

AIR CURTAIN CASE STUDY

Reducing Energy Losses

CLIENT

Holligan's CENTRA Store and Filling Station Kilkenny

Pat Holligan is the proprietor of Holligan's CENTRA Store and Fuel Station in Kilkenny. The CENTRA Shop is very busy and the automatic entrance doors are opening and closing on a very regular basis resulting in consistent cold draughts through the front double doors of the Shop. This is leading to large heat losses through the doors every time they are opened as well as considerable discomfort to both the Staff and Customers.



With the onset of colder winter months coming the client requested our recommendations to reduce the discomfort from the cold draughts which is anticipated would lead to a reduction in high energy costs. The current energy costs relate to the Air Conditioning Cassette Unit mounted in the ceiling of the shop as the only heat source available and is operating on the maximum heat output setting throughout the day during the winter months.

We undertook a site survey of the door and the shop area and made the following recommendations.

In order to offset the cold draughts every time a customer entered the shop, we recommended the installation of an Energy Efficient surface mounted Thermoscreens Air Curtain over the entrance door. This air curtain covered the full width of the doors.

The model recommended was a Thermoscreens C1500E 9kw electrical unit which is suitable for doors up to 3m high. The unit also includes an Eco Power Plus controller with a built in Thermister Temperature Sensor offering greater savings and control (for more information on the Eco Power Plus capabilities visit www.atc.ie).



The air curtain has reduced the cold draughts considerably and has allowed the client to reduce the output of the Air Conditioning unit from the maximum setting. We also recommended running the Air Curtain in ambient mode in the warmer summer weather as this would improve the efficiency of the Air Conditioning Unit resulting in further energy cost savings.

On a follow up call a few weeks later the client stated *'that there was a noticeable improvement in the cold draughts and the Air Curtain was performing very well. The Air Curtain was doing all that he hoped it would do, stopping the cold draughts, giving a more comfortable working environment and a reduction in the heat output setting of the air conditioning unit. This will hopefully yield good savings on energy costs into the future'*.

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