

**Flexible sheets for waterproofing - Determination of peel resistance of joints - Part 2: Plastic and rubber sheets for roof waterproofing**

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## EESTI STANDARDI EESSÕNA

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Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 05.06.2013.	Date of Availability of the European standard is 05.06.2013.
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English Version

## Flexible sheets for waterproofing - Determination of peel resistance of joints - Part 2: Plastic and rubber sheets for roof waterproofing

Feuilles souples d'étanchéité - Détermination de la résistance au pelage des joints - Partie 2 : Feuilles d'étanchéité de toiture plastiques et élastomères

Abdichtungsbahnen - Bestimmung des Schälwiderstandes der Fügenähte - Teil 2: Kunststoff- und Elastomerbahnen für Dachabdichtungen

This European Standard was approved by CEN on 28 March 2013.

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## Foreword

This document (EN 12316-2:2013) has been prepared by Technical Committee CEN/TC 254 "Flexible sheets for waterproofing", the secretariat of which is held by NEN.

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of an identical text or by endorsement, at the latest by December 2013, and conflicting national standards shall be withdrawn at the latest by December 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This document supersedes EN 12316-2:2000.

This document has been technically and editorially revised to include the following:

- introduction of failure modes and how to handle results with different modes;
- estimation of precision.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the 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 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 for plastic and rubber sheets for waterproofing.

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## 1 Scope

This European Standard specifies a method for determining the resistance to peeling of joints between two adjacent sheets of the same plastic or rubber sheets for waterproofing.

This test method will be used mainly for testing the joints in mechanically fastened plastic or rubber sheets for waterproofing.

The peel strength characterises the optimum joint strength which can be reached for a membrane and a joint technique under laboratory conditions. On roofs the joint strength could be clearly reduced due to the non-optimal conditions (e.g. pressure, temperature, humidity, pollution, workmanship). The requirement for the joint technique at the site is to ensure a permanently tight joint.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 7500-1, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system (ISO 7500-1)*

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

## 3 Terms and definitions

For the purpose of this document, the following terms and definitions apply.

### 3.1

#### **peel resistance**

tensile force required to completely separate a prepared joint test specimen by peeling

## 4 Principle

The principle of the test is to pull a test specimen to peel a joint at a constant speed until it breaks. The tensile force is continuously recorded throughout the test.

## 5 Apparatus

Tensile testing machine equipped with a continuous recording of force and corresponding extension and capable of maintaining uniform speed of grip separation as specified below.

Tensile testing machine shall have a sufficient loading capacity and a grip separation speed of  $(100 \pm 10)$  mm/min. The width of grips shall not be less than 50 mm.

The tensile testing machine shall be equipped with grips of a type which maintain or increase the clamping pressure as a function of the increase of the force applied to the test specimen. The test specimen shall be held so that it does not slip in the grips more than 2 mm.