



**NSAI**  
Standards

Irish Standard  
I.S. EN 12697-53:2019

# Bituminous mixtures - Test methods - Part 53: Cohesion increase by spreadability-meter method

**I.S. EN 12697-53:2019**

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

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

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

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

*This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):*

*NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.*

*This document is based on:*

EN 12697-53:2019

*Published:*

2019-09-25

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

2019-10-14

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

Údarás um Chaighdeáin Náisiúnta na hÉireann

## National Foreword

I.S. EN 12697-53:2019 is the adopted Irish version of the European Document EN 12697-53:2019, Bituminous mixtures - Test methods - Part 53: Cohesion increase by spreadability-meter method

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

For relationships with other publications refer to the NSAI web store.

**Compliance with this document does not of itself confer immunity from legal obligations.**

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

This page is intentionally left blank

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 12697-53**

September 2019

ICS 93.080.20

English Version

**Bituminous mixtures - Test methods - Part 53: Cohesion  
increase by spreadability-meter method**

Mélanges bitumineux - Méthodes d'essai - Partie 53 :  
Montée en cohésion par la méthode du maniabilimètre

Asphalt - Prüfverfahren - Teil 53:  
Kohäsionszunahmemessung durch  
Ausbreitmaßmethode

This European Standard was approved by CEN on 1 July 2019.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, 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: Rue de la Science 23, B-1040 Brussels**

<b>Contents</b>	<b>Page</b>
<b>European foreword.....</b>	<b>3</b>
<b>1 Scope .....</b>	<b>4</b>
<b>2 Normative references .....</b>	<b>4</b>
<b>3 Terms and definitions .....</b>	<b>4</b>
<b>4 Principle .....</b>	<b>4</b>
<b>5 Apparatus.....</b>	<b>5</b>
5.1 Moulds.....	5
5.2 Spreadability-meter .....	6
5.3 Filling shoot.....	7
5.4 Steel straightedge for striking off.....	8
5.5 Climatic chamber or oven .....	8
<b>6 Procedure.....</b>	<b>9</b>
6.1 Number of samples to be tested.....	9
6.2 Filling the mould and curing.....	9
6.3 Shear force measurement.....	9
6.4 Expression of the results .....	10
<b>7 Precision.....</b>	<b>10</b>
<b>8 Test report.....</b>	<b>10</b>
<b>Bibliography.....</b>	<b>12</b>

## **European foreword**

This document (EN 12697-53:2019) has been prepared by Technical Committee CEN/TC 227 “Road materials”, 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 March 2020, and conflicting national standards shall be withdrawn at the latest by March 2020.

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

A list of all parts in the EN 12697 series can be found on the CEN website.

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

**EN 12697-53:2019 (E)****1 Scope**

This document specifies a method to measure the spreadability characteristics of bituminous mixtures which are able to vary with time. It can be used for the determination of the delay between manufacturing and laying. It is intended to be assistance for bituminous mixtures design rather than a type test.

This document applies to bituminous mixtures both those made up in laboratory and those resulting from work site sampling, with an upper aggregate size not larger than 31,5 mm. It is not applicable to mastic asphalt.

**2 Normative references**

There are no normative references in this document.

**3 Terms and definitions**

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

**4 Principle**

The aim of the test is to determine the cohesion increase of a bituminous mixture in fixed temperature and hygrometry conditions, using a spreadability-meter.

The cohesion increase test consists of measuring of the resistance against the shear due to the progress of a piston in a mould filled with the bituminous mixture to be tested (Figure 1). The cohesion of the bituminous mixture increases as the shear force increases.



This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- Looking for additional Standards? Visit Intertek Inform Infostore
  - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-