

# Blown Away

## AIR CURTAINS: A VIABLE ALTERNATIVE TO VESTIBULES

Your company would love to cut energy costs, but every time a customer walks in the door, some of that expensively conditioned air flows out. So what's the best solution? Recent studies have proven that air curtains are more effective at saving energy than vestibules. Find out how much you could start saving today.

### Gone with the Wind



**19%** global energy consumed by the U.S. in 2011

**41%** primary energy usage in the U.S. was by the building sector

### The Cost of Energy Savings

#### COST OF A VESTIBULE



\$20,000 - \$60,000

#### COST OF AN AIR CURTAIN



~~\$2,000 - \$6,000 + Installation~~

### Weighing Your Options

A 2008 Berner study concluded that regardless of loading, building performance aligns in the same order:



**GOOD**  
TEMPERATURE  
RETENTION

**BETTER**  
TEMPERATURE  
RETENTION

**BEST**  
TEMPERATURE  
RETENTION

The biggest step you can take toward energy savings is installing an air curtain

33.5°F  
10.3°F

More wind and pedestrian traffic

**TEMPERATURE LOSS:**  
20.6°F  
9.6°F

Less wind and pedestrian traffic

19.6°F  
9.3°F

### Long-Term Losses or Long-Term Savings?

An investigation by the Air Movement and Control Association International, Inc., concluded:

FOR A MODELED MEDIUM OFFICE BUILDING:

**1,146 KWH - 18,986 KWH**

3

Climate Zone

8

**IN ANNUAL SAVINGS**

with an air curtain in cooler climates compared to vestibules

AIR CURTAINS REDUCE AIR INFILTRATION **SIGNIFICANTLY**

**70-80%!**



Air infiltration accounts for up to **18%** of heat loss

**Berner.com:** SAVING ENERGY AND CREATING HEALTHY, COMFORTABLE ENVIRONMENTS

#### SOURCES:

<http://www.amca.org/UserFiles/file/Energy%20Initiative%20Web%20Pages/Air%20Curtain%20Study%281%29.pdf>  
<http://www.amca.org/UserFiles/file/Energy%20Initiative%20Web%20Pages/Air%20Curtain%20Study%281%29.pdf>  
<http://www.berner.com/AirCurtainPerformanceResearch.php5>  
<http://www.amca.org/UserFiles/file/Energy%20Initiative%20Web%20Pages/Air%20Curtain%20Study%281%29.pdf>  
 Berner International Corp. Air Curtains: A Proven Alternative to Vestibule Design. New Castle, PA, 2008.