



SWEDISH  
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## SVENSK STANDARD SS-EN 12730

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### **Flexible sheets for waterproofing – Bitumen, plastics and rubber sheets for roof waterproofing – Determination of resistance to static loading**

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Swedish Standards corresponding to documents referred to in this Standard are listed in "Catalogue of Swedish Standards", issued by SIS. The Catalogue lists, with reference number and year of Swedish approval, International and European Standards approved as Swedish Standards as well as other Swedish Standards.

### **Flexibla tätskikt – Bitumen-, plast- och gummibaserade tätskikt för tak – Bestämning av motstånd mot statisk belastning**

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EUROPEAN STANDARD  
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EUROPÄISCHE NORM

**EN 12730**

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English version

**Flexible sheets for waterproofing - Bitumen, plastic and rubber sheets for roof waterproofing - Determination of resistance to static loading**

Feuilles souples d'étanchéité - Feuilles d'étanchéité de toitures bitumineuses, plastiques et élastomères - Détermination de la résistance au poinçonnement statique

Abdichtungsbahnen - Bitumen-, Kunststoff- und Elastomerbahnen für Dachabdichtungen - Bestimmung des Widerstandes gegen statische Belastung

This European Standard was approved by CEN on 10 June 2000.

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 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 Management Centre has the same status as the official versions.

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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 July 2001, and conflicting national standards shall be withdrawn at the latest by 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 and classification of bitumen, 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 product standards for bitumen, plastic and rubber sheets for roof waterproofing.

## 1 Scope

This European Standard specifies a test for puncture by static loading for roofing membranes. Mechanical stress on membranes varies from static long-term loads to dynamic short-term loads. This method represents the static category of load where the stress is applied over a period of time.

This European Standard may also be applied for waterproofing.

## 2 Normative references

This European Standard incorporates by dated or undated references 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 applies.

prEN 13416:1998  
Flexible sheets for waterproofing - Bitumen, plastic and rubber sheets for roof waterproofing - Rules for sampling

## 3 Definitions

For the purpose of this standard, the following definition applies.

**3.1 surface:** The upper side of the sheet, as used in situ. It is usually the inside of the roll.

## 4 Principle

The principle of the test is to apply a concentrated load over a period of time, through a puncturing tool onto the surface of the membrane, when lying on a specified soft support (method A) or hard support (method B).

## 5 Apparatus

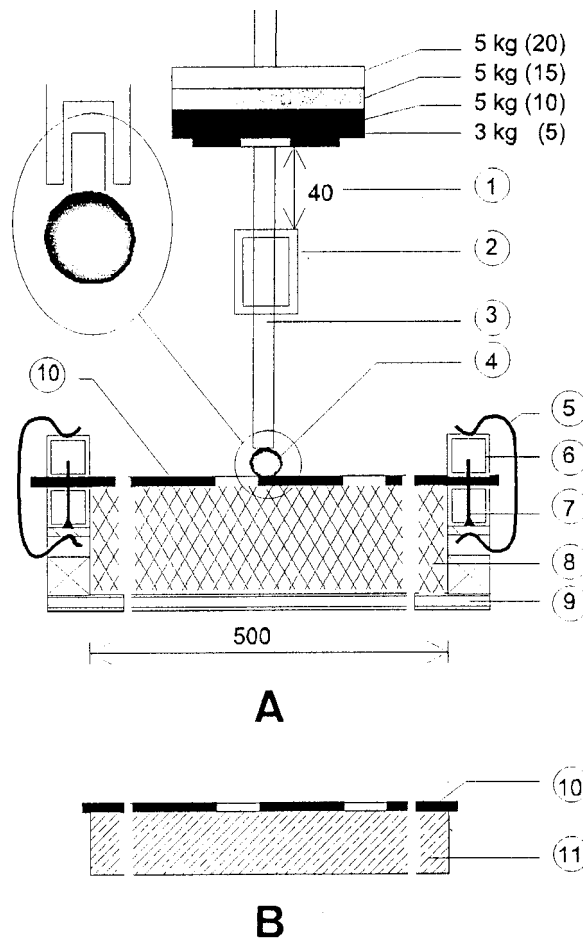
### 5.1 General

The testing apparatus consists of parts indicated in 5.2 to 5.6 (Figure 1)

### 5.2 Guide rail

The guide rail holds the loading rod in a vertical position. The vertical movement of the puncturing tool from the surface of the test specimen can be limited to  $(40 \pm 2)$  mm by the guide rail.

Dimensions in millimetres



#### Key

1	Maximum downward movement	8	EPS (500 x 500 x 50)
2	Guide rail	9	Rigid support
3	Loading rod	10	Test specimen
4	Ball puncturing tool, diameter 10	11	Concrete (300 x 300 x 40)
5	Clamp	A	Soft support
6	Frame profile (20 x 20)	B	Hard support
7	Nail (2.8) c/c 50		

Figure 1 - Static test arrangements (example)