

KIPSPLAATKONSTRUKTSIOONIDE ABIKARKASSID JA  
TUGEVDUSLIISTUD. MÄÄRATLUSED, NÕUDED JA  
KATSEMEETODID

Metal beads and feature profiles for use with gypsum  
plasterboards - Definitions, requirements and test  
methods

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 14353:2017 sisaldab Euroopa standardi EN 14353:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 14353:2017 consists of the English text of the European standard EN 14353:2017.
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 05.07.2017.	Date of Availability of the European standard is 05.07.2017.
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](mailto:standardiosakond@evs.ee).

ICS 91.100.10

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:  
Koduleht [www.evs.ee](http://www.evs.ee); telefon 605 5050; e-post [info@evs.ee](mailto: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:

Homepage [www.evs.ee](http://www.evs.ee); phone +372 605 5050; e-mail [info@evs.ee](mailto:info@evs.ee)

English Version

**Metal beads and feature profiles for use with gypsum  
plasterboards - Definitions, requirements and test  
methods**

Cornières et profilés métalliques pour plaques de  
plâtre - Définitions, exigences et méthodes d'essai

Hilfs- und Zusatzprofile aus Metall zur Verwendung  
mit Gipsplatten - Begriffe, Anforderungen und  
Prüfverfahren

This European Standard was approved by CEN on 29 July 2016.

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, Serbia, 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**

<b>Contents</b>	<b>Page</b>
<b>European foreword</b> .....	<b>3</b>
<b>Introduction</b> .....	<b>4</b>
<b>1 Scope</b> .....	<b>5</b>
<b>2 Normative references</b> .....	<b>5</b>
<b>3 Terms, definitions, symbols and abbreviations</b> .....	<b>6</b>
3.1 Terms and definitions .....	6
3.2 Symbols and abbreviations .....	7
<b>4 Requirements</b> .....	<b>7</b>
4.1 Reaction to fire.....	7
4.2 Flexural strength (expressed as bending behaviour).....	8
4.3 Release of dangerous substances.....	8
4.4 Additional technical requirements.....	8
4.5 Protective coating .....	8
4.6 Functional requirements.....	9
4.7 Dimensions and tolerances .....	9
<b>5 Test methods</b> .....	<b>12</b>
5.1 Sampling.....	12
5.2 Dimensional measurements .....	12
5.3 Profile dimensions.....	15
5.4 Wing width.....	15
5.5 Determination of expansion and movement.....	15
5.6 Determination of breaking strength of paper tape.....	16
5.7 Determination of bending behaviour .....	16
<b>6 Assessment and verification of constancy of performance — AVCP</b> .....	<b>17</b>
6.1 General.....	17
6.2 Type testing.....	17
6.3 Factory production control (FPC) .....	18
<b>7 Designation</b> .....	<b>19</b>
<b>8 Marking, labelling and packaging</b> .....	<b>20</b>
<b>Annex A (informative) Sampling procedure for testing</b> .....	<b>21</b>
A.1 General.....	21
A.2 Sampling procedure.....	21
<b>Annex ZA (informative) Relationship of this European Standard with Regulation (EU) No.305/2011</b> .....	<b>23</b>
ZA.1 Scope and relevant characteristics.....	23
ZA.2 System of Assessment and Verification of Constancy of Performance (AVCP) .....	23
ZA.3 Assignment of AVCP tasks .....	23
<b>Bibliography</b> .....	<b>26</b>

## European foreword

This document (EN 14353:2017) has been prepared by Technical Committee CEN/TC 241 “Gypsum and gypsum based products”, 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 January 2018, and conflicting national standards shall be withdrawn at the latest by April 2019.

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 14353:2007+A1:2010.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of Regulation (EU) No. 305/2011.

For relationship with Regulation (EU) No. 305/2011, see informative Annex ZA, which is an integral part of this document.

The main technical changes that have been made in this new edition of EN 14353 are the following:

- a) Normative references have been updated;
- b) Annex ZA and Clause 6 have been revised to be in line with the Construction Products Regulation (CPR);
- c) document has been editorially revised.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Introduction

Metal beads and feature profiles are produced in wide variety of sizes and shapes. They are cold formed from mild steel sheets with various protective coatings or extruded or cold formed from aluminium. Some of the beads are faced with paper tape to enable them to be jointed. The materials, design and mechanical properties make them particularly suitable to provide improved physical properties and/or enhanced decorative solutions to gypsum board assemblies.

Metal beads and feature profiles may be fixed by various methods to the gypsum board and may be featured self-finished, featured with decoration or concealed by finishing with jointing compounds to receive decoration.

## 1 Scope

This European Standard specifies the characteristics and performance of metal beads, metal beads combined with paper tape and metal feature profiles designed for use in systems made with gypsum plasterboards according to EN 520, gypsum boards with fibrous reinforcement according to EN 15283-1 and EN 15283-2 and products from secondary processing according to EN 14190, gypsum board thermal/acoustic insulation composite panels according to EN 13950 and prefabricated gypsum board panels with a cellular paperboard core according to EN 13915, intended to be used in building construction works. Metal beads and feature profiles, depending upon their material and type, can be featured without decoration, decorated or finished with jointing compounds to receive decoration.

It covers the following performance characteristics: reaction to fire and flexural strength (bending behaviour) to be measured according to the corresponding European test methods.

It provides the assessment and verification of constancy of performance of the products

This European Standard covers also additional technical characteristics that are of importance for the use and acceptance of the product by the construction industry and the reference tests for these characteristics.

## 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 485-2:2016, *Aluminium and aluminium alloys — Sheet, strip and plate — Part 2: Mechanical properties*

EN 485-4:1993, *Aluminium and aluminium alloys — Sheet, strip and plate — Part 4: Tolerances on shape and dimensions for cold-rolled products*

EN 520:2004+A1:2009, *Gypsum plasterboards — Definitions, requirements and test methods*

EN 10131:2006, *Cold rolled uncoated and zinc or zinc-nickel electrolytically coated low carbon and high yield strength steel flat products for cold forming — Tolerances on dimensions and shape*

EN 10139:2016, *Cold rolled uncoated low carbon steel narrow strip for cold forming — Technical delivery conditions*

EN 10140:2006, *Cold rolled narrow steel strip — Tolerances on dimensions and shape*

EN 10143:2006, *Continuously hot-dip coated steel sheet and strip — Tolerances on dimensions and shape*

EN 10152:2017, *Electrolytically zinc coated cold rolled steel flat products for cold forming — Technical delivery conditions*

EN 10346:2015, *Continuously hot-dip coated steel flat products for cold forming — Technical delivery conditions*

EN 13501-1:2007+A1:2009, *Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests*

EN 13963:2014, *Jointing materials for gypsum boards — Definitions, requirements and test methods*

EN 15283-1:2008+A1:2009, *Gypsum boards with fibrous reinforcement — Definitions, requirements and test methods — Part 1: Gypsum boards with mat reinforcement*

EN 15283-2:2008+A1:2009, *Gypsum boards with fibrous reinforcement — Definitions, requirements and test methods — Part 2: Gypsum fibre boards*

EN ISO 1924-2:2008, *Paper and board — Determination of tensile properties — Part 2: Constant rate of elongation method (20 mm/min) (ISO 1924-2:2008)*

EN ISO 9227:2017, *Corrosion tests in artificial atmospheres — Salt spray tests (ISO 9227:2017)*

### 3 Terms, definitions, symbols and abbreviations

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

#### 3.1 Terms and definitions

##### 3.1.1

##### **metal bead**

profiled narrow section formed in steel or aluminium with a cross section to suit its application

Note 1 to entry: Beads may incorporate a variety of profiles and one or more wings depending upon their function. The wings can be perforated or expanded to facilitate fixing using mechanical and/or jointing compound methods.

##### 3.1.2

##### **angle bead**

profiled section used to enhance and protect external angles

##### 3.1.3

##### **edge bead**

profiled section engaged to enclose and enhance and protect the edge of the gypsum board

##### 3.1.4

##### **feature bead**

profiled section used to enhance the finish to the edge of the gypsum board

##### 3.1.5

##### **stop bead**

profiled section used to provide a straight edge to receive the finish to the edge

##### 3.1.6

##### **corner tape**

paper tape incorporating one or more metal or other strips to give added protection to external angles

##### 3.1.7

##### **profile**

surface or edge with a cross section to suit the application

##### 3.1.8

##### **wing**

area adjoining the bead face or edge, usually perforated or expanded, used for support or fixing