

Which Fire Extinguisher should we use and when?

Do not give fire a chance to damage your property and stop it straight away at the beginning! The Fire Rescue Service of the South Moravian Region in partnership with the Police of the Czech Republic – the city police headquarters of Brno and Diocesan Charity of Brno offers you some information about fire extinguishers, how to choose the right type and how to handle it.

What are Fire Extinguishers for?

A fire extinguisher is to **extinguish a starting fire**, i.e. **for initial firefighting**. It contains a certain kind of extinguishing agent and includes a mechanism which puts the extinguisher into operation. We distinguish these kinds of fire extinguishers: **handheld (portable)**, **cart-mounted** (also called wheeled), and **trailers**.



Fig.1: Information about the type and use of the fire extinguisher

What types of fire extinguishers do we recognize?

Fire extinguishers according to their extinguishing agents

FOAM	WATER	DRY POWDER	CARBON DIOXIDE	HALON
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The choice of the right fire extinguisher depends on the type of a flammable substance. Substances are classified in so called "Classes of fire"

class	type of flammable substance
A	burning of solids burning with a flame or glow
B	burning of liquids and combustibles which turn in liquids
C	burning gasses burning with a flame
D	burning light alkaline metals

Which fire extinguisher should we use for certain materials?

Foam extinguisher

suitable	unsuitable	mustn't be used!
flammable solids	flammable liquids which mix with water	alive electric gadgets
petrol, oil, mineral oils, and lipids	flammable gasses	light and flammable alkaline metals

Water extinguisher

suitable	unsuitable	mustn't be used!
paper, wood, and other flammable solids	petrol, oil, alcohol, diluting agent	alive electric gadgets
alcohol	flammable gasses	flammable light alkaline metals
	valuable material (archives)	substances sharply reacting with water (e.g. acids)
		vegetable and animal fats and oils

Dry powder extinguisher

suitable	unsuitable	mustn't be used!
alive electric gadgets	wood, coil, textile	light and flammable alkaline metals
flammable gasses		
petrol, oil, oils		
solids		
computers, televisions, and other electric gadgets		

Carbon Dioxide (CO₂)

suitable	unsuitable	mustn't be used!
alive electric gadgets	flammable solids such as wood, textile, coil	light and flammable alkaline metals
flammable gasses		flammable dust
flammable liquids		powdery and non-coherent matters
precise mechanisms and electronic gadgets		

Warning! Be aware of danger of frostbites if your skin gets in touch with CO₂!

Halon extinguisher

It can be used for all types of materials except for glowing solids.

It is suitable for extinguishing:

- automobiles
- precise mechanisms and electronics, computers
- alive electric gadgets
- archives and valuable materials

Warning! Do not use in closed rooms with no ventilation – there is a danger of health damage!

For you household we recommend you to use a **dry powder extinguisher A,B,C** (which is all-purpose – it can be used for solids, liquids, gasses, electrics, and suchlike, however, there is an advantage of subsequent disposal). The most suitable extinguishing agent for solids is water; yet, you must not use it for electrics!

The best way of placing and using fire extinguishers (FE)

- FE need to be placed at visible and easily reachable places
- in not clearly arranged or blind areas a particular fire symbol for marking placement of FE is to be used and placed at a visible place.



Fig.3: Placement of HP on the car



- FE are placed in areas with high probability of fires
- portable FE are placed on the wall, so that the handle of EF was up to 1,5m above the ground
- FE on the floor must be prevented from falling
- FE in vehicles are placed not to endanger personal safety

Fig.2: Placement of FE 150cm from the ground

Appropriate use of FE has a graphic representation and short description on each FE. Read the instructions first before use.

Remember! Apply fire extinguishing **always in the direction of wind** and extinguish the quenching surface from **its edge**.



Fig.4: release of a safety lock



Fig.5: use of FE

A fire extinguisher can be used repeatedly, therefore after each (even very short) **use refill** the FE. In case of another fire you will avoid complications connected with the lack of extinguishing agent.

The control of FE is to be done after each use or when mechanically damaged, otherwise usually once a year by a specialized company.

A bit of our legal regulations

On the basis of regulation 23/2008 of code of law / of technical conditions of fire service of buildings/ **since 1st July, 2008 the living space of all new objects being used for living** (houses, dwelling units, accommodation facilities, and garages) **must be equipped with portable fire extinguishers with extinguishing efficiency of at least 34A** (it means that this FE is to be used for extinguishing flammable solids and at the testing moment it will extinguish the fire of a wooden stack of a certain size. This requirement does not apply to the buildings realized before the validity of this regulation, however, we highly recommend you to invest in fire extinguishers in your household.

Would you like to learn more about how to act correctly in emergency? Within the project of "Vaše cesty k bezpečí" (Your ways to safety) The Fire Rescue Service of the South Moravian Region in partnership with the Police of the Czech Republic – the city police headquarters of Brno and Diocesan Charity of Brno offers you more advices of our smart blondes, who will give you instructions at our web pages www.firebrno.cz/EN how to solve other situations endangering your safety, health, life and possessions.



Fig.6: information about the control of FE