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

<table>
<thead>
<tr>
<th>COST OF A VESTIBULE</th>
<th>COST OF AN AIR CURTAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>$40,000 - $60,000</td>
<td>$2,000 - $6,000 + installation</td>
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Weighing Your Options

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

VESTIBULE | AIR CURTAIN | AIR CURTAIN + VESTIBULE

<table>
<thead>
<tr>
<th>GOOD TEMPERATURE RETENTION</th>
<th>BETTER TEMPERATURE RETENTION</th>
<th>BEST TEMPERATURE RETENTION</th>
</tr>
</thead>
</table>

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

<table>
<thead>
<tr>
<th>TEMPERATURE LOSS:</th>
<th>33.5°F</th>
<th>20.6°F</th>
<th>19.6°F</th>
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</thead>
<tbody>
<tr>
<td>10.3°F</td>
<td>9.6°F</td>
<td>9.3°F</td>
<td></td>
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</tbody>
</table>

More wind and pedestrian traffic | Less wind and pedestrian traffic

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

Climate Zone

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%203%201923.pdf
http://www.berner.com/AirCurtain/performanceResrch.php