

# Portable Fire Extinguishers

## Guide to Installing and Locating Portable Fire Extinguishers

This document is intended as a general guideline for installing and locating portable fire extinguishers in buildings in accordance with the Ontario Building Code (OBC) and Ontario Fire Code (OFC). For full details refer to the current OBC and OFC.

The Ontario Building Code Division B, 3.2.5.17.(1) prescribes that portable fire extinguishers shall be installed in all buildings, except within dwelling units, in conformance with the provisions of Part 6 of Division B of the Fire Code.

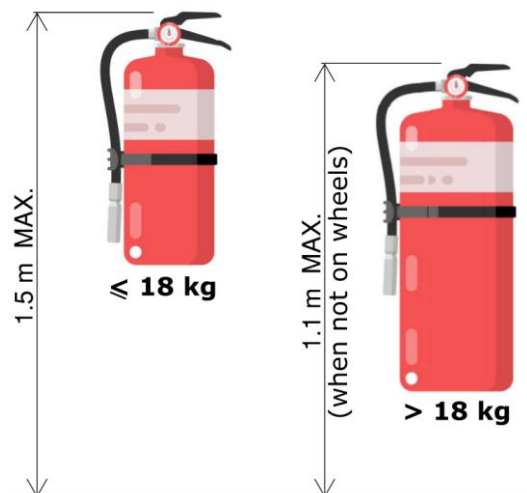
In accordance with the Ontario Fire Code Portable extinguishers shall be provided to protect every building, each hazardous occupancy inside the building and each hazardous process or operation located outside.

### Occupancy Classification

In order to properly place fire extinguishers, the classification of the hazard in the occupancy must be determined. See Table below for examples;

<b>Light Hazard Occupancy</b> (small fire size expected based on quantity of combustible material)	<b>Ordinary Hazard Occupancy</b> (moderate fire size expected based on quantity of combustible material)	<b>Extra Hazard Occupancy</b> (severe fire size expected based on quantity of combustible material)
<ul style="list-style-type: none"> <li>• Offices</li> <li>• Residential</li> <li>• Schoolrooms</li> <li>• Churches</li> <li>• Assembly Halls</li> <li>• Telephone exchanges</li> </ul>	<ul style="list-style-type: none"> <li>• Parking garages</li> <li>• Mercantile (except storage areas)</li> <li>• Warehouses (not classified as extra hazard)</li> <li>• Light manufacturing</li> <li>• Display rooms</li> <li>• Auto showrooms</li> <li>• School shop areas</li> </ul>	<ul style="list-style-type: none"> <li>• Mercantile storage areas</li> <li>• Warehouses with high-piled combustibles</li> <li>• Woodworking</li> <li>• Auto repair</li> <li>• Aircraft servicing</li> <li>• Processes incorporating flammable or combustible liquids</li> </ul>

### Distance above floor / Mounting Heights



### Signage

The location of portable extinguishers shall be prominently indicated by signs or markings in large floor areas and in locations where visual obstructions cannot be avoided.



### Test labels

A label shall be fixed to the extinguisher after testing that indicates the month and year the hydrostatic pressure test was performed, the test pressure used and the name of the person or agency performing the test.

## Required Extinguisher Types and Locations

Portable extinguishers shall be located;

- adjacent to corridors or aisles that provide access to exits
- so that they are easily seen and shall be accessible at all times, except where in;
  - a lockable, break-front glazed cabinet may be used for security purposes
  - a detention occupancy
 (see OFC for full requirements)

Portable extinguishers shall be suitable for the following fire classes;

**Class A fire** = a fire involving combustible materials such as wood, cloth and paper.

- Class A extinguisher - required for all buildings.
- Class A Extinguisher locations shall be in accordance with Table 6.2.6.A. <sup>(See Note 1)</sup>

**Table 6.2.6.A.**

Basic Minimum Extinguisher Rating for Area Specified	Maximum Travel distance to Extinguisher (m)	Maximum Area to be Protected per Extinguisher for Class A Fires (m <sup>2</sup> )		
		Light Hazard Occupancy	Ordinary Hazard Occupancy	Extra Hazard Occupancy
2A	25	600	300	Not Acceptable
3A	25	900	400	300
4A	25	1100	600	400
6A	25	1100	900	600
10A	25	1100	1100	900
20A	25	1100	1100	1100
40A	25	1100	1100	1100

**Class B fire** = a fire involving a flammable or combustible liquid, fat or grease.

- Class B extinguisher - required for occupancies where flammable or combustible liquid, fat or grease are present.
- Class B extinguisher locations shall conform to Subsection 6.2.6. of the Ontario Fire Code, see regulation for full requirements. <sup>(See Note 1)</sup>

**Class C fire** = a fire involving energized electrical equipment.

- Class C extinguisher – required in or near service rooms containing electrical equipment.
- Class C extinguisher locations shall conform to the distribution provisions for Class A or Class B in the vicinity of the electrical equipment. <sup>(See Note 1)</sup>

**Class D fire** = a fire involving a combustible metal.

- Class D extinguisher – required for occupancies with combustible metals
- Extinguishers shall be located not more than 25 m from the Class D fire hazard. <sup>(See Note 1)</sup>

**Class K fire** = a fire involving combustible cooking media such as vegetable oils, animal oils and animal fats.

- Class K extinguisher – required for commercial cooking operations
- Extinguishers shall be located to protect the cooking operations.

### Notes:

- (1) Where more than one class of fire extinguisher is required, the most restrictive location criteria shall be used for locating the extinguisher(s).