SLOVENSKI STANDARD
SIST EN 1903:2015

01-julij-2015

Nadomešča:
SIST EN 1903:2009

Lepila - Preskusna metoda za lepila za polimerne ali gumene talne in stenske obloge - Ugotavljanje sprememb mer po pospešenem staranju

Adhesives - Test method for adhesives for plastic or rubber floor coverings or wall coverings - Determination of dimensional changes after accelerated ageing

Klebstoffe - Prüfverfahren für Klebstoffe für Boden- und Wandbeläge aus Kunststoff oder Gummi - Bestimmung der Maßänderungen nach beschleunigter Alterung

Adhésifs - Méthodes d'essai des adhésifs aux revêtements de sol ou mural en plastique ou en caoutchouc - Détermination des variations dimensionnelles après un vieillissement accéléré

Ta slovenski standard je istoveten z: **EN 1903:2015**

ICS:

83.180	Lepila	Adhesives

SIST EN 1903:2015 **en,fr,de**

EUROPEAN STANDARD
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EN 1903

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ICS 83.180

Supersedes EN 1903:2008

English Version

Adhesives - Test method for adhesives for plastic or rubber floor coverings or wall coverings - Determination of dimensional changes after accelerated ageing

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

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Foreword

This document (EN 1903:2015) has been prepared by Technical Committee CEN/TC 193 “Adhesives”, the secretariat of which is held by AENOR.

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of an identical text or by endorsement, at the latest by October 2015 and conflicting national standards shall be withdrawn at the latest by October 2015.

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 1903:2008.

The main change in respect to EN 1903:2008 is the change of the roller dimensions.

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1 Scope

This European Standard specifies a test method that measures the dimensional changes of a plastic or rubber floor or wall covering bonded to a given substrate after accelerated ageing. The term “wall covering” does not include any type of wallpaper.

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 923:2005+A1:2008, *Adhesives - Terms and definitions*

EN 1067, *Adhesives - Examination and preparation of samples for testing*

EN ISO 9142, *Adhesives - Guide to the selection of standard laboratory ageing conditions for testing bonded joints (ISO 9142)*

EN ISO 15605, *Adhesives - Sampling (ISO 15605)*

ISO 554, *Standard atmospheres for conditioning and/or testing - Specifications*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 923:2005+A1:2008 and the following apply.

3.1
covering
flexible resilient or textile floor covering or wall covering

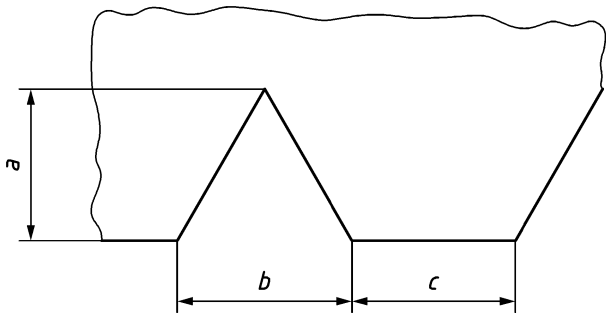
3.2
adhesive for coverings
adhesive which is intended to produce firm and durable bonds between coverings and various substrates

4 Principle

This test method gives a measure of the suitability of a plastic or rubber floor or wall covering/adhesive combination by monitoring dimensional changes during defined conditioning sequences when bonded to a specific substrate.

5 Apparatus and materials

5.1 Notched trowel (for the shape of the notch, see Figure 1) with dimensions *a*, *b* and *c* specified by the adhesive manufacturer.



Key

a notch depth

b notch width

c notch distance

Figure 1 — Shape of notches of notched trowels

5.2 **Roller**, of width (60 ± 5) mm, diameter (90 ± 5) mm and total mass (3,50 ± 0,05) kg with a handle at 90° to the axis (as an example, see Figure 2).

Dimensions in millimetres

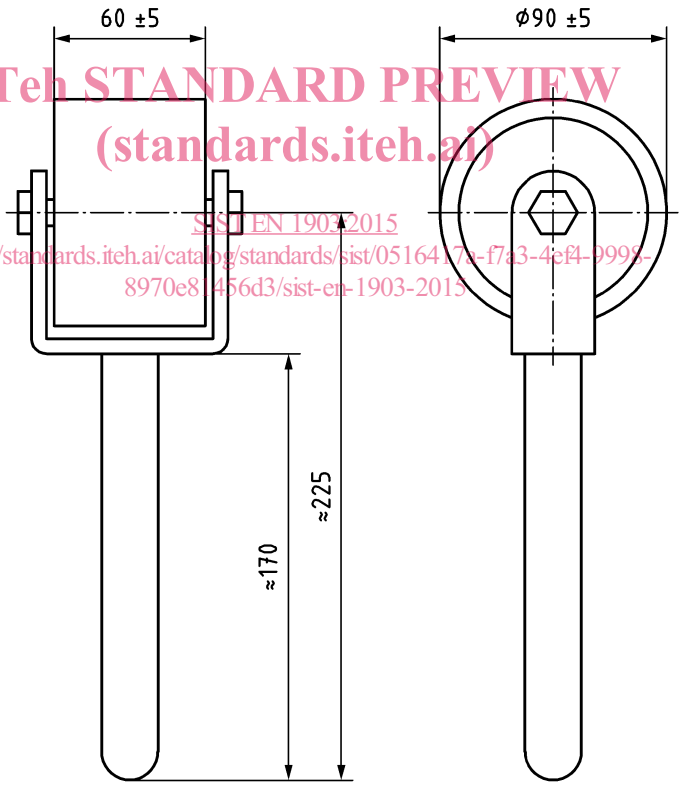


Figure 2 — Roller

NOTE The length of the handle is not critical and can be used for setting the total mass.

5.3 **Heating chamber**, ventilated and adjustable to a temperature between 20 °C and 200 °C according to EN ISO 9142.

5.4 **Primer**, if applicable.

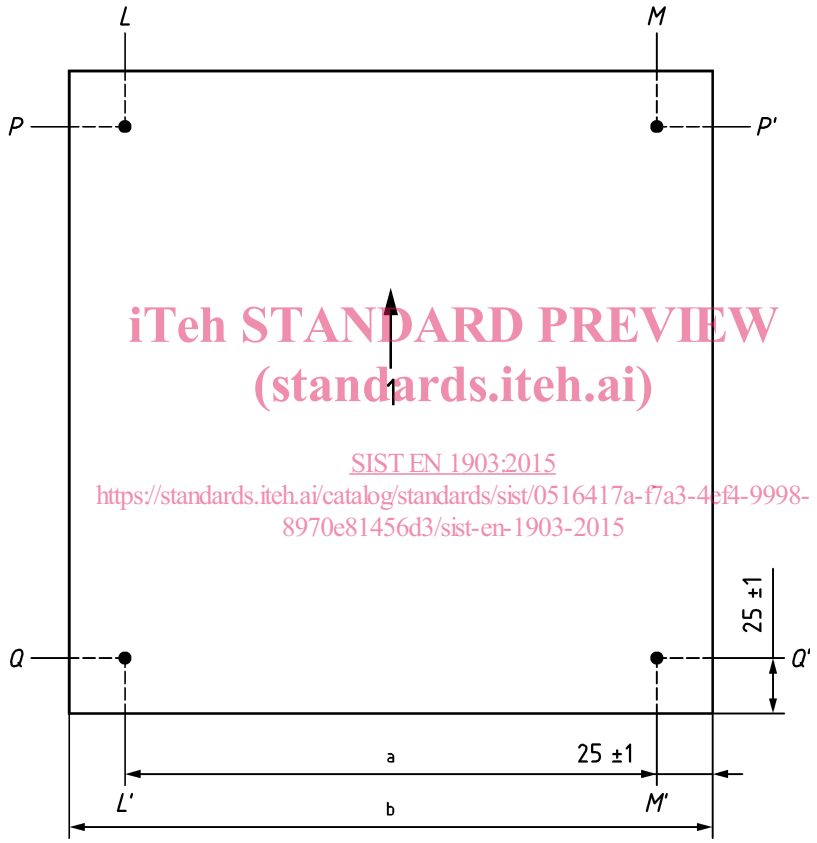
5.5 Test covering, three test pieces for each combination with adhesive dimensions of (250 ± 5) mm × (250 ± 5) mm or (300 ± 5) mm × (300 ± 5) mm.

5.6 Substrate, one uncoated fibre cement panel, fully compressed and autoclaved, of a minimum thickness of approximately 8,0 mm for each test piece. Dimensions shall not be greater than 50 mm longer than the distance between the datum points, i.e. each datum point shall not be greater than (25 ± 1) mm from the outer edge (see Figure 3).

NOTE 1 The thickness is not critical.

NOTE 2 Depending on the source of the fibre cement panels the surfaces can differ with respect to gloss, absorbency and strength. In this case, it is important to do some preliminary assessment (i.e. peel tests) of the panels to identify the preferred side for testing. The preferred side will be called the upper side of the substrate in this standard.

Dimensions in millimetres



Key

1 grain direction

a measurements between studs

b edge to edge measurements

Figure 3 — Measurements

Where edge to edge measurements are being carried out, recommended dimensions are approximately 300 mm × 300 mm.

5.7 Suitable measuring devices, capable of measuring to the nearest 0,01 mm over a length of either 200 mm or 250 mm, e.g. an elongation meter.

5.8 Adhesives, for fixing gauge studs to the covering surface if required by the measuring method.

6 Preparation of test specimens

6.1 Conditioning of fibre cement substrate

Place the test panels (5.6) in a heating chamber (5.3) for 6 h at (80 ± 2) °C. Ensure that the test panels are spaced in such a way as to enable a free passage of air over them. At the end of this period, remove the test panels from the heating oven and store in a standard atmosphere of (23 ± 2) °C and (50 ± 5) % relative humidity for at least 48 h prior to use.

6.2 Conditioning of test covering

6.2.1 Room temperature storage

Condition all test pieces (5.5) in a standard atmosphere of (23 ± 2) °C and (50 ± 5) % relative humidity for at least 24 h prior to use.

6.2.2 Elevated temperature pre-treatment

Place the test pieces (5.5) on a firm horizontal substrate (5.6) and heat for 6 h in a heating chamber (5.3) at (80 ± 2) °C. Ensure that the test pieces and substrate are spaced in such a way as to enable a free passage of air over them. At the end of this period, remove the test pieces and supports from the heating chamber and store for 48 h in a standard atmosphere of (23 ± 2) °C and (50 ± 5) % relative humidity prior to use.

The pre-treatment will release any stresses in the covering so that it is in a relaxed state when the actual test is commenced. The pre-treatment of the test coverings may be run together with the conditioning of the substrate (6.2).

In most cases a more practical assessment is required. Pre-conditioning of the floor or wall covering materials at elevated temperature (6.2.2) may not be regarded as necessary. If knowledge of dimensional changes after this pre-treatment is required, dimensions should be measured as given in 6.5 before and after the pre-treatment.

6.3 Sampling and conditioning of adhesive

Take a sample in accordance with EN ISO 15605 of the adhesive to be tested and examine and prepare it in accordance with EN 1067.

Condition the adhesive in a standard atmosphere of (23 ± 2) °C and (50 ± 5) % relative humidity for at least 24 h before making the test specimens, in accordance with ISO 554.

6.4 Datum points

6.4.1 Fixing of gauge positions

Using the appropriate adhesive, fix the gauge studs in four positions, each being (25 ± 1) mm from the outer edge of the covering (see Figure 3).

6.4.2 Edge to edge measurements

Test specimens shall be marked at positions (25 ± 1) mm from each edge.

6.5 Initial measurements of dimensions prior to bonding

Measure the dimension of each test piece along the two datum lines LL' and MM' parallel to its grain, when this can be identified, (longitudinally) and the two datum lines PP' and QQ' at right angles to these lines (transversely). Record as measurement A.