TECHNICAL REPORT 8266-1984 (E)

Published 1984-09-15

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Guidelines for the presentation of International Standards dealing with the design of structures

Directives pour la présentation des Normes internationales traitant des bases du calcul des constructions

ISO (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.

The main task of ISO technical committees is to prepare International Standards. In exceptional circumstances a technical committee may propose the publication of a technical report of one of the following types :

— type 1, when the necessary support within the technical committee cannot be obtained for the publication of an International Standard, despite repeated efforts;

— type 2, when the subject is still under technical development requiring wider exposure;

— type 3, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example).

Technical reports are accepted for publication directly by ISO Council. Technical reports types 1 and 2 are subject to review within three years of publication, to decide if they can be transformed into International Standards. Technical reports type 3 do not necessarily have to be reviewed until the data they provide is considered no longer valid or useful.

ISO/TR 8266 was prepared by Technical Committee ISO/TC 98, *Bases for design of structures*.

The reasons which led to the decision to publish this document in the form of a technical report type 1 are explained in the Introduction.

---

0 Introduction

The need for guidelines for the presentation of International Standards dealing with the design of structures was recognized some time ago when it became apparent that different approaches to the drafting of such documents were being adopted by the ISO technical committees and international organizations concerned. These different approaches resulted in a lack of uniformity in the technical content, and in the layout and sequence of the subject matter, of such documents.

It was recognized that this lack of uniformity would constitute an impediment to the use of these documents, but that the task of the user would be greatly facilitated if International Standards, national standards and the publications of other international organizations were presented in a consistent and uniform manner for all structural materials.

This Technical Report has, therefore, been prepared to respond to this need. While it is intended primarily for the harmonization of the presentation of International Standards dealing with the design of structures, it is hoped that, in practice, it will also serve as a basis for the drafting of national standards and of publications of other international organizations.

UDC 624.04 : 006.76 **Ref. No. ISO/TR 8266-1984 (E)**

Descriptors : buildings, structural design, standards, generalities.

Printed in Switzerland

Price based on 3 pages

1 Scope and field of application

This Technical Report gives guidelines for the presentation of International Standards dealing with the design of structures.

The guidelines are based on ISO 2394, *General principles on reliability for structures.*[1)]

2 Proposed presentation

Clause No.	Heading	Examples of contents
0	**Introduction**	General concepts, aims. Relations to international and national standards, and to regulations, guidelines and requirements. Users of the International Standard (or of other documents).
1	**Scope**	Structural use of the materials in buildings and structures. Definitions of the materials.
2	**Field of application**	Kinds of structures relating to this Technical Report: — linear, plane and three-dimensional structures, — structures with or without second order effects, — buildings, bridges, etc. Applicability to structures and to their elements. Design in various stages of construction and use, of repair, of reconstructions and of pulling down.
3	**References**	A list of all documents cited in the International Standard — giving number and titles.
4	**Definitions, notations and units**	List of terms, symbols and units.
5	**Materials**	Classification related to material properties, such as rheological properties, durability, etc. Classes related to the strength. Other mechanical properties. Definitions of characteristic values — choice of fractile values.
6	**Basis for design**	Definitions of the design method recommended by ISO 2394. Requirements for resistance related to earthquake and other hazards. Applicability of model tests and full-scale tests.
7	**Principles of the design method**	Application of different models for stress-strain relations. Ultimate limit states and serviceability limit states. Design variables: — actions (loads, environmental influences, imposed deformations), — material properties, — geometrical parameters.

1) At present at the stage of draft. (Revision of ISO 2394-1973.)

Clause No.	Heading	Examples of contents
8	**Design calculations**	Determination of action effects: forces and moments affecting a cross-section. Stresses, strains, deformations related to the material properties. Verification of safety and reliability.
9	**Structural detailing**	Transformation of design values into detailing. Particular items related to safety.
10	**Construction and control during construction**	Structural safety during all stages of construction. Control of materials and components as to their properties.
11	**Testing**	General control of the bearing capacity by testing. Test conditions.
12	**Miscellaneous**	Maintenance and repair. Control by periodic inspection during use (detailed recommendations should normally be given in other International Standards).

This page intentionally left blank