BRITISH STANDARD

BS EN
12697-29:2002

Bituminous mixtures — Test methods for hot mix asphalt —

Part 29: Determination of the dimensions of a bituminous specimen

The European Standard EN 12697-29:2002 has the status of a British Standard

ICS 93.080; 93.080.20

National foreword

This British Standard is the official English language version of EN 12697-29:2002.

The UK participation in its preparation was entrusted by Technical Committee B/510, Road materials, to Subcommittee B/510/1, Coated macadam and hot asphalt, which has the responsibility to:

— aid enquirers to understand the text;

— present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;

— monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the *BSI Catalogue* under the section entitled "International Standards Correspondence Index", or by using the "Search" facility of the *BSI Electronic Catalogue* or of British Standards Online.

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This British Standard, having been prepared under the direction of the Building and Civil Engineering Sector Policy and Strategy Committee, was published under the authority of the Standards Policy and Strategy Committee on 11 October 2002

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Bituminous mixtures - Test method for hot mix asphalt - Part 29: Determination of the dimensions of a bituminous specimen

Mélanges bitumineux - Méthodes d'essai pour mélange hydrocarboné à chaud - Partie 29: Détermination des dimensions des éprouvettes d'enrobées hydrocarbonés

Asphalt - Prüfverfahren für Heißasphalt - Teil 29: Bestimmung der Maße von Asphalt-Probekörpern

This European Standard was approved by CEN on 1 August 2002.

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 Management Centre or to any CEN member.

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

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Contents

Foreword

This document EN 12697-29:2002 has been prepared by Technical Committee CEN/TC 227 "Road materials", the secretariat of which is held by DIN.

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 March 2003, and conflicting national standards shall be withdrawn at the latest by April 2005.

This European Standard is one of a series of standards as listed below.

EN 12697-1, *Bituminous mixtures Test methods for hot mix asphalt Part 1: Soluble binder content*

EN 12697-2, *Bituminous mixtures Test methods for hot mix asphalt Part 2: Determination of particle size distribution*

EN 12697-3, *Bituminous mixtures Test methods for hot mix asphalt Part 3: Bitumen recovery: Rotary evaporator*

EN 12697-4, *Bituminous mixtures Test methods for hot mix asphalt Part 4: Bitumen recovery: Fractionating column*

EN 12697-5, *Bituminous mixtures - Test methods for hot mix asphalt - Part 5: Determination of the maximum density*

prEN 12697-6, *Bituminous mixtures Test methods for hot mix asphalt Part 6: Determination of bulk density of bituminous specimens by hydro-static method*

EN 12697-7, *Bituminous mixtures Test methods for hot mix asphalt Part 7: Determination of bulk density of bituminous specimens by gamma rays*

prEN 12697-8, *Bituminous mixtures Test methods for hot mix asphalt Part 8: Determination of void characteristics of bituminous specimens*

prEN 12697-9, *Bituminous mixtures Test methods for hot mix asphalt Part 9: Determination of the reference density*

EN 12697-10, *Bituminous mixtures Test methods for hot mix asphalt Part 10: Compactibility*

prEN 12697-11, *Bituminous mixtures Test methods for hot mix asphalt Part 11: Determination of the compatibility between aggregates and bitumen*

prEN 12697-12, *Bituminous mixtures Test methods for hot mix asphalt Part 12: Determination of the water sensitivity of bituminous specimens*

EN 12697-13, *Bituminous mixtures Test methods for hot mix asphalt Part 13: Temperature measurement*

EN 12697-14, *Bituminous mixtures Test methods for hot mix asphalt Part 14: Water content*

prEN 12697-15, *Bituminous mixtures Test methods for hot mix asphalt Part 15: Determination of the segregation sensitivity of bituminous mixtures*

prEN 12697-16, *Bituminous mixtures Test methods for hot mix asphalt Part 16: Abrasion by studded tyres*

prEN 12697-17, *Bituminous mixtures Test methods for hot mix asphalt Part 17: Particle loss of porous asphalt specimen*

prEN 12697-18, *Bituminous mixtures Test methods for hot mix asphalt Part 18: Binder drainage from porous asphalt*

prEN 12697-19, *Bituminous mixtures Test methods for hot mix asphalt Part 19: Permeability of specimen*

prEN 12697-20, *Bituminous mixtures Test methods for hot mix asphalt Part 20: Indentation using cube or marshall specimens*

prEN 12697-21, *Bituminous mixtures Test methods for hot mix asphalt Part 21: Indentation using plate specimens*

prEN 12697-22, *Bituminous mixtures Test methods for hot mix asphalt Part 22: Wheel tracking*

prEN 12697-23, *Bituminous mixtures Test methods for hot mix asphalt Part 23 Determination of the indirect tensile strength of bituminous specimens*

prEN 12697-24, *Bituminous mixtures Test methods for hot mix asphalt Part 24: Resistance to fatigue*

prEN 12697-25, *Bituminous mixtures Test methods for hot mix asphalt Part 25: Dynamic creep test*

prEN 12697-26, *Bituminous mixtures Test methods for hot mix asphalt Part 26: Stiffness*

EN 12697-27, *Bituminous mixtures Test methods for hot mix asphalt Part 27: Sampling*

EN 12697-28, *Bituminous mixtures Test methods for hot mix asphalt Part 28: Preparation of samples for determining binder content, water content and grading*

prEN 12697-29, *Bituminous mixtures Test methods for hot mix asphalt Part 29: Determination of the dimensions of bituminous specimen*

prEN 12697-30, *Bituminous mixtures Test methods for hot mix asphalt Part 30: Specimen preparation, impact compactor*

prEN 12697-31, *Bituminous mixtures Test methods for hot mix asphalt Part 31: Specimen preparation gyratory compactor*

prEN 12697-32, *Bituminous mixtures Test methods for hot mix asphalt Part 32: Laboratory compaction of bituminous mixtures by a vibratory compactor*

prEN 12697-33, *Bituminous mixtures Test methods for hot mix asphalt Part 33: Specimen preparation slab compactor*

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prEN 12697-45, *Bituminous mixtures — Test methods for hot mix asphalt — Part 45: Binder drainage – Schellenberg method*

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

1 Scope

This European Standard specifies a test method for determining the dimensions of cylindrical, rectangular or non-rectangular bituminous test specimens by measurement.

The applicability of this European Standard is described in the product standards for bituminous mixtures.

The test is applicable to laboratory-made specimens, trimmed by sawing, or specimens from cores cut from the road, trimmed by sawing.

2 Apparatus

2.1 Calliper gauge.

2.2 Approved jig or other device.

3 Procedure

NOTE The measurements should preferably be made with the specimen standing firmly on its upper face in a vertical position. Alternatively the specimen can be laid on a level surface in a horizontal position and rolled as necessary to permit the taking of all measurements.

3.1 Measurement of height

3.1.1 Take four measurements evenly spaced around the perimeter of each specimen. The position of these measurements shall be clearly marked along each specimen. All measurements shall have a limit deviation of ± 0,1 mm.

3.1.2 Each measurement shall be made approximately 10 mm in from the edge of the specimen.

3.1.3 Define the average of the four measurements as the height of the specimen and express it to the nearest 0,1 mm.

3.2 Measurement of diameter

3.2.1 Take two measurements perpendicular to each other at the top, the middle and the bottom of the specimen. All measurements shall have a limit deviation of ± 0,1 mm.

3.2.2 Define the average of the six measurements as the diameter of the specimen and express it to the nearest 0,1 mm.

3.3 Measurement of (non)-rectangular specimens

3.3.1 Take four measurements evenly spaced around the perimeter of each specimen in each direction (height, width and depth). If the dimensions in one or more directions change substantially (e.g. a two point bending test specimen) the number of measurements in that direction shall be extended in such a way that the volume of the specimen can always be calculated.

The position of the measurements shall be clearly marked along each specimen. All measurements shall have a limit deviation of ± 0,1 mm.

3.3.2 Each measurement shall be made near the edges of the specimen.

3.3.3 Define the average of the four measurements as the dimension of the specimen in a given direction and express it to the nearest 0,1 mm.

NOTE It is possible that in one direction more than one average value can be calculated.

4 Test report

With reference to this European Standard the report shall include the following information:

a) measurement procedure used;

b) relevant dimensions of each specimen, reported to the nearest 0,1 mm.

5 Precision

NOTE The precision of this test has not yet been established.

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