

## SYSTEM DESCRIPTION

There are several types of portable fire extinguishers and suppression agents that protect areas from potential fires. The type of cylinder, its capacity, the volume of suppression agent within, and the appropriate distances between each if more than one cylinder is needed to cover the area, are all determining factors when deciding the type of fire extinguisher required.

Portable fire extinguishers are divided into different fire classes (**A, B, C, D et K**) and evaluated according to their extinguishing efficacy.

- **Water:** The most common is the permanent pressure water extinguisher. Water is a cooling agent.
- **Foam:** Type of AFFF (Aqueous Film Forming Foam) or FFFP (Film Forming Fluoro-Protein). These are rated to extinguish class A and B type fires. They are not suitable when temperatures are below freezing. Foaming agents suffocate the fire by starving the burning liquid of oxygen.
- **Carbon dioxide (CO<sub>2</sub>):** An electrically non-conductive, odourless and colourless inert gas that is a suitable agent for extinguishing Class B and C fires. The agent leaves no deposits.
- **Chemical Powder:** Given the diversity of designs and types of extinguishing agents, the choice of fire extinguishers requires careful consideration. Three of the five most used types of agents are: ABC, BC, and PK.
- **Dry Powder:** These extinguishers and types of agents are intended for Class D firefighting and for very specific metals.
- **Clean Agent:** Halocarbon fuel agents are used to protect computer rooms or other sensitive areas where a "clean" extinguishing agent is recommended. They can be used on Class **A, B and C** fires.
- **Wet Chemical Agent:** This Class **K** agent is intended for cooking appliances.

Fire extinguishers are regulated under NFPA 10, as well as the CNB and CNPI codes.

## HOW TO USE A FIRE EXTINGUISHER

To activate a portable fire extinguisher, the following steps must be performed:

- **Remove the safety device** (pin).
- **Positioning:** Hold the fire extinguisher with one hand and the hose with the other.
- **Spraying:** Squeeze the handles together while directing the stream to the base of the fire in a back-and-forth motion.

Before using the extinguisher, be sure to learn its limits and how it works.