Flexible sheets for waterproofing - Bitumen, plastic and rubber sheets for roof waterproofing - Determination of resistance to impact

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EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 12691:2006 sisaldab Euroopa standardi EN 12691:2006 ingliskeelset teksti. Käesolev dokument on jõustatud 28.04.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 12691:2006 consists of the English text of the European standard EN 12691:2006. This document is endorsed on 28.04.2006 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This European Standard specifies a test for puncture by impact on sheets for roof waterproofing. Mechanical stress on waterproofing sheets ranges from static long-term loads to dynamic short-term loads. This method represents the dynamic category of load where puncture may be caused by impact.	**Scope:** This European Standard specifies a test for puncture by impact on sheets for roof waterproofing. Mechanical stress on waterproofing sheets ranges from static long-term loads to dynamic short-term loads. This method represents the dynamic category of load where puncture may be caused by impact.

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Võtmesõnad: climatic protect, consistency, detection, holes, roofing, sampling, sealing, sealing means, sheets, sheets of elastomer, shock resistance, shortage, sprocket feed holes, surface defects, test equipment, testing, water proof sheetings, water-proof sheeting for roofs

EUROPEAN STANDARD

NORME EUROPÉENNE

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English Version

Flexible sheets for waterproofing - Bitumen, plastic and rubber sheets for roof waterproofing - Determination of resistance to impact

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

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

This European Standard was approved by CEN on 12 January 2006.

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.

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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, 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.

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Foreword

This European Standard (EN 12691:2006) 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 September 2006, and conflicting national standards shall be withdrawn at the latest by September 2006.

This European Standard supersedes EN 12691:2001.

In order to receive more precise test results a revision of the test procedure was necessary.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, 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 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 European Standards “Definitions and characteristics” for bitumen sheets and for plastic and rubber sheets for roof waterproofing.

1 Scope

This European Standard specifies a test for puncture by impact on sheets for roof waterproofing. Mechanical stress on waterproofing sheets ranges from static long-term loads to dynamic short-term loads. This method represents the dynamic category of load where puncture may be caused by impact.

This European Standard may also be applied for other purposes of waterproofing.

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 13163:2001, *Thermal insulation products for buildings — Factory made products of expanded polystyrene (EPS) — Specification*

EN 13416:2001, *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
top surface
upper side of the sheet as used in-situ. It is usually the inside of the roll.

4 Principle

The test specimen is struck on the top surface of the sheet by a free falling drop mass with a puncturing tool.

The test specimen is lying on a hard support (method A) and if required additionally on a soft support (method B). After the impact the test specimen is tested for leakage.

5 Apparatus

The testing is performed using a test apparatus, which enables vertically falling of the drop mass and consists of the parts indicated in 5.1 to 5.7 and can be used with a hard support (method A) or a soft support (method B).

5.1 Stand

The stand can be constructed for free falling of the drop mass or optionally for rail guided falling and should be at least as long (high) as the maximum drop height to be tested (for most practical purposes 2 m will be sufficient).

An example for a guide rail for the falling drop mass is given in Figure 1.