SECTION 10 44 00
Fire Protection Specialties

PART 1 GENERAL

1.1 SUMMARY

A. Section includes fire extinguishers; fire extinguisher cabinets; and brackets for wall mounting.
B. This standard is provided to obtain and maintain adequate, approved fire protection for Stanford University. Any questions regarding this standard shall be directed to the Stanford University Fire Marshal’s Office (SUFMO).
C. In general, all fire protection design issues are subject to internal review and approval by SUFMO.

1.2 REFERENCES

A. Fire Extinguishers Study Guide, as published by the Office of State Fire Marshal.
B. UL (Underwriters Laboratories, Inc.) - Fire Protection Equipment Directory
C. CCR Title 19, CCR Title 24
D. NFPA 10

1.3 SUBMITTALS

A. Architectural Drawings: All fire extinguisher (FE) locations shall be shown on the drawings and indicate whether FE’s are to be in cabinet(s) or wall mounted. Provide product data submittals for all cabinets to be installed as part of the project to SUFMO for approval prior to purchase.

B. The Project Manager will submit the drawings to SUFMO for approval as part of the normal SUFMO review process. After receiving comments, the contractor shall make appropriate changes to the drawings. For any requirements not implemented, design consultant/contractor shall provide an explanation in writing.

C. Manufacturer’s data sheets for all types of fire extinguisher cabinets, signs and other accessories shall be submitted. Exact model shall be indicated on the data sheet when more than one model is shown.

1. Include physical dimensions, operational features, color and finish, anchorage details, rough-in measurements, location and details.
D. Record Drawings: At project close-out, the Contractor shall provide to the Project Manager a record set of drawings that includes the location of each extinguisher and other installed hardware on the final floor plans.

1.4 QUALITY ASSURANCE

A. Competency Quotation: The work shall be performed by a Contractor who shall have had at least 5 years successful installing cabinets, brackets signs and other accessories of similar make and similar model. The Project Manager may reject any proposed installer who cannot show evidence of such qualifications.

1.5 ENVIRONMENTAL REQUIREMENTS

A. Interior cabinets shall only be located in interior locations. Exterior locations shall utilize weather-proof cabinets.

PART 2 PRODUCTS

2.1 FIRE EXTINGUISHERS – Fire Extinguishers are Stanford furnished items and will be charged to the single project work request/work order; a separate work request is not required. Fire protection cabinets are to be furnished and installed by the Contractor. The fire extinguishers are furnished, tagged and installed by SUFMO or the Contractor.

A. Minimum Type and Location:
1. 3A-40BC extinguishers in all common areas, elevator control rooms, generators and at electric vehicle charging stations as required by SUFMO.
2. 5lb CO2 extinguishers in all wet chemical labs. 10lb CO2 extinguishers in all main mechanical and electrical rooms.
3. Class K to be located in kitchens equipped with deep fat fryers within 30' of the hood being served.
4. 40BC extinguishers to be located in kitchens without deep fat fryers.
5. Data Centers, Communication Hubs – type as required by SUFMO.
6. Magnet Rooms – Non-magnetic Clean Guard or Water Mist extinguisher is required to protect MRI equipment. All other fire extinguishers in proximity to an MRI or magnetic devices shall be a non-magnetic type of extinguisher.

B. Halon: Not permitted for new installations.

C. Water Type: For exterior use only as approved by SUFMO.

D. Special Hazard Conditions: type as required by SUFMO.

E. The minimum number of extinguishers and spacing shall be as required by Title 19. The preferred location for extinguishers is adjacent to exits and in the corridors and main egress paths.
2.2 FIRE EXTINGUISHER CABINETS

A. Configuration: Recessed or Semi-Recessed
   Exception: Exterior weather-proof cabinets may be surface mounted.

B. Door: Latch access only, key lock access is not acceptable. Cabinet doors shall be equipped with a vision panel.

C. Door Glazing: Break glass type cabinets are not acceptable.

D. Cabinet interiors to have a minimum clear space of 18 inches high by 8 inches wide and capable of containing the specified fire extinguisher.

E. Cabinet Finish: Project Architect shall specify finish type available from the manufacturer.

PART 3 EXECUTION

3.1 EXTINGUISHER INSTALLATION

A. Extinguishers: Installed by SUFMO or the Contractor

3.2 CABINET INSTALLATION

A. Prepare structural members of backing as required for mounting screws.

B. Installation of cabinets using nails is not acceptable.

C. Ensure cabinets are secured rigidly in place in accordance with manufacturer’s instructions. Minimum of two screws each at both the top and bottom of the rear of the cabinet anchored to building structural members or backing attached to structural members. Verify that the cabinet mounting holes line up with structural members or backing.

D. Install fire extinguishers in cabinets at the completion of construction. Cabinets shall be located so that the hinge door has a clear opening dimension of 180 degrees.

E. Fire extinguisher cabinets shall be installed so that the bottom of the cabinet is not more than 2 ft. above the floor.

F. Signs shall be installed wherever extinguishers are not readily visible to identify their location. Where cabinets are used signs shall be installed to identify location along the corridor or hallway.
3.3 BRACKET INSTALLATION

A. Brackets for hanging fire extinguishers will normally be installed by SUFMO.

B. Alternate installation methods shall be reviewed and approved by SUFMO.

3.4 WARRANTY

A. Contractor shall warranty cabinets, accessories, and workmanship for a period of one (1) year from the date of final acceptance.

END OF SECTION