**INTERNATIONAL STANDARD** 

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# Modular co-ordination – Principles and rules

Coordination modulaire - Principes et règles

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# FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

International Standard ISO 2848 was drawn up by Technical Committee ISO/TC 59, *Building construction*, and circulated to the Member Bodies in July 1972.

It has been approved by the Member Bodies of the following countries :

India

Australia Austria Canada Denmark Egypt, Arab Rep. of Finland France Germany Hungary

Ireland Israel Italy Japan Netherlands New Zealand Norway Romania South Africa, Rep. of Sweden Switzerland Thailand Turkey United Kingdom U.S.S.R.

The Member Body of the following country expressed disapproval of the document on technical grounds :

#### Belgium

This International Standard is part of a series of ISO documents concerning modular co-ordination in building construction.

This series includes, among others, the following ISO documents; it is necessary to consult them in order to understand the present International Standard :

ISO 1006, Modular co-ordination - Basic module.

ISO 1040, Modular co-ordination – Multimodules for horizontal co-ordinating dimensions.

ISO 1789, Modular co-ordination – Storey heights and room heights for residential buildings.

ISO/R 1790, Modular co-ordination — Reference lines of horizontal controlling co-ordinating dimensions.

ISO 1791, Modular co-ordination - Vocabulary.

◎ International Organization for Standardization, 1974 ● Printed in Switzerland

# Modular co-ordination – Principles and rules

### 1 SCOPE

This International Standard specifies the aims of modular co-ordination and states the general principles and rules to be applied in determining the sizes of building components and equipment, and of assemblies and buildings themselves.

# 2 FIELD OF APPLICATION

Modular co-ordination applies to the design and construction of buildings of all types and to the production of building components of all kinds used for their construction.

#### **3 DEFINITIONS**

For the purpose of this International Standard, the definitions given in ISO 1791 apply.

#### 4 AIMS OF MODULAR CO-ORDINATION

The principal object of modular co-ordination is to assist rationalization and industrialization within the building industry and associated industries, by standardization in such a way that components may be manufactured on an industrial scale, and/or erected efficiently on site, thereby improving the economics of building.

In addition, modular co-ordination is intended :

1) to facilitate co-operation between building designers, manufacturers, distributors and contractors;

2) to permit the use of building components of standard sizes to construct different types of building;

3) in design work, to simplify the preparation of building drawings and make possible the determination of the sizes and position of each building component in relation to other components and to the building as a whole;

4) to optimize the number of standard sizes of building components;

5) to permit the interchangeability of these components, whatever their material, form or method of manufacture;

6) to simplify site operations by rationalizing setting out, positioning and assembly of building components;

7) to ensure dimensional co-ordination between installations (equipments, storage units, other fitted furniture, etc.) and the rest of the building.

# 5 BASIS OF MODULAR CO-ORDINATION

Modular co-ordination is essentially based on :

1) the use of modules : the basic module and multimodules;

2) the use of a reference system to define co-ordinating spaces and zones for building elements and for the components which form them;

3) rules for locating building elements within the reference system;

4) rules for sizing building components in order to determine their work sizes;

5) rules for defining preferred sizes for building components and controlling dimensions for buildings.

# 6 MODULES

#### 6.1 Basic module

The basic module is the fundamental unit of size in modular co-ordination<sup>1</sup>).

The co-ordinating sizes of building components, of the parts of buildings they form and of buildings themselves shall be multiples of the basic module.

#### 6.2 Multimodules

Multimodules are selected multiples of the basic module; different multimodules will suit particular applications. However, since their values must not be chosen arbitrarily

1) See ISO 1006. The symbol of the basic module is M and its value 1 M = 100 mm.