SLOVENSKI STANDARD
SIST EN 1849-2:2001

01-december-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 for roof waterproofing

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 élastomeres

Ta slovenski standard je istoveten z: **EN 1849-2:2001**

ICS:

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

SIST EN 1849-2:2001 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

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ICS 91.100.50

English version

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

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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 Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This European Standard 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identical text or by endorsement, at the latest by month of November 2001, and conflicting national standards shall be withdrawn at the latest by month of July 2002.

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

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 European Standard "Definition and Characteristics" for plastic and rubber sheets for roof waterproofing.

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

This European Standard incorporates by dated or undated reference provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references, the latest editions of the publication referred to apply (including amendments)

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 European Standard, 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 0,1 mm (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 0,1 mm (see Figure 2 b)

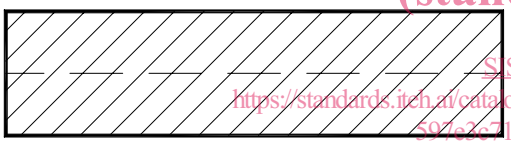
3.3
Internal fabric
layer of woven or non-woven fabric of synthetic or mineral fibres incorporated in the sheet (see Figure 1c). This layer may or may not constitute reinforcement

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 (see Figure 2 d)

3.5
overall thickness (*e*)
thickness of the sheet excluding any surface profile

3.6
effective thickness (e_{eff}):
thickness of the sheet providing the waterproofing function including any surface texture but excluding any surface profile and backing

a) b)



c)

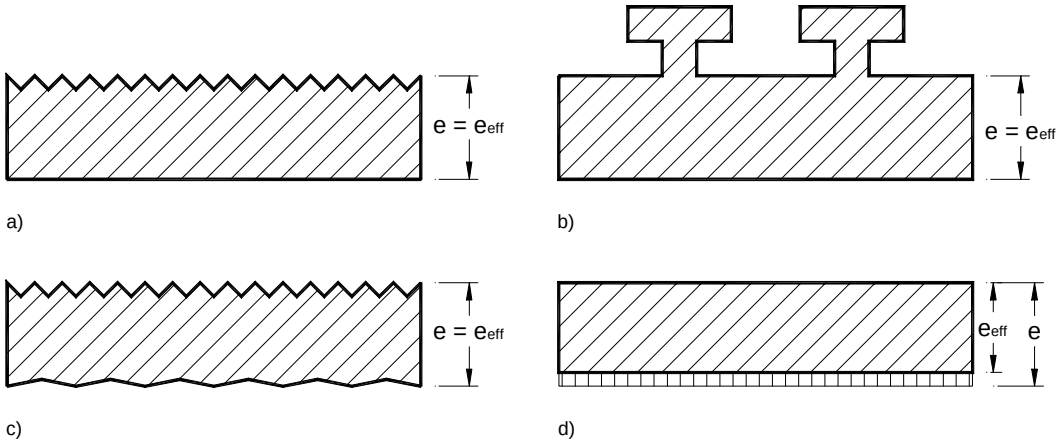
Key

a) Homogeneous single layer sheet.

b) Multi-layer sheet

c) Sheet with internal fabric

Figure 1 - Structure of the sheet



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 0,01 mm. The measuring surfaces shall be planar and have a diameter of 10 mm exerting a pressure of 20 kPa on the sheet surface.

5.2.2 Optical device (for sheets with a surface profile and/or backing) capable of indicating the thickness to 0,01 mm.

5.3 Test specimens

The test specimens shall be square or circular in form, and have an area of (10000 ± 100) mm^2. Cut from the sheet *x* test specimens evenly divided over the width of the sheet, the outer specimen (100 ± 10) mm from the edges; (*x* equals the width of the sheet in millimetres divided by 500, rounded upwards, with a minimum of three)(see Figure 3).

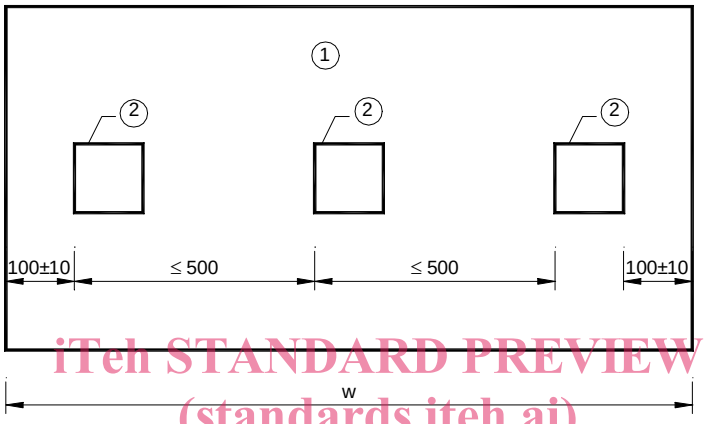
5.4 Procedure

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

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

Record all relevant thicknesses of the sheet once per test specimen to 0,01 mm. Calculation of the mean value and standard deviation is based on the readings of all test specimens.

Dimensions in millimetres



Key

1 Test piece
2 Test specimen
w Width of the sheet

Figure 3 - Cutting plan for test specimens

5.4.1 Mechanical measurement

Check the zero point of the measuring device before starting the measurements and recheck after each series of measurements.

When determining the thickness, lower the foot gently to avoid deforming the material.

5.4.2 Optical measurement

Measure optically the thickness of a sheet with any surface profile and/or backing.

5.5 Expression of results

The sheet overall thickness (e) shall be stated as the mean thickness of all test specimens.

The sheet effective thickness (e_{eff}) shall be stated as the mean thickness of all test specimens without taking into account any surface profile and/or backing.

State all the results of sheet thickness and standard deviation to the nearest 0,01mm.