



# Fire protection - selected issues

What is Fire Safety Instruction and how to use it



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## **Legal basis**



The most important legal acts regulating fire safety in buildings are:

- Ustawa z dnia 24 sierpnia 1991 roku o ochronie przeciwpożarowej (t.j. Dz.U. z 2022 roku poz. 2057);
- ➤ Rozporządzenie Ministra Infrastruktury z dnia 12 kwietnia 2002 roku w sprawie warunków technicznych, jakim powinny odpowiadać budynki i ich usytuowanie (t.j. Dz. U. z 2022 roku, poz. 1225);
- ➤ Rozporządzenie MSWiA z dnia 7 czerwca 2010 roku w sprawie ochrony przeciwpożarowej budynków, innych obiektów budowlanych i terenów (t.j. Dz.U. z 2023 roku, poz. 822, ze zm.);
- ➤ Rozporządzenie MSWiA z dnia 24 lipca 2009 roku w sprawie przeciwpożarowego zaopatrzenia w wodę oraz dróg pożarowych (Dz.U. z 2009 roku, nr 124, poz. 1030).



## **Fire Safety Instruction**

The document specifying fire safety rules in buildings is Fire Safety Instruction.

- ➤ The purpose of the manual is to define fire safety rules and indicate the responsibilities of employees in terms of fire protection. The method of storing the instructions together with attachments (facility floor-plans) should ensure their immediate use for rescue operations.
- The manual should be updated periodically, at least once every two years, and also after changes in the use of the facility that affect fire protection conditions.

**Note:** The persons obliged to read the manual and comply with the provisions contained therein are as follows:

- ✓ all the staff employed in the facility and its operation,
- ✓ employees of external companies performing work in the facility or in the adjacent area, in particular those involved in fire-hazardous work.



## **Fire Safety Instruction**

Owners, managers or users of facilities or parts thereof constituting separate fire zones, intended to perform public utility functions, collective residences, production, storage and livestock functions, shall ensure and implement fire safety instructions, including:

- 1) fire protection conditions resulting from the purpose, method of use, technological process, storage and technical conditions of the facility, including the risk of explosion;
- 2) determining the required fire-fighting equipment and extinguishers and the methods of subjecting them to technical inspections and maintenance activities;
- 3) methods of proceeding in the event of fire and other threats;
- 4) methods of securing fire-hazardous work, if such work is planned;
- 5) conditions and organization of evacuation of people and practical ways of checking them;



## Fire Safety Instruction

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- 6) ways of familiarizing users of the facility, including employees, with fire safety regulations and the content of the manual in question;
- 7) tasks and responsibilities in the field of fire protection for persons who are their regular users;
- 8) floor-plans of the facilities, including their location, and the adjacent area, including graphic data [...];
- 9) indication of the persons or entities preparing the instructions.



## **Dangerous materials**

The following are considered fire hazardous materials:

- 1) flammable gases;
- 2) flammable liquids with a flash point below 328.15 K (55°C);
- 3) materials that produce flammable gases when in contact with water;
- 4) materials that ignite spontaneously in air;
- 5) explosives and pyrotechnic articles;
- 6) materials subject to spontaneous decomposition or polymerization;
- 7) materials prone to spontaneous combustion;
- 8) other materials if their storage, processing or other use may result in fire.



## Fire hazardous work

These are renovation and construction works related to the use of open fire, cutting with the generation of mechanical sparks and welding, carried out inside or on the roofs of buildings, in adjacent areas and storage yards, as well as renovation and construction works carried out in explosion-hazard zones.





## **Explosion hazard zone**

An explosion hazard zone should be understood as a space in which an explosive mixture of flammable gases, vapors of flammable liquids, dust or fibers of flammable solids with air (or other oxidants) may occur, with a concentration between the lower and upper explosion limits. Such mixtures may explode when exposed to an ignition initiating factor (spark, electric arc, high temperature), i.e. undergo rapid combustion accompanied by an increase in pressure.



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# Fire-fighting devices

The term fire-fighting devices should be understood as devices (fixed or semi-permanent, manually or automatically activated) used to prevent, detect, fight fire or limit its effects, in particular:

- 1) fire alarm system;
- 2) alarm transmission device;
- 3) hydrant installation;
- 4) emergency lighting installation;
- 5) fire protection switch;
- 6) sound warning system.











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In the facilities and in the areas adjacent to them, it is prohibited to perform activities that may cause fire, its spread, impede rescue operations or evacuation:

- using installations, devices and tools that are technically defective or in a manner inconsistent with their intended use or conditions specified by the manufacturer or that are not subject to periodic inspections, with the scope and frequency resulting from the provisions of construction law, if this may contribute to the occurrence of a fire, explosion or spread of fire;
- 2) heating tar and other materials with an open fire at a distance of less than 5 m from the object, however, it is permissible to perform these activities on roofs with a non-flammable structure and covering, if appropriate heaters intended for this purpose are used;
- 3) storing flammable materials, including plant remains, branches and brushwood, outside buildings at a distance of less than 4 m from the border of the adjacent plot;
- use of electric heating devices placed directly on flammable surfaces, with the exception of devices operated in accordance with the conditions specified by the manufacturer;





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- 5) storing flammable materials and using interior design elements and furnishings made of flammable materials at a distance of less than 0.5 m from:
  - a) devices and installations whose external surfaces may heat up to a temperature exceeding 373.15 K (100 °C),
  - b) cable lines with a voltage above 1 kV, grounding cables and discharge wires of the lightning protection system and active electric current switchboards, power cables and power plug sockets with a voltage above 400 V;
- 6) using flammable materials to cover light points, with the exception of flammable and non-flammable materials, if they are placed at a distance of at least 0.05 m from the bulb;
- 7) installing lighting fixtures and electrical installation accessories, such as switches, plug sockets, directly on a flammable surface, if their design does not protect the surface against ignition;



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- 8) storing flammable materials along general communication routes used for evacuation or placing objects on these roads in a way that reduces their width or height below the required values;
- 9) storage of flammable materials in technical rooms;
- 10) closing emergency doors in a way that prevents their immediate use in the event of fire or other threat requiring evacuation;
- 11) blocking fire doors in a way that prevents them from closing automatically in the event of a fire;
- 12) locating interior design elements, installations, devices or objects in a way that reduces the dimensions of the escape route below specified values;



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- 13) preventing or limiting access to:
  - a) fire extinguishers and fire-fighting equipment,
  - b) water sources for firefighting purposes,
  - c) devices activating and controlling installations affecting the fire safety of the facility,
  - d) emergency exits,
  - e) switches and distribution boards for electricity and main taps of the gas installation.

## Fire extinguishers

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- ➤ Each of UEP buildings is equipped with fire extinguishers that are adapted to extinguish groups of fires occurring in buildings.
- The graphic letter marking shows the purpose of the fire extinguisher.
- ➤ The most common fire extinguishers in UEP buildings:
  - powder, ABC, 6 kg (weight of the entire fire extinguisher approximately 9 kg),
  - snow (CO2), BC, 5 kg.



fires of solid bodies of organic origin, e.g. fires of wood, paper, fabrics, etc.



fires of flammable liquids, melting solids, e.g. fires of gasoline, alcohol, paraffin, varnish, solvents, etc.,



flammable gas fires, e.g. methane, acetylene, hydrogen, natural gas and other fires



metal fires.



fat and oil fires in kitchen appliances.



## Powder fire extinguisher ABC 6 kg

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# Snow fire extinguisher B or BC 5 kg

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# Rules for proper use of a fire extinguisher

|   | GOOD   | WRONG        |
|---|--------|--------------|
| Extinguish the fire along the direction of the wind (with the wind)                           | *      | 本            |
| Extinguish burning surfaces starting from the rim!  | AT MAN | A            |
| Extinguish fires on dripping or flowing substances with a stream directed from top to bottom! | A      | AT WALL      |
| Extinguish wall fires with a stream directed from the bottom up!                              | A      | A            |
| Use a sufficient number of fire extinguishers - never one after the other!                    |        | m Z          |
| Beware of the possibility of the fire rekindling!   |        | ***          |
| Never rehang fire extinguishers in place after use. Have them refilled first!                 | F      | Mi <u>nm</u> |



## BASIC RULES OF CONDUCTIN CASE OF FIRE

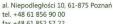
#### In the event of a fire you should:

- Determine the exact location of the fire (or other local threat), determine its spread paths and threats to adjacent rooms and people staying in the building.
- Notify people closest to the incident site activate the nearest manual call point (ROP).
- Alert a fire station (tel. **112** or 998).
- While alerting a fire station, the fire should be extinguished first with fire extinguishers, then with internal hydrants together with employees working in the vicinity of the fire.
- Evacuate people in the fire zone.
- Notify the facility manager.
- Until the fire brigade arrives, the facility managers or a person designated by them are in charge of the operation.



## Summary

- The most important information regarding fire safety of a given building can be found in the **Fire Safety Instruction**.
- ➤ If a threat is detected **ACT!** Press the manual call point (ROP), alert co-workers, use a fire extinguisher or hydrant, call for help and evacuate.
- ➤ If you have any questions or concerns, please contact the Fire Protection Inspector.





# THANK YOU FOR YOUR ATTENTION

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