



**NSAI**  
Standards

Irish Standard  
I.S. EN 13108-8:2016

# Bituminous mixtures - Material specifications - Part 8: Reclaimed asphalt

**I.S. EN 13108-8:2016**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

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*This document is based on:*

EN 13108-8:2016

*Published:*

2016-06-15

*This document was published under the authority of the NSAI and comes into effect on:*

2017-01-06

ICS number:

93.080.20

NOTE: If blank see CEN/CENELEC cover page

NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

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## National Foreword

I.S. EN 13108-8:2016 is the adopted Irish version of the European Document EN 13108-8:2016, Bituminous mixtures - Material specifications - Part 8: Reclaimed asphalt

I.S. EN 13108-8:2016 is one of a series of European standards for bituminous mixtures. I.S. EN 13108-8:2016 revises I.S. EN 13108-8:2006.

The current Standard Recommendation S.R. 28:2009 provides guidance on the use in Ireland of the I.S. EN 13108 series of standards.

S.R. 28 is currently being revised by the NSAI Roads Standards Consultative Committee, Asphalt working group to provide guidance in Ireland to the 2016 versions of the I.S. EN 13108 series of standards.

NSAI plans to publish the revised S.R. 28 in quarter 2 of 2017 and withdraw S.R. 28:2009 with its associated versions of the I.S. EN 13108 series of standards.

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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*In line with international standards practice the decimal point is shown as a comma (,) throughout this document.*

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EUROPEAN STANDARD

EN 13108-8

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2016

ICS 93.080.20

Supersedes EN 13108-8:2005

English Version

## Bituminous mixtures - Material specifications - Part 8: Reclaimed asphalt

Mélanges bitumineux - Spécifications pour le matériau  
- Partie 8: Agrégats d'enrobés

Asphaltnischgut - Mischgutanforderungen - Teil 8:  
Ausbauasphalt

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.



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

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## European foreword

This document (EN 13108-8:2016) 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 13108-8:2005.

Compared with EN 13108-8:2005, the following changes have been made:

- a) update for consistency with other parts of EN 13108 series and CPR requirements;
- b) introduction of term “site-won asphalt” and differentiation from feedstock;
- c) note exclusion of contaminated materials;
- d) new Table 1 for minimum test frequencies for feedstock;
- e) enhanced requirements for traceability of delivered feedstock.

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*

**EN 13108-8:2016 (E)**

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 use of recycling in asphalt production makes it necessary to specify reclaimed asphalt as a constituent material in a way similar to that of aggregates and binders. In the asphalt product standards EN 13108-1 up to and including EN 13108-7 and EN 13108-9 the use of reclaimed asphalt is permitted with requirements related to the percentage addition.

Site-won asphalt comprises asphalt taken by milling of asphalt road layers, slabs ripped up from asphalt pavements and asphalt from reject and surplus production.

The processing of site-won asphalt results in reclaimed asphalt, suitable and ready to be used as constituent material for asphalt, after being tested, assessed and classified according to this standard. Reclaimed asphalt (RA) may be used as a constituent material for bituminous mixtures manufactured in an asphalt plant, in accordance with the specifications for those mixtures.

This European Standard contains requirements for reclaimed asphalt with respect to binder and aggregate properties and foreign matter that apply in all cases of usage of reclaimed asphalt. Additionally, this European Standard indicates which properties of the reclaimed asphalt and its constituent materials need to be declared and documented if a description of a feedstock is necessary.

Since the requirements for the asphalt mixtures are the same for mixtures with and without reclaimed asphalt, a set of properties of the reclaimed asphalt are of importance. The particle size and properties of the aggregate, the binder content, the properties of the binder and foreign matter in the reclaimed asphalt are relevant to the quality of the product, i.e. the fresh asphalt in which it is mixed. The level of homogeneity of the material in practice determines the maximum amount of reclaimed asphalt that may be used.

The size of the particles of asphalt in the reclaimed asphalt, which may range from large lumps to finely milled material, is relevant only to the process to be used to mix into the fresh asphalt.

## EN 13108-8:2016 (E)

### 1 Scope

This European Standard specifies requirements for the classification and description of reclaimed asphalt as a constituent material for asphalt mixtures. It is not a standard for compliance.

This European Standard only specifies reclaimed asphalt with bituminous binders, such as: paving grade bitumen, modified bitumen or hard grade bitumen. Reclaimed asphalt contaminated with coal tar or other additives or components above hazardous levels is not covered by this standard and will need to be considered under Member State Environmental, and Health and Safety Regulations.

### 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 932-1, *Tests for general properties of aggregates — Part 1: Methods for sampling*

EN 933-1, *Tests for geometrical properties of aggregates — Part 1: Determination of particle size distribution — Sieving method*

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

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

EN 12697-2, *Bituminous mixtures — Test methods — 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 — Part 4: Bitumen recovery: Fractionating column*

EN 12697-42, *Bituminous mixtures — Test methods for hot mix asphalt — Part 42: Amount of foreign matter in reclaimed asphalt*

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

### 3 Terms, definitions, symbols and abbreviations

#### 3.1 Terms and definitions

For the purpose of this document, the following terms and definitions apply.

##### 3.1.1

##### **asphalt**

homogenous mixture typically of coarse and fine aggregates, filler aggregate and bituminous binder which is used in the construction of a pavement

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