

ICS 91.060.10

CCS Q 15



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

GB/T 47628-2026

Panels for external walls used in buildings

建筑用外墙条板

Issued on: May 25, 2026

Implemented on: December 1, 2026

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

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6.1 Appearance quality and dimensional tolerances

6.1.1 The appearance quality shall conform to the requirements of Table 3.

6.1.2 Dimensional tolerances shall conform to the provisions of Table 4.

7 Test Methods

7.1 Test Environment and Test Conditions It should comply with the provisions of GB/T 30100.

7.2.1 Appearance Quality

7.2.1.1 For the exterior wall panels under test, at a viewing distance of 0.5m, illuminate the panels with a light source having an illuminance of not less than 300 lx and visually inspect for the presence or absence of panels. Exposed ribs or fibers, burrs, efflorescence, efflorescence, and surface contamination are also issues that require visual inspection of the bonding between the panel and the core layer for composite exterior wall panels.

Cracks and surface layer peeling occurred.

7.2.1.2 Use a steel ruler to measure cracks, honeycomb pores, and chipped edges on the board surface, with readings accurate to 1 mm. Use a reading microscope to measure the crack width. The degree is measured with an accuracy of

0.1 mm, and the quantity is recorded.

7.2.2 Dimensional tolerances Perform in accordance with the provisions of GB/T 30100.

7.3 Physical and Mechanical Properties The test methods for the physical and mechanical properties of exterior wall panels shall comply with the provisions of Table 6.

8.1 Inspection Classification

8.1.1 Factory Inspection Products should undergo factory inspection before leaving the factory, and the inspection items should comply with the provisions of Table 7.

8.1.2 Type Testing Type testing items shall comply with the provisions of Table

7. Type testing shall be conducted under any of the following circumstances.

- a) When a trial-produced new product undergoes production evaluation;
- b) When there are significant changes to the product's materials, formula, or process after formal production has commenced;
- c) For products manufactured under continuously standardized conditions, the classification indexes for airborne sound weighted insulation, design value of uniformly distributed bending load bearing capacity, and uniformly distributed bending load bearing capacity are as follows: Load deflection and fire resistance limit shall be tested every 3 years; other items specified in Chapter 6 shall be tested annually.
- d) When a product is put back into production after being shut down for more than six months;
- e) When the factory inspection results differ significantly from the previous type inspection results.

8.2 Sampling

8.2.1 Sampling for Factory Inspection The product's appearance quality and dimensional tolerances will be inspected according to the normal inspection double sampling plan in GB/T 2828.1 before leaving the factory. Samples should be drawn according to Table

8. Samples for factory inspection items should be randomly selected from products that have passed the inspection for appearance quality and dimensional tolerances as described above. For machine sampling, the sampling plan should be carried out according to the corresponding items in Table 9.

8.3.1 Appearance quality and dimensional tolerances

8.3.1.1 Based on the sample inspection results, if the appearance quality and dimensional tolerances of the inspected board meet the corresponding requirements in 6.1, the board... The inspected board should be deemed a qualified board; if any one or more of the appearance quality or dimensional tolerance items of the inspected board do not comply with the relevant provisions in 6.1, the board shall be deemed qualified. If this condition is met, the board should be deemed a defective board.

8.3.1.2 Based on the sample inspection results, if the number of non-conforming plates (u_1) found in the first sample (n_1) is less than or equal to the first acceptance number... (A_1) indicates that the appearance quality and dimensional tolerances of this batch should be deemed acceptable; if the number of non-conforming plates (u_1) is found in the first sample (n_1), then... If the number of defects is greater than or equal to the first rejection number (R_1), the appearance quality and dimensional tolerance of the batch should be deemed unqualified. If the number of non-conforming plates (u_1) found in the first sample (n_1) is greater than the first acceptance number (A_1) but less than the first non-conforming number... When the number is constant (R_1), a second sample (n_2) should be drawn for testing. Based on the test results of the first and second samples, if the total number of non-conforming plates ($u_1 + u_2$) found in the first and second samples is smaller than... When the acceptance number is equal to or greater than the second acceptance number (A_2), the appearance quality and dimensional tolerances of the batch should be deemed acceptable. If the first and second samples... When the total number of nonconforming plates ($u_1 + u_2$) found in this batch is greater than or equal to the second nonconformity criterion (R_2), the appearance quality and dimensions of the batch are permissible. Any deviation should be deemed unqualified. The judgment rules should comply with the provisions of Table 10.

8.3.2 Physical and Mechanical Properties

8.3.2.1 The rules for judging the physical and mechanical performance test items of the factory inspection shall comply with the following provisions.

a) Based on the sample inspection results, if all the factory inspection items in

8.1.1 meet the corresponding requirements in 6.2, the physical condition of the batch of products should be determined. The mechanical performance test items must pass the factory inspection; if none of the factory inspection items in

8.1.1 meet the corresponding requirements in 6.2, it should be determined that... The physical and mechanical properties of this batch of products failed the factory inspection.

b) If any item is found to be non-compliant during the factory inspection, a second sample shall be taken for inspection according to Table 9 for that non-compliant item.

c) During the second sample inspection, if no result is found to be non-compliant, the

physical and mechanical performance test items of the batch of products should be deemed compliant with the factory inspection. If any result is still unqualified, the batch of products shall be deemed unqualified in the factory inspection of physical and mechanical properties.

8.3.2.2 The judgment rules for the physical and mechanical performance test items of type testing shall comply with the following provisions.

- a) Based on the sample inspection results, if the number of non-conforming items found in all items of the first sample is 0, the batch of products should be deemed physically non-conforming. The mechanical performance test items passed the type test; if the number of non-conforming items found in the first sample is not less than 2, it should be... The physical and mechanical properties of this batch of products were deemed unqualified during type testing.
- b) If the number of nonconforming items found in the first sample is 1, a second sample should be drawn for that nonconforming item according to Table 9. test.
- c) During the second sample inspection, if no result is found to be non-compliant, the type test results for the physical and mechanical properties of the batch of products should be deemed compliant. If any result is still unqualified, the type test of the physical and mechanical properties of the batch of products should be deemed unqualified.

8.3.3 Comprehensive Judgment

8.3.3.1 The quality judgment of the factory inspection shall comply with the following provisions.

- a) If the inspection results for appearance quality and dimensional tolerances are deemed (qualified) according to the judgment rules in 8.3.1, and the physical and mechanical properties are satisfactory... If the factory inspection items are deemed (qualified) according to the judgment rule in 8.3.2.1, the batch of products shall be deemed (qualified) for factory inspection.
- b) If any item in the appearance quality, dimensional tolerances, or physical and mechanical properties factory inspection items is deemed non-compliant... If the product fails to meet the quality standards during factory inspection, the batch of products should be deemed substandard.

8.3.3.2 The quality judgment of type testing shall comply with the following provisions.

- a) If the inspection results for appearance quality and dimensional tolerances are deemed (qualified) according to the judgment rules in 8.3.1, and the physical and mechanical properties are satisfactory... If the type test items are deemed qualified according to the judgment rule 8.3.2.2, the batch of products shall be deemed to have passed the type test.
- b) If any item in the appearance quality and dimensional tolerances or the physical and