



Fire Safety Regulations 2013

(Version 01/2013)

for the following property:

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1. INTRODUCTION

The following Fire Safety Regulations are important instructions to prevent fires, risk to health or property, and to reduce momentous damage, as well as instructions for the conduct in case of a fire.

Each employee must take note of the fire safety regulations and confirm this with their signature. The fire safety regulations are to be posted in a freely accessible way in the departments of the IFA - Tulln.

The rules listed below must be observed with the utmost care. Failure to follow these instructions may also result in civil and/or criminal penalties under certain circumstances.

2. ACCOUNTABILITY AND RESPONSIBILITIES

The Fire Protection Officer of the IFA - Tulln is the main person responsible for the fire safety of the entire Institute.

A deputy and the respective fire wardens of each department assist him.

The persons referred to above are responsible for the monitoring and observance of the officially prescribed fire safety measures and the provisions of these Fire Safety Regulations.

The Fire Protection Officer is to be granted access to all areas of the individual departments at any time.

Instructions by these persons concerning fire protection are to be followed immediately and any perceived deficiencies in the area of fire safety are to be reported to them at once.

3. GENERAL CONDUCT

It is essential that order and cleanliness are maintained throughout the entire Institute at all times!

The signs mounted around the Institute, which refer to the correct conduct in accordance with the fire safety regulations, are to be read thoroughly and neither be moved out of sight nor be damaged or removed.

Escape routes and other routes (in particular hallways and staircases) must be kept clear in their full width. Exits and emergency exits must remain usable at all times. Storage in hallways and staircases is hazardous to life and therefore prohibited.

Vehicles may be parked in the entire operation area only where this is expressly permitted. Escape routes and other traffic routes as well as the emergency access roads must remain clear.

The escape route lighting is designed to illuminate the escape routes and exits in case of main lighting system failure. They must not be covered with decorative materials, signs or the like.

The actuating devices for the smoke ventilation must be accessible at all times.

All lamps are to be always kept free of any kinds of combustible materials (furniture, stocked material, curtains, dust, etc.). The protective glasses and protective baskets must not be removed. The replacement of failed or poorly-starting fluorescent tubes is to be arranged right away (work order to Building Services IFA).

EACH EMPLOYEE MUST FIRMLY REMEMBER THE FOLLOWING ITEMS IN THEIR WORK ENVIRONMENT:

- **PUSH BUTTON ALARM**
- **FIRE EXTINGUISHER LOCATIONS**
- **ESCAPE ROUTES**

THE SMOKING PROHIBITION THROUGHOUT THE ENTIRE INSTITUTE IS TO BE OBSERVED!

Heaters and heating appliances may only be installed and put into operation with the approval of the Fire Protection Officer and the administration. They are to be maintained and operated properly.

Fire or high temperature work (welding, soldering, cutting, ...), working with dust formations or compressed air work are only permitted after notification of the Fire Protection Officer of the administrative department and only after his approval by means of a **RELEASE FORM**.

The seating etc. used must show fire resistance class **B1** and **Q1**.

Fire doors must be kept closed. The closure sequence controller must not be blocked or disabled. Fire doors must be kept clear of objects of all kinds. Mechanical locking devices are therefore **FORBIDDEN** (e.g. wedges, keeping fire doors open by using fire extinguishers, and the like).

Flammable objects shall be at least 1 meter away from fire doors.

Electrical systems are to be kept properly maintained. Alterations and repairs must only be carried out by authorized persons. The setting up of temporary installations is prohibited.

Technical rooms of building services are to be kept clear of storage of all kinds. Fuse boxes must be freely accessible at all times.

Machines are to be maintained and operated as per the manufacturer's instructions.

Extinguishers must not be removed from the prescribed installation locations or moved out of sight (e.g. garments placed over them). They must also not be used in violation of their original purpose (e.g. fixing of doors).

After work, all work areas must be put in order. All necessary precautions to ensure fire safety must be taken. Equipment not suitable for continuous operation (office equipment, laboratory equipment, heaters, etc.) must be switched off.

A stay of workers in the Institute beyond the general working hours is only permitted with an approval from the respective department head.

Pressure vessels and pressurized gas containers (gas bottles, spray cans, etc.) must be protected from thermal influence, stably set up and stored so that they can easily be retrieved in a hazardous situation and don't block the escape routes.

No pressurized gas containers may be stored in the area of exits or emergency exits, staircases and hallways.

Decoration material for events must be made of materials that will not burn easily (**B1, Q1**).

Combustible waste may only be stored in the garbage containers provided **at the garbage collection points**.

4. CONDUCT IN THE CASE OF A FIRE

1. ALERT
2. RESCUE AND ESCAPE
3. EXTINGUISH
4. EVACUATION ALARM

4.1 ALERT

Stay calm!

ALERTING AND RESCUING TAKE PRECEDENCE OVER FIRE FIGHTING.

If a fire is detected, one immediately notifies the responsible persons of the IFA, i.e. Mr. Joseph Hübl (0664/80745-4983) or Mr. Helmut Marschik (0676 / 83280-114) or the fire department by calling (0) 122 – without regard to the extent of the fire and without waiting to check the success of one's own attempts to extinguish it, and even in case of smoke or a burning smell only.

Be sure to give the following information:

- **WHERE IT IS BURNING** (Department and Room number)
- **WHAT IS BURNING**
- **ANY INJURED PEOPLE**
- **NAME OF CALLER**

Point out special circumstances (e.g. if the concerned place is hard to find) and speak slowly and clearly.

4.2 RESCUE AND ESCAPE

After the alerting one needs to explore whether people are at risk. The Rescuing of Life takes precedence over attempting to fight the fire in any event.

Endangered persons are to be warned. Do not let persons with burning clothes run away, but instead wrap them in blankets and coats or cloths, make them lie on the floor and smother the flames.

If possible, bring unconscious persons out of the danger zone.

In the case of being locked in a room, make yourself noticed by the emergency crews by shouting, phone calls, switching on the lights, etc.

Leave rooms using the marked emergency exits. All doors are to be closed behind oneself. Ventilate escape routes. Do not use the elevator in case of a fire.

4.3 EXTINGUISH

Begin fire-fighting using the existing fire-fighting equipment (fire extinguishers or fire blanket). Throw burning objects on the ground and try to extinguish the fire either using fire extinguishers or by throwing coats, blankets etc. over it.

Remove easily flammable objects from the vicinity of the fire.

Should this not be possible, cool them with water.

Do not fight flammable liquids (e.g. gasoline, solvents, etc.) with water but with fire extinguishers. Smother burning fats (e.g. in kitchens) with a fire blanket or a cloth (do not use water).

Close doors and windows, switch off ventilation, heating and air-conditioning (to cut off the oxygen supply to the fire).

In the case of no possibility of success in extinguishing the fire with the available equipment due to the development of heavy smoke or the scope of the fire, discontinue the fire-fighting in the interest of your own safety.

Leave the room, close the fire doors behind you, and leave the building as quickly as possible. If use of the escape routes is no longer possible due to smoke development, remain in the offices or laboratories, close the doors, open the windows and make yourself noticeable to the emergency crews by shouting. Use the ground floor windows to escape.

4.4 EVACUATION ALARM

Upon instructions by the Fire Protection Officer or his deputy, or a senior executive, but especially on instructions by the squad leader of the fire department, an evacuation alarm is to be triggered.

This means that a fire broke out at some location in the Institute or some other risk exists which requires a precautionary evacuation of the building.

The alarm signal is:

CONTINUOUS SIGNAL TONE

IN THE CASE OF AN EVACUATION ALARM THE FOLLOWING IS TO BE TAKEN NOTE OF:

Absolutely remain calm! Avoid as much as possible any panic-inducing announcements, shouts and actions.

Possibly present **VISITORS** are to be directed to the exits and emergency exits, urged to leave the building with somebody accompanying them and go to the assembly point.

All employees must leave their workstation immediately and go to the assembly point.

The meeting place must not be left without the consent of the operational command of the fire department, of the Fire Protection Officer or his deputy. This measure serves to help in determining the complete presence of all employees.

MISSING PEOPLE ARE TO BE REPORTED IMMEDIATELY TO THE FIRE DEPARTMENT LEADER OR THE FIRE PROTECTION OFFICER.

Legend:
(alphabetic)

- ABGANG** = Staircase
- BAUTEIL** = Building part
- BRUNNEN** = Well, Fountain
- EG** = ground floor
- FASSADE** = Facade, front
- GASLAGER** = Gas storage
- GRÜNFLÄCHE** = Green space
- HEIZRAUM** = Boiler room

LÖSCHTEICH

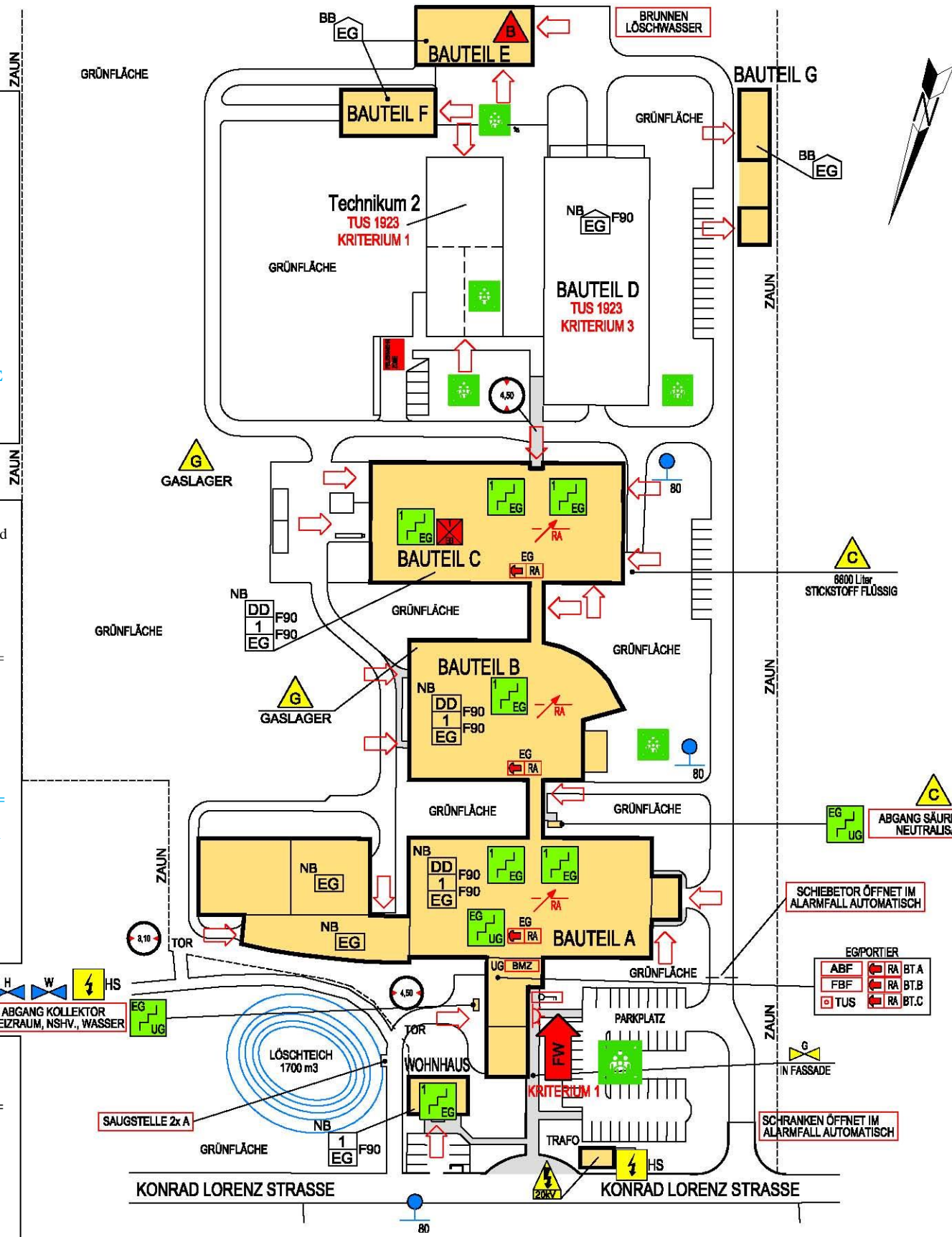
- = Fire water pond
- LÖSCHWASSER** = Extinguishing water

ÖFFNET IM ALARMFALL AUTOMATISCH

- = Opens automatically in case of an alarm
- PARKPLATZ** = Parking space
- PORTIER** = Receptionist
- SAUGSTELLE** = Suction point
- SÄURELAGER** = Acid storage
- SCHIEBETOR** = Sliding door
- SCHRANKEN** = Gates

STICKSTOFF FLÜSSIG

- = Liquid nitrogen
- TECHNIKUM** = Pilot plant
- TRAFO** = Transformator
- WASSER** = Water
- WOHNHAUS** = Residential



5. CONDUCT DURING A FIRE

The instructions of the fire teams and the fire department are to be followed without fail.

Perform rescue attempts only as directed by emergency crews.

The following is to be paid attention to during the fighting of a fire:

- Do not direct the extinguishing jet on the flames, but on the burning objects.
- Remove easily flammable objects from the fire or cool them with water.
- In the case of flying sparks, all doors and windows of the rooms at risk are to be shut.
- Make room for the work to be performed by emergency crews.

6. MEASURES AFTER THE FIRE

Do not enter rooms affected by the fire.

All perceptions which may help in determining the cause of the fire are to be reported to the squad leader of the fire department, the Fire Protection Officer or the respective superior.

Put used portable fire extinguishers back in their locations only after refilling and servicing.

Switch on the electrical systems, ventilation systems, etc. only after approval by the Fire Protection Officer. Clean up only after instruction by the fire department or Fire Protection Officer.

7. ESCAPE ROUTES

- Escape routes must not be blocked or confined below the required minimum usable width.
- Escape routes must not be bounded by objects that are easily knocked over or may be moved.
- Escape routes must be freely usable at any time, as long as employees who may rely on them are present in the workplace.

SYMBOLS:



Meeting point



Emergency Exit



**Escape Route Left
down the Stairs**



**Escape Route Right
down the Stairs**



Escape Route Left



Escape Route Right

8. OPERATION AND FUNCTION OF FIRE EXTINGUISHERS

FIRE EXTINGUISHER

On these pages we would like to clarify the purpose of fire extinguishers. In our experience the early use of fire extinguishers can save lives and reduce property damage. Fire extinguishers are used for effective fighting of incipient fires. This means that only small and developing fires can be extinguished successfully. Each fire extinguisher can be used without special knowledge, and it is quite sufficient to follow the printed instructions for use. For your own safety, you should, however, already make yourself familiar with the operation of fire extinguishers available to you. Read the operating instructions mounted on the fire extinguishers carefully and familiarize yourself with the existing control elements. This saves valuable time in case of an emergency. You should also check that the fire extinguisher in your area works for the combustible materials present in your environment. On the fire extinguisher you will find printed icons illustrating the suitability for different classes of fire. The tables below should give you a basic understanding about the fire classes and the appropriateness of different fire extinguishers for the respective fire classes.



Not every fire extinguisher can be used for all types of fire!

When applying the **wrong extinguishing agent** one can quickly **achieve the opposite** of what one had in mind! Just think of fat explosions, when burning oil comes into contact with the most natural extinguishing agent in the world, **water!**





There are four classes of fire that you can easily assign to fire types using symbols that must be mounted on any portable fire extinguisher.

STRUCTURE OF A POWDER CARTRIDGE-OPERATED FIRE EXTINGUISHER

Aufbau und Bedienung eines Pulver-Aufladelöschers
dem Gerät mit welchem Sie am ehesten konfrontiert werden:





	Aufbau	Handhabung	
1	<p>Sicherungsglasche oder -stift Dieser ist meist Gelb und so angebracht, dass er leicht zu finden ist</p>	<p>Reißen Sie die Lasche oder ziehen sie den Stift heraus.</p>	
2	<p>Schlag- oder Auslöseknopf meist Rot, kann auch in den Griff integriert sein</p>	<p>Schlagen Sie fest auf den Knopf, bis Sie den Widerstand überwunden haben, Sie hören jetzt ein leises rauschen! Es dauert ca. 5-10 Sec. bis sich der Druck vollständig entfaltet hat!!</p>	
3	<p>Treibmittelkartusche sie ist mit einer dünnen Membran verschlossen, die sie mit dem Dorn des Schlagkopfes durchstoßen.</p>		
4	<p>Blasrohr hierdurch wird das Treibgas in den Löschmittelbehälter geführt</p>		
5	<p>Signalstift ist nur selten vorhanden</p>		
6	<p>Steigrohr hierdurch wird das Treibmittel zum Schlauch geführt</p>		
7	<p>Löschpistole mit Schließmechanismus zum dosierten Abgeben des Löschmittels</p>	<p>Bringen Sie nun stoßweise das Löschpulver auf den Brandherd aus.</p>	

CATEGORIZATION OF FIRE CLASSES

	SOLIDS mainly organic in nature, with formation of glowing embers e.g. wood, paper, straw, coal, textiles, car tires
	LIQUIDS or materials which become liquid e.g. oils, fats, resins, tar, waxes, alcohols, plastics
	GASEOUS SUBSTANCES e.g. methane, propane, hydrogen, acetylene, town gas
	METALS e.g. aluminum, magnesium, sodium, lithium, potassium, or their alloys

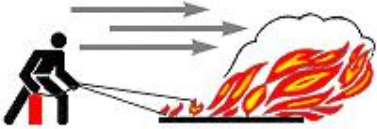

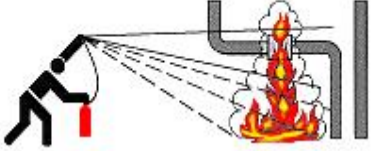
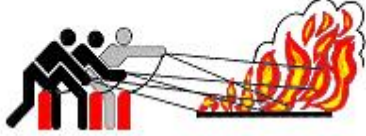


In most cases you will encounter **powder extinguishers A B C**, so that you can fight almost all fires, except when dealing with metals, which fortunately is not so common.

Suitability of fire extinguishers for different classes of fire:

	Classes of fire				
Powder extinguisher with glow fire extinguishing powder	PG	YES	YES	YES	NO
Powder extinguisher with metal fire extinguishing powder	PM	NO	NO	NO	YES
Powder extinguisher	P	NO	YES	YES	NO
Carbon dioxide extinguisher (CO ₂)	K	NO	YES	NO	NO
Water extinguisher	W	YES	NO	NO	NO
Foam extinguisher	S	YES	YES	NO	NO

IN THE CASE OF A FIRE IN ELECTRICAL FACILITIES USE THE CO₂ EXTINGUISHER!

USE THE FIRE EXTINGUISHER CORRECTLY WHILE EXTINGUISHING!

	<p>Observe wind direction, always proceed with the wind, spray down on the embers, don't spray into the flame, keeping enough distance so that the powder cloud envelops the entire fire as much as possible. Absolutely extinguish intermittently.</p>
	<p>Extinguish conflagrations from the front and from below, not from behind or above, always directed onto the burning material, do not extinguish the flames themselves.</p>
	<p>With dripping or fluid fires, extinguish from the top (exit point) to the bottom (burning pool).</p>
	<p>In the case of larger incipient fires use several fire extinguishers simultaneously and not consecutively.</p>
	<p>Pay attention to potential flashback, don't leave the fire site, but observe.</p>
	<p>After using the fire extinguisher, do not, under any circumstances, hang it back up at its accustomed place, but put it down and get it filled up immediately.</p>

THE FIRE PROTECTION OFFICER IS TO BE ALERTED EVEN WHEN THE FIRE COULD BE EXTINGUISHED WITHOUT HELP!

Fire Protection Officer: Hübl Josef, mobile phone: 0664 80745 4983, email: josef.huebl@boku.ac.at

FPO – Deputy: Marschik Helmut, mobile phone: 0676 83280-114, email: helmut.marschik@boku.ac.at

ADDENDUM 1 – STRUCTURE AND OPERATION OF A POWDER CARTRIDGE-OPERATED EXTINGUISHER

The device you will most likely be encountering:

	Structure	Operation
1	Securing clip or pin Most of the time it is yellow and mounted in a way it is easily found	Tear the clip off or pull the pin out
2	Impact or release button Most of the time it is red , but it can also be integrated in the handle	Hit hard on the button until you overcome the resistance, you now hear a faint rushing sound! It takes about 5-10 seconds until the pressure has completely unfolded!!
3	Propellant cartridge it is sealed with a thin membrane, which you pierce with the mandrel of the impact head	
4	Blow tube through it the propellant is guided into the container with the extinguishing agent	
5	Signal pin only rarely present	
6	Riser pipe through it the propellant is guided to the tube	
7	Extinguishing pistol with closing mechanism for the dosed emission of the extinguishing agent	Now direct the extinguishing powder intermittently onto the source of the fire