

ICS 91.100.50
CCS Q 27



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

GB/T 12954-1991

Replacing GB/T 12954-1991

**Testing methods for construction adhesives -- Part 1: Test
methods for ceramic tiles adhesives
(English Translation)**

Issued on: June 30, 2008

Implemented on: April 1, 2009

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China, Standardization
Administration of the People's Republic of China**

Table of Contents

Preface
1 Scope
2 Normative references
3 Terms and definitions
4 General Provisions
4.1 Sampling
4.2 Standard test conditions
4.3 Test Materials
4.4 Adhesive mixing
4.5 Test substrate
4.6 Destruction mode
4.7 Test Report
5 Test methods
5.1 Airing time
5.2 Slip
5.3 Shear bond strength (D and R type adhesive)
5.4 Stretch bond strength (Class C adhesive)
5.5 Transverse deformation (Class C adhesive)
5.6 Chemical resistance (R-type adhesive)
Appendix A (Normative) Test concrete plate

Foreword

GB/T 12954 "Building Adhesives Test Method" is expected to be divided into three parts.

- Part 1. ceramic tile adhesive test methods;
- Part 2. Insulation board adhesive test methods;
- Part 3. decorative adhesive test methods.

This section GB/T 12954 Part 1.

This part of the revision adopted ISO 13007-2.:2005 "Tiles - Sealants and adhesives - Part 2. Test methods for adhesives." in order to be more suitable for our country's national conditions, this section has been modified when using ISO 13007-2.:2005, this section and

ISO 13007-2.

The main differences in 2005 are as follows.

--- Modify the reference standard in the international standard to the corresponding national standard of our country;

--- Increasing the reference standard equipment;

--- Added terms and definitions;

--- Increased the compression shear bond strength formula;

--- Increased transverse deformation test materials and appliances in the briquette clause.

This Part replaces GB/T 12954-1991 "Building Adhesives General Test Method." this part of GB/T 12954-1991 The main difference is.

--- Modify the standard name;

--- Modify the scope of application;

--- Added terms and definitions;

--- Increased standard test conditions;

--- Canceled the density, pH, viscosity, solid content, storage stability, pot life, the amount of test methods;

--- Increased open time, slip, lateral deformation, chemical resistance to chemical test methods;

--- Added Appendix A Appendix A of this section is normative appendix.

This part is proposed by China Building Materials Federation.

This part of the National Lightweight and Decorative Building Materials Standardization Technical Committee (SAC/TC195) centralized.

This section is responsible for drafting unit. Shanghai Academy of Building Research (Group) Co., Ltd.

This section mainly participated in the drafting unit. Shanghai Caoyang Building Adhesive Factory, Shanghai Beheng Chemical Building Materials Co., Ltd., Shenzhen Building Science Institute.

1 Scope

GB/T 12954 provisions of this section ceramic tile adhesive (hereinafter referred to as adhesive) hanging time, slip, shear bond strength, Tensile bond strength, transverse deformation, chemical resistance of the test method.

This section applies to paste ceramic tile adhesive performance testing.

2 Normative references

The following documents contain provisions that, through the reference in this part of GB/T 12954, become the provisions of this section. Any reference to the date of the document, its all subsequent amendments (not including errata content) or revisions do not apply to this section, however, are encouraged to reach an agreement under this section. Study whether the latest versions of these files are available. For undated references, the latest version applies to this section.

Universal portland cement GB/T 4100-2006 Ceramic tiles (ISO 13006.:1998
Ceramics-definitions, classification, characteristics and marking, MOD) Planetary cement
mortar mixer JC/T 682-2005 cement mortar molding test Taiwan

3 Terms and definitions

The following terms and definitions apply to this section.

The maximum time interval from the application of the adhesive to the laminated test piece to meet the specified tensile bond strength index.

On the vertical plane, the amount of downward displacement of the test tile after bonding with a combed adhesive coating.

The hardened strip adhesive specimen undergoes three-point bending and produces the maximum displacement at the crack center in the specimen center.

Cement-based adhesive from adding water to the time interval can be used.

A hydraulic mixture of hydraulic cementitious material, mineral aggregates and organic admixtures. Mix with water or other liquids when used.

A paste-like mixture consisting of an aqueous polymer emulsion, organic admixtures and mineral fillers can be used as received.