

L.N. 281 of 2004

**OCCUPATIONAL HEALTH AND SAFETY
AUTHORITY ACT
(CAP. 424)**

**Work Place (Minimum Health and Safety Requirements for
Work at Construction Sites) Regulations, 2004**

IN EXERCISE of the powers conferred by article 12 of the Occupational Health and Safety Authority Act, 2000, the Minister of Education, Youth and Employment, in consultation with the Occupational Health and Safety Authority, has made the following regulations:-

1. (1) The title of these regulations is the Work Place (Minimum Health and Safety Requirements for Work at Construction Sites) Regulations, 2004. Title, scope and coming into force.

(2) The scope of these regulations is to lay down minimum health and safety requirements for work at construction sites.

(3) These regulations shall not apply to drilling and extraction in the extractive industries including the activities of prospecting and of extraction in the strict sense of the word as well as of preparation of extracted materials for sale (crushing, screening, washing), but shall apply to the processing of such extracted materials.

(4) The provisions of the General Provisions for Health and Safety at Work Places Regulations, 2003 (the "Regulations of 2003") are fully applicable to the whole scope referred to in sub-regulation 2 of this regulation, without prejudice to more stringent and, or specific provisions contained in the Regulations of 2003. L.N. 36 of 2003.

2. In these regulations, unless the context otherwise requires: Interpretation.

“the Act” means the Occupational Health and Safety Authority Act;

“the Authority” means the Occupational Health and Safety Authority established by article 8 of the Act.

“client” means any natural or legal person for whom a project is carried out;

“construction site” means any construction site at which building or civil engineering works are carried out, a non-exhaustive list of which is given in Schedule I;

“contractor” means a contractor or employer whose workers undertake, carry out or manage construction work, and who supplies materials and, or labour to carry out such work;

“project” means any development which includes or is intended to include construction work;

“project supervisor” means any natural or legal person responsible for the design and, or execution and, or supervision of the execution of a project, appointed by a client;

“self-employed person” means any person, other than a person in the employment, traineeship or apprenticeship of a contractor, whose professional activity contributes to the completion of a project.

Appointment of project supervisors.

3. (1) It shall be the duty of a client to appoint, in respect of every project, a project supervisor for the design stage and a project supervisor for the construction stage, and any such appointment shall be terminated, changed or renewed as necessary:

Provided that nothing in this regulation, shall prevent the client from acting as project supervisor at either stage if he is competent to undertake the duties involved.

Provided further that nothing in this regulation shall prevent the client from appointing one person to act as project supervisor for both the design and construction stage, if that person is competent to undertake the duties involved.

(2) It shall be the duty of a client to keep and make available any health and safety files prepared in accordance with regulation 4 and any other relevant information regarding health and

safety, for inspection by any person who may need information in the file for the purpose of compliance with any statutory obligations.

(3) Where a client disposes of his or her interests in the project, a client shall deliver the health and safety file in respect of the project to that person who acquires such interest in the project, and any obligations arising out of these regulations remaining for the duration of the project, shall be assumed by this person.

4. (1) In the case of construction sites on which work is scheduled to last longer than 30 working days and on which more than 20 workers are occupied simultaneously, or on which the volume of work is scheduled to exceed 500 person-days, the project supervisor shall communicate a prior notice drawn up in accordance with Schedule III to the Authority at least four calendar weeks before work starts. Once any work activity on the project commences, a copy of the prior notice shall be clearly displayed on the construction site and, if necessary, periodically updated. Prior notice.

(2) The project supervisor for the design stage shall coordinate the implementation of the provisions of this regulation, and shall ensure that prior to the setting up of a construction site, a health and safety plan is drawn up in accordance with regulation 5. Health and safety plan.

(3) The project supervisor for the design stage, shall take account of the general principles of prevention concerning health and safety referred to in the Act and subsidiary regulations as appropriate, during the various stages of designing and preparing the project, in particular: Project preparation stage: general principles.

(a) when architectural, technical and, or organizational aspects are being decided, in order to plan the various items or stages of work which are to take place simultaneously or in succession,

(b) when estimating the period required for completing such work or work stages.

Account shall also be taken, each time this appears necessary, of all health and safety plans and of files drawn up in accordance with regulation 5 or adjusted in accordance with regulation 6.

(4) The health and safety plan shall set out the rules applicable to the construction site concerned, taking into account where necessary the industrial activities taking place on the site;

this plan must also include specific measures concerning work which falls within one or more of the categories of Schedule II.

(5) The project supervisor for the design stage shall prepare a file appropriate to the characteristics of the project containing relevant health and safety information to be taken into account during any subsequent works.

Project execution stage: duties of project supervisor.

5. The project supervisor for the execution stage shall:

(a) coordinate implementation of the general principles of prevention and safety:

(i) when technical and, or organizational aspects are being decided, in order to plan the various items or stages of work which are to take place simultaneously or in succession,

(ii) when estimating the period required for completing such work or work stages;

(b) coordinate implementation of the relevant provisions in order to ensure that contractors, and if necessary for the protection of workers, self-employed persons:

(i) apply the principles referred to in regulation 8 in a consistent manner,

(ii) where required, follow the health and safety plan referred to in regulation 4;

(c) make, or cause to be made, any adjustments required to the health and safety plan and the file referred to in regulation 4 to take account of the progress of the work and any changes which have occurred;

(d) organize cooperation between contractors, including successive contractors on the same site, coordination of their activities with a view to protecting workers and preventing accidents and occupational health hazards and reciprocal information as provided for in regulation 7 of the Regulations of 2003, ensuring that self-employed persons are brought into this process where necessary;

(e) coordinate arrangements to check that the working procedures are being implemented correctly;

(f) take the steps necessary to ensure that only authorized persons are allowed onto the construction site.

6. (1) Where a client has appointed any project supervisor to perform the duties referred to in regulations 5 and 6, this does not relieve the client his responsibilities in that respect.

Responsibilities of clients, project supervisors and contractors.

(2) The implementation of these regulations shall not affect the principle of employers' responsibility as provided for in the Act or in subsidiary legislation.

7. When the work is being carried out, the principles set out in regulations 4 to 8 of the Regulations of 2003 shall be applied, in particular as regards:

Implementation of regulations 4 to 8 of the regulations 11 of 20032.

(a) keeping the construction site in good order and in a satisfactory state of cleanliness;

(b) choosing the location of workstations, bearing in mind how access to these workplaces is obtained, and determining routes or areas for the safe passage and movement of equipment;

(c) the conditions under which various materials are handled;

(d) technical maintenance, pre-commissioning checks and regular checks on installations and equipment with a view to correcting any faults which might affect the health and safety of workers;

(e) the demarcation and laying-out of areas for the storage of various materials, in particular where dangerous materials or substances are concerned;

(f) the conditions under which the dangerous materials used are removed;

(g) the storage and disposal or removal of waste and debris;

(h) the adaptation, based on progress made on the site, of the actual period to be allocated for the various types of work or work stages;

(i) cooperation between contractors and self-employed persons;

(j) interaction with industrial activities at the place within which or in the vicinity of which the construction site is located.

Obligations of contractors.

8. In order to preserve health and safety on the construction site, under the conditions set out in regulations 5 and 6, contractors shall:

(a) in particular when implementing regulation 7, take measures that are in line with the minimum requirements set out in Schedule IV;

(b) take into account directions from any project supervisor on health and safety matters.

Obligations of other groups of persons.

9. (1) In order to preserve health and safety on the construction site, self-employed persons shall:

(a) comply in particular with the following, *mutatis mutandis*:

(i) the requirements of regulations 7 and 15(2) of the Regulations of 2003 and regulation 8 and Schedule IV of these regulations;

(ii) Article 4 of Directive 89/655/EEC and the relevant provisions of the Annex thereto, as transposed into Maltese legislation;

(iii) the Minimum Requirements for the Use of Personal Protective Equipment at Work Regulations, 2003;

(b) take into account directions from the project supervisor or supervisors on health and safety matters.

(2) In order to preserve health and safety on the site, where contractors are engaged in work activity on the construction site, they shall:

(a) comply in particular with the following, *mutatis mutandis*:

(i) regulation 15(2) of the Regulations of 2003;

(ii) Article 4 of Directive 89/655/EEC and the relevant provisions of the Annex thereto as transposed into Maltese legislation;

(iii) the Minimum Requirements for the Use of Personal Protective Equipment at Work Regulations, 2003;

(b) take account of the comments of the project supervisor or supervisors on health and safety matters.

10. (1) Without prejudice to regulation 12 of the Regulations of 2003, workers and, or their representatives shall be informed of all the measures to be taken concerning their health and safety on the construction site. Information for workers.

(2) The information must be comprehensible to the workers concerned.

11. Consultation and participation of workers and, or of their representatives shall take place in accordance with regulation 13 of the Regulations of 2003 on matters covered by regulations 6, 8 and 9 of these regulations, ensuring whenever necessary proper coordination between workers and, or workers' representatives in undertakings carrying out their activities at the workplace, having regard to the degree of risk and the size of the work site. Consultation and participation of workers.

12. In any proceedings for an offence under these regulations consisting of a failure to comply with a duty or requirement to do something, or to do something so far as is reasonably practicable, it shall be for the accused to prove, as the case may be, that it was not practicable or not reasonably practicable to do more than was in fact done to satisfy the duty or requirement, or that there was no better practicable means than was in fact used to satisfy the duty or requirement. Onus of proof.

13. Any person who knowingly or recklessly interferes with the process of providing a safe and healthy place of work, shall be guilty of an offence. Offences.

SCHEDULE I

**NON-EXHAUSTIVE LIST OF BUILDING AND CIVIL ENGINEERING
WORKS**

1. Excavation
2. Earthworks
3. Construction
4. Assembly and disassembly of prefabricated elements
5. Conversion or fitting-out
6. Alterations
7. Renovation or restoration
8. Repairs
9. Dismantling
10. Demolition
11. Upkeep
12. Maintenance - painting and cleaning work
13. Drainage

SCHEDULE II

NON-EXHAUSTIVE LIST OF WORK INVOLVING PARTICULAR RISKS TO THE HEALTH AND SAFETY OF WORKERS

1. Work which puts workers at risk of burial under earthfalls, engulfment in swampland or falling from a height, where the risk is particularly aggravated by the nature of the work or processes used or by the environment at the place of work or site.

2. Work which puts workers at risk from chemical or biological substances constituting a particular danger to the health and safety of workers or involving a legal requirement for health monitoring.

3. Work with ionizing radiation requiring the designation of controlled or supervised areas.

(a) Controlled area means an area subject to special rules for the purposes of protection against ionizing radiation and to which access is controlled.

(b) Supervised area means an area subject to appropriate supervision for the purpose of protection against ionizing radiation.

4. Work near high voltage power lines.

5. Work exposing workers to the risk of drowning.

6. Work on wells, underground earthworks and tunnels.

7. Work carried out by divers having a system of air supply.

8. Work carried out by workers in caisson with a compressed-air atmosphere.

9. Work involving the use of explosives.

10. Work involving the assembly or dismantling of heavy prefabricated components.

SCHEDULE III

**CONTENT OF THE PRIOR NOTICE REFERRED TO IN
REGULATION 4 (1)**

1. Date of forwarding
2. Exact address of the construction site
3. Client(s) (name(s) and address(es))
4. Type of project
5. Project supervisor(s) (name(s) and address(es))
6. Project supervisor(s) during the project preparation stage (name(s) and address(es))
7. Project supervisor(s) for health and safety matters during the project execution stage (name(s) and address(es))
8. Date planned for start of work on the construction site
9. Planned duration of work on the construction site
10. Estimated maximum number of workers on the construction site
11. Planned number of contractors and self-employed persons on the construction site
12. Details of contractors already chosen

SCHEDULE IV

MINIMUM HEALTH AND SAFETY REQUIREMENTS FOR CONSTRUCTION SITES

Preliminary remarks

The obligations laid down in this Schedule apply wherever required by the features of the construction site, the activity, the circumstances or a hazard. For the purposes of this Schedule, 'rooms' covers, inter alia, hatted accommodation.

PART A: GENERAL MINIMUM REQUIREMENTS FOR ON-SITE WORKPLACES

1. Stability and solidity

1.1. Materials, equipment and, more generally, any component which, when moving in any way, may affect the health and safety of workers must be stabilized in an appropriate and safe manner.

1.2. Access to any surface involving insufficiently resistant materials is not authorized unless appropriate equipment or means are provided to enable the work to be carried out safely.

2. Energy distribution installations

2.1. The installations must be designed, constructed and used so as not to present a fire or explosion hazard; persons must be adequately protected against the risk of electrocution caused by direct or indirect contact.

2.2. The design, construction and choice of equipment and protection devices must take account of the type and power of the energy distributed, external conditions and the competence of persons with access to parts of the installation.

3. Emergency routes and exits

3.1. Emergency routes and exits must remain clear and lead as directly as possible to a safe area.

3.2. In the event of danger, it must be possible for workers to evacuate all workstations quickly and as safely as possible.

3.3. The number, distribution and dimensions of emergency routes and exits depend on the use, equipment and dimensions of the site and of the rooms and the maximum number of persons that may be present.

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3.4. Specific emergency routes and exits must be indicated by signs in accordance with the regulations contained in (LN 45 of 2002).

Such signs must be sufficiently resistant and be placed at appropriate points.

3.5. Emergency routes and exits, and the traffic routes and doors giving access to them, must be free from obstruction so that they can be used at any time without hindrance.

3.6. Emergency routes and exits requiring illumination must be provided with emergency lighting of adequate intensity in case the lighting fails.

4. Fire detection and fire fighting

4.1. Depending of the characteristics of the site, the dimensions and use of the rooms, the on-site equipment, the physical and chemical properties of the substances present and the maximum potential number of people present, an adequate number of appropriate fire-fighting devices and, where required, fire detectors and alarm systems must be provided.

4.2. These fire-fighting devices, fire detectors and alarm systems must be regularly checked and maintained.

Appropriate tests and drills must take place at regular intervals.

4.3. Non-automatic fire-fighting equipment be easily accessible and simple to use.

The equipment must be indicated by signs in accordance with the regulations contained in the work place, (Provisions of Health and Safety Signs) Regulations, 2002. L.N. 45 of 2002.

Such signs must be sufficiently resistant and placed at appropriate points.

5. Ventilation

5.1 Steps shall be taken to ensure that there is sufficient supply of fresh air, having regard to the working methods used and the physical demands placed on the workers.

5.2 If a forced ventilation system is used, it must be maintained in working order and must not expose workers to draughts which are harmful to health.

5.3 Any breakdown must be indicated by a control system where this is necessary for workers' health.

6. Exposure to particular risks

6.1. Workers must not be exposed to harmful levels of noise or to harmful external influences (e.g. gases, vapours, dust).

6.2. If workers have to enter an area where the atmosphere is liable to contain a toxic or harmful substance or to have an insufficient oxygen level or to be inflammable, the confined atmosphere must be monitored and appropriate steps taken to prevent any hazards.

6.3. A worker may not in any circumstances be exposed to a high-risk confined atmosphere.

He must at least be watched at all times from outside and all appropriate precautions must be taken to ensure that he can be assisted effectively and immediately.

7. Temperature

During working hours, the temperature must be appropriate for human beings, having regard to the working methods used and the physical demands placed on the workers.

8. Natural and artificial lighting of workstations, rooms and traffic routes on the site

8.1. Workstations, rooms and traffic routes must as far as possible have sufficient natural lighting and be provided with appropriate and sufficient artificial lighting at night and when natural daylight is inadequate; where necessary, portable light sources that are protected against impact must be used.

The colour of artificial light used must not alter or affect the perception of signals or signposts.

8.2. Lighting installations for rooms, workstations and traffic routes must be placed in such a way that there is no risk of accident to workers as a result of the type of lighting fitted.

8.3. Rooms, workstations and traffic routes where workers are especially exposed to risks in the event of artificial lighting, must be provided with emergency lighting of adequate intensity.

9. Doors and gates

9.1. Sliding doors must be fitted with a safety device to prevent them from being derailed and falling over.

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9.2. Doors and gates opening upwards must be fitted with a mechanism to secure them against falling back.

9.3. Doors and gates along escape routes must be appropriately marked.

9.4. In the immediate vicinity of gates intended primarily for vehicle traffic, there must be doors for pedestrian traffic unless it is safe for pedestrians to cross; such doors must be clearly marked and kept free at all times.

9.5. Mechanical doors and gates must operate without any risk of accident to workers.

They must be fitted with emergency stop devices which are easily identifiable and accessible and, unless they open automatically in the event of a power-cut, it must be possible for them to be opened manually.

10. Traffic routes - danger areas

10.1. Traffic routes, including stairs, fixed ladders and loading bays and ramps, must be calculated, located, laid out and made negotiable to ensure easy, safe and appropriate access in such a way as not to endanger workers employed in the vicinity of these traffic routes.

10.2. Routes used for pedestrian traffic and, or goods traffic including those used for loading and unloading must be dimensioned in accordance with the number of potential users and the type of activity concerned.

If means of transport are used on traffic routes, a sufficient safety clearance or adequate protective devices must be provided for other site users.

Routes must be clearly marked, regularly checked and properly maintained.

10.3. Sufficient clearance must be allowed between vehicle traffic routes and doors, gates, passages for pedestrians, corridors and staircases.

10.4. If the site includes limited-access areas, these must be equipped with devices to prevent unauthorized workers from entering.

Appropriate measures must be taken to protect workers who are authorized to enter the danger areas.

Danger areas must be clearly signposted.

11. Loading bays and ramps

11.1. Loading bays and ramps must be suitable for the dimensions of the loads to be transported.

11.2. Loading bays must have at least one exit point.

11.3. Loading ramps must be sufficiently safe to prevent workers from falling off.

12. Freedom of movement at the workstation

The floor area at the workstation must be such as to allow workers sufficient freedom of movement to perform their work, taking account of any necessary equipment or appliances present.

13. First aid

13.1. The contractor must ensure that first aid can be provided, and that the staff trained to provide it can be called upon, at any time.

Measures must be taken to ensure that workers who have had an accident or have suddenly been taken ill can be removed for medical treatment.

13.2. One or more first-aid rooms must be provided where the scale of the works or the types of activity being carried out so require.

13.3. First-aid rooms must be fitted with essential first-aid installations and equipment and be easily accessible to stretchers.

They must be signposted in accordance with the regulations contained in Legal Notice 45 of 2002.

13.4. In addition, first-aid equipment must be available at all places where working conditions so require.

This equipment must be suitably marked and easily accessible.

The address and telephone number of the local emergency service must be clearly displayed.

14. Sanitary equipment

14.1. Changing rooms and lockers.

14.1.1. Appropriate changing rooms must be provided for workers if they have to wear special work clothes and if, for reasons of health or propriety, they cannot be expected to change in another area.

Changing rooms must be easily accessible, be of sufficient capacity and be provided with seating.

14.1.2. Changing rooms must be sufficiently large and have facilities to enable each worker, where necessary, to dry his working clothes as well as his own clothing and personal effects and to lock them away.

If circumstances so require (e.g. dangerous substances, humidity, dirt), facilities must be provided to enable working clothes to be kept in a place separate from workers' own clothes and personal effects.

14.1.3. Provisions must be made for separate changing rooms or separate use of changing rooms for men and women.

14.1.4. If changing rooms are not required as referred to in point 14.1.1, first paragraph, each worker must be provided with a place in which he can lock away his own clothes and personal effects.

14.2. Showers and washbasins

14.2.1. Suitable showers in sufficient numbers must be provided for workers if required by the nature of the work or for health reasons.

Provisions must be made for separate shower rooms or separate use of shower rooms for men and women.

14.2.2. The shower rooms must be sufficiently large to permit each worker to wash without hindrance in conditions of an appropriate standard of hygiene.

The showers must be equipped with hot and cold running water.

14.2.3. Where showers are not required under the first paragraph of 14.2.1, a sufficient number of suitable washbasins with running water (hot water if necessary) must be provided in the vicinity of the workstations and the changing rooms.

Provisions must be made for separate washbasins, or separate use of washbasins for men and women when so required for reasons of propriety.

14.2.4. Where the rooms housing, the showers or washbasins are separate from the changing rooms, there must be easy communication between the two.

14.3. Lavatories and washbasins

Special facilities with an adequate number of lavatories and washbasins must be provided for workers in the vicinity of workstations, rest rooms, changing rooms and rooms housing showers or washbasins.

Provisions must be made for separate lavatories or separate use of lavatories for men and women.

15. Rest rooms and, or accommodation areas

15.1. Where the safety or health of workers, in particular because of the type of activity carried out or the presence of more than a certain number of employees as well as the remote nature of the site, so require, workers must be provided with easily accessible rest rooms and, or accommodation areas.

15.2. Rest rooms and, or accommodation areas must be large enough and equipped with an adequate number of tables and seats with supporting backs for the number of workers concerned.

15.3. If there are no facilities of this kind, other facilities must be provided in which workers can stay during interruptions in work.

15.4. Fixed accommodation areas unless used only in exceptional cases, must have sufficient sanitary equipment, a rest room and a leisure room.

They must be equipped with beds, cupboards, tables and seats with backs taking account of the number of workers, and be allocated taking account, where appropriate, of the presence of workers of both sexes.

15.5. Appropriate measures should be taken for the protection of non-smokers against discomfort caused by tobacco smoke in rest rooms and or accommodation areas.

16. Pregnant women and nursing mothers

Pregnant women and nursing mothers must be able to lie down to rest in appropriate conditions.

17. Handicapped workers

Workplaces must be organized to take account of handicapped workers, if necessary.

The provision applies in particular to the doors, passageways, staircases, showers, washbasins, lavatories and workstations used or occupied directly by handicapped persons.

18. Miscellaneous provisions

18.1. The surroundings and the perimeter of the site must be signposted and laid out so as to be clearly visible and identifiable.

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18.2. Workers must be provided at the site with a sufficient quantity of drinking water and possibly another suitable non-alcoholic beverage both in occupied rooms and in the vicinity of workstations.

18.3. Workers must:

(a) be provided with facilities enabling them to take their meals in satisfactory conditions,

(b) where appropriate, be provided with facilities enabling them to prepare their meals in satisfactory conditions.

PART B: SPECIFIC MINIMUM REQUIREMENT FOR ON-SITE WORKSTATIONS

Preliminary remark

If special situations so dictate, the classification of these minimum requirements into two sections, as below, should not be regarded as binding.

Section I: On-site indoor workstations

1. Stability and solidity

Premises must have a structure and stability appropriate to the nature of their use.

2. Emergency doors

Emergency doors must open outwards.

Emergency doors must not be so locked or fastened that they cannot be easily and immediately opened by any person who may require to use them in an emergency.

Sliding or revolving doors are not permitted if intended as emergency exits.

3. Ventilation

If air-conditioning or mechanical ventilation installations are used, they must operate in such a way that workers are not exposed to draughts which cause discomfort. Any deposit or dirt likely to create an immediate danger to the health of workers by polluting the atmosphere must be removed without delay.

4. Temperature

4.1. The temperature in rest areas, rooms for duty staff, sanitary facilities, canteens and first-aid rooms must be appropriate to the particular purpose of such areas.

4.2. Windows, skylights and glass partitions should allow excessive effects of sunlight to be avoided, having regard to the nature of the work and the use of the room.

5. Natural and artificial lighting

Workplaces must as far as possible have sufficient natural light and be equipped with the means of providing artificial lighting which is adequate for the purposes of protecting workers' health and safety.

6. Floors, walls, ceilings and roofs of rooms

6.1. The floors of workplaces must have no dangerous bumps, holes or slopes and must be fixed, stable and not slippery.

6.2. The surfaces of floors, walls and ceilings in rooms must be such that they can be cleaned or refurbished to an appropriate standard of hygiene.

6.3. Transparent or translucent walls, in particular all-glass partitions, in rooms or in the vicinity of workplaces and traffic routes must be clearly indicated and made of safety material or be shielded from such places or traffic routes to prevent workers from coming into contact with walls or being injured should the walls shatter.

7. Windows and skylights

7.1. It must be possible for workers to open, close, adjust or secure windows, skylights and ventilators in a safe manner.

When open, they must not be positioned so as to constitute a hazard to workers.

7.2. Windows and skylights must be designed in conjunction with equipment or otherwise fitted with devices allowing them to be cleaned without any risk to the workers carrying out this work or to workers present.

8. Doors and Gates

8.1. The position, number and dimensions of doors and gates, and the materials used in their construction, are determined by the nature and use of the rooms or areas.

8.2. Transparent doors must be appropriately marked at a conspicuous level.

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8.3. Swing doors and gates must be transparent or have see-through panels.

8.4. If transparent or translucent surfaces in doors and gates are not made of safety material and if there is a danger that workers may be injured if a door or gate should shatter, the surfaces must be protected against breakage.

9. Traffic routes

Where the use and equipment of rooms so requires for the protection of workers, traffic routes must be clearly identified.

10. Specific measures for escalators and travelators

Escalators and travelators must function safely. They must be equipped with any necessary safety devices. They must be fitted with easily identifiable and accessible emergency shut-down devices.

11. Room dimensions and air space in rooms

Workrooms must have sufficient surface area and height to allow workers to perform their work without risk to their safety, health or well-being.

Section II: On-site outdoor workstations

1. Stability and solidity.

1.1. High-level or low-level movable or fixed workstations must be solid and stable, taking account of:

- the number of workers occupying them,
- the maximum loads they may have to bear and the weight distribution,
- the outside influences to which they may be subject.
- if the support and the other components of these workstations are not intrinsically stable, their stability will have to be ensured by appropriate and safe methods of fixing to avoid any untimely or spontaneous movement of the whole or of parts of the workstations.

1.2. Checking

Stability and solidity must be checked appropriately and especially after any change in the height or depth of the workstation.

2. Energy distribution installations

2.1. On-site energy distribution installations, especially those subject to outside influences, must be regularly checked and maintained.

2.2. Installations existing before the site began must be identified, checked and clearly signposted.

2.3. Whenever possible, where overhead electric power lines exist, either they must be redirected away from the area of the site or else the current must be cut off.

If this is not possible, there will be barriers or notices to ensure that vehicles and installations are kept away. Suitable warnings and suspended protections must be provided where vehicles have to pass beneath the lines.

3. Atmospheric influences

Workers must be protected against atmospheric influences which could affect their health and safety.

4. Falling objects

Wherever technically feasible, workers must be protected by collective methods against falling objects.

Materials and equipment must be laid out or stacked in such a way as to prevent their collapsing or overturning.

Where necessary, there must be covered passageways on the side or access to danger areas must be made impossible.

5. Falls from a height

5.1. Falls from a height must be physically prevented in particular by means of solid cradles which are sufficiently high and have at least an end-board, a main handrail and an intermediate handrail or an equivalent alternative.

5.2. In principle, work at a height must be carried out only with appropriate equipment or using collective protection devices such as cradles, platforms or safety nets.

If the use of such equipment is not possible because of the nature of the work, suitable means of access must be provided and safety harnesses or other anchoring safety methods must be used.

5.3 Protection railings should be fitted around stairwells and stairs

6. Scaffolding and ladders

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6.1. All scaffolding must be properly designed, constructed and maintained to ensure that it does not collapse or move accidentally.

6.2. Work platforms, gangways and scaffolding stairways must be constructed, dimensioned, protected and used in such a way as to prevent people from falling or being exposed to falling objects.

6.3. Scaffolding must be inspected by a competent person:

- (a) before being put into service;
- (b) subsequently, at periodic intervals;
- (c) after any modification period without use, exposure to bad weather or seismic tremors, or any other circumstance which may have affected its strength or stability.

6.4. Ladders must be sufficiently strong and correctly maintained.

They must be correctly used, in appropriate places and in accordance with their intended purpose.

6.5. Mobile scaffolding must be secured against spontaneous movements.

7. Lifting equipment

7.1. All lifting devices and accessories, including their component parts, attachments, anchorings and supports, must be:

- (a) properly designed and constructed and sufficiently strong for the use to which they are put;
- (b) correctly installed and used;
- (c) maintained in good working order;
- (d) checked and subjected to periodic tests and inspections in accordance with current legislation;
- (e) operated by qualified workers who have received appropriate training.

7.2. All lifting devices and accessories must clearly display their maximum load values.

7.3. Lifting equipment and accessories may not be used for other than their intended purposes.

8. Excavating and materials-handling vehicles and machinery

8.1. All excavating and materials-handling vehicles and machinery must be:

- (a) properly designed and constructed taking account, as far as possible, of the principles of ergonomics;
- (b) kept in good working order;
- (c) used correctly.

8.2. Drivers and operators of excavating and materials-handling vehicles and machinery must be specially trained.

8.3. Preventive measures must be taken to ensure that excavating and materials-handling vehicles and machinery do not fall into the excavations or into water.

8.4. Where appropriate, excavating machinery and materials-handling machinery must be fitted with structures to protect the driver against being crushed if the machine overturns, and against falling objects.

9. Installations, machinery, equipment

9.1. Installations, machinery and equipment, including hand tools whether power-driven or not, must be:

- (a) properly designed and constructed taking accounts, as far as possible, of the principle of ergonomics;
- (b) kept in good working order;
- (c) used solely for the work for which they were designed;
- (d) operated by workers who have received appropriate training.

9.2. Installations and equipment under pressure must be checked and subjected to regular tests and inspections in accordance with existing legislation.

10. Excavations, wells, underground works, tunnels and earthworks

10.1. Suitable precautions must be taken in an excavation, well, underground, working or tunnel:

- (a) using an appropriate support or embankment;

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(b) to prevent hazards entailed in the fall of a person, materials or objects, or flooding;

(c) to provide sufficient ventilation at all workstations so as to ensure a breathable atmosphere which is not dangerous or harmful to health;

(d) to enable workers to reach safety in the event of fire or inrush for water or materials.

10.2. Before excavation starts, measures must be taken to identify and reduce to a minimum any hazard due to underground cables and other distribution systems.

10.3. Safe routes into and out of the excavation must be provided.

10.4. Piles of earth, materials and moving vehicles must be kept away from the excavation; appropriate barriers must be built if necessary.

11. Demolition work

Where the demolition of a building or construction may present a danger:

(a) appropriate precautions, methods and procedures must be adopted;

(b) the work must be planned and undertaken only under the supervision of a competent person.

12. Metal or concrete frameworks, shutterings and heavy prefabricated components

12.1. Metal or concrete frameworks and their components, shutterings, prefabricated components or temporary support, and buttresses must be erected and dismantled only under the supervision of a competent person.

12.2. Adequate precautions must be taken to protect workers against risks arising from the temporary fragility or instability of a structure.

12.3. Shutterings, temporary supports and buttresses must be devised and designed, installed and maintained so as to safely withstand any strains and stresses which may be placed on them.

13. Cofferdams and caissons

13.1. All cofferdams and caissons must be:

(a) well constructed, of appropriate, solid materials of adequate strength;

(b) appropriately equipped so that workers can gain shelter in the event of an irruption of water and materials.

13.2. The construction, installation, transformation or dismantling of a cofferdam or caisson must take place only under the supervision of a competent person.

13.3. All cofferdams and caissons must be inspected by a competent person at regular intervals.

14. Work on roofs

14.1. Where necessary to avert a risk or where the height or the slope exceed set values, collective preventive measures must be taken to prevent workers, and tools or other objects or materials, from falling.

14.2. Where workers have to work on or near a roof or any other surface made of fragile materials through which it is possible to fall, preventive measures must be taken to ensure that they do not inadvertently walk on the surface made of fragile.

