Polymer modified bituminous thick coatings for waterproofing - Determination of crack bridging ability



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Käesolev Eesti standard EVS-EN 15812:2011 sisaldab Euroopa standardi EN 15812:2011 ingliskeelset teksti.

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# **EUROPEAN STANDARD**

## EN 15812

# NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

March 2011

ICS 91.100.50

#### **English Version**

# Polymer modified bituminous thick coatings for waterproofing -Determination of crack bridging ability

Revêtements bitumineux épais modifiés aux polymères pour imperméabilisation - Détermination de l'aptitude à ponter les fissures

Kunststoffmodifizierte Bitumendickbeschichtungen zur Bauwerksabdichtung - Bestimmung des Rissüberbrückungsvermögens

This European Standard was approved by CEN on 13 February 2011.

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

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#### **Foreword**

This document (EN 15812:2011) has been prepared by Technical Committee CEN/TC 361 "Project Committee — Polymer modified bituminous thick coatings for waterproofing — Definitions/requirements and test methods", the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by September 2011, and conflicting national standards shall be withdrawn at the latest by September 2011.

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### 1 Scope

This European Standard specifies two methods (method A and method B) for determining the crack bridge properties of polymer modified bituminous thick coatings for waterproofing. The two test methods may be applied equally.

#### 2 Normative references

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

EN 1062-7:2004, Paints and varnishes — Coating materials and coating systems for exterior masonry and concrete — Part 7: Determination of crack bridging properties

EN 1766:2000, Products and systems for the protection and repair of concrete structures — Test methods — Reference concretes for testing

FprEN 15814:2011, Polymer modified bituminous thick coatings for waterproofing — Definitions and requirements

ISO 554, Standard atmospheres for conditioning and/or testing — Specifications

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in FprEN 15814:2011 and the following apply.

#### 3.1

#### crack bridge ability

ability of a product to bridge a crack under specified conditions and without damage

#### 4 Principle

After coating the substrate, a defined crack is made in the substrate at a nominal crack point. The applied bitumen coating is stretched over this crack. The mechanical stress is applied to the bitumen coating. The crack width is continuously enlarged with defined speed.

The measurement is finished, when a failure in the bitumen coating occurs or when the required crack width is reached. The required crack width is kept constant for a period of 24 h. After that period a visual judgement is made. The crack-bridging properties are determined at a specified temperature.

Two different test methods can be applied: The bending test (method A) or the tensile test (method B).

#### 5 Apparatus

The test apparatus shall ensure that the movement of the cracks lies between given limits, and that shearing (horizontal and vertical movement) of the crack is avoided during the measurement.

It shall be provided with a device for maintaining the temperature at which the determination of the crack-bridging properties is to be carried out (normally 4  $^{\circ}$ C). The tolerance of the test temperature shall be  $\pm$  1  $^{\circ}$ C.