# Windows, doors and shutters Explosion resistance - Requirements and classification - Part 1: Shock tube

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### **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 13123-
1:2001 sisaldab Euroopa standardi EN
13123-1:2001 ingliskeelset teksti.

Käesolev dokument on jõustatud 19.12.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 13123-1:2001 consists of the English text of the European standard EN 13123-1:2001.

This document is endorsed on 19.12.2001 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

### Käsitlusala:

This standard specifies the criteria which windows, doors and shutters shall satisfy to achieve a classification when submitted to the test method described in EN 13124-1.

### Scope:

This standard specifies the criteria which windows, doors and shutters shall satisfy to achieve a classification when submitted to the test method described in EN 13124-1.

**ICS** 13.230, 91.060.50

**Võtmesõnad:** doors, endings, explosion pressure, explosion proofness, explosion protection, explosion resistance, explosions, impact tests, penetrations, pipes, pressure wave, shock tubes, specification (approval), specifications, testing, tubes, windows

## EUROPEAN STANDARD NORME EUROPÉENNE

### EN 13123-1

EUROPÄISCHE NORM

April 2001

ICS 13.230; 91.060.50

### **English version**

# Windows, doors and shutters - Explosion resistance - Requirements and classification - Part 1: Shock tube

Fenêtres, portes et fermetures - Résistance à l'explosion -Prescriptions et classification - Partie 1: Tube à effet de souffle (shock tube) Fenster, Türen und Abschlüsse - Sprengwirkungshemmung - Anforderungen und Klassifizierung - Teil 1: Stoßrohr

This European Standard was approved by CEN on 7 March 2001.

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 Management Centre or to any CEN member.

This European Standard exists 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 Management Centre has the same status as the official versions.

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



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

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#### **Foreword**

This European Standard 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 October 2001, and conflicting national standards shall be withdrawn at the latest by October 2001.

This European Standard is one of a series of standards for windows, doors and curtain walling. The requirements and classification relate to a test specified in EN 13124-1.

Annex A is normative.

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. TO PROLITION OF THE PARTY OF TH

### 1 Scope

This European Standard specifies the criteria which windows, doors and shutters shall satisfy to achieve a classification when submitted to the test method described in EN 13124-1.

This European Standard concerns a method of test against blast waves generated by using a shock tube facility to simulate a high explosive detonation in the order of 100 kg to 2 500 kg TNT at distances from about 35 m to 50 m.

This European Standard is applicable to blast overpressure generated in a shock tube test facility used to simulate a high explosive detonation on windows, doors and shutters, complete with their frames and infills, for use in both internal and external locations in buildings. It gives no information on the explosion resistance capacity of the wall or other surrounding structure.

### 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 (including amendments).

EN 13124-1:2001 Windows, doors and shutters – Explosion resistance – Test method – Part 1 : Shock tube

### 3 Terms and definitions

For the purposes of this European Standard the terms and definitions given in EN 13124-1 apply.

### 4 Requirements

and,

Resistance to perforation and pressure shall be classified in accordance with clause 5. To achieve a particular class of explosion resistance, the test specimen shall

(a) be subjected to not less than the corresponding level of each of peak pressure, positive specific impulse and minimum duration specified in clause 5, Table 1

(b) show no perforation or damage exceeding that specified in 9.2 of EN 13124-1:2001