

**Windows, doors and shutters -  
Explosion resistance - Test method -  
Part 1: Shock tube**

Windows, doors and shutters - Explosion resistance  
- Test method - Part 1: Shock tube

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13124-1:2001 sisaldab Euroopa standardi EN 13124-1:2001 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 19.12.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13124-1:2001 consists of the English text of the European standard EN 13124-1:2001.</p> <p>This document is endorsed on 19.12.2001 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> This standard specifies a conventional test procedure to permit classification of the explosion resistance of windows, doors and shutters together with their infills. The standard concerns a method of test against blast waves generated by using a shock tube facility to simulate a high explosive detonation in order of 100 kg to 2 500 kg TNT at distances from 35 m to 50 m. This standard covers only the behavior of the complete unit including infill, frame and fixings as tested. It gives no information on the ability of the surrounding wall or building structure to resist the direct or transmitted forces.</p>	<p><b>Scope:</b> This standard specifies a conventional test procedure to permit classification of the explosion resistance of windows, doors and shutters together with their infills. The standard concerns a method of test against blast waves generated by using a shock tube facility to simulate a high explosive detonation in order of 100 kg to 2 500 kg TNT at distances from 35 m to 50 m. This standard covers only the behavior of the complete unit including infill, frame and fixings as tested. It gives no information on the ability of the surrounding wall or building structure to resist the direct or transmitted forces.</p>
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ICS 13.230, 91.060.50

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

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ICS 13.230; 91.060.50

English version

## Windows, doors and shutters - Explosion resistance - Test method - Part 1: Shock tube

Fenêtres, portes et fermetures - Résistance à l'explosion -  
Méthode d'essai - Partie 1: Tube à effet de souffle (shock  
tube)

Fenster, Türen und Abschlüsse - Sprengwirkungshemmung  
- Prüfverfahren - 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.

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## Foreword

This European Standard has been prepared by Technical Committee CEN/TC 33, "Windows, doors, 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.

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.

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## 1 Scope

This European Standard specifies a conventional test procedure to permit classification of the explosion resistance of windows, doors and shutter together with their infills.

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 covers only the behaviour of the complete unit including infill, frame and fixings as tested. It gives no information on the ability of the surrounding wall or building structure to resist the direct or transmitted forces.

If the windows, doors and shutters are intended for specific conditions of climate, specific test conditions may be required.

It gives no information on the behaviour of the units subjected to other types of loading.

**NOTE** Care should be taken to ensure that all joints between the wall and the window or door have protection which is at least equal to that of the window or door.

## 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 13123-1:2001 Windows, doors and shutters – Explosion resistance – Requirements and classification – Part 1 : Shock tube

## 3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

### 3.1

#### **test specimen**

sample prepared and submitted for testing

### 3.2

#### **attack face**

the face of the test specimen designed to face the explosion

### 3.3

#### **rear face**

the opposite side of the test specimen to the attack face