

# Technische Universität Dortmund

## Fire Safety Regulations

According to DIN 14096, Part B



This part of the Fire Safety Regulations addresses all employees and students of Technische Universität Dortmund as well as all affiliated organizations and facilities such as H-Bahn, cleaning services, technical firms, construction firms, which are not merely temporarily undergoing on-site construction. All facilities are obligated to observe these Fire Safety Regulations.

According to **ArbSchG 15**, employees are obliged to take care for their safety and health during working hours according to the best of their abilities and according to the instructions and directives of the management.

The scope of the employer responsibilities of fire safety extends not only to the administration, but also to every manager of every department or other administrative unit. It is the duty of every supervisor to know and adhere to the contents of the fire safety regulations as well as to instruct their employees at least once annually on these regulations. It is also the duty of every supervisor to document the instructions provided. A training attendance roster must be included with this documentation, which the employees must sign personally to confirm that they have participated in the instruction.

These fire safety regulations are internal university regulations and does not relieve employees from following other security, work safety, and generally recognized technical regulations.

**These fire safety regulations are in effect as of 01.11.2009**

**Prof. Dr. Ursula Gather**

**Rectorin**

**Chancellorin / Chancellor**

# **Fire Safety Regulation Contents**

1. Fire Safety Regulations according to DIN 14096, Part A
2. Fire Prevention
3. Spreading of Fire and Smoke
4. Escape and Rescue Routes
5. Notification and Fire Fighting Capabilities
6. Reaction to Fire
7. Reporting a Fire
8. Alarm Signals and Directions
9. Getting to Safety
10. Attempts to Extinguish Fires
11. Emergency Telephone Numbers

# 1. Fire Safety Regulations according to DIN 14096, Teil A

This section of the regulations addresses all personnel on a particular property.

## Prevent Fire



No fire, Open Flames, or Smoking Allowed

## In Case of Fire

**Remain Calm**  
**Sound the Alarm**



Push Fire Alarm

Call **0-112** (NOT 911)

Warn Endangered Personnel

Evacuate Stranded Personnel

Close Doors and Windows

Follow Escape Route Signs

Do Not Use Elevators

Pay Attention to the Instructions

**Get to Safety**



**Attempt to Extinguish Fire**



Use Fire Extinguishers

Use Equipment to Fight Fires (e.g.  
Fire Blankets)

## 2. Fire Prevention

**As of 1 January, 2004, it is generally forbidden to smoke in all rooms of the Technische Universität Dortmund.**

In rooms with danger of explosion, no fire or open flames, no hot instruments may be used. Only electrical equipment may be utilized that is in accordance with VDE regulations of required explosion safety classifications.

In technical rooms (transformers and other electrical central control rooms, transit stations, media shafts, crawl spaces, energy canals, etc.) flammable materials, even temporarily, should not be stored.

Electrical devices to warm or prepare food or drinks (coffee machines, hotplates, etc.) must be secure from tipping over. They must be placed sufficiently away from flammable materials (at least 50 cm). The use of multiple outlets and extension cords is forbidden.

Main gas valves must be closed when gas is not in use.

Packing materials (boxes, styrofoam, plastic, etc.) are a great fire hazard and therefore employees must promptly remove and recycle them. They must **not** be stored temporarily in laboratories, hallways, elevator foyers, basements, etc.

When leaving the workplace, all electrical devices must be turned off. Where exceptions are necessary, all devices must be licensed for permanent operation.

Particular attention must be paid when dealing with flammable materials and waste, working in laboratories, as well as work where fire can break out, e.g. welding, grinding, soldering.

Welding, grinding, and soldering work - especially by contractors – requires prior consultation by the appropriate technical departments of the university's department 6.

**The Contractor Guidelines by Technische Universität Dortmund must be complied with.**

### 3. Spreading of Fire and Smoke

The spreading of fire and smoke is minimized and prevented through the construction measures. In exceptional cases, it can be supplemented by administrative measures such as working rooms with few combustible materials.



#### Fire and Smoke Doors



Fire and smoke doors have the function of separating and containing the fire and the connected deadly fumes to defined sections. They are labeled in the corridors or staircases. Doors of rooms with increased fire hazard can also be designed as fire and smoke doors (for example, technical rooms, copying rooms, storage and garbage rooms).

For the doors to fulfill their functions **they absolutely must be closed**, unless they are operated by an accompanying smoke detector.

**Keeping doors open with doorstops, string, fire extinguishers, etc. is forbidden as is elimination, changing, or damaging the door closing mechanism.**

The entrances to the installation shafts, technical rooms and electrical distributors must be kept accessible. In case of emergency, immediately turn off gas, compressed air, electricity, water, etc.

Through uncontrolled acts or failure to observe regulations, fire sectors can be rendered inoperable and affect large sections of a building.



#### Fume Outlets



Push, as far as it is possible without danger in smoke filled areas, the control section's buttons to open the smoke ventilation outlets.

The control sections are generally found in front of the lecture halls, in the locks or in front of stairways and are clearly marked. Through the release, the hatch will open so that toxic smoke and heat can escape.

## 4. Escape and Rescue Routes

Every person present should inform themselves about the rescue routes appropriate for their place of work. These can be gathered from escape and rescue route plans which are clearly displayed in the buildings of Technische Universität Dortmund.

Mistakes in the plans should immediately be brought to the attention to Department 6, section for Work Safety and Environmental Protection.

### Keep Escape Route Free of Obstruction

**Obstruction of objects of every sort, e.g. furniture, appliances, cartons, boxes, etc., is strictly forbidden.**

The full width of escape and rescue routes (stairs, hallways, doors, emergency exits, hallways in front of the elevators, areas of the lecture hall, etc) are to be kept free of obstruction.

The placement of fire hazards in escape and rescue routes is forbidden. This especially includes electrical equipment (copying machines, refrigerators, freezers, drying cabinets, etc.) or flammable objects (cartons, styrofoam, furniture, files, bulletins, posters, garbage, etc.).

**Doors in the path of rescue and escape routes are not allowed to be locked or obstructed.**

**This includes exits and emergency exits.**

Escape windows, which are used as access to fire escapes, are to be appropriately kept free of obstruction so that they can be opened at all times without prior clearing efforts.

The outer fire escape balconies make possible an escape to safe areas and constitute a secondary escape and rescue route, if in case the primary rescue route (hallways, stairways) is no longer usable.



### Fire Department Access Routes



The marked **fire department access routes** (fire department information signs) and the **fire department access zones** are to be completely kept free of obstruction.

Universität Dortmund is obliged to keep the fire departments **access routes** and the accompanying **access zones** free and if necessary make arrangements to tow away unauthorized vehicles.

**Also short-term parking in these areas is forbidden.**

## 5. Notification and Fire Fighting Capabilities

Every person should inform themselves in the whereabouts of the local notification, safety, and first aid points. Including, for example, the fire and smoke detectors, fire extinguishers, emergency fire blankets, emergency stop switch, as well as emergency and eye showers.

The access to all emergency points must always be kept unobstructed. It is also not allowed to lock them or obstruct their visibility. The information signs must at all times be visible.

### Notification

At the Technische Universität Dortmund one can alarm the fire department in one of the following ways:

- Fire Alarm  
Push to activate. The alarm alerts the fire department, the evacuation alarm ring and the master control room of Technische Universität Dortmund. The fire department comes directly to the appropriate building.
- Telephone (0-112)  
(see point 7, Reporting a Fire)
- Master Control Room (3333)  
(see point 7, Reporting a Fire)
- Optical smoke alarm or heat differential alarm. These alarms are activated through smoke accumulation or extreme temperature differences in a certain period of time. This activates an automatic alert to the fire department, the evacuation alarm ring and master control room.

### Extinguishing Equipment

Depending on degree of danger, the following extinguishing equipment is available:



#### Fire Extinguishers



They are found in hallways, laboratories, work shops, storage areas as well as in several rooms. Their locations are clearly marked with pictograms. In laboratories, storage areas, and rooms, they are found generally near the door. The locations of the fire extinguishers in the immediate vicinity of the workplace should be known to all employees. Inform yourself in time about appropriate extinguishing devices.

At Universität Dortmund, predominantly powder and CO<sub>2</sub> extinguishers are utilized. Metal fires may only be extinguished with dry sand.

When fighting fires with fire extinguishers, the following information should be taken into consideration:

- The fire extinguisher should only be put into operation in the immediate vicinity of the source of the fire.
- Do not indiscriminately extinguish the fire, but rather concentrate on place of embers or flammable surfaces. Do not approach fire too closely in order to avoid stimulating the blaze.

Always

approach the fire downwind.

fight the fire source from below moving upwards

cover burning liquids with powder.

Used extinguishers must be exchanged in Building (ZAUS) Emil-Figge-Str. 71a, Department 6, Department of Work Safety and Environmental Protection. Expired fire extinguishers should be reported.



## Fire Blankets



They are stored in the stairways and in several laboratories. They are located in red boxes and they are an important extinguishing device to apply to burning persons, as well as fires in the initial stages. They can be utilized for smothering flames.

**Do not let burning persons run away!** If necessary, they should be thrown to the floor and either showered under an emergency shower or wrapped in blankets and cloths and rolled on the floor. Powder extinguishers should only be utilized in extreme emergencies.

## Water

As an extinguishing device for initial fires, everyday liquids can also be used, for example, mineral water, coffee, flower water (exceptions include grease fires and certain chemical fires).

When firefighters fight grease fires with the wrong extinguishing agent, water, an explosion of fat can be expected. Grease fires delete it right where you burner / stove off and cover the container. Call the Emergency!



## **6. Reaction to Fire**

### **Keep Calm**

**Personal Safety before Property**

### **Report Fire**

**Every fire must be immediately reported!**

### **Activate Fire Alarm**

These are found normally in or in front of the stairways, at the lecture hall exits and at the building exits. The notification through the push-button fire alarm is preferred to a telephone fire call because it is more secure and quicker and the place of alarm is automatically transferred to the fire department.

### **Alarm the Fire Department**

**From all telephones: 0 (Office) 112**



**Or through the master control room  
(Leitwarte) 3333**



Afterwards always

**inform the master control room (Leitwarte) 3333**

## 7. Reporting a fire to the Fire Brigade

# 0-112

To effectively combat fires and to provide timely rescue of trapped individuals, the fire department and/or rescue service needs the following information:

**Where is it burning?**

Building, Campus North / south, floor, room number and number of the street access

All employees must be able to give accurate directions to their place of work. In view of this, rescue information is to be placed in the vicinity of all telephones. The access road number can be found on the orange signs located next to every driveway on campus.

**What is burning?**

Type and extent of fire

Possible special dangers such as the presence of chemicals, compressed gasses, high voltage areas, electrical switchgear

**How many people are injured?**

How many people are injured, what types of injuries have they sustained, and how severe are these injuries?

**Who is reporting the fire?**

Name of the eye-witness and telephone number 0231-755...

**Wait for the return call!**

The return call is used by the fire department and rescue service to make sure they have all the correct information about the situation. **It is up to the fire department to decide that they have all the information they need!**

**Direct the fire department and rescue service to the site!**

Wait by the fire access routes of the buildings for the fire department or the rescue service personnel.

## 8. Take note of alarm signals and directions

The sounding of the fire alarm in the building is identifiable as a **loud signal tone**. This signal requires all people present to leave the building.

Discontinue any telephone conversations, turn off all electronic appliances, gas, power, water (except for cooling water); close doors and windows but do not lock them. **Please leave the building immediately.**

**It is a requirement to follow all instructions provided by the fire chief.**

In almost all buildings at Technische Universität Dortmund there are alarms to call the fire department and building alarms (fire department alarms are the red boxes/building alarms are the blue boxes).

In some buildings the fire department alarm is combined with the building alarm. This means that by pushing the button to report a fire or in the case of automatic activation through the smoke detector, the alarm will directly call the fire department as well as activate the alarm signal to exit the building.

In buildings in which the fire and security alarms are not combined, when activating the fire alarm do not forget to also activate the building alarm to clear the building. It is not sufficient to just activate the building alarm since this alarm does not automatically notify the fire department.

Upon the resounding of the loud signal it is imperative that everyone **always** exits the building. Everyone should be made aware of the signal. Persons with limited mobility should be helped out of the building.

Included in Appendix 1 is a table outlining the different buildings and their respective systems.

## 9. Getting to Safety

**Bring endangered, disabled or injured persons to safety.**

Please close all fire and smoke doors that have not been activated, but do not lock them.

**Due to the danger of suffocation do not use the elevators!**



**Follow the marked emergency exit signs to safety!  
Make sure that you are well informed about all exit routes.**



Upon encountering heavy smoke proceed in a hunched position or crawl! Hold a damp cloth over your nose and mouth to aid your breathing.

If it is impossible to proceed through the hallways, either wait on the balcony located along the outside of the building or continue on to the next useable staircase.

In the case of buildings that have no access to either fire escapes or to a second stairwell, there is also the possibility for the fire department to use a ladder to reach one or more windows in the building. Please inform yourself in advance if all windows are suitable for a ladder escape or whether there are certain rooms preferably used for ladders by the fire department.

In case that all fire escapes in the building are obstructed, please regard the following instructions:

Close the door, make your presence at the window **clearly** known (shout, wave a handkerchief etc.) and wait for help.

Upon exiting the building, promptly search for your appointed meeting area and make sure that all members of your department are present. If anyone is missing, inform the fire department officials as soon as possible.

Please do not congregate directly in front of an exit of the burning building as these are reserved for the fire department and/or emergency medical services. If you should have to cross in a fire access route or open traffic in an effort to find your designated meeting point, please pay attention to the on-coming traffic.

In Appendix 2 of this fire safety procedure you will find a list of the prescribed meeting points organized in reference to particular buildings. It is not compulsory that only the listed meeting points be used. You may appoint an alternative meeting point if your department so chooses.

## 10. Extinguishing Fires

In cases of smaller fires, such as initial blazes, one should attempt to quench them with specified fire safety equipment (fire extinguishers, fire blankets, water, etc).

Under the following circumstances the Dortmund Fire Department should be contacted: If the flames are visible, an attempt to extinguish the blaze should be made. Otherwise attempts to stop the fire should be avoided.

If the first attempts to stop the fire are not successful: close all windows and doors, but do not lock them. Leave the affected area after alerting all people in the vicinity.

Pay attention when opening closed doors. When opening a closed door, the influx of oxygen into a burning room can cause a flare-up of the fire which could then burst out of the door causing serious harm to any individuals standing in the vicinity of the door.

# 11. Emergency Numbers

From all inside and outside lines, and departmental phones:

Fire Department/ Emergency **0-112**

Police **0-110**

Direct notification of the emergency personnel is often faster and more efficient and thus should be preferred to the indirect route of the master control room (Leitwarte).

Emergency number **Master Control Room (Leitwarte) 3333**

Notice:

The numbers of the fire department and the police can be accessed from any phone on the Technische Universität Dortmund campus. Other external numbers can be accessed only at specifically marked phones.

Poison Informationl Center **0- 0228-2873211**

## Hospitals

St.-Johannes-Hospital	18 43 - 0	Johannesstraße 9 - 13	44137 Dortmund-Mitte
Kath. Krankenhaus Dortmund-West	67 98 - 1	Zollern 40	44379 Dortmund-Kirchlinde
St.-Josefs-Hospital	43 42 - 0	Willhelm-Schmidt-Str. 4	44263 Dortmund-Hörde
Marien Hospital	77 50 - 0	Behringstr. 36	44225 Dortmund-Hombruch
Klinikum Dortmund	9 53 - 0	Beurhausstr. 40	44137 Dortmund-Mitte
Augenklinik	9 53 - 21 40 0	Beurhausstr. 40	44137 Dortmund-Mitte
Ev. Krankenhaus Lütgendortmund	61 88 - 0	Volksgartenstr. 40	44388 Do-Lütgendortmund
Knappschafts Krankenhaus	9 22 - 0	Wieckesweg 27	44309 Dortmund-Brakel

Department 6,  
Department of Work Safety and Environmental Protection **- 3306 / 3307**

Occupational Medicine **0 - 95 20 52-71**

# Appendix 1

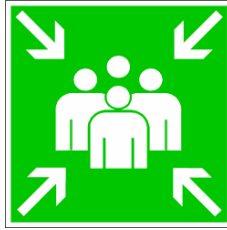
Building name	Fire alarm	Building alarm	Combination of two alarms
<b>North Campus</b>			
<b>Biochemical and Chemical Engineering</b>			
BCI Ground Floor 1	yes	yes	yes
BCI Roof 1			
BCI Main Floor			
BCI Ground Floor 2	yes	yes	yes
BCI Roof 2			
BCI Main Floor			
BCI Ground Floor 3	yes	yes	yes
BCI Roof 3			
BCI Practical/Technical Center	yes	yes	yes
BCI Lab Supplies	yes	no	
<b>Mathematics / Audimax</b>	yes	yes	yes
<b>University Technical Supervision (THB)</b>	yes	yes	yes
<b>THB BHKW</b>	yes	no	
<b>Chemistry</b>			
Chemistry 1	yes	yes	yes
Chemistry Lecture Halls	yes	yes	yes
Chemistry Roof	yes	yes	yes
Chemistry 2	yes	yes	yes
<b>Physics</b>			
Physics 1	yes	yes	yes
Physics Roof	yes	yes	yes
Physics Labs	yes	yes	yes
Physics 2	yes	yes	yes
<b>University Library</b>	yes	yes	yes
<b>Hörsaalgebäude II</b>	yes	yes	Yes

<b><u>Building name</u></b>	<b><u>Fire alarm</u></b>	<b><u>Building alarm</u></b>	<b><u>Combination of two alarms</u></b>
Emil-Figge-Strasse 61	yes	yes	Yes
Emil-Figge-Strasse 50	yes	yes	Yes
Sports	yes	yes	Yes
Mechanical Engineering I	yes	yes	Yes
Mechanical Engineering II	yes	yes	Yes
Institute for Robotics	yes	yes	Yes
Pavillon 11 Business & Econ.	yes	no	
DELTA	yes	no	
Emil-Figge-Strasse 72 ZIB / AAA	yes	yes	yes
Center for Workers- and Environmental Protection	yes	no	
Electrical Engineering (New Building)	yes	yes	yes
Computer Science (Otto-Hahn-Strasse 14)	yes	yes	yes
Computer Science (Otto-Hahn-Strasse 16)	yes	yes	yes
<b>South Campus</b>			
Geschossbau I	yes	yes	yes
Geschossbau II	yes	yes	yes
Geschossbau III	yes	yes	yes
Geschossbau IV	yes	yes	yes
Geschossbau V	yes	yes	yes
Computerroom ITMC	yes	yes	yes
Experimentierhalle	yes	yes	no
Ex-Halle Anbau Halle	yes	yes	yes
Hörsaalgebäude I / Rector's Office	yes	yes	yes
Dezernat 5 (WD2)	yes	yes	no
Dezernat 3 (WD1)	yes	yes	yes



<b><u>Building name</u></b>	<b><u>Fire alarm</u></b>	<b><u>Building alarm</u></b>	<b><u>Combination of two alarms</u></b>
<b>Pavillon 1</b>	yes	no	
<b>Pavillon 2a</b>	yes	no	
<b>Pavillon 2b</b>	yes	no	
<b>Pavillon 3</b>	yes	no	
<b>Pavillon 4</b>	yes	no	
<b>Pavillon 5</b>	yes	no	
<b>Pavillon 6</b>	yes	no	
<b>Pavillon 7</b>	no	no	
<b>Pavillon 8</b>	yes	yes	yes
<b>Haus Dörstelmann</b>	no	no	
<b>Referat 01 (Baroper Str. 283)</b>	yes	yes	no
<b>Referat 01 (Baroper Str. 285)</b>	yes	yes	no
<b>Foyergebäude</b>	yes	no	
<b>Heating Plant CS</b>	yes	no	
<b>Pavillon 10</b>	Yes	no	

## Appendix 2



The following places have been selected by the Technical University of Dortmund to serve as meeting points and are identifiable by the above marking:

### North Campus

- Parking Lot Leonhard-Euler-Str. / Emil-Figge-Str. (Chemical Engineering PT) Entrance 9-10
- Parking Lot Leonhard-Euler-Str. (in front of the Mechanical Engineering Building I) Entrance 6
- Parking Lot Emil-Figge-Str. (in front of the Chemical Engineering Building G3 / F3) Entrance 12
- Parking Lot Emil-Figge-Str. (across from EF-50)
- Parking Lot Vogelpothsweg (across from the University Library) Entrance 21
- Parking Lot Otto-Hahn-Str. (across from Physics/Chemistry)

### South Campus

- Parking Lot August-Schmidt-Str. (at GB V) Entrance 46-51
- Parking Lot Baroper Str. (at the Ex-Halle) Entrance 42 and 44
- Parking Lot Baroper Str. (at Pav. 8, 4 and 3) Entrance 53

Alternately, the following places can also serve as gathering areas.

### North Campus

Large Lawns, these among others:

- Between the EF-50 and the University Library
- Next to the EF-61
- In front of the Sports Science Building
- At Entrance 1 across from the BHKW
- Between the DELTA and Electrical Engineering

**Upon deciding on an appointed gathering point, please remember to pick a place that does not board on the burning building. Being in close vicinity to the building in question can impede the work of emergency crews.**