

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 557

SYMBOLS, DIMENSIONS AND LAYOUT
FOR SAFETY SIGNS

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BRIEF HISTORY

The ISO Recommendation R 557, *Symbols, Dimensions and Layout for Safety Signs*, was drawn up by Technical Committee ISO/TC 80, *Safety Colours*, the Secretariat of which is held by the Nederlands Normalisatie-instituut (NNI).

Work on this question by the Technical Committee began in 1956 and led, in 1963, to the adoption of a Draft ISO Recommendation.

In July 1964, this Draft ISO Recommendation (No. 734) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies:

Canada	Italy	Sweden
Chile	Korea, Rep. of	Switzerland
Czechoslovakia	Morocco	Turkey
Denmark	Netherlands	U.A.R.
Germany	New Zealand	United Kingdom
Greece	Norway	U.S.S.R.
Hungary	Portugal	Yugoslavia
Israel	Republic of South Africa	

Three Member Bodies opposed the approval of the Draft:

Belgium
France
India

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in March 1967, to accept it as an ISO RECOMMENDATION.

SYMBOLS, DIMENSIONS AND LAYOUT FOR SAFETY SIGNS

1. SCOPE

This ISO Recommendation applies to

- (a) the dimensions of safety signs in geometric forms as given in ISO Recommendation R 408, *Safety Colours*;
- (b) symbolic images to be placed on those safety signs, representing the objects or events to which the safety signs are intended to call particular attention;
- (c) the layout of the signs.

2. DEFINITIONS

The following terms are used for notions applied in this ISO Recommendation:

- contrast colour—neutral colour, or white or black, used as a contrast in combination with the safety colour or with the auxiliary colour;
- safety symbol—simple image graphically specifying more closely the meaning of the safety indication;
- safety sign—geometric form (e.g. circle, triangle or rectangle) containing a safety symbol, wording or both.

3. PURPOSE OF SAFETY SIGNS

The purpose of the safety signs and of the symbols which may appear on them, together with the application of the safety colours which may reinforce their effect, is to attract attention rapidly to a danger and to facilitate its identification by specifying it, if necessary, by means of more precise indications.

They may also be used for indicating the location of devices and equipment which are particularly important from the safety point of view. Safety signs and symbols do not by themselves eliminate any danger, and the instructions or warnings they give cannot be substituted for proper accident prevention measures.

4. OVERALL DIMENSIONS OF SAFETY SIGNS

The overall dimensions of safety signs should be such that the area S of a safety sign and the distance of observation L comply with the formula

$$S \geq \frac{L^2}{2000}$$

S and L being expressed in the same unit of measurement (e.g. the metre).

5. SYMBOLS

The dimensions of essential details of safety symbols should be in the ratio of at least 1/1000 of the distance of observation, corresponding approximately to a visual angle of 3' 30" (in compliance with the following rule: the dimensions of essential details of the symbols should be at least 3 % of the maximum dimension of the safety sign).

This rule is sufficient for the observation of the essential details under the following conditions recommended in general for the use of safety signs:

- illuminance level not less than 50 lux on the surface of the sign,
- luminance contrast Δ within the sign, not less than 25 %, where Δ is the difference between the luminance level of the safety colour and that of the contrast colour divided by the higher of the two.

When the minimum illuminance level of 50 lux is not attained by the ordinary lighting, users are recommended to arrange for special lighting on the signs. In a number of cases, it may be of advantage to make use of luminescent or retro-reflective signs.