

Workplace

The Workplace (Health, Safety and Welfare) Regulations 1992 cover a wide range of basic health, safety and welfare issues and apply to most workplaces

Employers have a general duty under section 2 of the Health and Safety at Work etc Act 1974 to ensure, so far as is reasonably practicable, the health, safety and welfare of their employees at work. These Regulations aim to ensure that workplaces meet the health, safety and welfare needs of all members of a workforce, including people with disabilities.

Several of the Regulations require things to be 'suitable'. Regulation 2(3) makes it clear that things should be suitable for anyone. This includes people with disabilities. Where the workforce includes people with disabilities, it is important to ensure the workplace is suitable for them, particularly traffic routes, toilets and workstations.

Health

Ventilation

Workplaces need to be adequately ventilated. Fresh, clean air should be drawn from a source outside the workplace, uncontaminated by discharges from flues, chimneys or other process outlets, and be circulated through the workrooms. Ventilation should also remove and dilute warm, humid air and provide air movement which gives a sense of freshness without causing a draught. If the workplace contains process or heating equipment or other sources of dust, fumes or vapours, more fresh air will be needed to provide adequate ventilation. Windows or other openings may provide sufficient ventilation but, where necessary, mechanical ventilation systems should be provided and regularly maintained.

Temperatures in indoor workplaces

Comfort depends on air temperature, radiant heat, air movement and humidity. Individual personal preference makes it difficult to specify a thermal environment which satisfies everyone. For workplaces where the activity is mainly sedentary, for example offices, the temperature should normally be at least 16 degrees C. If work involves physical effort it should be at least 13 degrees C (unless other laws require lower temperatures).

Work in hot or cold environments

The risk to the health of workers increases as conditions move further away from those generally accepted as comfortable. Risk of heat stress arises, for example, from working in high air temperatures, exposure to high thermal radiation or high levels of humidity, such as those found in some areas in paper mills. Cold stress may arise, for example, from working in cold stores, and in the open air during winter.

Assessment of the risk to workers' health, from working in either a hot or cold environment, needs to consider two sets of factors - personal and environmental. Personal factors include body activity, the amount and type of clothing, and duration of exposure. Environmental factors include ambient temperature, and radiant heat; and if the

work is outside, sunlight, wind velocity and the presence of rain or snow.

Any assessment needs to consider:

- measures to control the workplace environment, in particular heat from any source. Minimising the risk of heat stress may mean insulating plant which acts as a source of radiant heat, using local cooling by increasing ventilation rates and maintaining the appropriate level of humidity. If it is not reasonably practicable to avoid workers being exposed to cold environments you should consider using local environmental controls, for example cab heaters in fork-lift trucks used in cold stores;
- restriction of exposure by, for example, re-organising tasks to build in rest periods or other breaks from work. This will allow workers to rest in an area where the environment is comfortable and, if necessary, to replace bodily fluids to combat dehydration or cold. If work rates cause sweating, workers may need frequent rest pauses for changing into dry clothing;
- medical pre-selection of employees to ensure that they are fit to work in these environments;
- use of suitable clothing (which may need to be heat resistant or insulating, depending on whether the risk is from heat or cold);
- acclimatisation of workers to the environment in which they work;
- training in the precautions to be taken; and
- supervision, to ensure that the precautions identified by the assessment are taken.

(see Temperature at Work section)

Lighting

Lighting should be sufficient to enable people to work and move about safely. If necessary, local lighting should be provided at individual workstations, and at places of particular risk such as crossing points on traffic routes. Lighting and light fittings should not create any hazard. Automatic emergency lighting, powered by an independent source, should be provided where sudden loss of light would create a risk.

Cleanliness and waste materials

Every workplace and the furniture, furnishings and fittings should be kept clean and it should be possible to keep the surfaces of floors, walls and ceilings clean. Cleaning and the removal of waste should be carried out as necessary by an effective method. Waste should be stored in suitable receptacles.

Room dimensions and space

Workrooms should have enough free space to allow people to move about with ease. The volume of the room, when empty, divided by the number of people normally working in it should be at least 11 cubic metres. All or part of a room over 3.0 m high should be counted as 3.0 m high. Eleven cubic metres per person is a minimum and may be insufficient depending on the layout, contents and the nature of the work.

Workstations and seating

Workstations should be suitable for the people using them and for the work. People should be able to leave workstations swiftly in an emergency. If work can or must

be done sitting, seats which are suitable for the people using them and for the work done there should be provided. Seating should give adequate support for the lower back, and footrests should be provided for workers who cannot place their feet flat on the floor.

Safety

Maintenance

The workplace, and certain equipment, devices and systems should be maintained in efficient working order (efficient for health, safety and welfare). Such maintenance is required for mechanical ventilation systems, equipment and devices which would cause a risk to health, safety or welfare if a fault occurred.

Floors and traffic routes

'Traffic route' means a route for pedestrian traffic, vehicles, or both, and includes any stairs, fixed ladder, doorway, gateway, loading bay or ramp. There should be sufficient traffic routes, of sufficient width and headroom, to allow people and vehicles to circulate safely with ease.

Floors and traffic routes should be sound and strong enough for the loads placed on them and the traffic expected to use them. The surfaces should not have holes, be uneven or slippery and should be kept free of obstructions. Restrictions should be clearly indicated. Where sharp or blind bends are unavoidable or vehicles need to reverse, measures such as one-way systems and visibility mirrors should be considered. Speed limits should be set. Screens should be provided to protect people who have to work where they would be at risk from exhaust fumes, or to protect people from materials likely to fall from vehicles.

Additional measures need to be taken where pedestrians have to cross or share vehicle routes. These may include marking of routes, provision of crossing points, bridges, subways and barriers.

Open sides of staircases should be fenced with an upper rail at 900 mm or higher and a lower rail. A handrail should be provided on at least one side of every staircase and on both sides if there is a particular risk. Additional handrails may be required down the centre of wide staircases. Access between floors should not be by ladders or steep stairs.

Where a load is tipped into a pit or similar place, and the vehicle is liable to fall into it, barriers or portable wheel stops should be provided at the end of the traffic route. Loading bays should have at least one exit point from the lower level or a refuge should be provided to avoid people being struck or crushed by vehicles.

Falls and falling objects

Falls

The consequences of falling from heights or into dangerous substances are so serious that a high standard of protection is required. Secure fencing should be provided to prevent people falling from edges, and objects falling onto people. Where fencing cannot be provided, other measures should be taken to prevent falls.

If a person might fall two metres or more, or might fall less than two metres and risk serious injury, fencing should be at least 1100 mm high and have two guard-rails. Tanks,

pits and structures should be securely covered, or fenced to a height of at least 1100 mm.

Fixed ladders should be of sound construction, properly maintained and securely fixed. Rungs should be horizontal and give adequate foothold and the stiles should extend at least 1100 mm above the landing. Fixed ladders over 2.5 m long at a pitch of more than 75 degrees should be fitted with safety hoops or permanently fixed fall-arrest systems. Fixed ladders should only be used if it is not practical to install a staircase.

Slips and trips which may be trivial at ground level may result in fatal accidents when on a roof. Precautions should be taken where there is a risk of falling off or through a roof. These may include fall-arrest devices and crawling boards. Fragile roofs or surfaces should be clearly identified. People should, as far as possible, avoid climbing on top of vehicles or their loads. If this is not possible, effective measures such as providing fencing should be taken, to prevent falls. If a tanker is loaded from a fixed gantry and access is required onto the top of the tanker, fencing should be provided. Sheetings of lorries should be carried out in properly equipped designated places.

When moving goods up or down between levels, the edge should be fenced, as far as possible, and secure handholds should be provided where necessary. If fencing or covers cannot be provided, or have to be removed, effective measures should be taken to prevent falls. Access should be limited to specified people and in high risk situations suitable formal written 'permit-to-work' systems should be adopted.

A safe system of work should be operated which may include the use of a fall-arrest system or safety lines and harnesses and secure anchorage points. Systems which do not require disconnection and re-connection of safety harnesses should be used. If there is no need to approach edges, the length of the line and anchorage position should prevent the edge being approached.

Falling objects

Materials and objects need to be stored and stacked in such a way that they are not likely to fall and cause injury. Storage racking and shelving needs to be of adequate strength and stability for the loads to be placed on it. In general, racking and shelving is made from lightweight materials and is limited to the amount of wear and tear it can withstand. The skill of workplace transport operators has a great bearing on the amount of damage likely to be caused. The greater the damage to racking and shelving, the weaker it will be, until it may eventually collapse, even when supporting less than its normal working load.

To ensure that racking or shelving installations continue to be serviceable:

- check them regularly to identify damage and necessary action;
- encourage employees to report any damage, however minor, so that its effect on safety may be assessed; and
- fix maximum load notices and adhere to them strictly.

Appropriate precautions in stacking and storing include:

- safe stacking on sound pallets;
- banding or wrapping to prevent individual articles falling;
- setting limits for the height of stacks to maintain stability;
- regular inspection of stacks to detect and remedy any unsafe stacks;

- instruction and training of employees in stacking; and
- special arrangements for objects which may be difficult to store.

Transparent or translucent doors, gates or walls and windows

Windows, transparent or translucent surfaces in walls, partitions, doors and gates should, where necessary for reasons of health and safety, be made of safety material or be protected against breakage. Employers will need to consider whether there is a foreseeable risk of people coming into contact with glazing and being hurt. If there is no risk, no further action is required.

If there is a risk then action will be necessary to comply with the regulation to:

- prevent people or objects coming into contact with the glazing, or
- upgrade it so that if it breaks, it breaks safely, and
- mark large expanses of glazing in some way so that people know it is there

Openable windows and the ability to clean them safely

Openable windows, skylights and ventilators should be capable of being opened, closed or adjusted safely and, when open, should not be dangerous.

Windows and skylights should be designed so that they may be cleaned safely. When considering if they can be cleaned safely, account may be taken of equipment used in conjunction with the window or skylight or of devices fitted to the building.

Doors and gates

Doors and gates should be suitably constructed and fitted with safety devices if necessary.

Doors and gates which swing both ways, and conventionally hinged doors on main traffic routes should have a transparent viewing panel.

Power-operated doors and gates should have safety features to prevent people being struck or trapped and, where necessary, should have a readily identifiable and accessible control switch or device so that they can be stopped quickly in an emergency.

Upward-opening doors or gates need to be fitted with an effective device to prevent them falling back. Provided that they are properly maintained, counterbalance springs and similar counterbalance or ratchet devices to hold them in the open position are acceptable.

Welfare

Sanitary conveniences and washing facilities

Suitable and sufficient sanitary conveniences and washing facilities should be provided at readily accessible places. They and the rooms containing them should be kept clean and be adequately ventilated and lit. Washing facilities should have running hot and cold or warm water, soap and clean towels or other means of cleaning or drying. If required by the type of work, showers should also be provided. Men and women should have separate facilities unless each facility is in a separate room with a lockable door and is for use by only one person at a time.

Drinking water

An adequate supply of wholesome drinking water, with an upward drinking jet or suitable cups, should be provided. Water should only be provided in refillable enclosed containers where it cannot be obtained directly from a mains supply. The containers should be refilled at least daily (unless they are chilled water dispensers where the containers are returned to the supplier for refilling). Bottled water/water dispensing systems may still be provided as a secondary source of drinking water.

Accommodation for clothing and facilities for changing

Adequate, suitable and secure space should be provided to store workers' own clothing and special clothing. As far as is reasonably practicable the facilities should allow for drying clothing. Changing facilities should also be provided for workers who change into special work clothing. The facilities should be readily accessible from workrooms and washing and eating facilities and should ensure the privacy of the user.

Facilities for rest and to eat meals

Suitable and sufficient, readily accessible, rest facilities should be provided. Rest areas or rooms should be large enough, and have sufficient seats with backrests and tables, for the number of workers likely to use them at any time. They should include suitable facilities to eat meals where meals are regularly eaten in the workplace and the food would otherwise be likely to become contaminated.

Seats should be provided for workers to use during breaks. These should be in a place where personal protective equipment need not be worn. Work areas can be counted as rest areas and as eating facilities, provided they are adequately clean and there is a suitable surface on which to place food. Where provided, eating facilities should include a facility for preparing or obtaining a hot drink. Where hot food cannot be obtained in, or reasonably near to the workplace, workers may need to be provided with a means for heating their own food.

Canteens or restaurants may be used as rest facilities provided there is no obligation to purchase food. Suitable rest facilities should be provided for pregnant women and nursing mothers. They should be near to sanitary facilities and, where necessary, include the facility to lie down.

Rest areas and rest rooms away from the workstation should include suitable arrangements to protect non-smokers from discomfort caused by tobacco smoke.

Action Points

1. Ensure the employer meets the requirements of the Regs for all new workplaces, extensions and modifications.
2. Use your safety rep's rights to inspect the workplace to check the implementation of the standards established in the Regs.