INTERNATIONAL STANDARD

ISO 15928-3

Second edition
2015-08-15

This document is a preview generated by EVS

Houses — Description of performance —

Part 3: Structural durability

Constructions d'habitation — Description des performances —

Partie 3: Durabilité de la structure



Reference number
ISO 15928-3:2015(E)

© ISO 2015

This document is a preview generated by EVS



COPYRIGHT PROTECTED DOCUMENT

© ISO 2015, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

 © ISO 2015 – All rights reserved

Contents

Page

Foreword ... **iv**
Introduction ... **v**
1 Scope ... **1**
2 Normative references ... **1**
3 Terms and definitions ... **1**
4 Structural durability performance ... **2**
4.1 Objective ... 2
4.2 Performance descriptions ... 2
5 Parameters for the description of performance ... **3**
5.1 Parameters for describing the house service life ... 3
5.2 Parameters for describing component service life ... 3
5.3 Parameters for describing the maintenance schedule ... 3
5.4 Parameters for describing internal and external environmental agents ... 3
5.4.1 General ... 3
5.4.2 Parameters for geographical location ... 3
5.4.3 Parameters describing agents causing environmental actions ... 3
6 Evaluation ... **4**
6.1 General ... 4
6.2 Evaluation methods ... 4
6.2.1 General ... 4
6.2.2 Field testing ... 5
6.2.3 Laboratory testing ... 5
6.2.4 Service experience ... 5
6.2.5 Modelling ... 5
6.2.6 Combination ... 5
Annex A (informative) **Commentary** ... **6**
Bibliography ... **12**

This document is a preview generated by EVS

© ISO 2015 – All rights reserved

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 15, *Performance description of houses*.

This second edition cancels and replaces the first edition (ISO 15928-3:2009), which has been technically revised.

ISO 15928 consists of the following parts, under the general title *Houses — Description of performance*:

— *Part 1: Structural safety*

— *Part 2: Structural serviceability*

— *Part 3: Structural durability*

— *Part 4: Fire safety*

— *Part 5: Operating energy*

The following part is under preparation:

— *Part 6: Sustainable development contributions*

This document is a preview generated by EVS

 © ISO 2015 – All rights reserved

Introduction

This part of ISO 15928 is one of a series of standards. The objective of the ISO 15928- series is to identify the methods that will be used to describe the performance of houses. The ISO 15928- series is confined to buildings occupied for residential purposes that may be separated or linked horizontally, but not linked vertically, and which have their own access and do not share any common space.

Each part of ISO 15928 relates to a separate attribute. The parts of ISO 15928 do not specify levels of performance and they are not intended to replace national standards or regulations, but provide a standardized framework to be used for development of national standards and regulations consistent with World Trade Organization (WTO) requirements. The parts of ISO 15928 do not provide design methods and/or design criteria.

Based on the framework provided by the ISO 15928- series, purchasers, regulators and standards-preparers in respective countries can describe their requirements in standardized performance terms, as appropriate. Additionally, the manufacturers/providers can respond by describing the performance of their products in a similar manner.

The purpose of this part of ISO 15928 is to provide a standardized system of describing performance that can be used to specify performance requirements and performance levels, or to rate houses, in terms of structural durability.

NOTE The WTO *Agreement on technical barriers to trade*, Clause 2.8, states: "Whenever appropriate, members shall specify technical regulations based on product requirements in terms of performance, rather than design or descriptive characteristics."

This document is a preview generated by EVS

© ISO 2015 – All rights reserved

This document is a preview generated by EVS

Houses — Description of performance —

Part 3: Structural durability

This document is a preview generated by EVS

1 Scope

This part of ISO 15928 sets out a method for describing the structural durability performance of houses. It covers objectives, provides performance descriptions, establishes parameter descriptions and outlines evaluation processes.

This part of ISO 15928 is intended for use in the evaluation of the design and construction of houses, in the international trading of houses or their subsystems and in developing quality systems for houses.

The ISO 15928- series does not specify a level of performance and it is not intended to provide a design method and/or criteria.

NOTE 1 Annex A includes background information on this part of ISO 15928, guidance on its use and suggestions on good practice.

NOTE 2 Details on references referred to in Notes are provided on Bibliography.

NOTE 3 Structural safety, serviceability and other attributes are covered in other parts of ISO 15928.

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 2394, *General principles on reliability for structures*

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

ISO 13823, *General principles on the design of structures for durability*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6707-1, ISO 2394, ISO 13823 and the following apply.

3.1
components
part of a house that can be identified

EXAMPLE Floor, wall.

Note 1 to entry: Includes fittings.

3.2
house
building occupied for residential purposes and designed as one unit (dwelling) with its own access

Note 1 to entry: The house can be a separate building, or linked horizontally with another house but not linked vertically.

© ISO 2015 – All rights reserved