

AIR BARRIERS

# **COMMERCIAL / INDUSTRIAL AIR BARRIERS**

DURASHIELD / DURASHIELD HD / ULTRASHIELD / XTREMESHIELD SHIPPING & RECEIVING DOORS / SERVICE BAYS COOLERS / FREEZERS / FOOD PREP / MANUFACTURING WAREHOUSE & DISTRIBUTION



DS-96 Model Shown

# AN ENERGY EFFICIENT TECHNOLOGY THAT SEALS OPEN DOORWAYS

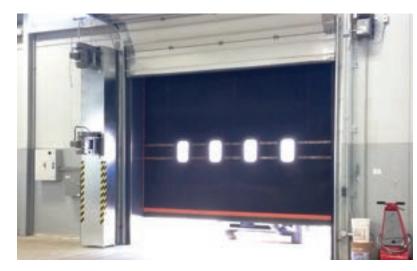
## Save up to 15 Units of Energy for Every One Unit of Energy Consumed by the Air Barrier!

With the cost of energy continuing to rise, heating / cooling bills for your building are a major expense. For businesses that keep their doors open to allow frequent movement of products and people, these costs are even greater. Properly selecting a custom made Enershield Air Barrier that can create an efficient and effective seal is as important as the decision to install the technology. We design and custom build our units to perform in the toughest climates, hot or cold. We don't take any shortcuts when it comes to quality. There are varying Air Barrier concepts on the market claiming to be equal to the Enershield design, but when comparing features and performance they fall well short.



DSH-144 Model Shown

# LEADERS IN THE INDUSTRY, INNOVATORS IN THE TECHNOLOGY



Both Vertical and Horizontal installations available - Vertical Air Barrier shown above.

# BENEFITS

- Save Energy
- Enhance Comfort
- Keep Out Heat / Humidity
- Deter Dusts & Insects
- Stop Cold Drafts
- Environmental Separation
- Improve Safety
- Increase Productivity



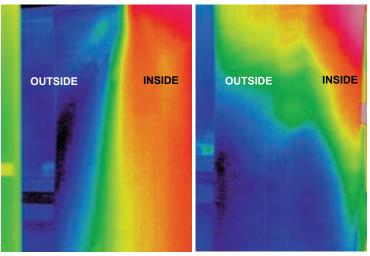
# A CORRECTLY INSTALLED AIR BARRIER CAN SEAL OFF AN OPEN DOORWAY AND **REDUCE THE HEAT / AC ENERGY LOSS** BY AS MUCH AS 90%.

## **AIR BARRIER VS. HEATED AIR CURTAIN**

Air Barriers should not be confused with a heated warm air curtain, with a primary design objective to provide warmth at an open doorway. Without a proper seal over an open door, your expensively heated or air-conditioned air, along with the warm blast from a typical heated air curtain is immediately conveyed to the outside. Air Curtains typically do not have the velocity or volume of air needed to create an effective seal on the door opening, they add heat to the airflow to condition the amount of cold air that's infiltrating through the door opening. Enershield Air Barriers operate at higher velocities and volumes with the strength to efficiently seal the door opening with ambient air, saving energy and money on operating costs.

### HOW AN AIR BARRIER WORKS

Enershield Air Barriers create an effective seal on the doorway by re-circulating the facility air in a laminar (smooth) air flow across an open doorway. The kinetic energy in the moving air generates a barrier, like a waterfall, that prevents leakage of air between two areas with different pressure and climate. The more laminar this air flow, the harder it is for outside air to penetrate the barrier.

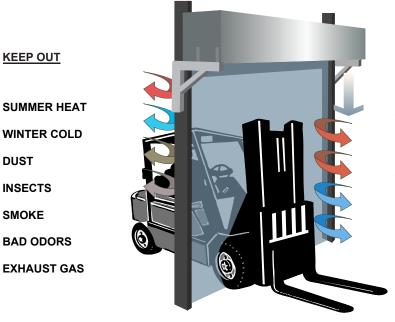


**AIR BARRIER ON** 

**AIR BARRIER OFF** 

### **SAVINGS & COMFORT**

Open doors account for a considerable amount of the energy loss in a building. A correctly installed Air Barrier can seal off an open doorway, and reduce the heat (and air conditioning) loss through the door as much as 90%, translating into substantial energy savings, as well as creating a more comfortable environment for both employees and customers - when employees are more comfortable, they tend to be more productive. When customers are more comfortable, they tend to stay longer and spend more, resulting in increased profit! Enershield Air Barriers have also been proven beneficial in certain manufacturing and packaging processes where a contaminant free environment and/or temperature stability are critical.



#### **KEEP IN**

#### **AIR FLOW**

The design re-circulates facility air in a smooth laminar / uniform flow, creating up to a 90% seal on the doorway

#### WARM AIR

Keeps heated air inside during the cooler months

#### **COOL AIR**

Keeps cooled air inside during the warmer months



AIR BARRIERS

# ADVANTAGES OF UTILIZING ENERSHIELD AIR BARRIERS

- UKCA / CE Certified Manufacturing facility of the highest quality.
- Powder coated steel frame construction and sheet metal jacket provide a rigid, corrosion resistant unit to withstand even the harshest environments.
- Acoustic insulation allows for quiet operation.
- Uniform and consistent spacing of blowers, external motor placement on larger units along with patented unique diffuser gives the required laminar air flow to efficiently seal the door.
- Telescopic sliders and wall brackets that are provided allow for ease of install / retrofit on most doors.
- Control panel incorporates Photo cell switch which allows for automatic activation upon door opening.
- Custom manufacturer, each order is designed and customized for your application.
- Enershield Air Barriers can be mounted horizontally or vertically.



#### Enershield Commercial & Industrial Air Barriers - Additional Models available

| For Climate Control up to 3.m High                      |
|---|
| Direct Drive Motors (1nh) - Cabinet (508mm H x 432mm D) |

| Durashield                     | DS-72  | DS-96  | DS-120 | DS-144 | DS-168 | DS-192 |
|--------------------------------|--------|--------|--------|--------|--------|--------|
| Air Velocity<br>(m/s)          | 23     | 23     | 23     | 23     | 23     | 23     |
| Air Volume<br>(m³/s)           | 4      | 5.33   | 6.66   | 8      | 9.33   | 10.66  |
| Motor Electrical<br>Power (kW) | 1.05   | 1.4    | 1.75   | 2.1    | 2.45   | 2.8    |
| Weight<br>Kg                   | 136 Kg | 181 Kg | 227 Kg | 272 Kg | 318 Kg | 363 Kg |

#### For Climate Control up to 5.4m High Belt Drive (3ph) - Cabinet (559mm H x 483mm D)

| Ultrashield                       | US-120 | US-144 | US-168 | US-192 | US-216 | US-240 |
|-----------------------------------|--------|--------|--------|--------|--------|--------|
| Air Velocity<br>(m/s)             | 33     | 33     | 33     | 33     | 33     | 33     |
| Air Volume<br>(m <sup>3</sup> /s) | 9.38   | 11.26  | 13.13  | 15.01  | 16.88  | 18.76  |
| Motor Electrical<br>Power (kW)    | 7.5    | 11     | 11     | 15     | 15     | 15     |
| Weight<br>Kg                      | 363 Kg | 490 Kg | 523 Kg | 579 Kg | 630 Kg | 699 Kg |

Model number reflects approximate cabinet length in inches

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#### Enershield Air Barriers Head Office & UK Manufacturing Centre

Calderhead Road, Shotts, Lanarkshire, Scotland ML7 4EQ 01501 826500



Scan to visit website



For Climate Control up to 3.6m High Belt Drive (3ph) - Cabinet (508mm H x 432mm D)

| Durashield-HD                  | DSH-96 | DSH-120 | DSH-144 | DSH-168 | DSH-192 |
|--------------------------------|--------|---------|---------|---------|---------|
| Air Velocity<br>(m/s)          | 28     | 28      | 28      | 28      | 28      |
| Air Volume<br>(m³/s)           | 6.09   | 7.61    | 9.13    | 10.65   | 12.18   |
| Motor Electrical<br>Power (kW) | 4      | 5.5     | 8       | 8       | 8       |
| Weight<br>Kg                   | 231 Kg | 295 Kg  | 393 Kg  | 412 Kg  | 460 Kg  |

#### For Climate Control up to 8m High Belt Drive (3ph) - Cabinet (600mm H x 559mm D)

| Xtremeshield                   | XS-120 | XS-150 | XS-180 | XS-210 | XS-240 |
|--------------------------------|--------|--------|--------|--------|--------|
| Air Velocity<br>(m/s)          | 38.1   | 38.1   | 38.1   | 38.1   | 38.1   |
| Air Volume<br>(m³/s)           | 11.24  | 14.05  | 16.87  | 19.68  | 22.48  |
| Motor Electrical<br>Power (kW) | 11     | 15     | 22     | 22     | 22     |
| Weight<br>Kg                   | 408 Kg | 483 Kg | 599 Kg | 709 Kg | 798 Kg |

Velocities & Volumes are based on Maximum outputs

#### Distributed by:



Think Energy, Think Environment, THINK ENERSHIELD!