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Buildings and civil engineering works — Sealants — Determination of tear resistance

Bâtiments et ouvrages de génie civil — Mastics — Détermination de la résistance au déchirement

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Foreword

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The committee responsible for this document is ISO/TC 59, *Buildings and civil engineering works*, Subcommittee SC 8, *Sealants*.

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Buildings and civil engineering works — Sealants — Determination of tear resistance

1 Scope

This international standard specifies a method for the determination of the tear resistance of sealants used in joints in building construction.

2 Normative reference

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.

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

3 Terms and definitions

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

4 Principle

Test specimens are prepared such that the sealant to be tested adheres to two parallel contact surfaces. An incision is realized in the sealant to a defined length. The test specimens are extended to a defined width and this extension is maintained under defined conditions. Any tear propagation is noted.

5 Apparatus

5.1 Substrate materials, used for the preparation of test specimens as defined in ISO 13640. Other substrate materials may be used as agreed by the parties concerned.

For each test specimen, two substrate pieces of the same material are required with a cross section of dimensions as shown in Figure 1. Test substrates of other dimensions may be used, but then the dimensions of the sealant bead and the area of adhesion shall be the same as those shown in Figure 1.

5.2 Spacers, cross section (12 mm × 12 mm) with anti-adherent surface. For the preparation of test specimens see Figure 1.

5.3 Anti-adherent substrate, which is for the preparation of the test specimens, for example, polyethylene (PE) film, preferably according to the advice of the sealant manufacturer.

5.4 Tensile test machine, capable of extending the test specimens at a rate of (5,5 ± 0,7) mm/min.

5.5 Ventilated convection-type oven, capable of being maintained at (70 ± 2) °C for conditioning according to method B (see 7.3).

5.6 Container, immersing test specimens in distilled water for conditioning according to method B (see 7.3).

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