

The Voice of the European Air-Conditioning, Refrigeration, Air handling, Heating and Ventilation industry

Brussels, April 12th 2011

POSITION PAPER
Air Curtains
Lot 20 “local room heating products”

Eurovent would like to thank the Commission and BIOs for the studies received. The Eurovent Product Group 16 (air curtains) studied the documents and on behalf of the chairman Mr, Peter Bethlehem we would like to provide you with our first main comments regarding the definition and the calculation method of the energy efficiency requirements which is far different from the one used for the “usual” energy related products.

Herewith you can find our main comments:

Definition

An air curtain unit (ACU) produces a directionally-controlled airstream, moving across the entire height and width of an opening, which reduces the infiltration or transfer of air from one side of the opening to the other and/or inhibits flying insects, dust or debris from passing through.

Benefits

There are many benefits of using an ACU. When properly applied, an ACU can maintain the environmental integrity of two distinct areas affording clear unobstructed access. More specifically, when areas of different temperatures are separated or when perimeter openings are protected, an ACU can provide:

- significant energy savings;
- increased comfort levels for customers and employees;
- increased safety at busy doorways;
- decrease in equipment maintenance and a more sanitary environment.

Benefits of using an ACU will only be fully realized when the equipment is properly sized, installed, adjusted, and maintained.

Theory

The primary purpose of the air curtain is to act as a building's control barrier for environmental and temperature separation when its doors/windows are opened. As a temperature control barrier, the ACU reduces the cross migration of warm lighter air flowing through the upper part of the opening and cold heavier air through the lower part of the opening. As an environmental separation barrier, the ACU repels the entrance of wind borne dust, dirt, fumes, odors and flying insects from entering a building or a protected area within a building. As a wind resistance barrier, the ACU minimizes the effect of outside wind blowing into a building's openings.

So an air curtain acts as a temperature barrier and this should be taken in consideration when defining the Minimum Efficient Performans (MEPs').

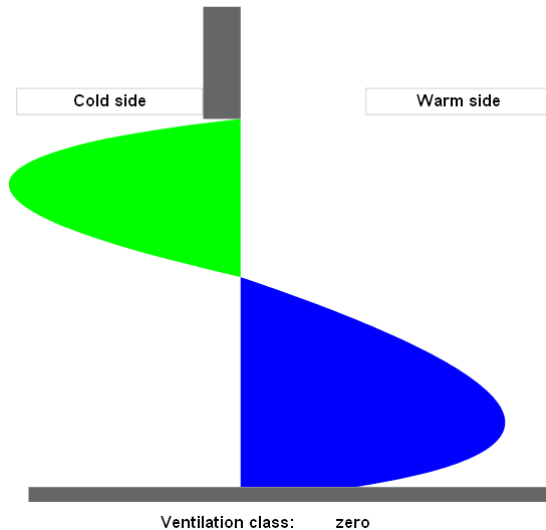
Yours faithfully,

Joop Hoogkamer
Executive Director
Eurovent

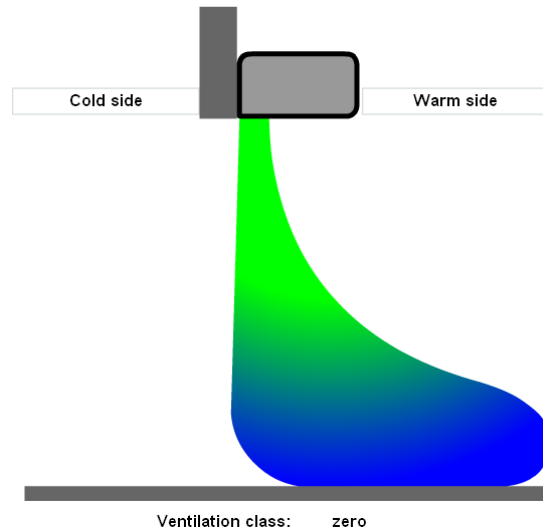
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Without air curtain



With air curtain



Who is Eurovent?

Eurovent, the European Committee of Air Handling and Refrigeration is the representative of the European refrigeration, air conditioning, air handling, heating and ventilation industry and represents trade associations from European and non-European countries.

Eurovent represents over 1,000 companies in 14 European countries, employing 150,000 employees who jointly generate more than € 25 billion of annual output. Eurovent was initially founded in 1958 and has been functioning under its current name since 1964. Eurovent has become over the years a well-known and respected stakeholder in all industry related matters and, in particular, in climate change and energy efficiency.

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