

Code of practice for  
**INDUSTRIAL IDENTIFICATION BY COLOUR,  
WORDING, OR OTHER CODING**

- Part 1 Identification of signs, safety colours  
and fire extinguishers
- Part 2 Identification of contents of piping,  
conduit and ducts
- Part 3 Identification of industrial gas cylinders

Superseding NZS 2257



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## NEW ZEALAND STANDARD

Code of practice for

INDUSTRIAL IDENTIFICATION BY COLOUR,  
WORDING, OR OTHER CODING

- Part 1 Identification of signs, safety colours and fire extinguishers
- Part 2 Identification of contents of piping, conduit and ducts
- Part 3 Identification of industrial gas cylinders

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**COMMITTEE REPRESENTATION**

This standard was prepared under the supervision of the Safety and Hygiene Sectional Committee (58/—) for the Standards Council, established under the Standards Act 1965. The committee consisted of representatives of the following:

- \*Accident Compensation Commission
- Consumers Institute
- \*Department of Health
- Department of Internal Affairs
- \*Department of Labour
- Department of Scientific and Industrial Research
- Federation of Labour
- \*Ministry of Energy —
  - Electricity Division
  - Mines Division
- \*Ministry of Transport —
  - Marine Division
- \*Ministry of Works and Development
- New Zealand Contractors Federation
- New Zealand Employers Federation
- New Zealand Forest Service
- \*New Zealand Government Railways Department
- New Zealand Industrial Design Council
- New Zealand Institute of Industrial Management
- \*Post Office

In addition to the above representation, the chairman, Mr E.J. Batt, was co-opted to the committee.

The Industrial Colour Coding Committee (58/7) was responsible for the preparation of the standard and consisted of representatives of the following organizations in addition to those marked with an asterisk (\*) above:

- New Zealand Fire Service
- New Zealand Manufacturers Federation

In addition, Mr M. Rennison, IST Consolidated, was appointed, and Mr R. Baird, De Neefe (NZ) Ltd, was co-opted to the committee.



## RELATED DOCUMENTS

Reference is made in this document to the following:

	Clause reference herein
<b>NEW ZEALAND STANDARDS</b>	
NZS 1304 : 1957 (BS 1319 : 1955) <i>Medical gas cylinders and anaesthetic apparatus</i>	301.1
NZS 4507 : 1978 <i>Fire testing and rating of portable fire extinguishers</i>	107.3
MP 3801 : 1972 <i>A guide to the adoption of the model building bylaw (NZS 1900) by local authorities using the standard adoption and annual updating procedure</i>	102.1
<b>OVERSEAS STANDARDS</b>	
BS 349 : 1973 <i>Identification of contents of industrial gas containers</i>	Table 6
BS 5252 : 1976 <i>Framework for colour co-ordination for building purposes</i>	Tables 2, 3, 4 & 6; 303.1
BS 5378 : 1976 <i>Specification for safety colours and safety signs</i>	101.3
ISO 3 : 1973 <i>Preferred numbers – Series of preferred numbers</i>	Table 7
ISO 3098/1 : ---- <i>Technical drawings – Lettering – Part 1 : 1974 Currently used characters</i>	A2.1
<b>RELATED LEGISLATION</b>	
<i>Dangerous Goods (Labelling) Regulations 1978</i>	301.1

## ACKNOWLEDGMENT

The committee acknowledges the use of material taken from AS 1345–1972 *Rules for the identification of piping, conduits and ducts*, published by the Standards Association of Australia, and from various publications of the International Organization for Standardization.

The assistance provided by the Accident Compensation Commission towards the preparation of this standard is gratefully acknowledged.

## FOREWORD

This standard is a revision in metric units of NZS 2257 : 1969. Identification coding has two main purposes. The more important of these is to identify and indicate fire and safety precautions and degrees of hazards of contents of pipes, valve systems, ducting, conduits, and gas cylinders. The second is to provide specific indication of the conditions or purpose of their contents.

The object of coding by colour is to encourage reflex action on the part of the viewer, and it is important that a colour should have the same meaning in all places where the same type of hazard may be encountered, and its use should be avoided for other purposes. It is for this reason that this standard has been prepared, and it should apply in places of work such as factories, construction sites, hospitals, institutions, offices, on board ships, and in other community areas where there is a need to denote hazard.

The association of hazard with colour has become traditional – hence, red for danger, yellow for caution, and green for safety. These traditional concepts have been used in the selection of colours in this standard. At the same time, the number of distinctive colours available for use in a code is limited, and therefore, auxiliary means of identification such as colour banding, colour blocks, symbols, and the use of words and letters on colour have been introduced.

The principles set out in this standard comply generally with ISO R 408–1964 *Safety colours*; ISO 448–1977 *Gas cylinders for industrial use – marking for identification of content*; and ISO R508–1966 *Identification colours for pipes conveying fluids in liquid or gaseous condition in land installations and on board ships*. At the same time, this framework of identification coding does not preclude any industry or firm from devising additional methods of identification suited to its own needs, but these should not conflict with the content of this document. In any event, efforts should be made to ensure that occupants of buildings such as factories, hospitals, institutions and offices are aware of the importance of the colour codings together with symbols in accordance with ISO/ R 557–1967 *Symbols, dimensions and layout of safety signs*.

Considerable thought has been given to the forms that additional codes might take. In view of the limitation of the number of useful colours available, the likelihood of confusion of closely related shades by colour-blind persons, and the possibility of colours fading with the passage of time, emphasis has now been laid on wording or lettering for identifying the precise condition or purpose of contents.

As lettering is common to all parts of this standard, recommendations on type, size, and height of letters are contained in Appendix A.

The four safety colours, the auxiliary colour blue, and the basic identification colours contained in this standard are defined in BS 5252 *Framework for colour co-ordination for building purposes*. British standard specification colour reference numbers approximating closely to the limits required are shown in tables 2, 3, 4 and 6. The committee that prepared NZS 5807 accepts that the problem of deciding an auxiliary colour coding is one that many organizations encounter. However, the committee cannot deviate from the basic colours in this code until international uniformity is achieved.

NOTE – The sample colours shown in this standard are as near to the colours specified in BS 5252 as printing processes will allow.

## NEW ZEALAND STANDARD

### Code of practice for INDUSTRIAL IDENTIFICATION BY COLOUR, WORDING, OR OTHER CODING

#### PART 1 IDENTIFICATION OF SIGNS, SAFETY COLOURS AND FIRE EXTINGUISHERS

##### 101 Scope

101.1 The purpose of this Part of this standard is to define safety colours, safety signs and other warning indications which will aid in the prevention of accidents, the indication of health hazards, and in the location and identification of first aid and fire-fighting equipment.

101.2 It cannot be too strongly stressed that the basic colours or meanings given to them must be predominant, regardless of the context in which they are used.

101.3 Symbols may be used on safety signs provided that they are in accordance with BS 5378\*. (See section 108.)

101.4 Attention is drawn to the legislation concerning the labelling of dangerous goods.

##### 102 Interpretation

102.1 Where any other standard named in this standard has been declared or endorsed in terms of the Standards Act 1965, then —

- (a) Reference to the named standard shall be taken to include any current amendments declared or endorsed in terms of the Standards Act 1965; or
- (b) Reference to the named standard shall be read as reference to any standard currently declared or endorsed in terms of the Standards Act 1965 as superseding the named standard, including any current amendments to the superseding standard declared or endorsed in terms of the Standards Act 1965.

NOTE — The date at which an amendment or superseding standard is regarded as “current” is a matter of law depending upon the particular method by which this standard becomes legally enforceable in the case concerned. In general, if this is by contract the relevant date is the date on which the contract is created, but if it is by Act, regulation, or bylaw then the relevant date is that on which the Act, regulation, or bylaw is promulgated; for bylaws, promulgation includes updating by the procedure set out in MP 3801\*.

\* See list of related documents.

##### 103 Definitions

103.1 In this standard, unless inconsistent with the context, the following definitions shall apply:

**SAFETY COLOUR.** A colour of specified properties to which a safety meaning is attributed.

**SAFETY SIGN.** A sign which in combination with geometric form and a safety colour, together with a safety symbol or text (that is, words, letters, numbers or a combination of these), gives a particular safety message.

**SAFETY SYMBOL.** A graphic symbol used in a safety sign.

##### 104 Basic safety colours

104.1 The meanings assigned to basic safety colours are set out in table 1.

Table 1  
MEANINGS ASSIGNED TO BASIC SAFETY COLOURS

Colour	Meaning
Red	To have the meaning STOP or DANGER and to indicate fire-fighting equipment and its location.
Yellow	To have the meaning CAUTION or WARNING OF DANGER.
Green	To have the meaning SAFETY. To be used for the identification or location of safety equipment, routes for use in an emergency, and medical first aid equipment and rooms.
Blue	To have the meaning MANDATORY ACTION (for example, “wear safety goggles”). INFORMATION (for example, “location of telephone”).

NOTE — Blue is only used as a component of a sign and it is considered a safety colour only if used in conjunction with a circle.

104.2 The physical definition of basic safety colours is given in table 2.

Table 2

PHYSICAL DEFINITION OF BASIC SAFETY COLOURS	
Basic colour name	Specification reference number
Safety red	BS 5252* Colour No. 04 E 53
Safety yellow	BS 5252* Colour No. 08 E 51
Safety green	BS 5252* Colour No. 14 E 53
Safety blue	BS 5252* Colour No. 18 E 53

105 Contrast colours for background use and supplementary instructions

105.1 The contrast colour should be white in contrast with red, green or blue and black in contrast with yellow. The basic colours should be predominant.

106 GEOMETRICAL FORMS

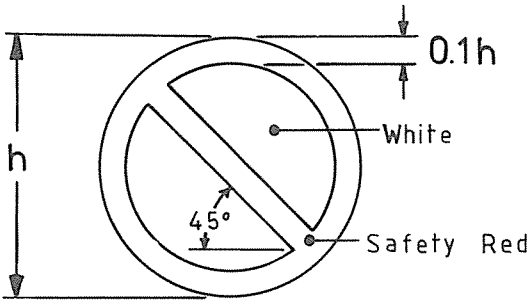
106.1 Geometrical forms shall be used for all signs.

106.2 Preferred sizes for the overall height (*h*) of safety signs are:

- 100 mm
- 200 mm
- 300 mm
- 600 mm
- 1200 mm

NOTE – If other sizes are used then the proportional representations must be maintained.

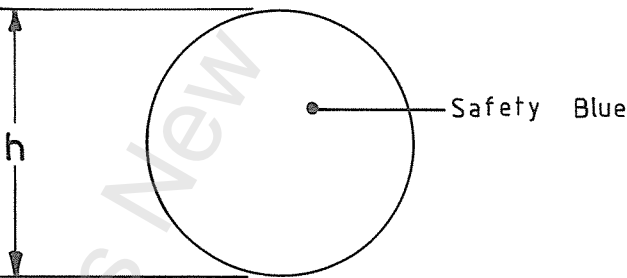
106.3 Prohibition signs (circle). Background colour shall be white. Circular band and crossbar shall be *safety red*. The safety symbol shall be black and placed centrally on the background but shall not obliterate the crossbar. An outer narrow white band is optional. *Safety red* should cover at least 35 percent of the sign area.



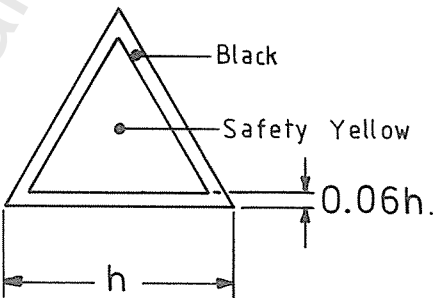
\* See list of related documents.

106.4 Mandatory action or obligatory signs (circle). Background colour shall be *safety blue*. The safety symbol or text shall be white and placed centrally on the background. An outer narrow white band is optional. *Safety blue* shall cover at least 50 percent of the area of the sign.

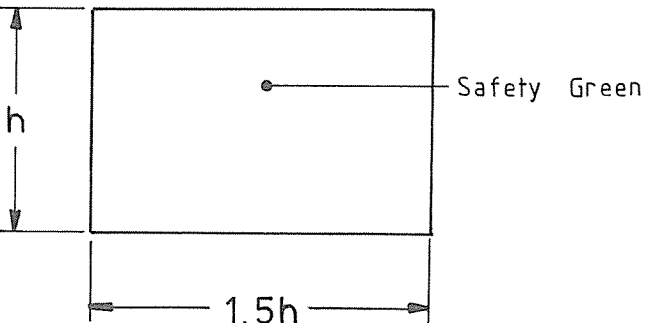
NOTE – The symbols for obligatory signs shown in the samples depict general types of protection. Where necessary a specific type of level of protection should be indicated in words on a supplementary sign used in conjunction with the appropriate obligatory sign.



106.5 Caution signs (equilateral triangle). Background colour shall be *safety yellow*. Triangular band shall be black. The safety symbol or text shall be black and placed centrally on the background. An outer narrow yellow band and rounding of corners is optional. The background colour shall cover at least 50 percent of the sign area.



106.6 Safety information signs (rectangle – vertical or horizontal or a square). Background shall be *safety green*. The safety symbol or text shall be white and placed centrally on the background. The shape of the sign may be rectangular or square to suit the safety symbol or text. A narrow outer white band and rounding of corners is optional. The background colour shall cover at least 50 percent of the sign area.

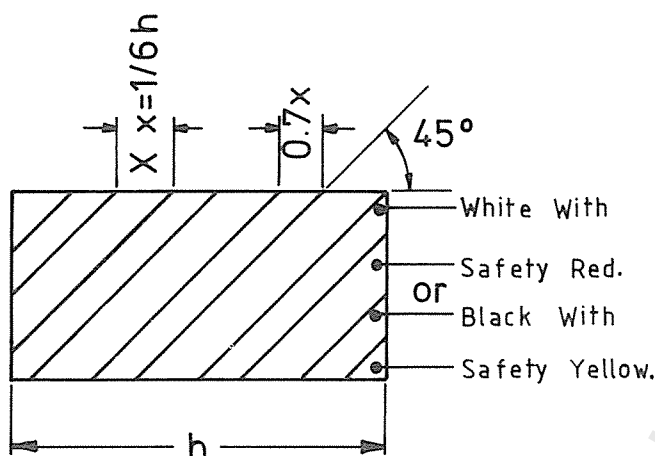




**106.7 Indication signs.** The signs are used:

- (a) To indicate the location of all fire fighting equipment. 'X' stripe *safety red*, '0.7 X' stripe white;
- (b) To indicate any hazard to safety. 'X' stripe *safety yellow*, '0.7 X' stripe black.

**NOTE** – The background colour (that is, red or yellow) to cover at least 50 percent of the sign area; 'h' axis may be horizontal or vertical.



## 107 FIRE PROTECTION EQUIPMENT

**107.1** Protective covers for manually operated fire alarm devices, access panels to fire brigade waterway connections, sprinklers or other fire protection systems and hose reel cabinets should be coloured RED.

**107.2** Portable fire extinguishers should be indicated and coloured in accordance with the colour coding described in clause 108.1 (a) (2) and fig. 1. (For actual colours see separate colour section.)

**107.3** Portable fire extinguishers should be labelled to identify the extinguishing medium contained, the classification and rating in accordance with NZS 4507\* and, where appropriate, a warning regarding any condition under which the extinguisher is not suitable for use.

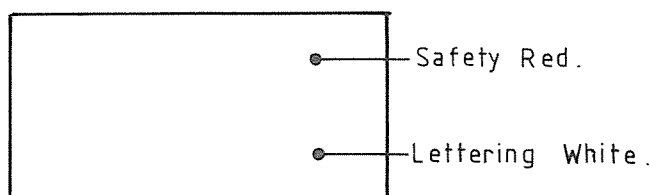
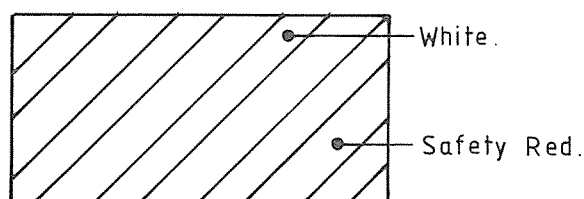
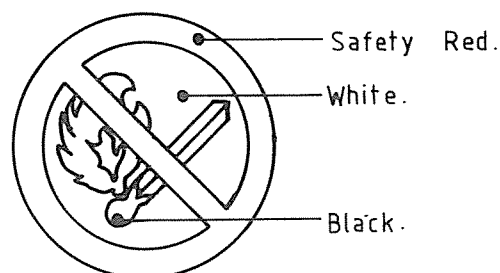
Such labelling shall be in accordance with the marking requirements of the appropriate New Zealand Standard.

**107.4** Pipes associated with fire protection systems should be painted in accordance with the codings described in Part 2 of this standard, *Identification of contents of piping, conduit and ducts*.

## 108 EXAMPLES OF THE USES OF THE SAFETY COLOURS

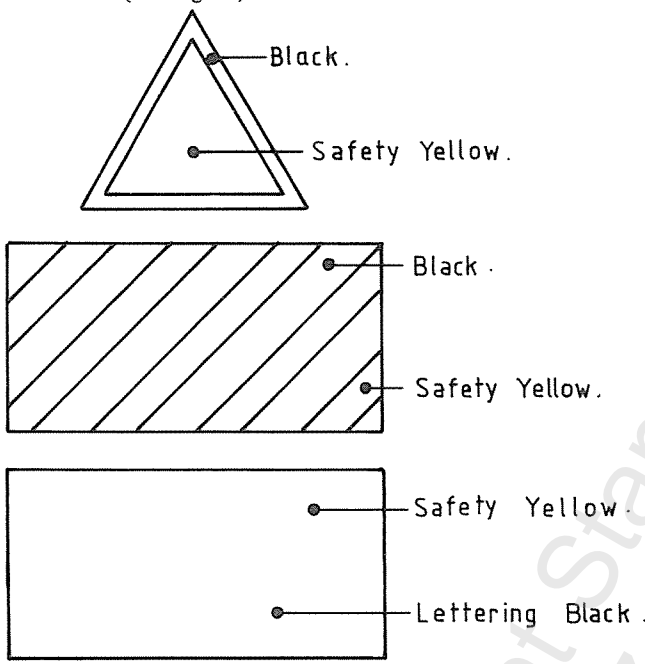
**108.1 Signs.** (For shape refer to section 106.) Signs are recommended for use as follows:

- (a) **SAFETY RED** (with white as a contrast where necessary) –
  - (1) Signs to indicate prohibition and flammable liquids refer to Dangerous Goods (Labelling) Regulations 1978. (See fig. 2.)
  - (2) To indicate the location of all first aid fire fighting equipment, including: Fire extinguishers (see fig. 1), internal hose reels and valves.
  - (3) Stop signs.

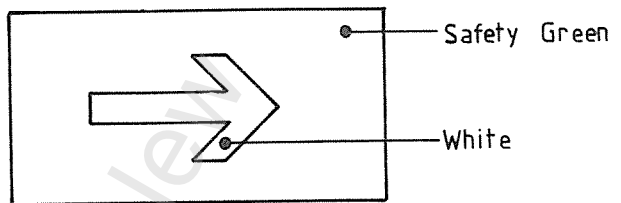


\* See list of related documents

- (b) SAFETY YELLOW (with black as a contrast where necessary) –
- (1) Containers with harmful contents such as acids and corrosives (see fig. 3). Note the Dangerous Goods (Labelling) Regulations 1978.
  - (2) Tripping hazards, changes in floor level (see fig. 4).
  - (3) Obstruction, low head-room (see fig. 4).
  - (4) Mobile equipment likely to cause a hazard. (See fig. 4.)



- (c) SAFETY GREEN (with white as a contrast where necessary) –
- (1) Fire and emergency exit signs (see fig. 1).
  - (2) Medical first aid signs (see fig. 5).
  - (3) Safety equipment such as breathing apparatus and resuscitator equipment.



- (d) SAFETY BLUE (with white as a contrast where necessary) –
- Mandatory obligation to wear safety equipment such as breathing apparatus or eye protectors (see fig. 4).

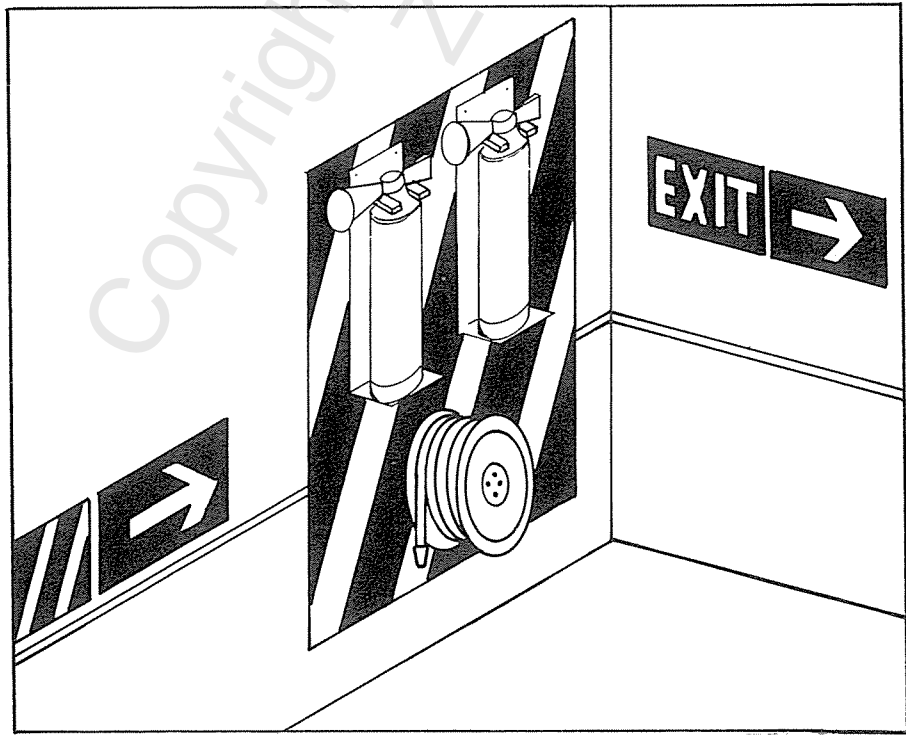
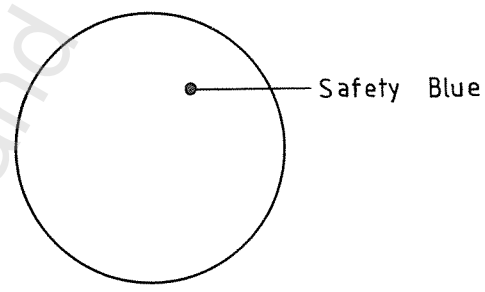


Fig. 1 FIRE FIGHTING EQUIPMENT Refer clause 108.1 (a) (2)  
EMERGENCY ROUTE SIGN Refer clause 108.1 (c) (1)

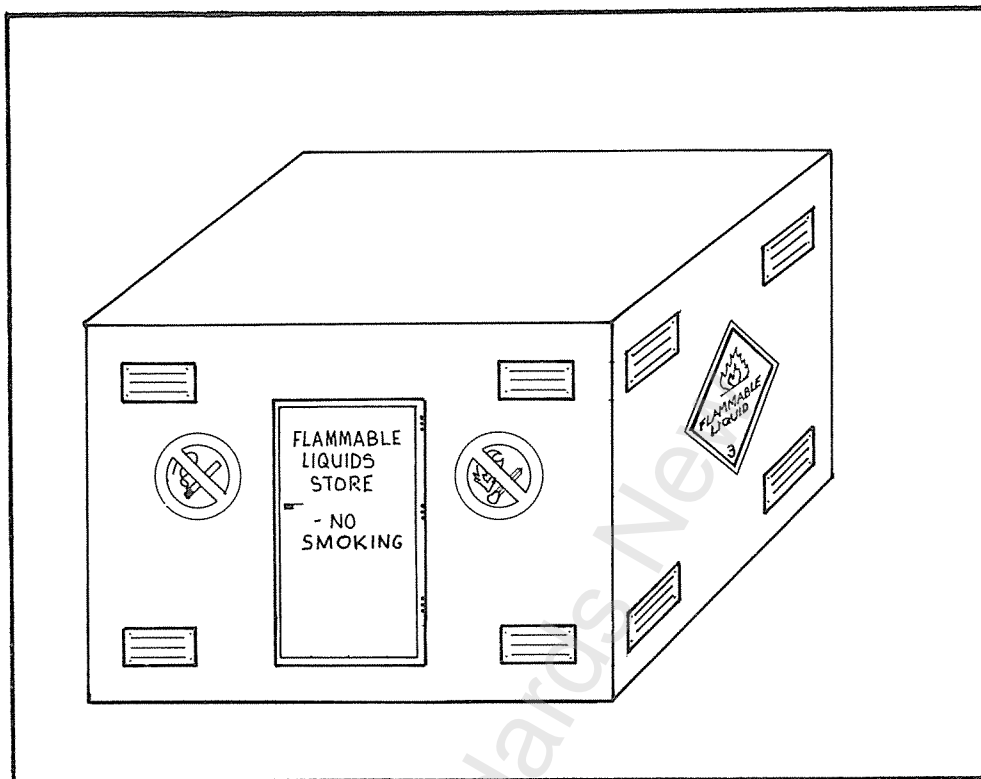


Fig. 2 FLAMMABLE LIQUID STORE  
Refer clause 108.1 (a) (1)

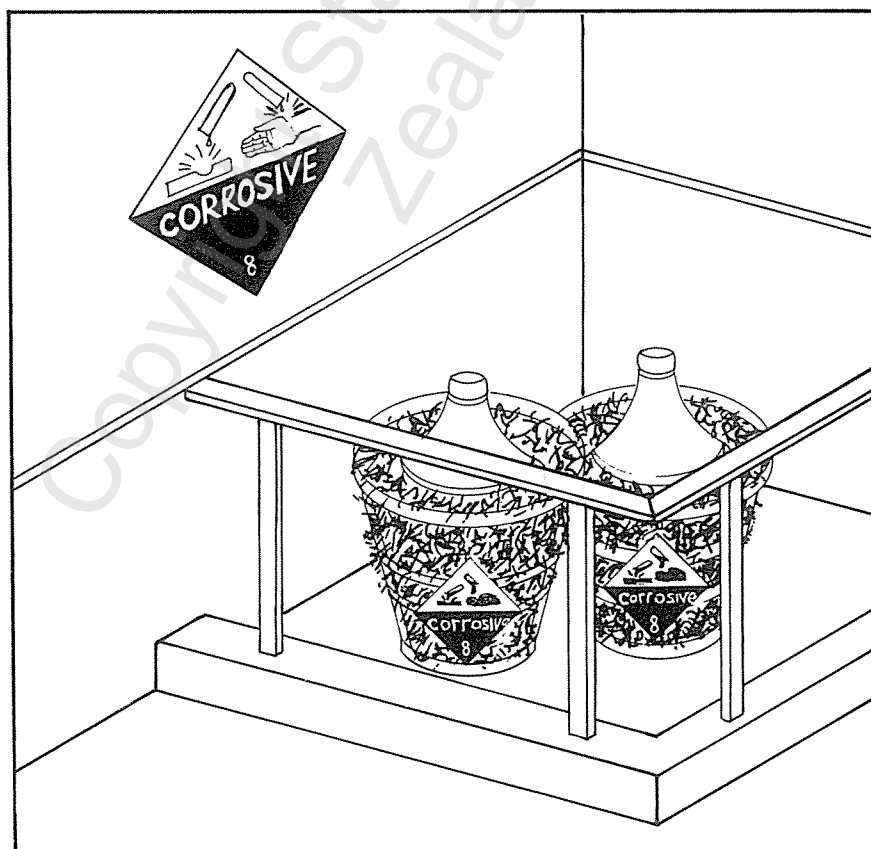


Fig. 3 ACID CONTAINERS  
Refer clause 108.1 (b) (1)

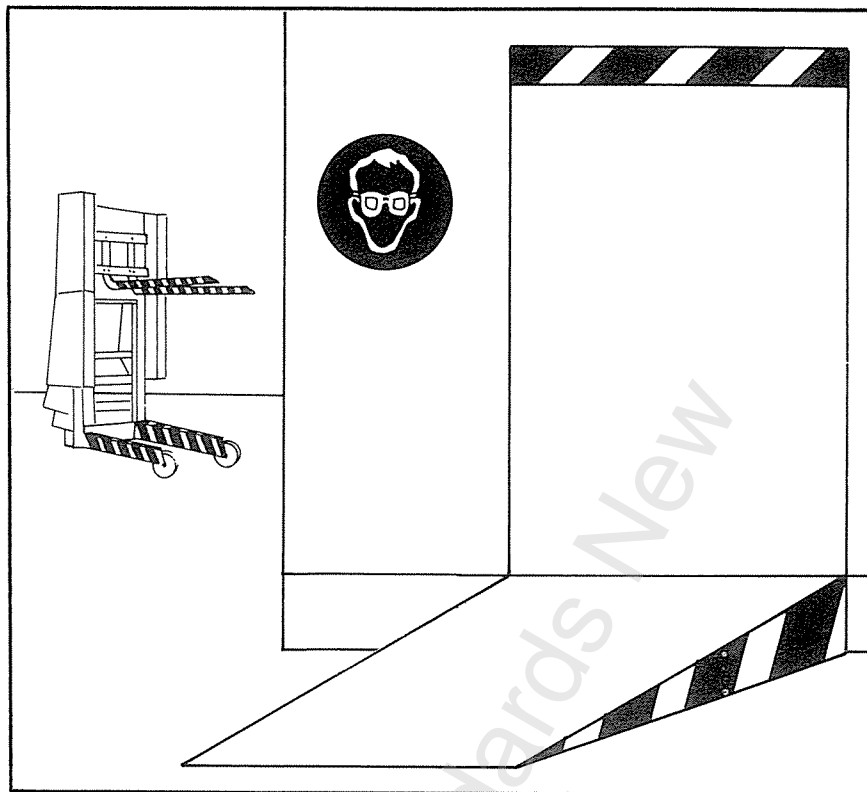


Fig. 4 TRIPPING HAZARD Refer clause 108.1 (b) (2)

LOW HEAD-ROOM Refer clause 108.1 (b) (3)

MOBILE EQUIPMENT Refer clause 108.1 (b) (4)

OBLIGATION TO WEAR SAFETY EQUIPMENT Refer clause 108.1 (d)

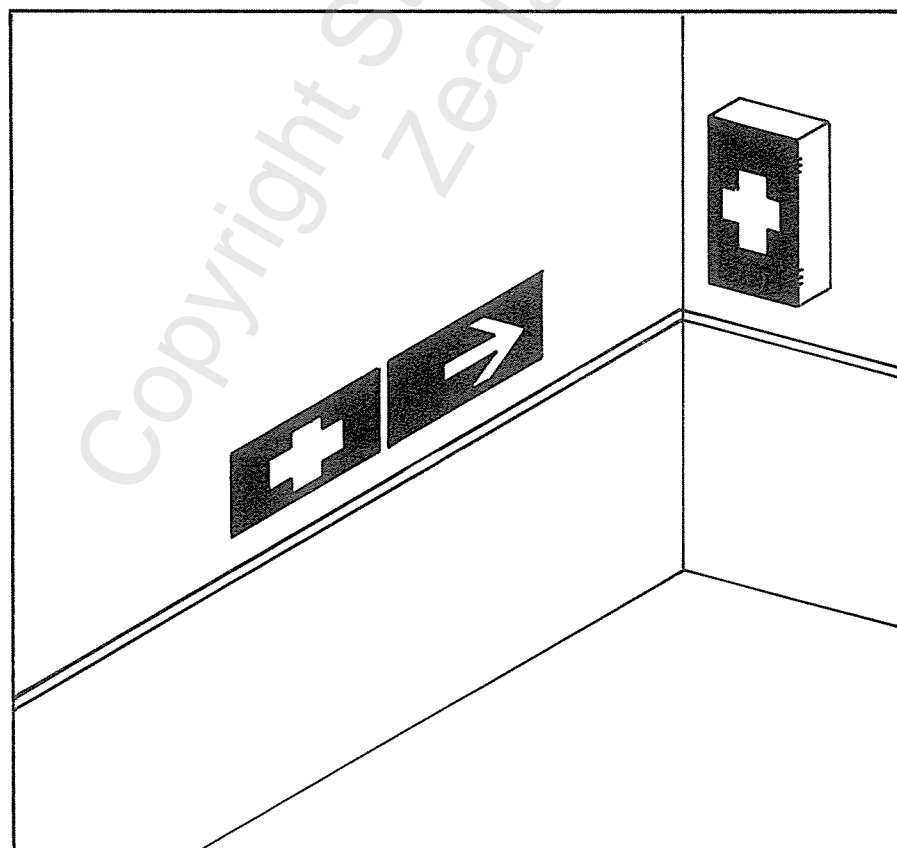


Fig. 5 FIRST AID SIGNS  
Refer clause 108.1 (c) (2)



## PART 2 IDENTIFICATION OF CONTENTS OF PIPING, CONDUIT AND DUCTS

### 201 SCOPE

201.1 The purpose of this Part of this Standard is to define the meaning and application of the colours and other indications which are recommended for —

- (a) The identification of pipes conveying fluids in liquid or gaseous conditions; *and*
- (b) The identification of conduit and ducting enclosing electrical services.

Nothing in this standard shall apply to pipelines buried in the ground.

201.2 According to the importance of the installations and to the variety of contents conveyed, pipes and electrical conduit and ducting should be identified as follows:

- (a) Basic identification colours only — *for installations where the determination of merely the basic nature of the contents is sufficient.*
- (b) Basic identification colours, data code indications or an auxiliary colour indication, or both — *for installations where the precise determination of the contents is of great importance.*

201.3 Examples are shown in fig. 6 and in the separate colour section.

### 202 BASIC IDENTIFICATION COLOURS

202.1 **Definition.** Physical definition of the basic identification colours and their meanings are as defined in table 3.

#### 202.2 Method of application

202.2.1 At the user's choice, the basic identification colour should be —

- (a) Painted on the pipe, conduit, or ducting over the whole length; *or*
- (b) Painted on the pipe, conduit, or ducting as a band or bands (see table 5); *or*
- (c) Placed by wrapping around the pipe, conduit, or ducting, an adhesive or clip-on band of the basic identification colour.

202.2.2 The basic identification colour should be placed at all junctions, at both sides of valves, service appliances, bulkheads, wall penetrations, and any other places where identification of the content is necessary.

202.2.3 Valves should be painted in the identification colour with the following exception: if the content of the pipeline is used for fire fighting, the valves should be

painted in red, or identified by a plaque. (See clause 203.2 (a).) For example, valves in a fire extinguishing steam pipeline, in an extinguishing water pipeline, or water flooding pipeline should be painted red.

### 203 CODE INDICATIONS

203.1 **Application.** The application of code indications should be determined by the user. Code indications should be placed at all junctions, at both sides of valves, service appliances, bulkheads, and wall penetrations.

203.2 **Code indications.** Code indications are as follows:

- (a) The safety colours —
  - (1) *Safety red*, for fire fighting. (For specific wording, see subclause 203.2 (c).)
  - (2) *Safety yellow*, with black diagonal stripes, for warning of danger.
- (b) Auxiliary blue, used in conjunction with the green basic colour, denotes pipes carrying fresh potable water.
- (c) Data of the nature of content in full, for example, lubricating oil, hot water.

203.3 **Definition of the safety colours.** The safety colours are defined in section 104 and tables 1 and 2 relating to identification of general safety colours and fire extinguishers.

203.4 **Definition of auxiliary colour blue.** In addition to the basic identification colours, blue may be used in an auxiliary capacity as a signalling colour. Physical definition of the auxiliary colour blue is as defined in table 4.

203.5 **Method of application of safety colours and auxiliary blue.** If a safety colour or auxiliary blue is applied, it should be in accordance with table 5.

203.6 Further possible code indications, such as data regarding the content, should be placed on the basic identification colour or next to the basic identification colour band. Such data should be either in white or in black in order to contrast clearly with the colour of the pipe, conduit, or ducting, or with the basic identification colour, and should be placed directly on the pipe, conduit, or ducting or on a label, plate, or sign, fixed to the pipe, conduit, or ducting near the basic identification colour.

### 204 DIRECTION OF FLOW

204.1 The direction of flow of a fluid content should be indicated by an arrow situated in the proximity of the basic identification colour and painted white or black in order to contrast clearly with the basic identification colour. If a label, plate, or sign, with a codified indication, is attached to the pipe, conduit, or ducting, the direction of flow may be shown by the pointed end of this label, plate, or sign.

**Table 3 PHYSICAL DEFINITION OF  
BASIC IDENTIFICATION COLOURS**

<i>Paint colour name</i>	<i>Specification reference number</i>	<i>Meanings</i>
Forest green	BS 5252* Colour No. 12 C 39	Water in liquid state
Silver grey or aluminium	BS 5252* Colour No. 00 A 01	Steam
Brown	BS 5252* Colour No. 06 D 45	Mineral, vegetable and animal oil combustible liquids
Light buff	BS 5252* Colour No. 08 C 35	Gases in either gaseous or liquified condition (except air)
Violet	BS 5252* Colour No. 24 C 37	Acids and alkalis
Light blue	BS 5252* Colour No. 18 E 51	Air
Orange	BS 5252* Colour No. 06 E 55	Electrical conduit and ducting
Black	BS 5252* Colour No. 00 E 53	Other liquids

**Table 4 DEFINITION OF AUXILIARY COLOUR BLUE**

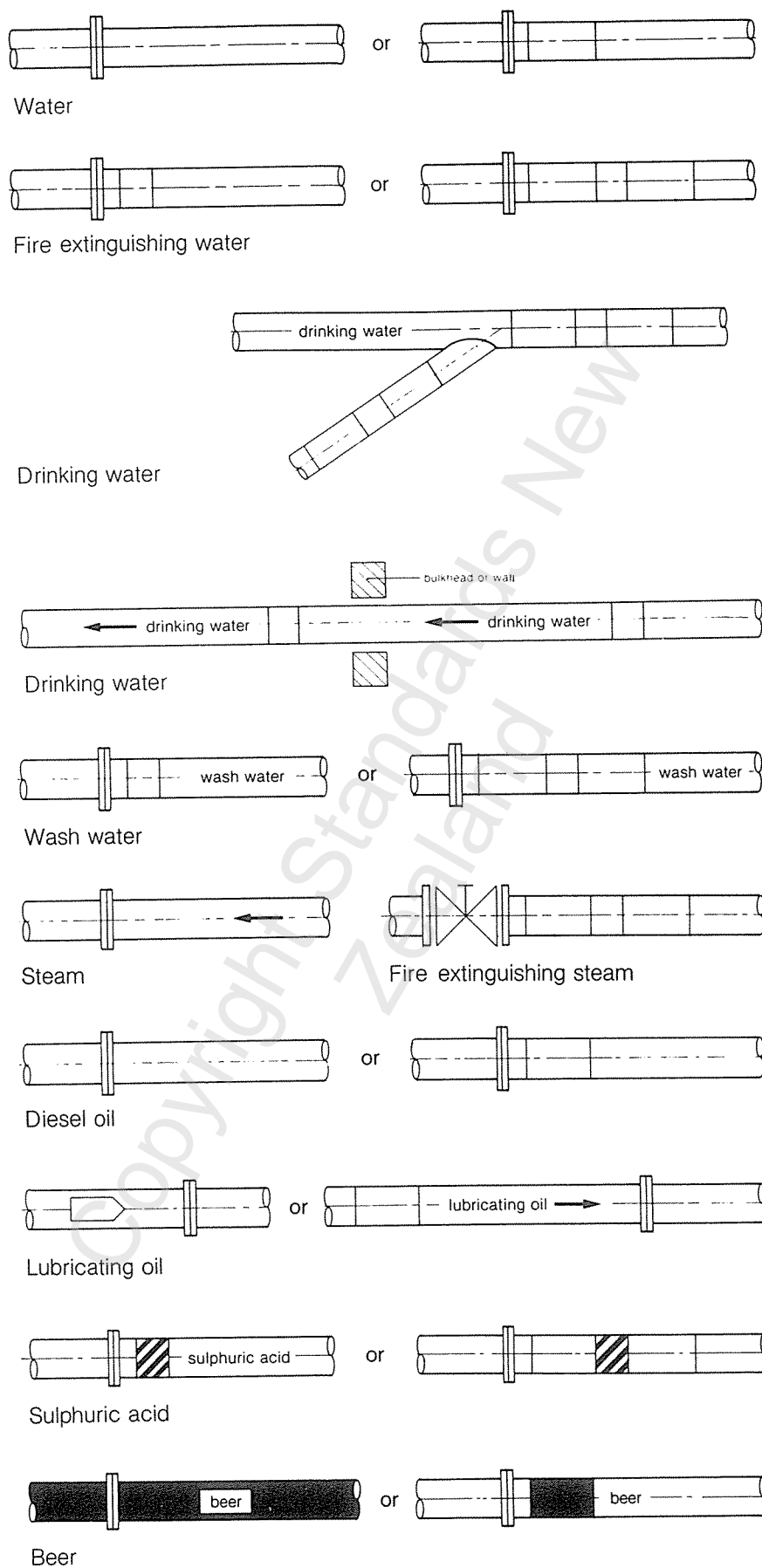
<i>Colour name</i>	<i>Specification reference number</i>
Auxiliary blue	BS 5252* Colour No. 18 E 53

**Table 5 IDENTIFICATION BANDING WIDTHS**  
(Dimensions in millimetres)

<i>Pipe or its covering O.D.</i>	<i>Basic identification colour width</i>	<i>Auxiliary width</i>
Up to 50	120	100
55 to 130	160	100
140 to 255	200	150
Over 260	250	200
Over 300† rounds may be used	0.5 x pipe O.D.	0.3 x pipe O.D.

\* See list of related documents

† Placed around circumference at points best suited to aid identification. Alternatively a 700 mm x 300 mm rectangle with basic colour strip 250 mm wide either side of central auxiliary colour strip 200 mm wide.



**Fig. 6 IDENTIFICATION FOR PIPES CONVEYING FLUID IN LIQUID OR GASEOUS CONDITION**

(For actual colours, see separate colour section.)

## 205 LOCATION OF IDENTIFICATION MARKING

205.1 The location of identification marking shall be at intervals of not more than 8 m and preferably adjacent to branches, junctions, valves, walls and control points (see clause 203.6). Such marking shall be placed so that it can be easily seen from all approaches.

## 206 MAINTENANCE

206.1 The system used to identify the contents of the

pipeline shall be maintained in good condition so as to be readily distinguishable at all times.

## 207 COLOUR RENDITION

207.1 Under certain types of lighting, now coming into increased usage, colour identification has often been proven erroneous. Low pressure sodium lighting should be avoided where safety colours have to be identified. Failing that, fluorescent paint in the correct safety colour may be used if available.

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### PART 3 IDENTIFICATION OF INDUSTRIAL GAS CYLINDERS

#### 301 SCOPE

301.1 This Part of this standard makes provision for the identification of the contents of industrial gas cylinders. Medical gas cylinders are not referred to in this standard, but are covered by NZS 1304\*.

This Part of this standard shall apply to portable gas cylinders of up to 250 l water capacity. All industrial gas cylinders and tanks shall be identified as required by the Dangerous Goods (Labelling) Regulations 1978.

#### 302 IDENTIFICATION OF THE CONTENTS OF CYLINDERS

302.1 The primary identification of the contents of industrial gas cylinders should be by marking clearly the name of the contained gas on the shoulder of the cylinder.

The colour coding of cylinders prescribed in table 6 is recommended as a useful secondary identification.

302.2 Types and sizes of letters are set out in Appendix A.

#### 303 STANDARD COLOURS

303.1 The colour used both for the ground colour and the distinguishing colour band shall be in accordance with BS 5252\*.

#### 304 MAINTENANCE OF COLOUR

304.1 Colour coding on gas cylinders shall be maintained for easy visual identification.

Table 6 NEW ZEALAND STANDARD IDENTIFICATION COLOURS FOR GAS CYLINDERS, EXCLUDING CYLINDERS FOR MEDICAL PURPOSES

Gas name	Ground colour of cylinder	BS 5252* colour No.	Colour of Band †	BS 5252*
Acetylene	Maroon	04 C 40	None	04 E 53 & 08 E 51
Air	Grey	12 B 21	None	
Ammonia	Black	00 E 53	* Red & yellow	
Argon	Blue	18 D 45	None	
§ Carbon dioxide	Aluminium	00 A 01	None	04 E 53
Chlorine	Yellow	08 E 51	None	
Ethylene	Mauve	24 C 39	Red	
Helium	Medium brown	06 C 39	None	
Hydrogen	Red	04 E 53	None	00 E 53
Liquid petroleum	Aluminium or white	00 A 01 or 00 E 55		
Nitrogen	Grey	12 B 21	Black	
Oxygen	Black	00 E 53	None	

\* See list of related documents.

† The colour band shall be located around the neck of the cylinder adjacent to the valve fitting.

\* The red band shall be placed adjacent to the valve fitting and the yellow band between that and the ground colour of the cylinder.

§ Excluding portable fire extinguishers.

NOTE – For the full range of colours and banding for all commercially available gases see BS 349 *Identification of contents of industrial gas containers*, and tables 1 and 2 and Appendix A of this standard.

APPENDIX A

LETTERING

A1 TYPE OF LETTER

A1.1 The vertical block type letter using full strokes should be used because it is more easily read than most other types of letter faces (see fig. 7).

A2 SIZE OF LETTERS

A2.1 The letter proportions set out in table 7 are examples of a satisfactory type for warning signs. The series references are based on those in ISO 3098/1\*.

Table 7 LETTERING

Type (see table below)	Ratio	Dimensions in millimetres											
<i>h</i> <sup>†</sup>	(10/10) <i>h</i>	10	12.5	16	20	25	31.5	40	50	63	80	100	
<i>c</i>	( 7/10) <i>h</i>	7	8.75	11.2	14	17.5	22	28	35	44	56	70	
<i>a</i>	( 2/10) <i>h</i>	2	2.5	3.2	4	5	6.3	8	10	12.6	16	20	
<i>b</i>	(14/10) <i>h</i>	14	17.5	22.4	28	35	44	56	70	88.2	112	140	
<i>e</i>	( 6/10) <i>h</i>	6	7.5	9.6	12	15	19	24	30	37.8	48	60	
<i>d</i>	( 1/10) <i>h</i>	1	1.25	1.6	2.0	2.5	3.2	4.0	5.0	6.3	8.0	10.0	

- Type table:
- Height of capitals — *h*
  - Height of lower-case letters (without stem or tail) — *c*
  - Spacing between characters — *a*
  - Minimum spacing of base lines — *b*
  - Minimum spacing between words — *e*
  - Thickness of lines — *d*

<sup>†</sup> R10 series of preferred numbers (ISO 3\*)

A2.2 The height of lettering used should be as large as possible and consistent with good balance and legibility. A minimum height of 100 mm is recommended for egress signs.

A2.3 Visibility. The relationship between the greatest distance “D” from which the sign can be understood and the minimum area “A” of the sign is given by the formula  $A > D^2 / 2000$ . This formula is applicable up to a distance of 50 m. If 100 mm high characters shown in the proportions in table 7 and drawn to the dimensioning of fig. 7 are used to form the words “EXIT” and “STOP”, under clear atmospheric conditions, they will be clearly visible by a person having normal vision.

\*See list of related documents.



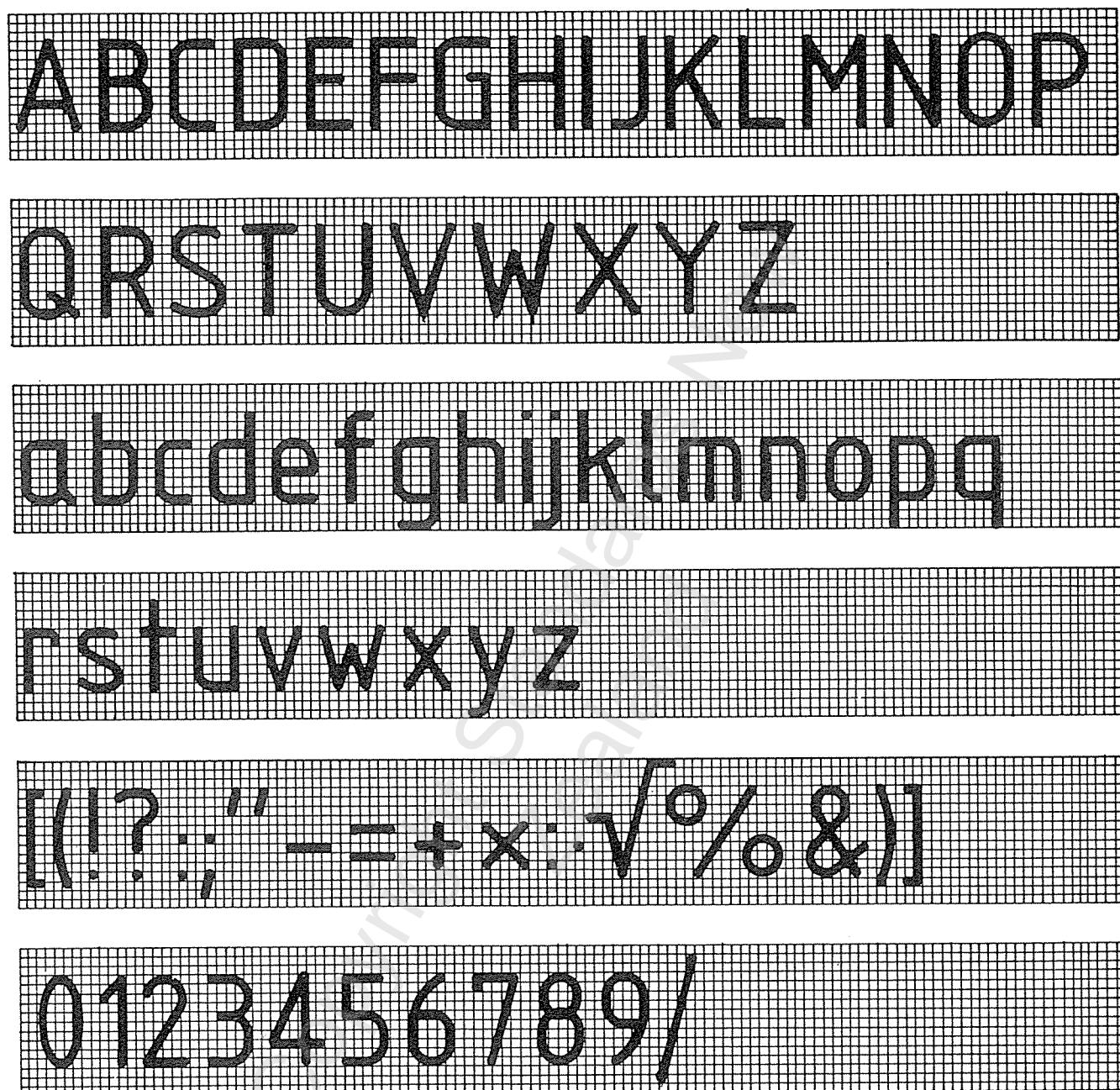


Fig. 7 ISO LETTERING, TYPE B CHARACTERS (VERTICAL)

NOTE – This is not a spacing guide. Spacing is shown in table 7. To obtain constant line density, freedom from blurring at intersecting lines and ease of printing, the letters shall be formed so that lines cross or meet nearly at right angles.

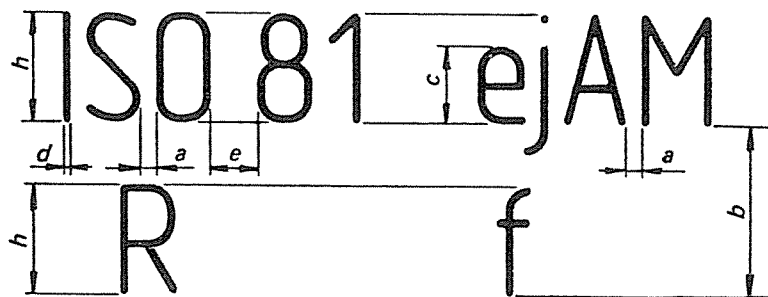


Fig. 8 EXAMPLE OF LETTERING AND SPACING

### A3 LETTERING OF PIPELINES

A3.1 Lettering should be applied as follows:

- (a) Lettering should be applied by painting or other permanent methods direct to the pipeline at locations indicated in fig. 6. Such lettering should be applied over the ground colour only. Where a plate or a tag is used for the lettering, it should have the same ground colour as the pipeline.
- (b) Letters should not be less than 10 mm in height, conspicuous and easily identified.
- (c) Where the identification colour is in the form of supplementary bands, the lettering should be placed over the ground colour band.



# NZS 5807 INDUSTRIAL IDENTIFICATION by colour, wording, or other coding.

## Basic identification colours

NAME	COLOUR	PAINT REF No.	MEANING
Safety red		BS 5252 Colour No. 04 E 53	To have the meaning <b>Stop</b> or <b>Danger</b> and to indicate fire-fighting equipment and its location.
Safety yellow		BS 5252 Colour No. 08 E 51	To have the meaning <b>Caution</b> or <b>Warning of Danger</b> .
Safety green		BS 5252 Colour No. 14 E 53	To have the meaning <b>Safety</b> . For identification or location of safety equipment, emergency escape routes and medical first aid equipment.
Safety blue (auxiliary blue)		BS 5252 Colour No. 18 E 53	To have the meaning <b>Mandatory Action</b> (for example, "wear safety goggles"). <b>Information</b> (for example, "location of telephone").
Forest green		BS 5252 Colour No. 12 C 39	Water in liquid state
Silver grey or aluminium		BS 5252 Colour No. 00 A 01	Steam

NAME	COLOUR	PAINT REF No.	MEANING
Brown		BS 5252 Colour No. 06 D 45	Mineral, vegetable and animal oil combustible liquids
Light buff		BS 5252 Colour No. 08 C 35	Gases in either gaseous or liquified condition (except air)
Violet		BS 5252 Colour No. 24 C 37	Acids and alkalis
Light blue		BS 5252 Colour No. 18 E 51	Air
Orange		BS 5252 Colour No. 06 E 55	Electrical conduit and ducting
Black		BS 5252 Colour No. 00 E 53	Other liquids

## Symbols showing safety colours

SAFETY RED (with white as a contrast where necessary)—	SAFETY YELLOW (with black as a contrast where necessary)—	SAFETY GREEN (with white as a contrast where necessary)—
 Safety Red White 1 Signs to indicate prohibition and flammable liquids refer to Dangerous Goods (Labelling) Regulations 1978. (See fig. 2.)	 Black Safety Yellow 1 Containers with harmful contents such as acids and corrosives (See fig. 3). Note the Dangerous Goods (Labelling) Regulations 1978.	 Safety Green White 1 Fire and emergency exit signs (See fig. 1). 2 Medical first aid signs (See fig. 5). 3 Safety equipment such as breathing apparatus and resuscitator equipment.
 Safety Red White 2 To indicate the location of all first aid fire fighting equipment, including: Fire extinguishers (See fig. 1), internal hose reels and valves.	 Black Safety Yellow 2 Tripping hazards, changes in floor level (See fig. 4).	<b>SAFETY BLUE (with white as a contrast where necessary)—</b>
 Safety Red Lettering White 3 Stop signs.	 Black Safety yellow 3 Obstruction, low Head-Room (See fig. 4). 4 Mobile equipment likely to cause a hazard.	 Safety Blue 1 Mandatory obligation to wear safety equipment such as breathing apparatus or eye protectors (See fig. 4).

## Specific uses of colours and symbols

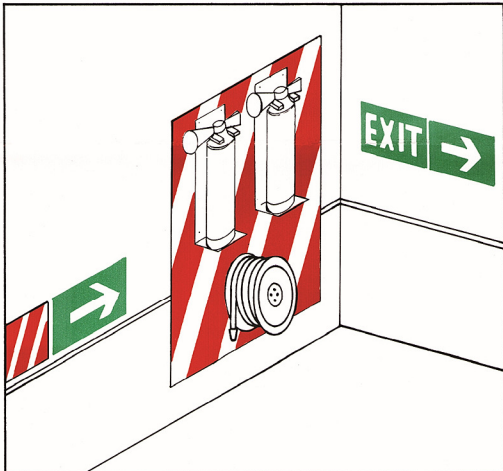


Fig. 1. Fire Fighting Equipment & Emergency Route Sign

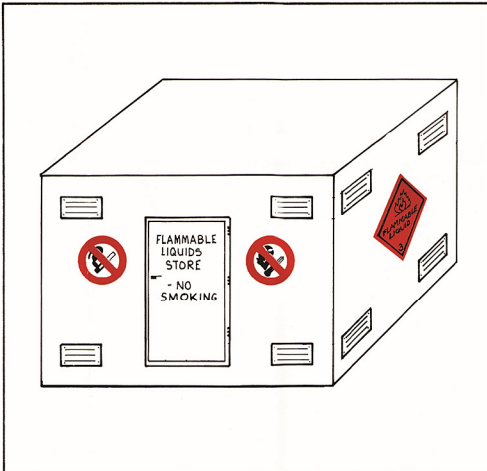


Fig. 2. Flammable Liquid Store.

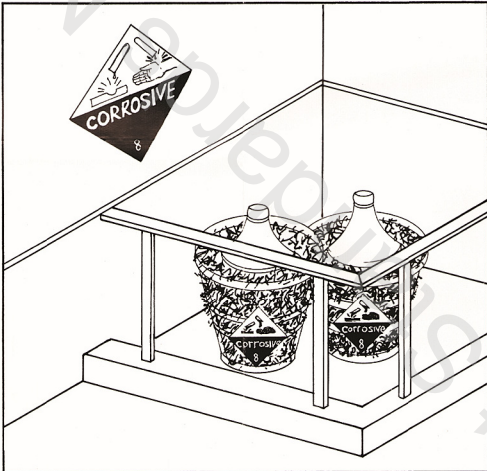


Fig. 3. Acid Containers.

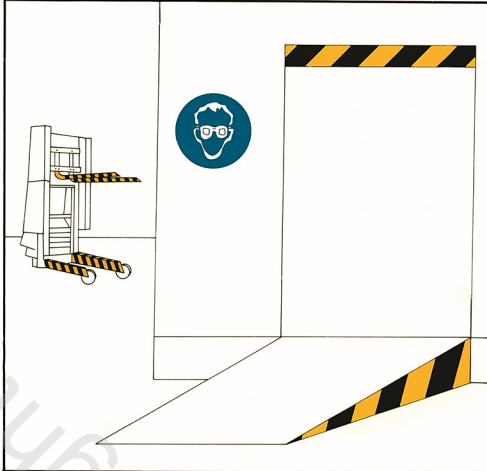


Fig. 4. Tripping Hazard. Low Head-Room. Mobile Equipment. Obligation To Wear Safety Equipment.

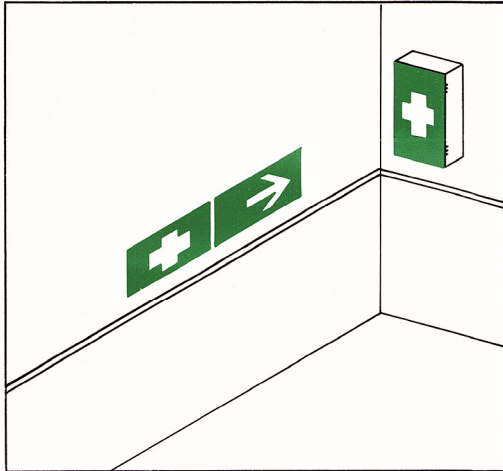


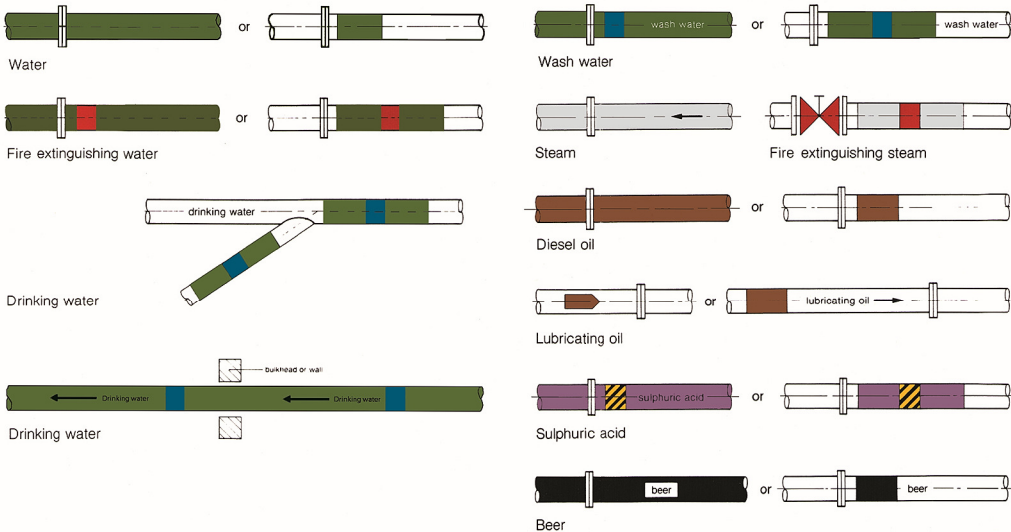
Fig. 5. First Aid Signs.

## Colour coding and indicators for portable fire extinguishers

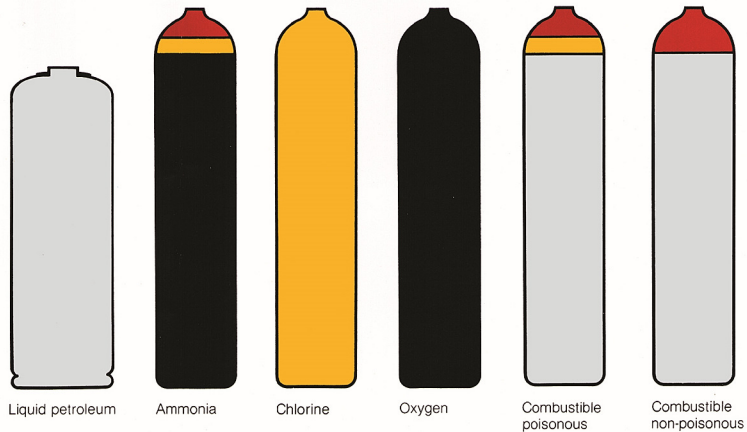
Colour coding and indicators for portable fire extinguishers cannot be included until the revision of BS 5423:1977 Specification for portable fire extinguishers is completed. Illustrations in colour will be prepared at that time and published as an Amendment to NZS 5807.

29 August 1980

## Identification colours for pipes



## Identification colours for gas cylinders



NEW ZEALAND STANDARD

NZS 5807:1980

Code of practice for  
INDUSTRIAL IDENTIFICATION BY COLOUR,  
WORDING, OR OTHER CODING

Amendment No. 1

May 1983

*EXPLANATORY NOTE - Amendment No. 1 clarifies the use of safety signs for illustrative purposes, adds a note regarding requirements for water potability being defined by the Regulatory Authority, allows the use of additional colour systems for colour reproductions and corrects an error in ISO lettering Type B characters (vertical).*

-----  
To ensure receiving the next amendment to NZS 5807:1980 please complete and return the amendment request form.  
-----

DECLARATION

Amendment No. 1 was declared on 20 May 1983 by the Standards Council to be an amendment to NZS 5807:1980 pursuant to the provisions of the Standards Act 1965.

-----  
Table 2 PHYSICAL DEFINITION OF BASIC SAFETY COLOURS

Below table 2 *add* the following:

NOTE - Other colour systems may be used provided that the colours are identical to those BS 5252 colours selected for use in this Standard. Colourfast media must be used.

(Amendment No. 1, May 1983)

-----  
Fig. 2 FLAMMABLE LIQUID STORE and Fig. 3 ACID CONTAINERS

After each caption *add* the following:

NOTE - Safety signs are shown for illustrative purposes only and may not be required by the Regulatory Authority.

(Amendment No. 1, May 1983)

-----  
Clause 203.2 Code indicators

In (b) after "Auxiliary blue, used .... fresh potable water," *add* the following:

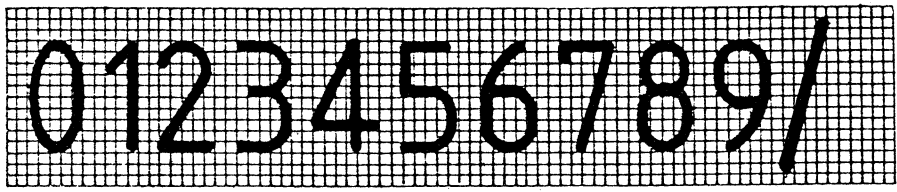
NOTE - Requirements for water potability are defined by the Regulatory Authority.

(Amendment No. 1, May 1983)

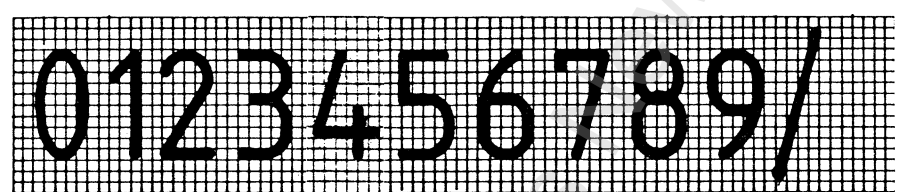


Fig. 7 ISO LETTERING, TYPE B CHARACTERS (VERTICAL)

Delete the following:



and substitute the following:



(Amendment No. 1, May 1983)

Twelve-colour poster in pocket at back of NZS 5807

At lower left hand corner *delete* the heading "Colour coding and indicators for portable fire extinguishers" and the Note below this heading.

(Amendment No. 1, May 1983)

(C) STANDARDS COUNCIL  
STANDARDS ASSOCIATION OF NEW ZEALAND  
WELLINGTON TRADE CENTRE, 15-23 STURDEE STREET, WELLINGTON 1

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NZS 5807:1980

Amendment No. 2

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Code of practice for  
INDUSTRIAL IDENTIFICATION BY COLOUR,  
WORDING, OR OTHER CODING

Pr AA

AMENDMENT No. 2

May 1988

**EXPLANATORY NOTE** - Amendment No. 2 alters the indication sign for any hazard to safety, to make the safety yellow and black stripe of equal width. Replacement colour stickers for the poster are attached.

To ensure receiving the next amendment to NZS 5807:1980 please complete and return the amendment request form.

#### DECLARATION

Amendment No. 2 was declared on 27 May 1988 by the Standards Council to be an amendment to NZS 5807:1980 pursuant to the provisions of section 23 of the Standards Act 1965.

(Amendment No. 2, May 1988)

#### 106.7

##### Indication signs

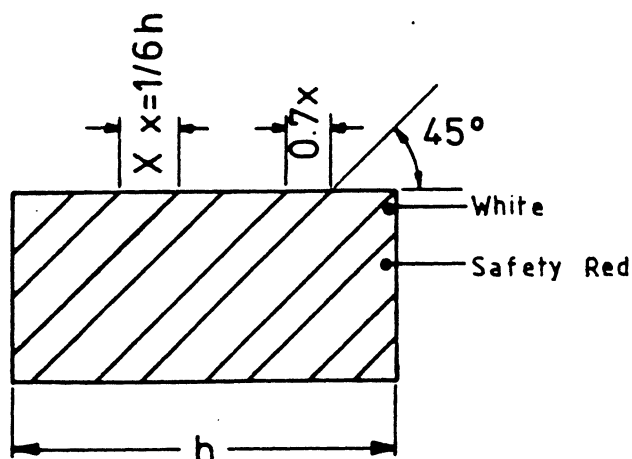
**Delete** the entire clause and accompanying figure and **substitute** the following:

#### 106.7

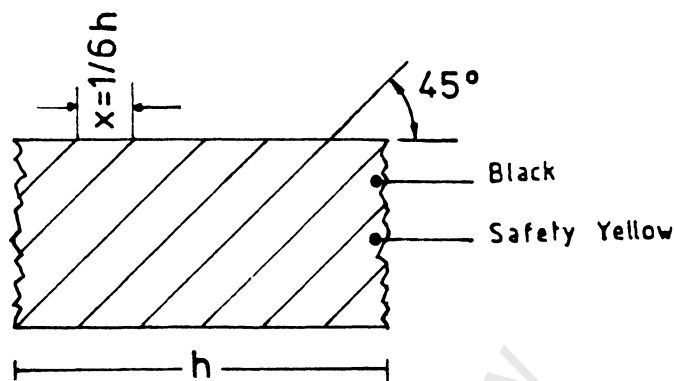
##### Indication signs

The signs are used:

- (a) To indicate the location of all fire fighting equipment.  
'X' stripe safety red, '0.7 X' stripe white,



- (b) To indicate any hazard to safety. Stripes of equal width of safety yellow and black.



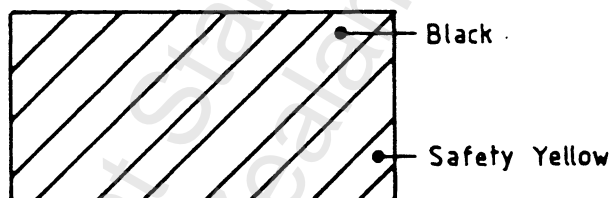
Note to (a) and (b) - The background colour (that is, red or yellow) to cover at least 50 % of the sign area; 'h' axis may be horizontal or vertical.

(Amendment No. 2, May 1988)

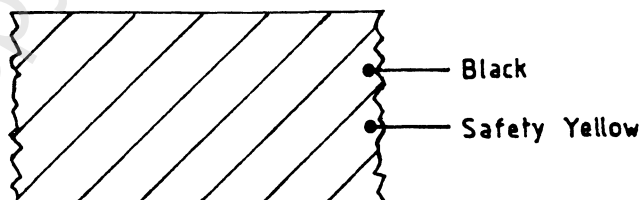
### 108.1 Signs

In 108.1 (b) SAFETY YELLOW

**Delete** the sign below;



and **substitute** the following sign;



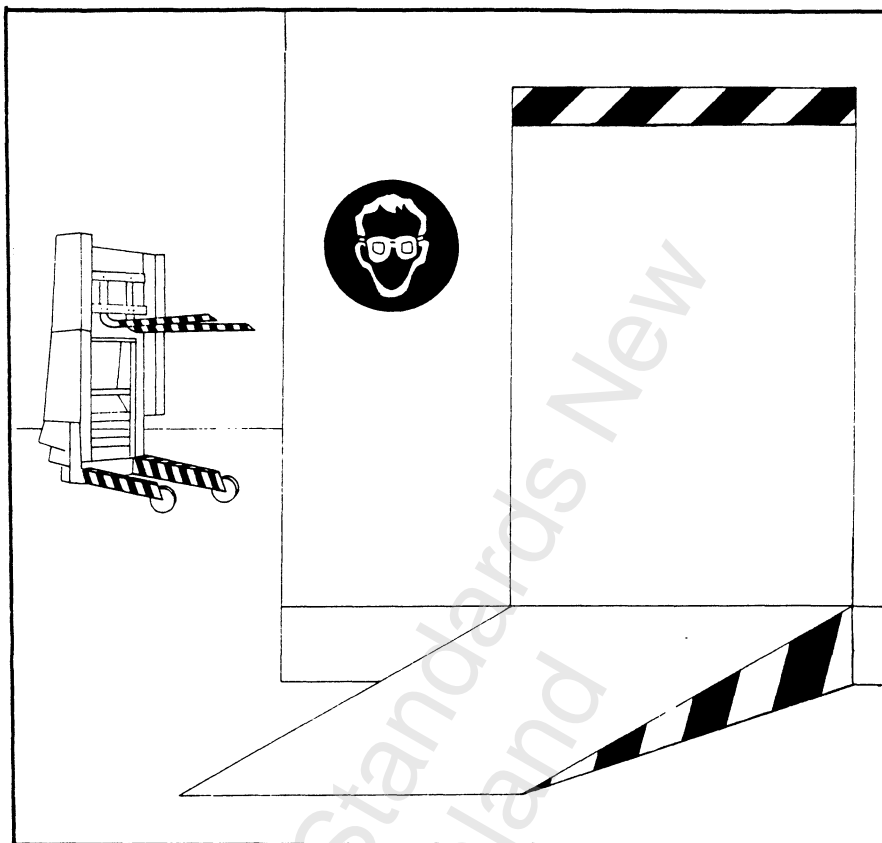
Yellow shall cover at least 50 % of the area of the sign.

(Amendment No. 2, May 1988)

**Fig. 4**

**Delete** the existing figure and **substitute** the following figure:

"Yellow and black stripes to be of equal width with yellow covering at least 50 % of sign area".



**Fig 4.**

**TRIPPING HAZARD** Refer clause 108.1(b)(2)

**LOW HEAD-ROOM** Refer clause 108.1(b)(3)

**MOBILE EQUIPMENT** Refer clause 108.1(b)4

**OBLIGATION TO WEAR SAFETY EQUIPMENT** Refer clause 108.1(d)

(Amendment No. 2, May 1988)

POSTER (Inside back flap)

**Symbols showing safety colours**

SAFETY YELLOW block.

Place attached sticker over relevant figure.

**Specific uses of colours and symbols**

Fig. 4 Place attached sticker over relevant figure.

(Amendment No. 2, May 1988)

1988 STANDARDS COUNCIL  
STANDARDS ASSOCIATION OF NEW ZEALAND  
WELLINGTON TRADE CENTRE, 181-187 VICTORIA STREET  
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