

**Flexible sheets for waterproofing - Part  
1: Bitumen sheets for roof  
waterproofing - Determination of  
resistance to tearing (nail shank)**

Flexible sheets for waterproofing - Part 1: Bitumen  
sheets for roof waterproofing - Determination of  
resistance to tearing (nail shank)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12310-1:2000 sisaldab Euroopa standardi EN 12310-1:1999 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.02.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12310-1:2000 consists of the English text of the European standard EN 12310-1:1999.</p> <p>This document is endorsed on 18.02.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b></p> <p>This standard specifies a method for the determination of the nail shank tear resistance of bitumen sheets for roofing. The method is for initial type testing and/or quality control purposes.</p>	<p><b>Scope:</b></p> <p>This standard specifies a method for the determination of the nail shank tear resistance of bitumen sheets for roofing. The method is for initial type testing and/or quality control purposes.</p>
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**ICS** 91.100.50

**Võtmesõnad:**

**English version**

**Flexible sheets for waterproofing**

**Part 1: Bitumen sheets for roof waterproofing – Determination of resistance to tearing (nail shank)**

Feuilles souples d'étanchéité –  
Partie 1: Feuilles d'étanchéité de  
toiture bitumineuses – Détermination  
de la résistance à la déchirure (au  
clou)

Abdichtungsbahnen – Teil 1:  
Bitumenbahnen für Dachabdich-  
tungen – Bestimmung des Weiterreiß-  
widerstandes (Nagelschaft)

This European Standard was approved by CEN on 1999-08-21.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

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**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

**Central Secretariat: rue de Stassart 36, B-1050 Brussels**

## Contents

	Page
Foreword	3
Introduction	3
1 Scope	3
2 Normative references	3
3 Definitions	3
4 Principle	3
5 Apparatus	3
6 Sampling	5
7 Preparation of test specimens	5
8 Procedure	5
9 Expression of results, evaluation and precision of test method	5
10 Test report	6

## 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 March 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.

## Introduction

This European Standard is intended for the characterisation of bitumen sheets as manufactured or supplied before use. The 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 Standards on product characteristics on reinforced and unreinforced bitumen sheets for roof waterproofing.

## 1 Scope

This European Standard specifies a method for the determination of the resistance tearing (nail shank) of bitumen sheets for roofing.

## 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 edition of the publication referred to applies.

EN 10002-2, Metallic materials - Tensile testing - Part 2 : Verification of the force measuring system of the tensile testing machines.

## 3 Definitions

For the purposes of this standard the definitions indicated in 3.1 and in the corresponding European Standard on product characteristics apply:

**3.1 resistance to tearing (nail shank):** The tensile force required to tear a test specimen held by a nail shank.

## 4 Principle

The test measures the force required to tear a test specimen pierced by a nail shank by a force applied to the product at right angles to the shank axis.

## 5 Apparatus

### 5.1 Tensile testing machine

Tensile testing machine equipped with a continuous recording of force and corresponding distance, capable of maintaining a uniform rate of grip separation as specified below. The tensile testing machine shall have a sufficient loading capacity (at least 2000 N) and a sufficient distance of grip separation, with a grip separation speed of  $(100 \pm 10)$  mm per minute. The width of grip shall not be less than 100 mm.