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Operating forces - Test method - Part 1: Windows

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

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**Operating forces - Test method - Part 1: Windows**

Forces de manœuvre - Méthode d'essai - Partie 1 :  
Fenêtre

Bedienkräfte - Prüfverfahren - Teil 1: Fenster

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## European foreword

This document (EN 12046-1:2020) 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.

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of an identical text or by endorsement, at the latest by February 2021, and conflicting national standards shall be withdrawn at the latest by February 2021.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 12046-1:2003.

This document is one of a series of standards for windows.

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**EN 12046-1:2020 (E)****1 Scope**

This document specifies the test method for determining the force required when engaging or releasing the hardware of a window and when commencing the movement of a casement or sash, in both opening and closing directions.

This document is applicable to all types of openable windows where the movement is a manual operation.

This document is applicable to products of any frame material.

**2 Normative references**

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 12519, *Windows and pedestrian doors — Terminology*

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