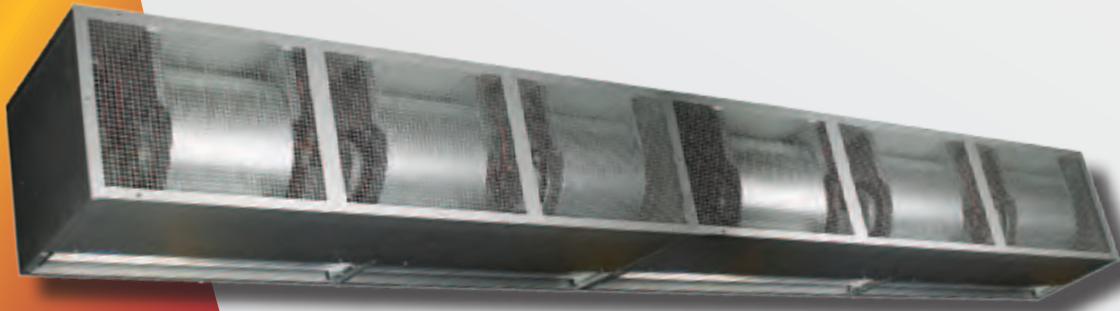


REZNOR®

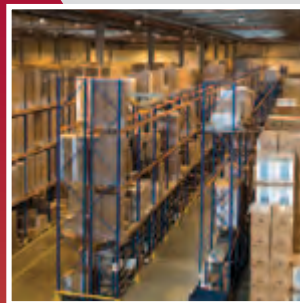


APPLICATIONS

Industrial air curtain

- >> DISTRIBUTION CENTRES
- >> HANGARS
- >> INDUSTRIAL BUILDINGS
- >> RETAIL UNIT STOCKROOMS
- >> WAREHOUSES
- >> COLD STORES

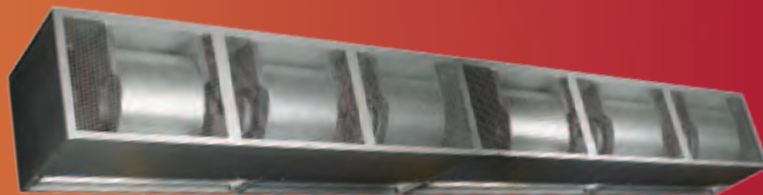
AB AIR CURTAIN



www.reznor.eu

AB Series

INDUSTRIAL AIR CURTAIN



Introduction

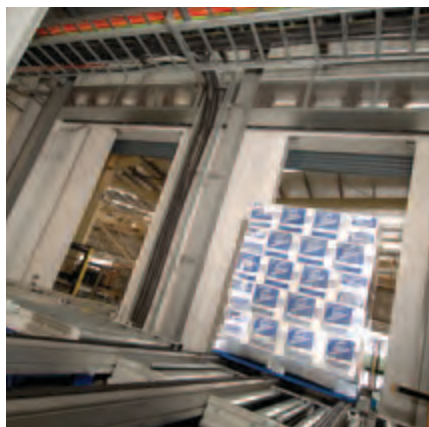
Reznor's AB industrial air curtains provide a barrier of high velocity air that helps block incoming winds and stops warm air escaping. They achieve this by delivering a powerful barrier of heated air across the entire width of the doorway. Units can be easily fitted within existing or new buildings and are ideal for open doorways.

The open door not only causes discomfort but greatly increases energy loss and the running costs of the building. AB units offer a cost-effective, energy efficient solution to these problems.

Units are best mounted horizontally above the door to enable high-level warm air to be recirculated to working level. For places where overhead mounting is impossible, alternative vertical units are available. These can be mounted at one or both sides of the door.

Features & benefits

- Lower energy bills; air curtains provide an effective barrier to prevent the loss of warm air through open doors.
- Complement and improve efficiency of conventional heating systems.
- Allow doors to be left open for fork lift access.
- AB units can provide supplementary heating when the door is closed.
- Models are supplied to site in modular format for ease of handling.
- All models are supplied with remote control panels.
- Optional fan speed control is available on all models.



Model range

- Nine models, for door widths from 2 to 6.7 metres.
- Suitable for doorways up to six metres high.
- Heat outputs from 40 to 210kW.
- Choice of gas, electric, low pressure hot water or steam units.
- Units may be specified for either use on natural gas or propane.
- Standard units are suitable for horizontal mounting over the top of a door. For applications requiring vertical air curtains, made-to-measure units are available.

Applications

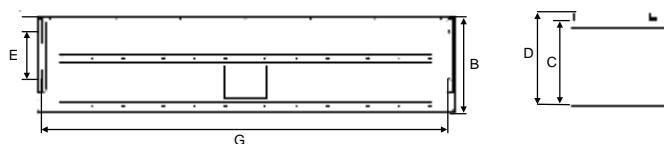
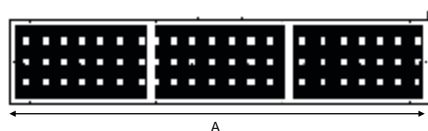
- Distribution centres
- Hangars
- Industrial buildings
- Retail unit stockrooms
- Warehouses
- Cold stores



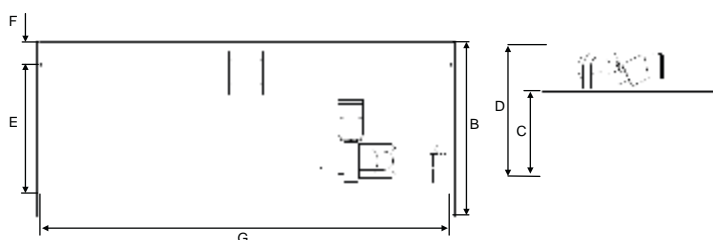
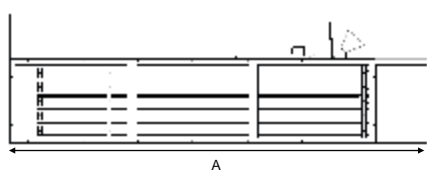
TECHNICAL DATA

Model		AB175	AB225	AB350	AB400	AB450	AB525	AB575	AB625	AB675	
Maximum door width	mm	1750	2250	3500	4000	4500	5250	5750	6250	6750	
Maximum mounting height	mm	6000	6000	6000	6000	6000	6000	6000	6000	6000	
Number of modules		1	1	2	2	2	3	3	3	3	
Number of fans		3	4	6	7	8	9	10	11	12	
Maximum air volume	m³/h	7068	9425	14136	16493	18850	21204	23561	25918	28275	
Maximum heating capacity											
Gas	kW	40	54	80	94	108	120	134	148	162	
Electric	kW	18	27	36	45	54					
Hot water	kW	60	70	120	130	140	180	190	200	210	
Steam	kW	60	70	120	130	140	180	190	200	210	
Total electrical load											
Hot water/ Steam	kW	1.65	2.20	3.30	3.85	4.40	4.95	5.50	6.05	6.60	
Gas	kW	1.75	2.30	3.50	4.05	4.60	5.25	5.80	6.35	6.90	
Electric	kW	19.65	26.20	39.30	45.85	52.40	58.95	65.50	72.05	78.60	
Electrical supply		230V 1 ph 50 Hz					415V 3 ph 50 Hz				
Current rating per fan	A	4.5 full load current									

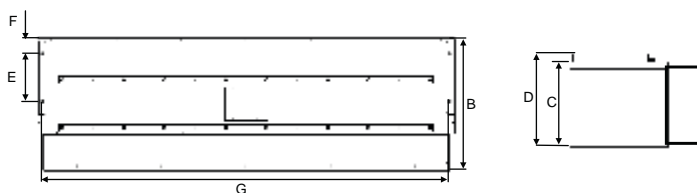
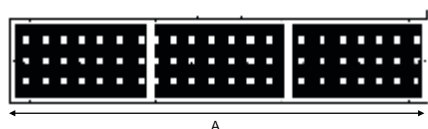
Hot water/ Steam unit



Electrically heated unit



Gas fired unit



DIMENSIONS

Model		Gas		Electric	
		AB175	AB225	AB175	AB225
A	mm	1750	2250	1750	2250
B	mm	950	950	722	722
C	mm	457	457	457	457
D	mm	700	700	507	507
E	mm	700	700	260	260
F	mm	125	125	86	86
G	mm	1710	2210	1695	2195
Weight	kg	185	185	133	145

Please allow an additional 300 mm of clearance at the sides of the units with hot water or steam coils.

The problem

When doors are opened in heated buildings, colder outside air, which is more dense, flows in through the bottom half of the opening, while warm inside air flows out through the upper part of the doorway.

Conversely, in air conditioned buildings or cold stores, the colder, more dense internal air spills out at low level to be replaced by warm, moist air.



Without air curtain

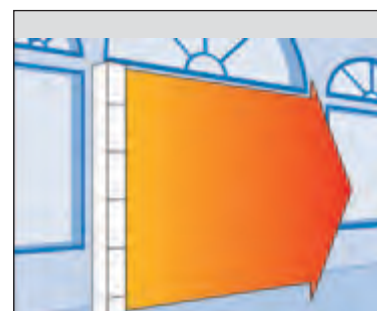
The solution

The installation of a Reznor energy saving air curtain provides a barrier of air that deflects the natural convection airflow, keeping conditioned air inside the building.

The AB design provides air at a critical velocity, volume flow and temperature for optimum performance.



Horizontal mounting



Vertical mounting

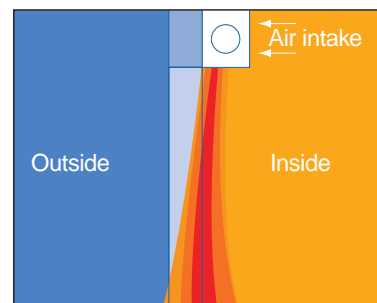
Reznor AB air curtains may be mounted horizontally or vertically to suit space or structure.

The technology

The Reznor AB design provides air at a critical velocity, volume flow and temperature for optimum performance. The evenly distributed airflow across the full width of the door ensures effective tempering of incoming air.

Industrial doors require high air volumes for effective climate separation. The width of the air jet is critical to the unit performance and to maintain optimum air velocity this requires high primary air volumes. Units with a low air volume and narrow jet width do not provide sufficient

resistance to the cold outside air. AB units have a 155mm outlet which, combined with the high primary air volume, provides a far more effective air barrier against external cold air, thereby reducing cold air ingress and improving energy savings.



Pattern of airflow

To transform the turbulent airflow created at the fan outlet while at the same time optimising velocity, the discharge section of the Reznor AB units incorporate robust 70mm deep aluminium aerofoil profile blades which act as air straightening vanes to produce a laminar airflow discharge while minimising airflow resistance. To allow the air discharge to be adjusted to suit prevailing conditions, the complete assembly adjusts as a single section to maintain the airflow profile. Once adjusted, the complete assembly can then be locked into position. A three speed fan allows the airflow and velocity to be adjusted to suit varying door heights or exposure levels.

REZNOR®

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Company Standards and Services:

All Reznor products are tested and approved to CE standards. Reznor Europe nv is assessed to ISO 9001 Quality Assurance. Reznor offers a service to its customers; including budget schemes, on site technical support and a comprehensive after-sales package. Reznor reserves the right to change specifications without prior notice.

ISO 9001



Thomas & Betts