

Flexible sheets for waterproofing - Bitumen sheets for roof waterproofing - Determination of adhesion of granules

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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ICS 91.100.50

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English Version

Flexible sheets for waterproofing - Bitumen sheets for roof waterproofing - Determination of adhesion of granules

Feuilles souples d'étanchéité - Feuilles d'étanchéité de
toiture bitumineuses - Détermination de l'adhérence
des granulats

Abdichtungsbahnen - Bitumenbahnen für
Dachabdichtungen - Bestimmung der
Bestreuungshaftung

This European Standard was approved by CEN on 20 May 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.

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This document consolidates EN 12039:2016 and the corrigendum EN 12039:2016/AC:2017.



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

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European foreword

This document (EN 12039:2016) has been prepared by Technical Committee CEN/TC 254 “Flexible sheets for waterproofing”, the secretariat of which is held by NEN.

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of an identical text or by endorsement, at the latest by December 2016, and conflicting national standards shall be withdrawn at the latest by December 2016.

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 supersedes EN 12039:1999.

List of main changes since this new edition:

- a) editorial changes;
- b) replacement of ISO 565 in B.1.2.

This document includes the corrigendum EN 12039:2016/AC:2017 which corrects the third paragraph of 5.2.

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, 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.

1 Scope

This European Standard applies to the apparatus and the test procedure used for the determination of the adhesion of granules to factory made bituminous sheets for roofing. It can also be used in other areas where it is relevant.

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 13416:2001, *Flexible sheets for waterproofing - Bitumen, plastic and rubber sheets for roof waterproofing - Rules for sampling*

ISO 3310-1, *Test sieves — Technical requirements and testing — Part 1: Test sieves of metal wire cloth*

3 Terms and definitions

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

3.1

surface

upper side of the sheet, as used in situ; which is usually the inside of the roll

3.2

granule

particle which does not pass a sieve as defined in B.1.2

4 Principle



The method determines the adhesion of granules during a brushing test under specified conditions. The mass of brushed-off granules is compared to the original mass of granules on a test specimen cut off from the same roll.

5 Apparatus

5.1 Brushing machine, working automatically to perform outward and return cyclic linear movements between a replaceable brush applied with a force of $(21,5 \pm 0,5)$ N on the surface of the test specimen, and the test specimen itself. The constant amplitude A of the relative movement of the axis of the replaceable brush is (200 ± 20) mm, and the average displacement speed is such that 50 cycles are achieved within (55 ± 5) s. The brushing machine shall include suitable clamps, at least 50 mm wide, to restrain the ends of the specimen.

5.2 Replaceable brush, consisting of a block of a suitable material in which 22 holes are drilled as indicated in Figure A.1, with a 4 mm diameter. From each hole, 22 polyamide 66 yarns, diameter 0,80 mm project (16 ± 2) mm.

The effective area of the replaceable brush, when loaded, is 80 mm × 25 mm. The effective brushed area B , as shown in Figure A.2, is $[(A + 80) \times 25]$ mm².

 A single replaceable brush shall be used if yarns are projecting less than 13 mm from a hole. 

5.3 Balance, accurate to the nearest 0,01 g.