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

GB/T 35166-2017

**Hygrothermal performance of building materials and products --
Determination of moisture adsorption/desorption properties in
response to humidity variation**

建筑材料及制品的湿热性能 吸放湿性能的测定 湿度反应法

(English Translation)

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Foreword

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

This standard uses the translation method identical with ISO 24353:2008 "Determination of moisture absorption/desorption properties of building materials and products Humidity reaction method. " this standard made the following editorial changes.

Put the bet of Table 1 in the original ISO 24353:2008 into the table;

The original ISO 24353:2008 Appendix A to Appendix B, Appendix B to Appendix A.

This standard proposed by the China Building Materials Federation.

This standard by the National Standardization Technical Committee thermal insulation material (SAC/TC191) centralized.

This standard drafting unit. China Building Materials Science Research Institute, Beijing Dacheng diatom New Materials Co., Ltd., Shenzhen Hui Yi Dehuan Paul Material Co., Ltd., Tianjin Shengmao Diatoms Technology Co., Ltd., Changxing East Red Synthetic Materials Co., Ltd., Guangzhou City, Victoria Dov Environmental Science and Technology have Limited, Shenzhen Hirota Decoration Group Co., Ltd., Jilin Province, Lanshe diatom mud New Materials Co., Ltd. Yingkou Panpan Diatoms Materials Group Limited Company, Qingdao Daqin diatom mud wall Co., Ltd., Shenzhen Shenzhuang Decoration Engineering Co., Ltd., Guilin Hsinchu nature of biological materials Co., Ltd., Beijing Dazuo diatom New Materials Technology Co., Ltd., Jilin Green Forest Environmental Protection Technology Co., Ltd., Hunan blue dolphin diatoms Mud New Materials Co., Ltd., Shanghai Lianglong Jinbao New Material Co., Ltd., Foshan Shunde Wenbao Technology Co., Ltd., Fujian Wukesong new Material Co., Ltd.

1 Scope

This standard specifies the use of humidity reaction method for determination of building materials absorption/release performance of the sample, test equipment, the surface (water

vapor) through the wet Resistance settings, test methods, calculations and inspection reports. This standard also defines the suction/desorption efficiency of building materials, passing the sample at the same temperature bar Under the conditions of a relative humidity from the space to another room for different relative humidity changes in quality to determine.

The material's absorption/desorption performance can be measured in a single cycle or in multiple cycles.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

Hygrothermal performance of building materials and articles - Determination of hygroscopicity (ISO 12571:2000, IDT) GB/T 20312-2006 ISO 12572:2001, Building materials and products - Determination of moisture vapor transmission performance (Hygrothermalperformance ofbuildingmaterialsandproducts-Determinationofwatervapourtransmissionproperties)

3.1 Terms and definitions

The following terms and definitions apply to this document.

3.1.1

Suction/release moistureadsorption/desorptionproperty Material suction/release wet ability and efficiency of the performance.

3.1.2

Moisture absorption process moistureadsorptionprocess Material absorbs moisture from the surrounding environment to achieve equilibrium.

3.1.3

Wet process moisturedesorptionprocess Material to the surrounding environment to release moisture to balance the process.

3.1.4

Moisture content moistureadsorptioncontent the total amount of moisture absorbed per unit area of material.

3.1.5

Moisture content moisture desorptioncontent the amount of moisture released per unit area of material.