



JACOBS
UNIVERSITY



Fire Safety Regulations

Publisher: Jacobs University Bremen gGmbH

Produced in cooperation with Referat 02 - Arbeits-
Gesundheits- und Umweltschutz der Universität
Bremen (department of environmental health and
safety of the University of Bremen)

Telephone: 0218-60130 / 0218-60145 / 0218-60141 / 4336
Fax: 0218-4898

Created by: Jacobs University Bremen gGmbH

Validity:

These Fire Safety Regulations come into force on the first day of the month following publication by the President of Jacobs University Bremen.

In the event of a disaster these Fire Safety Regulations are valid accordingly.

Bremen, April 2008



Prof. Dr. Joachim Treusch
(President)

Fire Safety Regulations

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Hot Work Permit

Contact

Fire Prevention



Fire, naked flames and smoking prohibited

Fire Action Procedure

1. Keep calm

2. Raise the alarm



Sound the alarm



Call the fire service:

**0-112 (fire service) or
911 (internal line)**

3. Evacuation procedure



- warn endangered persons
- assist others in need of help
- close doors (**do NOT lock**)
- use signed emergency escape routes
- do NOT use the lift
- follow instructions

4. Extinguishing



Use the fire extinguishers

Fire Safety Regulations Part A

Fire Safety Regulations Part A (sign)

Fire Safety Regulations Part B

Everyone is obliged to use due care and caution to help prevent fires.

The Jacobs University Fire Safety Regulations serve to prevent fire and regulate the action to be taken in the event of a fire. Compliance with these regulations should prevent fire, explosions and catastrophic fires and limit damage in the event of fire.

All employees and persons on the university campus and in its buildings must comply with the Fire Safety Regulations. They are valid for all Jacobs University buildings and facilities.

Employees are given a copy of the Fire Safety Regulations upon commencement of employment and must sign for their receipt. Students are to be made aware of the Fire Safety Regulations and their responsibilities upon receipt of their enrolment documents.

Employees may take part in theoretical briefings and practical fire drills.

1. Fire Prevention

General

All bans concerning smoking, open flames and other bans, instructions and warnings must be adhered to at all times. In order to prevent fires, matches, cigarette butts and leftover tobacco must not be put into waste paper baskets.

Fire and smoke doors which are not fitted with automatic shutting devices must be kept closed at all times

These doors must not be wedged open or held open in any other manner.



Any damage to electrical equipment (e.g. spark formation on motors, smell of burning, damaged cables or switches) and to supply or waste disposal lines (e.g. gas pipes) must be reported to the responsible superior and if necessary to Facility Management. Damage may only be repaired by qualified staff.

Multi-outlet power strips must conform to the VDE (Association for Electrical, Electronic and Information Technologies) requirements and carry the GS test symbol (safety tested symbol). Private electrical appliances may only be used with permission from Facility Management.

The kitchen areas are to be used to prepare or heat up food. Cooking and heating appliances must be placed on non-flammable surfaces. Ensure that fire cannot arise from heat transmission to surrounding areas. Plugs must be removed from power sockets when not in use. All cooking and heating appliances must carry the test symbols VDE and GS. Cooking and heating appliances must be approved by Facility Management before use.

Electrical devices and systems (electrical equipment) may only be used if they have been tested according to BGV A3.

Rooms with Specific Dangers

The following points must be observed in rooms with specific dangers e.g. store rooms for paper, wood and flammable liquids, store rooms for chemicals and hazardous waste as well as working spaces which are particularly at risk of fire and / or explosion:

- Open flames / fires must not be handled in these rooms;
- The rooms are to be provided with appropriate warning signs in accordance with DIN;
- All warning signs, mandatory signs and warning notices are to be observed;
- The fire extinguishing instructions of these Fire Safety Regulations (see page 8) and the laboratory regulations are to be made accessible to employees.



When leaving areas at risk of fire and explosion for a longer period of time or at the end of a session, employees and students must make sure that:

- lights and all electrical equipment have been turned off;
- all media lines (e.g. gas) have been shut off;
- there is no further risk of fire;
- the rooms cannot be entered by unauthorized persons.

Adequate control is to be guaranteed for all work with electrical cooking and heating appliances, equipment or other appliances which pose a fire hazard when in use for a longer period of time.



The definition of the term “longer period of time” is to be determined by the responsible superior according to the type of work and the danger involved.

Constant expert supervision must be guaranteed for work which poses a risk of fire or explosion. Persons who are not familiar with the work but are responsible for control or supervision must be thoroughly briefed regarding potential dangers and necessary safety-related behavior prior to commencing work. This briefing is carried out by the person responsible for the work.



Welding, Cutting and Soldering / Fire-Hazardous Tasks

Special safety precautions must be made and adhered to when carrying out welding, firing, grinding, cutting, heating and soldering (hot work) as well as other work which poses a fire hazard. This work must only be carried out by authorized persons. A hot work permit (see appendix) must be obtained from the appropriate authority (Facility Management) before beginning work and checked by the person in charge (e.g. head of the laboratory / workshop).



2. Spread of Fire and Smoke

To prevent the spread of fire and smoke and to avoid supplying the fire with additional oxygen, doors must be closed (but NOT locked) when leaving the room. Lights should not be switched off in the event of a fire.

Smoke and heat venting systems are to be activated where available.

If electrical equipment catches fire, the electricity is to be stopped immediately using the emergency switch where available.

Inflammable material (e.g. paper, furniture etc.) is prohibited in escape routes and exits.

Fire and smoke doors must be kept closed at all times if they aren't fitted with automatic shutting devices.

These doors are not to be wedged or held open in any other manner.

3. Escape Routes and Exits

Employees are to familiarize themselves fully with the escape routes and exits in their building!

Escape routes and exits (e.g. emergency exits, escape hatches, corridors, passages, entrances and exits and stairs) must be signed accordingly. They must be kept clear of all objects and must be accessible at all times.

Fire loads must not be stored or placed in escape routes or exits.

Doors along escape routes or other emergency openings must not be locked or obstructed.



Fire Safety Regulations Part A (fire prevention) as well as the emergency alarm plan must be displayed in an easily accessible and visible place.

Safety signs and escape and rescue plans must not be covered or blocked.

Access to the building must be guaranteed at all times in the event of danger.

All access routes to the fire must be kept clear for the fire service or other services. Appropriate signs are to be observed. Restrictions of all kinds e.g. parked vehicles or setting down is forbidden in these areas.

4. Fire Alarms, Fire-fighting Equipment / Extinguishers

Alarm raising equipment such as manual fire alarms, smoke detectors and heat detectors, telephones as well as first aid equipment must be accessible and ready for immediate use at all times. Misuse is forbidden. The same applies to all fire-extinguishing appliances such as wall-mounted hydrant systems, fire extinguishers, emergency showers, fire blankets, sand and sprinkler systems.



Inform yourself about the location of the appropriately signed fire-protection installations, fire-extinguishing and first aid equipment.

Employees must know how to operate the existing alarm raising and fire-fighting equipment.



Employees must know the location of the alarm raising equipment, fire extinguishers and escape and emergency routes for their workplace.

Telephone numbers and fire call points are to be found on the "fire prevention" sign (page 2) and on the emergency alarm plan (page 19).

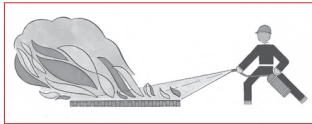


Fire Extinguishers

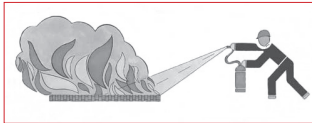


Empty or used fire extinguishers must be given to Facility Management for refilling. Used fire extinguishing material is to be replaced. All fire extinguishing appliances and other emergency aids are to be kept in an orderly and functional condition. Defects are to be reported to Facility Management immediately. The responsible superior is responsible for ensuring the orderly state in his/her respective area.

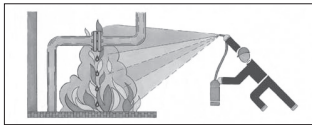
How to use a fire extinguisher



Tackle the fire with the wind behind you.

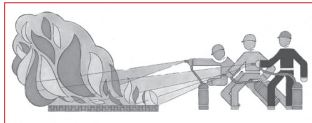


Extinguish fire at the base.



But:

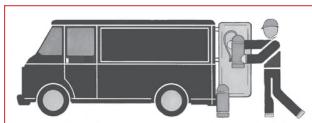
Flowing or dripping fires must be extinguished from top to bottom.



Use enough fire extinguishers simultaneously.
Not one after the other!



Beware in case the fire reignites.



Do not return used fire extinguishers to original position without refilling.
Fire extinguishers are to be refilled.

5. Fire Action Procedure

Keep calm! Think before you act to avoid making mistakes and prevent panic.

Report the fire immediately (phone the emergency number 0-112 or activate the manual fire alarm).

Close doors but do NOT lock.

Do NOT use lifts!

Warn those who have not heard the alarm.

Leave smoke filled rooms on your hands and knees.

Tell people with burning clothes to lie down, if necessary throw them to the ground. Smother the flames with a blanket or roll the person on the floor.

Unauthorized persons are not permitted to remain at the fire scene!

Leave the building following the fire evacuation route signage and go to the designated assembly point.

Reciprocal attendance checks should be made in order to quickly determine missing persons.

The building may only be re-entered when the fire service declares it as safe to do so.

Instructions given by the fire service must be followed.

Supply lines for gas or liquids as well as steam and compressed air pipelines are to be shut off immediately in fire areas or threatened areas.

In the event of electrical fires, this electrical equipment (machines, appliances, equipment) is to be turned off where possible. Electrical facilities such as switchgear, transformer stations or electrical service rooms may only be switched off by trained electricians!

In the event of fire, the responsible superior is to be informed. In the event of fire in areas where radioactive materials are in use, the radiation protection officer must also be informed.

6. Raising the Alarm



0-112

Anyone who discovers or experiences fire, smoke, the smell of burning or another danger (e.g. explosion or environmental accident) is to immediately alarm the fire service (0-112) and security on 911.

Raising the Alarm

Notify the fire service:

- sound the fire alarm
- or phone 0-112

Then immediately alarm security

- dial 911

Facility Management will be informed by security according to the current emergency plan.

Details necessary for reporting the fire

Location: - exact description within the university:

- Which building?
- Which floor?
- Which room?

Where / What / Who:

- You will be asked about the type of fire (important for extinguishing)
- Name of caller
- Injured persons (if and how many?)
- Await questions!

After alerting the fire service:

- warn endangered persons
- inform persons who are familiar with the place or competent persons (e.g. superior, safety officer, safety engineer)

Rescue others before fighting fire!

7. Alarm Signals and Instructions

In the event of fire or if the fire alarm has been sounded, you will hear the alarm siren. Some buildings are equipped with an intercom which enables alerting via announcements.

Instructions given by Facility Management and the management are to be followed until the fire service arrives. Once the fire service has arrived, their instructions are to be followed exclusively.

8. Evacuation Procedure

Shut doors but do NOT lock them when leaving the area.

Do NOT switch off lighting.

Keep calm!

Do NOT use lifts.

Leave smoke filled rooms on hands and knees.
If possible hold a damp cloth over your mouth.

Immediately leave areas of risk in the event of an alarm using the signed escape routes.

Help evacuate handicapped, injured or others in danger if you can do so without placing yourself in danger.

If it is not possible to use the escape route, enter a room and shut the door. If possible attract attention by waving from or calling out of the window.

If possible press the emergency switch and shut gas valves before leaving the building.

9. Extinguishing Fires

Attempts to save people and fight fire should only be made if you can do so without placing yourself in danger!

As a rule the general fire extinguisher instructions of the university are valid (see page 8).

Exceptions: Rooms with specific fire-fighting instructions (e.g. special rooms such as facilities at risk of fire or explosion etc.).

Extinguish Incipient Fires:

Attempts should be made to extinguish the fire to prevent it spreading. Use several fire extinguishers simultaneously. If fire-fighting attempts are unsuccessful discontinue them. Further attempts to extinguish the fire should only be made by the fire service.

Extinguishing liquid fires:

Do NOT extinguish with water (risk of large-scale fire). If possible remove highly combustible objects from the source of fire.

Employees must familiarize themselves with the use of fire extinguishers!



General Fire-fighting Instructions

Small fires should be fought promptly, if safe to do so, using fire blankets, fire extinguishers, sand or objects to cover the seat of the fire.

Incipient fires should be fought with dry extinguishing agents.

Use dry extinguishing agents on electrical fires. Dry extinguishing agents are e.g. PG or CO2 fire extinguishers and fire blankets. Do NOT use liquids.

Wrap people who are on fire in fire blankets to smother the flames.
Use emergency showers if available.

Shut doors but do NOT lock them (ensure access for the rescue services).

Prevent smoke from spreading by shutting the doors to the affected rooms (e.g. fire in an office) and the affected fire compartments (e.g. stairway doors).

Perform first aid. Rescue others before fighting fire!

Burning buildings or buildings at risk of explosion must only be entered by trained persons with self-contained breathing apparatus.



Electrical lighting should only be switched off in an absolute emergency.

Electrical appliances and equipment such as distribution stations, transformer stations and electrical service rooms may only be switched off by trained electricians!

Extinguish burning gas by shutting off the valve. If this is not possible let it burn (risk of explosion).

Avoid unnecessary damage to property.

Follow the instructions given by Facility Management and the fire service!



Fire classes and appropriate portable fire extinguishers



Fires involving solid material, mainly of organic nature, which normally burn with embers;

e.g. wood, paper, coal, textiles, car tires

- water extinguisher
- dry chemical extinguisher with ABC extinguishing agent



Fires involving liquid or liquid forming material;

e.g. petrol, oil, fat, varnish, resin, wax, tar, ether, alcohol, plastic

- carbon dioxide extinguishers
- dry chemical extinguisher with ABC extinguishing agent



Gas fires;

e.g. methane, propane, hydrogen, acetylene, town gas

- dry chemical extinguisher with ABC extinguishing agent



Metal fires;

e.g. aluminum, magnesium, lithium, sodium, potassium and their alloys

- dry chemical extinguisher with metal extinguishing agent



Fires involving edible oils and fats;

e.g. in fat-fryers and deep-fat-fryers

- fat fire extinguisher

Safety distance for equipment with a voltage less than 1000v

Water extinguisher	• 3 meters
Dry powder extinguisher	• 1 meter
Carbon dioxide extinguisher	• 1 meter

10. Conduct

Recovery of goods may only be undertaken if there is no risk to life and rescue and fire-fighting measures are not hindered.

Fire Safety Regulations Part C

Part C of the Fire Safety Regulations addresses persons with particular duties and responsibilities in the event of fire, emergencies and similar incidents.

1. Fire Prevention

Facility Management

Facility Management staff

- must take part in a practical fire drill at least every two years.
- must familiarize themselves with the operation of the existing fire extinguishing agents and escape routes.
- are responsible for ensuring that the installed fire-fighting equipment and escape route signs, as well as other safety-related signs are present and in working order.
- must immediately report defects detected to the responsible superior and take immediate steps to rectify the defects.

Facility Management staff

- must ensure that all escape routes (doors, corridors, emergency exits and exits, stairways etc.) are kept clear and in an orderly condition.
- must ensure that the Fire Safety Regulations Part A (fire prevention) are displayed in an accessible and easily visible location in every building.
- must provide access for the fire service and have plans and keys readily available.
- must ensure that fire service areas and outdoor hydrants are not blocked by parked cars and are accessible.
- must ensure that the function of special equipment such as emergency lighting, fume outlets, emergency electricity supply etc. are guaranteed.
- bring the emergency evacuation list to the assembly point and liaise with the corridor helpers and the fire service in the event of fire.
- block all entrances to the building in the event of fire with “Do NOT enter” signs.
- are responsible for the approval of work involving fire hazards at Jacobs University (issue hot work permit).

Safety Engineer

The senior safety engineer must check the Fire Safety Regulations every 2 years for validity and completeness. The senior safety engineer advises and supports the faculties and institutions of Jacobs University in all matters concerning fire prevention and control and keeps in constant contact with the fire service.

University Leadership

The president is responsible for effective fire prevention and control. He determines all necessary preventative measures and other provisions and oversees their enforcement, e.g. by requesting the compilation of

- laboratory regulations
- fire-fighting instructions
- internal university accident prevention regulations
- conducting fire drills
- Emergency Attack Plan
- first aid practice

Any report of fire or damage will be forwarded immediately according to the notification plan available at the central control room and the fire service. Facility Management is responsible for writing the above mentioned notification plan. The notification plan is to be checked at least every six months and be updated if necessary.

Superiors

The president is responsible for the compliance and enforcement of the fire regulations. The senior safety engineer supports and advises those responsible in the fulfillment of their tasks.

The president must ensure that evacuation drills are carried out in the respective departments in regular intervals.

The president is responsible for the compilation and updating of emergency evacuation lists. The buildings are divided into areas for the compilation of the emergency evacuation lists. Individuals, and a substitute for them, are to be appointed to the specific areas as „corridor helper“. Upon leaving the building these individuals must check to see if others are still in the area or have remained in the building (due to injury etc.). Only permanent employees can be appointed corridor helper. The list for the respective buildings is to be kept in the central fire alarm control room.

Example: Emergency evacuation list:

Updated: DD.MM.YY	Building ...		
Floor	Corridor helper	Substitute	
2			
1			
0			

The superior of each area is to ensure that the Fire Safety Regulations are displayed in a suitable place, that everyone is familiar with them and that they are enforced. Announcement of the Fire Safety Regulations must be carried out regularly by way of written instruction.

Alarm Plan

In the event of fire or explosion

Keep calm

1. Raise the alarm

- activate fire alarm or phone **0-112**
- **then** immediately inform the control room by dialing **911**
- use the available fire extinguishers to fight the fire (if safe to do so)

2. Evacuate the building

- when you hear the alarm system / megaphone or announcement
- leave the building calmly and without panic
- close doors, **do NOT lock them**

3. Escape routes

- corridors and stairs
- windows and escape balconies
- **do NOT use lifts!**

4. If the escape routes are not accessible

- close doors
- attract attention
- await the fire service

5. Go to an assembly point outside the building

- stay a safe distance from the building
- check to see if everyone has evacuated the building by determining whether people who were sitting near you or people in neighboring rooms are at the assembly point

Further measures will be decided upon by the university leadership or the fire service and the police.

3. Safety Precautions for Persons, Animals, the Environment and Property

Leave the building immediately upon hearing the alarm. Everyone is to be informed and requested to leave the building. Those not familiar with the premises, injured or handicapped persons will be given assistance in leaving the building.

Necessary interruptions will be arranged and carried out.

Material goods may only be recovered if doing so poses no threat to life and it does not hinder the recovery and fire-fighting procedures.

In the event of an emergency, the buildings will be shut by the university leadership. Buildings may only be re-entered when the university leadership and the fire service have given permission to do so.

In the event of imminent danger buildings may also be closed by other persons. In this case the university leadership is to be informed of the shut-down immediately.

4. Preparing for the Arrival of the Fire Service

If possible and without endangering persons, the fire scene and surrounding area is to be cleared before the fire service arrives.

Access to the fire scene, fire service area and water for extinguishing must be made accessible.

Access must be enabled to all affected and adjoining areas / buildings.

Information relevant to the fire service e.g. about the burning area is to be kept ready for the fire officer.

5. Follow up Procedure

Facility Management is to be informed again once fire extinguishing is concluded.

If a fire occurs university leadership and Facility Management and the senior safety engineer are to be informed immediately. All damage is to be reported (even the smallest fire).

Immediately after being used fire alarm systems, fire-fighting equipment as well as other appliances and equipment must be made ready for use again. Fire extinguishers which have been activated may only be used again once they have been duly checked and refilled.

Electrical equipment, systems and materials are to be checked by a trained electrician before being reused.

Facilities and buildings may only be re-entered following a fire when the university leadership has given the all clear to do so.

The right to impart information to a third party (e.g. the press) during or after an event causing damage is exclusively reserved to the university leadership or a person appointed by them.

6. Noncompliance

Noncompliance with these Fire Safety Regulations can result in disciplinary measures.

Hot Work Permit

(according to § 30 of the UVV (accident prevention regulation) and implementation rules and elucidations to § 8 as well as the Jacobs University Bremen Fire Safety Regulations)

Date: _____

Approved for the time from _____ until _____ am/pm

Type of work: welding, firing, soldering, heating, grinding

Miscellaneous work: _____

Building: _____ Room: _____

Description of work: _____

Contact company: _____ Name: _____

Operator: _____ Name: _____

Fire watch: _____ Name: _____

fire extinguisher available / accessible	<input type="checkbox"/>	water hose in service / operable	<input type="checkbox"/>
flammable material removed	<input type="checkbox"/>	dust removed from a wide area	<input type="checkbox"/>
workspace closed off	<input type="checkbox"/>	pipes: insulation and paint extensively removed	<input type="checkbox"/>
openings and gaps sealed	<input type="checkbox"/>	explosimeter-Test	<input type="checkbox"/>
seals covered	<input type="checkbox"/>		
shields put in place	<input type="checkbox"/>		
ventilator mounted	<input type="checkbox"/>		

Fire service number: 0-112 then 911

Nearest fire alarm, location: _____

Nearest telephone, location: _____

Special precautions: _____

NB: All work is to be stopped when the fire alarm sounds, general alarm signal or instruction via tannoy. Permission is required to recommence work.

Work finished: _____ am/pm and Facility Management notified.

	Name in capitals	Signature
1. Company:	_____	_____
2. Facility Management:	_____	_____
3. Person in charge of laboratory:	_____	_____

Contact:

Facility Management:

E-Mail: facility@jacobs-university.de

Occupational Safety:

E-Mail: safety@jacobs-university.de

Security:

E-Mail: pforte@jacobs-university.de

