

8 November 2007

**Guide to the
Safety, Health and Welfare at Work
(General Application) Regulations 2007
Chapter 1 of Part 7: Safety Signs at
Places of Work**

Table of Contents

	Page
Introduction	3
Regulation 158: Interpretation for Chapter 1 (of Part 7)	4
Regulation 159: Application of Chapter 1 (of Part 7)	6
Regulation 160: Provision of safety signs	6
Regulation 161: Information and Instruction for Employees	7
Regulation 162: Prohibition of Unauthorised Information on Signs	7
Basic Principles of the System of Safety Signs.	7
Design of Safety Signs	8
Overview of Schedule 9 to the General Application Regulations 2007	10
Part A of Schedule 9 General Requirements	10
Part B of Schedule 9 Signboards	12
Part C of Schedule 9 Signs on Containers and Pipes	12
Part D of Schedule 9 Identification and Location of Fire-Fighting Equipment used exclusively for fire-fighting purposes	12
Part E of Schedule 9 Signs Used for Obstacles and Dangerous Locations and for Marking Traffic Routes	13
Part F of Schedule 9 Illuminated Signs	13
Part G of Schedule 9 Acoustic Signs	13
Part H of Schedule 9 Verbal Communication	14
Part I of Schedule 9 Hand Signals	14
Appendix: Schedule 9 to the Safety, Health and Welfare at work (General Application) Regulations 2007	15

Guide to Chapter 1 of Part 7 of the General Application Regulations 2007

Chapter 1 of Part 7: SAFETY SIGNS AT PLACES OF WORK

Introduction

This Guide is aimed at safety and health practitioners, employers, managers, employees, safety representatives and others to give guidance on Chapter 1 of Part 7 (Regulations 158 to 162) and the related Schedule 9 to the Safety, Health and Welfare at Work (General Application) Regulations 2007 (S.I. No. 299 of 2007) as amended by the Safety, Health and Welfare at Work (General Application)(Amendment) Regulations 2007 (S.I. No. 732 of 2007) relating to safety signs at places of work. The objective of the Guide is to give general guidance aimed at the prevention of occupational accidents or ill health. It is not intended as a legal interpretation of the legislation.

Chapter 1 of Part 7 and Schedule 9 to the General Application Regulations 2007 set out requirements on the safety signs and signals which must be used at all workplaces when hazards cannot be avoided or adequately reduced.

From 1 November 2007, Chapter 1 of Part 7 of the General Application Regulations 2007 re-transposes EC Directive 92/58/EEC and replaces the Safety, Health and Welfare at Work (Signs) Regulations 1995 (S.I. No. 132 of 1995), which are revoked from that date.

The General Application Regulations 2007 are made under the Safety, Health and Welfare at Work Act 2005 (No. 10 of 2005) referred to elsewhere in this Guide as “the Act”.

In this Guide the Regulation and Schedule text is in Italics.

Regulation 158: Interpretation for Chapter 1. *as amended by the Safety, Health and Welfare at Work (General Application)(Amendment) Regulations 2007 (S.I. No. 732 of 2007)*

158. *In this Chapter:*

“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;

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

“hand signal” means a movement, position, or both, of the arm, hands, or both, in coded form, for guiding persons who are carrying out manoeuvres which constitute a hazard or danger for persons at work;

“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 referred to in prohibition, warning, mandatory or emergency escape or first-aid signs;

“mandatory sign” means a sign requiring specific behaviour;

“prohibition sign” means a sign prohibiting behaviour likely to incur or cause danger;

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

“safety or health signs” means signs referring to a specific object, activity or situation and providing information or instructions about safety, health, or both, at work by means of a signboard, a colour, an illuminated sign, an acoustic signal, a verbal communication or a hand signal;

“signboard” means a sign which provides specific information or instructions by a combination of a geometric shape, colours and a symbol or pictogram, without written words, which is rendered visible by lighting of sufficient intensity;

“supplementary signboard” means a signboard used together with one of the signs covered by the definition of “signboard” and which gives supplementary information, including, where appropriate, information in writing;

“symbol or pictogram” means a figure which describes a situation or requires 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 warning of a hazard or risk.

(as amended by the Safety, Health and Welfare at Work (General Application)(Amendment) Regulations 2007)

The term “sign” includes signboards and acoustic, verbal or hand signals. Signboards are signs that use a combination of shape, colour and a symbol or pictogram. Signboards should not contain text as the symbols or pictograms on a signboard are intended to be understood,

independently of the literacy or language ability of the worker viewing it.

Text may be included on a supplementary signboard provided that it does not adversely affect the effectiveness of the safety signboard.

The system for signs and signboards is based on the familiar “traffic light” colours–

- red for prohibition,
- yellow for caution,
- green for positive action.

A fourth colour, blue, is used for mandatory signs and to convey information such as the location of a telephone.

The shapes of the signboards are standardised –

- discs for prohibitions and instruction,
- triangles for warnings,
- squares, and rectangles for emergency and informative signs.



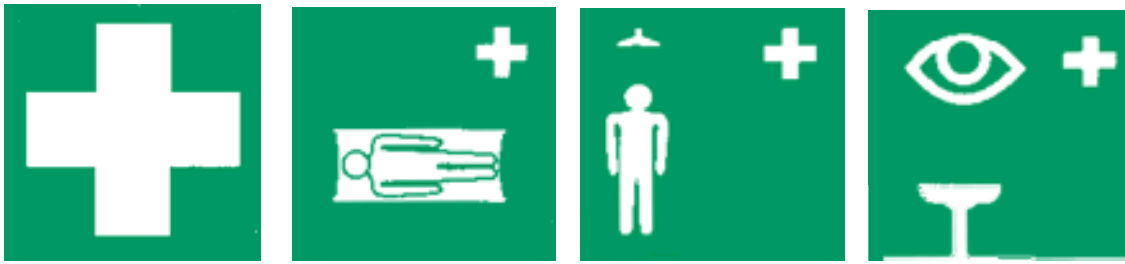
Examples of prohibitions signs



Examples of mandatory signs



Examples of warning signs



Examples of information signs

Regulation 159: Application of Chapter 1.

- 159.** (1) *Subject to paragraphs (2) and (3) of this Regulation and to Regulation 160(2), this Chapter applies to every place of work.*
- (2) *This Chapter does not apply to signs used for the placing on the market of dangerous substances and preparations, products or equipment except to the extent that any other enactment relating to the use of such signs may refer to these Regulations.*
- (3) *Subject to Regulation 160(1)(d), this Chapter does not apply to signs used for regulating road, rail, inland waterway, sea or air transport.*
- (4) *This Chapter is without prejudice to sections 8 to 11, 13, 14, 18 to 23 and 25 to 31 of the Act.*

Chapter 1 of Part 7 applies to every place of work but does not apply to any signs used in regard to the sale or supply of dangerous substances, preparations, products and equipment or signs regulating commercial and road transport.

Regulation 160: Provision of safety signs.

- 160.** (1) *An employer shall—*
- (a) *provide safety or health signs, or both, at the place of work where hazards cannot be avoided or adequately reduced by techniques for collective protection or measures, methods or procedures used in the organisation of work,*
- (b) *ensure that such signs are in place,*
- (c) *have regard to the risk assessment made under section 19 of the Act and the safety statement prepared under section 20 of the Act when determining whether or not to provide a sign under paragraph (a),*
- (d) *use the appropriate sign prescribed under any enactment regulating transport or movement of traffic involving road, rail, inland waterway, sea or air in relation to risk, where such forms of transport—*
- (i) *are present at the place of work, and*

*(ii) give rise to a risk to the safety or health of any employee,
and*

*(e) ensure that a safety or health sign used at work complies with
Schedule 9.*

(2) Where a signboard is in place at the commencement of these Regulations, which, solely because it includes a word or words, is not a signboard as defined in Regulation 158, an employer may leave that signboard in place until 1 January 2011.

Employers must apply the principles of prevention to avoid hazards. Where hazards cannot be avoided, employers must assess the risk and reduce it by using measures that protect all workers or by using safer work processes. Where the hazards cannot be avoided or reduced, employers have a duty to put in place appropriate signs for the protection of workers.

The risk assessment and safety statement for the place of work should identify any necessary signs.

Where there is a risk at a workplace because of traffic movements or traffic and pedestrian interaction appropriate signs regulating traffic and pedestrian movements should be put in place in accordance with any other legislation specifically regulating transport by road, water, rail or air.

Where a signboard is already in place before 1 November 2007 and contains text it may remain in place until 1 January 2011, after which date it should be replaced by a signboard without text.

Regulation 161: Information and instruction for employees.

161. Without prejudice to sections 9 and 10 of the Act, an employer shall—

(a) provide information to the employer's employees or representative, or both, as regards measures to be taken concerning safety or health signs used at work, especially signs incorporating words and the general and specific behaviour to be adopted in relation to those signs, and

(b) give the employer's employees suitable instruction, in particular in the form of specific directions concerning the safety or health signs used at work, which must include the meaning of the signs.

Employees must be provided with information and instruction on measures to be taken and on the meaning of safety signs and signals used.

Regulation 162: Prohibition of unauthorised information on signs.

162. An employer shall ensure that signs at work which are displayed for the purposes of this Chapter do not include information other than that authorised by this Chapter.

Only information authorised in accordance with Chapter 1 of Part 7 of these Regulations may

be displayed on safety signs at workplaces.

Basic Principles of the System of Safety Signs

(i) The objective of the system of safety signs is to draw attention rapidly and unambiguously to objects and situations capable of causing specific hazards.

(ii) A system of safety signs must never be used as a substitute for necessary protective measures.

(iii) The system of safety signs may only be used to give information related to safety.

(iv) The effectiveness of the system of safety signs is dependent in particular on the provision of full and regularly repeated information to all employees.

Design of Safety Signs

1. Prohibition Signs

Shape: Round

Background: White

Symbol: Black

The safety colour Red must appear around the edge and in a transverse bar and must cover at least 35% of the surface of the sign.

2. Warning Signs

Shape: Triangular

Background: Yellow with Black edging

Symbol/Pictogram: Black

A yellow triangle must have a black edge. The safety colour Yellow must cover at least 50% of the surface of the sign.

3. Mandatory Signs

Shape: Round

Background: Blue

Symbol/Pictogram: White

The safety colour Blue must cover at least 50% of the surface of the sign.

4. Emergency Escape or First-Aid Signs

Shape: Rectangular or Square

Background: Green

Symbol/Pictogram: White

The safety colour Green must cover at least 50% of the surface of the sign.

5. Fire-Fighting Signs

Shape: Rectangular or Square

Background: Red

Symbol/Pictogram: White

The safety colour Red must cover at least 50% of the surface of the sign.

6. Supplementary Signs

Background: White

Wording: Black

or

Background: Safety Colour

Wording Contrasting Colour.

7. Symbols/Pictograms

The design must be as simple as possible and details not comprehensible must be omitted.

Overview of Schedule 9 to the General Application Regulations 2007

Schedule 9 of the Regulations relates to safety signs at places of work. While the text of the Schedule is included in the Appendix to this Guide, each part of the Schedule is outlined below:

Part A of Schedule 9 - General Requirements

Permanent signboards should be used for prohibitions, warnings, mandatory requirements and the location of emergency exits and first aid facilities. Fire-fighting equipment should be marked with a permanent signboard or colour. Where there is a risk of falling or colliding with an object it must be marked with a signboard or safety colour or both. Traffic routes must be permanently marked with a safety colour

A large number of signs (including acoustic signals) should not be placed or used together, as the effectiveness of the signs can be significantly reduced. Signs must be designed so that they take account of the workplace conditions e.g. in relation to visibility, the presence of similar illumination sources or the presence of noise that might mask the sign.

Signs must be cleaned and checked to maintain their effectiveness and where they have a power supply they should be provided with a guaranteed back-up supply.

Where persons are present whose sight or hearing is impaired (including by the use of personal protective equipment) then other measures must be taken to ensure the effectiveness of the signs.

Colour, Meaning and Information on Safety Signs

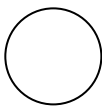

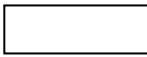
Colour	Meaning or Purpose	Instructions and Information
Red	<i>Prohibition sign</i>	<i>Dangerous behaviour</i>
	Danger alarm	Stop, shutdown, emergency cut-out devices Evacuate
	Fire-fighting equipment	Identification and location
Yellow or Amber	Warning sign	Be careful, take precautions Examine
Blue	Mandatory 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

The following three tables, not contained in the Schedule, indicate colours and shapes as appropriate for safety signs.




Contrasting Colours and Symbol Colours.

Safety Colour	Contrasting Colour	Symbol Colour
Red	White	Black
Yellow	Black	Black
Green	White	White
Blue	White	White

Geometrical Form and Meaning of Safety Signs

Geometrical Form	Meaning
	Mandatory and Prohibition Signs
	Warning Signs
	Emergency, Information and additional signs

Combinations of Shapes and Colours and Their Meaning for Signboards

Shape Colour			
Red	Prohibition		Fire Fighting Equipment
Yellow		Caution Possible Danger	
Green			No Danger Rescue Equipment
Blue	Mandatory		Information or Instruction

Part B of Schedule 9 - Signboards

Where signboards are used they should have the shape and colour set out in Part B of Schedule 9. The pictograms used should be as simple as possible and while they may be slightly different to those shown, any difference should not alter or obscure the meaning.

Signboards should be made of suitably robust materials and their dimensions and features should make them easy to see and understand. Signboards should be installed in the line of sight, should not be obscured, and should be installed in a well lit, easily accessible and visible location. Where light levels are poor, the signs should incorporate artificial lighting or reflective or phosphorescent material as appropriate.

Signboards should be removed as soon as the situation to which they refer ceases to exist. Otherwise, signs left in place undermine the effectiveness of other signage.

The signs should not include text. Text may be included on a supplementary signboard provided that it does not adversely affect the effectiveness of the signboard.

Part C of Schedule 9 - Signs on Containers and Pipes

Containers and visible pipes used for dangerous substances or preparations must be labelled or be protected by warning signs. Labels used on pipes should be positioned near dangerous points such as valves and joints and be repeated at suitable intervals.

Rooms or areas used to store significant quantities of dangerous substances or preparations must be indicated by a suitable warning sign.

This Part of the Schedule governs signs on containers and pipes but paragraph 1 does 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 or training (or both) which guarantee the same level of protection.

Part D of Schedule 9 - Identification and location of fire-fighting equipment used exclusively for fire-fighting purposes

This Part of the Schedule applies to equipment used exclusively for fire-fighting purposes and requires fire-fighting equipment to be identified by using a specific colour for the equipment and placing a location signboard, or by using a specific colour (Red) for the places where such equipment is kept, or their access points. The red area must be sufficiently large to allow the equipment to be identified easily.

Part E of Schedule 9 - Signs used for obstacles and dangerous locations and for marking traffic routes



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

Those signs detailed in Part E of Schedule 9 should be provided where-

- There is a risk of colliding with obstacles, of falling or of objects falling – yellow and black or red and white stripes,
- Traffic routes for vehicles. – continuous white or yellow lines where required for the protection of persons.

The dimensions of the markings must be commensurate with the scale of the obstacle or dangerous location in question. They must be located so as to indicate the necessary safe distance between the vehicles and any object which may be nearby, and between pedestrians and vehicles. Permanent traffic routes in built-up areas outdoors must, as far as is practicable, be similarly marked, unless they are provided with suitable barriers or pavements.

Part F of Schedule 9 - Illuminated Signs

Intrinsic features –

- 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 or an excessive amount of light or poor visibility as a result of insufficient light.
- The luminous area emitting a sign may be of a single colour as set out in paragraph 3 of Part A of Schedule 9 or contain a pictogram on a specified background.
- When the sign contains a pictogram, it must comply with all the relevant requirements of Part B of Schedule 9.

There are additional rules set out in the Schedule governing where a combination of continuous or intermittent signs or acoustic signals may be used, including the provision of auxiliary lighting where flashing signs warn of grave danger.

Part G of Schedule 9 - Acoustic Signs

Acoustic signals are required to have a sound level which is considerably higher than the level of ambient noise and to 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.

If a device can emit an acoustic signal at variable and constant frequencies, the variable

frequency must be used to indicate a higher level of danger or a more urgent need for the requested or imposed intervention or action in relation to the stable frequency.

The signal Code for evacuation must be continuous.

Part H of Schedule 9 - Verbal Communication

Verbal communication between a speaker or emitter and one or more hearers must take the form of short texts, phrases, groups of words or individual words.

Spoken messages must be short, simple and clear as possible and in a language understood by the persons involved. The verbal skills of the speaker and the hearing abilities of hearers must be such as to ensure reliable verbal communication.

Verbal communication may be 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).

An indicative list of code words for verbal communications is shown in Part H of Schedule 9.

Part I of Schedule 9 – Hand Signals

Part I of Schedule 9 contains specific rules governing use of hand signals, with or without the use of ancillary aids.

Hand signals must be precise, simple, expansive, easy to make and to understand, and clearly distinct from other such signals. Where both arms are used at the same time, they must be moved symmetrically and for giving one sign only.

Without prejudice to other codes applicable at European Union level, used for the same manoeuvres in certain sectors, hand signals used must be consistent with any relevant code of practice or the hand signals set out in paragraph 3 of Part I of Schedule 9.

Appendix

SCHEDULE 9

Regulation 160

SAFETY AND HEALTH SIGNS AT WORK

Part A — General requirements

1. Types of signs

1.1. Permanent signs

1.1.1. Permanent signboards shall 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 or a safety colour (or both) shall be used to mark permanently the location and identification of fire-fighting equipment.

1.1.2. Signboards on containers and pipes shall be placed as laid down in Part C of this Schedule.

1.1.3. Places where there is a risk of colliding with obstacles or of falling shall be permanently marked with a safety colour or with signboards (or both).

1.1.4. Traffic routes shall be permanently marked with a safety colour.

1.2. Occasional signs

1.2.1. Illuminated signs, acoustic signals or verbal communication (or both) shall be used where the occasion requires, taking into account the possibilities for interchanging and combining signs set out in Paragraph 2, to signal danger, to call persons to take a specific course of action and for the emergency evacuation of persons.

1.2.2. Hand signals or verbal communication (or both) shall be used where the occasion requires, to guide persons carrying out hazardous or dangerous manoeuvres.

2. Interchanging and combining signs

2.1. 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.

2.2. Some types of signs may be used together—

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

3. The instructions in the table below apply to all signs incorporating a safety colour—

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

4. The effectiveness of a sign shall not be adversely affected by:

4.1. the presence of another emission source of the same type which interferes with visibility or audibility; therefore, in particular—

4.1.1. the placing of too many signs too close together shall be avoided,

4.1.2. two illuminated signs which are likely to be confused shall not to be used at the same time,

4.1.3. an illuminated sign shall not be used in the proximity of another similar illuminated source,

4.1.4. two acoustic signals shall not be used at the same time,

4.1.5. an acoustic signal shall not be used if there is too much ambient noise.

4.2. poor design, insufficient number, incorrect positioning, poor state of repair or incorrect functioning of the signs or signalling devices.

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

6. 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.

7. Signs requiring some form of power shall be provided with a guaranteed emergency

supply in the event of a power cut, unless the hazard has thereby been eliminated.

8. *The triggering of an illuminated sign or acoustic signal (or both) indicates when the required action should start and the sign or signal shall be activated for as long as the action requires.*

Illuminated signs and acoustic signals shall be reactivated immediately after use.

9. *Illuminated signs and acoustic signals shall 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.*
10. *If the hearing or the sight of the persons concerned is impaired, including impairment caused by the wearing of personal protective equipment, measures shall be taken to supplement or replace the signs concerned.*
11. *Areas, rooms or enclosures used for storage of significant quantities of dangerous substances or preparations shall be indicated by a suitable warning sign taken from paragraph 3.2 of Part B, or marked as provided in paragraph 1 of Part C of this Schedule, unless the labelling of the individual packages or containers is adequate for this purpose.*

Part B — Signboards

1. Intrinsic features

- 1.1. *The shape and colours are set out in paragraph 3, 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 shall be as simple as possible and shall contain only essential details.*
- 1.3. *The pictograms used may be slightly different from or more detailed than those shown in paragraph 3, provided that they convey the same meaning and that no difference or adaptation obscures the meaning.*
- 1.4. *Signboards shall be made of shock and weather-resistant material suitable for the surrounding environment.*
- 1.5. *The dimensions and colorimetric and photometric features of signboards shall be such that they can be easily seen and understood.*

2. Conditions of use

- 2.1. *Signboards shall 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.
*Without prejudice to the provisions of Part 2, Chapter 1, phosphorescent colours, reflective materials or artificial lighting shall be used where the level of natural light is poor.**
- 2.2. *The signboard shall be removed when the situation to which it refers ceases*

to exist.

3. 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);

The script underneath each of the following pictograms is included here to show the meaning of the sign but is not to be included in the signboard.

That script or any other relevant script may be shown on a supplementary signboard.

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);

The script underneath each of the following pictograms is included here to show the meaning of the sign but is not to be included in the signboard.

That script or any other relevant script may be shown on a supplementary signboard.

Signs to be used



*Flammable material
or high temperature*



Explosive material



Toxic material



Corrosive material



Radioactive material



Overhead load



Industrial vehicles



Danger electricity



General danger



Laser beam



Oxidant material



*Non-ionizing
radiation*

Note—“Flammable material or high temperature” sign in the absence of a specific sign for high temperature



Strong magnetic field



Obstacles



Drop



Biological risk

Low temperature

*Harmful or
irritant material*

Note: The background to the “Harmful or irritant material” sign may exceptionally be amber if justified in order to differentiate it from a similar road safety sign except that it, or other relevant script, may be shown on a supplementary sign.

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);

The script underneath each of the following pictograms is included here to show the meaning of the sign but is not to be included in the signboard.

That script or any other relevant script may be shown on a supplementary signboard.

Signs to be used



**Eye protection must
be worn**



**Safety helmet must
be worn**



**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;

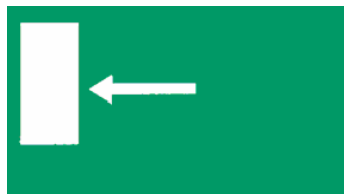
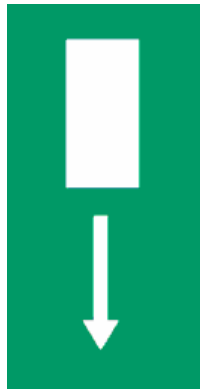
White pictogram on a green background (the green part to take up at least 50% of

the area of the sign.);

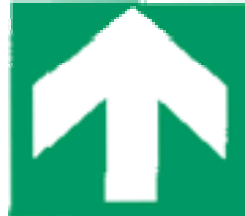
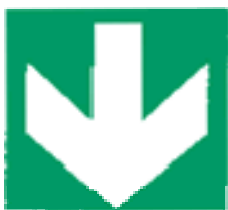
The script underneath each of the following pictograms is included here to show the meaning of the sign but is not to be included in the signboard.

That script or any other relevant script may be shown on a supplementary signboard.

Signs to be used



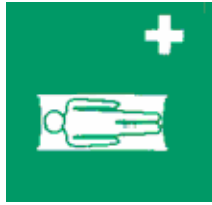
Emergency exit/escape route



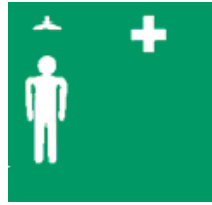
**This way
(supplementary information sign)**



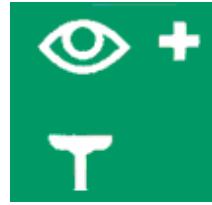
First-aid post



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);

The script underneath each of the following pictograms is included here to show the meaning of the sign but is not to be included in the signboard.

That script or any other relevant script may be shown on a supplementary signboard.

Signs to be used



Fire Hose



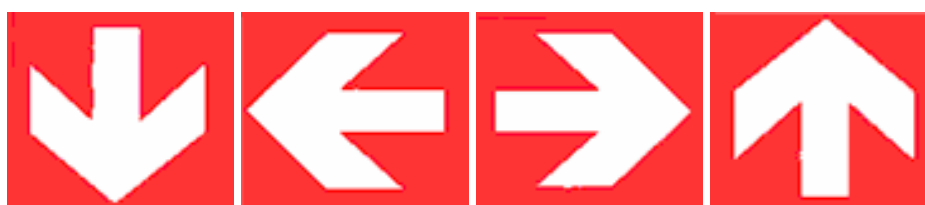
Ladder



**Fire
extinguisher**



**Emergency fire
telephone**



**This Way
(supplementary information sign)**

Part C — Signs on containers and pipes

1. *Containers used at work for dangerous substances or preparations to which the relevant statutory provisions apply and containers used for the storage of such dangerous substances or preparations, together with the visible pipes containing or transporting dangerous substances and preparations, shall be labelled (pictogram or symbol against a coloured background) in accordance with those provisions.*

This paragraph does not apply to containers used at work for brief periods nor to containers whose contents change frequently, provided that alternative adequate measures are taken, for information, training, or both, which guarantee the same level of protection.

The labels referred to in this paragraph may be—

- (a) replaced by warning signs as provided for in Part B of this Schedule, using the same pictograms or symbols,*
 - (b) supplemented by additional information, such as the name, formula, or both, of the dangerous substance or preparation and details of the hazard, and*
 - (c) for the transporting of containers at the place of work, supplemented or replaced by signs applicable throughout the European Union for the transport of dangerous substances or preparations.*
2. *Signs shall be mounted as follows—*
 - (a) on visible sides, and*
 - (b) in unipliable, self-adhesive or painted form.*
3. *Where appropriate, the signs referred to in paragraph 1 of this Part shall have the intrinsic features defined in paragraph 1.4. of Part B and shall fulfil the conditions of use for signboards laid down in paragraph 2 of Part B.*
4. *Without prejudice to paragraphs 1, 2 and 3, the labels used on pipes shall be positioned visibly in the vicinity of the most dangerous points, such as valves and joints, and at reasonable intervals.*
5. *Areas, rooms or enclosures used for the storage of significant quantities of dangerous substances or preparations shall be indicated by a suitable warning sign taken from paragraph 3.2 of Part B, or marked as provided in paragraph 1 of this Part, unless the labelling of the individual packages or containers is adequate for this purpose, taking into account paragraph 1.5 of Part B, with regard to dimensions.*

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

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.

**Part D — Identification and location of fire-fighting equipment
used exclusively for fire-fighting purposes**

1. Fire-fighting equipment shall be identified by using a specific colour for the equipment and placing a location signboard, or by using a specific colour or both for the places where such equipment is kept, or their access points.
2. For the purposes of paragraph 1 the specific colour shall be red. The red area shall be sufficiently large to allow the equipment to be identified easily.
3. The signboards provided for in paragraph 3.5 of Part B shall be used to mark the locations of this equipment.

**Part E — Signs used for obstacles and dangerous
locations and for marking traffic routes**

1. Signs for obstacles and dangerous locations
 - 1.1 Places where there is a risk of colliding with obstacles, of falling or of objects falling shall be marked with alternating yellow and black, or red and white stripes in built up zones in the place of work to which employees have access during their work.
 - 1.2. The dimensions of the markings shall be commensurate with the scale of the obstacle or dangerous location in question.
 - 1.3. The yellow and black or red and white stripes shall be at an angle of approximately 45° and of more or less equal size.
 - 1.4. Example:



2. Marking of traffic routes
 - 2.1. Where the use and equipment of rooms so requires for the protection of persons, traffic routes for vehicles shall 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 shall be located so as to indicate the necessary safe distance between the vehicles and any object which may be nearby, and between pedestrians and vehicles.

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

Part F — Illuminated signs

1. Intrinsic features

- 1.1 *.The light emitted by a sign shall 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 or 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 shall correspond to the table of colours and their meanings set out in paragraph 3 of Part A.*
- 1.4. *When the sign contains a pictogram, it shall comply with all the relevant requirements of Part B.*

2. Specific rules governing use

- 2.1. *If a device can emit both continuous and intermittent signs, the intermittent sign shall be used to indicate a higher level of danger or a more urgent need for the requested or required intervention or action than is indicated by the continuous sign.*
- The duration of each flash and the frequency of the flashes of an intermittent illuminated sign shall 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 shall be used.*
- 2.3. *Devices for emitting flashing signs in the event of grave danger shall be under special surveillance or be fitted with an auxiliary lamp.*

Part G — Acoustic signs

1. Intrinsic features

- 1.1. *Acoustic signals shall:*
- (a) *have a sound level which is considerably higher than the level of ambient noise, so that it is audible without being excessive or painful, and*
 - (b) *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 shall be used to indicate a higher level of danger or a more urgent need for the requested or imposed intervention or action in relation to the stable frequency.*

2. Code

The signal for evacuation shall be continuous.

Part H — Verbal communication

1. Intrinsic features

- 1.1. *Verbal communication between a speaker or emitter and one or more hearers shall take the form of (sometimes coded) short texts, phrases, groups of words or individual words.*
- 1.2. *Spoken messages shall be short, simple and clear as possible and in a language understood by the persons involved; the verbal skills of the speaker and the hearing abilities of hearers shall be such as to ensure reliable verbal communication.*
- 1.3. *Verbal communication may be 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. 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 safety or health (or both).*
- 2.2. *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’ *to be coordinated with the corresponding hand signals*
 - ‘backwards’ *to be coordinated with the corresponding hand signals*
 - ‘right’ *to be coordinated with the corresponding hand signal*
 - ‘left’ *to be coordinated with the corresponding hand signals*
 - ‘danger’ *for an emergency stop*
 - ‘quickly’ *to speed up a movement for safety reasons*

Part I — Hand signals

1. Features:

- 1.1 *Hand signals shall be precise, simple, 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 shall be moved symmetrically and for giving one sign only.*

1.3 Without prejudice to other codes applicable at European Union level, used for the same manoeuvres in certain sectors, hand signals used shall be consistent with any relevant code of practice.

2. Specific rules governing use:

2.1. The person giving the signs, hereinafter referred to as the “signaller”, shall use arm or hand movements to give manoeuvring instructions to the person receiving the signs, hereinafter referred to as the “operator”.

2.2. The signaller shall be able to monitor all manoeuvres visually without being endangered thereby.

2.3. The signaller’s duties shall consist exclusively of directing manoeuvres and ensuring the safety of persons in the vicinity.

2.4. If the conditions described in paragraph 2.2. are not fulfilled, one or more extra signallers shall be deployed.

2.5. The operator shall interrupt the ongoing manoeuvre in order to request new instructions if unable to carry out the orders received with the necessary safety guarantees.

2.6. Accessories:

2.6.1 The operator shall be able to recognise the signaller without difficulty.



2.6.2 The signaller shall wear one or more appropriate distinctive items, e.g. jacket, helmet, sleeves or armbands, or carry bats.







2.6.3 The distinctive items shall be brightly coloured, preferably all of the same colour and for the exclusive use of signallers.

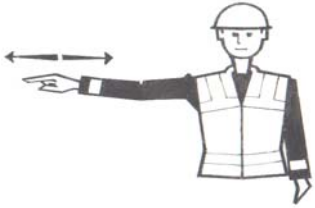
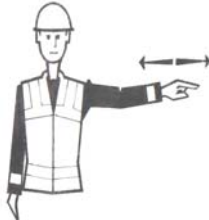


3. Coded signals to be used

Preliminary remark

The following set of coded signals are without prejudice to other codes applicable at European Community level, 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	

<p><i>END Of the operation</i></p>	<p><i>Both hands are clasped at chest height</i></p>	
<p><i>B. Vertical movements</i></p>		
<p><i>RAISE</i></p>	<p><i>The right arm points upwards with the palm facing forward and slowly makes a circle</i></p>	
<p><i>LOWER</i></p>	<p><i>The right arm points downwards with the palm facing inwards and slowly makes a circle</i></p>	
<p><i>VERTICLE DISTANCE</i></p>	<p><i>The hands indicate the relevant distance</i></p>	
<p><i>C. Horizontal Movements</i></p>		
<p><i>MOVE FORWARDS</i></p>	<p><i>Both arms are bent with the palms facing upwards, and the forearms make slow movements towards the body</i></p>	
<p><i>MOVE BACKWARDS</i></p>	<p><i>Both arms are bent with the palms facing downwards, and the forearms make slow movements away from the body</i></p>	

<p><i>RIGHT</i> <i>To the signaller's right</i></p>	<p><i>The right arm is extended more or less horizontally with the palm facing downwards and slowly makes small movements to the right</i></p>	
<p><i>LEFT</i> <i>To the signaller's left</i></p>	<p><i>The left arm is extended more or less horizontally with the palm facing downwards and slowly makes small movements to the left</i></p>	
<p><i>HORIZONTAL DISTANCE</i></p>	<p><i>The hands indicate the relevant distance</i></p>	
<p><i>D. Danger</i></p>		
<p><i>DANGER</i> <i>Emergency stop</i></p>	<p><i>Both arms point upwards with the palms facing forwards</i></p>	
<p><i>QUICK</i></p>	<p><i>All movements faster</i></p>	
<p><i>SLOW</i></p>	<p><i>All movements slower</i></p>	