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WHAT IS AN AIR CURTAIN?

Before, actually getting into the specifics of how, what and where, it is quite crucial to understand what exactly are air curtains.

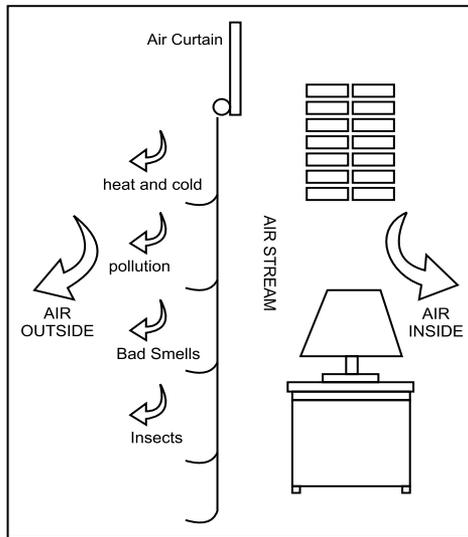


Fig. 1

The complete Guide to Air Curtains

Have you ever experienced air striking your head when you enter an airport or a mall? Ever wondered what that is? Well, it is surely something more than an ordinary door or any air vestibule. In fact, it is an invisible barrier of air that prevents the inside air to mix with the outside air, thus preventing the loss of conditioned air and obstruct the entry of mosquitoes, flies and dust, without any physical division.

Air curtains or air doors are devices that help create an unseen blockade between the air outside your premise and inside your workplace without the necessity of keeping a door which is a lot of hassle. Thus, air curtain is one of those devices

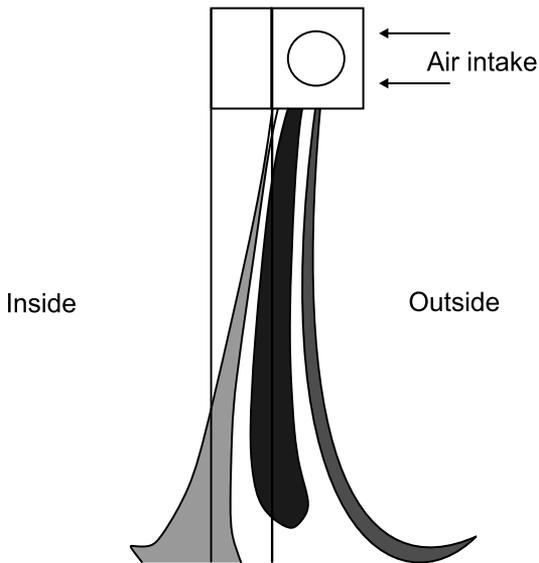


Fig. 2

that provides a lot of utility. This energy-saving innovation is used in commercial and residential buildings to prevent insects, dust and a wide range of other things from entering certain

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space. Furthermore, it ensures that the air in the building remains conditioned thereby, increasing the efficiency of the “air conditioners”, by not allowing the air to escape. Other than that, it allows the owners to utilise the space near the doors that would otherwise be blocked by bulky vestibules etc. Air curtains generate a uniform stream of directed air, across an opening (as shown in Fig. 2) and creates a barrier that inhibits the transfer of heat and particulate matter from one zone to the other. An appropriately designed system will create this barrier across the entire height and width of the opening.

Broadly, air curtains are of two types:

1. Recirculating and
2. Non-circulating air curtains.

The non-recirculating air curtain is more popular as it is more economical than the recirculating one.

Recirculating air curtains are a complex assembly of fan, floor grills, baffle filters, hepa filters, duct and plenum to create a uniform flow. Thus, making installation difficult, time consuming and costly.