

L.N. 45 of 2002

**OCCUPATIONAL HEALTH AND SAFETY AUTHORITY
ACT, 2000
(ACT NO. XXVII OF 2000)**

**Work Place (Provision of Health and, or Safety Signs)
Regulations, 2002**

In exercise of the powers conferred by article 12 of the Occupational Health and Safety Authority Act, 2000, the Deputy Prime Minister and Minister for Social Policy, in consultation with the Occupational Health and Safety Authority, has made the following regulations :

1. The title of these regulations is the Work Place (Provision of Health and, or Safety Signs) Regulations, 2002. Citation.

2. (1) In these regulations, unless the context otherwise requires - Interpretation.

“acoustic signal” means a coded sound signal which is released and transmitted by a device designed for that purpose, without the use of a human or artificial voice;

“the Act” means the Occupational Health and Safety Authority Act, 2000;

“dangerous substance” means any substance which is explosive, oxidising, flammable or easily flammable, or which has toxic, harmful, corrosive or irritant properties in relation to persons;

“emergency escape or first-aid sign” means a sign giving information on escape routes, emergency exits or first aid or rescue facilities;

“hand signal” means a movement or a position of the arms or hands or a combination thereof, in coded form, for guiding persons who are carrying out manoeuvres which constitute a hazard, a danger, or a risk to the health or safety of persons at work;

“health and, or safety sign” means a sign referring to a specific object, activity or situation which provides information or instructions about health and or safety by means of, but not limited to, a signboard, a colour, an illuminated sign, an acoustic signal, a verbal communication or a hand signal, as the case may be, and shall include, but shall not be limited to, a mandatory sign, a prohibition sign and a warning sign;

“illuminated sign” means a sign produced by a device made of transparent or translucent materials which are illuminated from the inside or the rear in such a way as to give the appearance of a luminous surface;

“information sign” means a sign providing information other than that given by a prohibition sign, a warning sign, or by an emergency escape or first-aid sign;

“mandatory sign” means a sign prescribing a specific form of behaviour;

“prohibition sign” means a sign prohibiting an activity or a form of behaviour likely to cause a risk to health or safety, or to incur danger;

“safety colour” means a colour to which a specific meaning is assigned;

“signboard” means a sign which provides specific information or instruction by a combination of geometric shapes, colours, symbols or pictograms, and which is rendered visible by lighting of sufficient intensity;

“substance” means a chemical element and, or its compounds, whether naturally occurring or produced by an industrial process, and shall include mixtures or solutions of two or more substances;

“supplementary signboard” means a signboard used together with another signboard, which provides supplementary information;

“symbol” or “pictogram” means a figure which describes a situation or which prescribes specific behaviour and which is used on a signboard or illuminated surface;

“verbal communication” means a predetermined spoken

message communicated by a human or artificial voice;

“warning sign” means a sign giving a warning of a hazard, a risk to health or safety, or to a danger.

(2) In these regulations, words and expressions shall have the same meaning as defined in article 2 of the Act.

3. (1) These regulations shall apply to all workplaces, and to all signs, except as provided in sub-regulation (3) heretof, and shall be considered as the minimum requirements applicable to all health and, or safety signs used at workplaces. Application

(2) Every health and, or safety sign used at work shall fulfil the minimum requirements set out in Schedules I to IX to these regulations.

(3) These regulations shall not apply to signs used for regulating road, sea or air travel:

Provided that where in a place of work there is a risk to the health or safety of any person, including a pedestrian, resulting from the presence of, or from the movement of traffic, it shall be the duty of an employer to put up the appropriate health and, or safety signs:

Provided further, and without prejudice to the provisions of Schedule V, the signs used for road, rail, inland waterway and for sea and air transport, shall be installed, wherever appropriate for such forms of transport, inside undertakings and, or firms.

(4) These regulations shall not apply to signs used in connection with the placing on the market, supply, or during the course of transport of any dangerous substance, preparation, product and, or equipment except to the extent of any reference to these regulations in any other regulation issued under the Act.

4. (1) It shall be the duty of an employer to provide and to ensure the presence at all times of suitable and appropriate health and, or safety signs at every place of work under his control, and in all cases where hazards cannot be avoided or adequately reduced by techniques for collective protection or measures, methods or procedures used in the organization of work, or when the risks resulting from such hazards cannot be adequately reduced except through the provision of the appropriate signs: General duties.

Provided that, without prejudice to the generality of the foregoing,

the provision by an employer of health and, or safety signs shall not exempt the employer from carrying out an adequate and appropriate risk assessment which takes into account the nature of the activities carried out, or from adopting all appropriate techniques for collective protection, or from instituting any preventive measure, or any other method or procedure used in the organization of work by which to avoid or to adequately reduce the risks resulting from the presence of hazards at the place of work.

(2) It shall be the duty of an employer to appropriately maintain any health and, or safety sign installed at a place of work, and to replace any sign which is torn, defaced or has otherwise become illegible.

(3) It shall be the duty of an employer to ensure that all workers have been informed, adequately instructed and trained, in a manner which is comprehensible and relevant, in the meaning of health and, or safety signs including those signs incorporating words, and on the general and specific behaviour and on the measures required to be taken in connection with such signs.

(4) It shall be the duty of an employer to consult workers and, or workers' health and safety representatives, who shall also be afforded every reasonable opportunity to make proposals and to participate in discussions on matters concerning the implementation of these regulations.

Onus of proof

5. 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.

Offences.

6. Any breach of any provision of these regulations shall be deemed an offence.

Repeals.
L.N. 65 of 2000.

7. The Provision of Health and Safety Signs at Work Places Regulations, 2000 are hereby repealed.

Schedule I

General minimum requirements concerning health and, or safety signs at work.

1.0. Preliminary remarks.

1.1. Where health and, or safety signs are required in terms of regulation 4 of these regulations, they must conform to the specific requirements in Schedules II to IV.

1.2. This Schedule includes those requirements for health and, or safety signs, describes their different uses and gives general rules on the interchanging and combining of signs.

1.3. Health and, or safety signs must be used only to convey the message or information specified in the Directive.

2.0. Types of signs.

2.1. Permanent signs.

2.1.1. Permanent signboards must be used for signs relating to prohibitions, warnings and mandatory requirements and the location and identification of emergency escape routes and first-aid facilities.

Signboards and, or a safety colour must be used to mark permanently the location and identification of fire-fighting equipment.

2.1.2. Signboards on containers and pipes must be placed as laid down in Schedule III.

2.1.3. Places where there is a risk of colliding with obstacles or of falling must be permanently marked with a safety colour and, or with signboards.

2.1.4. Traffic routes must be permanently marked with a safety colour.

2.2. Occasional signs.

2.2.1. Illuminated signs, acoustic signals and, or verbal communication must be used where the occasion requires, taking into account the possibilities for interchanging and combining signs set out in paragraph 3 of this Schedule, to signal a danger, to call persons to take a specific course of action and for the emergency evacuation of persons.

2.2.2. Hand signals and, or verbal communication must be used where the occasion requires, to guide persons carrying out hazardous or dangerous manoeuvres.

3.0. Interchanging and combining signs.

3.1. Any one of the following may be used if equally effective:

- a safety colour or a signboard to mark places where there is an obstacle or a drop;
- illuminated signs, acoustic signals or verbal communication;
- hand signals or verbal communication.

3.2. Some types of signs may be used together;

- illuminated signs and acoustic signals;
- illuminated signs and verbal communication;
- hand signals and verbal communication.

4.0. The instructions in the following table shall apply to all signs incorporating a safety colour:

Colour	Meaning or purpose	Instructions and information
Red	Prohibition sign	Dangerous behaviour.
	Danger alarm	Stop, shutdown, emergency cut-out devices. Evacuate.
	Fire-fighting equipment	Identification and location.
Yellow or amber	Warning sign	Be careful, take precautions. Examine.
Blue	Mandatory sign	Specific behaviour or action. Wear personal protective equipment.
Green	Emergency escape, first aid sign	Doors, exits, routes, equipment, facilities.
	No danger	Return to normal.

5.0. The effectiveness of a sign must not be adversely affected by the presence of another emission source of the same type which interferes with visibility or audibility; therefore, in particular:

- the placing of too many signs too close together should be avoided;
- two illuminated signs which are likely to be confused are not to be used at the same time;

B 470

- an illuminated sign is not to be used in the proximity of another similar illuminated source;

- two acoustic signals are not to be used at the same time;

- an acoustic signal is not to be used if there is too much ambient noise.

5.1. The effectiveness of a sign must similarly not be adversely affected by poor design, insufficient number, incorrect positioning, poor state of repair or incorrect functioning of the signs or signalling devices.

6.0. Depending on requirements, signs and signalling devices must be cleaned, maintained, checked, repaired, and if necessary replaced on a regular basis to ensure that they retain their intrinsic and, or functional qualities.

7.0. The number and positioning of signs or signalling devices to be installed will depend on the extent of the hazards or dangers or on the zone to be covered.

8.0. Signs requiring some form of power must be provided with a guaranteed emergency supply in the event of a power cut, unless the hazard has thereby been eliminated.

9.0. The triggering of an illuminated sign and, or acoustic signal indicates when the required action should start; the sign or signal must be activated for as long as the action requires. Illuminated signs and acoustic signals must be reactivated immediately after use.

10.0. Illuminated signs and acoustic signals must be checked to ensure that they function correctly and that they are effective before they are put into service and subsequently at sufficiently frequent intervals.

11.0. If the hearing or the sight of the workers concerned is impaired, including impairment caused by the wearing of personal protective equipment, measures must be taken to supplement or replace the signs concerned.

12.0. Areas, rooms or enclosures used for the storage of significant quantities of dangerous substances or preparations must be indicated by a suitable warning sign taken from paragraph 3.2. of Schedule II to these regulations, or marked as provided in section I of Schedule III to these regulations, unless the labelling of the individual packages or containers is adequate for this purpose.

Schedule II

General minimum requirements concerning signboards.

1.0. Intrinsic features.

1.1. The shape and colours of signboards are set out in paragraph 3 of this Schedule, in accordance with their specific object (signboards indicating a prohibition, a warning, a mandatory action, an escape route, an emergency or fire-fighting equipment).

1.2. Pictograms must be as simple as possible and should contain only essential details.

1.3. The pictograms used may be slightly different from or more detailed than those shown in paragraph 3 of this Schedule, provided that they convey the same meaning and that no difference or adaptation obscures the meaning.

1.4. Signboards are to be made of shock and weather-resistant material suitable for the surrounding environment.

1.5. The dimensions and colorimetric and photometric features of signboards must be such that they can be easily seen and understood.

2.0. Conditions of use.

2.1. Signboards are in principle to be installed at a suitable height and in a position appropriate to the line of sight, taking account of any obstacles, either at the access point to an area in the case of a general hazard, or in the immediate vicinity of a specific hazard or object and in a well-lit and easily accessible and visible location.

Phosphorescent colours, reflective materials or artificial lighting should be used where the level of natural light is poor.

2.2. The signboard must be removed when the situation to which it refers ceases to exist.

3.0. Signboards to be used.

3.1. *Prohibitory signs.*

Intrinsic features:

- round shape

- black pictogram on white background, red edging and diagonal line (the red part to take up at least 35% of the area of the sign).

B 472

Signs to be used:



No smoking



Smoking and naked flames forbidden



No access for pedestrians



Do not extinguish with water



Not drinkable



No access for unauthorised persons



No access for industrial vehicles



Do not touch

3.2 Warning signs.

- Intrinsic features:

- triangular shape

- black pictogram on a yellow background with black edging (the yellow part to take up at least 50% of the area of the sign)



Flammable material



Explosive material



Toxic material



Corrosive material



Radioactive material



Overhead load



Industrial vehicles



Danger: electricity



General danger



Laser beam



Oxidant material



Non-ionising
radiation



Strong magnetic field



Obstacles



Drop



Biological risk



Low temperature



Harmful or irritant material

3.3 *Mandatory signs.*

- Intrinsic features:
- round shape
- white pictogram on a blue background (the blue part to take up at least 50% of the area of the sign)



Eye protection must be worn



Safety helmet



Ear protection must be worn



Respiratory equipment
must be worn



Safety boots
must be worn



Safety gloves
must be worn



Safety overalls
must be worn



Face protection
must be worn



Safety harness
must be worn



Pedestrians must
use this route

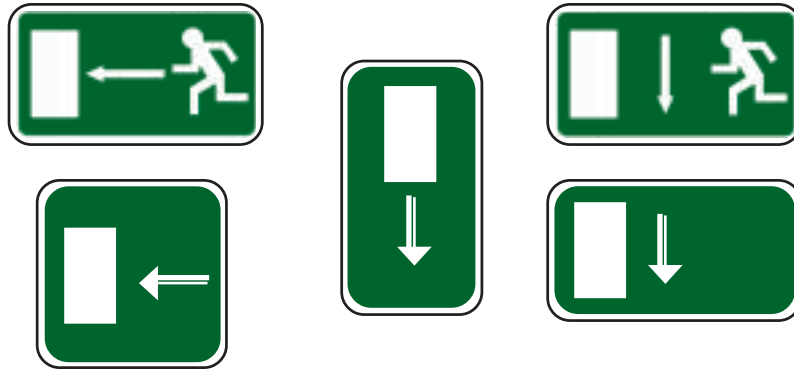


General mandatory sign
(to be accompanied where
necessary by another sign)

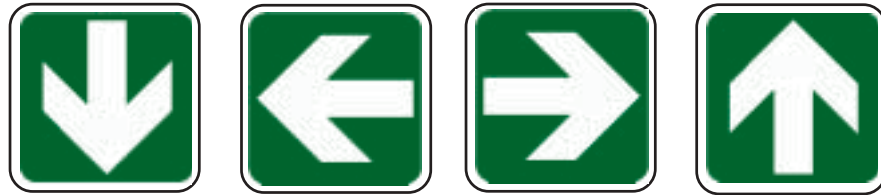
3.4 *Emergency escape or first-aid signs*

- Intrinsic features:
- rectangular or square shape
- white pictogram on a green background (the green part to take up at least 50% of the area of the sign)

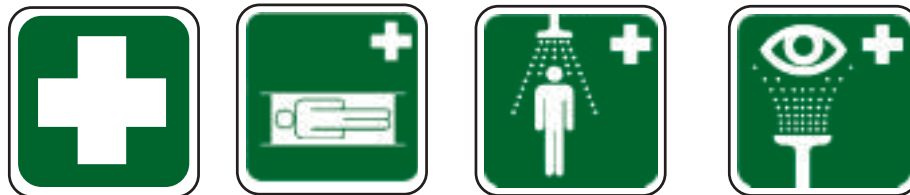
B 476



Emergency exit/escape route



This way
(supplementary information sign)



First-aid post

Stretcher

Safety shower

Eyewash



Emergency telephone for first-aid or escape

3.5 *Fire-fighting signs.*

- Intrinsic features:
- rectangular or square shape
- white pictogram on a red background (the red part to take up at least 50% of the area of the sign)



Fire hose



Ladder



Fire-extinguisher



Emergency fire
telephone



This way
(supplementary information sign)

Schedule III
Minimum requirements concerning health and safety signs on containers and pipes.

1.0. Preliminary remarks.

1.1. The provisions of this Schedule shall apply to signs on containers used at work for dangerous substances, containers used for the storage of such dangerous substances, together with the visible pipes containing or transporting dangerous substances.

The provisions of the preceding paragraph shall not apply to containers used at work for brief periods nor to containers whose contents change frequently, provided that alternative adequate measures are taken, in particular for information and, or training, which guarantee the same level of protection.

1.2. The signs referred to in paragraph 1.1. of this Schedule may be:

- supplemented by additional information, such as the name and, or formula of the dangerous substance and details of the hazard.

2.0. Signs must be mounted as follows:

- on the visible side(s);

- if unpliant, self-adhesive or painted form.

3.0. Where appropriate, the signs referred to in paragraph 1.1. of this Schedule must have the intrinsic features defined in paragraph 1.4 of Schedule II and must fulfil the conditions of use for signboards laid down in paragraph 2 of Schedule II.

4.0. Without prejudice to the preceding paragraphs, the signs used on pipes must be positioned visibly in the vicinity of the most dangerous points, such as valves and joint, and at reasonable intervals.

5.0. Areas, rooms or enclosures used for the storage of significant quantities of dangerous substances must be indicated by a suitable warning sign taken from paragraph 3.2 of Schedule II, or marked as provided in paragraph 1 of Schedule III, unless the labelling of the individual packages or containers is adequate for this purpose, taking into account paragraph 1.5 of Schedule II with regard to dimensions.

Stores of a number of dangerous substances may be indicated by the warning sign for general danger.

The signs referred to above must be positioned, as appropriate, near the storage area on the door leading into the storage room.

Schedule IV
Minimum requirements for the identification and location of
fire-fighting equipment.

1.0. Preliminary remark.

This Schedule applies to equipment used exclusively for fire-fighting purposes.

2.0. Fire-fighting equipment must be identified by using a specific colour for the equipment and placing a location signboard, and, or by using a specific colour for the places where such equipment is kept, or their access points.

3.0. The colour for identifying this equipment is red.

The red area must be sufficiently large to allow the equipment to be identified easily.

4.0. The signboards provided for in paragraph 3.5 of this Schedule must be used to mark the locations of this equipment.

Schedule V

Minimum requirements governing signs used for obstacles and dangerous
locations, and for marking traffic routes.

1.0. Signs for obstacles and dangerous locations.

1.1. Places where there is a risk of colliding with obstacles, of falling or of objects falling, should be marked with alternating yellow and black, or red and white stripes in built-up zones in the undertaking to which workers have access during their work.

1.2. The dimensions of the markings must be commensurate with the scale of the obstacle or dangerous location in question.

1.3. The yellow and black or red and white stripes must be at an angle of approximately 45° and of more or less equal size.

1.4. Example:



2.0 Marking of traffic routes.

2.1. Where the use and equipment of rooms so requires for the protection of workers, traffic routes for vehicles must be clearly identified by continuous stripes in a clearly visible colour, preferably white or yellow, taking into account the colour of the ground.

2.2. The stripes must be located so as to indicate the necessary safe distance between the vehicles and any object which may be near by, and between pedestrians and vehicles.

2.3. Permanent traffic routes in built-up areas outdoors should, as far as is practicable, be similarly marked, unless they are provided with suitable barriers or pavements.

Schedule VI Minimum requirements for illuminated signs.

1.0. Intrinsic features.

1.1. The light emitted by a sign must produce a luminous contrast which is appropriate to its environment, in accordance with the intended conditions of use of the sign, but without producing glare for an excessive amount of light or poor visibility as a result of insufficient light.

1.2. The luminous area emitting a sign may be of a single colour or contain a pictogram on a specified background.

1.3. The single colour must correspond to the table of colours and their meanings set out in paragraph 4 of Schedule I of these regulations.

1.4. When the sign contains a pictogram, the latter must comply with all the relevant conditions set out in Schedule II.

2.0. Specific rules governing use.

2.1. If a device can emit both continuous and intermittent signs, the intermittent sign should be used to indicate a higher level of danger or a more urgent need for the requested/imposed intervention or action than is indicated by the continuous sign.

The duration of each flash and the frequency of the flashers of an intermittent illuminated sign must be such as to:

- ensure the proper perception of the message, and
- avoid any confusion either between different illuminated signs or with a continuous illuminated sign.

2.2. If a flashing sign is used instead of, or together with, an acoustic signal, identical codes must be used.

2.3. Devices for emitting flashing signs in the event of grave danger must be under special surveillance or be fitted with an auxiliary lamp.

Schedule VII

Minimum requirements for acoustic signs.

1.0. Intrinsic features.

1.1. Acoustic signals must:

- have a sound level which is considerably higher than the level of ambient noise, so that it is audible without being excessive or painful;

- be easily recognisable, particularly in terms of pulse length and the interval between pulses or groups of pulses, and be clearly distinct from any other acoustic signal and ambient noises.

1.2. If a device can emit an acoustic signal at variable and constant frequencies, the variable frequency should be used to indicate a higher level of danger or a more urgent need for the requested / imposed intervention or action in relation to the stable frequency.

2.0. Code.

2.1. The signal for evacuation must be continuous.

Schedule VIII

Minimum requirements for verbal communication.

1.0. Intrinsic features.

1.1. Verbal communication between a speaker or emitter and one or more hearers is to take the form of (sometimes coded) short texts, phrases, groups of words and, or individual words.

1.2. Spoken messages are to be as short, simple and clear as possible; the verbal skills of the speaker and the hearing abilities of the hearer(s) must be such as to ensure reliable verbal communication.

1.3. Verbal communication is direct (by means of the human voice) or indirect (by means of a human or artificial voice which is broadcast by whatever means is appropriate).

2.0. Specific rules governing use.

2.1. The persons involved must have a good knowledge of the language used so that they are able to pronounce and understand the spoken message correctly and consequently behave in a way which is appropriate to health and, or safety.

2.2. If verbal communication is used instead of, or together with gestures, code words should be used. Examples of such code words include:

start	to indicate the start of a command
stop	to interrupt or end a movement
end	to stop the operation
raise	to have a load raised
lower	to have a load lowered
forwards	to be co-ordinated with the corresponding hand signals
backwards	to be co-ordinated with the corresponding hand signals
right	to be co-ordinated with the corresponding hand signals
left	to be co-ordinated with the corresponding hand signals
danger	for an emergency stop
quickly	to speed up a movement for safety reasons

Schedule IX

Minimum requirements for hand signals.

1.0. Features.

1.1. Hand signals must be precise, expansive, easy to make and to understand, and clearly distinct from other such signals.

1.2. Where both arms are used at the same time, they must be moved symmetrically and for giving one sign only.

1.3. The signals used may vary slightly from or be more detailed than those shown in section 3 of this Schedule, provided that they fulfil the conditions given above. They must however, be equally meaningful and comprehensible.

2.0. Specific rules governing use.

2.1. The person giving the signs, hereinafter referred to as the signalman, will use arm & hand movements to give manoeuvring instructions to the person receiving the signs, hereinafter referred to as the operator.

2.2. The signalman must be able to monitor all manoeuvres visually without being endangered thereby;

2.3. The signalman's duties must consist exclusively of directing manoeuvres and ensuring the safety of workers in the vicinity.

2.4. If the conditions described in paragraph 2.2. above are not fulfilled, one or more extra signalmen should be deployed.

2.5. The operator must interrupt the ongoing manoeuvre in order to request new instructions when he is unable to carry out the orders he has received with the necessary safety guarantees.

3.0. Accessories.






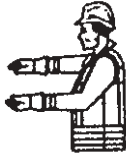

3.1. The operator must be able to recognise the signalman without difficulty.

3.2. The signalman is to wear one or more appropriate distinctive items, e.g. a jacket, helmet, sleeves or armbands, or carry bats.

3.3. The distinctive items are to be brightly coloured, preferably all of the same colour and for the exclusive use of signalman.

4.0. Coded signals to be used.

4.1. The following set of coded signals are without prejudice applicable under any other regulations, used for the same manoeuvres in certain sectors:

Meaning	Description	Illustration
A. General Signals		
START Attention Start of command	both arms are extended horizontally with the palms facing forward	
STOP Interruption End of movement	the right arm points upwards with the palm facing forwards	
END of the operation	both hands are clasped at chest height	
B. Vertical Movements		
RAISE	the right arm points upwards with the palm facing forward and slowly makes a circle	
LOWER	the right arm points downwards with the palm facing inwards and slowly makes a circle	
VERTICAL DISTANCE	the hands indicate the relevant distance	
Horizontal Movements		
C. MOVE FORWARDS	both arms are bent with the palms facing upwards and the forearms make slow movements towards the body	

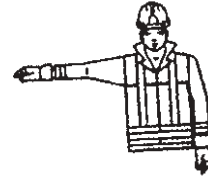
MOVE BACKWARDS

both arms are bent with the palms facing downwards, and the forearms make slow movements away from the body



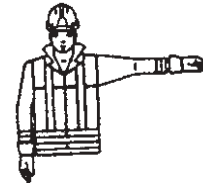
RIGHT
to the signalman's

the right arm is extended more or less horizontally with the palm facing downwards and slowly makes small movements to the left



LEFT
to the signalman's

the left arm is extended more or less horizontally with the palm facing downwards and makes small movements to the right



HORIZONTAL
DISTANCE

the hands indicate the relevant distance



D.

Danger

DANGER
Emergency stop

both arms point upwards with the palms facing forwards



QUICK

all movements faster

SLOW

all movements slower

B 486