



SLOVENSKI STANDARD
kSIST FprEN 14693:2016

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Hidroizolacijski trakovi - Hidroizolacija betonskih premostitvenih objektov in drugih betonskih povoznih površin - Določevanje obnašanja bitumenskih trakov pri nanašanju zaščitne plasti litega asfalta

Flexible sheets for waterproofing - Waterproofing of concrete bridge decks and other concrete surfaces trafficable by vehicles - Determination of the behaviour of bitumen sheets during application of mastic asphalt

Abdichtungsbahnen - Abdichtung von Betonbrücken und anderen Verkehrsflächen auf Beton - Bestimmung des Verhaltens von Bitumenbahnen bei Anwendung von Gussasphalt

Feuilles souples d'étanchéité - Étanchéité des tabliers de ponts en béton et autres surfaces en béton circulables par les véhicules - Détermination du comportement des feuilles d'étanchéité lors de l'application de l'asphalte coulé

Ta slovenski standard je istoveten z: FprEN 14693

ICS:

91.100.50 Veziva. Tesnilni materiali Binders. Sealing materials

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

FINAL DRAFT
FprEN 14693

October 2016

ICS 91.100.50

Will supersede EN 14693:2006

English Version

**Flexible sheets for waterproofing - Waterproofing of
concrete bridge decks and other concrete surfaces
trafficable by vehicles - Determination of the behaviour of
bitumen sheets during application of mastic asphalt**

Feuilles souples d'étanchéité - Étanchéité des tabliers
de ponts en béton et autres surfaces en béton
circulables par les véhicules - Détermination du
comportement des feuilles d'étanchéité lors de
l'application de l'asphalte coulé

Abdichtungsbahnen - Abdichtung von Betonbrücken
und anderen Verkehrsflächen auf Beton - Bestimmung
des Verhaltens von Bitumenbahnen bei Anwendung
von Gussasphalt

This draft European Standard is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 254.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard was established by CEN 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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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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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (FprEN 14693:2016) has been prepared by Technical Committee CEN/TC 254 “Flexible sheets for waterproofing”, the secretariat of which is held by NEN.

This document is currently submitted to the Unique Acceptance Procedure.

This document will supersede EN 14693:2006.

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

FprEN 14693:2016 (E)

Introduction

The purpose of the test is to determine the behaviour of the waterproofing sheet which is in contact with the mastic asphalt during application.

1 Scope

This European Standard is applicable to waterproofing sheets intended for use with a layer of mastic asphalt.

This European Standard specifies a test method for the evaluation of the resistance of waterproofing sheets to the rising of the bitumen compound at the application of mastic asphalt in a non-floating manner.

NOTE This European Standard can also be used for waterproofing sheets intended for use with other asphalt types as a protection layer.

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 1849-1, *Flexible sheets for waterproofing - Determination of thickness and mass per unit area - Part 1: Bitumen sheets for roof waterproofing*

EN 13375, *Flexible sheets for waterproofing - Waterproofing of concrete bridge decks and other concrete surfaces trafficable by vehicles - Specimen preparation*

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*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13375, EN 14695 and prEN 17048.

4 Test methods

4.1 Principle

Mastic asphalt, with a temperature of 220 °C, is poured on bitumen sheet and the following points are determined:

- quantity of sheet-compound specks on the surface of the mastic asphalt;
- quantity of sheet-compound inclusions within the mastic asphalt;
- changes in thickness of the bitumen sheet.

4.2 Apparatus and materials

4.2.1 Mastic asphalt, in accordance with EN 13375, with a substitution of 4 % to 5 % by mass of filler by iron oxide powder (Fe₂O₃).

4.2.2 Mastic asphalt boiler, with motor-driven stirring device and indirect heating.

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4.2.3 Stereo optical measuring instrument, with tenfold magnification and a reading accuracy of 0,1 mm.

4.2.4 UV lighting equipment.

4.2.5 Concrete slab, in accordance with EN 13375 (400 ± 10) mm \times (400 ± 10) mm, thickness (45 ± 5) mm.

4.2.6 Frame, internal dimensions (350 ± 10) mm \times (350 ± 10) mm, height of frame (40 ± 2) mm.

4.2.7 Equipment for measuring the temperature, with an accuracy of 1 °C.

4.2.8 Layer of dry sand, with a depth of 80 mm to 100 mm natural sand.

4.2.9 Spirit level.

4.2.10 Saw.

4.2.11 Float for mastic asphalt.

4.2.12 Screw clamps.

4.2.13 Transparent foil.

4.3 Preparation of test specimens

Take samples and test specimens in accordance with EN 13416, the dimensions of the test specimens are (400 ± 10) mm \times (400 ± 10) mm. Ensure that the test specimens are without any mechanical damage.

The thickness of the sheet, determined in accordance with EN 1849-1, shall be known (reference thickness).

Two concrete slabs are required.

4.4 Procedure

4.4.1 Condition the sand layer, the concrete slab and the test specimen for at least 24 h at (23 ± 2) °C.

4.4.2 Place the test specimen onto the concrete slab. Position the frame on top of the test specimen and concrete slab, and fix it with screw clamps.