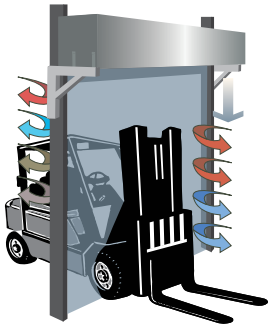


# Enershield Air Barriers for cold storage facilities

 **AVERAGE R.O.I.: LESS THAN ONE YEAR**

**KEEP OUT:** Humidity, insects, pests, dust, hot/cold drafts, smoke, bad odors, and more

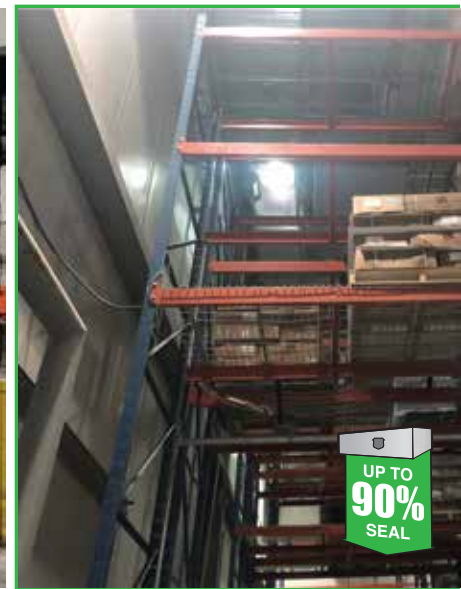
**PREVENT:** Moisture, ice or frost build-up to dramatically reduce slip and fall hazards



**BEFORE**



**AIR BARRIER**



**AFTER 90 DAYS**

Receive **energy rebates\*** for decreasing the load on your cooling system.

## Keep your door open and closed at the same time.

### The most efficient door seal

Create up to a 90% seal on open doorways to keep inside air separated from outside contaminants.

### Save energy and save your money

Reduce the number of cycles your HVAC system takes and extend the life of your HVAC equipment. In addition, lower your cooling costs.

### Separate two different environments

Create a strong environmental separation between two areas with different pressure or climate zones.

\*In select areas of Ontario. Contact Northern Dock Systems for eligibility requirements.

### Increase safety and remain HACCP compliant

Keep your workers safe by preventing slip and fall accidents. Remain compliant with strict HACCP guidelines for food safety.

### The investment that gives back

Businesses in selected areas of Ontario are eligible for energy rebates.\*

### Keep contaminants out

Prevent contaminants from entering the facility with air barriers that are tested to maintain an ideal 800-1000 fpm 2-3 feet from the opposite jam side.

## How an air barrier works

Enershield Air Barriers create up to a 90% effective seal on open doorways by recirculating facility air in a laminar (smooth) flow across the doorway, preventing contaminants such as humidity, dust, hot/cold drafts and insects from entering the facility. Moving air generates a barrier that prevents leakage of air between two areas with different pressure or climate zones.



**FROST BUILD-UP BEFORE AIR BARRIER INSTALLATION**



**NO FROST BUILD-UP AFTER AIR BARRIER INSTALLATION**

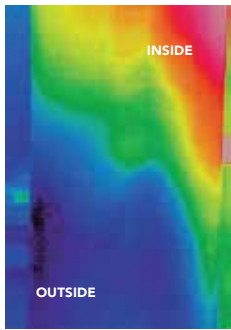
## Air Barriers provide full visibility through door openings



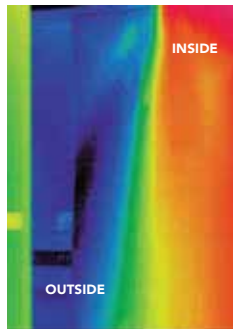
**BLOCKED LINE OF SIGHT WITH PLASTIC CURTAINS**



**CLEAR LINE OF SIGHT WITH AIR BARRIERS**



**AIR BARRIER OFF**

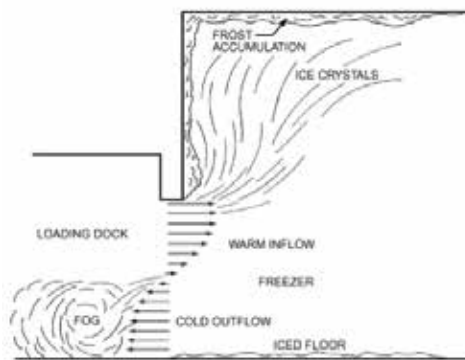


**AIR BARRIER ON**

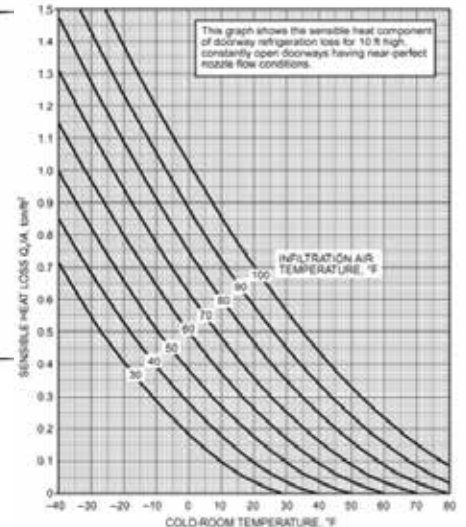
## ASHRAE refrigeration load calculations support the science behind air barrier technology

Infiltration most commonly occurs because of air density differences between rooms. For a typical case where the air mass flowing in equals the air mass flowing out minus any condensed moisture, the room must be sealed except at the opening in question. If the cold room is not sealed, air may flow directly through the door.

Excerpt source: 2006 ASHRAE Handbook: Refrigeration, Chapter 13 (Refrigeration Load).



Flowing cold and warm air masses for typical open freezer doors



Sensible heat gain by air exchange for continuously open door with fully established flow