

Flexible sheets for waterproofing - Waterproofing of concrete bridge decks and other concrete surfaces trafficable by vehicles - Determination of water absorption

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 14223:2017 sisaldab Euroopa standardi EN 14223:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 14223:2017 consists of the English text of the European standard EN 14223:2017.
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.
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English Version

**Flexible sheets for waterproofing - Waterproofing of  
concrete bridge decks and other concrete surfaces  
trafficable by vehicles - Determination of water absorption**

Feuilles souples d'étanchéité - Étanchéité des tabliers  
de ponts en béton et autres surfaces en béton  
circulables par les véhicules - Détermination de  
l'absorption d'eau

Abdichtungsbahnen - Abdichtung von Betonbrücken  
und anderen Verkehrsflächen aus Beton - Bestimmung  
der Wasserabsorption

This European Standard was approved by CEN on 6 February 2017.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
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## Contents

Page

European foreword.....	3
1 Scope.....	4
2 Normative references.....	4
3 Terms and definitions .....	4
4 Test method .....	4
4.1 Principle .....	4
4.2 Apparatus and materials.....	4
4.3 Preparation of test specimens.....	5
4.4 Drying and conditioning of the test specimens.....	5
4.5 Procedure.....	5
4.6 Expression of results.....	5
4.6.1 Calculation .....	5
4.6.2 Precision.....	6
4.7 Test report.....	6

## European foreword

This document (EN 14223:2017) 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 September 2017, and conflicting national standards shall be withdrawn at the latest by September 2017.

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

This document supersedes EN 14223:2005.

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

The significant technical changes are the new reference to prEN 17048:2016 at Clause 2, Normative references, and substitution of the terms “bitumen sheet” with the generic wording “waterproofing sheet” at every clause where needed.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## 1 Scope

This European Standard specifies a test method for the determination of water absorption in waterproofing sheets which could influence the functional behaviour of these sheets.

NOTE It is primarily the reinforcement's ability to absorb water which is examined by this test.

## 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 1109, *Flexible sheets for waterproofing - Bitumen sheets for roof waterproofing - Determination of flexibility at low temperature*

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

EN 14695, *Flexible sheets for waterproofing - Reinforced bitumen sheets for waterproofing of concrete bridge decks and other trafficked areas of concrete - Definitions and characteristics*

prEN 17048, *Flexible sheets for waterproofing - Plastic and rubber sheets for waterproofing of concrete bridge decks and other trafficked areas of concrete - Definitions and characteristics*

ISO 5725-2, *Accuracy (trueness and precision) of measurement methods and results — Part 2: Basic method for the determination of repeatability and reproducibility of a standard measurement method*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13416, EN 14695, prEN 17048 and the following apply.

### 3.1 water absorption

increase in mass of test specimen after immersion in water expressed as a percentage

## 4 Test method

### 4.1 Principle

The water absorption of the waterproofing sheet is measured after the test specimen has been immersed in water for a defined period and determined as the increase in mass of the test specimen.

### 4.2 Apparatus and materials

**4.2.1 Balance**, capable of measurements to the nearest 0,1 g.

**4.2.2 Water bath**, capable of maintaining a temperature of  $(23 \pm 3) ^\circ\text{C}$ .

**4.2.3 Chamber (or laboratory)**, capable of maintaining a temperature of  $(23 \pm 3) ^\circ\text{C}$  and  $(50 \pm 5) \% \text{ RH}$ .

**4.2.4 Distilled water**, or de-ionized water.

**4.2.5 Equipment for hanging test specimens**, without damaging the specimens.