# **Operating forces - Test method - Part 2: Doors**

Operating forces - Test method - Part 2: Doors 



## EESTI STANDARDI EESSÕNA

### NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12046- 2:2000 sisaldab Euroopa standardi EN 12046-2:2000 ingliskeelset teksti.	This Estonian standard EVS-EN 12046- 2:2000 consists of the English text of the European standard EN 12046-2:2000.
Käesolev dokument on jõustatud 08.08.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 08.08.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

Käsitlusala: This standard defines the test method determining the forces required when engaging or releasing the movable parts of a door set or to bring the movable part of a sliding door to a specified position defined by the personal safety devices built into the hardware as well as the forces to lock or unlock the door via a handle or a key and the force to commence opening.	Scope: This standard defines the test method determining the forces required when engaging or releasing the movable parts of a door set or to bring the movable part of a sliding door to a specified position defined by the personal safety devices built into the hardware as well as the forces to lock or unlock the door via a handle or a key and the force to commence opening.
ICS 91.060.50	Q,
Võtmesõnad:	

# EN 12046-2

February 2000

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

ICS 91.060.50

#### **English version**

# Operating forces - Test method

Part 2: Doors

Forces de manœuvre – Méthode d'essai - Partie 2: Portes

Bedienungskräfte - Prüfverfahren -Teil 2: Türen

This European Standard was approved by CEN on 1999-12-23.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.



European Committee for Standardization Comité Européen de Normalisation Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

© 2000. CEN – All rights of exploitation in any form and by any means reserved worldwide for CEN national members.

### Contents

Forewo	ord		
1	Scope	3	
2	Normative references	3	
3	Definitions	3	
4	Principle of test	3	
<b>5</b> 5.1 5.2	Test apparatus Equipment with weights Actuator and recording device for determining linear forces and torques	4	
6	Test specimen	4	
<b>7</b> 7.1 7.2 7.3	Procedure for basic operation Procedure for determining the dynamic closing force Procedure for determining the linear force and torque for operating the hardware Procedure for determining the minimum force to commence and maintain the	5	
	motion	5	
<b>8</b> 8.1 8.2	Test sequences Specimens without self closing devices	5	
9	Expression of results		
10	Test report	6	
Annex A (informative) Typical test set-up for hinged or pivoted door			
Annex B (informative) Typical test set-up for sliding door			

### Foreword

This European Standard has been prepared by Technical Committee CEN/TC 33 "Portes, fenêtres, fermetures, quincaillerie de bâtiment et façades rideaux", the secretariat of which is held by AFNOR.

0240

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 August 2000, and conflicting national standards shall be withdrawn at the latest by August 2000.

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

This Standard is one in series of standards for doors.

The Annexes A and B are informative.

### 1 Scope

This Standard is for hinged/pivoted and sliding doorsets with latches, for pedestrian use. It defines the test methods to determine the forces to open/close doors and to engage/release and lock/unlock the hardware using a key or handle.

It is only applicable to the manual operation doorsets.

The measurement of forces for doorsets with self closing devices engaged is excluded from this test method. It is also not applicable to doorsets with special hardware e.g. emergency exit devices.

The tests are applicable to doorsets of any material.

NOTE : The operation of some windows involves latches and may be tested in accordance with this standard.

#### 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

prEN 12519:1996 Doors and windows – Terminology

### 3 Definitions

For the purposes of this European Standard, definitions as given in prEN 12519:1996 and the following apply :

**3.1** attachment point : A point adjacent to a single handle. With more than one handle, a point midway between the extreme handle positions.

#### 4 Principle of test

The principle consists of measuring the minimum force or torque required to engage or disengage the hardware, (locks, handles etc.), commence opening and complete closing of the door leaf, sash or casement to the latched position or engagement of any safety device.

#### 5 Test apparatus

The apparatus shall include a support frame into which the specimen shall be mounted using the fixing systems and devices provided or described by the manufacturer. The construction and stiffness of the support frame shall not influence the test result.