

# **R175 Safety and Health in Construction Recommendation, 1988**

## RECOMMENDATION CONCERNING SAFETY AND HEALTH IN CONSTRUCTION

Recommendation:R175

Place:Geneva

Session of the Conference:75

Date of adoption=21:06:1988

Subject classification: Construction

Subject: Occupational Safety and Health

Display the document in: French Spanish

Status: Up-to-date instrument This Recommendation was adopted after 1985 and is considered up to date.

The General Conference of the International Labour Organisation,

Having been convened at Geneva by the Governing Body of the International Labour Office, and having met in its Seventy-fifth Session on 1 June 1988, and

Noting the relevant international labour Conventions and Recommendations and, in particular, the Safety Provisions (Building) Convention and Recommendation, 1937, the Co-operation in Accident Prevention (Building) Recommendation, 1937, the Radiation Protection Convention and Recommendation, 1960, the Guarding of Machinery Convention and Recommendation, 1963, the Maximum Weight Convention and Recommendation, 1967, the Occupational Cancer Convention and Recommendation, 1974, the Working Environment (Air Pollution, Noise and Vibration) Convention and Recommendation, 1977, the Occupational Safety and Health Convention and Recommendation, 1985, the Asbestos Convention and Recommendation, 1986, and the list of occupational diseases as revised in 1980 appended to the Employment Injuries Benefits Convention, 1964, and

Having decided upon the adoption of certain proposals with regard to safety and health in construction, which is the fourth item on the agenda of the session, and

Having determined that these proposals shall take the form of a Recommendation supplementing the Safety and Health in Construction Convention,

adopts this twentieth day of June of the year one thousand nine hundred and eighty-eight, the following Recommendation, which may be cited as the Safety and Health in Construction Recommendation, 1988:

### I. Scope and Definitions

1. The provisions of the Safety and Health in Construction Convention, 1988, hereinafter

referred to as the Convention and of this Recommendation should be applied in particular to:

(a) building, civil engineering and the erection and dismantling of prefabricated buildings and structures, as defined in Article 2(a) of the Convention;

(b) the fabrication and erection of oil rigs, and of offshore installations while under construction on shore.

2. For the purposes of this Recommendation-

(a) the term construction covers:

(i) building, including excavation and the construction, structural alteration, renovation, repair, maintenance (including cleaning and painting) and demolition of all types of buildings or structures;

(ii) civil engineering, including excavation and the construction, structural alteration, repair, maintenance and demolition of, for example, airports, docks, harbours, inland waterways, dams, river and avalanche and sea defence works, roads and highways, railways, bridges, tunnels, viaducts and works related to the provision of services such as communications, drainage, sewerage, water and energy supplies;

(iii) the erection and dismantling of prefabricated buildings and structures, as well as the manufacturing of prefabricated elements on the construction site;

(b) the term construction site means any site at which any of the processes or operations described in clause (a) above are carried on;

(c) the term workplace means all places where workers need to be or to go by reason of their work and which are under the control of an employer as defined in clause (f) below;

(d) the term worker means any person engaged in construction;

(e) the term workers' representatives means persons who are recognised as such under national law or practice;

(f) the term employer means:

(i) any physical or legal person who employs one or more workers on a construction site; and

(ii) as the context requires, the principal contractor, the contractor or the subcontractor;

(g) the term competent person means a person possessing adequate qualifications, such as suitable training and sufficient knowledge, experience and skill for the safe performance of the specific work. The competent authorities may define appropriate criteria for the designation of such persons and may determine the duties to be assigned to them;

(h) the term scaffold means any temporary structure, fixed, suspended or mobile, and its supporting components which is used for supporting workers and materials or to gain access to any such structure, and which is not a "lifting appliance" as defined in clause (i) below;

(i) the term lifting appliance means any stationary or mobile appliance used for raising or lowering persons or loads;

(j) the term lifting gear means any gear or tackle by means of which a load can be attached to a lifting appliance but which does not form an integral part of the appliance or load.

3. The provisions of this Recommendation should also apply to such self-employed persons as may be specified by national laws or regulations.

## II. General Provisions

4. National laws or regulations should require that employers and self-employed persons have a general duty to provide a safe and healthy workplace and to comply with the prescribed safety and health measures.

5.

(1) Whenever two or more employers undertake activities at one construction site, they should have the duty to co-operate with one another as well as with any other persons participating in the construction work being undertaken, including the owner or his representative, in order to comply with the prescribed safety and health measures.

(2) Ultimate responsibility for the co-ordination of safety and health measures on the construction site should rest with the principal contractor or such other person as is primarily responsible for the execution of the work.

6. The measures to be taken to ensure that there is organised co-operation between employers and workers to promote safety and health at construction sites should be prescribed by national laws or regulations or by the competent authority. Such measures should include-

(a) the establishment of safety and health committees representative of employers and workers with such powers and duties as may be prescribed;

(b) the election or appointment of workers' safety delegates with such powers and duties as may be prescribed;

(c) the appointment by the employer of suitably qualified and experienced persons to promote safety and health;

(d) the training of safety delegates and safety committee members.

7. Those concerned with the design and planning of a construction project should take into account the safety and health of the construction workers in accordance with national laws, regulations and practice.

8. The design of construction equipment, tools, protective equipment and other similar equipment should take account of ergonomic principles.

### III. Preventive and Protective Measures

9. Construction work should be planned, prepared and undertaken in such a way that-

(a) risks liable to arise at the workplace are prevented as soon as possible; (b) excessively or unnecessarily strenuous work positions and movements are avoided;

(c) organisation of work takes into account the safety and health of workers; (d) materials and products are used which are suitable from a safety and health point of view;

(e) working methods are employed which protect workers against the harmful effects of chemical, physical and biological agents.

10. National laws or regulations should provide for the notification to the competent authority of construction sites of such size, duration or characteristics as may be prescribed.

11. Workers should have the right and the duty at any workplace to participate in ensuring safe working conditions to the extent of their control over the equipment and methods of work and to express views on the working procedures adopted as they may affect safety and health.

### Safety of Workplaces

12. Housekeeping programmes should be established and implemented on construction sites which should include provision for-

(a) the proper storage of materials and equipment;

(b) the removal of waste and debris at appropriate intervals.

13. Where workers cannot be protected against falls from heights by any other means-

(a) adequate safety nets or safety sheets should be erected and maintained; or

(b) adequate safety harnesses should be provided and used.

14. The employer should provide the workers with the appropriate means to enable them to use individual protective equipment and should ensure its proper use. Protective equipment and protective clothing should comply with standards set by the competent authority, taking into account as far as possible ergonomic principles.

15.

(1) The safety of construction machinery and equipment should be examined and tested by type or individually, as appropriate, by a competent person.

(2) National laws and regulations should take into consideration the fact that occupational diseases may be caused by machinery, apparatus and systems which do not take account of ergonomic principles in their design.

#### Scaffolds

16. Every scaffold and part thereof should be of suitable and sound material and of adequate size and strength for the purpose for which it is used and be maintained in a proper condition.

17. Every scaffold should be properly designed, erected and maintained so as to prevent collapse or accidental displacement when properly used.

18. The working platforms, gangways and stairways of scaffolds should be of such dimensions and so constructed and guarded as to protect persons against falling or being endangered by falling objects.

19. No scaffold should be overloaded or otherwise misused.

20. A scaffold should not be erected, substantially altered or dismantled except by or under the supervision of a competent person.

21. Scaffolds as prescribed by national laws or regulations should be inspected, and the results recorded, by a competent person-

(a) before being taken into use;

(b) at periodic intervals thereafter;

(c) after any alteration, interruption in use, exposure to weather or seismic conditions or any other occurrence likely to have affected their strength or stability.

#### Lifting Appliances and Lifting Gear

22. National laws or regulations should prescribe the lifting appliances and items of lifting gear which should be examined and tested by a competent person-

(a) before being taken into use for the first time;

(b) after erection on a site;

(c) subsequently at intervals prescribed by such national laws or regulations;

(d) after any substantial alteration or repair.

23. The results of the examinations and tests of lifting appliances and items of lifting gear carried out in pursuance of Paragraph 22 above should be recorded and, as required, made available to the competent authority and to employers and workers or their representatives.

24. Every lifting appliance having a single safe working load and every item of lifting gear should be clearly marked with its maximum safe working load.

25. Every lifting appliance having a variable safe working load should be fitted with effective means to indicate clearly to the driver each maximum safe working load and the conditions under which it is applicable.

26. A lifting appliance or item of lifting gear should not be loaded beyond its safe working load or loads, except for testing purposes as specified by and under the direction of a competent person.

27. Every lifting appliance and every item of lifting gear should be properly installed so as, inter alia, to provide safe clearance between any moving part and fixed objects, and to ensure the stability of the appliance.

28. Where necessary to guard against danger, no lifting appliance should be used without the provision of suitable signalling arrangements or devices.

29. The drivers and operators of such lifting appliances as are prescribed by national laws or regulations should be-

(a) of a prescribed minimum age;

(b) properly trained and qualified.

#### Transport, Earth-moving and Materials-handling Equipment

30. The drivers and operators of vehicles and of earth-moving or materials-handling equipment should be persons trained and tested as required by national laws or regulations.

31. Adequate signalling or other control arrangements or devices should be provided to guard against danger from the movement of vehicles and earth-moving or materials-handling equipment. Special safety precautions should be taken for vehicles and equipment when

manoeuvring backwards.

32. Preventive measures should be taken to avoid the fall of vehicles and earth-moving and materials-handling equipment into excavations or into water.

33. Where appropriate, earth-moving and materials-handling equipment should be fitted with structures designed to protect the operator from being crushed should the machine overturn, and from falling material.

#### Excavations, Shafts, Earthworks, Underground Works and Tunnels

34. Shoring or other support for any part of an excavation, shaft, earthworks, underground works or tunnel should not be erected, altered or dismantled except under the supervision of a competent person.

35.

(1) Every part of an excavation, shaft, earthworks, underground works and tunnel where persons are employed should be inspected by a competent person at the times and in the cases prescribed by national laws or regulations, and the results recorded.

(2) Work should not be commenced therein until after such an inspection.

#### Work in Compressed Air

36. The measures regarding work in compressed air prescribed pursuant to Article 21 of the Convention should include provisions regulating the conditions in which the work is to be carried out, the plant and equipment to be used, the medical supervision and control of workers and the duration of work in compressed air.

37. A person should only be allowed to work in a caisson if it has been inspected by a competent person within such preceding period as is prescribed by national laws or regulations; the results of the inspection should be recorded.

#### Pile Driving

38. All pile-driving equipment should be of good design and construction taking into account as far as possible ergonomic principles, and properly maintained.

39. Pile driving should be carried out only under the supervision of a competent person.

#### Work Over Water

40. The provisions regarding work over water prescribed in pursuance of Article 23 of the Convention should include, where appropriate, the provision and use of suitable and adequate-

(a) fencing, safety nets and safety harnesses;

(b) life vests, life preservers, manned boats (motor driven if necessary) and lifebuoys;

(c) protection against such hazards as reptiles and other animals.

#### Health Hazards

41.

(1) An information system should be set up by the competent authority, using the results of international scientific research, to provide information for architects, contractors, employers and workers' representatives on the health risks associated with hazardous substances used in the construction industry.

(2) Manufacturers and dealers in products used in the construction industry should provide with the products information on any health risks associated with them and on the precautions to be taken.

(3) In the use of materials that contain hazardous substances and in the removal and disposal of waste, the health of workers and of the public and the preservation of the environment should be safeguarded as prescribed by national laws and regulations.

(4) Dangerous substances should be clearly marked and provided with a label giving their relevant characteristics and instructions on their use. They should be handled under conditions prescribed by national laws and regulations or by the competent authority.

(5) The competent authority should determine which hazardous substances should be prohibited from use in the construction industry.

42. The competent authority should keep records of monitoring of the working environment and assessment of workers' health for a period prescribed by national laws and regulations.

43. The manual lifting of excessive weights which presents a safety and health risk to workers should be avoided by reducing the weight, by the use of mechanical devices or by other means.

44. Whenever new products, equipment and working methods are introduced, special attention should be paid to informing and training workers with respect to their implications for safety and health.

#### Dangerous Atmospheres

45. The measures regarding dangerous atmospheres prescribed pursuant to Article 28, paragraph 3, of the Convention should include prior written authority or permission from a competent person, or any other system by which entry into any area in which a dangerous atmosphere may be present can be effected only after completing specified procedures.

#### Fire Precautions

46. Where necessary to guard against danger, workers should be suitably trained in the action to be taken in the event of fire, including the use of means of escape.

47. Where appropriate suitable visual signs should be provided to indicate clearly the directions of escape in case of fire.

#### Radiation Hazards

48. Stringent safety regulations should be drawn up and enforced by the competent authority with respect to construction workers engaged in the maintenance, renovation, demolition or dismantling of any buildings in which there is a risk of exposure to ionising radiations, in particular in the nuclear power industry.

#### First Aid

49. The manner in which first-aid facilities and personnel are to be provided in pursuance of Article 31 of the Convention should be prescribed by national laws or regulations drawn up after consulting the competent health authority and the most representative organisations of employers and workers concerned.

50. Where the work involves risk of drowning, asphyxiation or electric shock, first-aid personnel should be proficient in the use of resuscitation and other life-saving techniques and in rescue procedures.

#### Welfare

51. In appropriate cases, depending on the number of workers, the duration of the work and its location, adequate facilities for obtaining or preparing food and drink at or near a construction site should be provided, if they are not otherwise available.

52. Suitable living accommodation should be made available for the workers at construction sites which are remote from their homes, where adequate transportation between the site and their homes or other suitable living accommodation is not available. Men and women workers should be provided with separate sanitary, washing and sleeping facilities.

#### IV. Effect on Earlier Recommendations

53. This Recommendation supersedes the Safety Provisions (Building) Recommendation, 1937, and the Co-operation in Accident Prevention (Building) Recommendation, 1937.