# Construction drawings — Representation of modular sizes, lines and grids

 $ICS\ 01.100.30$ 



## National foreword

This British Standard reproduces verbatim ISO 8560:1986 and implements it as the UK national standard. This standard, together with BS EN ISO 4157-1:1999, BS EN ISO 4157-2:1999, BS EN ISO 4157-3:1999, BS EN ISO 6284:1999 and BS EN ISO 9431:1999 supersedes BS 1192-1:1984 which is withdrawn

The UK participation in its preparation was entrusted by Technical Committee B/212, Tolerances, drawing practice, modular co-ordination, joints, project information and computer modelling, to Subcommittee B/212/2, Construction drawing practice, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

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The British Standards which implement international publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled "International Standards Correspondence Index", or by using the "Find" facility of the BSI Standards Electronic Catalogue.

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#### Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN ISO title page, page 2, the ISO title page, pages ii to iv, pages 1 to 6 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

This British Standard, having been prepared under the direction of the Sector Committee for Building and Civil Engineering, was published under the authority of the Standards Committee and comes into effect on 15 October 1999

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#### Amendments issued since publication

Date	Comments
	Date

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

**EN ISO 8560** 

July 1999

ICS 01.100.00

#### English version

# Technical drawings — Construction drawings — Representation of modular sizes, lines and grids

(ISO 8560:1986)

Dessins techniques — Dessins de construction — Représentation des dimensions, lignes et quadrillages modulaires (ISO 8560:1986)

Zeichnungen für das Bauwesen — Darstellung von modularen Größen, Linien und Rastern (ISO 8560:1986)

This European Standard was approved by CEN on 1 July 1999.

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The text of the International Standard from Technical Committee ISO/TC 10 "Technical drawings, product definition and related documentation" of the International Organization for Standardization (ISO) has been taken over as an European Standard by CEN/CS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2000, and conflicting national standards shall be withdrawn at the latest by January 2000.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

#### **Endorsement notice**

The text of the International Standard ISO 8560:1986 has been approved by CEN as a European Standard without any modification.

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# International Standard (ISO)



INTERNATIONAL ORGANIZATION FOR STANDARDIZATION®MEЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ®ORGANISATION INTERNATIONALE DE NORMALISATION

# Technical drawings — Construction drawings — Representation of modular sizes, lines and grids

Dessins techniques — Dessins de construction — Représentation des dimensions, lignes et quadrillages modulaires

First edition - 1986-05-01

UDC 744.43:69:721.013

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 $\textbf{Descriptors:} \ \text{Drawings, technical drawings, construction, modules, schematic representation, dimensions, lines.}$ 

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#### **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 8560 was prepared by Technical Committee ISO/TC 10, *Technical drawings*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

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#### 1 Scope and field of application

This International Standard lays down rules for the representation of modular sizes, lines and grids on construction drawings. The basic module **M** is 100 mm (see ISO 1006).

Generally, modular sizes should be used on design drawings. Construction and work sizes should be used on production drawings.

Modular sizes, lines and grids make the planning and design work easier. Multimodular grids may be added, to a limited extent, on construction drawings for manufacturing and construction for orientation and location.

#### 2 References

ISO 128, Technical drawings — General principles of presentation.

 ${\rm ISO~1006}, Building~construction -- Modular~coordination -- Basic~module.$ 

 $ISO\ 2595, Building\ drawings -- Dimensioning\ of\ production\ drawings -- Representation\ of\ manufacturing\ and\ work\ sizes.$ 

#### 3 General

Drawings with modular sizes shall be executed in accordance with ISO 128 and ISO 2595. If necessary, the drawings should have a note indicating that modular sizes are being used.

#### 4 Designations of modular sizes

- **4.1** Drawings with sizes indicated in modules (instead of in millimetres or metres) should have a clear note explaining that this is the case.
- **4.2** The designations of modular sizes are as follows.

**4.2.1** Modular:  $n \times \mathbf{M}$ 

4.2.2 Basic module: M

**4.2.3** Multimodules: 3M, 6M, 12M

**4.2.4** Modular sizes: 10**M** 

**4.2.5** Multimodular sizes:  $10 \times 3M$ ,  $5 \times 6M$ 

**4.2.6** Non-modular, if needed:

#### 5 Representation of modular lines and sizes

**5.1** Modular and multimodular lines shall be drawn using a continuous line (see Figure 1). The lowest level shall be drawn using a continuous thin line.

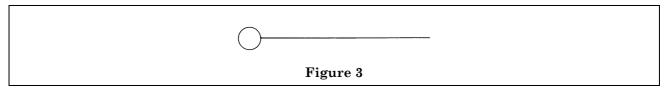
Figure 1	

**5.2** Where necessary for reasons of clarity, a modular line in an axial position may be indicated by a chain line (see Figure 2).

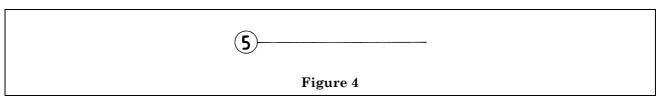
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Figure 2

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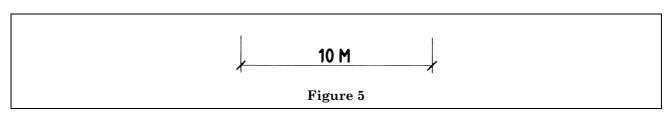
**5.3** Where necessary for identification purposes, multi-modular grid lines shall be terminated with a circle drawn with a thin line (see Figure 3).



**5.4** The line may be designated by a reference inside the circle (see Figure 4).

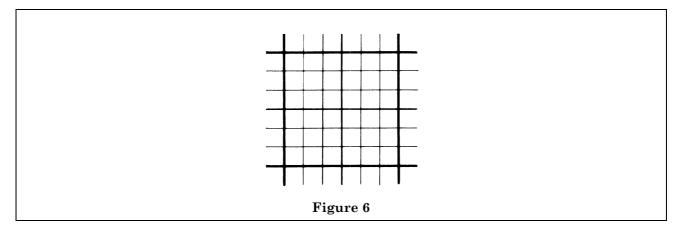


 ${f 5.5}$  Terminations for the size of a modular zone shall be the same as for single sizes, as specified in ISO 2595 (see Figure 5).

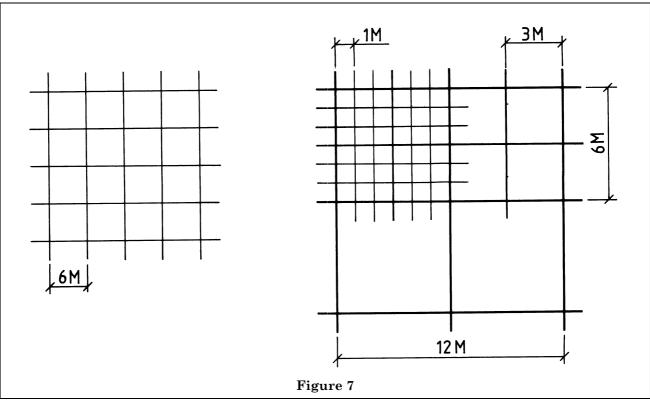


## 6 Representation of modular grids

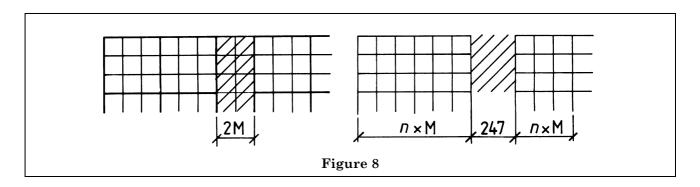
- **6.1** Modular grids shall be drawn with modular lines.
- **6.2** Modular grids with different line intervals which are superimposed may be clarified by using a thin line for the smallest interval, a thick line for the next largest interval, etc. (see Figure 6).



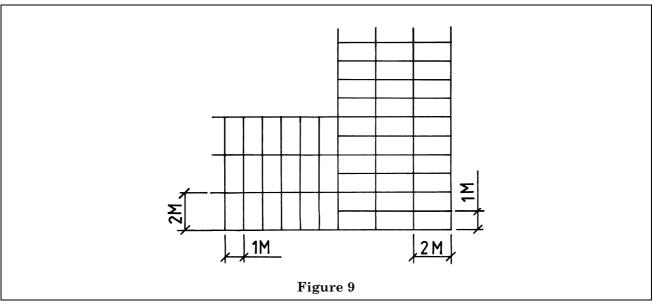
**6.3** Indication of the size of a grid line interval is shown in Figure 7.



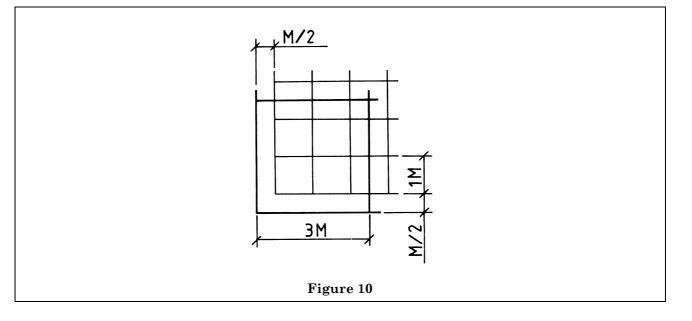
 ${f 6.4}$  Indication of a modular or a non-modular zone is shown in Figure 8.



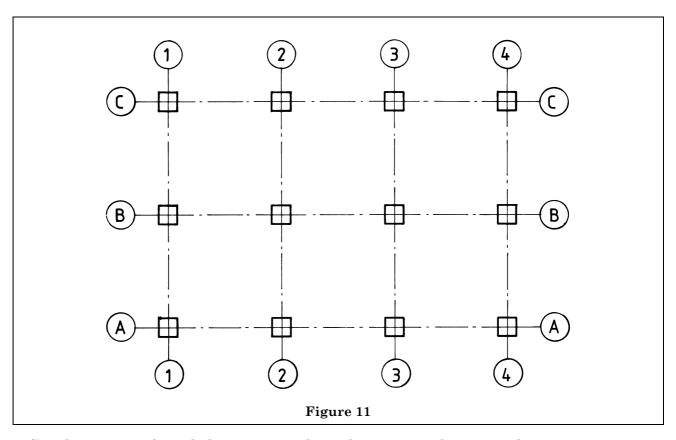
**6.5** Indication of a change in direction of a modular grid is shown in Figure 9.



6.6 Indication of the displacement of a modular grid is shown in Figure 10.

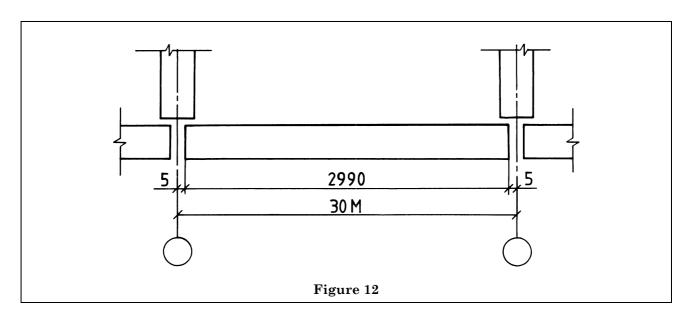


6.7 Indication using a chain line of a modular line in an axial position is shown in Figure 11.



### 7 Combination of modular sizes and work sizes on the same drawing

An example of modular sizes and work sizes being used together on the same drawing is shown in Figure 12.



### 8 Bibliography

For the purposes of this International Standard, it may be useful to consult the following International Standards:

ISO 129, Technical drawings — Dimensioning —General principles, definitions, methods of execution and special indications.

 ${\rm ISO~1040}, Building~construction -- Modular~coordination -- Multimodules~for~horizontal~coordinating~dimensions.$ 

ISO 1791, Building construction — Modular coordination — Vocabulary.

ISO 2848, Building construction — Modular coordination — Principles and rules.

ISO 4068, Building and civil engineering drawings — Reference lines.

ISO 6514, Building construction — Modular coordination — Sub-modular increments.

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