
International Standard



4172

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Building and civil engineering drawings — Drawings for the assembly of prefabricated structures

Dessins de bâtiment et de génie civil — Dessins d'assemblage des structures préfabriquées

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Foreword

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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 4172 was developed by Technical Committee ISO/TC 10, *Technical drawings*, and was circulated to the member bodies in February 1979.

It has been approved by the member bodies of the following countries :

Australia	India	Romania
Austria	Italy	South Africa, Rep. of
Belgium	Japan	Spain
Bulgaria	Korea, Rep. of	Sweden
Canada	Libyan Arab Jamahiriya	Switzerland
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The member body of the following country expressed disapproval of the document on technical grounds :

United Kingdom

Building and civil engineering drawings — Drawings for the assembly of prefabricated structures

1 Scope and field of application

This International Standard lays down general rules for the preparation of working drawings intended for the field assembly of prefabricated structures for building and civil engineering works.

2 References

ISO 1046, *Architectural and building drawings — Vocabulary*.

ISO 4157/1, *Building drawings — Part 1: Designation of buildings and parts of buildings*.

3 Definitions

3.1 prefabricated structure : A structure erected out of prefabricated structural components.

3.2 prefabricated structural component : A component of a prefabricated structure delivered to the construction site as a purpose made part.

4 Documentation

4.1 General

The documentation of prefabricated structures consists of :

- a) location drawings (general arrangement drawings);
- b) detail drawings;
- c) component schedules (and component range drawings);
- d) additional specifications and lists for incidental materials, special shipping instructions, etc.

These shall be prepared in accordance with the relevant International Standards.

4.2 Location drawings

4.2.1 A location drawing is a simplified representation of a prefabricated structure and the location of marked structural components. The components may be represented usually by one extra thick line (see figures 1, 3 and 4) or by their simplified outlines.

For each group of components for prefabricated structures, connected by similar construction conditions, the location drawings should be given in the sequence of their application during the assembly.

If necessary, design charts or loading schemes shall be given on location drawings, which shall indicate loading limitations, erection procedures, and other details concerning erection and assembly such as joints and jointing and temporary works, and shall refer to documents giving such information.

The location drawings for prefabricated structures shall show the following :

- a) layout grid lines of buildings;
- b) marks of structural components;
- c) relationship of components to the layout grid lines;
- d) specific levels of structural components;
- e) reference to the detail drawings.

The structural components should be shown in plans (or) sections or views, as illustrated in figures 1 to 6.

The location drawings for complicated three-dimensional structures should be made in different planes.

The preferred scales for location drawings are 1 : 50, 1 : 100 and 1 : 200.