

Maintenance fire extinguishers

General information

This information contains a general guideline for maintaining your fire extinguishers. If you are using fire extinguishers in a commercial environment, legislation and insurance requirements may apply. Please check with your local authorities to make sure you comply with all necessary rules and regulations. The information in this document is general information that may not cover all situations that may occur during maintenance.

Maintenance on a fire extinguisher should always be carried out by a qualified person. In different European countries these qualified maintenance companies and the guidelines they follow are identified in different ways. In the Netherlands, these persons are "REOB certified", in Germany . In each country, maintenance and location guideline may be present, there are described in local standards such as:

Netherlands: REOB certified, NEN-2559 <https://hetccv.nl/certificatie-inspectie/vakman/onderhoud-blusmiddelen/>

Belgium: NBN S21-050

Germany: DIN 14406

Austria: önorm F-1053

UK: BS 5306-3:2009

All local standards are based on product standard EN-3 and give specific information on where to place extinguishers or how often to maintain them.

For consumers in most European homes, owning a fire extinguishers is not obligatory. Keeping a fire extinguisher nearby to extinguishing a small, starting fire could however save lives and prevent a lot of damages. The Dutch fire fighters advise consumers to only fight fires that have the size of a football. If the fire is bigger, evacuate everyone from the building and call the fire fighters.

Testing and filling instructions

These instructions cover the most basic guidelines to test and refill a Smartwares extinguisher. The powder extinguisher BB series, foam extinguisher SB series and wet chemical extinguisher VB series are stored pressure extinguishers. They consist of a cylinder containing the extinguishing agent (powder, foam or a wet chemical solution) and are permanently pressurized.

Visual inspection

The purchasing date sticker that is included with the extinguisher allows you to mark the installation date as a reminder. Starting from installation a visual inspection is necessary because the extinguisher is no longer protected by the giftbox.

Every 3 months, check if the safety pin is still in place and read the pressure gauge (manometer) on the extinguisher. This is not applicable for CO2 extinguishers, they do not have a pressure gauge. The pressure gauge needle must be in the green area. If a rubber hose is present, check the hose for corrosion and other damages. The instructions on the extinguisher should be readable, the

extinguisher itself can be cleaned with a moist cloth. Please ensure that the bracket is still firmly mounted on the wall.

It is advised to take the extinguisher from the bracket and shake it or gently tap it against the floor at least once per year. This way the extinguishing agent does not sink to the bottom of the extinguisher, for powder extinguishers especially. Weighing the extinguisher will give information if the extinguisher was partially discharged. If the weight of the extinguisher decreases by more than 10 percent it needs to be refilled. The hose can be removed and checked or cleaned, the O ring can be replaced and used to connect the hose back to the extinguisher.

Visual inspection summary every 3 months:

- Safety pin check – in place?
- Pressure gauge needle – in green area?
- Hose – no corrosion or damage?
- Wipe down and read the cylinder
- Check mounting bracket – still mounted firmly?

Every 12 months:

- Check weight of the extinguisher
- Remove hose and check for damage or obstruction

Extended maintenance

For commercial buildings, maintenance may be extended. It can only be carried out by a qualified person. Original spare parts must be used, please check the item code on www.smartwares.eu for more information. Extended maintenance is advised every 5 years. The extended maintenance costs may be higher than the costs for a new fire extinguisher. If you choose to replace the fire extinguisher please follow our advise for disposal of a fire extinguisher.

Every 5 years the extinguishing agent in a foam extinguisher must be replaced, every 10 years the powder extinguishing agent must be replaced. Until then, the extinguishing agent can be checked visually for clotting (powder) or particles. The weight of the extinguishing agent should be maximum 10% less than the original weight. When in doubt, the extinguishing agent must be replaced.

Extended maintenance steps:

- Visual inspection (see above)
- Discharge the extinguisher and temporarily store the extinguishing agent in a suitable container.
- Remove the operating handle and check all parts for damage.
- Rinse out the fire extinguisher and perform visual check on corrosion.
- Replace the hose and the O ring
- Refill the extinguisher with the same extinguishing agent
- Re-pressurize the extinguisher
- Mark the extinguisher with a new service label.

Fire extinguishers must be refilled by a qualified person immediately after each discharge, even if the discharge was not complete. The extinguishing agent may cause damage to surroundings, always check with local fire fighters on how to proceed after the extinguisher was used.

CO2 extinguishers must be refilled after 10 years. They cannot be discharged and refilled as foam or powder extinguishers because of the health risks CO2 poses. Please contact a qualified company.

Spare parts

Spare parts are available for the Smartwares fire extinguishers. More information can be found on our website www.smartwares.eu.

Disposal of a fire extinguisher

Before disposal extinguisher must be depressurized. The extinguisher can be disposed of as small chemical waste. Please check with your local authorities for guidelines on small chemical waste.