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Building construction — Sealants — Determination of resistance to prolonged exposure to water

*Construction immobilière — Mastics — Détermination de la résistance à
une immersion prolongée dans l'eau*



Reference number
ISO 13638:1996(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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Building construction — Sealants — Determination of resistance to prolonged exposure to water

1 Scope

This International Standard specifies a method for the determination of the ability of sealants to resist differing degrees of exposure to water under conditions of service.

The method assesses the effects of water immersion, for specified durations of time, on the ability of the sealant to fulfil its essential functions, principally to withstand joint movements.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revisions, and parties to agreement based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 6927:1981, *Building construction — Jointing products — Sealants — Vocabulary*.

ISO 9046:1987, *Building construction — Sealants — Determination of adhesion/cohesion properties at constant temperature*.

ISO 9047:1989, *Building construction — Sealants — Determination of adhesion/cohesion properties at variable temperatures*.

ISO 11600:1993, *Building construction — Sealants — Classification and requirements*.

3 Definitions

For the purposes of this International Standard, the definitions given in ISO 6927 apply.

4 Principle

Test specimens are prepared in which the sealant to be tested adheres to two parallel contact surfaces. After immersion of the test specimens in water under defined conditions, they are subjected to repeated extension and compression movements in a suitable device, at an amplitude which is 50 % of that used in the test to assess the respective movement accommodation factor. This procedure is repeated a number of times, or until failure of one or more test specimens is observed. The number of repetitions of water immersion followed by extension/compression movement is related to the expected water resistance in service.

Water immersion may be carried out either at ambient temperature (23 °C), or at elevated temperature (40 °C or 50 °C) to accelerate the influence of the exposure to water.