



C-25 – FIRE SAFETY ELEMENTS

General

1. Fire lanes shall be provided for as described below.
2. Fire service sprinkler system features, standpipes, and fire alarm systems shall be provided for as described below.
3. Fire extinguishers shall be provided for as described below.
4. Key Boxes (Knox Boxes) shall be provided for as described below.

Fire Lanes and Access Roads

This section has been relocated, refer to Section: ***B-01 - Roadways, Driveways & Fire Lanes.***

Sprinkler Systems, Standpipes and Alarm Systems

Fire department connection (FDC) locations shall be approved by the University Fire Marshal in consultation with the Chapel Hill Fire Department.

- A. Buildings equipped with a fire sprinkler system or standpipe system must be equipped with Post Indicating Valves (PIVs).
- B. FDC locations and PIVs shall be identified with a sign stating “FDC” or “PIV”, where appropriate, and must indicate the name of the building served by the connection or valve. All text shall be white on a red background. The “PIV” or “FDC” designation shall be no less than 8” in height.
- C. FDCs shall be provided with at least 3 feet of space on all sides.
- D. Directional signage shall be provided for FDC and PIV locations where the sign in section C is obscured from the fire lane or access road.
- E. Fire alarm panels or equipment should not be co-located in spaces with other uses (e.g., housekeeping closets, communications closets).
- F. Rooms containing the fire alarm panel shall be identified with a sign indicating “FACP”, with letters no less than 6” in height.
- G. Where required by code, a Fire Command Center will be provided at a location approved by the University Fire Marshal and Chapel Hill Fire Department. This location will be constructed in accordance with Section 508 of the North Carolina Fire Prevention Code.

Fire Extinguishers

The purchase and installation of fire extinguishers shall be included as a part of the cost of each project.

- A. Fire extinguishers installed within recessed or semi-recessed cabinets along a hallway or path of egress shall be provided with a sign visible from both directions along the path of egress.
- B. Fire extinguishers shall be distributed in accordance with Section 906 of the North Carolina Fire Prevention Code. With respect to fire extinguishers, University buildings shall be considered at least an Ordinary hazard occupancy unless otherwise designated by the University Fire Marshal.
- C. Given the requirement in Section IV.C above, fire extinguishers shall be required to be installed, even where not required explicitly by code due to the installation of quick-response sprinkler heads.
- D. Fire extinguisher layout and distribution plans shall be submitted to the University Fire Marshal for review and approval prior to construction.
- E. “Amerex” brand fire extinguishers are preferred for compatibility with existing University fire extinguisher maintenance programs.



Key Boxes (Knox Box)

Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for lifesaving or fire-fighting purposes, the University Fire Marshal is authorized to require a key box to be installed in an approved location.

- A. The key box shall be a Knox Box and shall contain keys and or access cards to gain necessary access.
- B. A Knox box shall be added to all new construction projects and will be installed with a tamper switch that will be hardwired to the fire alarm communicator to send a signal to monitoring station at UNC Police Department.
- C. Approved Knox boxes are **model 3200 and model 4400**. The University Fire Marshal will determine which box is required for the building based on UNC Fire Safety SOP.
- D. The operator of the building shall immediately notify the University Fire Marshal and provide new key where a lock is changed or rekeyed. The key to such lock shall be secured in the Knox box.
- E. The purchase and installation of Knox boxes shall be included as a part of the cost of each project.