



Application Limitations for the Edge Compact

Introduction

The Edge Compact, Zero Zone's new condensing unit, has not yet completed DOE testing. Because the Edge Compact has not been evaluated for DOE compliance, it has specific limitations for walk-in cooler applications. This document outlines the conditions and restrictions that apply to Edge Compact installations.

Approved Applications

Note: Exact verbiage in DOE documents is "refrigerated load." In this case, one walk-in refrigerator = one refrigerated load, even if there are multiple evaporators.

The following are the Edge Compact's approved walk-in cooler/freezer use cases:

- A single walk-in cooler/freezer over 3000 sq/ft is permitted for any application.
- A single walk-in cooler/freezer under 3000 sq/ft is permitted when it is used exclusively for medical, scientific or research purposes.
- Multiple walk-in cooler/freezers of any size are permitted when all walk-ins are cooled by a single condensing unit.
- Multiple walk-in cooler/freezers of any size with multiple condensing units are permitted if all walk-in cooler/freezer are used for process cooling purposes **and** meet one or more of the following criteria:
 1. Utilizes a condensing unit that produces at least 100 Btu/h per cubic foot of insulated space.
 2. Contains an evaporator coil that is at least 4.5 ft tall and has a width that is at least 1.5 times the evaporator coil's height.
 3. Does not use an evaporator coil as the system's cooling unit.

For example, applicable process cooling applications are:

- A 2000 sq ft walk-in cooler/freezer which uses a condensing unit producing 200,000 Btu/h and has an evaporator over 4.5 ft tall and 6.75 ft wide.
- A 1600 sq ft walk-in cooler/freezer which is 10 ft tall and contains a 16,000 cubic foot volume with a cooling load of 2,000,000 Btu/h
- A 1000 sq ft insulated walk-in cooler/freezer which exclusively uses the unit cooler (evaporator coil) to separate chemicals.

