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

GB/T 46993-2025

**Thermal insulation products - Aerogel blanket for buildings -
Specification**

绝热材料 建筑用气凝胶毯 规范

(English Translation)

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Table of Contents

Foreword
1 Scope
2 Normative references
3 Terms, definitions, symbols and abbreviations

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".

This document is modified to adopt ISO 22482:2021 "Insulation materials - Aerogel blankets for building use".

This document has undergone significant structural adjustments compared to ISO 22482:2021. A table comparing the structural numbering changes between the two documents is provided. See Appendix A.

This document differs significantly from ISO 22482:2021. The relevant clauses are indicated in vertical margins.

Single lines (|) are indicated. A summary of these technical differences and their causes can be found in Appendix B. The following editorial changes have been made to this document.

---3.2 added a note.

1 Scope

This document specifies the technical requirements, marking, inspection rules and identification for factory-made aerogel blankets for building insulation, and describes the test methods.

This document applies to blanket-like building insulation materials with high porosity and nanopores, made from aerogel and inorganic fiber substrate composites. Production.

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 to this document.

GB/T 5480 Test methods for mineral wool and its products

GB 8624 Classification of fire performance of building materials and products

GB/T 10294 Determination of steady-state thermal resistance and related properties of thermal insulation materials - Protective hot plate method (GB/T 10294-2008, ISO 8302:1991, IDT)

GB/T 10295 Determination of steady-state thermal resistance and related properties of thermal insulation materials - Heat flow meter method (GB/T 10295-2008, ISO 8301:1991, IDT)

GB/T 11835-2016 Rock wool, slag wool and their products for thermal insulation

GB/T 13480 Determination of compressive properties of thermal insulation products for building (GB/T 13480-2014, ISO 29469:2008, IDT)

GB/T 17393 Specification for Thermal Insulation Materials Covering Austenitic Stainless Steel

GB/T 30807 Determination of long-term water absorption of building insulation products by immersion method (GB/T 30807-2025, ISO 16535:2019, IDT)

3.1 Terms and Definitions

The following terms and definitions apply to this document.

3.1.1 Aerogel

Nanoscale porous solid materials are formed by using the sol-gel method to replace the liquid phase in the gel with gas through a certain drying process.