## **Enershield Air Barriers Model Range**

#### **Microshield (MCS)**

for climate control on openings up to 2.4m high.

Not recommended for doors facing a high wind velocity. Designed for pedestrian traffic.

	MCS-36	MCS-48	MCS-72
Air Velocity (m/s) High / Low	16/12.7	16/12.7	16/12.7
Air Volume (I/s) High / Low	305/250	416/333	632/500
Motor(s)(w)	2@150w	2@150w	3@150w
Weight kg	16	18	26
Noise level (dB) High setting Low setting	52 49	53 50	57 55

#### **Comfortshield (ECS)**

for climate control on openings up to 2.7m high. Designed for pedestrian traffic.

	ECS-36	ECS-48	ECS-72	ECS-96
Air Velocity (ft/min)(m/s)	3500/17.8	3500/17.8	3500/17.8	3500/17.8
Air Volume (cfm)(l/s)	1824/860	1824/860	3648/1722	4560/2152
Motor(s)(w)	2@150w	2@150w	4@150w	5@150w
Weight Ibs/kg	106/48	130/59	187/85	240/109

#### Durashield (DS) for climate control on openings up to 3m high.

	DS-72	DS-96	DS-120	DS-144	DS-168	DS-192
Air Velocity (ft/min)(min)	4500/23	4500/23	4500/23	4500/23	4500/23	4500/23
Air Volume (cfm)(l/s)	8475/4000	11,300/5333	14,125/6666	16,950/8000	19,775/9333	22,600/10,666
Motor(s)(w)	3@350w	4@350w	5@350w	6@350w	7@350w	8@350w
Weight Ibs/kg	300/136	400/181	500/227	515/234	750/341	800/363

#### Durashield HD (DSH) for climate control on openings up to 3.6m high.

	DSH-96	DSH-120	DSH-144	DSH-168	DSH-192
Air Velocity (ft/min)(min)	5500/28	5500/28	5500/28	5500/28	5500/28
Air Volume (cfm)(l/s)	12,900/6088	16,125/7610	19,350/9132	22,575/10,654	25,800/12,176
Motor(s)(kw)	1@4	1@5.5	2@4	2@4	2@4
Weight Ibs/kg	520/237	660/300	812/370	924/420	1012/460

#### Ultrashield (US) for climate control on openings up to 5.4m high.

	US-120	US-144	US-168	US-192	US-216	US-240
Air velocity(ft/min)(m/s)	6500/33	6500/33	6500/33	6500/33	6500/33	6500/33
Air volume(cfm)(l/s)	19,875/9380	23,850/11,256	27,825/13,132	31,800/15,008	35,775/16,884	39,750/18,760
Motor(s)(Kw)	1@7.5	2@5.5	2@5.5	2@7.5	2@7.5	2@7.5
Weight Ibs/kg	800/363	1080/490	11530/523	1276/579	1404/638	1542/699

#### Xtremeshield for climate control on openings up to 8m high.

	XS-120	XS-150	XS-180	XS-210	XS-240
Air velocity(fpm)(m/s)	7500/38.1	7500/38.1	7500/38.1	7500/38.1	7500/38.1
Air volume(cfm)(l/s)	23,825/11,244	29,781/14,055	35,738/16,866	41,720/19,680	47,650/22,488
Motor(s)(Kw)	1 @ 11	1 @ 15	2 @ 11	2 @ 11	2 @ 11
Weight lbs/kg	900/410	1188/540	1420/638	1663/756	1890/860

Megashield (MGS) for climate control on openings up to 11.5m high.

Enershield Air Barriers can be customised to fit any size of doorway



Local Distributor:





OLDA

Creates up to a 90% seal on open doors by recirculating facility air

# www.enershield.eu

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**Enershield Europe** 

# **ENERGY SAVING AIR BARRIERS**

## THINK EFFICIENT. THINK ENVIRONMENT. THINK ENERSHIELD



## What is an air barrier?

The **Enershield** air barrier creates a *"virtual door"* by re-circulating ambient air and forcing it across an opening to create up to a 90% seal. The seal separates the atmospheres on either side and stops the transfer of temperature, humidity, dust, odours and insects. With just a draught of air creating the barrier, vehicles and pedestrians can pass without obstruction.

## Air Barrier v. Air Curtain?

Air barriers should not be confused with a heated warm air curtain, where the primary design objective is to provide warmth at an open doorway. Without a proper seal across 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. Traditionally a typical 5kW air curtain will operate 8 hours per day, 5 days per week and will consume in excess of £1,000 of electricity per annum. Under the same conditions an Enershield air barrier will consume £60 of electricity per annum.

## Power is everything

Enershield Air Barriers are designed to deliver the correct volume of air at the correct speed to achieve a seal across the entire opening: top to bottom. Check our airflow specifications and then see how other products compare. If there isn't the right airflow, it won't create the essential seal.



Plus 14°c inside and minus 23°c outside. Only 1°c lost after one hour with the door open.



#### The effectiveness of Enershield air barriers (in preventing heat loss and the ingress of cold air) is clearly illustrated by these thermal

images.

Outside Inside Outside Inside

Enershield Air Barrier On

## **EFFECTIVELY SEAL AN OPEN DOORWAY**

## The Benefits

Save energy: Escalating energy costs mean rising fuel bills. Where doors are opening and closing frequently or always open due to high volume of traffic or to present a welcoming approach to customers then your heating costs will be a major and increasing expense.

Enhanced comfort for employees and customers. Keeps the outside air out and the inside air in, maintaining the warmth of your heating in winter and the coolness of your air-conditioning in the summer.

Atmospheric separation. In other words: airborne problems like dust, insects, smoke, traffic fumes and odours are all prevented from passing through the Enershield.

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Reduced demand on your heating and air-conditioning systems reduces servicing costs and increases their life expectancy.

With reduced energy consumption, typical installations provide a payback of less than 2 years.

Stylish, aesthetic and unobtrusive design. 

Improved safety and accessibility with unobstructed doorways and unrestricted access

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Increased comfort gives improved productivity.

Control of contaminants gives improved production quality.

Stabilised temperature gives improved production quality.

### **Applications**

Warehouse and manufacturing facilities -

shipping/receiving doors, loading bays and workshops

Food production – temperature control, environmental separation, insect or odour control

Retail outlets loading bays, store entrances & exits, comfort control

Freezer rooms for maintenance of controlled temperatures and prevention of frost build up.

> Waste processing for odour containment.

## **Typical Installation**



IR FLOW

the doorway

keeps heated air

inside during the

keeps cooled air

inside during the

winter

COOL AIR

summer

The design re-

circulates facility air

in a smooth laminar/

uniform flow, creating up to a 90% seal on

SUMMER HEAT WINTER COLD **BAD ODOUI EXHAUST GA** 

THINK EFFICIENT, THINK ENVIRONMENT, THINK ENERSHIELD

## Why Enershield?

SAVE ENERGY. Selection of the right air barrier is as crucial as the decision to install the technology in the first place.

The Enershield is UK manufactured to a Canadian design and it is built to perform in the toughest climates, hot or cold. Build quality and performance guarantees are industry leading.

Powder coated steel frame construction and sheet metal jacket provide a rigid, corrosion resistant unit to withstand even the harshest environments. Stainless steel casings can be specified.

Typically our units are unheated. although heating can be included where required.

For every unit of energy that your Enershield consumes, it will save approximately 15 units of energy.

**CASE STUDY** 



**BEFORE ENERSHIELD IS FITTED** 



**3 MONTHS AFTER ENERSHIELD IS FITTED** 

#### **Freezer Room Installation**

The air barrier prevents warm, moisture laden ambient air from entering. Increasing efficiency and preventing frost build up.