
INTERNATIONAL STANDARD



4069

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Building and civil engineering drawings — Representation of areas on sections and views — General principles

Dessins de bâtiment et de génie civil — Représentation des surfaces sur des coupes et des vues — Principes généraux

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Descriptors : architecture, buildings, civil engineering, engineering drawings, surfaces.

FOREWORD

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Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 4069 was developed by Technical Committee ISO/TC 10, *Technical drawings*, and was circulated to the member bodies in August 1976.

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It has been approved by the member bodies of the following countries :

[ISO 4069:1977](#)

Australia	Germany	Poland
Austria	India	Romania
Belgium	Italy	Sweden
Bulgaria	Korea, Rep. of	Switzerland
Canada	Mexico	Turkey
Chile	Netherlands	United Kingdom
Finland	New Zealand	U.S.S.R.
France	Norway	Yugoslavia

The member body of the following country expressed disapproval of the document on technical grounds :

Czechoslovakia

Building and civil engineering drawings – Representation of areas on sections and views – General principles

1 SCOPE AND FIELD OF APPLICATION

This International Standard establishes general rules for representation of areas on sections and views on building and civil engineering drawings.

It does not include indications for specific materials.

2 REFERENCE

ISO 128, *Technical drawings – Principles of presentation*.¹⁾

3 RULES

3.1 The principal areas shall be emphasised by thicker outlines, if the sections or views of a drawing are not sufficiently clear from the primary lines (see figure 1).

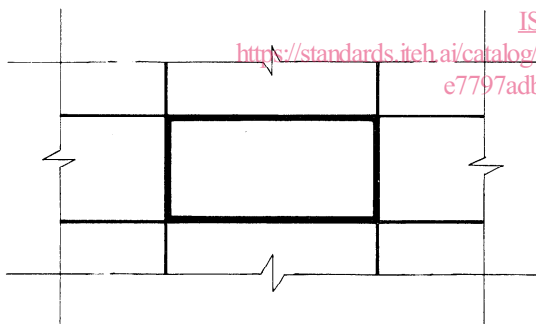


FIGURE 1

3.2 If this method (3.1) would prove inadequate, simple types of hatching or shading shall be employed (see figures 2 and 3).

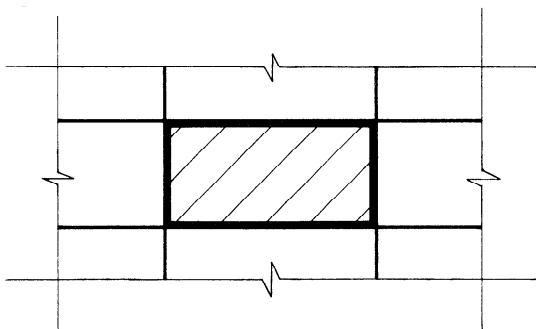


FIGURE 2

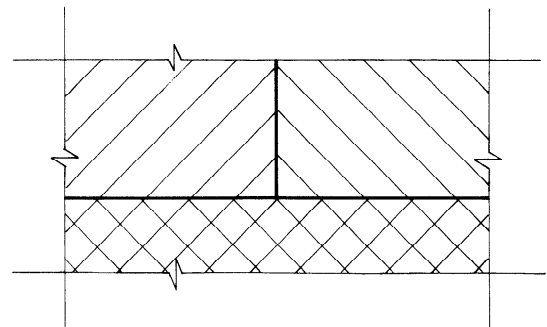


FIGURE 3

3.3 Before choosing an appropriate hatching or shading, consideration shall be given to the methods of production and reproduction that will be used.

3.4 When necessary, the meaning of hatchings and shadings shall be clearly defined.

3.5 Hatchings may consist of thin lines, continuous or interrupted, which may vary in spacing (see figure 4), in direction (see figure 5), and shape (see figure 6). The figures are examples.

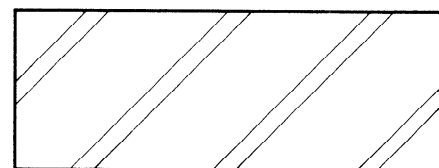
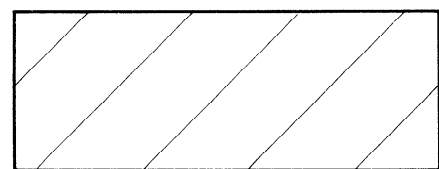


FIGURE 4

1) At present at the stage of draft. (Revision of ISO/R 128-1959.)

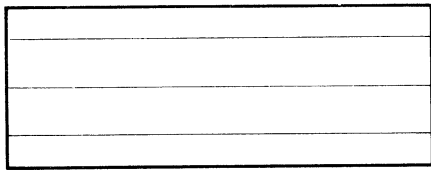


FIGURE 5

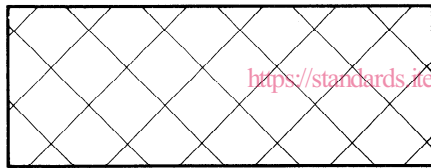
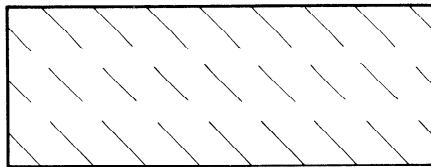


FIGURE 6

3.6 Shadings may consist of a pattern of dots or an overall toning of areas (see figure 7).

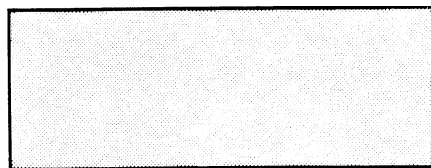
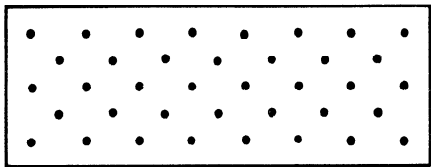


FIGURE 7

3.7 The spacing between lines or dots may be adapted to suit the size of the area, and the scale of the drawing (see figure 8).

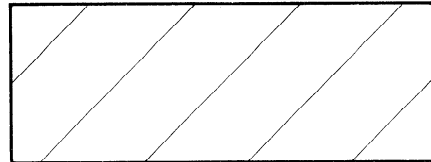


FIGURE 8

3.8 On large areas, hatchings or shadings may be limited to the zone following the outlines (see figure 9).

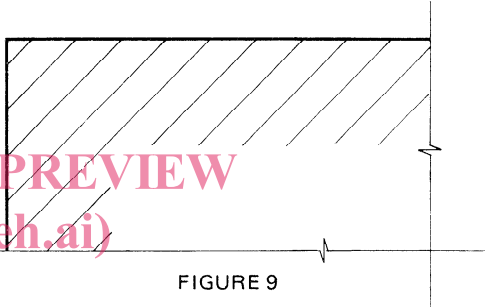
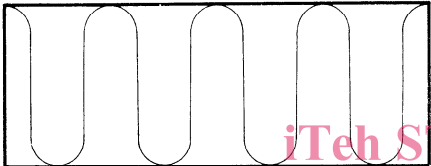


FIGURE 9

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3.9 Hatchings or shadings shall be interrupted for lettering, dimensions and symbols (see figure 10). (If possible, it is preferred to lengthen the dimension line and to indicate the dimension outside the area.)

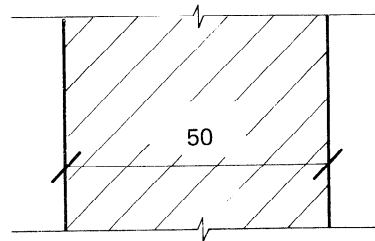


FIGURE 10

3.10 Adjacent areas that are solidly filled in shall be separated by gaps (see figure 11).



FIGURE 11