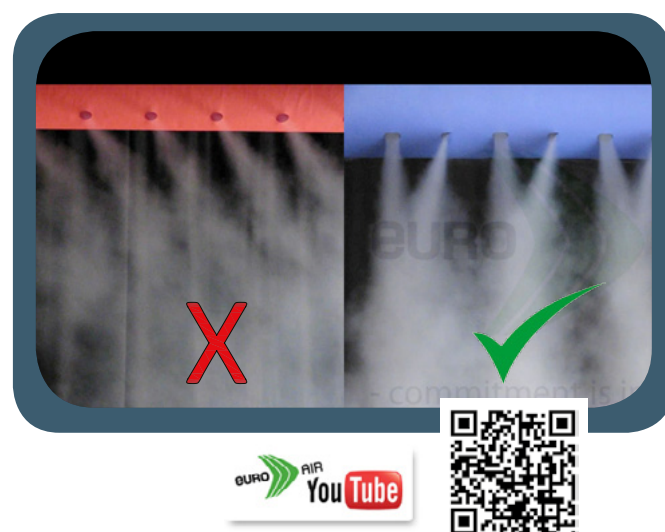
See the film by scanning the QR code below the picture and especially notice the red fabric duct. The main problem with entrainment is that it will cause great problems with the air distribution in the occupied zone.

It is most likely that the air will be stagnant where the fabric duct begins and very drafty where it ends in the room.

The DFC System - how does it work?

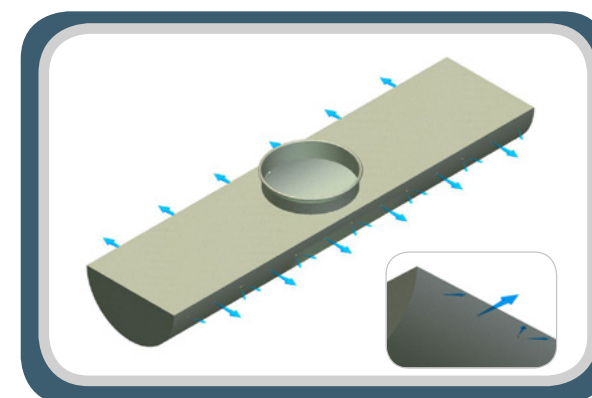
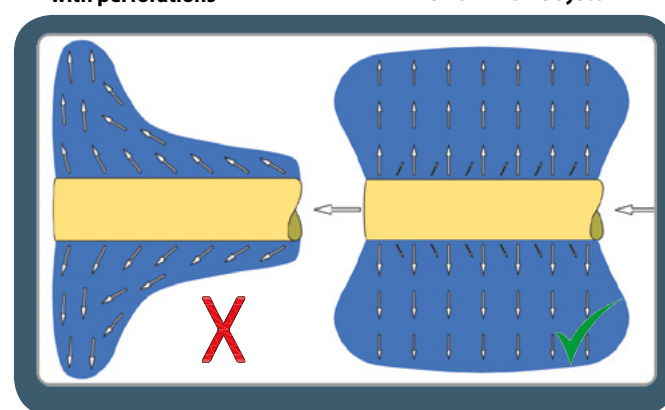
The DFC System was designed by Euro Air primarily to avoid entrainment. The concept behind the DFC system is a combination of laser cut holes (unique shape) and directional baffles. See the film above and notice the blue fabric duct. The directional baffles discharge the air in a pressure-dependent angle, correcting the main flow so it remains perpendicular to the fabric duct.

In cooperation with our internal R&D department, the 't Rijks Technasium, Bergen op Zoom in the Netherlands have performed tests establishing that students were more active due to the low level of CO₂ in their science classroom. We used a DFC Induction System and the average ppm level during an entire day of schooling was 492 ppm with highest peak at only 660 ppm.



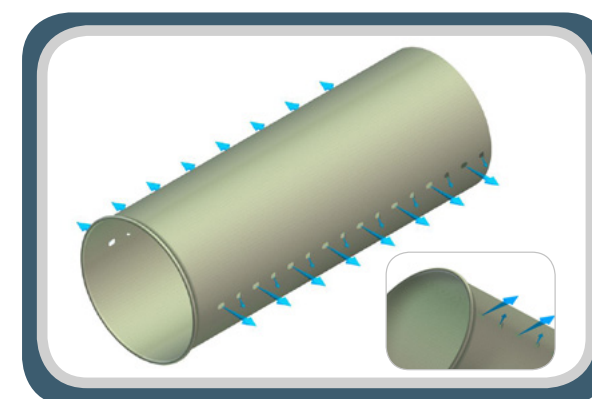
Conventional system
with perforations

EURO AIR DFC System



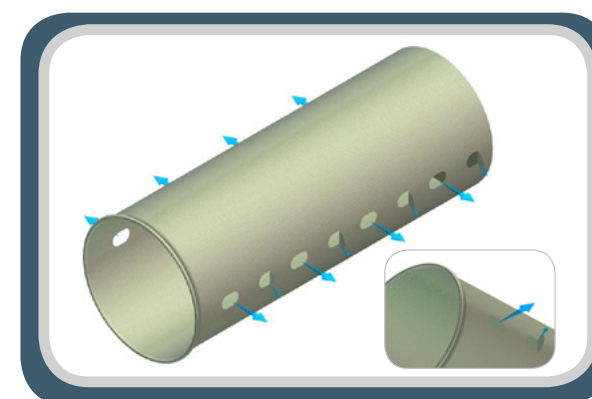
DFC Comfort System

- Customized solutions for cooling, heating and ventilation in areas with high demands on comfort
- Uniform air distribution with Double Directional Flow Control
- Air flow through orifices from 7-20 m³/h/m (60 Pa)
- Applications: Offices, schools, laboratories, canteens, auditoriums, etc.



DFC Induction System

- Customized solutions for cooling, heating and ventilation in areas with medium demands on comfort
- Used mainly for half round or quarter round airsox. Available with one, two, or three orifice rows
- Air flow through orifices from 17-90 m³/h/m (120 Pa)
- Applications: Fitness centres, showrooms, cinemas, supermarkets, museums, etc.



DFC Long Throw System

- Customized solutions for cooling, heating and ventilation in areas with medium or no demands on comfort
- Used mainly for half round airsox. Available with one, two, or three orifice rows
- Air flow through orifices from 65-370 m³/h (120 Pa)
- Applications: Sports centres, production facilities, supermarkets, food terminals, etc.



DFC Comfort System

The DFC Comfort System is well-suited for rooms with high demands on comfort and can be used for cooling, heating and ventilation applications.

Euro Air has successfully provided a solution to a nursing home in Verpleeghuis Moermont (NL).



Office, Amsterdam - NL

The DFC Comfort System is mainly used for half-round or quarter-round fabric ducts. This system comes with single, double or three rows of orifice holes.

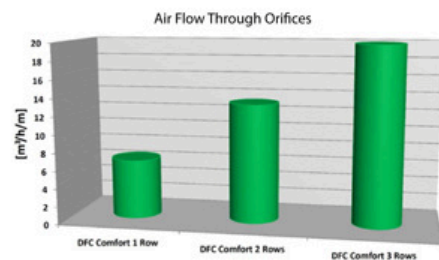
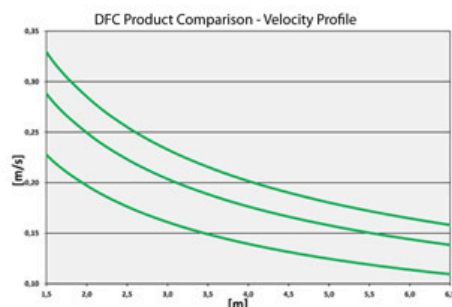
Typical air flow through orifices is ranging from 7 m³/h/m – 20 m³/h/m at 60 Pa.



Nursing home, Moermont - NL

Typical applications:

- Offices
- Schools
- Canteens
- Auditoriums
- Cinemas
- Etc.



DFC Induction System

The DFC Induction System is ideal in rooms where demands on comfort can be either high or medium. This system can be used for cooling, heating and ventilation applications.

Euro Air has successfully installed a DFC Induction system in a renovated building, the ClinicClowns' headquarters in Holland.



ClinicClowns - NL



DFC Induction system

The DFC Induction System is mainly used for half-round or round fabric ducts. This system comes with single and double rows of orifice holes.

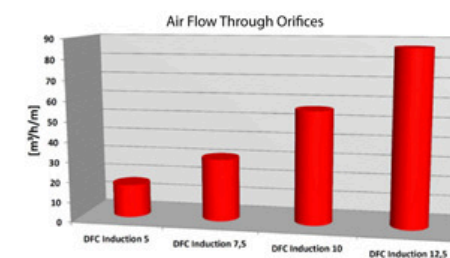
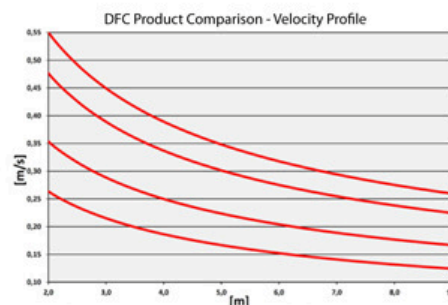
Typical air flow through orifices is ranging from 17 m³/h/m – 90 m³/h/m at 120 Pa.

Typical applications:

- Fitness centres
- Schools
- Showrooms
- Exhibitions
- Museums
- Supermarkets
- Car repair shops
- Light industry
- Etc.



Juffrouw Jansen - NL



DFC Long Throw System

The DFC Long Throw System is specially designed for rooms with high ceilings and with medium or no demands on comfort. This system is well-suited for cooling, heating and ventilation applications.

With the DFC Long Throw System penetration is not an issue as it is possible to have air movement beyond 20 metres.

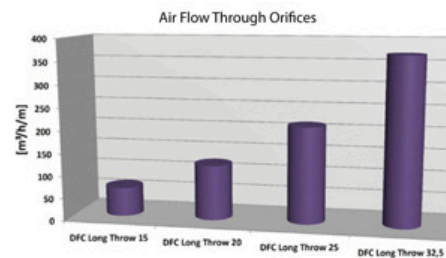
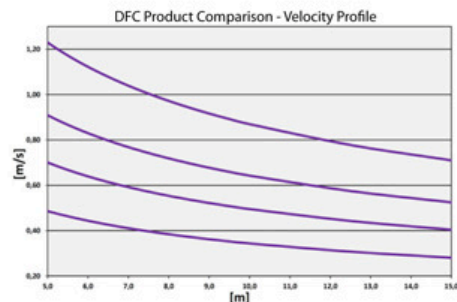
The DFC Long Throw System is mainly used for round fabric ducts. This system comes with single and double rows of orifice holes.



Typical air flow through orifices is ranging from 65 m³/h/m – 370 m³/h/m at 120 Pa.

Typical applications:

- Sport centers
- Warehouses
- Hyper Markets
- Distribution Centers
- Heavy industry
- etc.





Distributor:



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Commitment is included