



180001283476



中国认可
国际互认
检测
TESTING
CNAS L0230

检测报告

TEST REPORT

BETC-HJ-2022-A-00328

Name of Engineering/Product XQ Series injection anchoring Adhesive

Client ZHEJIANG XINCHOR TECHNOLOGY CO.,LTD.

Test Category Sampling

建研院检测中心有限公司
CABR TESTING CENTER CO.,LTD

国家化学建筑材料测试中心(建工测试部)
National Center for Test of Chemical Building Materials



2022-004920



CABR TESTING CENTER CO., LTD
NATIONAL CENTER FOR TEST OF CHEMICAL BUILDING MATERIALS

Commission No. : 2022-004920

No. of Report: BETC-HJ-2022-A-00328

Page 1 of 6

Name of Product	XQ Series injection anchoring Adhesive	Sample No.	HJ-2022-A-00328
Client	ZHEJIANG XINCHOR TECHNOLOGY CO.,LTD.	Type/Model	XQE Class I, Grade A
		Brand	XINCHOR
Manufacturer	ZHEJIANG XINCHOR TECHNOLOGY CO.,LTD.	Test Category	Sampling
Sampling Unit	National Center for Test of Chemical Building Materials, China	Quantity	5 pieces / batch 3 batches in total
Sampling Place	Zhonggang Avenue, Huaxi Street, Changxing County, Huzhou City, Zhejiang Province	Date of sampling	Aug. 09, 2022
Cardinal Number	5000 pieces, 20000 pieces, 9000 pieces	Date of delivery	Aug. 15, 2022
Production Period	-----	Contractor/ Sampling persons	Luo yali, Liu zhiqi
Test Items	Basic performance, Property of long-term performance (resistance to heat- humidity aging, resistance to heat aging, resistance to freeze-thaw aging, resistance to long-term stress, resistance to fatigue stress), Property of resistance to medium erosion (salt spray, alkaline medium, acid medium) and process performance.		
Test Standard	GB 50728-2011 "Technical code for safety appraisal of engineering structural strengthening materials", GB/T 7124-2008 "Adhesives-Determination of tensile lap-shear strength of rigid-to-rigid bonded assemblies" etc.		
Criteria based on	GB 50728-2011 "Technical code for safety appraisal of engineering structural strengthening materials", GB 55021-2021 "General code for assessment and rehabilitation of existing buildings" etc.		
The Test Results	After inspection, the test results in Table 1 meet the class I adhesive Grade A technical requirements in Table 4.2.2-3, Table 4.2.2-4, Table 4.2.2-5 and Table 4.8.1 of GB 50728-2011 "Technical code for safety appraisal of engineering structural strengthening materials", the test results of items 4 to 13 meet the class I adhesive Grade A technical requirements in Table B.0.2-3 and Table B.0.6 of GB 55021-2021 "General code for assessment and rehabilitation of existing buildings", the test results in Table 2 meet the adhesive Grade A technical requirements in Table 4.6.6 of JTG/T J22-2008 "Specifications for strengthening design of highway bridges". Date: May 05, 2023		
Instruments	Digital caliper, Salt spray test chamber, Automatic low-temperature freeze-thaw testing machine, Super water bath pot, Air thermal aging box, Heat distortion temperature measuring instrument, Scale magnifier, Rotational viscometer, Electronic universal testing machine of AG-IS-100kN from Shimadzu, Anchor tension gauge, Impact peeling tester, High and low temperature alternating damp heat test chamber.		
Remarks	1. Factory number: 2022072501, 2022080201, 2022080901; 2. Production Date: Jul. 25, 2022, Aug. 02, 2022, Aug. 09, 2022; 3. When there are differences in understanding between the Chinese and the English report, the Chinese report shall prevail.		

Approved:

Verification:

Chief Inspector:

CABR TESTING CENTER CO., LTD
NATIONAL CENTER FOR TEST OF CHEMICAL BUILDING MATERIALS
Table 1

Commission No. : 2022-004920

No. of Report: BETC-HJ-2022-A-00328

Page 2 of 6

Test data				Aug. 15, 2022 ~ Apr. 12, 2023			
No.	Test item			Test method	Technical Index (Class I adhesive)	Test result	Evaluation
					Grade A		
1	Splitting tensile strength (MPa)			GB 50728-2011 Appendix E	≥8.5	16.91	Qualified
2	Flexural strength (MPa)			GB 50728-2011 GB/T 2567-2008	≥50, and shall not be broken into fragments	71.4, not be broken into fragments	Qualified
3	Compressive strength (MPa)				≥60	113.9	Qualified
4	Tensile shear strength of steel to steel (MPa)	Standard value	(23±2) °C	GB 50728-2011 GB/T 7124-2008	≥10	18.5	Qualified
		Average value	(60±2) °C 10min		≥11	18.5	Qualified
		Average value	(-45±2) °C 30min		≥12	19.2	Qualified
5	Bond strength between ribbed rebar and concrete under constrained drawing conditions (MPa)		C30 φ25 l=150mm	GB 50728-2011 Appendix K	≥11	13.5	Qualified
			C60 φ25 l=125mm		≥17	19.2	Qualified
6	T-Impact peeling length for steel to steel (mm)			GB 50728-2011 Appendix F	≤25	0.0 (No crack)	Qualified
7	Heat distortion temperature (°C)			GB/T 1634.2-2019	≥65	67.8	Qualified
8	Non-volatile material content (%)			GB 50728-2011 Appendix H	≥99	99.8	Qualified

CABR TESTING CENTER CO., LTD
NATIONAL CENTER FOR TEST OF CHEMICAL BUILDING MATERIALS
Table 1

Commission No. : 2022-004920

No. of Report: BETC-HJ-2022-A-00328

Page 3 of 6

Test data			Aug. 15, 2022 ~ Apr. 12, 2023			
No.	Test item		Test method	Technical Index (Class I adhesive)	Test result	Evaluation
				Grade A		
9	Property of resistance to heat-humidity aging	After aging at 50°C and 95%RH for 90d (grade B adhesive for 60d), the tensile shear strength for steel to steel was tested at room temperature. Compared with the short-term test results at room temperature, the decreased of the shear strength (%)	GB 50728-2011 Appendix J GB/T 7124-2008	≤ 12	Drop of 5.8	Qualified
10	Property of resistance to heat aging	After aging at (80±2) °C for 30d, the tensile shear strength for steel to steel was tested at the same temperature. Compared with the short-term test results at the same temperature for 10min, the decreased of the shear strength (%)	GB 50728-2011 Appendix L GB/T 7124-2008	≤ 5	Drop of 2.3	Qualified
11	Property of resistance to freeze-thaw aging	At the temperature of -25°C and 35°C freeze-thaw cycle, each cycle is 8h and after 50 cycles, the tensile shear strength for steel to steel is tested at room temperature. Compared with the short-term test results at room temperature, the decreased of the shear strength (%)	GB 50728-2011 GB/T 7124-2008	≤ 5	Drop of 3.2	Qualified

CABR TESTING CENTER CO., LTD
NATIONAL CENTER FOR TEST OF CHEMICAL BUILDING MATERIALS
Table 1

Commission No. : 2022-004920

No. of Report: BETC-HJ-2022-A-00328

Page 4 of 6

Test data		Aug. 15, 2022 ~ Apr. 12, 2023				
No.	Test item		Test method	Technical Index (Class I adhesive)	Test result	Evaluation
				Grade A		
12	Property of resistance to long-term stress	Sustained shear stress of 4.0MPa at (23±2) °C and (50±5) %RH for 210d (mm)	GB 50728-2011 GB/T 7124-2008	The specimens are not damaged, and the creep deformation value is less than 0.4mm	0.0 (No damaged)	Qualified
13	Property of resistance to fatigue stress	Tensile shear tests for steel to steel were carried out at room temperature under fatigue loads of 20Hz, 5:1.5 stress ratio and 4.0MPa maximum stress	GB 50728-2011 Appendix M GB/T 7124-2008	After 2×10 ⁶ times sinusoidal fatigue load, the specimen does not damage	No damaged	Qualified
14	Property of resistance to salt spray	5% NaCl solution, spray pressure: 0.08Mpa, test temperature (35±2) °C, spray once every 0.5h, each time 0.5h. Salt spray should settle freely on the specimen. Time of grade A adhesive and II, III adhesive 90d, grade B adhesive 60d. The tensile shear strength test for steel to steel shall be carried out after expiration	GB 50728-2011 GB/T 7124-2008	Tensile shear strength of steel to steel drop rate ≤5%, no cracks or degumming on the surface	Decrease 2.7%, no cracks or degumming on the surface	Qualified

CABR TESTING CENTER CO., LTD
NATIONAL CENTER FOR TEST OF CHEMICAL BUILDING MATERIALS
Table 1

Commission No. : 2022-004920

No. of Report: BETC-HJ-2022-A-00328

Page 5 of 6

Page 5 of 5

Test data			Aug. 15, 2022 ~ Apr. 12, 2023			
No.	Test item		Test method	Technical Index (Class I adhesive)	Test result	Evaluation
				Grade A		
15	Property of resistance to alkaline medium	Ca(OH) ₂ saturated solution, test temperature (35±2) °C, soak time: grade A adhesive and Class II, III adhesive 60d, grade B adhesive 45d. Test the tensile bond strength of steel to concrete	GB 50728-2011 Appendix G	Compared with the control group, the strength does not decrease, and the concrete is destroyed, the surface is not allowed to crack, peel or bubble	The strength has not decreased, and the concrete is destroyed, the surface has no crack, peel or bubble	Qualified
16	Property of resistance to acid medium	5% H ₂ SO ₄ solution, test temperature (35±2) °C, soaking time is 30d. Test the tensile bond strength of steel to concrete		Compared with the control group, the concrete is damaged, no cracks or degumming on the surface	Concrete damage, no cracks or degumming on the surface	Qualified
17	Thixotropic index		GB 50728-2011 Appendix R	≥4.0	4.3	Qualified
18	Drop fluidity, 25°C (mm)		GB 50728-2011 GB/T 13477.6-2002	≤2.0	0 (No sagging)	Qualified
19	Pot life	23°C (min)	GB 50728-2011 GB/T 7123.1-2015	≥40	58	Qualified
		30°C (min)		≥30	47	Qualified
		10°C (min)		40~120	93	Qualified
Remarks		Blank				

CABR TESTING CENTER CO., LTD
NATIONAL CENTER FOR TEST OF CHEMICAL BUILDING MATERIALS
Table 2

Commission No. : 2022-004920

No. of Report: BETC-HJ-2022-A-00328

Page 6 of 6

Test data			Aug. 15, 2022 ~ Apr. 12, 2023			
No.	Test item		Test method	Technical Index	Test result	Evaluation
				Grade A adhesive		
1	Splitting tensile strength (MPa)		GB 50728-2011 Appendix E	≥8.5	16.91	Qualified
2	Flexural strength (MPa)		GB 50728-2011 GB/T 2567-2008	≥50	71.4	Qualified
3	Compressive strength (MPa)			≥60	113.9	Qualified
4	Bond strength between ribbed rebar and concrete under constrained drawing conditions (MPa)	C30 φ25 l=150mm	GB 50728-2011 Appendix K	≥11	13.5	Qualified
		C60 φ25 l=125mm		≥17	19.2	Qualified
5	Non-volatile material content (Solid content) (%)		GB 50728-2011 Appendix H	≥99	99.8	Qualified
The following is blank.						
Remarks			Blank			