

Fire Extinguishers and Cabinets Design Guide

Basis of Design

These guidelines apply to the selection and installation of fire extinguishers, fire extinguisher cabinets, and accessories and are intended to be consistent with the International Fire Code and NFPA 10. Portable fire extinguishers should be furnished and installed by the contractor. Please use the University of Washington Guide Specification 10 44 00 and discuss deviations with Environmental Health and Safety.

General Guidelines

- Fire extinguisher and cabinet symbols must be shown on the plans.
- University occupancies generally require multipurpose dry chemical (ABC) extinguishers to meet code. All areas must have a multipurpose (minimum 2A:40B:C rated) extinguisher.
- Fire extinguishers must be conspicuously located and within required travel distances as outlined in the codes and standards. If the extinguisher is not readily apparent, signage shall be provided to indicate location.

Special Conditions

- A combination of water and multipurpose extinguishers may be appropriate in specific areas such as a library or other areas with contents predominantly of ordinary combustibles.
- Carbon Dioxide and other clean agent extinguishers are typically provided in rooms dedicated to computer systems and clean rooms.
- Type K extinguishers are required in most commercial kitchen areas with deep fat frying.
- Areas working with certain metals may also require a Class D extinguisher. These are chemical specific; please contact EH&S for further guidance.
- Extinguishers in all laboratory areas of science buildings shall be located inside and near the door of all wet laboratories and other rooms using and storing permit level quantities of hazardous materials. A hallway or corridor location may suffice for very small laboratories and rooms.

Design Evaluation Submittals

CD Phase: Show extinguisher and cabinet location on drawings with a type legend, details for recessed cabinets, and a complete specification tailored for the project. Environmental Health and Safety will evaluate the design. Identify all theft-prone areas for each project and specify lockable fire extinguisher cabinets. Generally, this will include loading docks, parking garages, and throughout residential buildings. Do not specify lockable cabinets elsewhere; most areas within academic and research buildings have not historically posed an extinguisher theft problem.

Construction Submittals

Products information and an extinguisher inventory must be reviewed and approved by the Owner. The Owner's representative for this section is Environmental Health and Safety.

Products, Materials and Equipment

University personnel service fire extinguishers in-house; therefore, it is preferred to limit the manufacturer and model of products to facilitate cost effective maintenance. Refer to the type specification for approved products and inquire with EH&S for alternates.