



Fire Extinguishers & Response

MODULE 17



Fire Response Protocol

1. Activate the nearest fire alarm/call 9-1-1 and Public Safety ext. 7000
2. A fire alarm is relayed from the alarm company to San Mateo County Communications, CSM Public Safety Department, and the fire alarm station is identified so that fire equipment can proceed directly to the area of trouble. Alarms can be activated through either a pull box or automatically through smoke- and heat-sensing devices or water pressure gauges in the automatic sprinkler systems.
3. Horns and strobes will be activated in the corridors and restrooms of most buildings and inside certain large spaces such as the gymnasium and theatre. When the automatic sprinkler is activated, a continuous bell will also sound. When the fire alarm sounds, the buildings will be evacuated at once. CSM has Building Captains and Floor Managers who will assist in the evacuation. Permission to return to classes will be indicated by the Incident Commander or Emergency Management.
4. Faculty are responsible for the instruction of students in procedures to be followed in the event of an alarm. Procedures are as follows:
 - a. In an orderly manner, proceed out the building by means of the nearest unblocked route.
 - b. Evacuation routes are delineated on emergency maps in every facility.
 - c. Building Captain shall check to ascertain that all persons have vacated the buildings.
 - d. Once outside a building, all persons must remain at least 100 feet from a building.
 - e. Each building has a designated emergency assembly area.



Fire Response Protocol Continued

5. In case of fire or other emergency, automobiles should not be moved unless it can be done safely and not interfere with the movement of emergency personnel.
6. The first responsibility of all staff is that of saving lives, best accomplished by:
 - a. Activate nearest fire alarm
 - b. Call 9-1-1 and Public Safety
 - c. Utilize fire extinguishers for incipient fires. *See Fire Extinguisher Section below.*
7. All staff should be familiar with the location and type of fire extinguishers in areas which they frequent. The most common fire extinguishers found on district grounds are Multipurpose Dry Chemical extinguishers which are used for "A," "B," or "C" fires. However, there are specialized fire extinguishers that use only Pressurized Water for "A" fires or Carbon Dioxide (Co2) for "B" and "C" fires in laboratories and other special hazard areas.
8. Nonemergency personnel may fight the fire ONLY if both of the following conditions apply:
 - a. The fire is small (e.g., trash can) and is not spreading to other areas; *and*
 - b. A readily accessible fire extinguisher is in working condition and personnel are trained to use it.
9. Do not activate a pull box in the event of an automobile fire in a parking lot, unless there is a direct facility exposure. Phone the Public Safety Office, (650) 738-7000 and/or call 911 (Provide parking lot name and number).



Fire Class - C

Energized Electrical Equipment

- Computers
- Fax Machine
- Power Cord
- Engine Compartment on Car
- De-energized equip is Class A fire

Class - K

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...s, lards, and fats in
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- D

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Class - B

- Flammable Liquids
- Gasoline
- Oil
- Grease
- Solvents



Fire Extinguishers

Class - A

- Ordinary Combustibles
- Wood
- Paper Cloth
- Plastics
- Roofing Material
- Hay, Straw, Etc.



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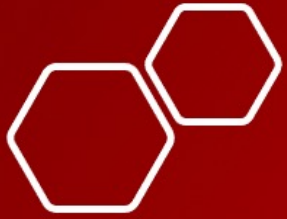
Fire Class - A

- Ordinary Combustibles
 - Wood
 - Paper Cloth
 - Plastics
 - Roofing Material
 - Hay, Straw, Etc.



CLASS A

Contain water for use against ordinary combustibles



Fire Class - B

- Flammable Liquids
 - Gasoline
 - Oil
 - Grease
 - Solvents





Fire Class - C

- Energized Electrical Equipment
 - Computers
 - Fax Machine
 - Power Cord
 - Engine Compartment on Car
- De-energized equip is Class A fire





Fire Class - D

- Combustible Metals
 - Magnesium
 - Sodium
 - Potassium
 - Titanium





Fire Class - K

- Cooking Fires
 - Recently recognized as NFPA 10
 - Fires involving combustible oils, lards, and fats in commercial cooking





Fire Extinguisher Types

Pressurized Water

- Class “A” fires only
- 2.5 gal. water (up to 1 minute discharge time)
- Has pressure gauge to allow visual capacity check
- 30 – 40 ft. max effective range
- Can be started and stopped as necessary
- Extinguishes by cooling burning material below the ignition point
- Thumb can be used to break the stream



Fire Extinguisher Types Cont.

Carbon Dioxide (Co2)

- Class “B” or “C” fires
- 2.5 – 100lbs of Co2 (8 – 30 seconds of discharge time)
- Has no pressure gauge (capacity verified by weight)
- 3 – 8 ft. maximum effective range
- Extinguished by **smothering** burning materials
- Extinguisher is distinguished by the cone shaped discharge orifice



Fire Extinguisher Types Cont.

Multipurpose Dry Chemical

- Class “A”, “B”, or “C” fires
- 2.5 – 20lbs dry chemical (ammonium phosphate: 8 – 25 seconds of discharge time)
- Has pressure gauge to allow visual capacity check
- 5 – 20 ft. maximum effective range
- Extinguished by smothering burning materials
- Most common in our District