

Requirements for the use of safety and/or health signs at work*

Regulation No. 75 of the Minister of Social Affairs of 30 November 1999

This regulation is enacted on the basis of section 4 (4) of the Occupational Health and Safety Act (RT I 1999, 60, 616).

§ 1. Scope of application

(1) These requirements constitute the minimum requirements for the use of safety and/or health signs in the workplace.

(2) The requirements shall not apply to signs for the placing on the market of dangerous substances and preparations, products and/or equipment, or to signs for the regulation of road, rail, inland waterway, sea or air transport.

§ 2. Application of safety and/or health signs

(1) A safety and/or health sign is a marking, sign, colour, illuminated sign, acoustic signal, verbal communication or hand signal used depending on the situation to refer to a specific object, activity or situation, and guarantee the necessary information or instructions about safety.

(2) Employers shall, on the basis of a risk evaluation, provide safety and/or health signs where hazards cannot be adequately reduced by techniques for collective protection or measures, methods or procedures used in the organization of work, or ensure that such signs are in place.

(3) In companies where land, sea or air transport are used, signs, road signs or illuminated signs required for the regulation of traffic shall be installed in traffic areas, without neglecting subsections 1-3 of section 13 of this regulation.

(4) Employers shall inform workers and working environment representatives of all safety and/or health signs in use and to be amended, or of new safety and/or health signs to be introduced, and provide training concerning the meaning of the signs and the rules of behaviour in force in the area it refers to.

(5) In order to adopt a safety and/or health sign, the employer must consult with employees or working environment representatives, and grant them the opportunity to participate in the solution of questions connected with the introduction of safety and/or health signs.

§ 3. Types of safety and/or health signs

(1) Safety and/or health signs are divided into permanent and occasional signs.

(2) Permanent signs are used:

- 1) in the case of prohibitions, warnings and mandatory requirements;
- 2) to mark emergency escape routes and exits, first aid and fire fighting facilities and their locations;
- 3) to mark containers and pipes;
- 4) to mark obstacles, hazardous places and traffic routes.

(3) The following are occasional signs:

- 1) illuminated signs, acoustic signals or verbal communication to alert workers to danger, call persons to take a specific course of action and for the emergency evacuation of persons from a dangerous area;
- 2) verbal communication or hand signals to guide persons carrying out hazardous or dangerous manoeuvres.

§ 4. Interchanging and combining signs

(1) The signs with the same meaning may be used interchangeably:

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

(2) The following signs may be used together:

- 1) illuminated signs and acoustic signals;
- 2) illuminated signs and verbal communication;
- 3) hand signals and verbal communication.

§ 5. Colours used in safety and/or health signs

Colour	Meaning or purpose	Instructions and information
Red	Prohibition sign	Dangerous behaviour
	Danger alarm	Stop, shutdown, emergency cutout

		devices Order to evacuate danger zone
	Fire-fighting equipment	Identification and location
Yellow or orange	Warning sign	Be careful, take precautions, examine the situation
Blue	Mandatory sign	Specific compulsory behaviour or action Obligation to wear personal protective equipment
Green	Emergency escape, first aid signs	Doors, exits, routes
		Identification and location of first aid facilities
	No danger	Return to normal

§ 6. Ensuring of effectiveness of a safety and/or health sign

(1) The following measures must be implemented to ensure the effectiveness of signs:

- 1) signs and signalling devices must be cleaned, maintained, checked, repaired, and if necessary repaired, painted or replaced on a regular basis to ensure that they retain their intrinsic and/or functional qualities;
- 2) 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;
- 3) Illuminated signs or acoustic signalling devices 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;
- 4) The triggering of an illuminated sign and/or acoustic signal warns of danger or indicates when the required action should start. The sign or signal must be activated for as long as the action requires. After the need has passed, the illuminated signal or acoustic signal must be disconnected immediately;
- 5) 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;
- 6) 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.

(2) The effectiveness of a sign must not be adversely affected by:

- 1) the presence of another light or noise emission source of the same type which interferes with visibility or audibility, and thus the following are prohibited: the placing of many illuminated signs or acoustic signalling devices in close proximity; the simultaneous use of two or more illuminated signals that are likely to be confused; the use of an illuminated sign in the proximity of another similar illuminated source; the simultaneous use of two acoustic signals and the use of an acoustic signal if there is too much ambient noise in the surrounding working environment;
- 2) poor design, insufficient number, incorrect positioning, poor state of repair or incorrect functioning of the signals.

§ 7. Intrinsic features of signboards

- (1) Signboards offer special safety information through a combination of geometrical shape, colours and symbols or pictographs.
- (2) Signboards are divided according to function into signboards indicating a prohibition, a warning, a mandatory action, an escape route, an emergency or fire-fighting equipment. Their shape and colour are described in section 9 (1) – (5) of this regulation.
- (3) Pictograms must be as simple as possible and should contain only essential details. The pictograms used may be slightly different from or more detailed than prescribed in section 9 (1) – (5), provided that they convey the same meaning and that no difference or adaptation obscures the meaning.
- (4) Signboards are to be made of shock and weather-resistant material suitable for the surrounding

environment.

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

§ 8. The use of signboards

(1) If there are danger zones in the workplace, the signboard shall be placed at the entrance to that area, and in the case of a specific hazard, near the source of the danger.

(2) In order to ensure good visibility, signboards shall be installed in well-lit places and at a height appropriate to the line of sight, avoiding the obstruction of the signal by structures or objects. Phosphorescent colours, reflective materials or artificial lighting should be used where the level of natural light is poor, observing the requirements for lighting in the workplace. The signboard must be easily accessible for maintenance.

(3) In installing signboards, the maximum distance at which they can be seen must be taken into consideration, depending on the size of the sign:

Prohibition and mandatory signs	Diameter (mm)	Maximum distance from which the sign can be seen (m)
	50	2
	100	4
	200	8
	315	13
	400	16
Warning signs	Length of side (mm)	Maximum distance from which the sign can be seen (m)
	50	2
	100	3
	200	7
	315	10
	400	13
Emergency exit, first aid and fire fighting signs	Length of sides a×b (mm)	Maximum distance from which the sign can be seen (m)
	100 × 100	10
	100 × 200	10
	148 × 148	15
	148 × 297	15
	200 × 200	20
	200 × 400	20
	250 × 250	25

(4) Signboards shall be removed when the situation to which it refers ceases to exist.

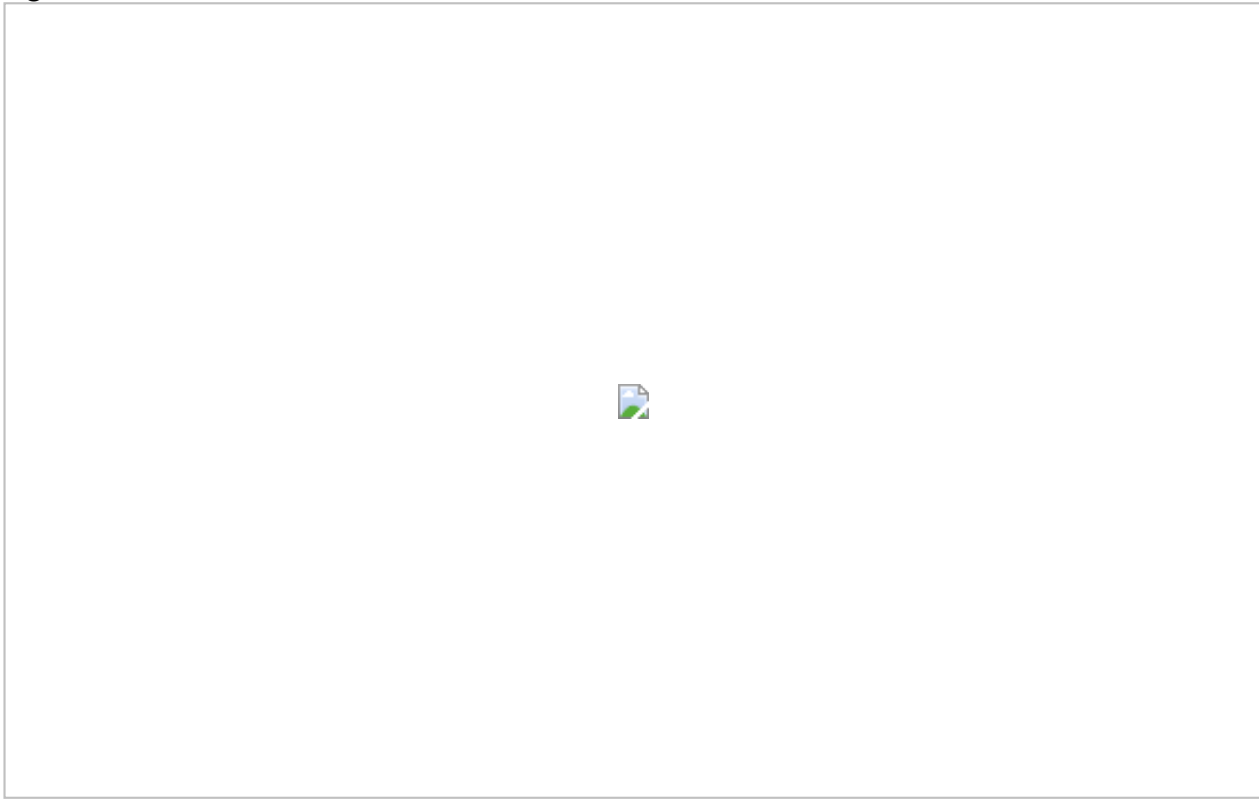
(5) Signboards may be supplemented by an information board that duplicates the meaning of the sign in written words, offers additional information about the area to which the sign refers, or directs persons towards the room or facility designated on the sign.

§ 9. Safety signs used

(1) Prohibitive signs

The distinctive features of prohibitive signs are their round shape, with black pictograph on white

background and red border and diagonal line. The red part shall form at least 35% of the area of the sign.



No smoking; No smoking and/or open fires; No entry for pedestrians; Do not extinguish with water; Non-potable water; Authorised personnel only; No entry by forklifts; Do not touch.

(2) Warning signs

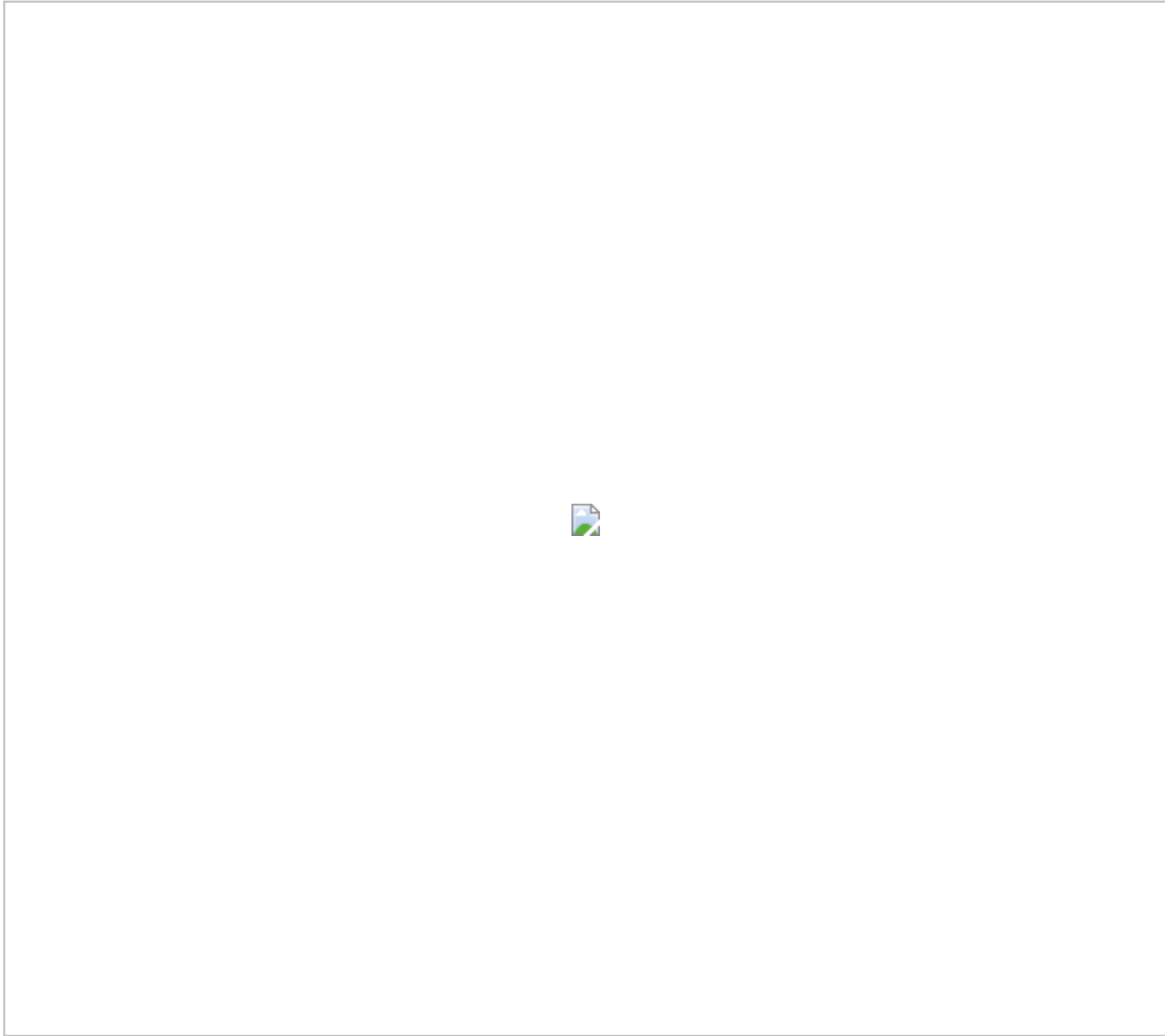
The distinctive features of warning signs are their triangular shape, with black pictograph on yellow background and black border. The yellow portion shall form at least 50% of the area of the sign.



Flammable substance, Explosive substance, Poisonous substance, Corrosive substance,
Radioactive substance, Cargo overhead, Moving forklift, Electrical hazard,
Danger zone, Laser radiation, Oxidising substance, Non-ionic radiation,
Strong magnetic field, Obstruction, Danger of falling,
Biological hazard, Low temperature, Hazardous substance or irritant.

(3) Mandatory signs

The distinctive features of mandatory signs are their round shape, with white pictograph on blue background. The blue part shall form at least 50% of the area of the sign.



Wear eye protection, Wear helmet, Wear hearing protection, Wear respiratory protection, Wear protective footwear, Wear protective gloves, Wear protective clothing, Wear facial protection, Wear protective belt, Pedestrian route, General mandatory sign (if necessary used together with another sign)

(4) Emergency escape and first aid signs

The distinctive features of the signs are their rectangular or square shape, with white pictograph on green background. The green part of the sign shall form at least 50% of the sign's area.



Emergency route or exit,
First aid, Stretcher, Safety shower,
Eye wash, Emergency phone,
Here/down, Left, Right, Ahead/above.

(5) Fire fighting signs

The distinctive features of fire fighting signs are their rectangular or square shape, with white pictograph on red background. The red part must form at least 50% of the sign's area.



Fire fighting hose, Fire fighting ladder, Fire extinguisher, Emergency phone,
Here/below, Left, Right, Ahead/above.

§ 10. Labelling of containers and pipes

(1) Containers used for dangerous substances or preparations and the visible pipes containing or transporting dangerous substances and preparations must, in accordance with the requirements established by law, be labelled with a black pictograph on an orange background, or with a symbol and its meaning in words.

(2) The requirement stipulated in subsection 1 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.

(3) The labels required in subsection 1 may be:

- 1) replaced by the warning signs specified in section 9 (2), using the same pictograms or symbols;
- 2) supplemented by additional information (such as the name and/or formula of the dangerous substance or preparation and details of the hazard, or other information);
- 3) for the transporting of containers at the place of work, supplemented or replaced by signs for the transport of dangerous substances or preparations.

(4) In addition to the requirement specified in subsection 1, pipes will be labelled with a permanent paint or coloured adhesive label possessing an arrow indicating the direction of flow of the substance, in accordance with the following table:

Substance flowing through the pipes	Colour	Colour of arrow
water	green	white
steam	red	white
air	black	black
combustible gases	yellow	red
non-combustible gases	black	white
acids	orange	white
bases	violet	white
combustible liquids	brown	red
non-combustible liquids	black	white

oxygen blue white

(5) Labels attached to / marked on a container or pipe must be located in a clearly visible position, and be resistant to weather and the environment. Labels on pipes shall be repeated at an expedient distance, and in the direct vicinity of the most dangerous places, for instance valves and connecting mountings.

(6) 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 section 9 (2), or marked as provided in subsection 1 of this section, unless the labelling of the individual packages or containers is adequate for this purpose, taking into account the provisions of section 7 (5) and section 8 (3) with regard to dimensions. Stores of a number of dangerous substances or preparations may be indicated by the warning sign for “danger zone”. The signs or labels referred to above must be positioned, as appropriate, near the storage area or on the door leading into the storage room.

§ 11. Identification of fire fighting equipment

The signs described in section 9 (5) shall be used for the identification of fire fighting equipment and their location.

§ 12. Marking of obstacles and dangerous locations

(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.

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

(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.

(4) Example of marking:



§ 13. Marking of traffic routes

(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, in order to achieve the required contrast.

(2) The stripes must be located so as to ensure the necessary safe distance between the vehicles and any object which may be nearby, and employees.

(3) Permanent traffic routes on a company’s territory should be marked in accordance with the requirements of subsections 1 and 2, unless they are provided with suitable barriers or pavements.

§ 14. Intrinsic features of illuminated signs

(1) An illuminated sign is 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 that the symbol or pictograph on the surface is highlighted.

(2) 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, i.e. ensure good visibility.

(3) The luminous area emitting a sign may be of a single colour or contain a symbol or pictogram on a specified background.

(4) The single colour must correspond to the table of colours and their meanings set out in section 5.

(5) The pictogram on an illuminated sign must comply with the rules set out in subsections 7 (3) and

(4).

§ 15. Use of illuminated signs

(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.

(2) 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.

(3) If a flashing sign is used instead of or together with an acoustic signal, signals of identical length and frequency must be used.

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

§ 16. Intrinsic features of acoustic signals

(1) Acoustic signals are coded sound signals that are released and transmitted by a device designed for that purpose, without the use of a human or artificial voice;

(2) Acoustic signals must:

1) have a sound level which is considerably higher than the level of ambient noise, in order to ensure audibility, without being excessively loud or painful to the ear;

2) be easily recognizable, 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.

(3) 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.

(4) The signal for evacuation from a danger zone in the event of serious and unavoidable danger must be a continuous tone.

§ 17. Intrinsic features of verbal communication

(1) Verbal communication is a predetermined spoken message communicated by a human or artificial voice.

(2) 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.

(3) Spoken messages are to be as short, simple and clear as possible.

§ 18. Use of verbal communication

(1) Verbal communication is either direct (by means of the human voice) or indirect (by means of a human or artificial voice which is broadcast using a device that broadcasts human or artificial voice).

(2) 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.

(3) If verbal communication is used instead of - or together with - gestures, code words should be used such as:

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, backwards, right, left – used with hand signals

danger - for an emergency stop

quickly - to speed up a movement for safety reasons.

§ 19. Features of hand signals

(1) Hand signals are movements and/or positions of the arms and/or hands, in coded form, for guiding persons who are carrying out dangerous handling or manoeuvres with a vehicle, which constitute a hazard or danger for workers.

(2) Hand signals must be precise, simple, expansive, easy to make and to understand, and clearly distinct from other such signals.

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

(4) Provided that they fulfil the conditions given in subsections 2 and 3, the signals used may vary slightly from or be more detailed than those shown in section 21; they must, however, be equally meaningful and comprehensible.

§ 20. Rules governing the use of hand signals

(1) The person giving the signs (hereinafter referred to as the 'signalman') will use arm/hand

movements to give instructions for manoeuvring or the handling of loads to the person receiving the signs (hereinafter referred to as the ‘operator’).

(2) The signalman must be able to monitor all manoeuvres visually without being endangered thereby. If this is not possible, one or more extra signalmen should be deployed to repeat the signs given.

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

(4) The operator must interrupt the ongoing manoeuvre or load handling in order to request new instructions, either using signal No. 1 portrayed in section 21 (1) or in some other manner, when he is unable to carry out the orders he has received with the necessary safety guarantees.

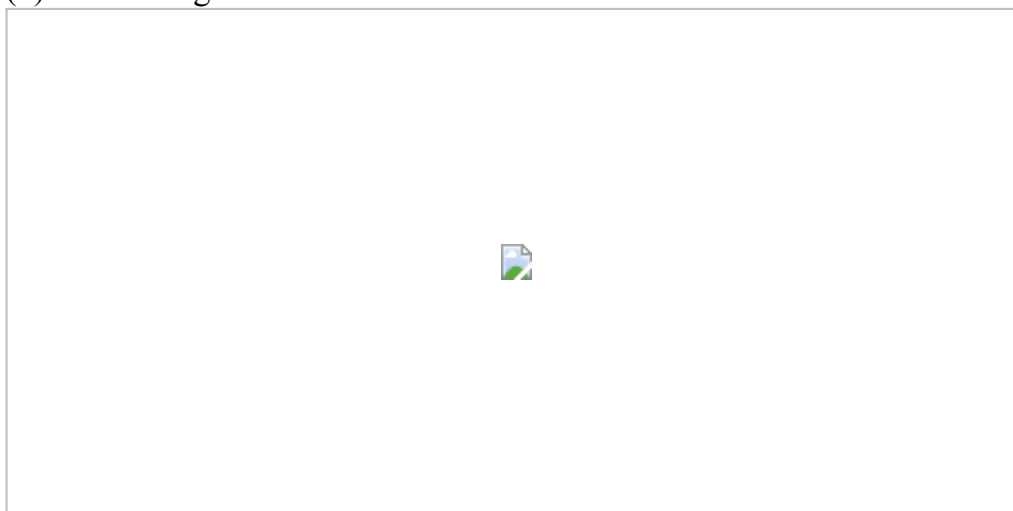
(5) Additional requirements for signalman:

1) The operator must be able to recognize the signalman without difficulty;

2) In order to distinguish him from other workers, the signalman is to wear one or more appropriate brightly coloured items, (an item of clothing, helmet, sleeves or armbands). In place of the above-mentioned items, the signalman may hold in his hand a blue and white striped bat or a blue flag. The above-mentioned attributes are for the exclusive use of signalmen.

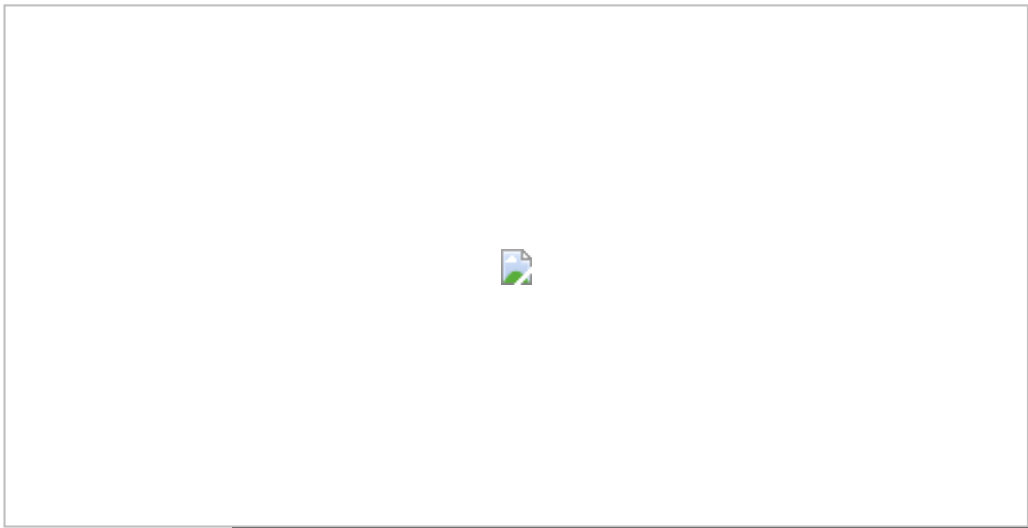
§ 21. Hand signals to be used

(1) General signals



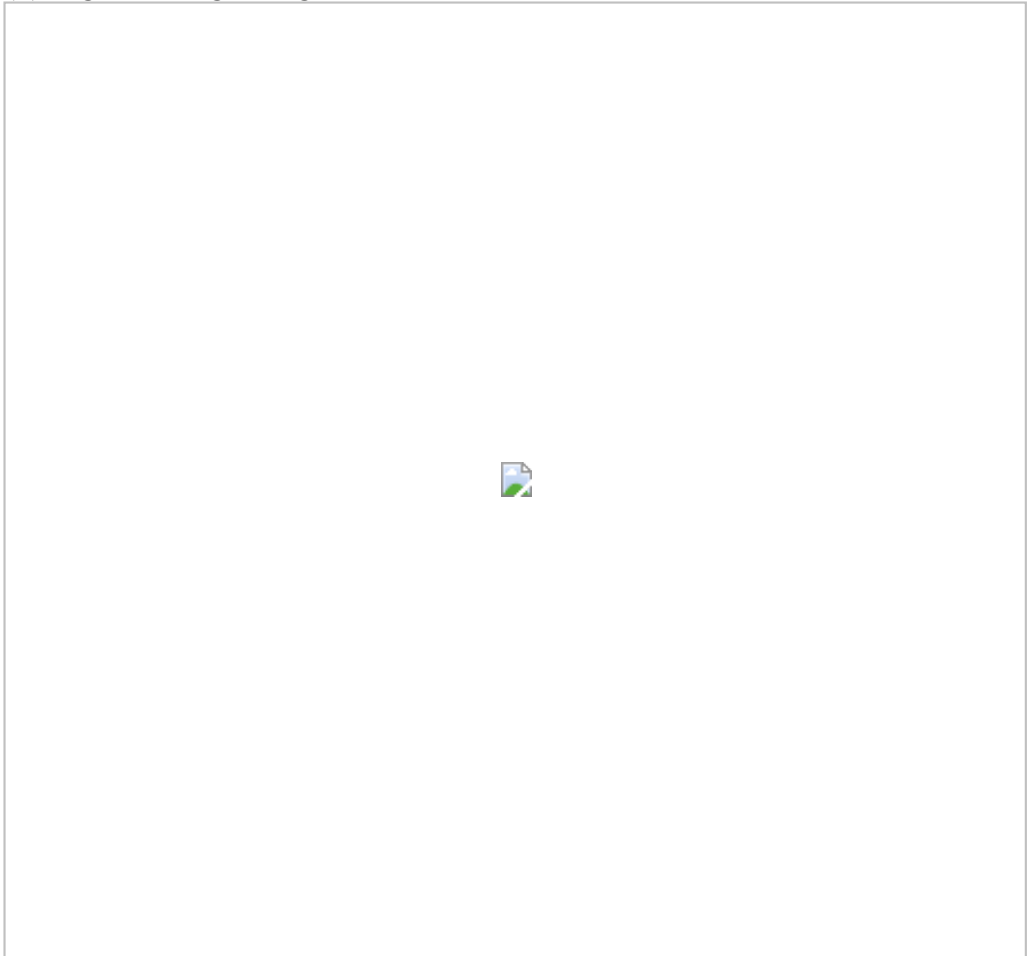
No.	Meaning	Description	Illustration
1.	START Attention Start of command	Both arms are extended horizontally with the palms facing forward	
2.	STOP Interruption End of movement	The right arm points upwards with the palm facing forwards	
3.	END of the operation	Both hands are clasped at chest height	

(2) Signals for guiding vertical movements



No.	Meaning	Description	Illustration
1.	RAISE	The right arm points upwards with the palm facing forward and slowly makes a circle	
2.	LOWER	The right arm points downwards with the palm facing inwards and slowly makes a circle	
3.	VERTICAL DISTANCE	The hands indicate the relevant distance	

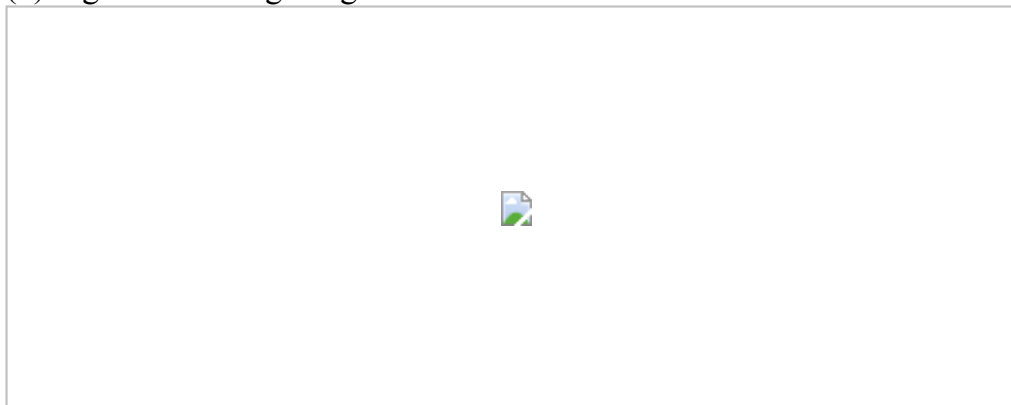
(3) Signals for guiding horizontal movements



No.	Meaning	Description	Illustration
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1.	MOVE FORWARDS	Both arms are bent with the palms facing upwards, and the forearms make slow movements towards the body	
2.	MOVE BACKWARDS	Both arms are bent with the palms facing downwards, and the forearms make slow movements away from the body	
3.	RIGHT	The right arm is extended more or less horizontally with the palm facing downwards and slowly makes small movements to the right	
4.	To the signalman's LEFT	The left arm is extended more or less horizontally with the palm facing downwards and slowly makes small movements to the left	
5.	HORIZONTAL DISTANCE	The hands indicate the relevant distance	

(4) Signals denoting danger



No.	Meaning	Description	Illustration
1.	DANGER	Both arms point upwards with the palms facing forwards	
2.	QUICK	All movements faster	
3.	SLOW	All movements slower	

§ 22. Implementing provisions

(1) This regulation shall enter into force as of 1 January 2000.

(2) The hazard signs presently in use shall be brought into accordance with these requirements within at the latest two years from the entry into force of the regulation.

* The regulation takes into account the requirements of Council of Europe Directive 92/58/EEC (OJ L 245, 26.08.1992, p. 18).

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