



Fire extinguisher recommendations

Fire extinguishers provide people with a first line of defence in extinguishing small fires. Fire and Emergency New Zealand recommends the installation and maintenance of fire extinguishers.

Research¹ shows that 80% of all fires in commercial premises are successfully extinguished in the early stages by members of the public, without the intervention of firefighters. Of these fires, 90% were extinguished using a fire extinguisher.

Where fire extinguishers are installed, fire safety regulations require them to be maintained. Where extinguishers are not required to be installed they are still highly recommended by Fire and Emergency to ensure the safety of building occupants and employees. This is especially relevant for places where there is a higher risk of fire such as cooking areas, certain manufacturing processes, welding, or other hot work. We also recommend the installation of fire extinguishers in domestic settings such as homes, cars, caravans and boats.

Know when to go

Fire extinguishers should only be used when it is safe to do so, e.g. the fire is no larger than a waste paper basket or pot on a stove. Always have a safe path of escape if you are attempting to extinguish a fire, and ensure Fire and Emergency has been called. Watch a short Fast Fire Facts video on how to safely use a fire extinguisher [here](#).

Not all fires are the same so there are different types of fire extinguishers. The table below outlines our recommendation about which extinguishers are suitable for different fire types. For more information, refer to the manufacturer's instructions or New Zealand Standard NZS 4503:2005 which explains the selection and use of fire extinguishers and covers their installation, distribution and maintenance.

| Fire extinguisher suitability | | | | | | |
|-------------------------------|--|---|--|--|---|--|
| Type of extinguisher | Types of fire | | | | | |
| | Flammable solids e.g. paper, plastic, wood Class A | Flammable liquids e.g. paint, petrol, oil Class B | Flammable gases ² e.g. butane, CNG, LPG Class C | Flammable metals ³ e.g. titanium, magnesium Class D | Electrical equipment e.g. cables, computers, switchboards Class E | Cooking oils and fats e.g. chip pans, fryers Class F |
| Water | Green | Red | Red | Red | Red | Red |
| Wet chemical | Green | Red | Red | Red | Red | Green |
| Foam | Green | Green | Red | Red | Red | Yellow |
| Dry powder | Green | Green | Green | Yellow | Green | Yellow |
| Carbon dioxide | Yellow | Yellow | Yellow | Red | Green | Yellow |

| | | | |
|-------------|---|--|---|
| Key: |  = Recommended Most effective on this type of fire. |  = Limited May be effective on small fires of this type. |  = Not Suitable Not effective on this type of fire. |
|-------------|---|--|---|

¹ [Impacts of changes in provision of hand-operated firefighting equipment in non-residential buildings.](#)

² Always turn off the supply of gas before extinguishing gas fires.

³ Special purpose extinguishers are available for metal fires.