

# SVENSK STANDARD

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### **Flexibla tätskikt – Plast- och gummibaserade tätskikt för tak – Metod för exponering till bitumen**

### **Flexible sheets for waterproofing – Plastic and rubber sheets for roof waterproofing – Method for exposure to bitumen**

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EUROPEAN STANDARD

**EN 1548**

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2007

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ICS 91.100.50

English Version

## Flexible sheets for waterproofing - Plastic and rubber sheets for roof waterproofing - Method for exposure to bitumen

Feuilles souples d'étanchéité - Feuilles d'étanchéité de toiture plastiques et élastomères - Méthode d'exposition au bitume

Abdichtungsbahnen - Kunststoff- und Elastomerbahnen für Dachabdichtungen - Verhalten nach Lagerung auf Bitumen

This European Standard was approved by CEN on 27 July 2007.

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## EN 1548:2007 (E)

### Foreword

This document (EN 1548:2007) 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of an identical text or by endorsement, at the latest by March 2008, and conflicting national standards shall be withdrawn at the latest by March 2008.

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 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.

## EN 1548:2007 (E)

### 1 Scope

This European Standard specifies a method of exposing test specimens of plastic and rubber sheets for roofing free from all external restraint, to contact with bitumen at an elevated temperature and methods for determining the changes in properties resulting from such exposure.

The methods for determination of changes in properties are specified as follows:

- a) changes in mass directly after contact with bitumen;
- b) changes in physical properties after contact with bitumen.

### 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 1849-2, *Flexible sheets for waterproofing – Determination of thickness and mass per unit area – Part 2: Plastic and rubber sheets for roof waterproofing*

EN 12311-2, *Flexible sheets for waterproofing – Determination of tensile properties – Part 2: Plastic and rubber sheets for roof waterproofing*

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

EN 13956:2005, *Flexible sheets for waterproofing – Plastic and rubber sheets for roof waterproofing – Definitions and characteristics*

### 3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 13956:2005 apply.

### 4 General

The bitumen compatibility of sheets with an inner layer and EPDM sheets may be determined by a change in mass.

The bitumen compatibility of sheets without an inner layer may be determined by the change in Young's Modulus. Results obtained by this test method from homogeneous sheets can be applied to sheets manufactured with same chemical formulation, but having inner reinforcement layers (e.g. fabric or non-wovens of polyester or mineral fibres).

NOTE See also Annex A

Sheets with a non-woven backing of at least 150 g/m<sup>2</sup> or equivalent, which prevents any contact of the waterproofing membrane with bitumen when installed in accordance with the manufacturer's instructions are considered to be bitumen compatible and may be declared as such by the manufacturer. The compatibility with bitumen is determined for the underside of the sheet as installed in accordance with the manufacturer's

instructions. This European standard does not necessarily assess compatibility with bitumen on the upper face.

## 5 Principle

A test specimen is exposed, on one face only, to contact with bitumen at 50°C for 28 days. Determination of properties is made before and after contact with bitumen.

## 6 Apparatus

### 6.1 Metal plate

A rectangular metal plate measuring 400 mm x 350 mm x 2 mm.

### 6.2 Metal mask

A rectangular metal mask 3 mm thick with outside dimensions of 280 mm x 220 mm and three inside windows of 200 mm x 80 mm each (see Figure 1). The beam width of the frame shall be 10 mm.

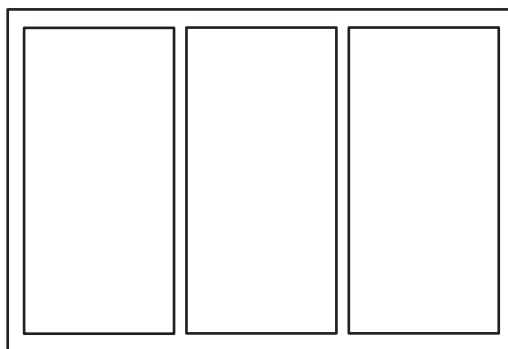


Figure 1 — Metal mask

### 6.3 Glass plate

A rectangular glass plate 3 mm to 8 mm thick measuring 400 mm x 350 mm.

### 6.4 Separation means

A means of separating sheets e.g. silicon paper, talc, aluminium foil, Teflon coated fabric.

### 6.5 Thermometer

A thermometer of suitable range and accuracy.

### 6.6 Balance

Balance capable of reading to 0,001 g.

### 6.7 Dial micrometer

Dial micrometer with flat anvils, accurate to 0,01 mm.