

ICS 91.100.50

Q 27

Record No: 15188-2005

JC

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

中华人民共和国电力行业标准

JC/T 547-2005

Replace JC/T 547-1994

Adhesives for ceramic wall and floor tiles

陶瓷墙地砖胶粘剂

Issued on February 14, 2005

Implemented on July 01, 2005

**Issued by National Development and Reform Commission of the People's
Republic of China**

Contents

Foreword	1
1 Scope	3
2 Normative references	3
3 Terms and definitions	3
3.1 open time	3
3.2 slip	4
3.3 wetting capability	4
3.4 transverse deformation	4
3.5 maturing time	4
3.6 fundamental characteristics	4
3.7 optional characteristics	4
3.8 additional characteristics	4
3.9 special characteristics	5
3.10 cementitious adhesive	5
3.11 dispersion adhesive	5
3.12 reaction resin adhesive	5
4 Classification, designation and marking	6
4.1 Classification and designation	6
4.1.1 Classification of product according to composition:	6
4.1.2 Type	6
4.1.3 Designation	6
4.2 Marking	8
5 General	8
6 Specification	8
6.1 Cementitious Adhesives (C)	8
6.2 Dispersion Adhesives (D)	10
6.3 Reaction Resin Adhesives (R)	10
7 Test method	12
7.1 Standard test conditions	12
7.2 Test materials	12
7.2.1 The placement of the test materials	12
7.2.2 Ceramic tile used for test	12
7.2.3 Concrete slab used for test	13
7.3 Test equipment	13
7.3.1 Test instruments	13
7.3.2 Test instruments	13
7.3.3 Blast oven used for test	16
7.4 Adhesive mixing	16
7.4.1 Cementations adhesive	16
7.4.2 Dispersion adhesive (D)	17
7.4.3 Reaction resin adhesive (R)	17
7.5 Test method of cementations adhesive	17

7.5.1	Test material preparation	17
7.5.2	Tensile adhesive strength.....	17
7.5.3	Tensile adhesive strength after immersion in water	17
7.5.4	Tensile adhesive strength after thermal aging	18
7.5.5	Tensile adhesive strength after freeze thawing circulation.....	18
7.5.6	Outcome evaluation and representation	18
7.6	Test method of dispersion adhesive	19
7.6.1	Test specimens preparation	19
7.6.2	Compressing shear adhesive strength	20
7.6.3	Compression shear adhesive strength after thermal aging	20
7.6.4	Compression shear adhesive strength after thermal aging	20
7.6.5	High temperature compression shear adhesive strength	20
7.6.6	Outcome evaluation and representation	21
7.7	Test method of reaction resin adhesive	21
7.7.1	Test specimen preparation	21
7.7.2	Compressing shear adhesive strength	22
7.7.3	Compression shear adhesive strength after thermal aging	22
7.7.4	Compression shear adhesive strength after high and low temperature alternating circulation	22
7.7.5	Outcome evaluation and representation	22
7.8	Open time	22
7.8.1	Test specimen preparation	22
7.8.2	Test specimen test	23
7.8.3	Outcome evaluation and representation	23
7.9	Sliding resistance test method	23
7.10	Test method of wetting ability	23
7.11	Mould of transverse deformation test	23
8	Inspection rules	24
8.1	Inspection classification	24
8.1.1	Ex-factory inspection	24
8.1.2	Type inspection	24
8.2	Batch grouping	25
8.3	Sampling	25
8.4	Determining rules	25
9	Marking, packaging, transportation and storage	26
9.1	Marking	26
9.2	Packaging	26
9.3	Transportation and storage	26
Annex A (Normative)	Concrete slab for adhesives test	27
Annex B (Normative)	Adhesive test specimen failure mode	30
Annex C (Normative)	Adhesive slip resistance test method	33
Annex D (Normative)	Adhesive wettability test method	36
Annex E (Normative)	Adhesive lateral deformation test method	38

Foreword

This Standard is revision of EN 12004-2001 *Adhesives for tiles — Definitions and specifications.*

Main differences between this Standard and EN 12004-2001 are as follows :

- Cancelled the general rule, factory production control and test report ;
- Not involved in construction method and instrument ;
- Added the general requirement, inspection rule, packaging, storage, transportation and treatment terms of test block in this Standard.

This Standard will replace JC/T 547-1994 *Adhesives for ceramic wall and floor tiles.*

Comparison with JC/T 547-1994, main changes of this Standard are as follows:

- Formulation of JC/T 547-1994 *Adhesives for ceramic wall and floor tiles* refers to BS 5980-1980, this Standard refers to EN 12004-2001 ;
- Changed the classification from five to three ;
- In addition to basic characteristics, added the optional characteristics, additional characteristics, special characteristics and general characteristics to product requirements ;
- Cancelled the classification, contractility, mildew resistance and time adjustment ;
- Added terms and requirements such as sliding, wetting ability, transverse deformation, maturing time;
- Added annex A, B, C, D, E and F ;
- Different methods will be used for product inspection according to category of product.

Annex A, B, C, D and E of this Standard are normative annex, Annex F is informative annex.

This Standard is proposed by China Building Materials Industry Association.

This Standard is under the jurisdiction of National Technical Committee (SAC/TC195) on Constructional Materials and Decorative Materials of Standardization Administration of China.

The responsible drafting organizations of this part are China Building Materials Academy and Technical Supervision and Research Center of the Building Materials Industry.

The participating drafting organizations include College of Materials Science and Engineering, Tongji University, Beijing Building Materials quality supervision checkpoint, Shanghai Caoyang Building-Anhesive Plant, Ferns Construction Materials (Guangzhou) Ltd, Mapei Yuandong Co., Ltd, Medium Virtuous and Joint Venture Shanghai Shenzhen-Uzin Adhesives Co., Ltd, Wacker Polymer Material (Shanghai) Co., Ltd, National Starch & Chemical(Shanghai)Co., Ltd, Yingwang The international Building Chemical Co., Ltd, Teyi Building Materials Technology Industry (Suzhou) Co., Ltd, Hangao Adhesive Co., Ltd, Lafarge Aluminates (China) Co., Ltd, Tangshan Polar Bear Special Cement Co., Ltd, Shanghai Lujian Dry Powder Building Materials Co., Ltd, Beijing Jingyeda New Building Materials Co., Ltd, Ardex Building Materials (Shanghai)Co., Ltd, Shanghai Master Builder Co., Ltd, Shanghai ASA-Laticrete Adhesive Co., Ltd, Beijing Meichao Decoration Material Co., Ltd, Maxit Building Material (Beijing) Co., Ltd, Zhengzhou Xikai Building Material Co., Ltd, Beijing Ruiyilide Trade Co., Ltd, Beijing Deco ZhenBang Technology Development Co., Ltd

The chief drafting staff of this Standard includes: Liu TIANCUN ,Yang Bin ,Zhang Yongming ,Yin Wei ,Zhu Lianbin , Han donghui , Zhang Liang , Zhang Jie ,Guan Lingwei, Wu Haiming ,Wang Congxiao, Chen Mengyin.

China Building Material Academy is authorized for interpretation by this Standard.

This part replaces the following historical editions issued:

— JC/T 547-1994;

Adhesives for ceramic wall and floor tiles

1 Scope

This Standard specifies the terms and definitions, classification, designation, labeling, general requirements, technical requirements, test methods, inspection rules of adhesives for ceramic wall and floor tiles (hereinafter referred to as adhesive) as well as marking, package, transportation and storage.

This Standard is applicable to adhesives for ceramic wall and floor tiles.

2 Normative references

The articles contained in the following documents have become this Standard when they are quoted herein. For the dated documents so quoted, all the modifications (excluding corrections) or revisions made thereafter shall not be applicable to this Standard. For the undated documents so quoted, the latest editions shall be applicable to this Standard

GB 175 Portland cement and ordinary portland cement

GB/T 3810.5-1999 Test methods of ceramic tiles--Part 5: Determination of impact resistance by measurement of coefficient of restitution

GB/T 4100.1 Dry-pressed ceramic tiles--Part 1: Porcelain tiles ($E \leq 0.5\%$)

GB/T 4100.5 Dry-pressed ceramic tiles--Part 5: Ceramic tiles ($E > 0.5\%$)

JC/T 681 Mixer for mixing mortars

3 Terms and definitions

For the purpose of this standard, following terms and definitions apply.

3.1

open time

maximum interval after application at which tiles can be embedded in the applied

完整版本请在线下单

或咨询：

TEL: 400-678-1309

QQ: 19315219

Email : info@lancarver.com

<http://www.lancarver.com>

对公账户：

单位名称：北京文心雕语翻译有限公司

开 户 行：中国工商银行北京清河镇支行

账 号：0200 1486 0900 0006 131

支付宝账户：info@lancarver.com

注：付款成功后，请预留电邮，完整版本将在一个工作日内通过电子 PDF 或 Word 形式发送至您的预留邮箱，如需索取发票，下单成功后的三个工作日内安排开具并寄出，预祝合作愉快！