

All you need to know about fire extinguishers

According to the National Fire Protection Association (NFPA), someone in the United States dies in a house fire every three hours, averaging approximately 3,000 deaths each year. Arm yourself with the right equipment to help prevent a small self-contained fire from spreading out of control.

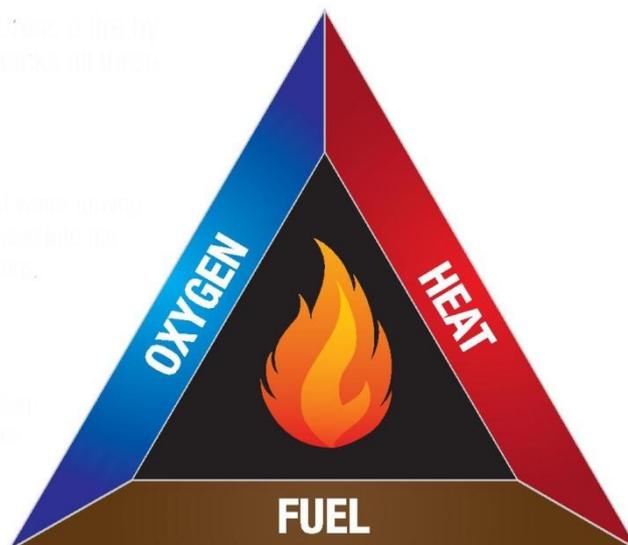
Fire extinguishers are an integral part of the fire safety provisions for any building and it is important to ensure that the correct type of fire extinguisher is installed and maintained. Geomast is well known for our expertise in consulting and providing reliable, high-quality fire safety products to meet the needs for all size businesses in all sectors.

Here we'll help you decide which solutions fit your business, and we'll show you how and when to use them but first in order to understand how fire extinguishers work you first need to know a little about combustion.

Fire triangle

First you must know how a fire is made; the **fire triangle** or **combustion triangle** is a simple model for understanding the necessary ingredients for most fires.

The triangle illustrates the three elements a fire needs to ignite: heat, fuel, and an oxidizing agent (usually oxygen). A fire naturally occurs when the elements are present and combined in the right mixture, meaning that fire is actually an event rather than a "thing". A fire can be prevented or extinguished by removing any one of the elements in the fire triangle. For example, covering a fire with a fire blanket removes the "oxygen" part of the triangle and can extinguish a fire.



Choosing the correct Fire Extinguisher

Each type of fire extinguisher is suitable for different types of burning materials and will have a fire rating based on the volume of fire that they are capable of extinguishing. Below is an overview of each type of fire extinguisher including its rating and suitable uses.

ΔΙΑΓΡΑΜΜΑ ΠΥΡΟΣΒΕΣΤΗΡΩΝ ΑΝΑ ΚΑΤΗΓΟΡΙΑ ΠΥΡΚΑΓΙΑΣ
FIRE EXTINGUISHER USE CHART PER CATEGORY OF FIRE

ΧΡΩΜΑ COLOUR	ΤΥΠΟΣ TYPE	ΣΤΕΡΕΑ SOLIDS	ΕΥΦΛΕΚΤΑ ΥΓΡΑ FLAMMABLE LIQUIDS	ΕΥΦΛΕΚΤΑ ΑΕΡΙΑ FLAMMABLE GASSES	ΗΛΕΚΤΡΙΚΕΣ ΕΓΚΑΤΑΣΤΑΣΕΙΣ ELECTRICAL EQUIPMENT	ΜΑΓΕΙΡΙΚΑ ΛΑΔΙΑ & ΛΙΠΗ COOKING OILS & FATS
	ΝΕΡΟΥ WATER	✓ Yes	✗ No	✗ No	✗ No	✗ No
	ΑΦΡΟΥ FOAM	✓ Yes	✓ Yes	✗ No	✗ No	✗ No
	ΞΗΡΑΣ ΚΟΝΕΩΣ DRY POWDER	✓ Yes	✓ Yes	✓ Yes	✓ Yes	✗ No
	ΔΙΟΞΕΙΔΙΟ ΑΝΘΡΑΚΑ CARBON DIOXIDE	✗ No	✓ Yes	✗ No	✓ Yes	✗ No
	WET CHEMICAL (F CLASS)	✓ Yes	✓ Yes	✗ No	✗ No	✓ Yes

When to use fire extinguishers

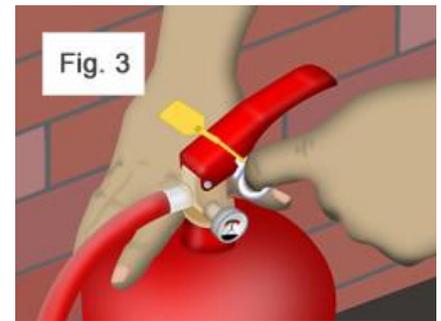
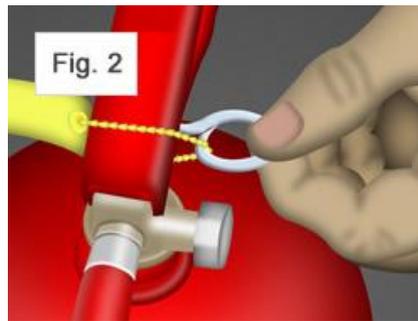
It's important to remember that fire extinguishers are only one element of a complete fire survival plan. Only use your extinguisher after making sure:

- All residents of the home have been evacuated to safety
- The fire department has been notified
- There is a clear exit behind the person using the extinguisher

Use your extinguisher only to keep a small self-contained fire from growing, only when the room is not filled with smoke, or to create a safe pathway out of the home. Be sure to read the instructions and become familiar with your fire extinguishers parts and operation before a fire breaks out.

How to use Fire Extinguishers

1. Before attempting to fight a fire with a fire extinguisher it is important to check that it is fully charged (**Fig. 1**) and that the safety pin is not bent (**Fig. 2**)
2. Ensure you remain a safe distance from the fire and remove the safety pin (**Fig.3**) this will break the tamper seal
3. Aiming the extinguisher:
 - **Solid Materials:** Aim the hose at the base of the flames, moving across the area of the fire
 - **Spilled liquids:** Aim the hose at the near edge of the fire and with a rapid sweeping motion, drive the fire towards the far edge until all the flames have been extinguished
 - **Flowing liquid:** Direct the hose at the base of the flames and sweep upwards until all the flames have been extinguished
 - **Electrical equipment:** Switch off the power (if safe to do so) and then direct the hose straight at the fire
4. Squeeze the lever slowly to begin discharging the extinguisher, as the fire starts to diminish carefully move closer to it
5. Ensure all the fire has been extinguished, re-ignition can be possible when a powder fire extinguisher has been used



ΟΔΗΓΙΕΣ ΓΙΑ ΣΩΣΤΗ ΧΡΗΣΗ ΠΥΡΟΣΒΕΣΤΗΡΩΝ – CORRECT USE OF FIRE EXTINGUISHERS

RIGHT ΣΩΣΤΟ		WRONG ΛΑΘΟΣ	
Κατευθύνουμε το πυροσβεστικό υλικό πάντοτε με τη φορά του ανέμου	Always aim the extinguishing agent in the direction of the wind		
Ρίχνουμε το υλικό στην βάση της φωτιάς. Ποτέ στις φλόγες	Fight flames starting from the base of the fire. Never aim on the flames		
Για την φωτιά από χυμένα λάδια διαρροής αρχίσει την κατάσβεση από πάνω προς τα κάτω	Exception: Fight dripping and flowing fire flames from top to bottom		
Προτίμησε την κατάσβεση με πολλούς πυροσβεστήρες συγχρόνως παρά την διαδοχική χρήση αυτών	For best results use a number of extinguishers at the same time, rather than one by one		
Βεβαιώσου για πιθανή επανάφλεξη. Πάντοτε κατά προς την εστία της φωτιάς	Beware of reigniting		
Φρόντισε για την αναγόμωση των πυροσβεστήρων που χρησιμοποιήθηκαν αμέσως, καθώς και για την ετήσια συντήρησή τους	Make sure to refill the fire extinguishers used immediately, as well as to monitor their annual maintenance		

Where should fire extinguishers be located

Fire extinguishers should be located in conspicuous positions, on wall brackets or stands and where they can be seen by persons following an escape route. They should be located near to room exits, in corridors, stairways, lobbies and landings. If possible they should be in similar positions on each floor. Care should be taken when siting extinguishers to cover specific individual risk. Extinguishers should not be placed too close to specific risks where the operator could be injured trying to access the appliance.

At home or at work, place the power to put out small fires in your hands and within your reach.

Choosing the correct Fire Extinguisher

Fire extinguishers are an integral part of the fire safety provisions within any building and as with any product with moving parts their components can start to degrade over time. To ensure that fire extinguishers are in good working order when they are need it is important that they are serviced annually in accordance with the regulatory system in Cyprus.

Here we'll give you some tips on how to choose them – and how to use them.

When to use fire extinguishers

It's important to remember that fire extinguishers are only one element of a complete fire survival plan. Only use your extinguisher after making sure:

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Fire Extinguisher Classes and Suitability

Each type of fire extinguisher is suitable for different types of burning media and will have a fire rating based on the volume of fire that they are capable of extinguishing. Below is an overview of each type of fire extinguisher including its rating and suitable uses.

Type of Fire Extinguisher	Fire Classification	Fire Extinguisher Suitability
ABC POWDER		<p>Powder fire extinguishers are ideal for use in mixed risk environments and offer excellent all round fire protection. With a unique class C rating, powder fire extinguishers are the only effective solution for fires involving flammable gases.</p>
AFFF FOAM		<p>Foam fire extinguishers are ideal for use on fire involving solid combustible materials and are highly effective on flammable liquid fires. The layer of foam applied by these extinguishers helps to prevent re-ignition after the fire has been extinguished.</p>
CARBON DIOXIDE		<p>CO2 fire extinguishers are suitable for use on flammable liquid fires and are extremely effective at extinguishing fire involving electrical equipment. CO2 is also one of the cleanest extinguisher agents and leaves no residue behind.</p>

WATER



Water fire extinguishers are suitable for use in environments containing solid combustible materials such as wood, paper and textiles. It is important to remember that water conducts electricity and should not be used around electrical equipment (unless water extinguishers with additive are used).

WET CHEMICAL



Wet chemical fire extinguishers have a unique class F rating and are usually supplied with a special application lance. The perfect solution for tackling large burning oil fires, wet chemical extinguishers are ideally suited to the kitchen environment.

FIRE EXTINGUISHER MAINTENANCE

How to use Fire Extinguishers

6. Before attempting to fight a fire with a fire extinguisher it is important to check that it is fully charged (**Fig. 1**) and that the safety pin is not bent (**Fig. 2**)
7. Ensure you remain a safe distance from the fire and remove the safety pin (**Fig.3**) this will break the tamper seal
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9. Squeeze the lever slowly to begin discharging the extinguisher, as the fire starts to diminish carefully move closer to it
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How to use Fire Blankets

Oil / Pan Fires

1. Turn of the heat source if it is safe to do so (Do not attempt to move the pan)
2. Pull the tapes to release the blanket from its container
3. Hold the blanket in a shield position and if possible wrap the blanket around your hands for protection
4. Place the blanket gently over the pan/container to smother the fire
5. Leave the pan to cool completely – do not attempt to uncover until it is completely cool

Clothing Fires

1. Pull the tapes to release the blanket from its container
2. Hold the blanket in a shield position and if possible wrap the blanket around your hands for protection
3. Wrap the blanket tightly around person to smother the fire

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