



SLOVENSKI STANDARD SIST EN 612:2005

01-julij-2005

BUXca Yý U

SIST EN 612:1998

SIST EN 612:1998/AC:1998

J]gY]j`YVcj]n`c`U Ubc`gdfYXb`c`gHfUb`c`]b`cXlc bYVWj]]n`d`c Yj]bY`g`gdc`]

Eaves gutters with bead stiffened fronts and rainwater pipes with seamed joints made of metal sheet

Hängedachrinnen mit Aussteifung der Rinnenvorderseite und Regenrohre aus Metallblech mit Nahtverbindungen

Gouttieres pendantes a ourlet et descentes d'eaux pluviales en métal laminé

SIST EN 612:2005
<https://standards.iteh.ai/catalog/standards/sist/bfbaec01-ba3e-4120-9916-990f95438ca0/sist-en-612-2005>

Ta slovenski standard je istoveten z: EN 612:2005

ICS:

91.060.20 Strehe

Roofs

SIST EN 612:2005

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 612:2005

<https://standards.iteh.ai/catalog/standards/sist/bfbaec01-ba3e-4120-9916-990f95438ca0/sist-en-612-2005>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 612

February 2005

ICS 91.060.20

Supersedes EN 612:1996

English version

Eaves gutters with bead stiffened fronts and rainwater pipes with seamed joints made of metal sheet

Gouttières pendantes à ourlet et descentes d'eaux pluviales en métal laminé

Hängedachrinnen mit Aussteifung der Rinnenvorderseite und Regenrohre aus Metallblech mit Nahtverbindungen

This European Standard was approved by CEN on 13 January 2005.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

iTeh STANDARD PREVIEW

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

[SIST EN 612:2005](https://standards.iteh.ai/catalog/standards/sist/bfbaec01-ba3e-4120-9916-990f95438ca0/sist-en-612-2005)

<https://standards.iteh.ai/catalog/standards/sist/bfbaec01-ba3e-4120-9916-990f95438ca0/sist-en-612-2005>



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

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

Contents

	Page
Foreword.....	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Shapes	6
4.1 Gutters	6
4.1.1 Components	6
4.1.2 General requirements on the main parts	7
4.2 Down-pipes.....	8
5 Classification.....	9
5.1 Gutters	9
5.2 Down-pipes.....	10
6 Material requirements.....	10
6.1 Aluminium sheet.....	11
6.2 Copper sheet.....	11
6.3 Hot-dip metal coated steel sheet.....	11
6.4 Metal plus organic coated steel sheet.....	11
6.5 Stainless steel sheet.....	11
6.6 Zinc sheet	11
7 Dimensional requirements.....	12
7.1 Gutters	12
7.1.1 Material thickness.....	12
7.1.2 Tolerances	12
7.2 Down-pipes.....	13
7.2.1 Material thickness.....	13
7.2.2 Tolerances	13
7.2.3 Joints	14
7.3 Accessories.....	14
8 Factory production control.....	14
9 Designation	14
10 Marking	15
11 Labelling	15

Foreword

This document (EN 612:2005) has been prepared by Technical Committee CEN/TC 128 “Roof covering products for discontinuous laying and products for wall cladding”, the secretariat of which is held by IBN.

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 August 2005, and conflicting national standards shall be withdrawn at the latest by August 2005.

This document supersedes EN 612:1995.

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

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 612:2005](https://standards.iteh.ai/catalog/standards/sist/bfbaec01-ba3e-4120-9916-990f95438ca0/sist-en-612-2005)

<https://standards.iteh.ai/catalog/standards/sist/bfbaec01-ba3e-4120-9916-990f95438ca0/sist-en-612-2005>

Introduction

This document specifies product requirements, derived from performance requirements established for various applications and is supported by separate standards for specific and common test methods in the framework of respective material standards. The performance of a gutter and drainage system made with these products depends not only on the properties of the products as they are defined by this document. The design, construction and behaviour of the relevant parts of the building also have an effect on the performance of the system.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 612:2005](https://standards.iteh.ai/catalog/standards/sist/bfbaec01-ba3e-4120-9916-990f95438ca0/sist-en-612-2005)

<https://standards.iteh.ai/catalog/standards/sist/bfbaec01-ba3e-4120-9916-990f95438ca0/sist-en-612-2005>

1 Scope

This document specifies requirements for eaves gutters and rainwater down-pipes made from metal sheet. It establishes the general characteristics, designation system, classification, marking and quality requirements for the products.

The document applies to eaves gutters and external rainwater down-pipes that are supported by metal brackets and used to drain away rainwater. The shape and dimensions of a gutter are defined by the quantity of water to be drained away from the roof to the down-pipes and by architectural design requirements.

The document specifies the requirements for gutters and rainwater down-pipes which enable these products to meet all usual service conditions such as catching and draining away rainwater, melted snow or ice water from a building to a drainage system or a sewer outside the building.

Requirements for fixings, supporting construction, flashings or the method of making joints between the different components are not included in this document.

This document does not specify requirements for eaves gutters handmade on site.

2 Normative references

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

EN 988, *Zinc and zinc alloys - Specification for rolled flat products for building*

EN 1172, *Copper and copper alloys — Sheet and strip for building purposes*

EN 1396, *Aluminium and aluminium alloys - Coil coated sheet and strip for general applications - Specifications.*

EN 10088-1, *Stainless steels - Part 1: List of stainless steels*

EN 10327, *Continuously hot-dip coated strip and sheet of low carbon steels for cold forming - Technical delivery conditions*

ENV 10169-2, *Continuously organic coated (coil coated) steel flat products - Part 2: Products for building exterior applications*

EN 10326, *Continuously hot-dip coated strip and sheet of structural steels - Technical delivery conditions*

EN 10327, *Continuously hot-dip coated strip and sheet of low carbon steels for cold forming - Technical delivery conditions*

3 Terms and definitions

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

3.1

eaves gutter

gutter situated outside the building and supported by brackets

EN 612:2005 (E)

- 3.2
down-pipe**
pipe fitted to a gutter to lead rainwater from the gutter to the drainage system or sewer
- 3.3
bead**
profile of partly circular or rectangular shape at the top of the front of a gutter
- 3.4
front**
part of the gutter fitted away from the building (see Figure 1)
- 3.5
bottom (sole)**
lower part of the gutter profile (see Figure 1)
- 3.6
back**
part of the gutter fitted adjacent to the building (see Figure 1)
- 3.7
water check**
small inward bend at the top edge of the back of a gutter
- 3.8
developed width**
original width of the piece of metal sheet from which the gutter or down-pipe is produced
- 3.9
commercial length**
length of a gutter or a down-pipe which was produced in a factory
- 3.10
accessories**
all parts besides the gutter and the down-pipe which are necessary for the construction of a rainwater drainage
- 3.11
seam overlap**
overlap of material when a rainwater down-pipe is formed from a flat metal sheet (see Figure 3)

4 Shapes**4.1 Gutters****4.1.1 Components**

A gutter, formed from one piece of metal sheet, shall consist of the following four main parts:

- bead;
- front;
- bottom and
- back.

Together, these parts form a trough-shape with an opening at the top to admit rainwater. The most commonly used shapes are shown in Figure 1.

The shape of the gutter is described by

- bead dimensions;
- height of the front;
- outside width of the bottom;
- height of the back;
- upper opening width and
- developed width.

4.1.2 General requirements on the main parts

4.1.2.1 Bead

The bead has to fulfil two functions,

- a) to give stiffness to the gutter in both the horizontal and the vertical direction,
- b) to form a fixing point for the gutter brackets.

The shape of the bead shall meet an agreed drawing within the tolerances given in 7.1.2.

Three of the most widely used shapes of bead are shown in Figure 2. The diameter of the bead, dimension d in Figure 2, shall be not smaller than the corresponding value in Table 1. The load bearing capacity and stiffness of other beads shall be not less than that of a bead of a circular type, Figure 2, shape I, of the same material in both the horizontal and the vertical direction. This shall be proved by calculation of the modulus of section.

4.1.2.2 Front

The shape and dimensions of the front shall meet an agreed drawing within the tolerances given in 7.1.2.

The vertical height of the front, dimension a in Figure 1, or the sum of bead diameter plus vertical height if the front, dimensions $a + d$ in Figure 1 or Figure 2b, shall be not less than the corresponding value given in Table 1.

4.1.2.3 Bottom

The shape and dimensions of the bottom are dependent upon the type of gutter. The shape and dimensions of the bottom, together with those of the front and the back, control the upper opening width, dimension e of Figure 1. If the outside width of the bottom, dimension b of Figure 1, is defined, the tolerances given in 7.1.2 apply.

4.1.2.4 Back

The shape and dimensions of the back shall meet an agreed drawing within the tolerances given in 7.1.2.

The vertical height of the back, dimension c of Figure 1, shall be greater than the vertical height of the front by not less than 6 mm when a water check is formed on the back, or 15 mm when there is no water check.