

TOOTE TEHNILINE DOKUMENTATSIOON (TTD).  
EHITUSDOKUMENTATSIOON. JOONISED  
MONTEERITAVATE KONSTRUKTSIOONIDE  
KOOSTAMISEKS

Technical product documentation (TPD) -  
Construction documentation - Drawings for the  
assembly of prefabricated structures (ISO 4172:2024)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>See Eesti standard EVS-EN ISO 4172:2024 sisaldab Euroopa standardi EN ISO 4172:2024 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 20.03.2024.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN ISO 4172:2024 consists of the English text of the European standard EN ISO 4172:2024.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 20.03.2024.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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EUROPEAN STANDARD

EN ISO 4172

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes EN ISO 4172:1996

English Version

Technical product documentation (TPD) - Construction  
documentation - Drawings for the assembly of  
prefabricated structures (ISO 4172:2024)

Documentation technique de produits (DTP) -  
Documentation de construction - Dessins d'assemblage  
des structures préfabriquées (ISO 4172:2024)

Technische Produktdokumentation (TPD) -  
Baukonstruktionszeichnungen - Zeichnungen für den  
Zusammenbau vorgefertigter Teile (ISO 4172:2024)

This European Standard was approved by CEN on 13 March 2024.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

## European foreword

This document (EN ISO 4172:2024) has been prepared by Technical Committee ISO/TC 10 "Technical product documentation" in collaboration with CCMC.

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of an identical text or by endorsement, at the latest by September 2024, and conflicting national standards shall be withdrawn at the latest by September 2024.

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.

This document supersedes EN ISO 4172:1996.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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, Türkiye and the United Kingdom.

## Endorsement notice

The text of ISO 4172:2024 has been approved by CEN as EN ISO 4172:2024 without any modification.

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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 document 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](http://www.iso.org/directives)).

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

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 10, *Technical product documentation*, Subcommittee SC 8, *Construction documentation*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/SS F01, *Technical drawings*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 4172:1991), which has been technically revised.

The main changes are as follows:

- update of normative references;
- provision of wider levels of drawings;
- replacement of the term “location drawings” by “general arrangement drawings”.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

This document sets out the requirements for representing prefabricated structures with assembly drawings. Prefabricated structures are components that are more likely to be considered as products comprising assemblies, rather than traditional components.

The purpose of this document is to aid with the following aspects:

- defining the drawing types and their hierarchy clearly;
- providing the technical rules within each type of drawing;
- giving guidelines for the application of representation techniques.

Those who draw prefabricated structures are encouraged to think about the methods they use to collect, demonstrate and disseminate product information to all stakeholders, including designers, engineers, manufacturers and contractors. Product information supports stakeholders to recognize product definitions, relations and other requirements identified within the life cycle. It is recognized that the drawing of products, using common lines, symbols and other graphic representations, aids in the organization of the information on the basis of concepts and relationships. Therefore, this document is intended to be adopted in coordination with ISO 7519 and other applicable standards.

ISO 7519 provides a method for organizing presentation approaches for a building, system, assembly, component or part, therefore providing comprehensive information hierarchically. Such a delivery method is advanced to regularize the flow of information within the supply chain. It does this by specifying a clear scope for requirements or specific objects using building information modelling (BIM) or other computer-aided design and drafting (CAD) applications, thereby enhancing the effectiveness of the processes involved by presenting unambiguous and sufficient data.

This document establishes the rules for prefabricated structures following the principles in ISO 7519 while maintaining symbolic representation applicable in the built environment sector. International Standards relating to technical product documentation developed by ISO/TC 10, as well as BIM International Standards developed by ISO/TC 59/SC 13, are considered helpful in adopting this document.

The figures included in this document are intended to illustrate the text and provide examples of the related technical drawing specification. These figures are not fully dimensioned and toleranced, showing only the relevant general principles. In all figures, the leader lines using an arrow and text ending with “type” and numbers indicate the line types used for the representations. They are not elements that are presented in a construction drawing.

# Technical product documentation (TPD) — Construction documentation — Drawings for the assembly of prefabricated structures

## 1 Scope

This document specifies general requirements for the preparation of construction drawings intended for the field assembly of prefabricated structures for building and civil engineering works.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 129-1, *Technical product documentation (TPD) — Presentation of dimensions and tolerances — Part 1: General principles*

ISO 4157-1, *Construction drawings — Designation systems — Part 1: Buildings and parts of buildings*

ISO 6284, *Technical product documentation — Construction documentation — Indication of limit deviations*

ISO 6707-1, *Buildings and civil engineering works — Vocabulary — Part 1: General terms*

ISO 7200, *Technical product documentation — Data fields in title blocks and document headers*

ISO 7519, *Technical product documentation (TPD) — Construction documentation — General principles of presentation for general arrangement and assembly drawings*

ISO 7573, *Technical product documentation — Parts lists*

ISO 10209, *Technical product documentation — Vocabulary — Terms relating to technical drawings, product definition and related documentation*

ISO 14405 (all parts), *Geometrical product specifications (GPS) — Dimensional tolerancing*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6707-1 and ISO 10209 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

### 3.1 assembly

set of related components attached to each other

Note 1 to entry: An assembly can be an aggregation which performs a systematic function, e.g. a structural frame, truss or modular container.