

ICS 91.100.60

CCS Q 25



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

GB/T 33158-2016

**Thermal insulating products for building applications --
Determination of behaviour under cyclic loading**

建筑用绝热制品 循环载荷性能的测定

(English Translation)

Issued on: October 13, 2016

Implemented on: September 1, 2017

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China**

Table of Contents

Foreword

1 Scope

2 Normative reference documents

3 Terms and definitions

Foreword

This standard is drafted in accordance with the rules given in GB/T 1.1-2009.

This standard uses the translation method equivalent to ISO 16545.:2012 "building insulation products with cyclic load performance determination".

And the normative reference in this standard international documents are consistent with the relationship between China's documents are as follows.

GB/T 13480-2014 Determination of compression performance of building insulation articles (ISO 29469.:2008, IDT) this standard is nationalized by the National Standardization Technical Committee for Thermal Insulation (SAC/TC191).

The drafting unit. Nanjing Glass Fiber Research and Design Institute Co., Ltd., Shenzhen Jintai Detection Technology Co., Ltd., the national glass fiber Dimensional product quality supervision and inspection center.

1 Scope

This standard specifies the equipment and procedures required to determine the performance of the specimen under cyclic loading.

This standard applies to building insulation products.

The choice of test conditions depends on the expected specific requirements of the specimen.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article Pieces. For undated references, the latest edition (including all modifications) applies to this document.

ISO 29469 Determination of the compressive properties of building insulation articles (Thermalinsulatingproducts forbuildingappli-cations-Determination ofcompressionbehaviour

ISO 29768 Thermal insulation for building insulation products - Determination of linear dimensions (Thermalinsulatingproducts forbuilding applications-Determinationoflineardimensionsof testspecimens)

3 Terms and definitions

The following terms and definitions apply to this document.

Thickness

The original thickness of the specimen.

Compressive stress σ the ratio of the compressive load to the initial cross-sectional area of the specimen.

σ_{min} . the lower limit of pressure under a cyclic load;

σ_{max} . the upper limit of pressure under a cyclic load.

Deformation the difference between the thickness of the specimen between $X_{i, max}$ and $X_{i, min}$.

$X_{i, min}$ The thickness of the specimen at the lower limit of pressure under i cyclic loading;

$X_{i, max}$ The thickness of the specimen at the upper limit of the pressure at i under cyclic loading.

Relative deformation the ratio of the thickness of the specimen to the thickness in the direction of the load is expressed as a percentage.