This is a free page sample. Access the full version online.

NSAI Standards

Irish Standard
I.S. EN 16337:2013

Hardware for furniture - Strength and loading capacity of shelf supports

© CEN 2013 No copying without NSAI permission except as permitted by copyright law.

This is a free page sample. Access the full version online.

I.S. EN 16337:2013

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces:

This document is based on:
EN 16337:2013

Published:
12 June, 2013

This document was published under the authority of the NSAI and comes into effect on:
12 June, 2013

ICS number:
97.140

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie

W **NSAI.ie**

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

This is a free page sample. Access the full version online.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 16337

June 2013

ICS 97.140

English Version

Hardware for furniture - Strength and loading capacity of shelf supports

Quincaillerie d'ameublement - Résistance mécanique et capacité de charge des supports d'étagère

Möbelbeschläge - Festigkeit und Tragfähigkeit von Bodenträgern

This European Standard was approved by CEN on 1 May 2013.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

© 2013 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN 16337:2013: E

This is a free page sample. Access the full version online.

Contents Page

Foreword 3

1 Scope 4

2 Normative references 4

3 Terms and definitions 5

4 General test condition 5
4.1 Preliminary preparation 5
4.2 Test equipment 5
4.2.1 Test wall 5
4.2.2 Particle board properties 5
4.2.3 Melamine faced particleboard 6
4.2.4 Steel impact plates 6
4.2.5 Masses 6
4.3 Tolerances (allowed variation from the nominal values) 6

5 Test set-up 6

6 Test procedures and requirements 7
6.1 General 7
6.2 Strength requirements and tests 8
6.3 Verification of loading capacity 8
6.3.1 General 8
6.3.2 Impact test 8
6.3.3 Sustained load test 10
6.4 Corrosion resistance 10

7 Test report 10

Annex A (normative) **Requirements for product information** 11

A.1 General 11

A.2 Field of application 11

A.3 Loading capacity, *M* 11

A.4 Adjustment systems 11

A.5 Corrosion test 11

A.6 Mounting instructions 11

Annex B (normative) **Test parameters for impact plates (4.2.4)** 12

Annex C (informative) **Determination of loading capacity** 13

C.1 Determination of breaking load 13

C.2 Calculation of loading capacity, *M* 13

Bibliography 14

This is a free page sample. Access the full version online.

Foreword

This document (EN 16337:2013) has been prepared by Technical Committee CEN/TC 207 “Furniture”, the secretariat of which is held by UNI.

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 December 2013, and conflicting national standards shall be withdrawn at the latest by December 2013.

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.

This is a free page sample. Access the full version online.

1 Scope

This European Standard specifies test methods for the verification of the loading capacity of shelf supports.

This standard does not apply to ceiling attached shelf support systems.

The tests consist of the application of vertical loads and forces simulating normal functional use, as well as misuse that might reasonably be expected to occur.

With the exception of the corrosion test in 6.4, the tests are designed to evaluate properties without regard to materials, design/construction or manufacturing processes.

The strength tests include only the shelf supports and their components as well as the attachment to the cabinet and/or to the wall. If the shelf support has additional functions, e.g. as a connector or as an extension element, these are not covered by this standard.

The test results are only valid for the shelf supports tested. The results may be used to represent the performance of production models provided that the tested model is representative of the production model.

The test results can only be used as a guide to the performance of the shelf supports.

With the exception of the corrosion test, ageing and influences of temperature and humidity are not included.

Annex A (normative) includes requirements for product information.

Annex B (normative) includes test parameters.

Annex C (informative) includes method for the determination of loading capacity.

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 320, *Particleboards and fibreboards - Determination of resistance to axial withdrawal of screws*

EN 323, *Wood-based panels - Determination of density*

EN 14322, *Wood-based panels - Melamine faced boards for interior uses - Definition, requirements and classification*

EN ISO 6270-2, *Paints and varnishes - Determination of resistance to humidity - Part 2: Procedure for exposing test specimens in condensation-water atmospheres (ISO 6270-2)*

ISO 7619-2, *Rubber, vulcanized or thermoplastic — Determination of indentation hardness — Part 2: IRHD pocket meter method*

SAI GLOBAL

This is a free preview. Purchase the entire publication at the link below:

Product Page

Looking for additional Standards? Visit Intertek Inform Infostore

Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation