

LUNDS UNIVERSITET Lunds Tekniska Högskola

Fire is always serious and can have disastrous consequences, both for individuals and the organisation. You should therefore have basic knowledge of fire and evacuation procedures. An alarm must always be taken seriously.

WARN those around you that a fire has started. Use the alarm button to start the fire and evacuation alarm.

**RESCUE** and help people in immediate danger and evacuate the premises. Close doors and windows, if possible, to reduce the spread of fire and smoke. Smoke rises, so it is easier to see and breathe down on the floor. You should therefore crawl out of a burning or smoke-filled room.

ALARM the fire and rescue services via SOS Alarm by ringing 112, or 0-112 if you are using an internal telephone.

**EXTINGUISH** the fire if you believe you can do so without taking unnecessary risks. Fire extinguishers, fire hydrants and fire blankets are placed at strategic points indicated on the **Emergency Escape Plan**.

**EVACUATE** the building via the escape routes stated on the **Emergency Escape Plan** and by following the signs that are there to guide you out. Choose a route that is free of smoke and use the stairs – never use a lift. Help each other, especially people with disabilities. Keeping calm can save lives in an emergency situation.

Escape routes must always be kept clear. To prevent the spread of smoke and fire, escape routes are equipped with fire doors that close automatically in case of an alarm. Fire doors may never be fixed so that they remain open.

**PROCEED TO THE ASSEMBLY POINT** and remain there to await information from the person in charge or a rescue services officer. If anyone is missing or injured, report it immediately. The building's assembly point is stated on the **Emergency Escape Plan** and the place is marked with a sign. Do not re-enter the building until you are given permission to do so.

Knowledge saves lives, property and business. You should therefore study the building's signs and Emergency Escape Plans and make sure you know the location of fire extinguishers, escape routes and assembly points.

## **IMPORTANT SIGNS**









Emergency Escape Plan



# Fire, fire extinguishers and systematic fire prevention work

### Fire

In order for a fire to start there must be combustible material (fuel), oxygen and heat. The fire will go out if one of these three factors is removed. In *removal* the fuel is isolated, in *smothering* the oxygen supply is reduced and in *cooling* the fuel's temperature is brought below its ignition temperature.

# Fire extinguishers

Different types of fire extinguishers are suitable for extinguishing fires in different materials. This is why suitable fire extinguishers are placed in strategic locations in the building. The fire extinguisher's location is marked with a sign and stated on the **Emergency Escape Plan**. A large hand-held fire extinguisher (5-10 kg) empties in 20-30 seconds and can reach up to 3-4 m. It is therefore important to know how it should be used in order for it to be effective.

### How to use the fire extinguisher:

- Carry the extinguisher by the lower handle and remove the pin by pulling the ring straight out
- Bend down and get as close to the fire as possible
- · Hold the mouthpiece firmly and aim it at the flames
- Release the extinguisher by pressing down the upper handle

#### Powder extinguisher

Foam extinguisher

ignition.

Powder extinguishers put out most types of fires and are very effective. The disadvantage is that powder makes a mess and is difficult to clean up – but so do fires! You should therefore avoid using powder extinguishers in rooms with sensitive equipment. Powder does not conduct electricity, which means that you can extinguish fires in electrical equipment.

Foam extinguishers are effective on fires in

fibrous material (e.g. wood, paper and textiles)

and on burning fluids. The foam lies on top of

the fire, putting it out and cooling it down. The

foam then remains as protection from re-

Just like water, foam conducts electricity so

foam and water are thus not suitable for extinguishing burning electrical equipment.



### Carbon dioxide extinguisher (CO<sub>2</sub> extinguisher)

Contains carbon dioxide gas that extinguishes fire quickly and "cleanly" but is poor at putting out embers. When putting out fires with  $CO_2$  the fire can reignite before the burnt object has had a chance to cool.  $CO_2$  does not conduct electricity and is therefore used to extinguish fires in electrical equipment.  $CO_2$  is very cold and should thus not be used for putting out fires in clothing.



#### Water extinguisher

Used on fires in fibrous material. Water is poor at extinguishing fires in petroleum products because these fluids float on top of water. Water conducts electricity so it is thus not suitable for extinguishing burning electrical equipment.

It can be extremely dangerous to try to extinguish hot oils with water. When the water touches the hot oil it evaporates explosively, resulting in a violent reaction in which burning oil is thrown in all directions.

Water extinguishers are currently being replaced by foam or powder extinguishers.

NB. The Swedish Consumer Agency recommends: homes: 9 kg foam or a 6 kg powder extinguisher and for the car/boat/caravan: 2 kg powder extinguisher.

# **Systematic Fire Prevention**

LTH continually carries out<sup>1</sup> Systematic Fire Prevention for organising, training, documenting and controlling fire prevention measures. One aspect of this that everyone notices are the regular evacuation exercises that are evaluated in cooperation with the fire and rescue services. If you have any questions, suggestions for improvements or want to highlight faults in the fire prevention measures, please contact LTH's information desk in Studiecentrum, tel: 046 222 7200 or e-mail: info@lth.se

