

Pressure, Vacuum, and Cryogenic Systems: Refrigeration, Chiller, Heating/Cooling System Requirements

Department: Chemical and General Safety

Program: Pressure, Vacuum, and Cryogenic Systems

Owner: Program Manager

Authority: ES&H Manual, Chapter 14, Pressure, Vacuum, and Cryogenic Systems¹

All pressure systems must be in conformance with the requirements of Chapter 14, and this exhibit provides the additional required information specific to refrigeration, chiller, and heating/cooling systems. If you need further clarification on the unique characteristics of this type of system or the specific codes, regulations, and standards, please contact the program manager.

Unique Characteristics

Refrigeration, chiller, and heating/cooling systems must be designed to certain additional codes and regulations based on the methods employed to create the hot or cold temperature regimes in a fluid.

Required Regulations, Codes, and Standards

In addition to those listed in Section 3, “Standards”, of Chapter 14, the following regulations, codes, and standards apply.

*Note Use the most current edition unless otherwise indicated.*²

American Society of Mechanical Engineers (ASME) Standards

- ASME B31.5-2001, “Refrigeration Piping and Heat Transfer Components”
- ASME B31.9-1996, “Building Services Piping”

California Fire Code

- Chapter 6, “Building Services and Systems”

California Mechanical Code

- Chapter 11, “Refrigeration”
- Chapter 12, “Hydronics”

1 *SLAC Environment, Safety, and Health Manual* (SLAC-I-720-0A29Z-001), Chapter 14, “Pressure, Vacuum, and Cryogenic Systems”, http://www-group.slac.stanford.edu/esh/hazardous_activities/pressure/policies.htm

2 See the “SLAC Research Library Community Pages”, <http://www-group.slac.stanford.edu/library/CommunityPages.asp>, for available standards.