



REZNOR

AB

Industrial air curtain

 **NORTEK**TM
GLOBAL HVAC





AB Air Curtains

Industrial Air Curtains

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.

Units are best mounted horizontally above the door to enable high-level warm air to be re-circulated to working level. Where over-door mounting is not possible, alternative units are available which may be mounted vertically at one or both sides of the door.

Model Range

- > Nine models, for door widths from 2 metres to 6.7 metres
- > Suitable for doorways up to six metres high
- > Heat outputs from 18 to 210 kW
- > Choice of ambient, gas, electric, LPHW or steam units
- > Units may be specified for either use on natural gas (G20) or propane (G31)
- > Standard units are suitable for horizontal mounting over the top of a door. For applications requiring vertical air curtains special 'tailor made' units are available

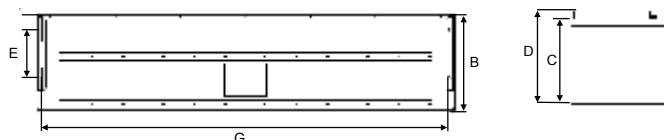
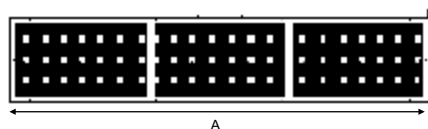
Features

- > Lower energy bills; air curtains provide an effective barrier to minimise 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
- > Heated units can operate when the door is closed to provide supplementary heating
- > 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

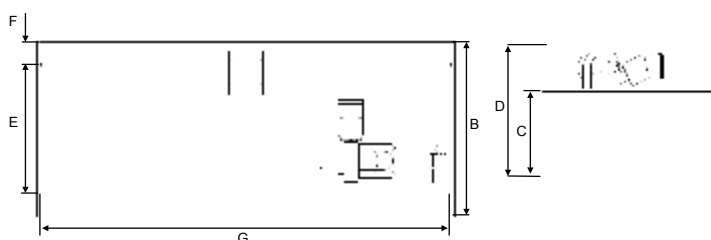
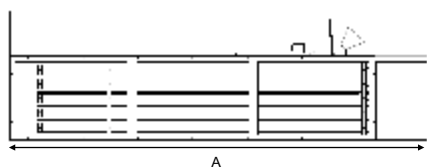
TECHNICAL DATA

Model		AB150-2	AB175-2	AB225-2	AB300-2	AB350-2	AB400-2	AB450-2	AB525-2	AB575-2	AB625-2	AB675-2
Maximum door width	mm	1500	1750	2250	3000	3500	4000	4500	5250	5750	6250	6750
Maximum mounting height	mm	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
Number of modules		1	1	1	2	2	2	2	3	3	3	3
Number of fans		2	3	4	2	6	7	8	9	10	11	12
Maximum air volume	m ³ /h	6400	11000	13000	12800	22000	24000	26000	33000	35000	37000	39000
Maximum heating capacity												
Gas	kW	40	40	54	80	80	94	108	120	134	148	162
Electric	kW	18	18	24	36	36	42	48	54	60	66	72
Hot water	kW		60	70	103	120	130	140	180	190	200	210
Steam	kW		60	70	130	120	130	140	180	190	200	210
Electrical supply	V	230V 1 ph 50 Hz				415V 3 ph 50 Hz						
Current rating per fan	A	5.2 full load current										

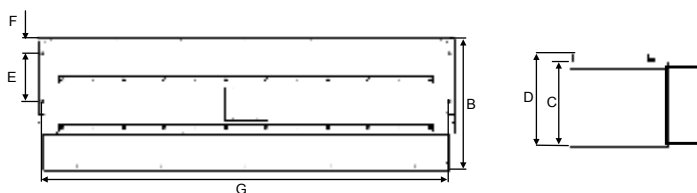
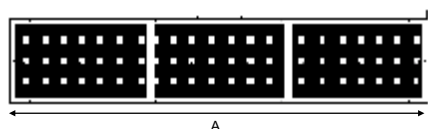
Ambient / Hot water / Steam unit *



Gas fired unit



Electric unit



DIMENSIONS

Model		Ambient *			Gas			Electric		
		AB150-2	AB175-2	AB225-2	AB150-2	AB175-2	AB225-2	AB150-2	AB175-2	AB225-2
A	mm	1500	1750	2250	1500	1750	2250	1500	1750	2250
B	mm	523	523	523	951	951	951	722	722	722
C	mm	456	456	456	456	456	456	456	456	456
D	mm	507	507	507	700	700	700	507	507	507
E	mm	260	260	260	820	820	820	260	260	260
F	mm	86	86	86	125	125	125	86	86	86
G	mm	1442	1692	2192	1460	1710	2210	1442	1692	2192
Weight	kg	80	92	114		185	230		133	145

*The coils for Hot water or Steam heated units are custom built for each order. 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, outside, colder, more dense air flows in through the bottom half of the door opening, whilst warm internal 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 and is replaced by warm, moist air.



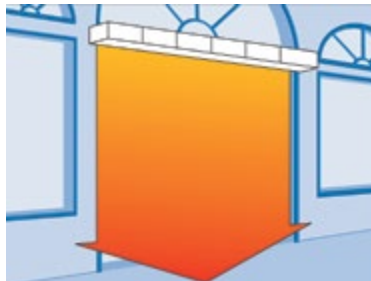
Without air curtain

The solution

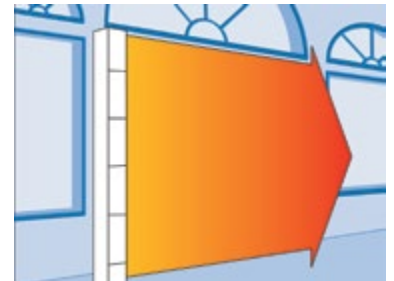
The installation of an energy saving air curtain provides a barrier of air that defects the natural convection airflow keeping conditioned air inside the building.

The Reznor designs provide air at a critical velocity, volume flow and temperature for optimum performance.

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



Horizontal mounting



Vertical mounting

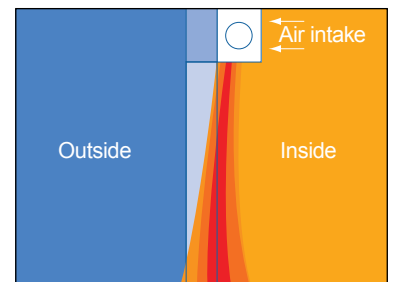
The technology

In order to achieve efficient low energy solutions, the air jet width, velocity and pattern of the airflow is crucial. Reznor units incorporate the following design features for optimum performance:

- > Uniform linear flow across the full door width
- > Fan speed control with extra width adjustable air jet for improved wind resistance.

Installation considerations:

- > Air curtains should be situated as close to the open door as possible
- > The selected air curtain should be wider than the opening
- > The air curtain should be commissioned to ensure the most efficient fan and heat settings are selected



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