

# SVENSK STANDARD

## SS-EN ISO 12006-2:2020

Strukturering av information om byggnadsverk –  
Del 2: Ramverk för klassificering (av information)  
(ISO 12006-2:2015)

Building construction – Organization of information about  
construction works –  
Part 2: Framework for classification (ISO 12006-2:2015)



**sis** Svenska  
Institutet för  
Standarder

Language: engelska/English

Edition: 1

This preview is downloaded from [www.sis.se](http://www.sis.se). Buy the entire  
standard via <https://www.sis.se/std-80019608>

Den här standarden kan hjälpa dig att effektivisera och kvalitetssäkra ditt arbete. SIS har fler tjänster att erbjuda dig för att underlätta tillämpningen av standarder i din verksamhet.

#### **SIS Abonnemang**

Snabb och enkel åtkomst till gällande standard med SIS Abonnemang, en prenumerationstjänst genom vilken din organisation får tillgång till all världens standarder, senaste uppdateringarna och där hela din organisation kan ta del av innehållet i prenumerationen.

#### **Utbildning, event och publikationer**

Vi erbjuder även utbildningar, rådgivning och event kring våra mest sålda standarder och frågor kopplade till utveckling av standarder. Vi ger också ut handböcker som underlättar ditt arbete med att använda en specifik standard.

#### **Vill du delta i ett standardiseringsprojekt?**

Genom att delta som expert i någon av SIS 300 tekniska kommittéer inom CEN (europeisk standardisering) och/eller ISO (internationell standardisering) har du möjlighet att påverka standardiseringsarbetet i frågor som är viktiga för din organisation. Välkommen att kontakta SIS för att få veta mer!

#### **Kontakt**

Skriv till [kundservice@sis.se](mailto:kundservice@sis.se), besök [sis.se](https://www.sis.se) eller ring 08 - 555 523 10

---

© Copyright/Upphovsrätten till denna produkt tillhör Svenska institutet för standarder, Stockholm, Sverige. Upphovsrätten och användningen av denna produkt regleras i slutanvändarlicensen som återfinns på [sis.se/slutanvandarlicens](https://www.sis.se/slutanvandarlicens) och som du automatiskt blir bunden av när du använder produkten. För ordlista och förkortningar se [sis.se/ordlista](https://www.sis.se/ordlista).

© Copyright Svenska institutet för standarder, Stockholm, Sweden. All rights reserved. The copyright and use of this product is governed by the end-user licence agreement which you automatically will be bound to when using the product. You will find the licence at [sis.se/enduserlicenseagreement](https://www.sis.se/enduserlicenseagreement).

Upplysningar om sakinnehållet i standarden lämnas av Svenska institutet för standarder, telefon 08 - 555 520 00. Standarder kan beställas hos SIS som även lämnar allmänna upplysningar om svensk och utländsk standard.

Standarden är framtagen av kommittén för Bygg- och förvaltningsdokumentation, SIS/TK 269.

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på [www.sis.se](https://www.sis.se) - där hittar du mer information.

Europastandarden EN ISO 12006-2:2020 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN ISO 12006-2:2020.

The European Standard EN ISO 12006-2:2020 has the status of a Swedish Standard. This document contains the official version of EN ISO 12006-2:2020.



EUROPEAN STANDARD

**EN ISO 12006-2**

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2020

ICS 91.010.01

English Version

**Building construction - Organization of information  
about construction works - Part 2: Framework for  
classification (ISO 12006-2:2015)**

Construction immobilière - Organisation de  
l'information des travaux de construction - Partie 2:  
Plan type pour la classification (ISO 12006-2:2015)

Hochbau - Organisation des Austausches von  
Informationen über die Durchführung von  
Hoch- und Tiefbauten - Teil 2: Struktur für  
die Klassifizierung (ISO 12006-2:2015)

This European Standard was approved by CEN on 11 December 2019.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

# Contents

Page

<b>European foreword</b> .....	<b>vii</b>
<b>Introduction</b> .....	<b>viii</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
3.1 General .....	1
3.2 Construction resource .....	2
3.3 Construction process .....	3
3.4 Construction result .....	4
3.5 Construction property .....	5
<b>4 Basic principles</b> .....	<b>5</b>
4.1 Object and process model .....	5
4.2 Classification and composition.....	6
4.3 Classification (type-of).....	7
4.4 Systems and compositional structuring (part-of).....	8
4.5 Other classification tables.....	8
4.6 Properties .....	8
<b>5 Recommended classification tables</b> .....	<b>9</b>
<b>Annex A (informative) Classification table titles and examples</b> .....	<b>10</b>
<b>Annex B (informative) Classification concepts</b> .....	<b>20</b>
<b>Bibliography</b> .....	<b>23</b>

## European foreword

The text of ISO 12006-2:2015 has been prepared by Technical Committee ISO/TC 59 "Buildings and civil engineering works" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 12006-2:2020 by Technical Committee CEN/TC 442 "Building Information Modelling (BIM)" the secretariat of which is held by SN.

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 August 2020, and conflicting national standards shall be withdrawn at the latest by August 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### Endorsement notice

The text of ISO 12006-2:2015 has been approved by CEN as EN ISO 12006-2:2020 without any modification.

## 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.



# Building construction — Organization of information about construction works —

## Part 2: Framework for classification

### 1 Scope

This part of ISO 12006 defines a framework for the development of built environment classification systems. It identifies a set of recommended classification table titles for a range of information object classes according to particular views, e.g. by form or function, supported by definitions. It shows how the object classes classified in each table are related, as a series of systems and sub-systems, e.g. in a building information model.

This part of ISO 12006 does not provide a complete operational classification system, nor does it provide the content of the tables, though it does give examples. It is intended for use by organizations which develop and publish such classification systems and tables, which may vary in detail to suit local needs. However, if this part of ISO 12006 is applied in the development of local classification systems and tables, then harmonization between them will be facilitated.

This part of ISO 12006 applies to the complete life cycle of construction works, including briefing, design, documentation, construction, operation and maintenance, and demolition. It applies to both building and civil engineering works, including associated engineering services and landscaping.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 22274, *Systems to manage terminology, knowledge and content — Concept-related aspects for developing and internationalizing classification systems*

### 3 Terms and definitions

#### 3.1 General

For the purposes of this document, the following terms and definitions apply.

NOTE 1 The definitions are arranged in the following order: construction resource, construction process, construction result, and construction properties.

NOTE 2 In the definitions, terms that are defined elsewhere within this clause are shown in *italics*.

NOTE 3 Examples are given in [Annex A](#).

##### 3.1.1 object

any part of the perceivable or conceivable world

Note 1 to entry: An object is something abstract or physical toward which thought, feeling, or action is directed.

##### 3.1.2 construction object

*object* ([3.1.1](#)) of interest in the context of a *construction process* ([3.3.2](#))

## SS-EN ISO 12006-2:2020 (E)

### 3.1.3

#### **construction system**

interacting *construction objects* ([3.1.2](#)) organized to achieve one or more purposes

Note 1 to entry: Construction systems can be classified in accordance with this International Standard.

[SOURCE: ISO/IEC 15288:2008, modified]

### 3.1.4

#### **type-of relation**

relation between two concepts where the intention of one of the concepts includes that of the other concept and at least one additional delimiting characteristic

Note 1 to entry: Type-of relation is also known as generic relation.

[SOURCE: ISO 1087-1:2000, 3.2.21]

### 3.1.5

#### **part-of relation**

relation between two construction objects where one object constitutes the whole and the other a part of that whole

Note 1 to entry: Part-of relation is also known as partitive relation, part-whole relation, or whole-part relation.

Note 2 to entry: See also ISO/IEC 81346-1.

[SOURCE: ISO 1087-1:2000, 3.2.22, modified]

### 3.1.6

#### **natural environment**

non-artificial environment of any physical *construction object* ([3.1.2](#))

### 3.1.7

#### **built environment**

physical *construction result* ([3.4.6](#)) intended to serve a function or user activity

Note 1 to entry: The built environment may be viewed as a system of either built space or built structure.

### 3.1.8

#### **space**

limited three-dimensional extent defined physically or notionally

### 3.1.9

#### **activity space**

*space* ([3.1.8](#)) defined by the spatial extension of an activity

Note 1 to entry: A spatial extension of an activity, for example, a table or a bed, and the activity space around them.

## 3.2 Construction resource

### 3.2.1

#### **construction agent**

human *construction resource* ([3.2.5](#)) carrying out a *construction process* ([3.3.2](#))

### 3.2.2

#### **construction aid**

*construction resource* ([3.2.5](#)) intended to assist in carrying out a *construction process* ([3.3.2](#))

Note 1 to entry: A construction aid is generally not intended for incorporation in a permanent manner in a construction entity.

### 3.2.3

#### **construction information**

information of interest in a *construction process* ([3.3.2](#))

Note 1 to entry: Construction information may be seen both as a construction resource and as a construction result.

### 3.2.4

#### **construction product**

product intended to be used as a *construction resource* ([3.2.5](#))

Note 1 to entry: Construction products have different complexity and can, by themselves or together with others, make up the parts in any level of assembly of construction entities.

### 3.2.5

#### **construction resource**

*construction object* ([3.1.2](#)) used in a *construction process* ([3.3.2](#)) to achieve a *construction result* ([3.4.6](#))

## 3.3 Construction process

### 3.3.1

#### **construction activity**

component process of construction process

### 3.3.2

#### **construction process**

process which uses *construction resources* ([3.2.5](#)) to achieve *construction results* ([3.4.6](#))

Note 1 to entry: Each construction process may be split up into its component processes.

Note 2 to entry: See also ISO 22263:2008.

### 3.3.3

#### **construction process lifecycle**

sequence of stages from the start to the end of the *construction process* ([3.3.2](#))

### 3.3.4

#### **pre-design process**

*construction process* ([3.3.2](#)) determining *construction properties* ([3.5.1](#)) for the *built environment* ([3.1.7](#)) before it is designed

### 3.3.5

#### **design process**

*construction process* ([3.3.2](#)) determining *construction properties* ([3.5.1](#)) for the *built environment* ([3.1.7](#)) before it is made physical

### 3.3.6

#### **production process**

*construction process* ([3.3.2](#)) resulting in *built environment* ([3.1.7](#))

Note 1 to entry: Production process includes demolition and recycling process.

### 3.3.7

#### **maintenance process**

*construction process* ([3.3.2](#)) preserving the function of, or operating, the *built environment* ([3.1.7](#))

### 3.3.8

#### **management**

control activity in a *construction process* ([3.3.2](#)) by one or more *construction agents*