



# Daily fire prevention measures for companies

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# 1 Purpose

These guidelines have been provided in order to protect the object of insurance from damage caused by fire. These guidelines shall be adhered to in all companies and industrial plants. By following the safety guidelines, the occurrence of damage can be prevented or the extent of damage reduced.

# 2 Binding force

If the safety guidelines are neglected and this has an impact on the occurrence or extent of damage, the compensation may be reduced or declined in accordance with the Insurance Contracts Act. The people responsible for the operation of the workplace must be informed about these safety guidelines.

# 3 Order and tidiness

Good order and tidiness shall be maintained in buildings and outdoor areas, including the following measures:

- Any combustible waste and used cleaning cloths must be kept in fire-proof waste containers equipped with a lid, and these shall be emptied daily. Fire-proof waste containers must be located outdoors so that fire cannot spread from them.
- Narrow spaces, such as under-floor areas, delivery shafts, air-conditioning channels, under-machinery areas, conduits, pits, etc., must be kept free of dust and other inflammable materials.
- Excess fire load (pallets and packaging materials, for example) must be removed and taken to the place reserved for that purpose.
- Cable shelves must be kept clean.
- Access corridors must be kept clear of obstructions.

# 4 Smoking

Smoking shall be permitted only at designated places. Smoking areas must be equipped with fire-proof ashtrays, which shall be emptied regularly at an agreed place.

# 5 Hot works

When performing hot works at a permanent or temporary hot work location, the safety guidelines Hot Works D10, Tapiola Group, must be adhered to.

Whenever possible, hot works shall be undertaken at a permanent hot work location. A written hot work permit shall always be required for any hot work at a temporary hot work location, and the person performing the work must have a valid hot work license.

The safety guidelines Hot Works D10, Tapiola Group, must also be followed when performing roof insulation and water-proofing hot work. A written hot work permit shall always be required for roof insulation and water-proofing hot work, and the person performing the work must have a valid hot work license for roof insulation and water-proofing.

# 6 Structural fire prevention

Fire doors and fire hatches must always be kept in proper condition. Fire doors must be self-closing and self-locking. Fire doors must be kept closed. If the use of the premises requires keeping the fire door constantly open, a closing device must be installed that will automatically close and lock the door in the event of a fire. A fire door equipped with an automatic closing device must close in the event of a power failure, or a power source that is independent of mains current must be used. The condition of the power source and the closing and locking mechanism of the door must be checked regularly.

Compartmentation structures must not have any openings. Pipe penetrations and cable lead-throughs must be insulated in accordance with the compartmentation requirements.

# 7 Emergency extinguishing and extinguishing systems

The emergency extinguishing equipment (emergency hydrants, internal hydrants, external hydrants, foam hydrants, stirrup pumps, emergency water containers, handheld extinguishers, portable extinguishers, and fire blankets) must always be in working order. Their locations must be easily detected, they must be clearly marked and easily accessible without any obstruction in their immediate vicinity, and within appropriate extinguisher pick-up distance. The emergency extinguishers must be checked regularly. Normally the maximum inspection interval should not exceed two years. In locations where handheld extinguishers are continuously exposed to elements that may impair their operation, like dampness, changes in the weather, and tremor, the maximum inspection interval shall be one year. The inspection interval for handheld extinguishers kept in mobile work machinery must not exceed six months. A handheld extinguisher that has been applied to a fire and is partly or completely empty must be taken to service immediately.

Handheld extinguishers may be inspected and serviced only by a service agent or maintenance company approved by the Safety Technology Centre.

In the maintenance of automatic extinguishing equip-

ment, the safety guidelines Maintenance of Sprinkler Systems, F21, Tapiola Group, must be adhered to.

## 8 Prevention of arson

Inflammable materials must not be stored close to the outer walls of a building, if this could cause a danger of a fire spreading into the building.

No inflammable materials may be kept on loading docks or under loading shelters, if outsiders may have access to these locations.

All waste must be kept inaccessible to outsiders, since waste catching fire will cause a danger of fire spreading into buildings.

The attics, basements, and other jointly used premises in buildings must be locked so that outsiders have no access to them.

Stair enclosures and corridors in publicly used premises must be kept free of any obstructions.

## 9 Inflammable liquids and gases

When manufacturing, transporting, using, or storing inflammable liquids and gases, the legislation pertaining to them and the decrees and instructions given on the basis of the legislation shall be adhered to. (Decree on the Industrial Handling and Storage of Dangerous Chemicals, 29 January 1999/59.)

The permits and notifications concerning the handling and storage of inflammable liquids must be kept up to date.

If the handled amounts are always small, a notification to the municipal fire authorities is sufficient.

### 9.1 Inflammable liquids

Open handling of inflammable liquids involves a fire and explosion hazard, and the following safety instructions must be followed in order to minimize such hazard:

- Naked flame and smoking shall be prohibited.
- Electrical installations shall be performed in accordance with the electrical safety regulations.
- The earthing of machines and appliances shall be ensured.
- Inflammable liquids shall not be handled near hot pipes or machine parts.
- No hot work shall be performed near inflammable liquids. In such cases, non-sparking tools shall be used, or the inflammable liquid shall be removed.

### 9.2 Liquid gas

The following instructions must be adhered to when handling and storing liquid gas:

- After working hours, any liquid gas bottles in temporary use shall be taken to a storeroom or kept next to an exit door.
- Liquid gas shall not be used in basements and other places where ventilation is poor.
- Forklift truck liquid gas bottles may be replaced only in the location reserved for that purpose.
- Liquid gas bottles shall always be stored upright with the valve pointing up; only empty bottles may be stored horizontally.
- Liquid gas bottles must not be placed underground, under a staircase, in a corridor or in any other exits or emergency access areas.
- Even a slight smell of liquid gas always indicates a leak and explosion hazard. In such case it must be kept in mind that liquid gases, just like the vapors of combustible liquids, are heavier than air. The liquid gas leakage must be closed and the room must be ventilated.

## 10 Heating systems

The safety distances and user instructions for heating systems must be observed.

Fireplaces working on solid fuel, thin oil, several fuels or heavy oil and connected air channels shall be cleaned at one-year intervals.

Electric heaters must meet the requirements of electrical safety regulations. Open-type radiation heaters must not be used in factory buildings or warehouses. Fixed installation shall be preferred for electric heaters, and they must not be covered.

Particular attention must be paid to the fire safety and location of temporary heaters.

## 11 Electrical devices

Electrical devices and installations must meet the requirements of electrical safety regulations. Any detected faults and defects in the devices must be repaired without delay.

Particular attention must be paid to the location of temporary lighting with a hot surface (halogen lamps, for example). Any such lighting appliances shall be equipped with a support to prevent them from tipping over, and the light shall be equipped with a shield to keep materials at a sufficient distance from the hot surface. For short-term use, it is recommended to use

lighting with a low surface temperature, e.g., fluorescent lamps.

The periodic inspections of electrical installations shall be carried out in accordance with electrical safety regulations at intervals of 5...15 years depending on the size and usage of the main fuse.“

## 12 Building, repair, and installation sites

Fire safety is extremely important on building, repair, and installation sites.

The safety guidelines Building and Repair Work B10, Tapiola Group, must be adhered to.

Litter, package materials and other unnecessary, inflammable materials must be removed daily and taken to the place reserved for them.

The condition of the electrical devices and heaters on the site as well as the hot work permission procedures must be monitored continuously. Access roads on the site must be kept in order and free of obstruction to enable rescue operations and access for the fire department.

The employees must be informed about the fire safety arrangements on the site and the safety guidelines Building and Repair Work B10, Tapiola Group.

## 13 Warehousing

### 13.1 Warehouse building

The fire safety of a warehouse depends on the inflammability of the stored material, the manner of storage, the protection level, and the compartmentation and structures of the warehouse. Any changes of operation in an existing building that influence the fire safety elements require assessment of the building's suitability and safety for the new operations.

Storage space shall always contain equipment that facilitates rescue and extinguishing work, in accordance with the selected protection level. The protection level affects, for example, the building's fire resistance rating, the permitted maximum size of fire compartments, smoke clearance, and the fire resistance rating requirements for supporting elements and compartmentation elements.

Warehouses equipped with automatic extinguishing or fire alarm systems must display a notice indicating the maximum stacking heights for goods, and these must not be exceeded.

### 13.2 Loading docks

Docks may be used only for loading, not for storage. At

the end of the workday, the area must be cleared of package materials, pallets, any other objects and materials, and litter. Smoking shall be prohibited on docks.

### 13.3 Vehicles

Vehicles may not normally be driven inside the warehouse for loading and unloading. If, however, loading or unloading is performed inside a warehouse, these instructions must be followed:

- Vehicles may remain inside the warehouse only during the loading or unloading.
- The vehicle's engine must not be running during the loading or unloading.
- Any other parking of vehicles inside a warehouse shall be prohibited.
- Vehicles must have a sufficient goods handling area.
- Vehicle driveways inside a warehouse must be clearly marked.
- Any oil discharged from a vehicle must be removed immediately.

Outside a warehouse, vehicles may be parked in designated places only.

### 13.4 Forklifts

A well-ventilated charging area must be provided for electric forklifts. No combustible material may be kept within two meters' distance of the charging place. A separate charging room is preferred.

Internal combustion engine forklifts must be stored in a partitioned and well-ventilated vehicle shelter. Other vehicles must be stored outdoors or in a motor vehicle shelter.

## 14 Fire prevention preparedness

The company's own systematic operation provides the basis for daily fire prevention. The company shall have a safety organization that is responsible for safety arrangements, led by a safety supervisor. The safety organization shall prepare and maintain the company's emergency response plan, containing descriptions of possible emergencies and threats in the company.

The maintenance of fire prevention preparedness constitutes a part of the company's safety culture, where safety is taken into account at all levels and the entire staff is committed to its implementation.

The company must arrange internal fire inspections at regular intervals, e.g., every six months. The inspectorate shall consist of the person in charge of fire safety in the company, the supervisor of the department

subject to inspection, and a representative of maintenance. In addition, other people responsible for company safety may take part in the inspection. An internal fire inspection shall include all the elements influencing the company's structural and operational fire safety, as well as the compliance with the safety guidelines.

The company shall have a written fire prevention guide, which shall be delivered to all employees. The fire prevention guide shall contain instructions on rescuing people, making a fire alarm, using the emergency extinguishers, and other measures to be taken in the event of a fire.

The employees must be familiarized with the necessary fire safety factors, e.g., the correct use of emergency extinguishers in the event of a fire. With regular training, employees will act correctly and adopt the right attitude toward fire safety.

## 15 Industrial companies

### 15.1 Hot works in the handling area of inflammable liquids and gases

Before starting the work, the container, device, or pipe to be repaired must be carefully emptied of inflammable liquids or gases, and sufficient ventilation must be ensured. The gas content must be measured before starting the work and, if necessary, during the work.

### 15.2 Hot works in explosive areas

Locations with an explosion risk include places where explosion hazard may be caused by the vapor or gas of an inflammable liquid, mixed with air, inflammable dust mixed with air, or actual explosives.

If it is necessary to perform hot work in such locations, the local fire authorities must be contacted before starting any hot work.

### 15.3 Manufacture and handling of inflammable liquids and gases

In order to prevent fire and explosion hazard, the following must be noted in addition to the points listed in section 6:

- Naked flame and smoking shall be strictly prohibited.
- All electrical installations and equipment shall comply with the electrical safety regulations.
- The handling containers of inflammable liquids shall be earthed.
- When appropriate, non-sparking tools shall be used.
- Artificial fiber clothing shall not be used, in order to avoid static electricity.

- A sufficient amount of emergency extinguishing equipment shall be kept available (normally powder or carbon dioxide extinguishers).

Sufficient ventilation must be ensured during the handling of inflammable liquids and gases, so that gas contents that may be explosive or hazardous to health will not develop in the air.

### 15.4 Electrical equipment

In premises with a fire or explosion risk, particular attention must be paid to the condition of electrical equipment and installations. Temporary installations must meet the requirements set for such premises. Electrical equipment that is not used after working hours must be de-energized.

All electrically powered machines must always comply with the electrical safety regulations, and they must be serviced in accordance with the manufacturer's instructions. Electric engines must be kept dry, and they must be cleaned regularly. Engine casings and handles must be cleaned of dust and dirt, so as not to impair the cooling function. Air cooling vents must also be kept unblocked.

### 15.5 Maintenance of machinery

All machines must be lubricated in accordance with the lubrication schedule. The condition and tightness of power transmission and drive belts must be monitored regularly.

Forklifts and other mobile work machinery shall be serviced and kept in proper condition at all times. Refueling and electric forklift charging may take place only at a location reserved for that purpose. After working hours, forklifts must be taken to shelters. Forklifts may be used and serviced only by qualified professionals.

### 15.6 Storage in production areas

Only the absolutely necessary quantity of goods may be stored inside the actual production plant. The vicinity of machines and extinguishing equipment must be kept absolutely clear. Unnecessary package materials must be removed and taken to the place reserved for them.

## 16 Safety guidelines

- Building, installation and repair work, B10, Tapiola Group
- Hot works, D10, Tapiola Group
- Maintenance of sprinkler systems, F21, Tapiola Group.



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