

Flexibla tätskikt – Bestämning av tjocklek och vikt per ytenhet –

Del 1: Bitumenbaserade tätskikt för tak

Flexible sheets for waterproofing – Determination of thickness and mass per unit area –

Part 1: Bitumen sheets for roof waterproofing

Europastandarden EN 1849-1:1999 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 1849-1:1999.

The European Standard EN 1849-1:1999 has the status of a Swedish Standard. This document contains the official English version of EN 1849-1:1999.

Dokumentet består av 8 sidor.

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 1849-1

November 1999

ICS 91.100.50

English version

**Flexible sheets for waterproofing - Determination of thickness
and mass per unit area - Part 1: Bitumen sheets for roof
waterproofing**

Feuilles souples d'étanchéité - Détermination de l'épaisseur
et de la masse surfacique - Partie 1: Feuilles d'étanchéité
de toiture bitumineuses

Abdichtungsbahnen - Bestimmung der Dicke und der
flächenbezogenen Masse - Teil 1: Bitumenbahnen für
Dachabdichtungen

This European Standard was approved by CEN on 30 September 1999.

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

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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of an identical text or by endorsement, at the latest by May 2000, and conflicting national standards shall be withdrawn at the latest by September 2001.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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies a method for the determination of thickness and mass per unit area of bitumen sheets for roof waterproofing. The measurement of thickness is appropriate for most bitumen sheets including sheets with a factory applied mineral finish

The determination of thickness is not applicable to sheets with pronounced surface texture or to sheets with a substantial fibrous backing. Where it is required to characterize these products, mass per unit area should be used instead.

The determination of mass per unit area serves to verify the value stated by the manufacturer for information and is not applicable to perforated materials.

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 these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

prEN 13416:¹⁾

Flexible sheets for waterproofing - Bitumen, plastic and rubber sheets for roof waterproofing - Rules for sampling

3 Definitions

For the purpose of this standard, the definitions indicated in 3.1 to 3.5 apply.

3.1 thickness: The dimension normal to the surface of the sheet.

3.2 pronounced surface texture: A textured pattern or emboss on one or both surfaces influencing the thickness by more than 10 %.

3.3 substantial fibrous backing: A layer of woven or non-woven fabric of synthetic fibres, weighing more than 80 g/m², fixed to the bottom of the sheet.

3.4 emboss: A textured pattern intentionally impressed into one or both surfaces of the sheet during the manufacturing process.

3.5 selvedge: An area of waterproofing sheet left free of granules or similar surface protection to aid the jointing of laps.

¹⁾ standard in preparation

4 Determination of thickness

4.1 Principle

The thickness of the sheet under test is measured by direct means in 10 places across the width of the sheet and the mean of these values recorded as the overall thickness in mm.

4.2 Apparatus

Measuring device, capable of measuring the thickness to the nearest 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.

4.3 Sampling and preparation of test specimens

4.3.1 Sampling

A complete undamaged roll of the bitumen sheet to be tested shall be selected in accordance with prEN 13416.

4.3.2 Preparation of test specimens

A test specimen at least 100 mm long and to the full width of the sheet shall be taken from the sample.

4.3.3 Conditioning of test specimens

Generally no ageing or conditioning shall be carried out and measurements shall be made under ambient conditions.

In case of dispute, the tests should be carried out at (23 ± 2) °C after conditioning for at least 20 h at (23 ± 2) °C.

4.4 Procedure

Ensure that the sheet and the faces of the measuring device are free from contamination. 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 test specimen. Measure and record the thickness in 10 places evenly distributed across the width of the sheet. The outer measurements being made 100 mm in from each edge of the sheet.

4.5 Expression of results

4.5.1 Calculation

The thickness is calculated as the mean of the 10 individual recorded measurements carried out in accordance with 4.4, rounded and expressed to the nearest 0,1 mm.

4.5.2 Precision

The precision is not specified by this standard.

It is assumed that the measured thickness cannot be carried out to a precision greater than 0,1 mm.