

Vinyl Curtain Energy Savings

A significant portion of the refrigeration load in walk-in refrigerators/freezers is attributed to infiltration through open doorways. In fact, according to the ASHRAE Refrigeration Handbook, heat gain from infiltration air and associated equipment loads can amount to more than half the total refrigeration load of distribution warehouses and similar applications. Installing vinyl curtains across doorways is a proven, effective means to drastically limit infiltration and provide significant savings to operation costs.

Walk-In Cooler*

Dimensions: 8 x 10 x 8 ft Floor Area: 80 sq ft Room Temperature: 35 °F Total Refrigeration Load without Vinyl Curtains = 7,785 BTU/hr Total Refrigeration Load with Vinyl Curtains = 6,434 BTU/hr Reduction in Refrigeration Load = 1,351 BTU/hr

Energy Savings with Vinyl Curtains = 20% Dollar Savings = \$20/mo -or - \$240/year

 Cooler: Approximate annual dollar savings = (\$0.12/kWh)(0.00029 kWh/BTU)(BTU/hr)(16 hrs/day)(25 day/mo) Based on compressor run time of 16 hrs/day

Walk-In Freezer*

Dimensions: 8 x 10 x 8 ft Floor Area: 80 sq ft Room Temperature: -10°F Total Refrigeration Load without Vinyl Curtains = 7,785 BTU/hr Total Refrigeration Load with Vinyl Curtains = 6,434 BTU/hr Reduction in Refrigeration Load = 1,351 BTU/hr

Energy Savings with Vinyl Curtains = 17% Dollar Savings = \$23/mo -or- \$282/yr

 Freezer: Approximate annual dollar savings = (\$0.12/kWh)(0.00029 kWh/BTU)(BTU/hr)(20 hrs/day)(25 day/mo) Based on compressor run time of 20 hrs/day

* From Carrier Totaline brochure