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

GB/T 43747-2024

**Evaluation of adhesion properties of sealants - Strip peel
method**

密封胶粘接性的评价 胶条剥离法

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is modified to adopt ISO 23658:2020 "Testing the adhesion of sealants for building and civil engineering - Peel test".

Compared with ISO 23658:2020, this document has many structural adjustments. Comparison table of structural number changes between the two documents See Appendix A.

This document has many technical differences compared to ISO 23658:2020.

A single line (|) is used to indicate these technical differences. A list of these technical differences and their reasons is given in Appendix B.

The following editorial changes were made to this document.

--- In order to coordinate with the existing standards, the name of the standard is changed to "Evaluation of sealant adhesion - Strip peeling method";

--- Deleted the examples in aging simulation (see Chapter 7) to adapt to my country's national conditions;

---Removed references.

1 Scope

This document describes the minimum elongation at break greater than 25% of the sealant and various substrates (including but not limited to. glass, aluminum, aluminum-plastic panels, Test method for adhesion of plastics (stone, etc.).

This document is applicable to the evaluation of sealant adhesion using the strip peeling method.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

GB/T 2943 Adhesive Terminology GB/T 16997 Method for expressing the main failure types of adhesives (GB/T 16997-1997, ISO 10365:1992, IDT) GB/T 21526 Guidelines for surface preparation of metals and plastics before bonding with structural adhesives GB/T 33403 Test method for self-leveling properties of adhesives

3 Terms and definitions

The terms and definitions defined in GB/T 2943 and GB/T 33403 apply to this document.

4 Principle

The sealant is applied to the substrate and after curing under specified conditions or specific aging conditions, the sealant sample is peeled off the substrate with a handheld tool.

Separate the sealant from the substrate and test the adhesion of the sealant to the substrate, and record the type of sealant failure.

5.1 Specimen preparation and pretreatment

5.1.1

Sample conditioning. Place the packaged sealant in an environment with a temperature of $(23 \pm 2) ^\circ\text{C}$ and a relative humidity of $(50 \pm 10)\%$ for at least 24 h.

In case of multi-component samples, all components should be processed simultaneously.

5.1.2

Selection of substrate and surface treatment. Surface treatment should be carried out in accordance with GB/T 21526.

According to the requirements, select the corresponding substrate and surface treatment method.

5.1.3

Test tools. glue dispenser, sharp knife or glue breaker.

5.2.1 Mold-free method

This method is applicable to non-self-leveling sealants. According to the test purpose, no less than two sealant strips should be prepared on each substrate.