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Buildings and civil engineering works — Determination of the staining of porous substrates by sealants used in joints —

Part 1: Test with compression

Bâtiments et ouvrages de génie civil — Détermination du tachage des supports poreux par les mastics utilisés dans les joints —

Partie 1: Essai avec compression

Reference number
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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 59, *Buildings and civil engineering works*, Subcommittee SC 8, *Sealants.*

This second edition cancels and replaces the first edition (ISO 16938-1:2008), which has been technically revised.

The main changes compared to the previous edition are as follows:

— the title of the document has been modified;

— the figures have been modified and notes were added to provide further explanation;

— Figure 4 has been replaced by Table 2.

A list of all parts in the ISO 16938 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Buildings and civil engineering works — Determination of the staining of porous substrates by sealants used in joints —

Part 1: Test with compression

1 Scope

This document specifies a method for determining the staining of porous substrates (e.g. marble, limestone, sandstone or granite) by sealants used in building construction. The method evaluates the likelihood of a sealant causing an early stain on a porous substrate due to exudation of materials from the sealant. The outcome of the test is specific to the tested sealant and tested substrate and cannot be extrapolated to other sealant formulations or other porous substrates. During this accelerated test, if the sealant does not stain or discolour the substrates, it does not mean that the tested sealant will not stain or discolour the tested porous substrate over a longer time period.

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.

ISO 4892-1, *Plastics — Methods of exposure to laboratory light sources — Part 1: General guidance*

ISO 4892-2:2013, *Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc lamps*

ISO 4892-3, *Plastics — Methods of exposure to laboratory light sources — Part 3: Fluorescent UV lamps*

ISO 6927, *Buildings and civil engineering works — Sealants — Vocabulary*

ISO 11431:2002, *Building construction — Jointing products — Determination of adhesion/cohesion properties of sealants after exposure to heat, water and artificial light through glass*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6927 apply.

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

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

4 Principle

This method measures the visible staining attributed to joint sealants on porous substrates that is a result of the conditioning specified.

A sealant is applied and cured between two pieces of porous substrate. The test specimens are compressed and then subjected to heat aging and/or cold aging and/or aging in actinic radiation accelerated weathering equipment. After aging, the test specimens are evaluated and visible staining is

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