

# Safety Regulations for the Fire Safety of a Solid-fuel Heating Station, S925

Your obligation to prevent damage, valid as of 1 January 2025

Welcome to the safety regulations!

In these safety regulations, we explain what you must do and take into consideration to avoid property damage and business interruption losses.

- ⓘ Read the regulations carefully. If you do not comply with the regulations, we may reduce or deny your insurance compensation.

These safety regulations apply to

- insurance policies of businesses or organisations that have commenced on or after 1 January 2014, and
- policyholders comparable to a consumer in insurance policies that have commenced on or after 1 January 2025 or after that.

Other insurance contracts are still subject to the Safety Regulations for the Fire Safety of a Solid-fuel Heating Station S925 that entered into force on 1 April 2020.

## These safety regulations are part of your insurance contract

Your insurance contract consists of the policy document, insurance terms and conditions, safety regulations, and the general contract terms and conditions.

**The policy document** lists your company's insurance policies and the terms and conditions applicable to them.

**The insurance terms and conditions** describe the terms under which your property is insured.

**These safety regulations** describe your obligations to prevent damage.

**The general terms of contract of Pohjola Insurance** contain general provisions related to your insurance.

We interpret the policy document, insurance terms and conditions, safety regulations, and general contract terms and conditions as a whole.



Policy document



Insurance terms and conditions



**Safety regulations**  
This document



General Terms of Contract

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## 1 Purpose of the safety regulations: avoiding fire damage caused by solid-fuel heating stations

The purpose of these safety regulations is to avoid property damage and business interruption losses.

These safety regulations contain fire safety instructions for solid-fuel heating stations which are in the range between 30 kW and under 1 MW with a boiler water temperature of less than 110 °C.

- The safety regulations must be complied with in all activities performed by the policyholder, insured person or parties comparable to insured persons.
- You and your company have an obligation to ensure that the following parties are aware of the content of the safety regulations:
  - insured persons and parties comparable to insured persons
  - parties in possession of, using or responsible for insured property
  - parties performing installation, repair or maintenance work at locations insured under the policy, or performing such work on insured property.
- You and your company must require and monitor that the abovementioned parties comply with the safety regulations.
- Insured persons and parties comparable to insured persons must inform the abovementioned parties of the content of the safety regulations in the same way as you and your company, and they must require and monitor compliance with the safety regulations.
- You and your company have the obligation to comply with official regulations and instructions regarding fire safety.

## 2 Ensure service and maintenance

### Fire risks related to the use of solid fuel

When considering the fire safety of solid-fuel heating stations, the risk of back fire must be considered with particular care. Particularly with dry and airy fuel such as wood shavings, fire can easily spread into the fuel feeder if the conditions align.

- ✓ **Follow** the device manufacturers' instructions in all activities related to the service and maintenance of the heating station, its boiler and any equipment supporting it.
- ✓ **Re-evaluate** the appropriateness and protection measures of the heating station and its equipment if you change the fuel used in the heating station to a different type, or make any changes to operating processes.
- ✓ **Have** the boiler serviced annually and ensure that any service measures are recorded in the equipment maintenance log.

- ✓ **Order** a sweeping of the boiler, any equipment supporting it and the flue at least once per year.
- ✓ **Ensure** that the sweeping work is recorded in the equipment maintenance log.
- ✓ **Monitor** and clear the boiler room of any unnecessary combustible or inappropriate material weekly.
- ✓ **Clean** the surfaces of electrical equipment weekly.
- ✗ **Do not** perform electrical installations yourself unless you have the proper training required for electrical installations.
- ✗ **Do not** use the boiler or heating station if you observe any malfunctions or risks of fire related to it.
- ✗ **Do not** use moist or frozen fuel.
- ✗ **Do not** make or drill holes into the stoker screw, any other feeder system or fuel tank.
- ✗ **Do not** leave or hold the fuel tank's lid open to increase airflow.
- ✗ **Do not** use any fuel that is not approved by the heating station's manufacturer.

### 3 Proactive measures to prevent fire damage

- ✓ **Always** perform any work with risks of fire in accordance with the requirements of the Hot Work Safety Regulations S621.
- ✓ **Ensure** that there is at least one hand-held fire extinguisher of the type 43 A 233 BC (6 kg) immediately inside or outside the exterior door in the immediate vicinity of the boiler room.
- ✓ **Ensure** that there is also a hose reel or an easily usable water hose that is continuously connected to the water mains in the vicinity. The hose must be long enough to reach the fuel storage.
- ✓ **Always** keep the door of the heating station or boiler room locked.
- ✓ **Store** ashes in a non-flammable lidded ash pan.
- ✓ **Ensure** that only the necessary pipes, chases, channels, cables and flues, as well as lead-throughs required by conveyors, are fed through the separating structural element. These must not significantly impair the compartmentation of the structural element.
- ✓ **Ensure** that automatic fuel feeder equipment is protected to prevent the spreading of a back fire.
- ✓ **Ensure** that solid-fuel feeder devices have at least two separate safety systems that are independent of each other.
- ✓ **Check** weekly to ensure that there is water in the fire fighting water tank and that the system's beeswax/ wax plug has not hardened.
- ✓ **Ensure** that safety systems can function even during power cuts.
- ✓ **Prepare** and draft an ATEX explosion protection document when necessary.
- ✓ **Comply** with the following safety regulations:
  - Hot Work, S621
  - Daily Fire Prevention, S411
  - Prevention of Electric Fires, S331
  - Installation and Construction Work, S450
- ✗ **Do not** use waste oils to heat the boiler.

### 4 Take care of structural fire safety

- In the planning, acquisition and implementation of fire safety, you must comply with fire safety and construction legislation, as well as building regulations and good construction practices when performing the planning of fire safety, making acquisitions related to fire safety and implementing fire safety.

## Heating station as a separate building

- The best solution for fire safety is to have the heating station in a separate building of its own.

ⓘ The heating station building is considered separate if the distance from the outer elements of the buildings to other buildings is at least eight (8) metres.

- The heating station must be in a separate building if the use and processing of the fuel type causes fine dust in such quantities that it can mix with air to create explosive or highly combustible and rapidly burning conditions.

## Heating station as part of a building

- The heating station is considered part of a building if it is connected to a building in use, or if the distance from the outer elements of the heating station building to other buildings is less than eight (8) metres.
- If the heating station is part of a building, its boiler and fuel storage room must be separated into fire compartments so that they are separated from each other and the rest of the building. The fire compartmentation requirement applies to all structural elements bordering the boiler or fuel storage room.

## Compartment doors, windows and hatches

- A door, relatively small window or other protective element of relatively small size set in a separating structural element must have a fire resistance period that is at least half of that of the separating structural element itself. A door in the exterior wall does not need to be a separating element.
- Compartment doors must be self-closing and self-latching.

## Portable heating station

- The fire compartmentation of a portable heating station must comply with the requirements defined in the section *Heating station as a separate building* if the heating station is placed at a distance of at least eight (8) metres from the rest of the building.
- The fire compartmentation of a portable heating station must comply with the requirements defined in the section *Heating station as part of a building* if the heating station is placed at a distance of less than eight (8) metres from the rest of the building

# 5 Fire compartmentation of fuel storage room

If the boiler room is separated into its own fire compartment separate from other facilities, solid fuel may be stored in the room in a non-combustible storage silo with an airtight lid and the boiler's storage chamber, up to a total of

- no more than 0.5 m<sup>3</sup> if the fuel is in a separate storage silo and the boiler room is separated from other premises into a fire compartment with structural elements fire-rated EI30.
- no more than 0.5 m<sup>3</sup> if the fuel is in a storage silo adjoining the boiler, and the storage chamber and boiler room are separated from other premises into a fire compartment with structural elements fire-rated EI60 and consisting of material rated at least A2-s1, d0.
- no more than 2.0 m<sup>3</sup> if the fuel is in a separate storage silo located in a space separated with a wall capable of preventing dust from spreading, and the boiler is separated from other premises into a fire compartment with structural elements fire-rated EI60 and consisting of material rated at least A2-s1, d0.

The fuel storage space must be separated into a fire compartment if the volume of fuel stored exceeds the volumes defined above. The fuel storage space must be separated into a fire compartment.

## 6 Requirements for safety systems

- The equipment supplier must install a plate in the boiler room indicating the type of fuel intended to be used with the boiler.
- A heating system supplier that installs other manufacturers' equipment or devices in the heating system must comply with the instructions and recommendations of the manufacturers in question.
- If the boiler and feeder are designed for use with multiple fuel types, the safety systems must be designed and installed based on the type of fuel that presents the greatest risk of back fire.
- Automatic fuel feeder equipment must always be protected to prevent the spreading of a back fire. The protection must take into account the possibility of a back fire spreading both in solid fuel and as a gas fire.

**Solid-fuel feeder devices need to have at least two separate, independent safety systems.**

- ✓ **Ensure** that safety systems can function even during a power cut.
- ✓ **Ensure** that one of the safety systems is a fire extinguishing system that is connected to the feeder device.
- ✓ **Ensure** that another of the safety systems is a rotary feeder if the fuel is dust producing or a dry, finely grained and light substance (saw dust, shavings, peat, etc.).
- ✓ **The extinguishing agent may be** either water or powder-based as appropriate to the risks.

## 7 Glossary

**A heating station** is a set consisting of a boiler room, fuel storage and the equipment placed in these facilities.

**A rotary feeder** is a device in the fuel supply system that cuts off the direct connection between the boiler and fuel storage even while the fuel is being supplied.

**A fuel storage** is a space, tank or silo for storing fuel.

**A tipping chute** is a part of a pellet boiler fuel feeder device that melts in case of a back fire and prevents the back fire from spreading along the feeder device.

**A falling chute** is a part of the 2-screw fuel feeder system where the fuel falls from a discharge screw onto a stoker screw.

**A fire extinguishing system** is a set of equipment that automatically detects the spreading of a fire in the fuel supply system and puts it out by spraying extinguishing agent on the fuel supply system.

**In pellet feeders**, it is possible to use a dry powder extinguishing system instead of a water extinguishing system.

By following these regulations, you will ensure the security of premises and avoid unpleasant surprises in the event of an insurance claim.

Thank you for taking the time to read these safety regulations!

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