ENERSHIELD
AIR BARRIERS

Preserve Set Point Temperature Integrity & Reduce Energy Loss

In cold storage, control and consistency are everything. Every open doorway challenges that balance - allowing warm, moist air to enter and cold, freezer air to escape.

Constant cycling, air leakage, and temperature fluctuations push refrigeration systems beyond capacity. It's expensive, inefficient, and in today's market, it's unsustainable.

Enershield Air Barriers create an effective environmental separation across open access points, preventing the transfer of air and moisture while allowing unrestricted movement. The technology helps maintain set point temperatures, reduce ice formation, and protect produce, products and equipment.

Temperature & Humidity
Proven to reduce heat, cold and humidity transfer by up to 90%

Airborne Contaminants
Reduce the ingress particulate matter, dust and other airborne contaminants by up to 80%

Fumes and Chemical Contaminants
Can improve indoor air quality and reduce thetransfer of VOC's, fumes and other gases

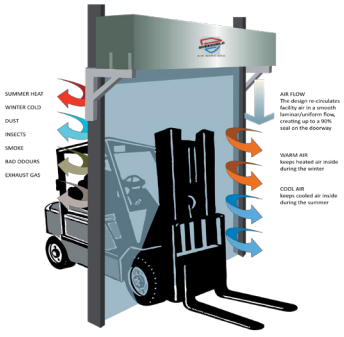
Flying Insects
Reduce flying insect ingress by up to 75%

Setpoint Temperature & Humidity
Help maintain desired internal setpoint temperature and humidity

Sustainability
Reduce energy consumption & CO2e emissions

Delivering Operational Stability

The installation of an Enershield Air Barrier supports the challenge of maintaining stable conditions within cold storage environments. By significantly reducing the ingress and transfer of warm air and moisture, Enershield technology helps maintain set point temperatures, limit ice build-up, and ensure consistent performance even during high levels of door activity.



Reducing Frost Build Up and Improving Operational Efficiency

The Client

Lomond Fine Foods are a family-run wholesale food business supplying ambient, chilled, and frozen products across Scotland.

The Challenge

Our client was facing persistent issues with ice build-up on the freezer room condensers, positioned above the entrance doorways. This was due to the hot air and moisture ingress from an adjacent area, entering the freezer as the doors were opened.

Lomond Fine Foods required a solution to minimise moisture entering the freezer, thereby reducing frost build-up and maintaining optimal performance within their cold store.

The Solution

Following a comprehensive site assessment, two Durashield Air Barriers were installed on the external side of the freezer room doors to operate in tandem with the existing fast-action doors. Integrated with the automatic door controls, the air barriers activate only when the doors are in use, ensuring energy-efficient operation.

Engineered to deliver controlled airflow that separates internal and external environments, the Durashield Air Barriers prevent warm, moisture-laden air from entering the freezer area — significantly reducing the conditions that cause frost build-up on condensers.

The Result

The Air Barriers are now operating effectively and in line with our promise and our customers' specifications - already less warm air is entering the freezer. Subsequently, Lomond Fine Foods have asked for another Air Barrier quote.