

# REZNOR®

# INDUSTRIAL AIR CURTAINS



## APPLICATIONS

- » DISTRIBUTION CENTERS
- » HANGARS
- » INDUSTRIAL BUILDINGS
- » RETAIL UNIT STOCKROOMS
- » WAREHOUSES
- » COLD STORES
- » RETAIL BOX STORES



## Capacities



175 - 675 MBH



4,000 - 16,650 CFM

[ReznorHVAC.com](http://ReznorHVAC.com)

# Model AB

## Introduction



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

Model AB is shipped from the factory fitted for natural gas heating. This unit can be field converted with a propane conversion kit.

It can also be operated during the summer without heat to impede dust and insects from entering the building through an open door.

Units are mounted above the door to enable high-level warm air to be re-circulated to floor level.

### Features & Benefits

- Lower energy bills; air curtains provide an effective barrier to prevent the loss of conditioned 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
- Single unit or combine multiple units
  - » Door widths 6 to 22 feet
  - » Air volume 4,160 to 16,643 CFM
  - » Heating capacity 175 to 625 MBH
- Suitable for doorways up to 20 feet tall
- Units may be specified for use with either natural gas or propane
- Units are suitable for horizontal mounting over the top of a door

## The Problem

When doors are opened during winter months, outside, colder, more dense air flows in through the bottom half of the door opening, while warm internal air flows out through the upper part of the doorway.

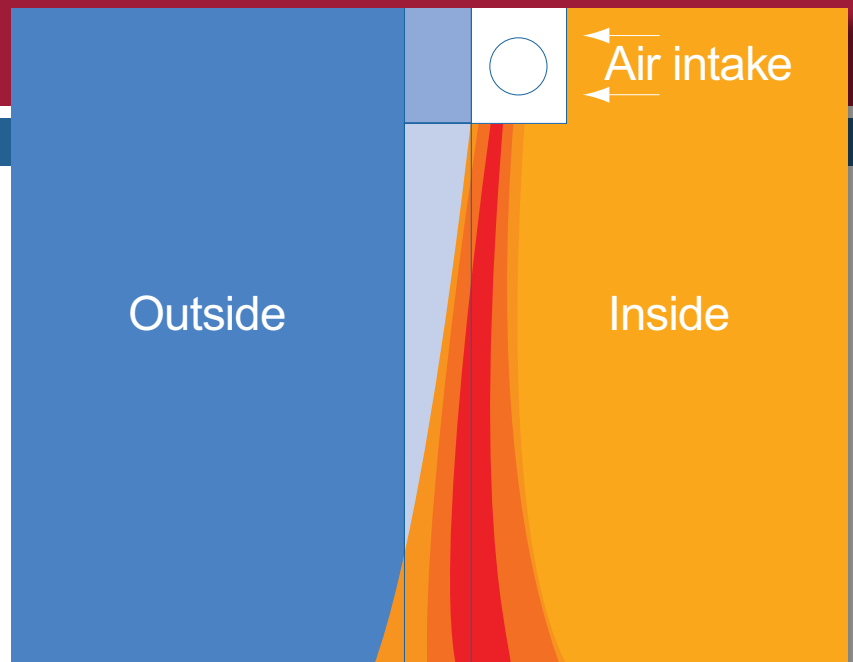
Likewise, in air-conditioned buildings or cold stores, the colder, more dense internal air spills out at low level and is replaced in the space by warm, moist air.



## The Technology

The Reznor 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 blocking 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. To maintain optimum air velocity this requires high primary air volumes. If an air curtain has a low air volume and narrow jet width, it does not provide sufficient resistance to the cold outside air. Reznor units have a 6-1/8" (155mm) outlet. When combined with the high primary air volume, this provides a far more effective air barrier against external cold air. The result is a reduction of cold air ingress and improved energy savings.



The key is to reduce turbulence normally created at the fan outlet while optimizing air velocity of the discharge section. Reznor accomplishes this by using robust 2-3/4" (70mm) deep aluminum airfoil profile blades. These blades act as air straightening vanes producing a laminar airflow discharge and minimizing airflow resistance.

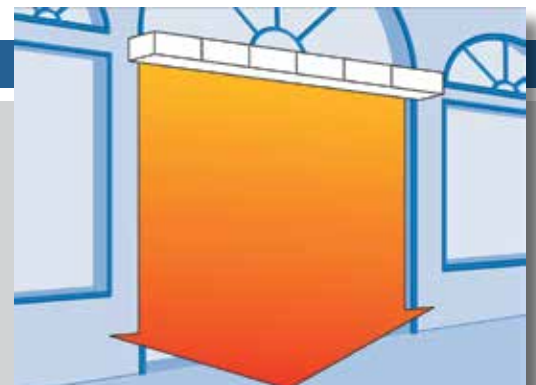
Reznor air curtains can be adjusted to the specific needs of the application. The three speed fan allows the airflow and velocity to be adjusted to the suit various door heights.

As prevailing conditions change, the air curtain can be adjusted to maintain the airflow profile. Making one single adjustment in the airflow changes the setting along the entire length of the system. Once the desired setting is achieved, it can be locked in place.

## The Solution

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

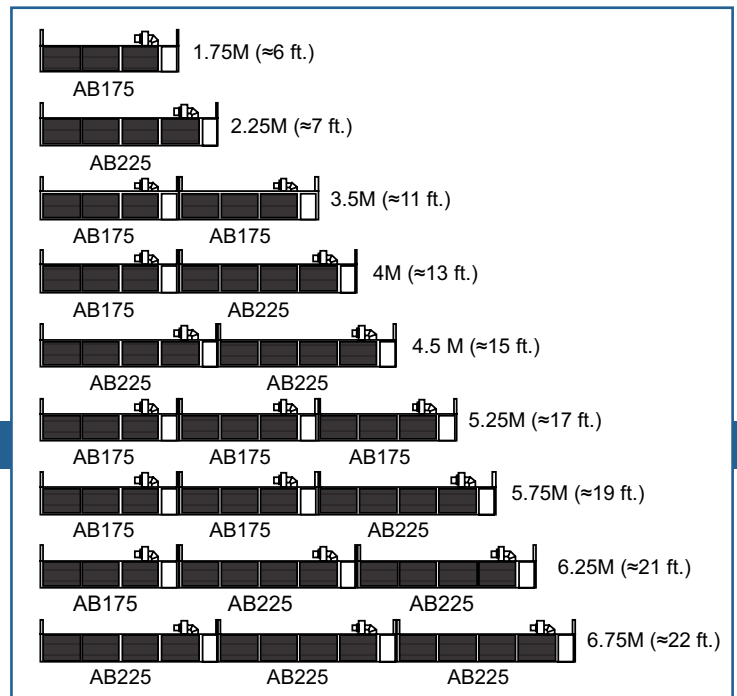
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# Technical Information

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Model AB		175	225
Maximum Door Width	Feet	6	7
	(Meters)	(1.75)	(2.25)
Maximum Mounting Height	Feet	20	20
	(Meters)	(6)	(6)
Total Fans (quantity)		3	4
Maximum Air Volume	CFM	4,160	5,548
	(M <sup>3</sup> /hr)	(7,068)	(9,425)
Maximum Heat Capacity	MBH	175	225
	(kW)	(51)	(66)
Electrical Supply	230V /1Ph / 60Hz		
Current Rating per Fan	4.5A (FLA)		



## Modular Design for Easy Selection

The model number relates to the length of the air curtain, so it is easy to order.

Models AB175 and AB225 are shipped individually. These can be linked together for larger doors up to 22 feet wide (see illustration to the right).

For complete catalog information including submittals, energy calculations, dimension drawings, and more go to [ReznorHVAC.com](http://ReznorHVAC.com) or call 800-695-1901.

*Note: In keeping with our policy of continuous product improvement, we reserve the right to alter, at any time, the design, construction, dimensions, weights, etc., of equipment information shown here.*

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