



Walk-In Coolers/Freezers

Minimum Requirements for Construction Drawings

Plans shall be of sufficient clarity to indicate the location, nature, and extent of the work proposed and show that it will conform to the provisions of the adopted Codes and ordinances.

Acceptable drawings sizes are those that are larger than 11" x 17" and drawn to an appropriate scale as listed below. Plans shall be drawn in indelible ink. Plan sheets that are cut and pasted, taped, or that have been altered by any means (pen, pencil, marking pens, etc.) will not be acceptable for plan check.

Washington State law requires that any registered professional who prepares or supervises the preparation of drawings and construction documents stamp and sign such documents. Where multiple copies of stamped submittal documents are submitted, at least one set must bear an original wet seal

Walk-In Cooler/Freezer – Inside existing building

A mechanical permit is required for the compressor and condenser, AND a building permit is required for the cooler. The mechanical and building permit information can either be combined on one application or applied for separately.

- Site plan
- Floor plan showing the location of each cooler/freezer inside building
- Construction plans of the cooler/freezer unit
- Manufacturer's Equipment Data and Installation Instructions

Walk-in Cooler/Freezer – Outside of existing building

A mechanical permit is required for the compressor and condenser, AND a building permit is required for the cooler. The mechanical and building permit information can either be combined on one application or applied for separately.

- Site plan. Indicate location of proposed and existing outdoor cooler/freezer (s) on the site.
- Construction plans of cooler/freezer
- Manufacturer's Equipment Data and Installation Instructions

Pre-fabricated walk-in coolers and freezers are components regulated by the International Building Code (IBC) and ASCE 7. Please see IBC Chapter 16 (Structural Forces) and Sec. 1613; and IBC Sec. 2603 (Foam Plastic Insulation).

Separate building permits are required for each structure, per IBC Sec. 105.1. **One combination Building/Mechanical permit can be issued for the construction of a walk-in cooler/freezer and all its related mechanical equipment.** All applications for coolers and/or freezers must include the following information that is necessary to verify compliance with the IBC, ASCE 7, Washington State Energy Code (C402.5, C402.6 & 403.5) and the International Mechanical Code.

Site Plan

- 1. Scale and north arrow. Max. scale 1"= 40' (Preferred scale is 1" = 20' or 1" = 40')
- 2. Dimensions of lot, distance to property lines, location(s) and square footage of existing or proposed structures, street name, location and use.
- 3. Condensing units located on building exterior must be shown on site plan.

Floor Plan

(scale: 1/4"= 1' or 1/8"= 1')

- 1. Indicate location of all exits. Required exit doors must be not less than 3' in width and not less than 6 feet 8 inches in height. Provide exiting details showing compliance with IBC Sec. 1014, 1015, and 1016 and Chapter 11
- 2. Show location and specify dimensions of proposed walk-in cooler or freezer.

General

- 1. Provide information regarding products stored, including packaging, shelving, and sprinkler design information (i.e. density, area of coverage and temperature rating of heads).

Mechanical

- 1. Provide refrigeration equipment product data specifying listing approvals and weights.
- 2. Show location of compressors, condensers, and other equipment.
- 3. Specify amount and type of refrigerant.

Structural Design

- 1. Provide framing plans and calculations, for vertical and lateral loads, stamped by a Washington State registered professional engineer for any roof mounted equipment weighing more than 400 pounds. Units weighing less than 400 pounds (when directly supported on framing members larger than 2 x 4) are not required to be stamped by an engineer.
- 2. Roof curb designs must be provided for all roof mounted mechanical equipment. If factory curbs will be used, provide details. Specify the type, amount, and location of fasteners.
- 3. All floor supported mechanical equipment and fixed appliances shall be anchored to the structure to resist displacement vertically and on both horizontal axis due to seismic motion. Specify anchorage for floor supported equipment on the plans.

- 4. Suspended mechanical equipment and appliances shall have rigid vertical hangers and be braced in both horizontal directions. Connections by pipes or ducts that are or contain non-rigid elements, are not of inherent sufficient strength, or which are not adequately anchored will not be acceptable as equipment or appliance anchors. Detail anchorage for suspended equipment on drawings.

Foam Plastic Insulation

- 1. The interior of the building shall be separated from foam plastic insulation by an approved thermal barrier that complies with IBC Sec. 2603.6.4.
- 2. Provide manufacturer's name, product listing, product identification and information to show that the proposed structure complies with the flame-spread and smoke-development limitations of IBC Sec. 2603.