

ICS 91.100.50
CCS G 38



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 46168-2025

**Building and civil engineering sealants - Determination of
application life**
(English Translation)

Issued on: August 29, 2025

Implemented on: March 1, 2026

Issued by: State Administration for Market Regulation

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is equivalent to ISO 4781:2022 "Determination of workability time of sealants for building and civil engineering".

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China Petroleum and Chemical Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Standardization of Adhesives (SAC/TC185).

1 Scope

This document describes a method for determining the workability of multi-component sealants.

Note: The method for determining workability time is only applicable to multi-component sealants.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

Note: GB/T 14682-2006 Terminology for Building Sealing Materials (ISO 6927:1981, NEQ) ISO 8394-2 Determination of extrudability of sealants for building and civil engineering - Part 2: Standardized equipment method (ratus) Note. GB/T 13477.3-2017 Building Sealing Materials Test Methods Part 3: Method for determining the extrudability of sealing materials using standard apparatus (ISO) 8394-2:2010, MOD)

3 Terms and Definitions

The terms and definitions defined in ISO 6927 and the following terms and definitions apply to this document.

Application life

According to the manufacturer's instructions, this is the maximum time a user can apply the multi-component sealant after mixing its components.

Note 1: Working time is the longest time that the mixed sealant can maintain its minimum extrudability.

Note 2: Operable time is also often referred to as "service life" or "working life," but the definitions of these terms and the associated testing methods may differ.

"Optimization time" is related to operational time, and they differ in terms of terminology and related testing methods.

4 Principles

Within a certain time interval after the start of the curing process of the multi-component sealant, the sealant is extruded from a standard instrument under specified conditions to achieve a tight seal.

The extrusion quality of the sealant determines the workability of a multi-component sealant. Once the sealant's quality is within 30 seconds of being extruded from a standard apparatus at a low level...

At a predetermined limit (e.g., specified by the sealant manufacturer), the sealant reaches the end of its workable time.

5.1 Incubator

The temperature can be adjusted to $(23 \pm 2)^{\circ}\text{C}$ or the temperature agreed upon by all parties.