SLOVENSKI STANDARD
SIST EN 15816:2011

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Bitumenske debeloslojne prevleke za tesnjenje, modificirane s polimeri - Odpornost proti dežju

Polymer-modified bituminous thick coatings - Resistance to rain

Kunststoffmodifizierte Bitumendickbeschichtungen - Beständigkeit gegen Regen

Ta slovenski standard je istoveten z: EN 15816:2011

ICS:

91.100.50 Veziva. Tesnilni materiali Binders. Sealing materials

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EUROPEAN STANDARD

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English Version

Polymer-modified bituminous thick coatings for waterproofing - Resistance to rain

Revêtements bitumineux épais modifiés aux polymères pour imperméabilisation - Résistance à la pluie

Kunststoffmodifizierte Bitumendickbeschichtungen zur Bauwerksabdichtung - Widerstand gegen Regen

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN 15816:2011) 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of an identical text or by endorsement, at the latest by September 2011, and conflicting national standards shall be withdrawn at the latest by September 2011.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 a procedure for determining the resistance to rain of polymer modified bituminous thick coatings for waterproofing.

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 206-1, *Concrete — Part 1: Specification, performance, production and conformity*

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

ISO 228-1, *Pipe threads where pressure-tight joints are not made on the threads — Part 1: Dimensions, tolerances and designation*

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
resistance to rain
resistance of the polymer modified bituminous thick coatings to the damaging effects of exposure to rain

4 Principle

The test provides an indication of the resistance of a freshly applied polymer modified bituminous thick coating to rain. The time after which a coating layer can be said to be resistant to rain under the conditions prevailing on the building site can vary quite considerably from the time determined in the laboratory. The measured values are therefore primarily suitable for use to compare the resistance of different products to rain.

5 Apparatus

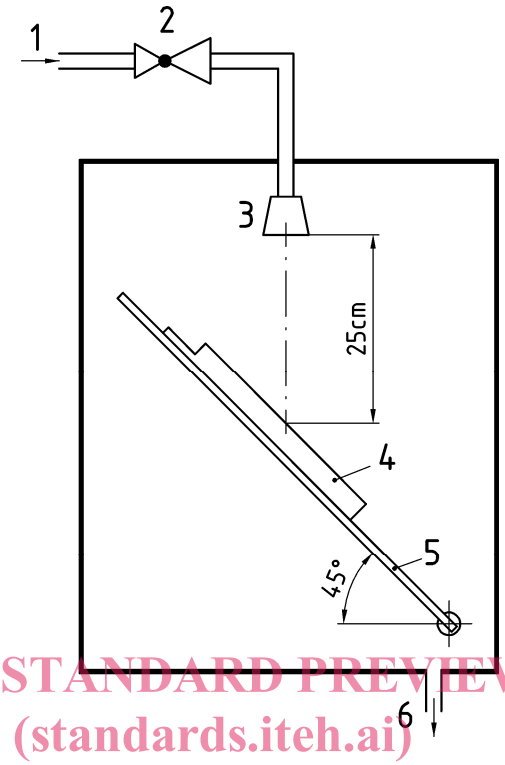
5.1 Sprinkler (see Figure 1) Standard conical nozzle made of copper-zinc alloy, pipe thread to ISO 228-1 – G1/4B, sprinkler cone 85°, flow rate 9l/min at 3 bar operating pressure; commercial pressure regulator with pressure gauge to indicate test pressure of (2 ± 0,1) bar; specimen holder to position the specimen at an angle of 45° to the sprinkling plane.

5.2 **Nozzle holder** to position the nozzle; the nozzle shall be placed such that the vertical distance between the nozzle and the centre of the surface of the specimen is 25 cm.

5.3 **Connection** to water mains, hoses, connectors.

5.4 **Stop watch**

5.5 Specimens: Base of concrete with a smooth or ground surface, of a compressive strength class not less than C20/25 in accordance with EN 206-1, to which a coating with an area of around 150 mm × 150 mm can be applied.



Key

1 connection to water mains gauge
2 pressure regulator with pressure
3 standard nozzle
4 specimen
5 specimen holder (at 45° angle)
6 outlet

Figure 1 — Sprinkler

6 Test specimens

6.1 General

At least two specimens are required for the test.

6.2 Preparation

The base shall be prepared and coated with a polymer modified bituminous thick coating as specified in the manufacturer's instructions for application. A wet layer with an average thickness of (3 ± 0,3) mm shall be applied. The edges shall be trimmed.

6.3 Dimensions of the test specimens

Test specimen with a size of approximately 150 mm × 150 mm.

6.4 Conditioning of test specimens

After coating, the specimens shall be left to stand for a period of time specified by the manufacturer, but not longer than 8 h in a normal climate of (23 ± 2) °C and a relative humidity of (50 ± 5) % in accordance with ISO 554.

7 Procedure

7.1 Test conditions

The test shall be carried out at (25 ± 5) °C.

7.2 Procedure

The specimens shall be tested after conditioning. Prior to the test the water pressure shall be set at (2 ± 0,1) bar when the water is running. Measure the temperature of the water.

Two specimens shall be tested either simultaneously in two test rigs or one immediately after the other in the same test rig. Place the specimen(s) in the holder under running water and start the stop watch. The test shall last 15 min. During the test, the water running off the test specimens shall be assessed for discolouration.

If necessary, repeat the test using different specimens.

8 Expression of results and precision

8.1 Expression of results

The water running off the test specimens shall not be discoloured during the test and the coating shall not deteriorate (e.g. surface erosion, water trapped in the material). In the event of such deterioration the test shall be repeated with a longer conditioning period on other specimens until at least two samples pass the test.

The test result shall be the shortest conditioning period in which two samples produce no discolouration, stated to 0,5 h. This is the time in which a layer of freshly applied polymer modified bituminous thick coating can be described as resistant to rain as defined in this test specification. The period shall not exceed 8 h.

8.2 Precision

Precision data are currently not available.

9 Test report

The test report shall include at least the following information:

a) a reference to this European Standard (i.e. EN 15816);

b) all details necessary to identify the product tested;

c) test procedure including any deviations from the test conditions;