



SLOVENSKI STANDARD
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Bitumenske tankoplastne prevleke, modificirane s polimeri - Definicije in zahteve

Polymer modified bituminous thick coatings for waterproofing - Definitions and requirements

Kunststoffmodifizierte Bitumendickbeschichtung zur Bauwerksabdichtung - Begriffe und Anforderungen

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91.100.50 Veziva. Tesnilni materiali Binders. Sealing materials

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English Version

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

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

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Foreword

This document (FprEN 15814:2011) 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 document is currently submitted to the Unique Acceptance Procedure.

FprEN 15814:2011 (E)**1 Scope**

This European standard specifies the definitions and requirements of prefabricated polymer modified bituminous thick coatings used for application in below ground structures. It applies to both one-component and two-component products. These products can be used with or without inlay.

This European Standard does not apply to products that are to be used for roof 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 1931, *Flexible sheets for waterproofing — Bitumen, plastic and rubber sheets for roof waterproofing — Determination of water vapour transmission properties*

EN 13238, *Reaction to fire tests for building products — Conditioning procedures and general rules for selection of substrates*

EN 13501-1, *Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests*

FprEN 15812, *Polymer modified bituminous thick coatings for waterproofing — Determination of crack bridging ability*

FprEN 15813, *Polymer modified bituminous thick coatings for waterproofing — Determination of flexibility at low temperature*

FprEN 15815, *Polymer modified bituminous thick coatings for waterproofing — Resistance to compression*

FprEN 15816, *Polymer modified bituminous thick coatings for waterproofing — Resistance to rain*

FprEN 15817, *Polymer modified bituminous thick coatings for waterproofing — Water resistance*

FprEN 15818, *Polymer modified bituminous thick coatings for water proofing — Determination of dimensional stability at high temperature*

FprEN 15819, *Polymer modified bituminous thick coatings for waterproofing — Reduction of the thickness of the layer when fully dried*

FprEN 15820, *Polymer modified bituminous thick coatings for waterproofing — Determination of watertightness*

EN ISO 2811-1, *Paints and varnishes — Determination of density — Part 1: Pyknometer method (ISO 2811-1:1997)*

EN ISO 2811-2, *Paints and varnishes — Determination of density — Part 2: Immersed body (plummet) method (ISO 2811-2:1997)*

EN ISO 3251, *Paints, varnishes and plastics — Determination of non-volatile-matter content (ISO 3251:2008)*

EN ISO 3451-1, *Plastics — Determination of ash — Part 1: General methods (ISO 3451-1:2008)*

EN ISO 3923-1, *Metallic powders — Determination of apparent density — Part 1: Funnel method (ISO 3923-1:2008)*

EN ISO 11925-2, *Reaction to fire tests — Ignitability of products subjected to direct impingement of flame — Part 2: Single-flame source test (ISO/FDIS 11925-2:2010)*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

crack bridging ability

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

3.2

free film

cured polymer modified bituminous coating emulsion based, which is tested without being applied to a substrate

3.3

ground moisture

capillary bonded moisture in ground (soil) without hydrostatic pressure

3.4

heat resistance

resistance of the product to the effects of exposure to heat

3.5

inlay

industrially produced material, which is incorporated as an intermediate layer when applying the coating

3.6

low temperature stability

resistance of the product to crack formation by bending at low temperatures

3.7

PMBC

prefabricated polymer modified bituminous thick coating (≥ 3 mm dry layer thickness) emulsion based, with or without admixtures, such as additives and mineral aggregates, comprising of one or two components. In case of two component PMBC the component A is the liquid bitumen emulsion and the component B is a reactive liquid or powder component.

3.8

pressure water

water in ground with hydrostatic pressure

3.9

resistance to rain

resistance of the PMBC to the damaging effects of exposure to rain

3.10

surface loading capacity (resistance to compression)

resistance of the product to a vertical load applied over a given time period

3.11

waterproofing

measure to prevent water from penetrating from one plane to another

3.12

waterproofing system

polymer modified bituminous thick coating emulsion based, which is applied to the respective substrate with or without inlay and/or with or without pre-coating

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4 Requirements

All PMBC according to this European Standard have to fulfil the general requirements of Table 1.

Table 1 — General requirements

Column	1	2			3	
Line	Characteristic	Requirement			Test method	
1	Crack bridging ability	Class CB 0 No requirement	Class CB 1 No damage Crack width ≥ 1 mm dry layer thickness ≥ 3 mm (MLV)	Class CB 2 No damage Crack width ≥ 2 mm dry layer thickness ≥ 3 mm (MLV)	FprEN 15812	
2	Resistance to rain	Class R0 No requirement	Class R3 ≤ 4 h wet layer thickness ≥ 3 mm (MLV)	Class R2 ≤ 8 h wet layer thickness ≥ 3 mm (MLV)	Class R1 ≤ 24 h wet layer thickness ≥ 3 mm (MLV)	FprEN 15816
3	Water resistance	1. No colouration of the water 2. No debonding from inlay, if used Dry layer ≥ 4 mm			FprEN 15817	
4	Flexibility at low temperature ^a	No cracks			FprEN 15813	
5	Dimensional stability at high temperature ^a	No sliding or draining down			FprEN 15818	