Air Curtains & Door Automation

The ideal solution for better climate and comfort
Air Curtains

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To create the ideal entrance solution it’s important that the operation of the Air Curtain is linked to the operation of the Automatic Door. We have the expertise to determine the right combination in terms of size, airflow, heating capacity and air velocity. Besam ensures climate control and comfortable passages with a minimum of energy consumption.

Airflow Geometry

Air Curtains create an “invisible door” using laminar airflow, which effectively separates the outdoor and indoor air temperatures when the physical door is open.

These pictures show the effect of an Air Curtain placed between a cold and a warm zone. The laminar airflow is created by a well-adjusted combination of airflow volume and air speed.
Creating Comfort – Avoiding the Draught

Energy losses are unavoidable when exterior doors open, regardless of the type of doors used. Differences in outdoor and indoor air temperatures produce draughts. The size of the opening and its frequency of use are also factors that determine the amount of warm or cold air that escapes from your building.

Cold air draught is uncomfortable for visitors and staff and often makes the floor space directly behind the door useless. The Air Curtain can eliminate the draught and thus increase the usable floor space.

By choosing Besam as supplier of your complete entrance, you will get the best entrance for comfortable passage into and out of your building and the best indoor climate comfort for your staff and visitors.

Performance - Energy Savings

The wind load is influenced by the location of the entrance and its position in relation to the prevailing wind direction. The pressure difference is usually caused by the ventilation system, but could also be related to building design factors such as ceiling heights and high open stairways.

All these factors, including the size and the type of door, are taken into consideration when selecting the correct Air Curtain performance for your Automatic Door entrance, all with the ambition to minimize your energy consumption.

Depending on availability, the Air Curtains can use either hot water or electricity for heating the air.

Horizontal or Vertical Installation

An Air Curtain can be positioned horizontally above the door opening. The horizontal Air Curtain should preferably be located just above and as close as possible to the door opening while covering the full width of it. Besam has developed a special telescopic wall consol to facilitate such installations. Alternatively the Air Curtain can be vertically installed beside the door opening. The vertical type is the most efficient as warm air is introduced at a low level just above the floor. By installing two vertical Air Curtains on each side of the door, very wide openings can be efficiently protected against draught.

Why Air Curtains?

- Eliminates draught and creates a comfortable environment
- Reduces energy loss due to draught
- Prevents infiltration of pollution, dust and rain
- Increases usable floor space
- Performs quietly – high noise levels have a negative effect on staff and visitors
Besam in brief
World leading supplier of entrance solutions
Global presence – local mindset
Global service programme
Customised applications
Design and functionality
A safe investment

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Besam is a part of ASSA ABLOY. ASSA ABLOY is the global leader in door opening solutions, dedicated to satisfying end-user needs for security, safety and convenience.