

Bituminous mixtures - Material specifications - Part 3: Soft Asphalt

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/16

Obsahuje: EN 13108-3:2016

Oznámením tejto normy sa od 31.03.2018 ruší STN EN 13108-3 (73 6163) z októbra 2006

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 13108-3

June 2016

ICS 93.080.20

Supersedes EN 13108-3:2006

### **English Version**

# Bituminous mixtures - Material specifications - Part 3: Soft Asphalt

Mélanges bitumineux - Spécifications des matériaux - Partie 3: Soft Asphalt

Asphaltmischgut - Mischgutanforderungen - Teil 3: Softasphalt

This European Standard was approved by CEN on 27 February 2016.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

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

Contents		Page	
European foreword4			
Introduction		6	
1	Scope	7	
2	Normative references		
_			
3	Terms, definitions, symbols and abbreviations		
3.1 3.2	Terms and definitions		
3.2	Symbols and abbreviations		
4	Requirements for constituent materials		
4.1	General		
4.2	Binder		
4.2.1 4.2.2	GeneralSelection of binder		
4.2.2	Aggregates		
4.3.1	Coarse aggregate		
4.3.2	Fine aggregate		
4.3.3	All-in aggregates		
4.3.4	00 0		
4.4	Reclaimed asphalt	11	
4.5	Additives	12	
5	Requirements for the mixture	12	
5.1	General		
5.2	Composition, grading and binder content		
5.2.1	Composition	12	
5.2.2	Grading		
5.2.3	Minimum binder content		
5.3	Properties		
5.3.1	Specimens		
5.3.2	Void content and voids filled with binder		
5.3.3	Water sensitivity		
5.3.4			
5.3.5	Reaction to fireTemperature of the mixture		
5.4 5.5	Regulated dangerous substances		
5.6	Conflicting requirements		
6	Assessment and verification of constancy of performance — AVCP	22	
7	Identification	23	
Anne	ex A (normative) Calculations of the penetration, the softening point or the viscosity of		
	the binder of a mixture when reclaimed asphalt is used	24	
<b>A.1</b>	General		
<b>A.2</b>	Calculation of the penetration of the binder of a mixture		
<b>A.3</b>	Calculation of the softening point of the binder of a mixture		
<b>A.4</b>	Calculation of the viscosity of the binder of a mixture	25	

Annex	z ZA (informative) Relationship of this European Standard with Regulation (EU)	
	No. 305/2011	26
<b>ZA.1</b>	Scope and relevant characteristics	26
<b>ZA.2</b>	System of Assessment and Verification of Constancy of Performance (AVCP)	27
<b>ZA.3</b>	Assignment of AVCP tasks	28

# **European foreword**

This document (EN 13108-3:2016) 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 December 2016, and conflicting national standards shall be withdrawn at the latest by March 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 13108-3:2006.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of Regulation (EU) No 305/2011 for construction products (CPR).

For relationship with Regulation (EU) No 305/2011, see informative Annex ZA which is an integral part of this document.

Compared with EN 13108-3:2006, the following changes have been made:

- a) possibility to define specific conditions in documents related to the application of the product;
- b) CPR reference and new Annex ZA according CPR rules.

This European Standard is one of a series as listed below:

- EN 13108-1, Bituminous mixtures Material specifications Part 1: Asphalt Concrete
- EN 13108-2, Bituminous mixtures Material specifications Part 2: Asphalt Concrete for Very Thin Layers (BBTM)
- EN 13108-3, Bituminous mixtures Material specifications Part 3: Soft Asphalt
- EN 13108-4, Bituminous mixtures Material specifications Part 4: Hot Rolled Asphalt
- EN 13108-5, Bituminous mixtures Material specifications Part 5: Stone Mastic Asphalt
- EN 13108-6, Bituminous mixtures Material specifications Part 6: Mastic Asphalt
- EN 13108-7, Bituminous mixtures Material specifications Part 7: Porous Asphalt
- EN 13108-8, Bituminous mixtures Material specifications Part 8: Reclaimed Asphalt
- EN 13108-9, Bituminous mixtures Material specifications Part 9: Asphalt for Ultra-Thin Layer (AUTL)
- EN 13108-20, Bituminous mixtures Material specifications Part 20: Type Testing
- EN 13108-21, Bituminous mixtures Material specifications Part 21: Factory Production Control

Annex A (normative) details the calculation of the viscosity, penetration or the softening point in mixtures containing reclaimed asphalt from the viscosity, penetrations or softening points of the added binder and the recovered binder from the reclaimed asphalt.

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

# Introduction

The aim of this European Standard is to enable specification of Soft Asphalt mixtures on a performance basis. In general, however, there are currently more empirical tests available to describe the mixtures. Depending on the experience with the combination of requirements in this European Standard more or less degrees of freedom for the producer may be given.

This European Standard covers a large variety of materials for different applications, traffic and climate conditions. EN 13108-3 gives properties and listings of possible categories. It has to accommodate the road industry for all of Europe. For this reason the menu approach for properties has been chosen. The tables represent categories that are required all over Europe. For this reason numerical values in tables do not always obey statistical rules. Based on conditions of use specific properties and categories may be defined in documents related to the application of the product. The categories defined in those documents need to take into account the reproducibility of the test when this is given in the appropriate test method.

Care should be taken to only select those tests which are relevant to the application of the Soft Asphalt and the use of the pavement and to avoid a combination of potentially conflicting requirements.

## 1 Scope

This European Standard specifies requirements for mixtures of the mix group Soft Asphalt for use on low volume roads and roads with low stability. Soft Asphalt is used for surface courses, regulating courses and bases in colder climates.

The mixtures of the mix group Soft Asphalt are produced on the basis of hot bitumen. Mixtures utilizing bitumen emulsion and bituminous materials based on *in situ* recycling are not covered by this standard.

This European Standard includes requirements for the selection of the constituent materials. It is designed to be read in conjunction with EN 13108-20 and EN 13108-21.

#### 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 1097–6:2013, Tests for mechanical and physical properties of aggregates — Part 6: Determination of particle density and water absorption

EN 1426, Bitumen and bituminous binders — Determination of needle penetration

EN 1427, Bitumen and bituminous binders — Determination of the softening point — Ring and Ball method

EN 12591, Bitumen and bituminous binders — Specifications for paving grade bitumens

EN 12595, Bitumen and bituminous binders — Determination of kinematic viscosity

EN 12596, Bitumen and bituminous binders — Determination of dynamic viscosity by vacuum capillary

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

EN 12697-4, Bituminous mixtures — Test methods — Part 4: Bitumen recovery: Fractionating column

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

EN 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 13043, Aggregates for bituminous mixtures and surface treatments for roads, airfields and other trafficked areas

EN 13108-8, Bituminous mixtures — Material specifications — Part 8: Reclaimed asphalt

EN 13108-20:2016, Bituminous mixtures — Material specifications — Part 20: Type Testing

EN 13108-21, Bituminous mixtures — Material specifications — Part 21: Factory Production Control

EN 13501-1:2007+A1:2009, Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests

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

koniec náhľadu – text ďalej pokračuje v platenej verzii STN