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

GB/T 4100-2015

Ceramic tiles
(English Translation)

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Foreword

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

This Standard replaces GB/T 4100-2006 "Ceramic tiles". Compared with GB/T 4100-2006, the main technical changes are as follows.

- ADD the specifications for the thickness of ceramic tiles (see 7.3);
- DELETE extruded ceramic tiles $3\% < E \leq 6\%$, Group Alla - Part 2 (see Annex C of 2006 edition);
- DELETE extruded ceramic tiles $6\% < E \leq 10\%$, Group Allb - Part 2 (see Annex

E of 2006 edition);

- MODIFY the requirements for the coefficient of friction of ceramic tiles (See Annex A, Annex B, Annex C, Annex D, Annex E, Annex G, Annex H, Annex J, Annex K, Annex L of this Standard, Annex A, Annex B, Annex C, Annex D, Annex E, Annex G, Annex H, Annex J, Annex K, Annex L of 2006 edition);
- MODIFY the requirements for the small colour difference of ceramic tiles (See Annex A, Annex B, Annex C, Annex D, Annex E, Annex G, Annex H, Annex J, Annex K, Annex L of this Standard, Annex A, Annex B, Annex C, Annex D, Annex E, Annex G, Annex H, Annex J, Annex K, Annex L of 2006 edition);
- MODIFY the classification method for the technical requirements of dry-pressed ceramic tiles, from the classification according to product surface areas to the classification according to nominal sizes (see Annex G, Annex H, Annex J, Annex K of this Standard, Annex G, Annex H, Annex J, Annex K of 2006 edition);
- MODIFY the classification method for the technical requirements of ceramic tiles, from the classification according to whether there are spacer lugs to the classification according to nominal sizes (see Annex L of this Standard, Annex L of 2006 edition).

This Standard uses the re-drafting method to modify and adopt ISO 13006.2012 "Ceramic tiles - Definitions, classification, characteristics and marking".

Compared with ISO 13006.2012, this Standard has added 3 clauses (7.1, 7.2, 7.3) in the structure, and added the thickness of ceramic tiles (see 7.3), to meet the needs of the thinness tendency of China's ceramic tiles. ADD an annex (Annex M) to unify the determination method for coefficient of friction. DELETE two annexes of ISO

13006.2012 (Annex C and Annex E of ISO 13006.2012), that is, cancel part 2 in Group

Alla extruded ceramic tiles ($3 \% < E \leq 6 \%$) of medium water absorption and part 2 in Group Allb extruded ceramic tiles ($6 \% < E \leq 10 \%$) of medium water absorption, which Ceramic tiles

1 Scope

This Standard specifies terms and definitions, classifications, characteristics, sampling and basis for acceptance, requirements and test methods, marking and specifications for ceramic tiles.

This Standard is applicable to ceramic tiles made by extrusion or dry pressing.

This Standard is not applicable to ceramic accessory tiles.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 3810.1 Test methods of ceramic tiles - Part 1. Sampling and basis for acceptance (GB/T 3810.1-2006, ISO 10545-1.1995, MOD)

GB/T 3810.2 Test methods of ceramic tiles - Part 2. Determination of dimensions and surface quality (GB/T 3810.2-2006, ISO 10545-2.1995, MOD)

GB/T 3810.3 Test method of ceramic tiles - Part 3. Determination of water absorption, apparent porosity, apparent relative density and bulk density (GB/T 3810.3-2006, ISO 10545-3.1995, IDT)

GB/T 3810.4 Test methods of ceramic tiles - Part 4. Determination of modulus of rupture and breaking strength (GB/T 3810.-2006, ISO 10545-4.2004, IDT)

GB/T 3810.5 Test methods of ceramic tiles - Part 5. Determination of impact resistance by measurement of coefficient of restitution (GB/T 3810.5-2006, ISO 10545-5.1996, IDT)

GB/T 3810.6 Test methods of ceramic tiles - Part 6. Determination of resistance to deep abrasion for unglazed tiles (GB/T 3810.6-2006, ISO 10545-6.1995, IDT)

GB/T 3810.7 Test methods of ceramic tiles - Part 7. Determination of resistance to surface abrasion for glazed tiles (GB/T 3810.7-2006, ISO 10545-7.1996, IDT)

GB/T 3810.8 Test methods of ceramic tiles - Part 8. Determination of linear thermal expansion (GB/T 3810.8-2006, ISO 10545-8.1994, IDT)

GB/T 3810.9 Test methods of ceramic tiles - Part 9. Determination of resistance to thermal shock (GB/T 3810.9-2006, ISO10545-9.1994, IDT)

GB/T 3810.10 Test methods of ceramic tiles - Part 10. Determination of moisture expansion (GB/T 3810.10-2006, ISO 10545-10.1995, IDT)

GB/T 3810.11 The methods of ceramic tiles - Part 11. Determination of crazing resistance for glazed tiles (GB/T 3810.11-2006, ISO 10545-11.1994, IDT)

GB/T 3810.12 Test methods of ceramic tiles - Part 12. Determination of frost resistance (GB/T 3810.12-2006, ISO 10545-12.1995, IDT)

GB/T 3810.13 Test methods of ceramic tiles - Part 13. Determination of chemical resistance (GB/T 3810.13-2006, ISO 10545-13.1995, IDT)

GB/T 3810.14 Test methods of ceramic tiles - Part 14. Determination of resistance to stains (GB/T 3810.14-2006, ISO 10545-14.1995, IDT)

GB/T 3810.15 Test methods of ceramic tiles - Part 15. Determination of lead and cadmium given off by glazed tiles (GB/T 3810.15-2006, ISO 10545-15.1995, IDT)

GB/T 3810.16 Test methods of ceramic tiles - Part 16. Determination of small colour differences (GB/T 3810.16-2006, ISO 10545-16.1999, IDT)

GB/T 9195-2011 Classification and terms of building and sanitary ceramics

GB/T 13891 Test methods of specular gloss for decorative building materials

3 Terms and definitions

For the purposes of this document, the terms and definitions given in GB/T 9195-2011 and the following apply. For ease of use, some of the terms and definitions in GB/T 9195-2011 are repeated below.

3.1

ceramic tile

Plate or block building ceramic products made from clays, feldspars and quartz, generally used as covering for floors and walls.

[GB/T 9195-2011, definition 3.1.1]

3.2