

Instructing students on fire safety

Student awareness of the Faculty buildings and escape routes

Students must become familiar with the Faculty buildings on their own. While moving around the buildings, attention should be paid to the orientation on escape routes. Fire Alarm Regulations and Fire Evacuation Plans are posted in the corridors and stairwells of the buildings to indicate both in text and graphic form the instructions in the event of an evacuation and also to indicate the most appropriate escape route from a given location. Safety signs indicating the escape direction from the building to an open space are placed on the escape routes.



Fire detection

Anyone who notices a fire shall try to extinguish or locate the fire to the best of their ability, either by improvised firefighting means or by portable fire extinguishers or hydrants. If the situation permits, combustible substances must be moved from the range of the effects of the fire. If the individual's own strength and resources are insufficient to fight the fire, they shall press the nearest push-button electrical fire alarm system (EPS) or shall report the fire in person to the front desk at the main entrance to Building C. It is also possible to choose the option of calling the emergency phone number 150 or 112.



Always close the door behind you when escaping from an area affected by a fire!

Fire alarm notification

Methods of announcing a fire alarm = by pressing the nearest push-button electrical fire alarm system (EPS), by calling "FIRE" at the place of the fire or, alternatively, by personal announcement at the front desk at the main entrance to Building C. Upon the activation of the electrical fire alarm system, an automatic announcement will be made over the public address system or an audible siren will sound announcing evacuation of the entire building, which must be heeded.



Evacuation of persons following a fire alarm announcement

When a fire alarm has been announced, everyone is obliged to cease all activities and leave the building without delay based on the specific situation, respecting the recommended escape directions which are indicated in the graphic parts of the Fire Evacuation Plan and by safety signs placed in the corridors and stairwells.

Take only the essentials with you and switch off the electrical appliances and devices that could cause a fire or another emergency event. These include, e.g., cookers or other heating equipment. Refrigerators, computers, photocopiers and other devices that are continuously operated should not be switched off.



Fire alarm receiving centres

Public fire alarm receiving centres in the Czech Republic have the telephone number **150** or 112. On the premises of the Faculty of Civil Engineering, the local fire alarm centre is located at the front desk at the main entrance to Building C.



Portable fire extinguishers

Types of fire extinguishers installed in the buildings of the Faculty of Civil Engineering: water, dry powder, Carbon Dioxide ("snow") and clean agent ("halotron") extinguishers.

Fire extinguishers are located in accessible and reachable places within the Faculty buildings, in corridors, stairwells or, e.g., in technical rooms.

Arbitrary handling of portable fire extinguishers by all persons is prohibited. No objects or materials shall be placed in front of fire extinguishers and the extinguishers shall be permanently accessible!

Principles for using fire extinguishers:

The MINIMAX principle = minimum quantity of an extinguishing agent with the maximum effect. The fire extinguisher is maximally effective at the start of a fire, when the fire has not ignited significantly, and a large area has not been affected yet. The operating time of a conventional fire extinguisher (9 l of water, 6 kg of dry powder) is approx. 20 seconds, the reach of the extinguishing agent is approx. 3-4 metres.



The procedure for using a fire extinguisher:

- remove the device from the holder,
- go to the site on fire,
- remove the fuse (in older types, puncture the cartridge),
- take a suitable position,
- start extinguishing.

While extinguishing, it is advisable to use the principle of intermittent extinguishing = do not spray the entire volume of the extinguisher at once but extinguish intermittently and react to how the flame is suppressed and, if necessary, how and where the fire is spreading.

The water fire extinguisher is designed for extinguishing solid combustible substances (wood, etc.), and also where there is no live electrical equipment!

The main extinguishing effect of water is to cool the burning substances, thus lowering the ignition temperature and interrupting the combustion.



The dry powder fire extinguisher is designed for extinguishing solid, liquid and gaseous substances. It can also be used for extinguishing live electrical equipment.

It extinguishes on the principle of retarding the combustion reaction (so-called negative catalytic effect), i.e. it does not remove heat from the burning substance. The dry powder as an extinguishing agent is non-toxic and harmless to the human body.



The Carbon Dioxide ("snow") fire extinguisher is designed for extinguishing liquid and gaseous substances. This device is particularly suitable for extinguishing live electrical equipment, because after extinguishing the carbon dioxide evaporates without residue and, except for hypothermia, it does not damage the extinguished objects (e.g. a small substation, working machines, computers, etc.).



Carbon dioxide - as a fire extinguishing agent extinguishes on the principle of creating an inert atmosphere, i.e. by a suffocating effect, whereby the access of air oxygen to the burning object is prevented. The "halotronic" fire extinguisher is primarily designed for extinguishing live electrical equipment and also for extinguishing liquid and gaseous substances. This device stands out for the excellent characteristics of its gaseous extinguishing agent. These extinguishers are only located in the technical rooms of the Faculty buildings.

Devices for fire water supply – hydrants

Wall hydrants are installed in the Faculty buildings. The hydrants are intended for initial intervention by the persons present before the arrival of the fire-fighter units.

When using a hydrant, the cooperation of two people is recommended = one person operates the nozzle and the hose, while the other person turns on the water. Beware of live electrical equipment. No objects or materials can be placed in front of the hydrants and the hydrants must be permanently accessible!



Electrical fire detection and fire alarm systems

Electrical fire detection and fire alarm systems are used to detect the signs of fire and to notify the security guard at the main entrance to Building C of the detected locality. For this purpose, automatic and push-button detectors are used. The automatic detectors operate without human intervention. The push-button detectors are operated by the person who detected the fire. In the event of a fire, you can use a push-button detector to report the fire to the front desk at the main entrance to Building C.

Prohibited activities

The activities that are prohibited in Faculty buildings include, e.g., the following:

- smoking outside designated areas,
- storing materials and objects outside designated areas, especially on escape routes,
- unauthorized handling of portable fire extinguishers and wall hydrants,
- damaging safety signs,
- carrying out activities that could lead to starting a fire.

Basic obligations of individuals – students

Natural persons (individuals) are obliged to act in such a way as to prevent fires, especially when using heating, electrical, gas and other appliances, when storing and using flammable or fire-hazardous substances and when handling open flames.

They must obey orders and prohibitions related to fire safety in designated areas - e.g. no smoking, no handling of open flames, etc.

A natural person must not carry out work activities that may lead to starting a fire unless they are qualified to carry out such work activities (e.g. unprofessional repairs to electrical wiring, heating appliances, etc.) and must not damage or misuse fire extinguishers or other physical fire protection equipment.

Assistance in fighting fires

Everyone is obliged to provide personal and material assistance in connection with fighting a fire. *Personal assistance* – take the necessary measures to rescue endangered persons, extinguish the fire or limit its spread (e.g. by closing the door) within their capabilities, press the push-button electrical fire alarm immediately, call 150, provide personal assistance at the call of the fire fighter unit's commander, etc.

Material assistance – provide means of transport, a source of water, a telephone or other means of communication. If expenses are involved in the provision of material assistance, the person who provided it shall be entitled to the reimbursement of expenses.

Other important principles relevant for fire safety:

- Do not leave electrical appliances on when leaving the Faculty building. This refers to the appliances that are not intended for continuous operation.
- Do not use unauthorised electrical appliances.
- Do not carry out work activities that may cause a fire (electrical repairs, welding, etc.) unless you are qualified and authorized for such activities.
- Ensure safe handling of high-pressure cylinders.
- Do not place combustible material near hot surfaces or heaters.
- Ensure that escape routes are clear, do not impair the functionality of fire doors.
- Do not store material, including high-pressure cylinders, outside the designated areas and in an unauthorized manner.
- Follow established work procedures and safety regulations to avoid unnecessary technological failures.
- Report any defects found to the teacher or to the front desk at the main entrance to Building C.
- Keep in mind your safety during potential firefighting.

The highest legal norm in the field of fire safety in the Czech Republic is Act No. 133/1985 Coll. on Fire Protection, as amended.

The Fire Protection Act is related to the implementing Decree No. 246/2001 Coll., on Fire Prevention, as amended, which regulates in detail some provisions of the Fire Protection Act.

I hereby confirm that I have been instructed in fire protection, I understand them and will abide by them.

In Prague on:.....

.....
Name and surname (block capitals)

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Signature

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