## **DESIGN CRITERIA**

- 1. Related Sections: See related Division 21 and 23 Design Criteria.
- This Section includes portable fire extinguishers, fire extinguisher cabinets, and fire protection accessories.
- 3. Design and placement of fire extinguishers shall be in accordance with NFPA 10 *Standard for Portable Fire Extinguishers* with locations clearly identified on the Drawings.
- 4. Extinguishers to be multipurpose dry chemical with a minimum rating of 4A:80B:C rated. Extinguishers located in customer and administrative office areas shall be provided with semi-recessed cabinets. Extinguishers located in warehouse and other similar areas shall be mounted on walls with manufacturer standard fire extinguisher hooks.
- 5. Per UFC 3-600-01 9-17.1, general purpose fire extinguishers must be installed where required by NFPA 101. Per NFPA 101 36.3.5.3, 38.3.5, Portable fire extinguishers shall be provided in all mercantile and business occupancies respectively.
  - A. Clean Agent extinguishers must be used in Electronic Equipment Areas.
  - B. Carbon Dioxide extinguishers may only be used in rooms more than 1,000 square feet.
- 6. Extinguishers shall be located throughout the building with a maximum 75' travel distance and each extinguisher shall have a maximum coverage area of 1500 square feet per unit of A, up to 6,000 square feet for a 4A extinguisher per NFPA 10 Table 6.2.1.1. Commissaries are considered to be Ordinary Hazard per Code Analysis document.
- One extra B rated extinguisher shall be installed near locations that have the possibility of flammable liquids fires, such as Deli/Bakery, break rooms, and food prep areas per NFPA 1 13.6.3.1.1.2 and NFPA 10 6.1.1.2.
- 8. Commissary facilities with Deli Departments containing a 1D09 rotisserie, and/or 1D10-B combosteamer ovens, or other grease-laden vapor producing cooking appliance shall require a vented hood with a built-in fire suppression system. A minimum 6Liter (1.8-gallon) wet chemical (UL Rating 2-A:K) extinguisher is required to supplement this system, and shall be located in the immediate vicinity of the hood.
- 9. Coordinate placement of extinguisher cabinets with to avoid wall mounted wood bumper rails, hose bibs, and other concealed utilities within walls.
- Locate fire extinguisher cabinets to comply with the guidelines of the ABA Accessibility Standard for Department of Defense Facilities.
- 11. Above each cabinet-mounted extinguisher and all other extinguishers that are not readily visible per NFPA 10 6.1.3.3.2, a wall-mounted sign shall be installed in close proximity to the extinguisher and visible from the normal path of travel.
- 12. Extinguisher location signs shall be a triangular acrylic sign able to be viewed from multiple directions similar to Brady "Tall Fire Extinguisher 'V' Sign" Part number SP818V.

**END OF SECTION** 

June 2022 10 44 00 1