



SLOVENSKI STANDARD
kSIST FprEN 14692:2016

01-december-2016

Hidroizolacijski trakovi - Hidroizolacija betonskih premostitvenih objektov in drugih betonskih povoznih površin - Določevanje odpornosti pri zgoščevanju asfaltne plasti

Flexible sheets for waterproofing - Waterproofing of concrete bridge decks and other concrete surfaces trafficable by vehicles - Determination of the resistance to compaction of an asphalt layer

AAbdichtungsbahnen - Abdichtung von Betonbrücken und anderen Verkehrsflächen auf Beton - Bestimmung des Widerstandes gegenüber Verdichtung der Asphaltschicht

Feuilles souples d'étanchéité - Étanchéité des tabliers de ponts en béton et autres surfaces en béton circulables par les véhicules - Détermination de la résistance au compactage de la couche bitumineuse

Ta slovenski standard je istoveten z: FprEN 14692

ICS:

91.100.50 Veziva. Tesnilni materiali Binders. Sealing materials

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NORME EUROPÉENNE
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FINAL DRAFT
FprEN 14692

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ICS 91.100.50

Will supersede EN 14692:2005

English Version

**Flexible sheets for waterproofing - Waterproofing of
concrete bridge decks and other concrete surfaces
trafficable by vehicles - Determination of the resistance to
compaction of an asphalt layer**

Feuilles souples d'étanchéité - Étanchéité des tabliers
de ponts en béton et autres surfaces en béton
circulables par les véhicules - Détermination de la
résistance au compactage de la couche bitumineuse

AAbdichtungsbahnen - Abdichtung von Betonbrücken
und anderen Verkehrsflächen auf Beton - Bestimmung
des Widerstandes gegenüber Verdichtung der
Asphaltschicht

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 14692:2016) 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 14692:2005.

The significant technical changes are the new reference to prEN 17048:2016 in Clause 2, Normative references, and the substitution of the terms “bitumen sheet” with the generic wording “waterproofing sheet” in every clause where needed, including the title.

Introduction

The purpose of the test is to determine the ability of a waterproofing system to resist damage from the compaction of an asphalt layer.

1 Scope

This European Standard specifies a test method for the evaluation of the resistance of a waterproofing sheet to the compaction of an asphalt 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 1928, *Flexible sheets for waterproofing - Bitumen, plastic and rubber sheets for roof waterproofing - Determination of watertightness*

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, prEN 17048 and the following apply.

3.1

resistance to compaction

ability of a waterproofing system to resist the compaction of an asphalt concrete overlay without damage

4 Test methods

4.1 Principle

The test consists of compacting a defined asphalt layer on a waterproofing sheet laid on a base specimen.

It may be carried out in two alternative ways:

- Method 1: The asphalt layer is laid directly on the sheet bonded to the base specimen;
- Method 2: A de-bonding interface is laid between the base specimen and the sheet and between the sheet and the asphalt layer.

After compacting of the test specimen, the waterproofing sheet is recovered for observation of its condition and any perforations. Depending on the results of the observations, the watertightness of the recovered waterproofing sheet should be checked.

FprEN 14692:2016**4.2 Apparatus and materials**

4.2.1 Compaction equipment, as referred to in EN 13375.

4.2.2 Standard equipment and materials, such as, site gas torch, brush, etc.

4.2.3 Oven, with circulating air (without fresh supply), capable of maintaining $(100 \pm 5) ^\circ\text{C}$

4.3 Preparation of test specimens**4.3.1 General**

Take samples and test pieces in accordance with EN 13416.

4.3.2 Test specimen with sheet bonded to the base specimen (Method 1)

The test specimen is prepared in accordance with EN 13375.

The size of the test specimen is 600 mm × 400 mm.

4.3.3 Test specimen with sheet not bonded to the base specimen (Method 2)

Place a de-bonding interface between the base specimen and the waterproofing sheet, and on the upper surface of the waterproofing to prevent the asphalt layer adhering to it.

For the interface between the base specimen and the waterproofing sheet, use one non-woven glass fibre sheet of $(70 \pm 5) \text{ g/m}^2$.

For the interface between the waterproofing sheet and the asphalt layer mix, use two non-woven glass fibre sheets of $(70 \pm 5) \text{ g/m}^2$.

The size of the test specimen is 600 mm × 400 mm [400 mm × 400 mm, resp. 500 mm × 500 mm].

4.3.4 Asphalt layer, compaction and test specimens**4.3.4.1 General**

Lay and compact the asphalt layer mix in accordance with EN 13375.

4.3.4.2 Test specimen with sheet bonded to the base specimen (Method 1)

In the case of the sheet bonded to the base specimen, obtain four equal parts by wet sawing the test specimen, prepared as described in 4.3.1 and 4.3.2.

4.3.4.3 Test specimen with sheet not bonded to the base specimen (Method 2)

In the case of test specimens with de-bonding interfaces, let the asphalt layer cool and remove the sheet for visual inspection and testing.

4.4 Procedure**4.4.1 Test specimen with sheet bonded to the base specimen (Method 1)**

4.4.1.1 Inspect visually the cross-section of the parts of the test specimen to check the sheet/asphalt layer interface, and whether any binder from the sheet is bleeding into the asphalt layer.

4.4.1.2 Heat two parts of the test specimen in an oven at $(100 \pm 5) ^\circ\text{C}$ for $(120 \pm 5) \text{ min}$.

4.4.1.3 Separate the sheet manually from the base specimen and asphalt layer, taking care not to destroy the asphalt layer so that its interface surface can be examined.