



Requirements for Walk-In Coolers Containing Beer-Wine in Pressurized Containers



When walk-in coolers containing beer and/or wine in pressurized containers are being installed, the following shall be required:

A Mechanical Permit Application from a State Licensed Mechanical Contractor, with the information noted below, shall be submitted to the Building Department for review and approval:

1. A report and design drawings prepared, signed and sealed by a State Licensed Professional Engineer with a minimum two years experience in the evaluation and design of the methods of protection required for Hazardous Materials applications.
2. The report and design drawings shall provide the information required by Section 414.1.3 of the Michigan Building Code (MBC) 2015 and shall contain the following additional information:
 - A. Information, drawings, and details to show that the storage, use, and handling of the CO₂ is in accordance with Chapter 53 of the 2015 International Fire Code (IFC) and NFPA 55, Chapter 13, and other applicable standards to ensure safe installation.
 - B. A clear indication showing how the CO₂ system will be protected from physical damage.
 - C. Information, drawings, and details of the required protection, ventilation, or emergency alarm system.
3. Please note: Additional requirements for gasses in piping systems over 15psi (per Section 5003.2.2.2 of the 2015 IFC) shall be included in the report and the drawings (as applicable). This required additional information applies to walk-in coolers with beer kegs on tap, typically supplied with both Nitrogen and CO₂ and shall include:
 - A. An "APPROVED" leak detection and shutoff system for both Nitrogen and CO₂.
 - B. Pipe labeling and "APPROVED" signage.
 - C. Methods to protect piping from physical damage, specifically from operations and storage.
 - D. A design that shows that all pump and relief vents are vented outdoors to an approved location at least 4 ft. from any door or window opening.

The requirements outlined above are referenced in the following Codes and Standards:

The 2015 Michigan Mechanical Code (MMC)

The 2015 Michigan Building Code (MBC)

The 2015 International Fire Code (IFC)

National Fire Protection Association NFPA-55

Compressed Gas Association CGA-G-6, CGA-G-6.5 & CGA-SB-29

European Industrial Gasses Association Info 24/11 - Carbon Dioxide Physiological Hazards, "Not Just An Asphyxiant".

Please direct any questions about the above requirements to the Building Department at 248-656-4615.