



Powered Aire Curtains



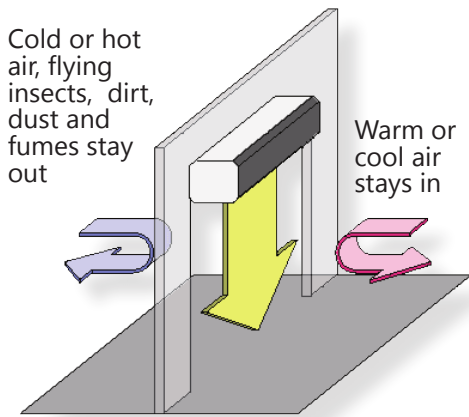
888-321-AIRE (2473)
www.poweredaire.com

Improve efficiency at doorways and docks in your plant or warehouse with the high performance line of Powered Aire Inc.[®] products.

Our products are designed to provide:

- **Warmer Docks**
- **Energy Savings**
- **Environmental Separation**
- **Insect Control**
- **Heat at the Doorway**





What is an air curtain?

An air curtain is a thermal barrier that separates one environment from another. It does this by projecting a 'curtain' of downward moving air over the opening of a doorway. This wall of air reduces infiltration of air from one side to the other.

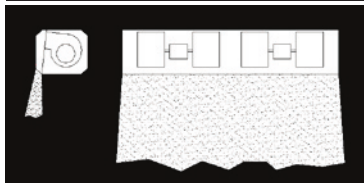
What will a Powered Aire Curtain do for me?

- Reduce wind and infiltration of outside air into heated or air conditioned areas.
- Reduce annoying and unsanitary flying insects, dust, odors, fumes and other contaminants from entering buildings.
- Conserve heat, enhance comfort and maintain temperature at docks while doors are open.
- Promote safety, by providing an unobstructed view of busy doorways.

Air curtain applications

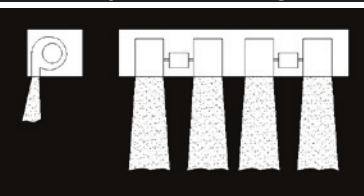
Large overhead doors, dock doors, man doors, customer entrances, high cycle doors, cooler & freezer doors.

Powered Aire plenum design



Powered Aire directs the blowers to the back of the unit, which creates a plenum-like effect. The result is a quieter performance and a very even air discharge.

Competitors' Design



Most manufacturers angle the unit's blowers so that they are blowing directly out of the nozzle. This creates an uneven discharge as well as additional noise.

USDA, FDA and AIB compliant

Key design features

- Standard corrosion resistant stainless steel construction.
- High efficiency plenum that provides uniform air distribution across the full width and height of door opening.
- Heavy duty direct drive motors for longer life.
- Easy Installation.
 - Universal mounting (no external mounting hardware).
 - Optional MB 1,2,3 mounting system (see back page).
- Motor/blower plate is all one removable assembly for ease of service.
- Widths ranging from 2.5 ft. to 30 ft. and heights up to 30 ft.
- Quietest in the industry.

CASE STUDY

- Powered Aire industrial unheated Model TSD-2-144.
- Outside temperature in Greenville, PA on Feb. 22, 2009: 36.5° F.
- Inside temperature with door closed: 67.6° F.
- Overhead door opened for 2 minutes.

FINDINGS

After 2 minutes **WITH** the air curtain operating, the temperature directly inside the door was 66.7° F.

After 2 minutes **WITHOUT** the air curtain operating, the inside temperature dropped to 42.2° F.

ENERGY COST SAVINGS EXAMPLE

Inside Temp: 67°F
 Hrs. per day door is open: 1
 Time range door is open: 8 a.m. - 5 p.m.
 Days per week door is open: 5
 Door height: 14
 Door width: 12
 Model: TSD-2-144
 City: Greenville, PA
 Cost savings during heating season:
\$2,423.00

Contact us for your free energy cost savings analysis

INSECT CONTROL

MODEL **BCE**

- Openings up to 8 ft. high
- Unheated
- 1/2 HP Motors

MODEL **BCT**

- Openings up to 10 ft. high
- Unheated
- 3/4 HP Motors



The **BCE** and **BCT** Bug Control models are designed to deter flying insects, and keep dust and other debris from entering an opening. The BCE and BCT are ETL listed for indoor use. They can be constructed and ETL listed for outdoor use upon request.

Typical application areas: Back doors, service doors, dock doors, odor control at trash compactors, dewatering or other environmental facilities.

Powered Aire Inc. also manufactures non-sparking, explosion-proof air curtains and air curtains for corrosive atmospheres, and can custom design an air curtain to meet your unique needs.

TEMPERATURE & CLIMATE CONTROL

MODEL **MP**

- Low profile design
- Openings up to 10 ft.
- Unheated or electric heat
- 1/5 HP motors

MODEL **ETD**

- Openings up to 10 ft. high
- Unheated or electric heat
- 3/4 HP motors

MODEL **TSD**

- Openings up to 17 ft. high
- 3 HP motors

MODEL **EHD**

- Openings up to 22 ft. high
- 5 HP motors

MODEL **BPA**

- Openings up to 30 ft. high
- 7.5 HP motors



The **MP** model is a compact 8.5 in. high and 13.5 in. in depth, which makes it perfect for openings with low height restrictions. This unit features variable speed and is available unheated or heated. ETL listed.

Typical application areas: Toll booth and other small service windows, coolers and freezers, any application where space is limited.

The **ETD** model is designed to stop cold or warm air from entering a climate controlled environment. The ETD features dual speed motors and is available unheated or heated. ETL listed.

Typical application areas: Dock doors, food processing rooms, coolers and freezers.

The **TSD**, **EHD** and **BPA** models are designed to protect dock door or other large openings in an industrial environment. These models have top and bottom access panels for easy access and maintenance.

Typical application areas: Mass transit facilities, airport hangars, warehouses, manufacturing, distribution centers, food processing rooms, coolers and freezers.

IN TANDEM WITH HIGH-CYCLE DOORS



An open door is 0% efficient, but by incorporating a Powered Aire Curtain into your high cycle door openings, you can increase the efficiency of that opening to up to 80%. A Powered Aire Curtain will help prevent ice buildup on freezer doors and floors. Ask for your free Energy Cost Savings Analysis.

Additional benefits of using a Powered Aire Curtain when the door is open

- Reduces warm air infiltration into a freezer or cooler opening.**
- Keeps floors dry to improve safety.
- Keeps poorly-insulated door panels from freezing up.
- Reduces infiltration of warm or cold air into conditioned space.**
- Reduces cross contamination between rooms.**

Heating Options



Indirect Gas Fired

The Indirect Gas Fired air curtain works like your home furnace. The fire heats a tube, the air flows over the tube and the heated air is discharged. This air curtain will provide a 35° F temperature rise at the threshold.



Hot Water, Steam Heat



Electric Heat



Custom Heat Application

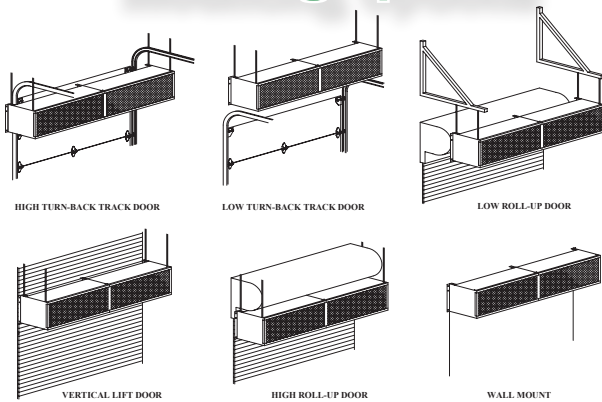
Let our experienced engineering department design a custom heated unit for your application.

Direct Gas Fired

With the Direct Gas Fired air curtain, the intake air goes directly through the flame prior to being discharged. This air curtain will provide up to a 105° F instant temperature rise at the threshold. *(Certain codes apply; Contact factory for details)*



Mounting Options



Recommended Control Options

BCE & BCT

Remote mounted Hand/Off/Auto Selector Switch
Magnetic Door Switch
Filter

ETD

Remote mounted High/Off/Low Selector Switch
Thermostat (if heated unit)
Magnetic Door Switch
Time Delay Relay
Filter

TSD, EHD, BPA

Remote mounted Hand/Off/Auto Selector Switch
Remote mounted control panel
Thermostat (if heated unit)
Magnetic Door Switch
Filter

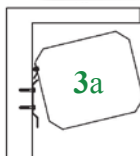
MB 1,2,3 FAST Mount for Light Industrial Units



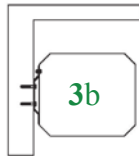
Bottom mounting bracket (1) attaches to wall.



Top mounting bracket (2) attaches to back of air curtain.



Air curtain is placed over bottom bracket and locks into place (3). Pre-punched hole pattern allows for universal mounting.



Weight of unit does not have to be supported while lags are installed. Use when air curtain mounting holes don't line up with wall studs or other structural supports.



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