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**BUILDING MATERIALS INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

JC/T 564.1-2018

**Fiber reinforced calcium silicate boards - Part 1: Non-asbestos
calcium silicate boards
(English Translation)**

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Table of Contents

Foreword...	3
1 Scope...	6
2 Normative references...	6
3 Terms and definitions...	7
4 Classification, grades, specifications, markings...	8
5 Raw materials...	10
6 Requirements...	10
7 Test methods...	13
8 Inspection rules...	14
9 Signs and certificates...	20
10 Transportation, packaging, storage...	20
Appendix A (Normative) Raw material...	22

Foreword

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

JC/T 564 "Fiber-reinforced calcium silicate board" is divided into two parts:

- Part 1: Non-asbestos calcium silicate boards;
- Part 2: Asbestos calcium silicate board.

This part is the part 1 of JC/T 564. This part was revised with reference to ISO 8336:2009 "Fiber-cement flat sheets - Product specification and test methods", ISO 1896:1991 "Products in fiber-reinforced cement - Non-combustible fiber-reinforced boards of calcium silicate or cement for insulation and fire protection", ISO 390:1993 "Products in fiber-reinforced cement - Sampling and inspection".

This part replaces JC/T 564.1-2008. As compared with JC/T 564.1-2008, in addition to editorial changes, the main technical changes are as follows:

- MODIFY the "Scope". DEFINE that this part is applicable to the non-asbestos calcium silicate boards which have fireproof, thermal insulation, dampproof requirements as used for building interior wall panels, exterior

wall panels, suspended ceiling panels, carriages, offshore structures, ship interior partitions, composite insulation panels; it may also be applicable to the non-asbestos calcium silicate boards which are suitable for other purposes such as home decoration (see clause 1; clause 1 of the 2006 version);

- MODIFY the expressions in the normative references (see clause 2; clause

2 of the 2008 version);

- In the normative reference, MODIFY the year number of GB/T 5464, GB/T 7109, GB 8624, GB/T 10294; ADD 6 standards: GB/T 12954.1-2008, GB/T 23263-2009, GB/T 24321, JC/T 409, JC/T 414, JC/T 622 (see clause 2; clause 2 of the 2008 version);

- MODIFY the definition of fiber-reinforced calcium silicate boards (see clause 3; clause 3 of the 2008 version);

- ADD the definition of the textured sheets and saturated shear board performance (see clause 3);

- ADJUST the specification size. INCREASE the length to 4880 mm (see Table 2; Table 1 of the 2008 version);

- The non-asbestos calcium silicate board is divided into three categories according to the use, that is, category A, B, C. MAKE corresponding adjustments for the markings of the flexural strength grade and the impact strength grade (see clause 4; clause 4 of the 2008 version);

- MODIFY the standard basis for the raw materials (see clause 5; clause 5 of the 2008 version);

- In the appearance quality, MODIFY the back quality requirements (see Table 3; Table 2 of the 2008 version);

- Separately LIST the shape deviations. For the thickness non-uniformity in the shape deviation, PROPOSE different indicators based on thickness. Appropriately IMPROVE such indicators as edge straightness, diagonal

difference, flatness (see Table 4; Table 3 of the 2008 version);

- MODIFY the index requirements for dimensional deviation. PROPOSE different indicators for the length and width based on different intervals. The thickness is divided into textured sheets and non-textured sheets.

PROPOSE different indicators based on different thickness intervals (see Table 5; Table 3 of 2008 version);

- ADD the requirements for asbestos composition;

- MODIFY the requirements for the items and indicators of physical properties. CANCEL the indicators of moisture content and heat shrinkage rate. The apparent density is explained by the supplier in the quality document. ADD the requirements for such indicators as moisture absorption rate, hot rain performance, hot water performance, immersion-drying performance, flexural strength in frost-resistance test (see Table 6; Table 4 of the 2008 version);

- MODIFY the code of flexural strength grade to R1, R2, R3, R4, R5. MODIFY the flexural strength indicator. CHANGE the vertical and horizontal strength ratio items in the original standard into the lowest strength of single block; for the category A and B sheets, CHANGE it into the requirements for strength indicator in saturated state. ADD the requirements for three mechanical properties: impact strength, impact resistance, saturated shear board performance (see Tables 7 and 8; Table 5 of the 2008 version);

- MODIFY the representation of the test method. USE form to list the test method corresponding to each item. SUPPLEMENT the test method of the test items as added in this part (see Table 9; clause 7 of the 2008 version);

- ADJUST the exit-factory inspection items. CANCEL the moisture content. ADD the item of water absorption rate (see 8.2.1; 8.2.1 of the 2008 version);

- MODIFY the type inspection conditions (see 8.3.1; 8.1.2 of the 2008 version);

Fiber reinforced calcium silicate boards -

Part 1: Non-asbestos calcium silicate boards

1 Scope

This part specifies the terms and definitions, classification, grades, specifications and markings, raw materials, requirements, test methods, inspection rules, signs, certificates, transportation, packaging, storage of non-asbestos calcium silicate boards (shortly referred to as non-asbestos calcium silicate boards).

This part is applicable to the non-asbestos calcium silicate boards which have fireproof, thermal insulation, dampproof requirements as used for building interior wall panels, exterior wall panels, suspended ceiling panels, carriages, offshore structures, ship interior partitions, composite insulation panels; it may also be applicable to the non-asbestos calcium silicate boards which are suitable for other purposes such as home decoration

2 Normative references

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) are applicable to this standard.

GB 175 Common Portland cement

GB/T 5464-2010 Non-combustibility test method for building materials

GB/T 7019-2014 Test methods for fiber cement products

GB 8624-2012 Classification for burning behavior of building materials and products

GB/T 10294-2008 Thermal insulation - Determination of steady-state thermal resistance and related properties - Guarded hot plate apparatus

GB/T 12954.1-2008 Testing methods for construction adhesives - Part 1: Test methods for ceramic tiles adhesives