

STN	Asfaltové zmesi Skúšobné metódy Časť 48: Skúška spojenia vrstiev	STN EN 12697-48+A1 73 6160
------------	---	--

Bituminous mixtures - Test methods - Part 48: Interlayer bonding

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. 03/26

Obsahuje: EN 12697-48:2021+A1:2025

Oznámením tejto normy sa ruší
STN EN 12697-48 (73 6160) z júla 2022

142142



EUROPEAN STANDARD

EN 12697-48:2021+A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2025

ICS 93.080.20

Supersedes EN 12697-48:2021

English Version

Bituminous mixtures - Test methods - Part 48: Interlayer Bonding

Mélanges bitumineux - Méthodes d'essai - Partie 48 :
Collage entre couches

Asphalt - Prüfverfahren - Teil 48: Schichtenverbund

This European Standard was approved by CEN on 16 August 2021 and includes Amendment 1 approved by CEN on 17 October 2025.

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, Türkiye 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**

EN 12697-48:2021+A1:2025 (E)

Contents	Page
European foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Principle	5
4.1 General.....	5
4.2 Torque Bond Test (TBT).....	5
4.3 Shear Bond Test (SBT).....	6
4.4 Tensile Adhesion Test (TAT)	6
5 Specimens	6
6 Torque Bond Test (TBT)	7
6.1 Apparatus.....	7
6.2 Materials.....	7
6.3 Site test method	7
6.4 Laboratory test method	8
6.5 Calculation of Torque Bond Strength and expression of results	9
6.6 Visual assessment of the mode of failure	9
6.7 Test report.....	10
6.8 Precision.....	10
7 Shear Bond Test (SBT)	11
7.1 Apparatus.....	11
7.2 Specimens	12
7.3 Test procedure	13
7.4 Calculation and Expression of Results.....	14
7.5 Test report.....	16
7.6 Precision.....	16
8 Tensile Adhesion Test (TAT)	17
8.1 Apparatus.....	17
8.2 Materials.....	18
8.3 Specimen	18
8.4 Test procedure	19
8.5 Calculation and expression of results.....	20
8.6 Test report.....	20
8.7 Precision.....	21
Annex A (informative) Compressed Shear Bond Test (CSBT)	22
Annex B (informative) Alternative Shear Bond Test (ASBT)	31
Annex C (informative) Layer Adhesion Measuring Instrument (LAMI)	34
Bibliography	45

European foreword

This document (EN 12697-48:2021+A1:2025) 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 June 2026, and conflicting national standards shall be withdrawn at the latest by June 2026.

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.

This document includes Amendment 1 approved by CEN on 17 October 2025.

This document supersedes EN 12697-48:2021.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

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

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies 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, Türkiye and the United Kingdom.

EN 12697-48:2021+A1:2025 (E)**1 Scope**

This document specifies test methods for determining the bond strength between an asphalt layer and other newly constructed construction layers or existing substrates in road or airfield pavements. The tests can also be applied on laboratory prepared interlayers.

The normative tests described in this document are:

- Torque Bond Test (TBT), generally applicable to any layer thicknesses;
- Shear Bond Test (SBT), generally applicable to layer thicknesses > 15 mm;
- Tensile Adhesion Test (TAT), generally applicable to layer thicknesses ≤ 15 mm.

NOTE Further non-normative test methods are described in informative annexes:

- Annex A (informative) - Compressed Shear Bond Test (CSBT);
- Annex B (informative) - Alternative Shear Bond Test (ASBT);
- Annex C (informative) - Layer Adhesion Measuring Instrument (LAMI).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 12697-27, *Bituminous mixtures — Test methods — Part 27: Sampling*

EN 12697-29, *Bituminous mixtures — Test methods — Part 29: Determination of the dimensions of a bituminous specimen*

EN 12697-33, *Bituminous mixtures — Test methods — Part 33: Specimen prepared by roller compactor*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN