

**Measure of the Director
of the Central European Institute of Technology of Masaryk University
No. 3/2018**

Fire Safety Code of CEITEC MU Buildings (Except for SUKB Premises)

(effective as of 1 July 2018)

Pursuant to Act No. 133/1985 Coll., on Fire Prevention, as amended, pursuant to Decree No. 246/2001 Coll., on establishing conditions of fire safety and state fire supervision (the Fire Prevention Decree), as amended, and pursuant to Chancellor's Guideline No. 4/2005 Organization of Fire Safety Arrangements at Masaryk University, I hereby issue this Measure:

Article 1

Subject Matter

- (1) The Fire Safety Code is a fire safety document, regulating the fundamental rules of fire safety at places where activities with an increased or high fire risk are being performed.
- (2) The Fire Safety Code contains the following:
 - a) brief description of performed activities and characteristics of fire risks of such activities;
 - b) fire-technical characteristics or technical and safety parameters of substances necessary for determining preventive measures;
 - c) maximum permissible amounts of substances specified in paragraph b) that may be present in the area of the performed activities;
 - d) determination of fire safety conditions preventing the occurrence and propagation of fire or explosion with subsequent fire;
 - e) determination of authorizations and obligations of persons in ensuring the prescribed fire safety conditions, during the commencement, course, interruption and completion of activities;
 - f) determination of conditions of safe presence and movement of persons and the manner of securing free escape routes;
 - g) name and surname of responsible supervising employee.
- (3) Attached to the Fire Safety Code are the guidelines for the activities of prevention fire patrol and overview of the location of warning and security signs, physical fire safety equipment and of fire safety devices.
- (4) The guidelines for the activities of preventive fire patrols always contain determination of premises or activities with respect to which the fire patrol is established, the list of the names of employees who are members of the fire patrol, as well as their responsibilities, and the necessary equipment for carrying out the initial intervention and, if applicable, any other information prescribed by special legal regulations.
- (5) The Fire Safety Code shall be posted so as to be well visible and accessible at all times for all persons present at places where the particular activity is being performed.

- (6) This Measure is divided into four parts, A, B, C, D, each applicable to one of the buildings A35, A26, A4, A2 of the University Campus of Bohunice ("UKB"), Kamenice 753/5, 625 00 Brno. It does not apply to technical premises of SUKB.

Part A

Fire Safety Code of Building A35 (except for SUKB premises)

Part A Article 1

Description of performed activities and characteristics of fire risks

- (1) CEITEC MU - Central European Institute of Technology of Masaryk University, Building A35 (except for the premises of SUKB - the Administration of Bohunice University Campus), Kamenice 753/5, 625 00 Brno. The building of a non-standard shape is connected at the north to the corridor interconnecting individual buildings within the University Campus of Bohunice ("UKB"). Building A35 is designed as a building of non-standard shape, having an elliptical cross section, with a roofed enclosed atrium that constitutes the communication and social centre of the building. The building consists of two above-ground floors and two underground floors, with the 2nd underground floor being further split to the 3rd underground floor in the technical premises. The basic load-bearing structure of the building is a ferro-concrete monolithic structure (circular pillars of 350 mm and 500 mm in diameter). The load-bearing structure of the foot bridge at the level of the 2nd AF of the interior and exterior staircases and elevator shafts is made of steel. Concrete circumference walls of 200, 300 and 350 mm. Steel structure of the glazed-in air shaft above the atrium. Interior staircases are made of steel. The load-bearing structure of the roof consists of a ferro-concrete board. Layout solution:

2 nd UF	laboratories, offices, server room, weak-current distribution centre, examination room, fuel warehouse, UPS backup power source, warehouse of laboratory equipment, meeting room, low-voltage distribution centre, transformer station, machine room of air-conditioning and cooling system, ventilation machine room, technical room, cooled waste storage room, exchanger station, reception desk, workshop, warehouses
1 st UF	cash desk, reception desk, offices, laboratories, meeting room, secretariat, kitchenettes, janitor's storage room, connections room, technical room, cooling rooms, sample collection room, examination rooms, warehouse, washing centre, deep-freezing boxes, microscopes, nitrogen storage room, dark room
1 st AF	laboratories, offices, meeting room, registry, tea kitchenettes, dark room
2 nd AF	laboratories, offices, meeting room, warehouses, dark room, cooled room

- (2) Building A35 is classified as a workplace with increased fire risk. The following activities are carried out here:
- works with volatile solvents that release flammable vapours (spirit, acetone);
 - works with flammable liquids and flammable or combustion promoting gases (spirit, acetone);
 - works with the use of a gas burner;

- d) Works with pressure vessels (carbon dioxide, nitrogen, argon, helium, propane, ethane).
- (3) The building has a very complex layout and difficult to navigate through, making it easy to lose orientation within the building.
- (4) In these premises, the entry or activities of a fire brigade without the notification of special hazards or procedures of fire extinguishing would endanger the health and lives of the firemen.
- (5) A fire hazard results from a breach of the prohibition of smoking and open fire handling in the course of certain works or from inappropriate storage of flammable liquids (in particular flammable liquids classified in hazard class I). Fire danger may also result from inappropriate conduct of students and employees during the performance of their work tasks.
- (6) The workplace includes a health care facility where a magnetic field is present of 3T magnetic resonances in rooms 2S123 and 2S131.

Part A

Article 2

Fire-technical characteristics of the present substances

- (1) **Acetone:** Acetone is a colourless liquid of specific smell, flammable, miscible with water without limitations. Mixture of vapours with oxygen is explosive. Used as solvent of organic substances.

Ignition temperature:	465 °C
Flash point temperature:	-18 °C
Explosion limits:	2.6 to 13% of volume
Melting temperature:	-95 °C
Boiling temperature:	56 °C



hazard pictogram:

signal word: danger

- (2) **Ethanol:** colourless liquid of acrid smell. The substance is classified as hazardous pursuant to Regulation (EC) no. 1272/2008. Flam.Liq. 2: H225

Ignition temperature:	305 °C
Flash point temperature:	17 °C (96% Ethanol)
Explosion limits:	3.5 to 15% of volume
Melting temperature:	-117 °C
Boiling temperature:	78 °C



hazard pictogram:

signal word: danger

- (3) **Methylalcohol:** colourless liquid smelling of alcohol, miscible with water without any limitations.

Ignition temperature:	455 °C
Flash point temperature:	11 °C
Explosion limits:	6 to 36% of volume
Melting temperature:	-98 °C
Boiling temperature:	65 °C



hazard pictogram:

signal word: danger

(4) **Isopropylalcohol:** colourless liquid of acrid alcohol-like smell.

Ignition temperature: not available
Flash point temperature: -103.99°C - closed cup
Explosion limits: 2 to 12.7% of volume
Melting temperature: -89.5 °C
Boiling temperature: 81.4 °C



hazard pictogram:

signal word: danger

(5) **Propane:** flammable gas stored under pressure

Flash point temperature: 12 °C
Explosion limits: 2.1 to 9.5% of volume
Melting temperature: -187.99 °C



hazard pictogram:

signal word: danger

(6) **Paper (printed documents and office paper/stationery)**

Chemical characteristics: mainly cellulose
Ignition temperature: 365 °C
Calorific value: 17 MJ.kg⁻¹
Auto-ignition temperature: 100 °C
Density: 80 g/m² (depending on the intended use)
Extinguishing medium: water with wetting agent, foam
During storage, protect against temperature exceeding 100 °C.

(7) **Corrugated paperboard, cardboard**

Ignition temperature: 427 °C
Flash point temperature: 258 °C
Glowing temperature: 258 °C
Density: 0.14 g/cm³
Extinguishing medium: water with wetting agent, foam
Inclination to thermal auto-ignition.
Protect against heat sources of temperature exceeding 100 °C.

(8) **Wood**

Ignition temperature: 375 – 399 °C
Flash point temperature: 238 – 255 °C
Self-heating point temperature: 80 – 120 °C
Extinguishing medium: water with wetting agent, foam
Inclination to thermal auto-ignition.

Part A
Article 3**Maximum permissible amounts of substances that may be present in building A35 (except for SUKB)**

It is possible to store no more than 30 l of flammable liquids in the laboratory, in original packaging, with well visible labels informing of the contents thereof. These containers must be placed in a metal lockable cabinet. It is possible to store no more than 250 l of flammable liquids in the warehouse, in original packaging, with well visible labels, in a metal lockable and ventilated cabinet.

Part A
Article 4**Determination of fire safety conditions preventing the occurrence and propagation of fire**

- (1) Smoking is strictly prohibited within the premises of UKB.
- (2) Works with volatile solvents must be performed in a fume chamber and the room must be ventilated.
- (3) Flammable liquids must be heated exclusively in a water bath or by an electric heater.
- (4) Flammable liquids must be stored separately from other chemicals, including toxic substances and mixtures, in a designated area.
- (5) Prior to leaving an empty building, the workplace must be inspected and left only in a fire safe condition (i.e. the last person leaving each floor shall inspect whether all electric appliances have been switched off, such as microwaves, electric kettles, etc., with the exception of those that are intended, according to the instructions for use, for permanent operation).
- (6) Electric switchboards must be closed and free access to them must be ensured at all times.
- (7) Fire extinguishers must be permanently accessible, secured against fall and may not be blocked or encased by any items.
- (8) Free access must be ensured at all times to fire extinguishers, hydrants and power distribution centres.
- (9) Containers with flammable liquids must be stored with their lid up, properly sealed and secured against leakage.
- (10) Flammable liquids classified in hazard class I or II may not be stored in transport packages made of plastic or rubber, unless the use of such packages is approved by the manufacturer and permanently marked on the packaging.
- (11) Flammable liquids may only be stored in original packaging, properly sealed (with the lid up), at cool and well ventilated places. They must further be stored outside ignition sources (e.g. open flame, static electricity, sunlight, sparkles, etc.).
- (12) Repairs of electrical installations or gas appliances may only be carried out by persons with appropriate professional training.

- (13) Lighting units (bulbs, fluorescent lamps) must be equipped with covers and may not be covered with any textiles, paper, etc., must be cleaned of dust, spider webs and dirt on a regular basis.
- (14) All premises must be kept clean and tidy.
- (15) Flammable waste must be removed on a regular basis.
- (16) It is prohibited to use private (brought) or not reviewed electrical or other appliances and devices. The permit for the use of appliances is issued by the Director of CEITEC MU, based on prior recommendation of the Occupational Safety, Health Protection and Fire Prevention Manager.
- (17) It is prohibited to handle pressure vessels without proper training provided by the supervising employee and without getting familiar with the characteristics of the relevant gases.
- (18) Sufficient ventilation must be ensured in rooms where pressure vessels are located.

Part A
Article 5

Determination of authorizations and obligations of persons in ensuring the prescribed fire safety conditions

- (1) Persons present in building A35 must act so that their conduct and acts do not cause a fire or explosion.
- (2) Persons present in building A35 are obliged to observe the fire safety rules, primarily to observe all applicable prohibitions and orders, to follow these rules of operation, instructions for use, applicable laws and regulations relating to building A35, UKB and MU.
- (3) Person responsible for observance of fire safety rules in laboratories is employee appointed in writing or supervising employee (head of research group, centre, core facility).
- (4) The Administration of the University Campus of Bohunice ("SUKB") shall be responsible for the observance of fire safety rules within the premises of SUKB.
- (5) Employees are obliged to notify their supervisors of any identified defects.
- (6) SUKB shall be responsible for ensuring maintenance, inspections and reviews of specified technical devices (except for steam sterilizers), technical facilities, fire safety devices and physical fire safety equipment.

Part A
Article 6

Determination of conditions of safe presence and movement of persons and the manner of securing free escape routes

- (1) All escape routes and exits must be permanently free and unblocked.
- (2) It is prohibited to place items in the area of protected escape routes (corridors leading to the outdoor escape staircase and the area in front of the reception desk of MAFIL health care facility).

- (3) For the purpose of initial intervention in the case of fire, there are powder and water fire extinguishers and CO₂ fire extinguishers, as well as interior hydrants.
- (4) A preventive fire patrol is established in building A35. SUKB is responsible for ensuring fire safety at the time of reduced operation.
- (5) Each supervising employee shall be responsible for the observance of fire safety rules at their workplaces within building A35.
- (6) The Fire Safety Code shall be posted so as to be well visible and accessible at all times for all persons present in building A35. The Fire Safety Code is further posted on the website is.muni.cz.

Part B

Fire Safety Code of Building A26 (except for SUKB premises)

Part B

Article 1

Description of performed activities and characteristics of fire risks

- (1) CEITEC MU - Central European Institute of Technology of Masaryk University, SO303, Building A26 (except for the premises of SUKB - the Administration of Bohunice University Campus), Kamenice 753/5, 625 00 Brno.
- (2) Building A26 has the nature of a typical university building, with three above-ground floors and one underground floor. It is extended at the level of the 1st underground floor by the technical rooms and greenhouse and by phytotrones that constitute independent operating units.
- (3) The main load-bearing structure of the building is designed as a combination of ferro-concrete and steel structure. On the underground floor, there are monolithic ferro-concrete pillars of circular cross section, in the greenhouse area, there are pillars of rectangular cross section and ferro-concrete monolithic circumferential walls. The interior staircase is made of steel. The circumference coat of the building is made of glazed-in system aluminium block facade with inserted windows. Layout solution:

1 st UF	weak-current distribution centres, machine room of the ventilation and central heating system, warehouses, centrifuges, autoclaves, laboratories, sanitary facilities, phytotrones and greenhouse with technical rooms
1 st AF	laboratories, offices, day room and sanitary facilities.
2 nd AF	laboratories, offices, day room, meeting room and sanitary facilities.
3 rd AF	offices, changing room, meeting room, day room and sanitary facilities.

- (4) Building A26 is classified as a workplace with increased fire risk. The following activities are carried out here:
 - a) Works with volatile solvents that release flammable vapours (spirit, acetone);
 - b) Works with the use of a gas burner;
 - c) Works with pressure vessels (carbon dioxide, argon, helium, nitrogen).
- (5) The building has a very complex layout and difficult to navigate through, making it easy to lose orientation within the building.
- (6) In these premises, the entry or activities of a fire brigade without the notification of special hazards or procedures of fire extinguishing would endanger the health and lives of the firemen.
- (7) A fire hazard results from a breach of the prohibition of smoking and open fire handling in the course of certain works or from inappropriate storage of flammable liquids (in particular flammable liquids classified in hazard class I).

Part B
Article 2

Fire-technical characteristics of the present substances

(1) **Acetone:** Acetone is a colourless liquid of specific smell, flammable, miscible with water without limitations. Mixture of vapours with oxygen is explosive. Used as solvent of organic substances.

Ignition temperature:	465 °C
Flash point temperature:	-18 °C
Explosion limits:	2.6 to 13% of volume
Melting temperature:	-95 °C
Boiling temperature:	56 °C



hazard pictogram:

signal word: danger

(2) **Ethanol:** colourless liquid of acrid smell. The substance is classified as hazardous pursuant to Regulation (EC) no. 1272/2008. Flam.Liq. 2: H225

Ignition temperature:	305 °C
Flash point temperature:	17 °C (96% Ethanol)
Explosion limits:	3.5 to 15% of volume
Melting temperature:	-117 °C
Boiling temperature:	78 °C



hazard pictogram:

signal word: danger

(3) **Methylalcohol:** colourless liquid smelling of alcohol, miscible with water without any limitations.

Ignition temperature:	455 °C
Flash point temperature:	11 °C
Explosion limits:	6 to 36% of volume
Melting temperature:	-98 °C
Boiling temperature:	65 °C



hazard pictogram:

signal word: danger

(4) **Isopropylalcohol:** colourless liquid of acrid alcohol-like smell.

Ignition temperature:	not available
Flash point temperature:	12 °C
Explosion limits:	2 to 12.7% of volume
Melting temperature:	-89.5 °C
Boiling temperature:	81.4 °C



hazard pictogram:

signal word: danger

(5) **Paper (printed documents and office paper/stationery)**

Chemical characteristics:	mainly cellulose
Ignition temperature:	365 °C

Calorific value: 17 MJ.kg⁻¹
 Autoignition temperature: 100 °C
 Density: 80 g/m² (depending on the intended use)
 Extinguishing medium: water with wetting agent, foam
 During storage, protect against temperature exceeding 100 °C.

(6) Corrugated paperboard, cardboard

Ignition temperature: 427 °C
 Flash point temperature: 258 °C
 Glowing temperature: 258 °C
 Density: 0.14 g/cm³
 Extinguishing medium: water with wetting agent, foam
 Inclination to thermal auto-ignition.
 Protect against heat sources of temperature exceeding 100 °C.

(7) Wood

Ignition temperature: 375 – 399 °C
 Flash point temperature: 238 – 255 °C
 Self-heating point temperature: 80 – 120 °C
 Extinguishing medium: water with wetting agent, foam
 Inclination to thermal auto-ignition.

Part B
Article 3

Maximum permissible amounts of substances that may be present in building A26 (except for SUKB)

It is possible to store no more than 30 l of flammable liquids in the laboratory, in original packaging, with well visible labels informing of the contents thereof. These containers must be placed in a metal lockable cabinet. It is possible to store no more than 250 l of flammable liquids in the warehouse, in original packaging, with well visible labels, in a metal lockable and ventilated cabinet.

Part B
Article 4

Determination of fire safety conditions preventing the occurrence and propagation of fire

- (1) Smoking is strictly prohibited within the premises of UKB.
- (2) Works with volatile solvents must be performed in a fume chamber and the room must be ventilated.
- (3) Flammable liquids must be heated exclusively in a water bath or by an electric heater.
- (4) Flammable liquids must be stored separately from other chemicals, including toxic substances and mixtures, in a designated area.
- (5) Prior to leaving an empty building, the workplace must be inspected and left only in a fire safe condition (i.e. the last person leaving each floor shall inspect whether all electric appliances have been switched off, such as microwaves, electric kettles, etc., with the exception of those that are intended, according to the instructions for use, for permanent operation).
- (6) Electric switchboards must be closed and free access to them must be ensured at all times.

- (7) Fire extinguishers must be permanently accessible, secured against fall and may not be blocked or encased by any items.
- (8) Free access must be ensured at all times to fire extinguishers, hydrants and power distribution centres.
- (9) Containers with flammable liquids must be stored with their lid up, properly sealed and secured against leakage.
- (10) Flammable liquids classified in hazard class I or II may not be stored in transport packages made of plastic or rubber, unless the use of such packages is approved by the manufacturer and permanently marked on the packaging.
- (11) Flammable liquids may only be stored in original packaging, properly sealed (with the lid up), at cool and well ventilated places. They must further be stored outside ignition sources (e.g. open flame, static electricity, sunlight, sparkles, etc.).
- (12) Repairs of electrical installations or gas appliances may only be carried out by persons with appropriate professional training.
- (13) Lighting units (bulbs, fluorescent lamps) must be equipped with covers and may not be covered with any textiles, paper, etc., must be cleaned of dust, spider webs and dirt on a regular basis.
- (14) All premises must be kept clean and tidy.
- (15) Flammable waste must be removed on a regular basis.
- (16) It is prohibited to use private (brought) or not reviewed electrical or other appliances and devices. The permit for the use of appliances is issued by the Director of CEITEC MU, based on prior recommendation of the Occupational Safety, Health Protection and Fire Prevention Manager.
- (17) It is prohibited to handle pressure vessels without proper training provided by the supervising employee and without getting familiar with the characteristics of the relevant gases.
- (18) Sufficient ventilation must be ensured in rooms where pressure vessels are located.

Part B

Article 5

Determination of authorizations and obligations of persons in ensuring the prescribed fire safety conditions

- (1) Persons present in building A26 must act so that their conduct and acts do not cause a fire or explosion.
- (2) Persons present in building A26 are obliged to observe the fire safety rules, primarily to observe all applicable prohibitions and orders, to follow these rules of operation, instructions for use, applicable laws and regulations relating to building A26, UKB and MU.
- (3) Person responsible for observance of fire safety rules: employee appointed in writing or supervising employee (head of research group, centre, core facility).
- (4) SUKB shall be responsible for the observance of fire safety rules in technical areas.

- (5) Employees are obliged to notify their supervisors of any identified defects.
- (6) SUKB shall be responsible for ensuring maintenance, inspections and reviews of specified technical devices (except for steam sterilizers), technical facilities, fire safety devices and physical fire safety equipment.

Part B

Article 6

Determination of conditions of safe presence and movement of persons and the manner of securing free escape routes

- (1) All escape routes and exits must be permanently free and unblocked.
- (2) It is prohibited to place flammable items in the premises in front of the insulating barrier (it is a protected escape route of type A) near the interior staircase and the elevator.
- (3) For the purpose of initial intervention in the case of fire, there are powder and water fire extinguishers and CO₂ fire extinguishers, as well as interior hydrants.
- (4) A preventive fire patrol is established in building A26. SUKB is responsible for ensuring fire safety at the time of reduced operation.
- (5) Each supervising employee shall be responsible for the observance of fire safety rules at their workplaces within building A26.
- (6) The Fire Safety Code shall be posted so as to be well visible and accessible at all times for all persons present in building A26. The Fire Safety Code is further posted on the website is.muni.cz.

Part C

Fire Safety Code of Building A4 (except for SUKB premises)

Part C

Article 1

Description of performed activities and characteristics of fire risks

- (1) The Central European Institute of Technology (CEITEC) ensures the implementation of research activities, approves plans of scientific and research work, administers assets developed or acquired within the framework of CEITEC project, manages public tenders and provides comprehensive management of the organizational operation.
- (2) The building of CEITEC - Central European Institute of Technology (building A4) constitutes a part of the University Campus of Bohunice ("UKB"). Building A4 has the nature of a typical university building, with one underground floor and three above-ground floors, extended to the level of the 1st above-ground floor by the NMR workplace. Layout solution:

1 st UF	laboratories, offices, day room, installations machine room, warehouse, NMR workplace, sanitary facilities.
1 st AF	laboratories, offices, day room and sanitary facilities, secretariat.
2 nd AF	laboratories, offices, day room, meeting room and sanitary facilities.
3 rd AF	offices, changing room, meeting room, day room and sanitary facilities.

- (3) The building consists of 3 above-ground floors and 1 underground floor (the floor level of the 1st UF is -3.78 m). The load-bearing structure is made of steel - steel pillars of circular cross section, steel draw rings and roof bars made of rolled sectional bars. The interior space of the steel pillars is filled with ferro-concrete. In the middle of the building, there is a one-wing steel staircase with a landing. At the northern side, there is an exterior steel staircase.
- (4) The NMR extension is situated at the level of the 1st underground floor and reaches up to building A3, being interconnected for operation and communication purposes with the existing premises of building A4. The load-bearing structure is made of ferro-concrete, the walls are made of waterproof concrete.
- (5) Building A4 is classified as a workplace with increased fire risk. The following activities are carried out here:
- works with volatile solvents that release flammable vapours (spirit, acetone);
 - works with flammable liquids (spirit, acetone);
 - works with the use of a burner;
 - works with pressure vessels (carbon dioxide, argon, helium, nitrogen).
- (6) The building has a very complex layout and difficult to navigate through, making it easy to lose orientation within the building.
- (7) In these premises, the entry or activities of a fire brigade without the notification of special hazards or procedures of fire extinguishing would endanger the health and lives of the firemen.
- (8) A fire hazard results from a breach of the prohibition of smoking and open fire handling in the course of certain works or from inappropriate storage of flammable liquids (in particular flammable liquids classified in hazard class I).

- (9) The NMR workplace is equipped with NMR spectrometers of 950 MHz, 850 MHz, 500 MHz, 600 MHz, 700 MHz, with the 5G radial stray field ranging from 0.8 m to 3.3 m.

Part C

Article 2

Fire-technical characteristics of the present substances

- (1) **Acetone:** Acetone is a colourless liquid of specific smell, flammable, miscible with water without limitations. Mixture of vapours with oxygen is explosive. Used as solvent of organic substances.

Ignition temperature:	465 °C
Flash point temperature:	-18 °C
Explosion limits:	2.6 to 13% of volume
Melting temperature:	-95 °C
Boiling temperature:	56 °C



hazard pictogram:

signal word: danger

- (2) **Ethanol:** colourless liquid of acrid smell. The substance is classified as hazardous pursuant to Regulation (EC) no. 1272/2008. Flam.Liq. 2: H225

Ignition temperature:	305 °C
Flash point temperature:	17 °C (96% Ethanol)
Explosion limits:	3.5 to 15% of volume
Melting temperature:	-117 °C
Boiling temperature:	78 °C



hazard pictogram:

signal word: danger

- (3) **Methylalcohol:** colourless liquid smelling of alcohol, miscible with water without any limitations.

Ignition temperature:	455 °C
Flash point temperature:	11 °C
Explosion limits:	6 to 36% of volume
Melting temperature:	-98 °C
Boiling temperature:	65 °C



hazard pictogram:

signal word: danger

- (4) **Paper (printed documents and office paper/stationery)**

Chemical characteristics:	mainly cellulose
Ignition temperature:	365 °C
Calorific value:	17 MJ.kg ⁻¹
Autoignition temperature:	100 °C
Density:	80 g/m ² (depending on the intended use)
Extinguishing medium:	water with wetting agent, foam
During storage, protect against temperature exceeding 100 °C.	

- (5) **Corrugated paperboard, cardboard**

Ignition temperature:	427 °C
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Flash point temperature: 258 °C
 Glowing temperature: 258 °C
 Density: 0.14 g/cm³
 Extinguishing medium: water with wetting agent, foam
 Inclination to thermal auto-ignition.
 Protect against heat sources of temperature exceeding 100 °C.

(6) Wood

Ignition temperature: 375 – 399 °C
 Flash point temperature: 238 – 255 °C
 Self-heating point temperature: 80 – 120 °C
 Extinguishing medium: water with wetting agent, foam
 Inclination to thermal auto-ignition.

Part C

Article 3

Maximum permissible amounts of substances that may be present in building A4 (except for SUKB)

It is possible to store no more than 30 l of flammable liquids in the laboratory, in original packaging, with well visible labels informing of the contents thereof. These containers must be placed in a metal lockable cabinet. It is possible to store no more than 250 l of flammable liquids in the warehouse, in original packaging, with well visible labels, in a metal lockable and ventilated cabinet.

Part C

Article 4

Determination of fire safety conditions preventing the occurrence and propagation of fire

- (1) Smoking is strictly prohibited within the premises of UKB.
- (2) Works with volatile solvents must be performed in a fume chamber and the room must be ventilated.
- (3) Flammable liquids must be heated exclusively in a water bath or by an electric heater.
- (4) Flammable liquids must be stored separately from other chemicals, including toxic substances and mixtures, in a designated area.
- (5) Prior to leaving an empty building, the workplace must be inspected and left only in a fire safe condition (i.e. the last person leaving each floor shall inspect whether all electric appliances have been switched off, such as microwaves, electric kettles, etc., with the exception of those that are intended, according to the instructions for use, for permanent operation).
- (6) Electric switchboards must be closed and free access to them must be ensured at all times.
- (7) Fire extinguishers and hydrants must be permanently accessible, secured against fall and may not be blocked or encased by any items.
- (8) Containers with flammable liquids must be adequately labelled and stored with their lid up, properly sealed and secured against leakage.
- (9) Flammable liquids classified in hazard class I or II may not be stored in transport packages made of plastic or rubber, unless the use of such packages is approved by the manufacturer and permanently marked on the packaging.

- (10) Flammable liquids may only be stored in original packaging, properly sealed (with the lid up), at cool and well ventilated places. They must further be stored outside ignition sources (e.g. open flame, static electricity, sunlight, sparkles, etc.).
- (11) Repairs of electrical installations or gas appliances may only be carried out by persons with appropriate professional training.
- (12) Lighting units (bulbs, fluorescent lamps) must be equipped with covers and may not be covered with any textiles, paper, etc., must be cleaned of dust, spider webs and dirt on a regular basis.
- (13) All premises must be kept clean and tidy.
- (14) Flammable waste must be removed on a regular basis.
- (15) It is prohibited to use private (brought) or not reviewed electrical or other appliances and devices. The permit for the use of appliances is issued by the Director of CEITEC MU, based on prior recommendation of the Occupational Safety, Health Protection and Fire Prevention Manager and the head of the given workplace.
- (16) It is prohibited to handle pressure vessels without proper training provided by the supervising employee and without getting familiar with the characteristics of the relevant gases.
- (17) Sufficient ventilation must be ensured in rooms where pressure vessels are located.

Part C

Article 5

Determination of authorizations and obligations of persons in ensuring the prescribed fire safety conditions

- (1) Persons present in building A4 must act so that their conduct and acts do not cause a fire or explosion.
- (2) Persons present in building A4 are obliged to observe the fire safety rules, primarily to observe all applicable prohibitions and orders, to follow these rules of operation, instructions for use, applicable laws and regulations relating to building A4, UKB, MU.
- (3) Person responsible for observance of fire safety rules in laboratories: employee appointed in writing or supervising employee (head of research group, centre, core facility).
- (4) The Administration of the University Campus of Bohunice ("SUKB") shall be responsible for the observance of fire safety rules within the premises of SUKB.
- (5) Employees are obliged to notify their supervisors of any identified defects.

Part C

Article 6

Determination of conditions of safe presence and movement of persons and the manner of securing free escape routes

- (1) All escape routes and exits must be permanently free and unblocked.
- (2) It is prohibited to place items in the area of protected escape routes (corridors in front of the insulation barrier near the staircase and elevator on each floor).

- (3) For the purpose of initial intervention in the case of fire, there are powder and water fire extinguishers and CO₂ fire extinguishers, as well as interior hydrants.
- (4) A preventive fire patrol is established in building A4. SUKB is responsible for ensuring fire safety at the time of reduced operation.
- (5) Each supervising employee shall be responsible for the observance of fire safety rules at their workplaces within building A4.
- (6) The Fire Safety Code shall be posted so as to be well visible and accessible at all times for all persons present in building A4. The Fire Safety Code is further posted on the website is.muni.cz.

Part D

Fire Safety Code of Building A2 (except for SUKB premises)

Part D

Article 1

Description of performed activities and characteristics of fire risks

- (1) CEITEC MU - Central European Institute of Technology of Masaryk University, Building A2 (except for the premises of SUKB - the Administration of Bohunice University Campus), Kamenice 753/5, 625 00 Brno.
- (2) The building of CEITEC - Central European Institute of Technology (building A2) constitutes a part of the University Campus of Bohunice ("UKB").
- (3) Building A2 has the nature of a typical university building, with one underground floor and three above-ground floors, extended to the level of the 4th above-ground floor by the greenhouse and two technical rooms of the greenhouse.
- (4) The building consists of 3 above-ground floors and 1 underground floor (the floor level of the 1st UF is -3.78 m). The load-bearing structure is made of steel - steel pillars of circular cross section, steel draw rings and roof bars made of rolled sectional bars. The interior space of the steel pillars is filled with ferro-concrete. In the middle of the building, there is a one-wing steel staircase with a landing. At the northern side, there is an exterior steel staircase.
- (5) The greenhouse structure on the roof of the building is made of aluminium bars with glazing. The circumferential walls of the greenhouse technical rooms are constructed of aerated concrete blocks. Layout solution:

1 st UF	laboratories, offices, day room, warehouse, storage of organic solvents, sanitary facilities.
1 st AF	laboratories, offices, day room and sanitary facilities, secretariat.
2 nd AF	laboratories, offices, day room, meeting room and sanitary facilities.
3 rd AF	offices, changing room, meeting room, day room and sanitary facilities.
4 th AF	greenhouse with technical background.

- (6) Building A2 is classified as a workplace with increased fire risk. The following activities are carried out here:
 - a) Works with volatile solvents that release flammable vapours (spirit, acetone);
 - b) Works with flammable liquids (ethanol, methanol, etc.);
 - c) Works with the use of a gas burner;
 - d) Works with pressure vessels (carbon dioxide, argon, helium, nitrogen).
- (7) The building has a very complex layout and difficult to navigate through, making it easy to lose orientation within the building.
- (8) In these premises, the entry or activities of a fire brigade without the notification of special hazards or procedures of fire extinguishing would endanger the health and lives of the firemen.
- (9) A fire hazard results from a breach of the prohibition of smoking and open fire handling in the course of certain works or from inappropriate storage of flammable liquids (in particular flammable liquids classified in hazard class I).

Part D
Article 2

Fire-technical characteristics of the present substances

(1) **Acetone:** Acetone is a colourless liquid of specific smell, flammable, miscible with water without limitations. Mixture of vapours with oxygen is explosive. Used as solvent of organic substances.

Ignition temperature:	465 °C
Flash point temperature:	-18 °C
Explosion limits:	2.6 to 13% of volume
Melting temperature:	-95 °C
Boiling temperature:	56 °C



hazard pictogram:

signal word: danger

(2) **Ethanol:** colourless liquid of acrid smell. The substance is classified as hazardous pursuant to Regulation (EC) no. 1272/2008. Flam.Liq. 2: H225

Ignition temperature:	305 °C
Flash point temperature:	17 °C (96% Ethanol)
Explosion limits:	3.5 to 15% of volume
Melting temperature:	-117 °C
Boiling temperature:	78 °C



hazard pictogram:

signal word: danger

(3) **Methylalcohol:** colourless liquid smelling of alcohol, miscible with water without any limitations.

Ignition temperature:	455 °C
Flash point temperature:	11 °C
Explosion limits:	6 to 36% of volume
Melting temperature:	-98 °C
Boiling temperature:	65 °C



hazard pictogram:

signal word: danger

(4) **Isopropylalcohol:** colourless liquid of acrid alcohol-like smell.

Ignition temperature:	not available
Flash point temperature:	12 °C
Explosion limits:	2 to 12.7% of volume
Melting temperature:	-89.5 °C
Boiling temperature:	81.4 °C



hazard pictogram:

signal word: danger

(5) **Paper (printed documents and office paper/stationery)**

Chemical characteristics: mainly cellulose

Ignition temperature: 365 °C
 Calorific value: 17 MJ.kg⁻¹
 Auto-ignition temperature: 100 °C
 Density: 80 g/m² (depending on the intended use)
 Extinguishing medium: water with wetting agent, foam
 During storage, protect against temperature exceeding 100 °C.

(6) Corrugated paperboard, cardboard

Ignition temperature: 427 °C
 Flash point temperature: 258 °C
 Glowing temperature: 258 °C
 Density: 0.14 g/cm³
 Extinguishing medium: water with wetting agent, foam
 Inclination to thermal auto-ignition.
 Protect against heat sources of temperature exceeding 100 °C.

(7) Wood

Ignition temperature: 375 – 399 °C
 Flash point temperature: 238 – 255 °C
 Self-heating point temperature: 80 – 120 °C
 Extinguishing medium: water with wetting agent, foam
 Inclination to thermal auto-ignition.

Part D

Article 3

Maximum permissible amounts of substances that may be present in building A2 (except for SUKB)

It is possible to store no more than 30 l of flammable liquids in the laboratory, in original packaging, with well visible labels informing of the contents thereof. These containers must be placed in a metal lockable cabinet. It is possible to store no more than 250 l of flammable liquids in the warehouse, in original packaging, with well visible labels, in a metal lockable and ventilated cabinet.

Part D

Article 4

Determination of fire safety conditions preventing the occurrence and propagation of fire

- (1) Smoking is strictly prohibited within the premises of UKB.
- (2) Works with volatile solvents must be performed in a fume chamber and the room must be ventilated.
- (3) Flammable liquids must be heated exclusively in a water bath or by an electric heater.
- (4) Flammable liquids must be stored separately from other chemicals, including toxic substances and mixtures, in a designated area.
- (5) Prior to leaving an empty building, the workplace must be inspected and left only in a fire safe condition (i.e. the last person leaving each floor shall inspect whether all electric appliances have been switched off, such as microwaves, electric kettles, etc., with the exception of those that are intended, according to the instructions for use, for permanent operation).
- (6) Electric switchboards must be closed and free access to them must be ensured at all times.

- (7) Fire extinguishers must be permanently accessible, secured against fall and may not be blocked or encased by any items.
- (8) Free access must be ensured at all times to fire extinguishers and hydrants.
- (9) Containers with flammable liquids must be stored with their lid up, properly sealed and secured against leakage.
- (10) Flammable liquids classified in hazard class I or II may not be stored in transport packages made of plastic or rubber, unless the use of such packages is approved by the manufacturer and permanently marked on the packaging.
- (11) Flammable liquids may only be stored in original packaging, properly sealed (with the lid up), at cool and well ventilated places. They must further be stored outside ignition sources (e.g. open flame, static electricity, sunlight, sparkles, etc.).
- (12) Repairs of electrical installations or gas appliances may only be carried out by persons with appropriate professional training.
- (13) Lighting units (bulbs, fluorescent lamps) must be equipped with covers and may not be covered with any textiles, paper, etc., must be cleaned of dust, spider webs and dirt on a regular basis.
- (14) All premises must be kept clean and tidy.
- (15) Flammable waste must be removed on a regular basis.
- (16) It is prohibited to use private (brought) or not reviewed electrical or other appliances and devices. The permit for the use of appliances is issued by the Director of CEITEC MU, based on prior recommendation of the Occupational Safety, Health Protection and Fire Prevention Manager.
- (17) It is prohibited to handle pressure vessels without proper training provided by the supervising employee and without getting familiar with the characteristics of the relevant gases.
- (18) Sufficient ventilation must be ensured in rooms where pressure vessels are located.

Part D

Article 5

Determination of authorizations and obligations of persons in ensuring the prescribed fire safety conditions

- (1) Persons present in building A2 must act so that their conduct and acts do not cause a fire or explosion.
- (2) Persons present in building A2 are obliged to observe the fire safety rules, primarily to observe all applicable prohibitions and orders, to follow these rules of operation, instructions for use, applicable laws and regulations relating to building A2, UKB, MU.
- (3) Person responsible for observance of fire safety rules: employee appointed in writing or supervising employee (head of research group, centre, core facility).
- (4) SUKB shall be responsible for the observance of fire safety rules in technical areas.
- (5) Employees are obliged to notify their supervisors of any identified defects.

- (6) SUKB shall be responsible for ensuring maintenance, inspections and reviews of specified technical devices (except for steam sterilizers), technical facilities, fire safety devices and physical fire safety equipment.

Part D

Article 6

Determination of conditions of safe presence and movement of persons and the manner of securing free escape routes

- (1) All escape routes and exits must be permanently free and unblocked.
- (2) It is prohibited to place flammable items in the premises in front of the insulating barrier (it is a protected escape route of type A) near the interior staircase and the elevator.
- (3) For the purpose of initial intervention in the case of fire, there are powder and water fire extinguishers and CO₂ fire extinguishers, as well as interior hydrants.
- (4) A preventive fire patrol is established in building A2. SUKB is responsible for ensuring fire safety at the time of reduced operation.
- (5) Each supervising employee shall be responsible for the observance of fire safety rules at their workplaces within building A2.
- (6) The Fire Safety Code shall be posted so as to be well visible and accessible at all times for all persons present in building A2. The Fire Safety Code is further posted on the website is.muni.cz.

Article 2

Final Provisions

- (1) The secretary of the Institute shall be responsible for the interpretation of this Measure.
- (2) The Institute's deputy director for administration is appointed to supervise the observance of this Measure.
- (3) This Measure shall become valid as of the execution date hereof.
- (4) This Measure shall become effective as of 1 July 2018.

Annexes: Annex No. A1 - Overview and location of physical fire prevention equipment and fire safety devices in A35 building

Annex No. A2 - Overview and location of warning and safety signs for A35 building

Annex No. A3 - Guidelines for the activities of fire patrol for building A35

Annex No. B1 - Overview and location of physical fire prevention equipment and fire safety devices in A26 building

Annex No. B2 - Overview and location of warning and safety signs for A26 building

Annex No. B3 - Guidelines for the activities of fire patrol for building A26

Annex No. C1 - Overview and location of physical fire prevention equipment and fire safety devices in A4 building

Annex No. C2 - Overview and location of warning and safety signs for A4 building

Annex No. C3 - Guidelines for the activities of fire patrol for building A4

Annex No. D1 - Overview and location of physical fire prevention equipment and fire safety devices in A2 building

Annex No. D2 - Overview and location of warning and safety signs for A2 building

Annex No. D3 - Guidelines for the activities of fire patrol for building A2

In Brno, on 14 June 2018

Jiří Nantl
Director of the Institute

Annex No. A1 - Overview and location of physical fire prevention equipment and fire safety devices in A35 building

Building A35

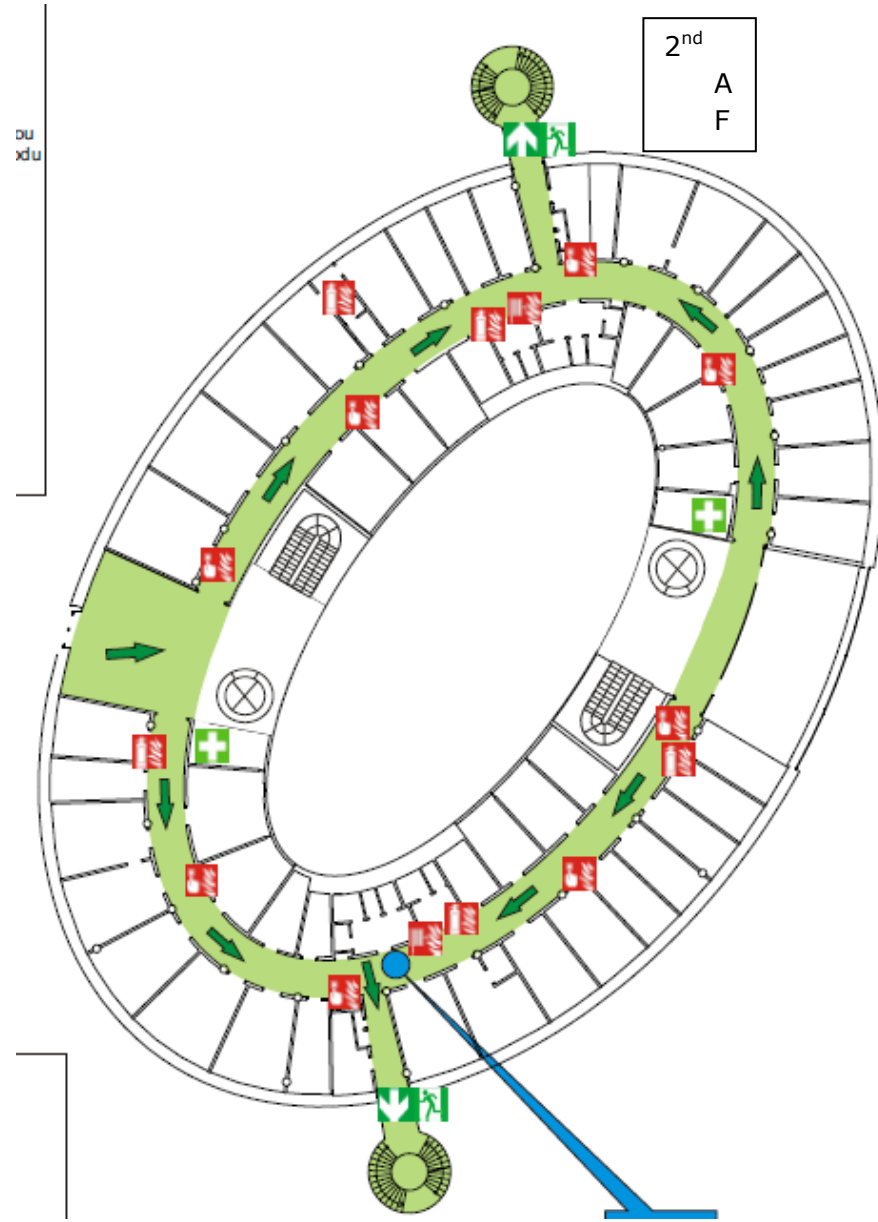
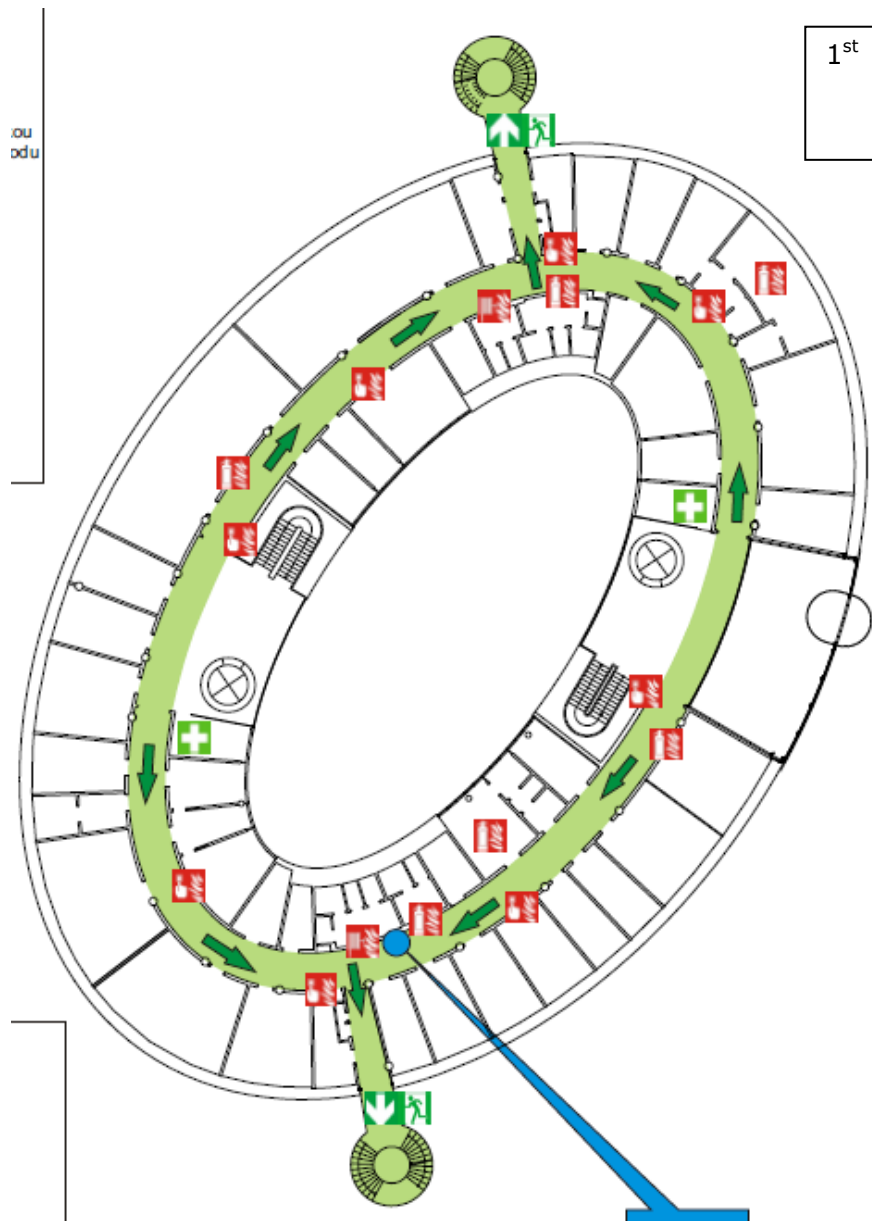
Address of the building where fire extinguishers are installed		Masaryk University Brno-Bohunice CEITEC MU - A35			
Serial Number	Fire extinguisher location	Type	Manufacturer	Type designation	Serial number
1	2 nd AF - N.3.1.II	CO ₂	H	S5H	127187
2	2 nd AF - N.3.1.II	CO ₂	H	S5H	127369
3	2 nd AF - N.3.1.II	CO ₂	H	S5H	126663
4	2 nd AF - N.3.1.II	PR	H	P6Te	087691
5	2 nd AF - N.3.2.II	CO ₂	H	S5H	127304
6	2 nd AF - N.3.1.II	PR	H	P6Te	087810
7	2 nd AF - N.3.1.II	CO ₂	H	S5H	126216
8	2 nd AF - N.3.1.II	PR	H	P6Te	087882
9	2 nd AF - N.3.1.II	PR	H	P6Te	096262
10	1 st AF - N.2.1.II	PR	H	P6Te	001647
11	1 st AF - N.2.1.II	CO ₂	H	S5H	126469
12	1 st AF - N.2.1.II	PR	H	P6Te	002176
13	1 st AF - N.2.1.II	CO ₂	H	S5H	126228
14	1 st AF - N.2.1.II	PR	H	P6Te	001664
15	1 st AF - N.2.1.II	PR	H	P6Te	002180
16	1 st AF - N.2.1.II	CO ₂	H	S5H	126952
17	1 st AF - N.2.3.III	CO ₂	H	S5H	126696
18	1 st UF - N.1.1.II	PR	H	P6Te	088296
19	1 st UF - P.01.24.I	CO ₂	H	S5H	126328
20	1 st UF - N.1.1.II	PR	H	P6Te	001111
21	1 st UF - N.1.1.II	CO ₂	H	S5H	127180
22	1 st UF - N.1.8.III	CO ₂	H	S5H	127336
23	1 st UF - N.3.II	CO ₂	H	S5H	126832
24	1 st UF - N.3.II	PR	H	P6Te	088399
25	1 st UF - N.1.7.II	CO ₂	H	S5H	126123
26	1 st UF - N.1.7.II	CO ₂	H	S5H	127164
27	1 st UF - N.1.7.II	CO ₂	H	S5H	126414
28	1 st UF - N.1.7.II	CO ₂	H	S5H	127297
29	1 st UF - N.1.4.II	V	H	V9Ti	2599
30	1 st UF - N.1.4.II	PR	H	P6Te	096216
31	1 st UF - N.1.4.II	CO ₂	H	S5H	126530
32	1 st UF - N.1.4.II	CO ₂	H	S5H	127139
33	1 st UF - N.1.4.II	PR	H	P6Te	001780
34	1 st UF - N.1.4.II	CO ₂	H	S5H	127025
35	1 st AF - P.01.1.7	CO ₂	H	S5H	126318
36	1 st AF - P.01.1.7	PR	H	P6Te	02671
37	1 st AF - P.01.1.7	PR	H	P6Te	001956

38	1 st UF - N.1.2.II	CO ₂	H	S5H	127254
39	1 st UF - N.1.2.II	PR	H	P6Te	000829
40	1 st UF - N.1.2.II	PR	H	P6Te	087026
41	2 nd UF - P.01.1.III	CO ₂	H	S5H	127393
42	2 nd UF - P.01.1.III	CO ₂	H	S5H	126684
43	2 nd UF - P.01.1.III	CO ₂	H	S5H	126249
44	2 nd UF - P.01.1.III	PR	H	P6Te	095832
45	2 nd UF - P.01.1.III	CO ₂	H	S5H	126109
46	2 nd UF - P.01.1.III	PR	H	P6Te	095365
47	2 nd UF - P.01.1.III	PR	H	P6Te	088718
48	2 nd UF - P.01.1.III	CO ₂	H	S5H	126671
49	2 nd UF - P.01.1.III	CO ₂	H	S5H	126116
50	2 nd UF - P.01.1.III	CO ₂	H	S5H	126808
51	2 nd UF - P.01.24a	CO ₂	H	S5H	127079
52	2 nd UF - P.01.6.III	CO ₂	H	S5H	127262
53	2 nd UF - P.01.6.III	CO ₂	H	S5H	126317
54	2 nd UF - P.01.6.III	PR	H	P6Te	088008
55	2 nd UF - P.01.6.III	CO ₂	H	S5H	126905
56	2 nd UF - P.01.9.II	CO ₂	H	S5H	127324
57	2 nd UF - P.01.9.II	CO ₂	H	S5H	126564
58	2 nd UF - P.01.11.III	CO ₂	H	S5H	127305
59	2 nd UF - P.01.9.II	CO ₂	H	S5H	126802
60	3 rd UF - P.01.9.II	CO ₂	H	S5H	126574
61	3 rd UF - P.01.9.II	CO ₂	H	S5H	127397
62	3 rd UF - P.01.9.II	CO ₂	H	S5H	126955
63	2 nd UF - P.01.9.II	CO ₂	H	S5H	126997
64	2 nd UF - P.01.10.II	CO ₂	H	S5H	126552
65	2 nd UF - P.01.10.II	CO ₂	H	S5H	029890
66	2 nd UF - P.01.4.II	CO ₂	H	S5H	126484
67	2 nd UF - P.01.4.II	PR	H	P6Te	087927
68	2 nd UF - P.01.1.III	CO ₂	H	S5H	126961
69	2 nd UF - P.01.1.III	PR	H	P6Te	001722
70	2 nd UF - P.01.3.II	CO ₂	H	S5H	126806
71	2 nd UF - P.01.3.II	PR	H	P6Te	001440
72	2 nd UF - P.01.16.III	CO ₂	H	S5H	126167
73	2 nd UF - P.01.16.III	CO ₂	H	S5H	126370
74	2 nd UF - P.01.16.III	CO ₂	H	S5H	126572
75	2 nd UF - P.01.16.III	PR	H	P6Te	087567
76	2 nd UF - P.01.2.III	CO ₂	H	S5H	126647
77	2 nd UF - P.01.2.III	PR	H	P6Te	088970
78	2 nd UF - P.01.1.III	CO ₂	H	S5H	126305

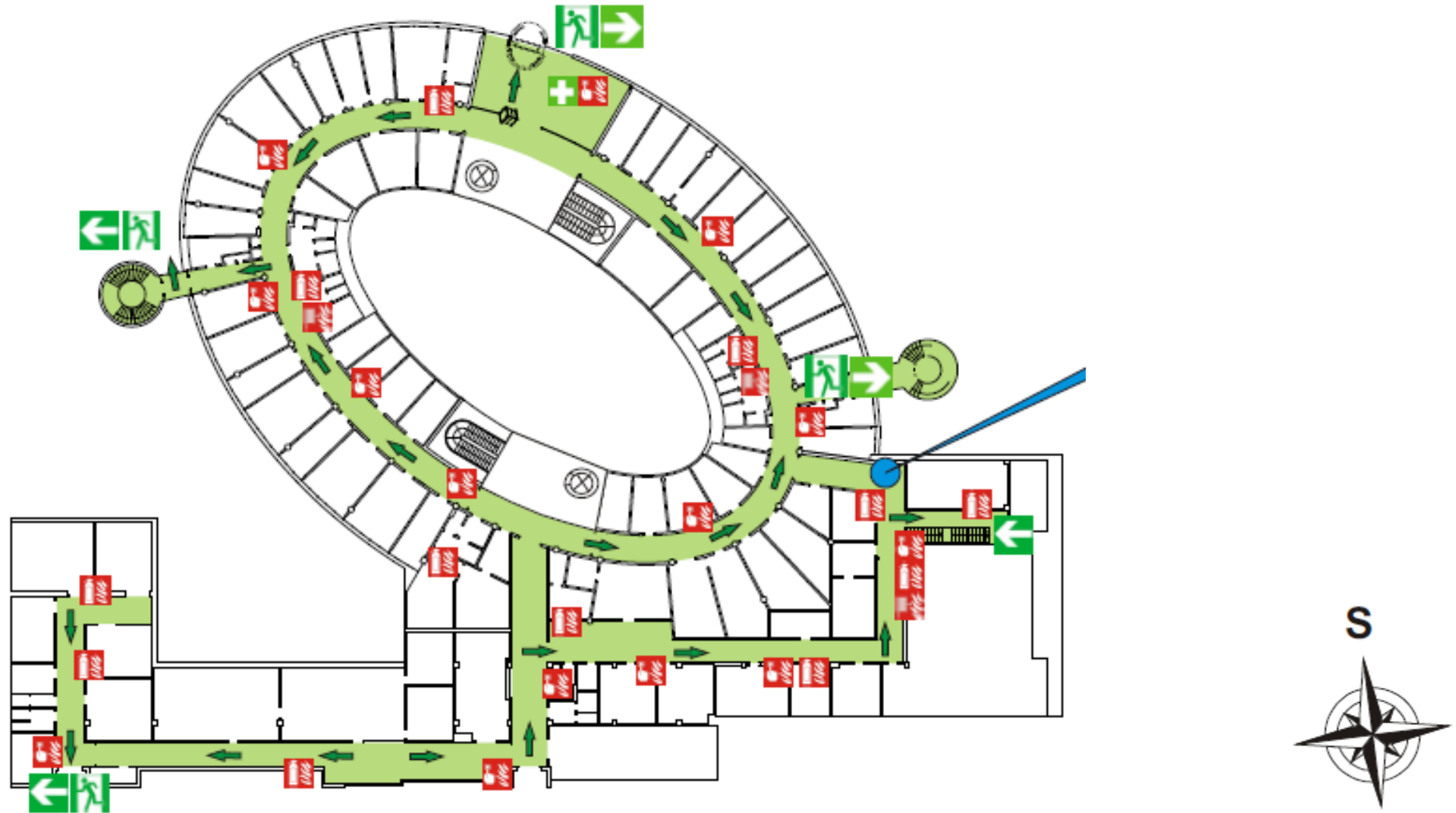


79	2 nd UF - P.01.1.III	PR	H	P6Te	002042
80	2 nd UF - P.01.9.II	CO ₂	H	S5H	126629
81	2 nd UF - P.01.9.II	PR	H	P6Te	087795

1st AF Overview of the location of fire extinguishers, hydrants, fire alarms, escape routes and their signing on 1st AF and 2nd AF



Overview of the location of fire extinguishers, hydrants, fire alarms, escape routes and their signing on 1st UF



Overview of the location of fire extinguishers, hydrants, fire alarms, escape routes and their signing on 2nd UF









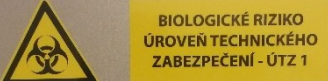
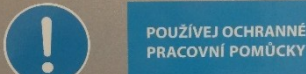





Overview of fire safety devices:

- Emergency lighting;
- Fire doors, incl. functional equipment;
- Fire seals, flaps;
- Equipment of escape route doors;
- Fire shutter near the reception area on 2nd UF;
- EFS system.

For detailed specifications, see separate protocols and inspection and review reports.

Annex No. A2 - Overview and location of warning and safety signs for A35 building

Sign	Description	Location
	WARNING: ELECTRICAL EQUIPMENT! DO NOT EXTINGUISH WITH WATER OR FOAM EXTINGUISHERS.	2 nd UF - 2 nd AF, always on the switchboard
	FIRE EXTINGUISHER	2 nd UF (including technical 3 rd UF) - 2 nd AF, always above the fire extinguisher
	HYDRANT	2 nd UF - 2 nd AF, always on the hydrant case
	FIRE ALARM DEVICE	2 nd UF - 2 nd AF, always near the fire alarm device
	THIS ELEVATOR IS NOT INTENDED FOR EVACUATION OF PERSONS	2 nd UF - 2 nd AF, always on the elevator
	MAIN WATER CLOSURE	1 st UF, on door 1S102
	MAIN GAS CLOSURE	on the door leading to the main gas closure located in the English courtyard garden outside the building
	TOTAL STOP, CENTRAL STOP	in the protected escape route on 1 st UF (corridor leading to the outside escape staircase)
  	BIOLOGICAL RISK TECHNICAL SAFEGUARDING LEVEL - ÚTZ 1 (2,3) USE PERSONAL PROTECTIVE EQUIPMENT NO ENTRY BY UNAUTHORIZED PERSONS	2 nd UF - 2 nd AF, each laboratory, depending on the technical safeguarding level
 	DANGER – STRONG MAGNETIC FIELD NO ENTRY WITH CARDIAC PACEMAKER	2 nd UF, premises in front of MRI

Annex No. A3 - Guidelines for the activities of fire patrol for building A35

Guidelines for the activities of prevention fire patrol 2018 for building A35, Central European Institute of Technology, Kamenice 753/5, 625 00 Brno

Obligations of fire patrol in terms of prevention:

- supervise the observance of fire safety regulations and fire safety code of practice;
- after the completion of work activities, inspect fire safety at the workplaces;
- attend specialized training at least once a year;
- be familiar with the workplaces and with activities involving an increased fire risk;
- know the location and manner of use of portable fire extinguishers and hydrants and inspect their readiness for use;
- ensure that escape routes are not blocked;
- ensure that access to portable fire extinguishers, hydrants, main switches and electrical switchboards is not blocked;
- be familiar with the method of announcing fire alarms and calling rescue;
- know the manner and place of evacuation of persons.

Obligations of fire patrol upon the occurrence of fire:

- follow instructions of the patrol commander in chief;
- commence fire extinguishing works with the use of portable fire extinguishers and hydrants;
- if the fire cannot be extinguished, adopt measures to prevent its propagation;
- participate in the evacuation of persons at risk;
- upon arrival of integrated emergency brigade, follow the instructions of the commander in chief.

Fire patrol	Name and surname	Obligations upon the occurrence of fire
FIRE PATROL COMMANDER	Mgr. Martina Pokorná, Ph.D. Ing. Michal Marcolla	<ul style="list-style-type: none"> ■ Manages fire patrols in the event of fire ■ Assists with evacuation of persons, implements measures necessary for rescue of persons at risk ■ After the arrival of the integrated emergency brigade, provides the required information to the commander in chief and follows his instructions ■ Ensures switching off the power supply, if required

FIRE PATROL MEMBER	Ing. Bc. Martin Hovorka Ing. Miroslav Marek Mgr. Jakub Zeman Ing. Jana Šilarová Mgr. Jana Otoupalíková Mgr. Jana Prušková Mgr. Tomáš Bártek Martin Smolík, DiS. Mgr. Petr Mokroš	<ul style="list-style-type: none"> ■ Follows instructions of the patrol commander in chief ■ Commences fire extinguishing works with the use of portable fire extinguishers and hydrants ■ If the fire cannot be extinguished, adopts measures to prevent its propagation; ■ Participates in the evacuation of persons at risk ■ Upon arrival of integrated emergency brigade, follows the instructions of the commander in chief
RECEPTION DESK	Zora Kochtíková Daniela Votavová and their deputies	<ul style="list-style-type: none"> ■ Calls central security desk (ext. 2929) or the fire brigade, if necessary (150) and informs them of the occurrence and location of fire ■ Upon evacuation, collects the book of arrivals and departures, visitors' log and operations card

Further particular activities of the fire patrol

Mgr. Martina Pokorná, Ph.D.	Supervision over evacuation of employees from 1 st UF and 2 nd UF if both commanders are present, communication with the reception desk, supervision over the call to the central security desk
Ing. Michal Marcolla	Supervision over evacuation of employees from 1 st AF and 2 nd AF if both commanders are present
Ing. Bc. Martin Hovorka Mgr. Petr Mokroš	participation in evacuation of 1 st UF and 2 nd UF + fire extinguishing works

Mgr. Jakub Zeman	participation in evacuation of 1 st AF and 2 nd AF + fire extinguishing works
Ing. Jana Šilarová	supervision over evacuation of persons during events at CEITEC MU + fire extinguishing works
Mgr. Tomáš Bártek Mgr. Jana Prušková	participation in evacuation of persons during events held within the premises of CEITEC MU + fire extinguishing works
Martin Smolík, DiS. Mgr. Jana Otoupalíková	participation in evacuation of persons during events held within the premises of CEITEC MU + fire extinguishing works

Annex No. B1 - Overview and location of physical fire prevention equipment and fire safety devices

Building A26

Serial No.	Hydrant location	Floor	Hydrant type	Nozzle diameter (mm)	Flow rate parameters	
					Overpressure (MPa)	Water yield (l/s)
1	corridor	3 rd AF	D25TS	10	0.20	1.55
2	corridor	3 rd AF	D25TS	10	0.20	1.55
3	corridor	2 nd AF	D25TS	10	0.22	1.62
4	corridor	2 nd AF	D25TS	10	0.22	1.62
5	corridor	1 st AF	D25TS	10	0.24	1.69
6	corridor	1 st AF	D25TS	10	0.26	1.76
7	corridor	1 st AF	D25TS	10	0.26	1.76










Building A26

Serial Number	Fire extinguisher location (room)	Fire extinguisher type	Fire extinguisher manufacturer	Type designation	Serial number	Year of manufacture
1	1 st UF, corridor	PR	H	P6Te	096153	2013
2	1 st UF, corridor	CO	H	S5H	126308	2013
3	1 st UF, corridor	CO	H	S5H	126363	2013
4	1 st UF, corridor	CO	H	S5H	126786	2013
5	1 st UF, corridor	PR	H	P6Te	088292	2013
6	1 st UF, corridor	PR	H	P6Te	088049	2013
7	1 st UF, corridor	CO	H	S5H	126782	2013
8	1 st UF, north	CO	H	S5H	127070	2013
9	1 st UF, corridor	CO	H	S5H	127290	2013
10	1 st UF, corridor	PR	H	P6Te	096160	2013
11	1 st UF, corridor	PR	H	P6Te	096180	2013
12	1 st AF, corridor	PR	H	P6Te	095323	2013
13	1 st AF, corridor	PR	H	P6Te	087653	2013
14	1 st AF, corridor	CO	H	S5H	126356	2013
15	1 st AF, corridor	CO	H	S5H	126961	2013
16	1 st AF, corridor	CO	H	S5H	127302	2013
17	2 nd AF, corridor	PR	H	P6Te	094431	2013
18	2 nd AF, corridor	CO	H	S5H	126883	2013
19	2 nd AF, corridor	PR	H	P6Te	095007	2013
20	2 nd AF, corridor	CO	H	S5H	126486	2013

Overview of fire safety devices:

- Emergency lighting;
- Fire doors, incl. functional equipment;
- Fire seals, flaps;
- Equipment of escape route doors;
- EFS system. For detailed specifications, see separate protocols and inspection and review reports.

Annex No. B2 - Overview and location of warning and safety signs for A26 building

Sign	Description	Location
	WARNING: ELECTRICAL EQUIPMENT! DO NOT EXTINGUISH WITH WATER OR FOAM EXTINGUISHERS.	1 st UF - 3 rd AF, always on the switchboard
	FIRE EXTINGUISHER	1 st UF - 3 rd AF, always above the fire extinguisher
	HYDRANT	1 st UF - 3 rd AF, always on the hydrant case
	FIRE ALARM DEVICE	1 st UF - 3 rd AF, always near the fire alarm device
	THIS ELEVATOR IS NOT INTENDED FOR EVACUATION OF PERSONS	1 st UF - 3 rd AF, always on the elevator
	MAIN WATER CLOSURE	1 st UF, on door 1S04
	MAIN GAS CLOSURE	on the door leading to the main gas closure located outside the building
	TOTAL STOP, CENTRAL STOP	in the protected escape route on 1 st UF (corridor leading to the outside escape staircase)
	BIOLOGICAL RISK TECHNICAL SAFEGUARDING LEVEL - ÚTZ 1 USE PERSONAL PROTECTIVE EQUIPMENT NO ENTRY BY UNAUTHORIZED PERSONS	barrier doors from 3 rd AF to 1 st UF, laboratory doors in front of the barrier

Annex No. B3 - Guidelines for the activities of fire patrol for building A26

Guidelines for the activities of prevention fire patrol for building A26, Central European Institute of Technology, Kamenice 753/5, 625 00 Brno 2018

Obligations of fire patrol in terms of prevention:

- supervise the observance of fire safety regulations and fire safety code of practice;
- after the completion of work activities, inspect fire safety at the workplaces;
- attend specialized training at least once a year;
- be familiar with the workplaces and with activities involving an increased fire risk;
- know the location and manner of use of portable fire extinguishers and hydrants and inspect their readiness for use;
- ensure that escape routes are not blocked;
- ensure that access to portable fire extinguishers, hydrants, main switches and electrical switchboards is not blocked;
- be familiar with the method of announcing fire alarms and calling rescue;
- know the manner and place of evacuation of persons.

Obligations of fire patrol upon the occurrence of fire:

- follow instructions of the patrol commander in chief;
- commence fire extinguishing works with the use of portable fire extinguishers and hydrants;
- if the fire cannot be extinguished, adopt measures to prevent its propagation;
- participate in the evacuation of persons at risk;
- upon arrival of integrated emergency brigade, follow the instructions of the commander in chief.

Fire patrol	Name and surname	Obligations upon the occurrence of fire
FIRE PATROL COMMANDE R	Mgr. Milan Pouch	<ul style="list-style-type: none"> ■ If fire occurs, reports the incident to: central security desk 549 49 2929 ■ Manages fire patrols in the event of fire ■ Assists with evacuation of persons, implements measures necessary for rescue of persons at risk ■ After the arrival of the integrated emergency brigade, provides the required information to the commander in chief and follows his instructions ■ Ensures switching off the power supply, if required

FIRE PATROL MEMBER	Mgr. Kamil Mikulášek Ing. Pavlína Mikulková, Ph.D.	<ul style="list-style-type: none"> ■ Follows instructions of the patrol commander in chief, Ing. Pavlína Mikulková, Ph.D., acts as the commander's deputy ■ Commences fire extinguishing works with the use of portable fire extinguishers and hydrants ■ If the fire cannot be extinguished, adopts measures to prevent its propagation; ■ Participates in the evacuation of persons at risk ■ Upon arrival of integrated emergency brigade, follows the instructions of the commander in chief
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Annex No. C1 - Overview and location of physical fire prevention equipment and fire safety devices in A4 building

Building A4											
Serial Number	Fire extinguisher location (room)	Fire extinguisher type	Fire extinguisher manufacturer	Type designation	Serial number	Year of manufacture	REPAIR (replacement of spare parts)	Inspection result			Compliant
								MAINTENANCE	Non-compliant	TECHNICAL SAFEGUARDING	
1	3 rd AF	PR	T	PG6Le	027591	2005		1		15	yes
2	3 rd AF	PR	T	PG6Le	027904	2005		1		15	yes
3	3 rd AF	PR	T	PG6Le	028817	2005		1		15	yes
4	3 rd AF	PR	T	PG6Le	027878	2005		1		15	yes
5	3 rd AF	CO	H	S5KTe	618744	2005		1		15	yes
6	3 rd AF	PR	T	PG6Le	029655	2005		1		15	yes
7	3 rd AF	PR	T	PG6Le	027544	2005		1		15	yes
8	2 nd AF	PR	T	PG6Le	029656	2005		1		15	yes
9	2 nd AF	PR	T	PG6Le	027790	2005		1		15	yes
10	2 nd AF	PR	T	PG6Le	029513	2005		1		15	yes
11	2 nd AF	PR	T	PG6Le	029998	2005		1		15	yes
12	2 nd AF	V	T	V9Le	020375	2005		1		15	yes
13	2 nd AF	PR	T	PG6Le	028307	2005		1		15	yes
14	2 nd AF	CO	H	S5KTe	615534	2005		1		15	yes
15	2 nd AF	PR	T	PG6Le	031150	2005		1		15	yes
16	1 st AF	PR	T	PG6Le	027909	2005		1		15	yes
17	1 st AF	PR	T	PG6Le	028694	2005		1		15	yes
18	1 st AF	V	T	V9Le	020533	2005				13	yes
19	1 st UF	PR	T	PG6Le	028517	2005		1		15	yes
20	1 st UF	V	T	V9Le	031804	2005	fire hose	1		15	yes
Building A4											
1	1 st UF	PR	T	PG6Le	027240	2005		1		15	yes
2	1 st UF	PR	T	PG6Le	029347	2005		1		15	yes

3	1 st UF	PR	T	PG6Le	0280 21	2005		1		15	yes
4	1 st UF, NMR laboratory extension	CO	H	S5KTe	6461 63	2005		1		15	yes
5	1 st UF, NMR laboratory extension	PR	T	PG6Le S	0082 66	2012				12	yes
6	1 st UF, NMR laboratory extension	CO	N	KA5 antimag.	8852 86	2012				12	yes
7	1 st UF, NMR laboratory extension	H	ESTO	T6Fe	0014 01	2012				12	yes
8	1 st UF, NMR laboratory extension	PR	T	PG6Le	0277 28	2005		1		15	yes
9	1 st UF, 048 technical gas	V	T	V9Le	0321 17	2005		1		15	yes
10	1 st UF, 048 technical gas	CO	H	S5KTe	6161 80	2005				12	yes

Building A4

Serial no.	Hydrant location	Floor	Hydrant type	Nozzle diameter (mm)	Flow rate parameters		Usability for intervention
					Overpressure (MPa)	Water yield (l/s)	
7	corridor	1 st UF	D25TS	10	0.34	2.02	YES
6.	corridor	1 st UF	D25TS	10	0.34	2.02	YES
5.	corridor	1 st AF	D25TS	10	0.32	1.96	YES
4.	corridor	2 nd AF	D25TS	10	0.32	1.96	YES
3	corridor	2 nd AF	D25TS	10	0.30	1.89	YES
2.	corridor	3 rd AF	D25TS	10	0.30	1.89	YES
1	corridor	3 rd AF	D25TS	10	0.28	1.83	YES











Overview of fire safety devices:



- Emergency lighting;
- Fire doors, incl. functional equipment;
- Fire seals, flaps;
- Equipment of escape route doors;

- EFS system.

For detailed specifications, see separate protocols and inspection and review reports.

Annex No. C2 - Overview and location of warning and safety signs for A4 building

Sign	Description	Location
	WARNING: ELECTRICAL EQUIPMENT! DO NOT EXTINGUISH WITH WATER OR FOAM EXTINGUISHERS.	1 st UF - 3 rd AF, always on the switchboard
	FIRE EXTINGUISHER	1 st UF - 3 rd AF, always above the fire extinguisher
	HYDRANT	1 st UF - 3 rd AF, always on the hydrant case
	FIRE ALARM DEVICE	1 st UF - 3 rd AF, always near the fire alarm device (in front of the insulation barrier near the elevator, near the barrier doors, behind the barrier, in the corridor near the exterior escape staircase on each floor, near the NMR)
	THIS ELEVATOR IS NOT INTENDED FOR EVACUATION OF PERSONS	1 st UF - 3 rd AF, always on the elevator
	MAIN GAS CLOSURE	on the door leading to the main gas closure located outside the building
	MAIN WATER CLOSURE	outside the building, in the underground corridor, room 0.54
	MAIN GAS CLOSURE	outside the building
	TOTAL STOP, CENTRAL STOP	outside the building, in the underground corridor, room 0.52
 in various modifications	information signs for escape routes and exits	3 rd AF, in front of the insulation barrier in the direction of the staircase, 2x behind the barrier 2 nd AF, in front of the insulation barrier in the direction of the staircase, 2x behind the barrier 1 st AF, in front of the insulation barrier in the direction of the exit to the free outside area and above the door, behind the barrier in the direction of the barrier section 1 st UF, in front of the insulation barrier in the direction of the staircase, behind the barrier, near NMR

 <p>NEBEZPEČÍ - - SILNÉ MAGNETICKÉ POLE</p>	 <p>ZÁKAZ VSTUPU S KARDIOSTIMULÁTOREM</p>	<p>DANGER – STRONG MAGNETIC FIELD NO ENTRY WITH CARDIAC PACEMAKER</p>	<p>1st UF, premises in front of NMR</p>
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Annex No. C3 - Guidelines for the activities of fire patrol for building A4

Guidelines for the activities of prevention fire patrol for building A4, Central European Institute of Technology, Kamenice 753/5, 625 00 Brno 2018

Obligations of fire patrol in terms of prevention:

- supervise the observance of fire safety regulations and fire safety code of practice;
- after the completion of work activities, inspect fire safety at the workplaces;
- attend specialized training at least once a year;
- be familiar with the workplaces and with activities involving an increased fire risk;
- know the location and manner of use of portable fire extinguishers and hydrants and inspect their readiness for use;
- ensure that escape routes are not blocked;
- ensure that access to portable fire extinguishers, hydrants, main switches and electrical switchboards is not blocked;
- be familiar with the method of announcing fire alarms and calling rescue;
- know the manner and place of evacuation of persons.

Obligations of fire patrol upon the occurrence of fire:

- follow instructions of the patrol commander in chief;
- commence fire extinguishing works with the use of portable fire extinguishers and hydrants;
- if the fire cannot be extinguished, adopt measures to prevent its propagation;
- participate in the evacuation of persons at risk;
- upon arrival of integrated emergency brigade, follow the instructions of the commander in chief.

Fire patrol	Name and surname	Obligations upon the occurrence of fire
FIRE PATROL COMMANDE R	Mgr. Jana Řiháková	<ul style="list-style-type: none"> <li data-bbox="901 271 1332 421">■ If fire occurs, reports the incident to: central security desk 549 49 2929 <li data-bbox="901 427 1353 495">■ Manages fire patrols in the event of fire <li data-bbox="901 501 1342 645">■ Assists with evacuation of persons, implements measures necessary for rescue of persons at risk <li data-bbox="901 651 1361 846">■ After the arrival of the integrated emergency brigade, provides the required information to the commander in chief and follows his instructions <li data-bbox="901 853 1329 920">■ Ensures switching off the power supply, if required

FIRE PATROL MEMBER	Dana Jelínková Jitka Kalabusová	<ul style="list-style-type: none"> <li data-bbox="901 1001 1353 1068">■ Follows instructions of the patrol commander in chief <li data-bbox="901 1075 1390 1218">■ Commences fire extinguishing works with the use of portable fire extinguishers and hydrants <li data-bbox="901 1225 1315 1361">■ If the fire cannot be extinguished, adopts measures to prevent its propagation; <li data-bbox="901 1368 1393 1435">■ Participates in the evacuation of persons at risk <li data-bbox="901 1442 1374 1579">■ Upon arrival of integrated emergency brigade, follows the instructions of the commander in chief
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Annex No. D1 - Overview and location of physical fire prevention equipment and fire safety devices in A2 building

Fire extinguisher manufacturer	Type designation	Serial number	Year of manufacture	REPAIR (replacement of spare parts)	Inspection result			Compliant
					MAINTENANCE	Non-compliant	TECHNICAL SAFEGUARDING	
Al	5CO2	078852	2015				15	yes
Al	6Pi	028007	2015				15	yes
T	PG6Le	027584	2005		1		15	yes
T	PG6Le	030240	2005		1		15	yes
T	PG6Le	029779	2005		1		15	yes
T	PG6Le	029794	2005		1		15	yes
T	PG6Le	027835	2010		1		15	yes
T	PG6Le	027352	2005		1		15	yes
T	PG6Le	030152	2005		1		15	yes
T	V9Le	020325	2012		1		15	yes
T	PG6Le	029986	2005		1		15	yes
T	PG6Le	029630	2005		1		15	yes
T	PG6Le	028539	2005		1		15	yes
H	S5KTe	592024	2005		1		15	yes
Metal	V9K	016024	2005		1		15	yes
T	PG6Le	030019	2005		1		15	yes
T	V9Le	020582	2005		1		15	yes
T	PG6Le	029877	2005		1		15	yes
H	S5KTe	647185	2005		1		15	yes
T	PG6Le	029538	2005		1		15	yes
T	PG6Le	030018	2005		1		15	yes

T	PG6Le	029614	2005		1	15	yes
T	V9Le	020469	2005		1	15	yes
T	V9Le	020316	2005				yes
T	PG6Le	027804	2005		1	15	yes

Building A2









Serial No.	Hydrant location	Floor	Hydrant type	Nozzle diameter (mm)	Flow rate parameters		Usability for intervention
					Overpressure (MPa)	Water yield (l/s)	
1	corridor	1 st UF	D25TS	10	0.34	2.02	YES
2	corridor	1 st UF	D25TS	10	0.32	1.96	YES
3	corridor	1 st AF	D25TS	10	0.30	1.89	YES
4	corridor	2 nd AF	D25TS	10	0.30	1.89	YES
5	corridor	2 nd AF	D25TS	10	0.28	1.83	YES
6	corridor	3 rd AF	D25TS	10	0.28	1.83	YES
7	corridor	3 rd AF	D25TS	10	0.28	1.83	YES

Overview of fire safety devices:

- Emergency lighting;
- Fire doors, incl. functional equipment;
- Fire seals, flaps;
- Equipment of escape route doors;
- EFS system.

For detailed specifications, see separate protocols and inspection and review reports.

Annex No. D2 - Overview and location of warning and safety signs for A2 building

Sign	Description	Location
	<p>WARNING: ELECTRICAL EQUIPMENT! DO NOT EXTINGUISH WITH WATER OR FOAM EXTINGUISHERS.</p>	<p>1st UF - 4th AF, always on the switchboard</p>
	<p>FIRE EXTINGUISHER</p>	<p>1st UF - 4th AF, always above the fire extinguisher</p>
	<p>HYDRANT</p>	<p>1st UF - 4th AF, always on the hydrant case</p>
	<p>FIRE ALARM DEVICE</p>	<p>1st UF - 4th AF, always near the fire alarm device</p>
	<p>THIS ELEVATOR IS NOT INTENDED FOR EVACUATION OF PERSONS</p>	<p>1st UF - 4th AF, always on the elevator</p>
	<p>MAIN WATER CLOSURE</p>	<p>in the corridor, outside A2</p>
	<p>MAIN GAS CLOSURE</p>	<p>on the door leading to the main gas closure located outside the building</p>
	<p>TOTAL STOP, CENTRAL STOP</p>	<p>in the corridor, outside A2</p>

Annex No. D3 - Guidelines for the activities of fire patrol for building A2

Guidelines for the activities of prevention fire patrol for building A2, Central European Institute of Technology, Kamenice 753/5, 625 00 Brno 2018

Obligations of fire patrol in terms of prevention:

- supervise the observance of fire safety regulations and fire safety code of practice;
- after the completion of work activities, inspect fire safety at the workplaces;
- attend specialized training at least once a year;
- be familiar with the workplaces and with activities involving an increased fire risk;
- know the location and manner of use of portable fire extinguishers and hydrants and inspect their readiness for use;
- ensure that escape routes are not blocked;
- ensure that access to portable fire extinguishers, hydrants, main switches and electrical switchboards is not blocked;
- be familiar with the method of announcing fire alarms and calling rescue;
- know the manner and place of evacuation of persons.

Obligations of fire patrol upon the occurrence of fire:

- follow instructions of the patrol commander in chief;
- commence fire extinguishing works with the use of portable fire extinguishers and hydrants;
- if the fire cannot be extinguished, adopt measures to prevent its propagation;
- participate in the evacuation of persons at risk;
- upon arrival of integrated emergency brigade, follow the instructions of the commander in chief.

Fire patrol	Name and surname	Obligations upon the occurrence of fire
FIRE PATROL COMMANDE R	Jana Kapustová	<ul style="list-style-type: none"> ■ If fire occurs, reports the incident to: central security desk 549 49 2929 ■ Manages fire patrols in the event of fire ■ Assists with evacuation of persons, implements measures necessary for rescue of persons at risk ■ After the arrival of the integrated emergency brigade, provides the required information to the commander in chief and follows his instructions ■ Ensures switching off the power supply, if required

FIRE PATROL MEMBER	Mgr. Ivana Urbánková Ing. Blanka Pekárová, Ph.D.	<ul style="list-style-type: none"> ■ Follows instructions of the patrol commander in chief, Commences fire extinguishing works with the use of portable fire extinguishers and hydrants ■ If the fire cannot be extinguished, adopts measures to prevent its propagation; ■ Participates in the evacuation of persons at risk ■ Upon arrival of integrated emergency brigade, follows the instructions of the commander in chief
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