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Building construction — Organization of information about construction works —

Part 2: Framework for classification

Construction immobilière — Organisation de l'information des travaux de construction —

Partie 2: Plan type pour la classification



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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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: Foreword — Supplementary information.

The committee responsible for this document is ISO/TC 59, *Buildings and civil engineering works*, Subcommittee SC 13, *Organization of information about construction works*.

This second edition cancels and replaces the first edition (ISO 12006-2:2001), which has been technically revised.

ISO 12006 consists of the following parts, under the general title *Building construction — Organization of information about construction works*:

- Part 2: Framework for classification
- Part 3: Framework for object-oriented information

<u>Annexes A</u> and <u>B</u> of this part of ISO 12006 are for information only.

Introduction

0.1 Background

This part of ISO 12006 was first produced when there was little international standardization of classification systems for construction. Now, several national classification systems have been developed, for example, in North America, Scandinavia, and the UK, that implement the 2001 edition. Lessons learned in these implementations have been applied in this second edition.

This part of ISO 12006 has also been revised to take into account developments in information technology (notably building information modelling) and construction procurement (for example, design-build and design-build-operate). It has been extended and definitions have been refined to better serve all construction sectors, including building, civil engineering, and even process engineering. However, it continues to serve traditional information technologies and procurement methods.

A survey conducted as part of the work towards this edition showed that the most widely used classifications remain work results (mainly for specifications) and elements (mainly for cost analysis). They are also the most widely varied classification tables not only in their itemization and structure but also in the range of purposes to which they are put. There are other classifications, potentially just as important, which are used to a lesser degree, e.g. for construction products and properties.

0.2 The need for standardization

Building information modelling and modern forms of procurement require all these construction object classes to be used, along with many others. Building information modelling, in particular, is about exchange of information of all types along the project time line and between participants and applications. This is also the case for cooperative forms of procurement. For this exchange to be successful, a complete and consistent approach to construction object classification is required within the project, and between projects. This part of ISO 12006 is intended to facilitate this exchange.

Information types include geometrical data, functional and technical data, and cost data and maintenance data. The project timeline runs from inception to eventual demolition. Participants include clients, designers, authorities, constructors, end users, and operators. Applications include modelling, specification, product information, and cost information systems. Even now, there is still pressure for each of these to retain, or even develop, its own classification silo. This is not sustainable.

While national classifications that implement this part are still likely to differ in their detail (for example, due to differences in construction culture and legislation), mapping between them should be fairly straightforward. This is because they will be using the same overarching classification framework and construction object class definitions. This, in turn, will help with international construction project work (with participants from many countries), and with development of applications intended to be used internationally.

0.3 The content of this part

This part of ISO 12006 defines a framework for construction-sector classification systems and identifies a set of recommended classification tables and their titles for a range of construction object classes according to particular views, supported by definitions.