

DER REKTOR
DER KANZLER
DER PERSONALRAT

Fire Safety Regulation Part B

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a) Fire Safety Regulation Part A (general poster)



Staff in supervisory roles are required to fill in all missing information ("nearest manual call point" / "nearest emergency meeting point") for their area of authority and to post in a suitable and visible manner in at least the following locations:

- In hallways at a regular distance from each other,
- in auditoriums and classrooms according to the local conditions on the inside next to the exits and/or near phones,
- in laboratories and workshops according to the local conditions, e.g. near phones, and
- in all elevators.

Posters that have limited legibility or are outdated must be replaced.

The poster is available for use from the homepage of the Administrative Division of Safety of the Universität Regensburg.

b) Fire Prevention

Parties concerned

All staff, faculty, and students of the Universität Regensburg and staff of third-party companies doing work at the Universität Regensburg are obliged to behave in such a way as to prevent fires. They are required to familiarize themselves with this fire safety regulation and the information on the poster in order to allow for effective fire prevention and for cautious and quick actions in case of a fire.

Bans on smoking and open fires

must be strictly followed.



Smoking is generally forbidden in all buildings and rooms.

Open fires are forbidden in all buildings of the university.

Exceptions:

- a.) In order to perform necessary work in laboratories, lab burners, for instance, may be used in accordance with GUV's informational brochure "Working Safely in Laboratories".
- b.) Soldering, brazing and autogenous welding are permitted in designated and specifically equipped workshops. If work is performed outside of workshops for the purpose of repair, installation or such, a welding permit must be obtained (see subsection "Hot work").

Flammable or explosive substances

may be stored only in designated and specifically equipped and labeled rooms or in authorized cabinets for hazardous substances.



Only the amount absolutely necessary to proceed with the work project may be stored in workshops and laboratories (see GUV's informational brochure "Working Safely in Laboratories"). When handling these substances, open fires are strictly forbidden.

Never pour flammable or explosive substances down the drain or in toilets, not even in small quantities.

Hot work

– such as welding, flame cutting, abrasive cutting, handling of flames, etc. – outside of specifically equipped workshops requires a written permit (welding permit). Observe and comply with the safety precautions listed on the welding permit.

Welding permits are issued by the Mechanical Engineering Division of the Maintenance Services Department.

Waste products

of highly flammable or explosive substances are to be kept in approved containers and, additionally, in suitable locations until disposal.

For this reason, laboratories are typically equipped with under-bench cabinets connected to an exhaust system.

Flammable waste

– such as newspapers, cardboard, wooden pallets, shipping crates and loose packaging material – must not accumulate, but must be taken to the publicized disposal stations without delay. The lids of the waste containers must be kept closed.

Outdoor fires

The dangers inherent to open fires (e.g. fire baskets, camp fires, etc.) must be taken into consideration; open fires must be located at a distance of at least 100 metres (330 feet) from highly flammable substances. They must be supervised at all times and must not be used outdoors with strong winds; in this case, the fire must be extinguished. When leaving the location of the fire, the fire and embers must have died.

Grilling appliances, patio heaters, air heaters and similar devices operating with flames may be run at such distances to flammable substances as indicated by the manufacturer (see instruction manual). If no such information is available, the specifications given above apply.

Fuel residue may only be disposed of when the embers have surely and entirely died. For safety, water may be poured over the fuel residue before disposal.

Electrical devices

Electrically powered devices and systems must be in compliance with VDE regulations (VDE labeling) and must display the CE symbol.

The use of defective electrical devices is prohibited. All defects in electrical devices must be repaired by a suitable workshop (electronics workshops of the faculties of Physics, Biology & Pre-clinical Medicine, Chemistry and Pharmacy as well as by the Maintenance Services Department).

The use of immersion heaters is prohibited.

Electrical systems and devices must be operated according to their instruction manuals.

Electrical devices that produce heat due to their technical design or technical intent must be placed at least 0.5 metres (20 inches) away from flammable substances. In heat emitting direction, the distance must be at least 1 metre (3.3 feet).

Every electrical device can become a fire hazard due to:

- ▶ a short circuit (flashover)
- ▶ overheating
- ▶ heat build-up

When leaving a room, make sure that all electrical devices are switched off or unplugged (if they do not generally require to be set to continuous operation).

Permanently installed electrical devices may be connected only by the Maintenance Services Department.

Placing and operating electrical devices in hallways and staircases is prohibited since these areas almost invariably serve as escape and rescue routes.

An exception may be possible and requires a specifically conducted risk assessment and the specification of technical measures after approval is given by the Fire Administration, by supervisory authorities and the Kanzler of the university.

Personal electrical devices

Prior to operating personal electrical devices at the university (such as coffeemakers, electric kettles, and microwaves) whose manufacturing date or initial operation date exceeds two years, these devices need to be signed up for electrical testing at the Electronical Services Division of the Maintenance Services Department. The costs for electrical testing of these devices are covered by the Maintenance Services Department.

In addition, personal electrical devices undergo – at defined intervals and at the same time as electrical devices owned by the Universität Regensburg – electronic testing by an electrician and are labeled with a compliance symbol.

Refrigerators for storing flammable liquids and explosive substances

must be designed in such a manner that their interiors lack ignition sources and/or are explosion-proof. These refrigerators must be clearly labeled.

Utilities supply

Damages to electrical systems or power lines – noticeable due to the presence of obvious damages, sparks, a smoldering smell, etc. – and damages to gas lines (smell of gas) must be reported immediately to the Control Room (Leitwarte) of the Maintenance Services Department (tel. 0941/943-3333, in-house 3333). Only specialists commissioned by the Control Room (Leitwarte) may repair potential damages.

c) Spreading of Fire and Smoke

Fire protection gates

in much frequented areas like the Main Lecture Hall Building (Zentrales Hörsaalgebäude), the Refectory (Mensa) and the underground parking garage are usually open; they close automatically in case of fire. The closing areas of these gates must not be obstructed by objects or vehicles.

When closed, the gates can be opened manually in order to escape; they will then close again automatically.

Fire and smoke doors

are usually located in hallways and staircases and must not be fixed in place by means of wedges or ropes or in any other way.

Newer fire and smoke doors are equipped with an electromechanical hold-open device. These doors close automatically in case of fire, and can be re-opened manually at all times. If needed, these doors can be closed by means of a pushbutton (located on the wall next to the doors).

Smoke extraction devices

are located in various staircases and in lecture halls. They allow for upwards extraction of the smoke in case of fire. The smoke ventilation openings are usually closed; in the event of a fire, they open automatically, or are opened by fire brigade staff or technical staff. It is prohibited to use these devices for other purposes (e.g. for air ventilation).

Everyone is obliged to remove wedges, ropes and other objects that obstruct the closing paths of fire protection gates, fire doors and smoke doors. Damages to the devices mentioned above must be reported immediately to the Control Room (Leitwarte) of the Maintenance Services Department (tel. 0941/943-3333, in-house 3333).

d) Escape and Rescue Routes



Everyone is obliged to memorize the escape and rescue routes in his or her location and must ensure that these routes are kept clear.

Stairs, hallways, traffic routes and exits

must be kept clear at all times over their entire inside diameters. In hallways containing concrete columns, the inside diameter extends from the front of the column to the wall surface on the opposite side.

In addition, flammable material must not be stored there. Electrical devices must not be set up and operated there.

Exits and emergency exits

must be able to be opened from the inside without any tools while people are present in the building. Doors in the path of escape routes as well as emergency exits must not be locked during hours of operation.

Fire brigade approach routes and operation zones

– so-called "fire brigade access zones" ("Feuerwehranfahrtszonen") – must absolutely be kept clear. They are identified by a "No stopping" sign referring to paragraph 22 of the Regulation for the Prevention of Fires ("Verordnung über die Verhütung von Bränden", VVB).

Vehicles parked in fire brigade access zones will be towed at the owner's expense.

Safety signage and markings

– such as fire safety, rescue and first aid signs, escape route markings and posted escape and rescue route plans indicating the course of rescue routes and all fire extinguishing and reporting options on the respective building floor – as well as other prohibitory, warning or mandatory signs must not be covered and/or blocked and must not be removed.

e) Fire Reporting and Extinguishing Equipment



Everyone is obliged to familiarize themselves with the location and operation of the manual call points and extinguishers in their work areas.

Used or defective as well as missing fire extinguishers must be reported immediately to the Administrative Division of Safety at 0941/943-3311, in-house 3311.

The fire alarm system of the university

consists of manual call points and automatic alarms, and is directly connected to the fire alarm system of the fire brigade.

Manual call points



are located inside and in front of the staircases and in the hallways.

Automatic alarms



are partially installed as part of the ventilation systems in laboratory buildings and in laboratories themselves as well as in all electrical operating rooms, in many computer rooms, in some reading, storage and catalogue rooms, in the hall and hallway areas of the Central Library (Zentralbibliothek) and in all supply channels.

Hand-held fire extinguishers



in the hallways and staircases are usually powder extinguishers, which are suitable for extinguishing all substances with the exception of metal fires, and for extinguishing electrical fires up to 1000 volts. For metal fires, specific hand-held fire extinguishers are available in particularly hazardous areas. In laboratories, near electrical installations and in areas containing expensive electronic devices, there are extinguishers filled with carbon dioxide ("CO₂ extinguishers").

Fire extinguishers must be protected from damages and must be kept in working condition. Fire extinguishers must not be used for other purposes or be removed from their locations, except when used to extinguish a fire.

Body showers



to extinguish clothing fires are located inside of laboratories or, occasionally, in the hallway of a laboratory area.

CO₂ fire extinguishing systems

are installed in some storage rooms for flammable liquids, in the entire storage area for fine chemicals where chemicals are disbursed (Chemistry Building) as well as in the storage rooms of the Waste Management Centre.

The CO₂ concentration sufficient to extinguish a fire is life-threatening for humans. You must therefore leave the room immediately when the acoustic alarm sounds.

According to the safety regulations for CO₂ fire extinguishing systems, all employees who have access to these areas must be educated once a year about the dangers of CO₂ gas influx and about how the CO₂ fire extinguishing system works.

Wall hydrants



– featuring a hose connection for anyone to use for extinguishing purposes – are located in the Main Lecture Hall Building (Zentrales Hörsaalgebäude), the Main Lecture Hall (Audimax) and the Student Theatre.

Sprinkler systems



are stationary, automatic fire extinguishing systems located in the underground parking garage, the Refectory (Mensa), in Tiefstraße Ost nearby the Computer Centre (Rechenzentrum) and in Tiefstraße West (underneath the northern part of the Law School & Economics Building). Areas with sprinkler systems can be identified by sprinkler heads located in the ceiling.

Dry standpipes

to attach fire hoses are located in the Chemistry Building, the Main Multipurpose Building (Sammelgebäude), the underground parking garage, the Refectory (Mensa), the Law & Economics Building, the Central Library (Zentralbibliothek) and the Vielberth Building.

Above-ground and underground hydrants

located in the outdoor area are intended for supplying water to the fire brigade.

f) Reporting a Fire



Report a fire by smashing the glass cover and activating the manual call point. The manual call point should be as close to the location of the fire as possible. The fire brigade receives the fire alarm directly through the fire alarm system.

All necessary information is available to the fire brigade, including building plans, in order to locate the activated manual call point as quickly as possible.

g) Paying Attention to Alarm Signals and Following Instructions

When the fire alarm system is activated, an acoustic alarm sounds. It does not necessarily sound in the entire building, for example when structural measures were taken to prevent fire from spreading from one part of the building to another within specified time limits.

This means that the alarm may sound only in the area that is directly affected, and possibly also in adjacent parts of the building. The acoustic alarm may be audible in other parts of the building, even if an emergency alert may not be necessary since there is no danger there.

In the **Main Multipurpose Building (Sammelgebäude)** and in the **buildings of the Department of Natural Sciences**, the building alarm is activated only in the area affected by the fire (i.e. only in that part of the building and possibly an adjacent part).

In the **Sports Centre**, the building alarm is represented by a low continuous tone emitted through the loudspeaker system.

In the **Refectory (Mensa)**, an alarm will sound in the event of a fire only in commonly accessible areas. No separate alarm will sound in the kitchen and technical areas.

The alarm system for the **Vielberth Building** presents itself as a voice announcement, which will contain instructions.

The fire brigade will assume command upon arrival.

When the alarm system sounds, the building must be vacated immediately. The "Directive Issued by the University Administration on Evacuation Proceedings for University Buildings in an Emergency" ("Verfügung der Hochschulleitung über das Verfahren bei einer Räumung von Universitätsgebäuden in Notfällen") contains more detailed regulations.

Note: If the alarm system for a building sounds once or several times for a duration of less than about 5 seconds each time, it is being serviced and tested by a technician. This may occur without advance notice.

h) Getting to Safety



Keep calm, do not panic. Clarify whether people are in danger.

Remove people threatened by fire and smoke from the danger zone without taking risks with your own safety. In the Natural Sciences faculties, you can get to safety by using either the escape routes inside the buildings or the escape balconies and roof terraces located in front of the windows.

During evacuation proceedings, make sure that nobody is left behind (e.g. in lavatories and adjacent rooms).

Exhibit caution when opening the door to a room where a fire is suspected:

1. Examine whether the door is warm. In that case, do not enter as a precaution.
2. Carefully crack the door open and take cover behind the door frame (due to the chimney effect, flames will be drawn outward).
3. Possibly spray a small amount of extinguishing agent from the fire extinguisher, then open the door further and fight the fire.

People enclosed by fire and smoke should close doors, possibly plug key holes and cracks with fabric or paper and try to draw attention to themselves at the windows.

Do not jump out of the window of building areas that are higher up from the ground.

Do not use elevators as a power failure is likely to occur in the event of a fire.

When leaving rooms that are at risk, close windows and doors.

Activate emergency stop switches and gas shut-off valves, if available.



It is the responsibility of their direct superiors (working group leaders, heads of central units as well as administrative department managers) to organize the **evacuation of employees with disabilities**. When an escort is required (e.g. due to visual impairment), colleagues within the direct superiors' area of responsibility must be nominated to serve as escorts. If it is not feasible to leave the building escorted (e.g. for those using a wheel-chair), at least two colleagues within their area of responsibility must be designated (including their substitutes, if possible) who would take care of evacuating the person with a disability in case of alarm. Specifically, the nominated colleagues are to take the person in need of assistance to a safe area and to take care him or her until the fire brigade arrives.

Safe areas are, for example, outdoor spaces or, inside of buildings, staircases or adjacent building areas that are structurally separated by fire doors or fire protection gates. If it is not

possible to proceed to a safe area, seek shelter in a room that is located as far from the fire as possible.

The fire brigade must be informed immediately that one or more people with disabilities are in the building and will then launch their rescue operation.

It is the responsibility of the professor, lecturer or laboratory or workshop manager to **evacuate students with disabilities** attending their course.

Since in this case people cannot be nominated in advance to assist the student with a disability, it is advised that the respective professor, lecturer or laboratory or workshop manager directly addresses two co-students when an alarm sounds, who would then take on the tasks mentioned above.

The same regulation as for the evacuation of employees with disabilities applies to the evacuation of students with disabilities to outdoor spaces or to safe areas within buildings.

Assembly points



Everyone must proceed to the designated assembly point. It is necessary to ensure that all employees, students and visitors are present at an assembly point. Superiors determine at the assembly point whether everyone is present and report any missing people to the fire brigade.

The major risk in the event of a fire is the toxicity, causticity or suffocating effect of smoke. Therefore, it is imperative to close doors when leaving danger zones to prevent smoke from spreading further. When walking in areas that contain smoke, walk stooped over or crawl as there is often air near the ground that is still breathable.

i) Fire Extinguishing Attempts



The most important principle is: Saving human life has priority over saving property.

Undertake an attempt to extinguish the fire only if you do not put yourself at risk.

Do not start up manual fire extinguishers prior to being close to the fire. If possible, use several manual fire extinguishers at the same time.

Stoop over (as this offers protection from heat, toxic smoke and lack of oxygen).
Extinguish from front to back and from bottom to top.

Do not disperse fires of resting flammable liquids at full flow, but rather extinguish low over the surface.



Do not allow people whose clothes are on fire to get away. Manual fire extinguishers can be used to extinguish clothing fires. Fire extinguishing blankets are only partially suited for this purpose.



In laboratory areas, a body shower is the best method to extinguish people on fire.

Do not return used manual fire extinguishers to their original location, but have them exchanged by the Administrative Division of Safety (tel. 0941/943-3311, in-house 3311).

k) Final Remarks

This fire safety regulation applies to all people who study and work at the university in some capacity, and – with restrictions – to visitors.

The working group leaders, heads of central units as well as administrative department managers are responsible for fully distributing this fire safety regulation to the employees in their areas and for disseminating the latest information to them.

All university employees must be educated periodically, at least once every year, about where fire extinguishers and fire alarm devices are located in the vicinity of their workspaces and on how to operate them. The training must be appropriately documented.

To assist with fire safety instruction, the Administrative Division of Safety (V/3) offers guidelines as well as a PowerPoint presentation on its homepage.

In addition, the Administrative Division of Safety offers several times a year a training of about two hours to become a **fire safety assistant**.

In the theoretical part of the training, the procedure to report a fire at the university and internal organizational regulations are briefly addressed.

In the practical part of the training, the attendees can practise operating a manual fire extinguisher on a fire simulator.

signed by
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Further Reading:

- Arbeitsstättenverordnung (ArbStättV) mit Technischen Regeln für Arbeitsstätten (ASR) (Workplace Regulations, including Technical Regulations for Workplaces)
- Verordnung zur Verhütung von Bränden (VVB, Regulation for the Prevention of Fires)
- Informational brochure "Arbeitssicherheit durch vorbeugenden Brandschutz" (GUV-I 560, "Occupational Safety through Fire Prevention")
- "Verfügung der Hochschulleitung über das Verfahren bei einer Räumung von Universitätsgebäuden in Notfällen" ("Directive Issued by the University Administration on Evacuation Proceedings for University Buildings in an Emergency")
- as well as various other literature as required.