EESTI STANDARD

EVS-EN 13596:2004

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Flexible sheets for waterproofing - Waterproofing of concrete bridge decks and other concrete surfaces trafficable by vehicles - Determination of bond strength

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EESTI STANDARDIKESKUS

EESTI STANDARDI EESSÕNA	NATIONAL FOREWORD
Käesolev Eesti standard EVS-EN 13596:2004 sisaldab Euroopa standardi EN 13596:2004 ingliskeelset teksti. Käesolev dokument on jõustatud 21.12.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 13596:2004 consists of the English text of the European standard EN 13596:2004. This document is endorsed on 21.12.2004 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This European Standard is one of a series of standards applicable to flexible sheets for waterproofing of concrete bridge decks and other concrete surfaces trafficable by vehicles. This European Standard specifies a test method for the evaluation of the tensile bond strength properties of the waterproofing sheet system applied to a concrete surface and with an asphalt layer.	**Scope:** This European Standard is one of a series of standards applicable to flexible sheets for waterproofing of concrete bridge decks and other concrete surfaces trafficable by vehicles. This European Standard specifies a test method for the evaluation of the tensile bond strength properties of the waterproofing sheet system applied to a concrete surface and with an asphalt layer.

ICS 91.100.50, 93.080.20

Võtmesõnad:

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Eesti Standardikeskusele kuulub standardite reprodutseerimis- ja levitamisõigus

EUROPEAN STANDARD

NORME EUROPÉENNE

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ICS 91.100.50; 93.080.20

English version

Flexible sheets for waterproofing - Waterproofing of concrete bridge decks and other concrete surfaces trafficable by vehicles - Determination of bond strength

Feuilles souples d'étanchéité - Etanchéité des ponts et autres surfacesen béton circulables par les véhicules - Détermination de l'adhérence

Abdichtungsbahnen - Abdichtungssysteme auf Beton für Brücken und andere Verkehrsflächen - Bestimmung der Abreißfestigkeit

This European Standard was approved by CEN on 8 August 2004.

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists 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 Central Secretariat has the same status as the official versions.

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Foreword

This document (EN 13596:2004) has been prepared by Technical Committee CEN /TC 254 "Flexible sheets for waterproofing", the secretariat of which is held by BSI.

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 April 2005, and conflicting national standards shall be withdrawn at the latest by July 2006.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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Introduction

The purpose of the test is to determine the adhesive properties of the waterproofing system.

Bond strength between the waterproofing sheet system and concrete substrate or asphalt layer can be determined.

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1 Scope

This document is one of a series of standards applicable to flexible sheets for waterproofing of concrete bridge decks and other concrete surfaces trafficable by vehicles.

This document specifies a test method for the evaluation of the tensile bond strength properties of the waterproofing sheet system applied to a concrete surface and with an asphalt layer.

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 13416, *Flexible sheets for waterproofing - Bitumen, plastic and rubber sheets for roof waterproofing - Rules for sampling*

EN 13375:2004, *Flexible sheets for waterproofing – Waterproofing of concrete bridge decks and other concrete surfaces trafficable by vehicles – Specimen preparation.*

prEN 14695:2003, *Flexible sheets for waterproofing – Reinforced bitumen sheets for waterproofing of concrete bridge decks and other concrete surfaces trafficable by vehicles – Definitions and characteristics.*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13375:2004, prEN 14695:2003 and the following apply.

bond strength
tensile stress at maximum force when testing the adhesion between different layers in a waterproofing system

4 Test methods

4.1 Principle

The bond strength shall be measured using a tensile test equipment. The tensile force shall be applied perpendicular to the test specimen, and the force required at failure shall be registered.

4.2 Apparatus and materials

a) Tensile test machine, with force increasing rate control and automatic load recording, fitted with suitable clamps and base to ensure that the tensile force can be applied without momentum perpendicular to the test specimen.

b) Circular steel plates, with a diameter of 50 mm, or square steel plates with test area (50 × 50) mm², and a tolerance of 0,5 mm. The steel plate shall be attached by suitable means (e.g. screwed) to the tensile test machine. Minimum thickness of steel plate shall be 10 mm from bottom of steel plate to bottom of screw hole.

c) Suitable adhesive (e.g. two part epoxy resin), for bonding the steel plates to the waterproofing sheet or the asphalt layer of the test specimen.

d) Oven, capable of maintaining a temperature of (23 ± 2) °C.

e) Device for measuring surface temperature, with an accuracy of at least ± 0,5 °C.

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