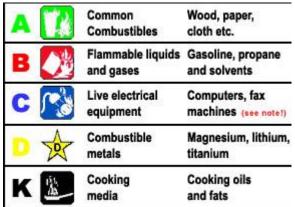# Fire Extinguisher University

Fire extinguisher classification may appear difficult to the average person, however with some basic knowledge the selection and use of fire extinguishers can be made easy. Fire extinguishers are divided into fire class and extinguishing agent. The following guide will walk you through the fire classifications, types of fires and information on how to choose and use the proper extinguisher. Commercial and industrial fire protection is mandated by code and specified minimum fire protection standards exist. Keep in mind that authorities having jurisdiction can increase the requirements in your area. The means to meeting the code and the liability for adequate fire protection is left to facility owners. You may also make a wise choice and increase your protection beyond code requirements. Be sure to contact your local authority having jurisdiction before installing any type of unit.

Fire extinguisher selection can be easy, just think in terms of CLASS of fire and TYPE of extinguishing agent. Fire extinguishers are described in terms of both Class and Type. To learn more on fire extinguisher Class and Type, please follow the links: Fire Extinguisher Class and Fire Extinguisher Extinguishing Agent Type Enjoy learning about fire extinguishers. All extinguishers are made by Badger Fire Protection. Units are shipped fully charged. In the event you need help choosing a unit, please feel free to contact us for help.

Fires are classified into 5 groups:

A		Common Combustibles	Wood, paper, cloth etc.
B		Flammable liquids and gases	Gasoline, propane and solvents
C		Live electrical equipment	Computers, fax machines (see note!)
D		Combustible metals	Magnesium, lithium, titanium
K		Cooking media	Cooking oils and fats

CLASS A: Class A fires involve common combustibles such as wood, paper, cloth, rubber, trash and plastics. They are common in typical commercial and home settings, but can occur anywhere these types of materials are found.

CLASS B: Class B fires involve flammable liquids' gases, solvents, oil, gasoline, paint, lacquers, tars and other synthetic or oil-based products. Class B fires often spread rapidly and, unless properly secured, can re-flash after the flames are extinguished.

CLASS C: Class C fires involve energized electrical equipment, such as wiring, controls, motors, data processing panels or appliances. They can be caused by a spark, power surge or short circuit and typically occur in locations that are difficult to reach and see.

CLASS D: Class D fires involve combustible metals such as magnesium and sodium. Combustible metal fires are unique industrial hazards which require special dry powder agents.

CLASS K: Class K fires involve combustible cooking media such as oils and grease commonly found in commercial kitchens. The new cooking media formulations used form commercial food preparation require a special wet chemical extinguishing agent that is specially suited for extinguishing and suppressing these extremely hot fires that have the ability to re-flash.

(NOTE: Although ABC and BC Dry Chemical extinguishers can control a fire involving electronic equipment, the National Fire Code (NFPA 75-1999 edition), Section 6-3-2, specifically advises against dry-chemical extinguishers for fires involving computers or other delicate electronic equipment due to the potential damage from residues.

Standard for the Protection of Electronic Computer/Data Processing Equipment

It is very important to choose the proper fire extinguisher. Extinguishing agents have differing attributes, which make them more or less appropriate for use, depending on the class of fire, and the setting in which they will be used. Some agents can be used on more than one class of fire, and some have very specialized characteristics that make them particularly suitable for a specific class of fire situation.

The label on each fire extinguisher has a color coded box that helps users determine at a glance which class of fire it can be used on, the agent it contains, and the class of fire and type of setting for which it is listed. The following links describe each type of extinguishing agent: multi purpose dry chemical, regular dry chemical, purple K chemical, carbon dioxide, wet chemical, Halotron, water, and foam. For a quick reference, the following guide to fire extinguishing agents is provided:

A Quick Guide to Fire Extinguishing Agents

AGENT	CLASS OF FIRE			
	A	B	C	K
Multi-Purpose	◆	◆	◆	
Regular		◆	◆	
Purple K		◆	◆	
Carbon Dioxide		◆	◆	
Wet Chemical				◆
Halotron	◆	◆	◆	
Water	◆			
Foam	◆	◆		