

Fire and Life Safety Systems

All of Tufts University buildings are protected by automatic fire detection devices and fire alarm systems. Every residential housing building is protected by an automatic fire sprinkler system that, when activated, will control and contain the spread of the fire until the local career fire departments that provide fire protection services to the Medford/Somerville and Boston campuses arrive to extinguish the fire. The Cummings School of Veterinary Medicine's fire service is provided by the Grafton Fire Department that is staffed by on-call fire fighters.

Fire Alarm System

The Fire Alarm Systems on all three campuses are monitored and supervised 24-7 by the Tufts Police Communications Centers located on the Boston and Medford campuses. The systems are engineered, installed and supervised in accordance with *Massachusetts Board of Fire Prevention Regulations 527 CMR* and *NFPA 72 National Fire Alarm Code*. The systems are maintained, inspected and tested annually in accordance with *NFPA 72*. Smoke detectors are ceiling mounted in each resident's room, the common hallways, stairways and corridors. Horn/strobe warning devices are installed to alert occupants to a life threatening incident. Manual Fire Alarm Pull Stations are located at every exterior exit on all levels of the buildings. Bedroom smoke detectors (local device) are programmed to alert the occupants if the origin of the smoke is in that room only. The detection devices (system devices) in the common areas (i.e., kitchens, living rooms, hallways, stairways and basements) will sound the building wide evacuation alarm and will also sound in all of the individual student rooms. Whenever a fire alarm activation is transmitted to the Communications Center, a Tufts Police patrol officer is immediately dispatched to the location and the local fire department is notified and responds. The patrol officer arrives within 2-3 minutes, followed by the local career fire department whose response time is usually 3-4 minutes. Upon arrival, the patrol officer determines the location of the alarm activation and proceeds to that location to verify the incident. When the fire department arrives, they assume command of the incident and investigate the reason for the activation. All of the university buildings are equipped with portable, multi-purpose, dry powder fire extinguishers. Tufts patrol officers are trained to operate the fire extinguishers. If the fire is small enough to be controlled or extinguished by its use, the officer will attempt to extinguish the fire.



Fire Sprinkler System

The Fire Sprinkler Systems on all three campuses are monitored and supervised 24-7 by the Tufts Police Communications Centers located on the Boston and Medford campuses. The systems are engineered, installed and supervised in accordance with *Massachusetts Board of Fire Prevention Regulations 527 CMR* and *NFPA 14, 14A and 25, Installation, Inspection, Testing and Maintenance of Water-Based Fire Suppression Systems*. 97% of all fires in fully sprinklered buildings are controlled by two sprinkler heads or less. When the temperature reaches 155° at the sprinkler head, the fusible link releases and water flows to control and contain the spread of the fire. Only that sprinkler head flows water, subsequent heads will flow water only when the temperature releases the fusible link.



Carbon Monoxide Detection

In accordance with the *Massachusetts Board of Fire Prevention Regulations 527 CMR 31.00 Carbon Monoxide Alarm*, all university residential buildings that contain fossil fuel burning equipment or have enclosed parking are equipped with Carbon Monoxide Alarm protection. The detection devices are wall mounted within ten (10) feet outside of any bedroom on each level of the dwelling unit. When the device has detected abnormal parts per million of carbon monoxide (CO), it sounds a local warning and sends a signal to the Tufts Police Dispatch Center. A patrol officer is immediately dispatched to the location of the alarm. If the alarm code on the detector is **GREEN** the area is safe and the most common reason for the activation is the pressing of the TEST button. If the alarm code is **RED** it indicates an abnormal level of CO has been detected. The patrol officer contacts the Dispatch Center and another patrol officer and the local fire department respond. In either situation, the patrol officer shall check the building occupants for any symptoms of CO poisoning. If symptoms are found, EMS will be notified to respond along with the local fire department.



Fire Doors

Fire barriers play an integral role in managing a fire by interrupting the spread of smoke, toxic gases, and the fire itself from one fire area into another. Fire doors are fundamental to the integrity of fire barriers because any time there is an open doorway to a compartment, a fire barrier is broken temporarily. To minimize the break in protection, fire doors must be self-closing and have proper latching devices in order to provide as much resistance as possible to the spread of fire, smoke, and toxic gases.

Fire exit doors are often held open for the convenience of employees and visitors, creating a significant fire hazard for all building occupants because of the break created in the fire barrier. Doors that are designed to be fire exit doors can be held open, but only if they automatically release when the building fire alarms are activated. Fire doors may only be held open by a device that automatically releases when the fire alarm is activated (such as an electromagnetic hold open device)



When Fire Doors are Needed

- Where a door has an EXIT sign on or around it;
- Where a door leads to exit stairwells and horizontal exits;
- Where a door leads to a hazardous area such as flammable storage;
- Where a door leads to a hallway or from one fully enclosed room to another.

Hazards to Avoid with Fire Doors

- Fire doors should never be tied open or held open by unapproved devices, such as door wedges and blocks;
- Even when closed, fire doors should never have their latch taped over; during a fire, hot gases can easily build up enough pressure to cause fire doors to blow open.



**This is a
FIRE DOOR
Your Safety
Depends Upon This
Door Being Closed**



Sticker affixed to University Fire Doors

Fire Door improperly tied open

Portable Fire Extinguishers

The majority of portable fire extinguishers that are strategically located throughout every University building are multi-purpose dry chemical extinguishers that will be effective on any type of fire you may encounter: ordinary combustibles such as paper, cardboard, cloth, and wood; energized electrical equipment; and flammable liquids, the exception is flammable metals.

If you discover a fire, you first must set off the building fire alarm system by activating a manual fire alarm pull station to warn the occupants. This will also initiate the response of the Tufts Police and the local fire department.

Only attempt to extinguish the fire if it is **very small, not more than 2 feet high**. Keep your escape route behind you.



P. A. S. S.

- P**ull safety pin from handle.
- A**im at base of fire.
- S**queeze the trigger handle.
- S**weep from side to side.



If you decide not to fight the fire, try to close the door to the fire area, if it is safe to do so, this will help to contain the heat, smoke and toxic gases from entering the egress corridors.

A periodic check of the extinguishers should be performed to ensure:

- ✓ that it is not being used as a door stop;
- ✓ that the pressure gauge needle is in the **GREEN** zone;
- ✓ that there are no visible indications that the extinguisher has been damaged, discharged or is missing.
- ✓ that the inspection tag is attached and punched with a month and year that is within the past twelve (12) months;



If an extinguisher needs to be replaced, submit a Work Order to Facilities to request corrective action.