



SLOVENSKI STANDARD

SIST EN 1849-2:2010

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Nadomešča:
SIST EN 1849-2:2001

Hidroizolacijski trakovi - Določevanje debeline in mase na enoto površine - 2. del: Polimerni in elastomerni trakovi za tesnjenje streh

Flexible sheets for waterproofing - Determination of thickness and mass per unit area -
Part 2: Plastic and rubber sheets

Abdichtungsbahnen - Bestimmung der Dicke und der flächenbezogenen Masse - Teil 2:
Kunststoff- und Elastomerbahnen für Dachabdichtungen

Feuilles souples d'étanchéité - Détermination de l'épaisseur et de la masse surfacique —
Partie 2: Feuilles d'étanchéité de toiture plastiques et élastomères

Ta slovenski standard je istoveten z: EN 1849-2:2009

ICS:

91.060.20	Strehe	Roofs
91.100.50	Veziva. Tesnilni materiali	Binders. Sealing materials

SIST EN 1849-2:2010 en,fr,de

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English Version

**Flexible sheets for waterproofing - Determination of thickness
and mass per unit area - Part 2: Plastic and rubber sheets**

Feuilles souples d'étanchéité - Détermination de l'épaisseur
et de la masse surfacique - Partie 2: Feuilles d'étanchéité
de toiture plastiques et élastomères

Abdichtungsbahnen - Bestimmung der Dicke und der
flächenbezogenen Masse - Teil 2: Kunststoff- und
Elastomerbahnen für Dachabdichtungen

This European Standard was approved by CEN on 19 October 2009.

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 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 Management Centre has the same status as the official versions.

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

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

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Foreword

This document (EN 1849-2:2009) has been prepared by Technical Committee CEN/TC 254 “Flexible sheets for waterproofing”, the secretariat of which is held by BSI.

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 June 2010, and conflicting national standards shall be withdrawn at the latest by June 2010.

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.

This document supersedes EN 1849-2:2001.

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

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EN 1849-2:2009 (E)**Introduction**

This European Standard is intended for characterisation of plastic and rubber sheets as manufactured or supplied before use. This test method relates exclusively to products or to their components where appropriate, and not to waterproofing membrane systems composed of such products and installed in the works.

This test is intended to be used in conjunction with EN 13956, *Flexible sheet for waterproofing — Plastic and rubber sheets for roof waterproofing — Definitions and characteristics*.

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1 Scope

This European Standard specifies methods for the determination of the thickness and mass per unit area of plastic and rubber sheets for roof waterproofing.

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 13416, *Flexible sheets for waterproofing — Bitumen, plastic and rubber sheets for roof waterproofing — Rules for sampling*

3 Terms and definitions

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

3.1

surface texture

textured pattern on one or both surfaces of the sheet creating a difference between the effective and overall thickness not exceeding 0,15 mm

NOTE See Figure 2 a) and c).

3.2

surface profile (surface structure)

raised area on the surface of the sheet creating a difference between the effective and overall thickness exceeding 0,15 mm

NOTE See Figure 2 b).

3.3

internal fabric

layer of woven or non-woven fabric of synthetic or mineral fibres incorporated in the sheet. This layer may or may not constitute reinforcement

NOTE See Figure 1 c).

3.4

backing

layer of woven or non-woven fabric of synthetic or mineral fibres or other materials, fixed to the bottom of the sheet

NOTE see Figure 2 d).

3.5

overall thickness

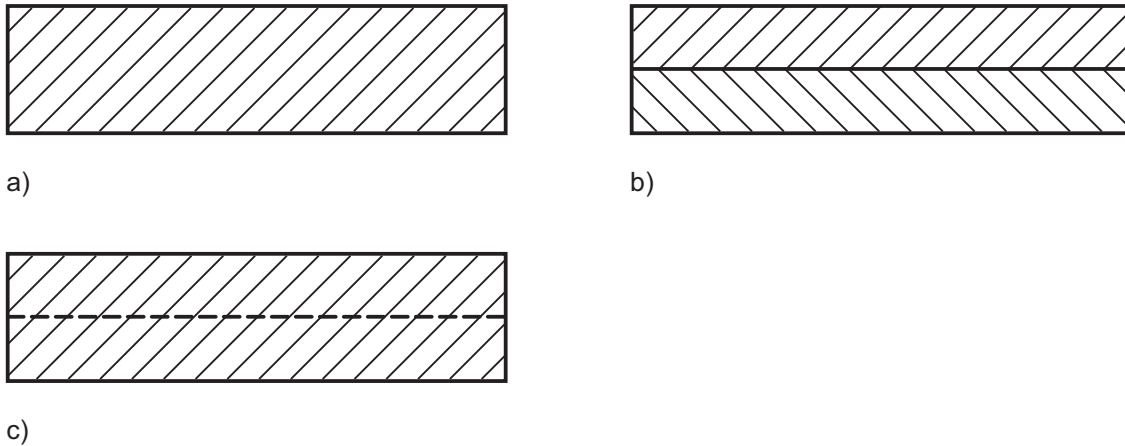
d

thickness of the sheet excluding any surface profile

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3.6
effective thickness d_{eff}

thickness of the sheet providing the waterproofing function including any surface texture but excluding any surface profile and backing



Key

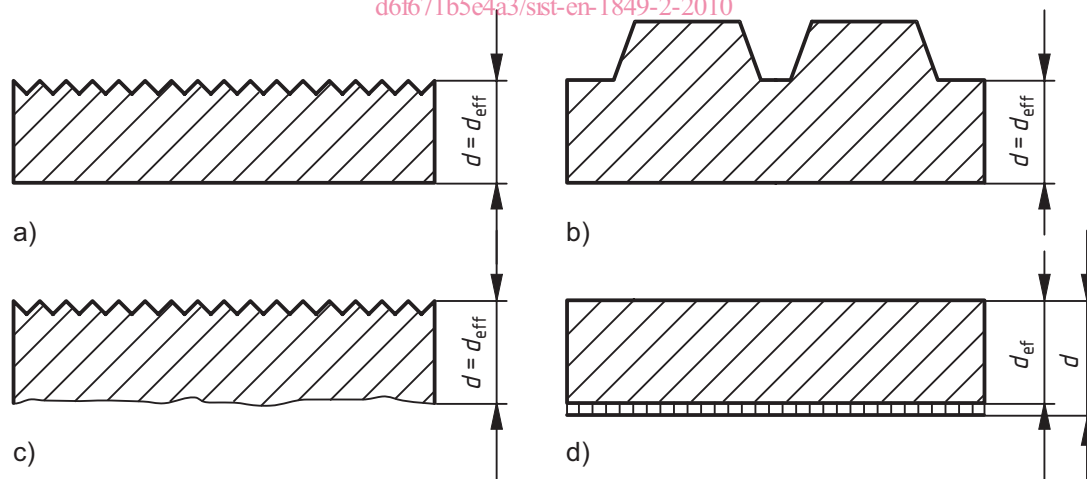
- a) homogeneous single layer sheet
- b) multi-layer sheet
- c) sheet with internal fabric

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Figure 1 — Structure of the sheet

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Key

- a) sheet with surface texture on one side
- b) sheet with surface profiles
- c) sheet with surface texture on both sides
- d) sheet with backing

Figure 2 — Types of surfaces

4 Sampling

Test samples shall be taken in accordance with EN 13416.

5 Determination of thickness

5.1 Principle

The thickness is determined by a mechanical device unless there is a hindrance by a surface profile and/or backing. In this case, optical measurement shall be used.

5.2 Apparatus

5.2.1 Measuring device

Capable of indicating the thickness to an accuracy of 0,01 mm. The measuring surfaces shall be planar and have a diameter of $(10 \pm 0,05)$ mm exerting a pressure of (20 ± 10) kPa on the sheet surface.

NOTE The determination of thickness according to EN 12311-2 may also be done with a measuring diameter of $(5 \pm 0,05)$ mm exerting a pressure of (20 ± 10) kPa on the sheet surface for the dumbbell type.

5.2.2 Optical device

For sheets with a surface profile and/or backing, capable of indicating the thickness to an accuracy of 0,01mm.

5.3 Test specimens

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The test specimens shall be square or circular in form, and have an area of $(10\ 000 \pm 100)$ mm². Cut from the sheet n test specimens (see Table 1) evenly divided over the width b of the sheet, the outer specimen (100 ± 10) mm from the edges (see Figure 3).

Table 1 — Required number of test specimens

Width of the sheet b [mm]	< 1 700	1 701 to 2 200	2 201 to 2 700	2 701 to 3 200	3 201 to 3 700	3 701 to 4 200	4 201 to 4 700	> 4 701
Number of test specimens n [-]	3	4	5	6	7	8	9	10

5.4 Procedure

5.4.1 General

Condition the sample for at least 2 h at (23 ± 2) °C and (50 ± 5) % relative humidity immediately before measuring.

Ensure that the sample and the faces of the measuring device are free from contamination for example dust.