



**SLOVENSKI STANDARD**  
**SIST EN 15814:2011/kFprA1:2012**  
**01-junij-2012**

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**Bitumenske debeloslojne prevleke, modificirane s polimeri - Definicije in zahteve**

Polymer modified bituminous thick coatings for waterproofing - Definitions and requirements

Kunststoffmodifizierte Bitumendickbeschichtungen zur Bauwerksabdichtung - Begriffe und Anforderungen

Revêtements bitumineux épais modifiés aux polymères pour imperméabilisation - Définitions et exigences

**Ta slovenski standard je istoveten z: EN 15814:2011/FprA1**

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**ICS:**

91.100.50      Veziva. Tesnilni materiali      Binders. Sealing materials

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NORME EUROPÉENNE  
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**FINAL DRAFT**  
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## Polymer modified bituminous thick coatings for waterproofing - Definitions and requirements

Revêtements bitumineux épais modifiés aux polymères  
pour imperméabilisation - Définitions et exigences

Kunststoffmodifizierte Bitumendickbeschichtungen zur  
Bauwerksabdichtung - Begriffe und Anforderungen

This draft amendment is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 361.

This draft amendment A1, if approved, will modify the European Standard EN 15814:2011. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

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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.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

This document (EN 15814:2011/FprA1:2012) has been prepared by Technical Committee CEN/TC 361 "Project Committee - Thick synthetic modified bitumous coating masses - Definitions and requirements/Test methods", the secretariat of which is held by DIN.

This document is currently submitted to the Unique Acceptance Procedure.

**EN 15814:2011/FprA1:2012 (E)****1 Modification to 3.4**

*Change the text as follows:*

**"3.4****PMBC**

**P**olymer **M**odified **B**ituminous thick **C**oating emulsion based, with or without admixtures, such as additives and mineral aggregates, comprising of one or two components"

**2 Modification to Table 1**

*Delete the footnote <sup>a</sup> in the lines 4 and 5 of Table 1 and change the text as follows:*

<sup>a</sup> The testing procedure of characteristics are also related to durability aspects."

**3 Modification to Clause 5**

*Replace the text as follows:*

**"5 Evaluation of conformity****5.1 General**

The compliance of PMBC with the requirements of this standard and with the declared values (including classes) shall be demonstrated by:

- Initial Type Testing;
- factory production control by the manufacturer, including product assessment.

The manufacturer shall always retain the overall control and shall have the necessary means to take responsibility for the product.

**5.2 Initial Type Testing – Type Testing****5.2.1 General**

Initial Type Testing and Type Testing shall be performed to demonstrate compliance with this European standard.

All essential characteristics for which the manufacturer declares performances, are subject to Initial Type Testing. In addition, the need to perform Type Tests applies to all other characteristics included in a standard when the manufacturer claims compliance, unless the standard gives provisions (e.g. use of previously existing data, CWFT and conventionally accepted performance) for declaring performances without performing tests.

Tests previously performed in accordance with the provisions of this standard, may be taken into account provided that they were made to the same or a more rigorous test method, under the same system of attestation of conformity on the same product or products of similar design, construction and functionality, such that the results are applicable to the product in question.

NOTE 1 Same system of attestation of conformity means testing by an independent third party (only for products covered by attestation of conformity system 1 and 3), under the responsibility of a product certification body (only for products covered by attestation of conformity system 1). See Annex ZA.

- For the purposes of testing, the manufacturer's products may be grouped into families, where it is considered that the results for one or more characteristics from any one product within the family are representative for that same characteristics for all products within that same family (a product may be in different families for different characteristics).

NOTE 2 Products may be in different families for different characteristics.

NOTE 3 Reference to the test method standards should be made to allow the selection of a suitable representative sample.

In addition, Type Tests or Initial Type Testing shall be performed for all characteristics included in the standard for which the manufacturer declares performances:

- at the beginning of the production of a new or modified PMBC (unless a member of the same family), or
- at the beginning of a new or modified method of production (where this may affect the stated properties);  
or

they shall be repeated for the appropriate characteristic(s), whenever a change occurs in the PMBC design, in the raw material or in the supplier of the components, or in the production process (subject to the definition of a family), which would affect significantly one or more of the characteristics.

Where components are used whose characteristics have already been determined, by the component manufacturer, on the basis of compliance with other product standards, these characteristics need not be re-assessed. The specifications of these components shall be documented, as shall be included in the inspection scheme for ensuring their compliance.

Products marked in accordance with appropriate harmonised European specifications may be presumed to have the performances stated with the marking, although this does not replace the responsibility on the PMBC designer to ensure that the PMBC as a whole is correctly designed and its component products have the necessary performance values to meet the design.

## 5.2.2 Test reports

All Type Tests, and/or Initial Type Tests and their results shall be documented in test reports. All test reports shall be retained by the manufacturer for at least 10 years after the last date of production of the PMBC to which they relate.

## 5.3 Factory production control (FPC)

### 5.3.1 General

The manufacturer shall establish, document and maintain an FPC system to ensure that the products placed on the market comply with the declared performance of the characteristics.

The FPC system shall consist of procedures, regular inspections and tests and/or assessments and the use of the results to control raw and other incoming materials or components, equipment, the production process and the product. All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures.

This production control system documentation shall ensure a common understanding of conformity evaluation and enable the achievement of the required product characteristics and the effective operation of the production control system to be checked. Factory production control therefore brings together operational techniques and all measures allowing maintenance and control of the compliance of the product with this European Standard.

**EN 15814:2011/FprA1:2012 (E)****5.3.2 Requirements****5.3.2.1 General**

The manufacturer is responsible for organizing the effective implementation of the FPC system. Tasks and responsibilities in the production control organization shall be documented and this documentation shall be kept up-to-date.

The responsibility, authority and the relationship between personnel that manages, performs or verifies work affecting product conformity, shall be defined. This applies in particular to personnel that needs to initiate actions preventing product non-conformities from occurring, actions in case of non-conformities and to identify and register product conformity problems. Personnel performing work affecting product conformity shall be competent on the basis of appropriate education, training, skills and experience for which records shall be maintained.

In each factory the manufacturer may delegate the action to a person having the necessary authority to:

- identify procedures to demonstrate conformity of the product at appropriate stages;
- identify and record any instance of non-conformity;
- identify procedures to correct instances of non-conformity.

The manufacturer shall draw up and keep up-to-date documents defining the factory production control. The manufacturer's documentation and procedures should be appropriate to the product and manufacturing process. The FPC system should achieve an appropriate level of confidence in the conformity of the product.

This involves:

- a) the preparation of documented procedures and instructions relating to factory production control operations, in accordance with the requirements of the technical specification to which reference is made;
- b) the effective implementation of these procedures and instructions;
- c) the recording of these operations and their results;
- d) the use of these results to correct any deviations, repair the effects of such deviations, treat any resulting instances of non-conformity and, if necessary, revise the FPC to rectify the cause of non-conformity.

Where subcontracting takes place, the manufacturer shall retain the overall control of the product and ensure that he receives all the information that is necessary to fulfill his responsibilities according to this European Standard.

If the manufacturer has part of the product designed, manufactured, assembled, packed, processed and/or labeled by subcontracting, the FPC of the subcontractor may be taken into account, where appropriate for the product in question.

The manufacturer who subcontracts all of his activities may in no circumstances pass these responsibilities on to a subcontractor.

**NOTE** Manufacturers having an FPC system, which complies with EN ISO 9000 series standard and which addresses the requirements of this European Standard are recognized as satisfying the FPC requirements of the Council Directive 89/106/EEC.



### **5.3.2.2 Equipment**

#### **5.3.2.2.1 Testing**

All weighing, measuring and testing equipment shall be calibrated and regularly inspected according to documented procedures, frequencies and criteria.

#### **5.3.2.2.2 Manufacturing**

All equipment used in the manufacturing process shall be regularly inspected and maintained to ensure use, wear or failure does not cause inconsistency in the manufacturing process. Inspections and maintenance shall be carried out and recorded in accordance with the manufacturer's written procedures and the records retained for the period defined in the manufacturer's FPC procedures.

### **5.3.2.3 Raw materials and components**

The specifications of all incoming raw materials and components shall be documented, as shall the inspection scheme for ensuring their compliance. In case supplied kit components are used, the attestation of conformity level of the component shall be that given in the appropriate harmonised technical specification for that component.

#### **5.3.2.4 Design process**

The factory production control system shall document the various stages in the design of products, identify the checking procedure and those individuals responsible for all stages of design. During the design process itself, a record shall be kept of all checks, their results, and any corrective actions taken.

This record shall be sufficiently detailed and accurate to demonstrate that all stages of the design phase, and all checks, have been carried out satisfactorily.

#### **5.3.2.5 Controls during manufacturing process**

The manufacturer shall plan and carry out production under controlled conditions.

#### **5.3.2.6 Product testing and evaluation**

The manufacturer shall establish procedures to ensure that the stated values of the characteristics he declares, are maintained. The characteristics, and the means of control, are given in Table 2.

## EN 15814:2011/FprA1:2012 (E)

Table 2 — Factory Production Control

Characteristic	Test method	Production control frequency	Tolerances
Flexibility at low temperature	EN 15813	Weekly or per batch	According to EN 15813
Dimensional stability at high temperature	EN 15818	Weekly or per batch	According to EN 15818
For the A-component			
— Solids content	EN ISO 3251	Weekly or per batch	$\pm 4$ % absolute
— Ash content (only for products with ash content $\geq 5$ mass %)	EN ISO 3451-1 with testing at a temperature of $(75 \pm 25)$ °C	Weekly or per batch	$\pm 2$ % absolute
For the B-component (only for two component PMBC)			
— Bulk density (for powder component)	EN ISO 3923-1	Weekly or per batch	$\pm 0,1$ g/cm <sup>3</sup>
— Density (for liquid component)	EN ISO 2811-1	Weekly or per batch	$\pm 0,1$ g/cm <sup>3</sup>
For the cured PMBC			
— Density	EN ISO 2811-2	Weekly or per batch	$\pm 0,1$ g/cm <sup>3</sup>
Identification for inlays:			
— Type	To be stated. Depending on the type of inlay, a suitable test has to be applied at incoming products.	At incoming products	-----
— Mass per unit area			
— Strength and elongation at break			

For the purpose of the Factory Production Control alternative tests to those given in Table 2 may be used, provided that a correlation of the results between both tests, for the product in question, is established. The use of alternative tests shall be recorded and maintained.

### 5.3.2.7 Non-complying products

The manufacturer shall have written procedures which specify how non-complying products shall be dealt with. Any such events shall be recorded as they occur and these records shall be kept for the period defined in the manufacturer's written procedures.

### 5.3.2.8 Corrective action

The manufacturer shall have documented procedures that instigate action to eliminate the cause of non-conformities in order to prevent recurrence.

### 5.3.2.9 Handling, storage and packaging

The manufacturer shall have procedures providing methods of product handling and shall provide suitable storage areas preventing damage or deterioration.

### 5.3.3 Product specific requirements