

International Standard



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Measurement methods for building — Setting out and measurement — Permissible measuring deviations

Méthodes de mesurage pour la construction — Piquetage et mesurage — Écarts de mesurage admissibles

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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 4463 was developed by Technical Committee ISO/TC 59, *Building construction*, and was circulated to the member bodies in February 1977.

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

Australia	Ireland	Romania
Denmark	Israel	South Africa, Rep. of
Finland	Korea, Rep. of	Spain
France	Mexico	Sweden
Germany, F. R.	Netherlands	Turkey
Hungary	Norway	United Kingdom
Iran	Poland	Yugoslavia

The member body of the following country expressed disapproval of the document on technical grounds :

Belgium

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Measurement methods for building — Setting out and measurement — Permissible measuring deviations

0 Introduction

This International Standard forms one of a series concerning measurement methods for building, and can be regarded as a frame for further reference standards for all setting out work. The other documents of this series are currently under preparation.

1 Scope

This International Standard deals with the different stages of the setting out work, i.e. the measuring of the primary framework (traverses, grids, etc.) on the site, the setting out of reference lines (baselines), the transfer (plumbing up) of reference lines to other floors, the setting out of position points and the levelling procedure for these different stages.

It gives values for permissible deviations when measuring and setting out and recommends certain procedures and instruments to be used.

Guidance is given on how inaccuracies can be controlled during the setting out process when using instruments and methods which are currently in common use in building construction.

2 Field of application

This International Standard applies to all usual types of building construction. Specialist operations such as the setting out of precision machinery require individual treatment.

3 Reference

ISO 1803, *Tolerances for building — Vocabulary*.¹⁾

4 Definitions

For the purpose of this International Standard, the following definitions apply.

4.1 primary point : Point which has been established by measurement. Primary points are referred to the national, municipal or other agreed reference systems and constitute the reference points for setting out the secondary points. These may have been adjusted locally.

4.2 secondary point : Point which, on its own or in combination to form lines, constitutes a reference point for the setting out of position points. A structural grid may be constituted from a system of secondary points.

4.3 position point : Point which marks the position of a certain detail of a building.

4.4 grid : Two sets of parallel horizontal lines which are at right angles to each other.

4.5 primary bench mark : Bench mark which has been established by levelling. Primary bench marks are referred to the national, municipal or other agreed reference systems and constitute the reference levels for the establishment of secondary bench marks. These may have been adjusted locally.

4.6 secondary bench mark : Transferred bench mark established by levelling, which constitutes the reference level for setting out the position levels.

4.7 position level : Point which marks the level of a certain detail of a building.

4.8 check measurement : Independent measurement to check the correctness and accuracy of a previous measurement.

1) At present under revision.