

Child protective products - Consumer fitted finger protection devices for doors - Safety requirements and test methods

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 16654:2015 sisaldab Euroopa standardi EN 16654:2015 ingliskeelset teksti.	This Estonian standard EVS-EN 16654:2015 consists of the English text of the European standard EN 16654:2015.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 11.11.2015.	Date of Availability of the European standard is 11.11.2015.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 91.060.50, 97.190

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:

Aru 10, 10317 Tallinn, Eesti; koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Aru 10, 10317 Tallinn, Estonia; homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

English Version

**Child protective products - Consumer fitted finger
protection devices for doors - Safety requirements and test
methods**

Articles pour la sécurité des enfants - Dispositifs de
protection des doigts à monter soi-même et destinés à
être installés sur des portes - Exigences de sécurité et
méthodes d'essai

Kinderschutzprodukte - Vom Verbraucher
anzubringende Fingerschutzvorrichtungen für Türen -
Sicherheitstechnische Anforderungen und
Prüfverfahren

This European Standard was approved by CEN on 12 September 2015.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents	Page
European foreword.....	3
1 Scope.....	4
2 Normative references.....	4
3 Terms and definitions	4
4 Requirements	5
4.1 General requirements	5
4.2 Child appeal.....	6
4.3 Mechanical function and structural integrity.....	6
4.3.1 Hazard shielding devices.....	6
4.3.2 Shut prevention devices	6
4.3.3 Shut controlling devices	6
4.4 Effectiveness	6
4.4.1 General requirements	6
4.4.2 Accessibility for hazard shielding devices	6
4.4.3 Deformation for hazard shielding devices.....	6
4.4.4 Static strength for shut prevention devices.....	7
4.4.5 Dynamic strength for shut controlling devices	7
4.5 Small parts	7
4.6 Sharp edges	7
4.7 Purchase information.....	7
4.8 User instructions	7
4.9 Marking of the product	8
5 Test methods	9
5.1 General test conditions	9
5.2 Test equipment.....	9
5.2.1 Test door and frame.....	9
5.2.2 Finger probe.....	9
5.2.3 Small parts cylinder	10
5.2.4 Tension test equipment.....	10
5.3 Extent and order of testing	11
5.4 Test procedures.....	11
5.4.1 Mechanical function and structural integrity tests.....	11
5.4.2 Effectiveness tests.....	12
5.4.3 Small parts test	13
5.5 Test report.....	14
Annex A (normative) Flowchart of test procedure	15
Bibliography.....	16

European foreword

This document (EN 16654:2015) has been prepared by Technical Committee CEN/TC 398 “Project Committee - Child Protective Products”, the secretariat of which is held by ASI.

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 May 2016, and conflicting national standards shall be withdrawn at the latest by May 2016.

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

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies requirements and test methods for consumer fitted finger protection devices intended to be mounted on hinged doors in the domestic environment inside buildings in order to prevent crushing injuries to children as a result of the door closing.

A finger protection product is based on at least one of three protection methods: hazard shielding, shut prevention or shut controlling.

NOTE 1 Products intended to maintain the door in a fixed position and friction hinges are not covered by this European Standard.

NOTE 2 Finger protection devices intended to be installed by professionals or that are an integral part of the door system are beyond the scope of this European Standard.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1935, *Building hardware — Single-axis hinges — Requirements and test methods*

3 Terms and definitions

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

3.1

finger protection device

device intended to minimize the risk of crushing injuries to fingers between (part of) door leaf/leaves and the door frame when the door leaf is moving

3.2

hazard shielding device

finger protection device intended to minimize the risk of crushing injuries to fingers in the gap between the hinge edge of the door leaf and the door frame

3.3

child appealing finger protection device

finger protection device that resembles by any means another object commonly recognized as appealing to or intended for use by young children, or has entertaining audio effects or animated effects

Note 1 to entry: This includes, but is not limited to finger protection devices the shape of which resembles cartoon characters, toys, guns, watches, telephones, musical instruments, vehicles, human body or parts of the human body, animals, food or beverages, or that play musical notes, or have flashing lights or moving objects or other entertaining features.

3.4

shut controlling device

finger protection device intended to minimize the risk of crushing injuries to fingers at the handle edge of the door by controlling the deceleration of the door leaf or preventing the door from shutting suddenly