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

GB/T 14685-2022

Replacing GB/T 14685-2011

Pebble and crushed stone for construction

建设用卵石、碎石

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1 Scope

GB/T 14685-2022 is the Chinese national standard on pebble and crushed stone for construction, in the field of construction materials and building. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 15 April 2022 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 November 2022. Classification: ICS 91.100.15, CCS Q13. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document stipulates the classification and categories, general requirements, technical requirements, test methods, inspection rules, marking, storage, transportation of pebbles and crushed stone used for construction. This document applies to pebbles and crushed stone, which are used in cement concrete and its products in construction projects (except

hydraulic buildings).

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, for dated reference documents, only the version corresponding to the date applies to this document; for undated reference documents, the latest version (including all amendments) applies to this document.

GB 175 Common Portland cement

GB/T 2419 Test method for fluidity of cement mortar

GB/T 6003.1 Test sieves - Technical requirements and testing - Part

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Pebble Under the action of natural conditions, rocks undergo crushing, weathering, sorting, migration, accumulation (sedimentation), forming rock particles which have a particle size greater than

3.2 Crushed stone Rock particles, which have a particle size greater than

4.75 mm, as produced from natural rocks, pebbles or mining waste rocks, through mechanical processing such as crushing and screening.

3.4 Irregular particle The particles of pebbles and crushed stone whose smallest one-dimensional size is less than

0.5 times the average particle diameter of the particle level to which the particle belongs.

3.5 Clay content in pebble The content of clay particles in pebbles, which have a particle size less than 75 μm .

3.6 Clay content and fine content in crushed stone The content of clay and stone powder particles in the crushed stone, which have a particle size less than 75 μm .

4 Classifications and categories

4.1 Classification Stones used for construction are divided into two categories. pebbles and crushed stone.

4.2 Category Stones for construction are classified according to clay content in pebble (clay content and fine content in crushed stone), clay lumps and friable particles content, elongated and flaky particle content, irregular particle content, sulfide and sulfate content, soundness,

5 General requirements

In addition to complying with the provisions of 6.4, harmful substances in crushed stone produced from mining waste rock shall also comply with the requirements of China's environmental protection and safety-related standards and specifications.

6 Technical requirements

6.1 Particle gradation The particle gradation of pebbles and crushed stone shall comply with the requirements in Table 1.

6.2 Clay content in pebble, clay content and fine content in crushed stone, clay lumps and friable particles content The clay content in pebble, clay content and fine content in crushed stone, clay lumps and friable particles content shall comply with the requirements in Table 2.

6.3 Elongated and flaky particle content and irregular particle content

6.3.1 Elongated and flaky particle content The elongated and flaky particle content of pebbles and crushed stone shall comply with the requirements in Table 3.

6.3.2 Irregular particle content The irregular particle content of category I pebbles and crushed stone shall not exceed 10%.

6.4 Hazardous substances The harmful substance content of pebbles and crushed stone shall comply with the provisions of Table 4.

6.5 Soundness When using the sodium sulfate solution method for testing, the mass loss of pebbles and crushed stone shall comply with the requirements in Table 5.

6.6 Strength

6.7 Apparent density, continuous graded loose packing void ratio The apparent density of pebbles and crushed stone and the void ratio of continuously graded loose stacks shall comply with the following requirements.

6.8 Water absorption rate The water absorption rate of pebbles and crushed stone shall comply with the requirements in Table 9.

6.9 Radioactivity The radioactivity of pebbles and crushed stone shall comply with the requirements of GB 6566.

6.10 Alkali-aggregate reaction When the purchaser makes a request, the measured expansion rate and alkali activity evaluation results shall be provided.

6.11 Moisture content and bulk density When the purchaser makes a request, the actual measured value shall be provided.