

Windows — Behaviour between different climates — Test method

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National foreword

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Comments arising from the use of this Draft for Development are requested so that UK experience can be reported to the European organization responsible for its conversion into a European Standard. A review of this publication will be initiated 2 years after its publication by the European organization so that a decision can be taken on its status at the end of its three year life. The commencement of the review period will be notified by an announcement in *Update Standards*.

According to the replies received by the end of the review period, the responsible BSI Committee will decide whether to support the conversion into a European Standard, to extend the life of the prestandard or to withdraw it. Comments should be sent in writing to the Secretary of BSI Technical Committee B/538, Doors, windows, shutters, hardware and curtain walling at 389 Chiswick High Road, London W4 4AL, giving the document reference and clause number and proposing, where possible an appropriate revision of the text.

A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

Summary of pages

This document comprises a front cover, an inside front cover, the ENV title page, pages 2 to 10, an inside back cover and a back cover.

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English version

Windows - Behaviour between different climates - Test method

Fenêtres - Comportement entre différents climats -
Méthode d'essai

Fenster - Differenzklima - Prüfverfahren

This European Prestandard (ENV) was approved by CEN on 7 June 1999 as a prospective standard for provisional application.

The period of validity of this ENV is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the ENV can be converted into a European Standard.

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Foreword

This European Prestandard has been prepared by Technical Committee CEN/TC 33 "Doors, windows, shutters, building hardware and curtain walling", the secretariat of which is held by AFNOR.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this European Prestandard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

The status as an European Prestandard was proposed because some experience in testing the different climates still has to be collected. The ENV phase should enable the countries to do this.

This Prestandard is one of a series of European standards for windows.

Introduction

Through climatic loading of the windows it is possible in the case of unfavourable designs that the frames of windows manufactured of different materials may

- decay through accumulation of moisture and may thus be damaged; this moisture may come from water vapour diffusion and condensation;
- be unable to fulfill their basic functions (serviceability, air permeability) because of unacceptable deformations.

This Prestandard defines the test procedures which are to be used in dependence of the potential risk of the design.

1 Scope

This European Prestandard specifies the test methods for evaluating

- the risks of decay of windows manufactured of different materials through increased moisture accumulation as a result of condensation or water vapour diffusion;
- the influence of deformation on basic performances of windows manufactured of different materials exposed to different climates between their external and internal faces.

Three test methods are to be differentiated. They take into account different cases of loadings.

Test method 1: For designs with low resistance to water vapour diffusion (normally designs with water vapour equalization holes); the test procedure is to be used for cross-sections where the danger is given by the moisture accumulation as a result of the condensation of moisture between the planking and the timber (see informative Annex A, Figure A.1).

Test method 2: For designs with high resistance to water vapour diffusion (normally designs without water vapour equalization holes); the test procedure is to be used for cross-sections where the danger is given by the moisture accumulation as a result of water vapour diffusion of the moisture at the internal and external face (see informative Annex A, Figure A.2 + A.3).

Test method 3: For designs being sensitive to deformation; the test procedure is to be used for cross-sections where they are sensitive to the function through deformation as a result of climatic loading.

This Prestandard is relevant to initial type testing, i. e. to developments or changes in designs. It is not relevant to routine quality control or to proven designs.

NOTE: Designs are included in Annex A, Annex B is the survey of general design criteria where tests are not