



**SLOVENSKI STANDARD**  
**kSIST FprEN 12316-2:2012**

**01-december-2012**

---

**Hidroizolacijski trakovi - Ugotavljanje odpornosti proti razslojevanju spojev - 2.  
del: Polimerni in elastomerni trakovi za tesnjenje streh**

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

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

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

**Ta slovenski standard je istoveten z: FprEN 12316-2**

---

**ICS:**

|           |                            |                            |
|-----------|----------------------------|----------------------------|
| 91.060.20 | Strehe                     | Roofs                      |
| 91.100.50 | Veziva. Tesnilni materiali | Binders. Sealing materials |

**kSIST FprEN 12316-2:2012**                      **en,fr,de**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**FINAL DRAFT**  
**FprEN 12316-2**

September 2012

ICS 91.100.50

Will supersede EN 12316-2:2000

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 draft European Standard is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 254.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

**Warning** : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**Management Centre: Avenue Marnix 17, B-1000 Brussels**

| <b>Contents</b> |  | Page     |
|-----------------|--|----------|
|                 | <b>Foreword</b> .....                                      | <b>3</b> |
| <b>1</b>        | <b>Scope</b> .....   | <b>4</b> |
| <b>2</b>        | <b>Normative references</b> .....                          | <b>4</b> |
| <b>3</b>        | <b>Terms and definitions</b> .....                         | <b>4</b> |
| <b>4</b>        | <b>Principle</b> .....                                     | <b>4</b> |
| <b>5</b>        | <b>Apparatus</b> .....                                     | <b>5</b> |
| <b>6</b>        | <b>Sampling</b> .....                                      | <b>5</b> |
| <b>7</b>        | <b>Preparation of test pieces and test specimens</b> ..... | <b>7</b> |
| <b>8</b>        | <b>Procedure</b> .....                                     | <b>7</b> |
| <b>9</b>        | <b>Expression of results</b> .....                         | <b>8</b> |
| <b>10</b>       | <b>Test report</b> .....                                   | <b>9</b> |

## Foreword

This document (FprEN 12316-2:2012) has been prepared by Technical Committee CEN/TC 254 “Flexible sheets for waterproofing”, the secretariat of which is held by NEN.

This document is currently submitted to the Unique Acceptance Procedure.

This document will supersede EN 12316-2:2000, which has been technically and editorially revised in order to:

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

## 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.

## 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 etc.). 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 (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 standard, the following term and definition applies:

### 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.

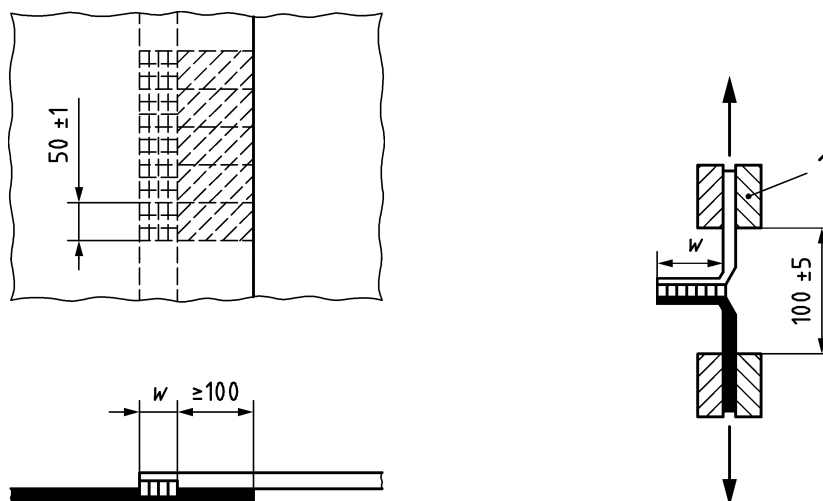
The method of gripping shall not induce premature rupture close to the grips.

The force measuring system shall meet at least Class 2 of EN ISO 7500-1 (i.e.  $\pm 2\%$ ).

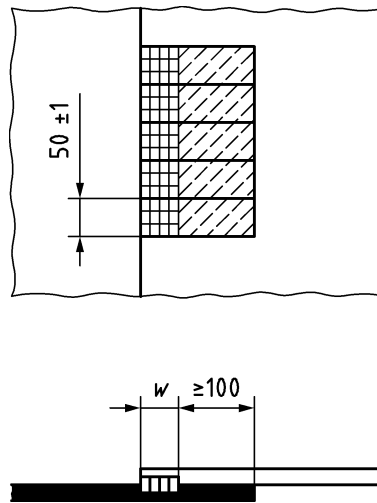
## 6 Sampling

Samples shall be taken in accordance with EN 13416.

Dimensions in millimetres



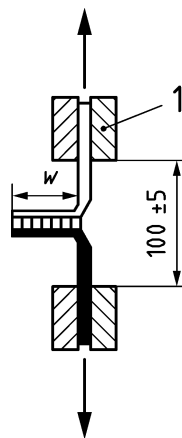
Dimensions in millimetres



**Key**  
 w Width of joint

**Figure 1 - Preparation of specimen from specially made side and end laps**

Dimensions in millimetres



**Key**  
 1 Grip  
 w Width of joint

**Figure 2 - Peel strength testing of side and end laps**