

ICS 91.100.01
CCS Q10



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

GB/T 16753-2023

Terms for silicate building products

硅酸盐建筑制品术语

Issued on: September 7, 2023

Implemented on: January 1, 2024

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

1 Scope	1
2 Normative reference documents	1
3 Basic terminology	1
4 Product Category Terminology	2
5 Product Name Terminology	4
6 Raw material terminology	8
7 Production process terms	14
8 Commonly used production equipment terms	16
9 Names and terms of each part of the product	18
10 Product Performance Terminology	21
29 Index	30

Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents" Drafting. This document replaces GB/T 16753-1997 "Terminology for Silicate Building Products". Compared with GB/T 16753-1997, except for structural adjustments In addition to editorial changes, the main technical changes are as follows:

- a) Deleted normative reference documents (see Chapter 2 of the.1997 edition);
- b) Changed the terminology of silicate building products, calcareous materials, and siliceous materials (see Chapter 3, 3.1, 5.1, and 5.2 of the.1997 edition);
- c) Added hydrothermal synthesis reaction, autoclaved fly ash silicate products, autoclaved fly ash silicate products, autoclaved aerated concrete, and steam-cured silicon Terms such as acid salt products (see Chapter 3);
- d) Added silicate solid bricks, silicate porous bricks, silicate hollow bricks, silicate special-shaped bricks, silicate matching bricks, and silicate interlocking bricks Bricks, silicate faced masonry bricks, silicate wall blocks, silicate small blocks, silicate medium blocks, silicate large blocks, Silicate solid blocks, silicate hollow blocks, silicate special-shaped blocks, silicate hydraulic blocks, silicate sheets, silicate walls board, silicate

partition board, silicate roof panel, silicate hanging board, silicate facing flat panel, silicate composite insulation wall panel, silicate Terms such as salt tiles and silicate municipal pavement products (see Chapter 4);

e) Changed the terms such as silicate bricks, silicate blocks, and silicate municipal pavement products (see Chapter 4, Chapter 4 of the.1997 edition);

f) The terms brick, block, board, tile, floor tile, etc. are deleted (see 3.2~3.6 of the.1997 edition);

g) Delete fly ash bricks, steam-cured fly ash bricks, auto-cured fly ash bricks, cinder blocks, coal gangue bricks, aerated concrete blocks, and silicates Terms such as board, steam-cured fly ash floor tiles, auto-cured fly ash floor tiles (see Chapter 4 of the.1997 edition);

h) Added autoclaved fly ash porous bricks, autoclaved fly ash hollow bricks, autoclaved lime sand porous bricks, autoclaved lime sand hollow bricks, and steam-cured cinders Bricks, steam-cured coal gangue bricks, autoclaved fly ash hollow blocks, autoclaved lime sand blocks, non-load-bearing autoclaved lime sand hollow blocks, autoclaved aerated Concrete blocks, autoclaved fiber cement slabs, autoclaved lime sand pavement bricks, autoclaved fly ash pavement bricks, autoclaved lime sand pavement panels, autoclaved Terms such as lime sand curb stones, autoclaved lime sand hydraulic blocks, autoclaved small lime sand components (see Chapter 5);

i) Changed terms such as lime, cement, steel slag, tailings (see Chapter 6, Chapter 5 of the.1997 edition);

j) Added quicklime, slaked lime, fly ash, bone (aggregate) material, coarse aggregate, gravel, pebbles, crushed pebbles, fine bone (aggregate) material, natural sand, machine Sand making, mixed sand, light bone (aggregate) material, artificial light bone (aggregate) material, natural light bone (aggregate) material, high-strength light bone (aggregate) material, ultra-light bone (aggregate) Materials, industrial waste light aggregate (aggregate), construction waste recycled aggregate, construction waste recycled coarse aggregate, construction waste recycled fine bone Material, alkali activator, aluminum powder, aluminum powder paste, reinforced fiber, alkali-resistant glass fiber, pulp fiber, chrysotile asbestos, organic fiber, steel fiber, steel Terms such as tendons (see Chapter 6);

1 Scope

GB/T 16753-2023 fixes the vocabulary of silicate building products - autoclaved aerated concrete blocks and panels, lime-sand brick, and the related materials made by curing a silica and lime mixture under steam pressure. They occupy a large share of Chinese wall construction, and they are a field where naming has been genuinely confused: products are known by trade names, by production route and by regional usage, and the same block is

called three things in three provinces. That matters commercially, because a specification, a purchase order and a building code clause have to refer to the same product, and technically, because the properties depend on which product it actually is. This document defines the basic terms and the related definitions across the field: product categories, product names, raw materials, production processes, the commonly used production equipment, the names of the parts of a product, and product performance. Under ICS 91.100.01 and CCS Q10, it is the reference underneath every other standard on these materials, and is written for manufacturers, for architects and specifiers, and for the construction quality inspection bodies.

This document defines the basic terms, product categories, product names, raw materials, production processes, commonly used production equipment, Names of each part of the product, product performance and other related terms and their definitions. This document applies to silicate building products produced using non-sintering processes in the field of buildings or structures. This document does not apply to building products with cement hydration products as the main binding material.

2 Normative reference documents

This document has no normative references.

3 Basic terminology

3.1 It mainly uses siliceous materials and calcareous materials as raw materials. After batching and molding, a hydrothermal synthesis reaction occurs in an autoclaved (or steam-cured) environment to produce Hydration products such as calcium silicate hydrate and calcium aluminate hydrate are the main cementing materials and are used in finished products in buildings or structures.

3.2 Under certain temperature and pressure conditions, calcium materials, siliceous materials and water react chemically to form hydrated calcium silicate, hydrated calcium aluminate, etc. A process with hydraulically gelling chemicals.

3.3 calcareousmaterials In the production of silicate building products, it refers specifically to raw materials that can provide the required calcium components for its hydrothermal synthesis reaction.

Note. Usually in the form of calcium oxide (CaO) or calcium hydroxide [Ca(OH)₂].

3.4 silicone materialssiliceousmaterials In the production of silicate building products, it specifically refers to raw materials that can provide siliceous components for its hydrothermal synthesis reaction.

Note. Usually found in the form of quartz and silica glass bodies.

3.5 Autoclaved lime sand silicate productsautoclavedsand-limesilicateproducts Use sand as

the main siliceous material, quicklime or carbide slag as the main calcareous material, add an appropriate amount of gypsum, admixtures and other aggregates, and pass through the blank Preparation, pre-curing and high-pressure steam curing of silicate building products.

3.6 Fly ash is used as the main siliceous material, quicklime or calcium carbide slag is used as the main calcareous material, and an appropriate amount of gypsum, admixtures and other aggregates can be added.

chinastandards.org · PREVIEW