Know your fire extinguishers

Protection starts with prevention
While insurance can help repair or replace your property, prevention is always the first step to protecting the things that are important to you. Take some time to learn more about what you can do to stay safe.

Portable fire extinguishers
A portable fire extinguisher is considered the first line of defence against a newly started fire of limited size. For a portable fire extinguisher to be effective, the following requirements must be met:
- It must be readily accessible.
- It must be in working order.
- It must be suitable for the hazard being protected.
- The person using the extinguisher must know how to operate it.

Fire classifications
Here are the five main types of fires based on the materials that are burning:

<table>
<thead>
<tr>
<th>Class A fire</th>
<th>Ordinary combustibles such as wood, paper and cloth.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class B fire</td>
<td>Flammable and combustible liquids and gases such as gasoline, kerosene, and liquefied petroleum gases.</td>
</tr>
<tr>
<td>Class C fire</td>
<td>Energized electrical equipment.</td>
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<tr>
<td>Class D fire</td>
<td>Combustible metals such as magnesium, sodium and titanium.</td>
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<tr>
<td>Class K fire</td>
<td>Cooking devices that contain or use combustible vegetable or animal oils and fats. Typically, the K type extinguisher is used in commercial cooking operations.</td>
</tr>
</tbody>
</table>

How extinguishers are rated
Portable fire extinguishers are rated according to their intended use and fire fighting capability for the five classes of fire. The type and amount of agent contained in an extinguisher and the extinguisher’s design determine the amount of fire that can be extinguished for a particular class of fire.

Discharge duration and range
Typically, dry chemical extinguishers discharge duration average from eight to 13 seconds and range 10 feet. Water stored under pressure extinguishers discharge duration average from 45 to 60 seconds and range up to 30 feet.
Placement of fire extinguishers in relation to occupancy
The following shows the recommended classification and minimum sizes of extinguishers for some common occupancy.

<table>
<thead>
<tr>
<th>Occupancies</th>
<th>Extinguisher size</th>
<th>Special areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apartments, retail stores, offices</td>
<td>2A10BC</td>
<td>Mechanical rooms 4A40BC</td>
</tr>
<tr>
<td>Restaurants</td>
<td>2A10BC</td>
<td>Mechanical rooms 4A40BC Kitchen K type</td>
</tr>
<tr>
<td>Commercial, industrial spaces</td>
<td>2A10BC</td>
<td>Processing area 4A40BC Mechanical rooms 4A40BC</td>
</tr>
<tr>
<td>Agriculture barns and shop structures</td>
<td>4A40BC</td>
<td></td>
</tr>
<tr>
<td>Dwellings</td>
<td>2A10BC</td>
<td>Kitchen/cooking area: 5BC</td>
</tr>
</tbody>
</table>

Where to locate an extinguisher
Extinguishers should be located within a specified distance from hazard area based on the type of hazard, extinguisher rating and hazard level (low, moderate or high).

- Class A type maximum is 75 feet
- Class B type 30 to 50 feet
- Class C type 30 to 50 feet
- Class D type usually placed in area of the hazard to maximum of 75 feet
- Class K type maximum is 30 feet

Extinguishers should be readily visible and accessible near exit point and paths of travel. Ensure they are mounted properly to avoid injury to building occupants and avoid damage to the extinguisher. Always recharge extinguishers after each use.

How to use a portable extinguisher with the P.A.S.S. method
Remember the P.A.S.S method when using a portable fire extinguisher:

P- Pull the pin out.
A- Aim the nozzle, outlet or hose toward the base of the flames.
S- Squeeze the handle.
S- Sweep the nozzle back and forth at the base of flames.

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