No.: G14-WT2447E

National Center of Supervision and Inspection for Ceramic Sanitary and Plumbing Fixture

Test Report

Form No.: QR-049-01A

Product Name, Model and Dimension Trademark/Grade	GLAZED PORCELAIN TILE 600mm×600mm	Date of Production	——
		Batch No.	——
		Voucher No.	——
Entrusting Department	FOSHAN KIVA CERAMIC CO.,LTD.	Test Classification	Entrusted Test
Entrusting Department Address	LIANXIN INDUSTRIAL ZONE, XIQIAO TOWN, FOSHAN CITY, G.D,CHINA	Sample Quantity	30 PCS
Manufacturer (Supplied by the applicant)	FOSHAN KIVA CERAMIC CO.,LTD.	Receival Date	2024-03-02
Manufacturer Address (Supplied by the applicant)	LIANXIN INDUSTRIAL ZONE, XIQIAO TOWN, FOSHAN CITY, G.D,CHINA	Sample Receiver	Li Dongping
Sample's State and Characteristic	Pieces		
Test Basis	GB/T4100-2006 *(Annex G) Ceramic Tiles Annex G Dry-pressed ceramic tiles with Low water absorption E≤0.5% Group BIa—porcelain tiles*; GB 6566-2010 *Limit of radionuclides in building materials*		
Test Result	Except No.13~No.21 are not verdict, the test results comply with the requirement of the standard GB/T 4100-2006 Annex G and the type A requirement for the decorative materials of the standard GB 6566-2010, the test is passed. 2024-03-22 NOTE: Any duplicated copy will be invalid without a red stamp specially for inspection restamped.		
Remarks	The test report is only responsible for the sample.		

Approved by: 王卓强 Checked by: 吴锦强 Tested by: 陆海婷

National Center of Supervision and Inspection for Ceramic Sanitary and Plumbing Fixture

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No.	Test Items	Unit	Technical Requirements			Test Results	Verdict
1	Size and difference	%	Length	The deviation, of the average size for each tile from the work size	±0.5	-0.01～+0.02	Pass
				The deviation, of the average size for each tile from the average size of the 10 test specimens	±0.4	-0.02～+0.02	
			Width	The deviation, of the average size for each tile from the work size	±0.5	-0.05～+0.05	
				The deviation, of the average size for each tile from the average size of the 10 test specimens	±0.4	-0.05～+0.05	
		mm	Thickness			12.4～12.7	——
2	Straightness of sides	%	±0.3			-0.04～+0.05	Pass
3	Rectangularity	mm	Difference of the opposite sides		≤2.0	0.6	Pass
			Difference of the diagonals		≤2.0	0.6	
4	Surface flatness	mm	Convexity		≤2.0	0.6	Pass
			Concave		≤2.0	0.5	
5	Surface quality	——	A minimum of 95% of the tiles shall be free from visible defects that would impair the appearance of a major area of tiles.			Conformed	Pass
6	Water absorption	%	Average maximum 0.04 Individual maximum 0.05			0.04～0.05	Pass
7	Breaking strength	N	When the thickness≥7.5mm, the mean value shall not be less than 1300			3532	Pass
8	Modulus of rupture	MPa	Average minimum 35 Individual minimum 32			38 37～40	Pass
9	Crazing resistance	——	No crazing or peeling on the glazed surface after the crazing test.			Conformed	Pass
10	Frost resistance	——	No crack or peeling after the frost test			Conformed	Pass
11	Resistance to staining	——	Mininum class 3			Class 5	Pass
12	Resistance to household chemicals & swimming pool salts	——	Minimum GB			Class GA	Pass

Checked by : 吴博彪 Tested by : 殷海静

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No.	Test Items	Unit	Technical Requirements	Test Results		Verdict
13	Resistance to thermal shock	——	Report the test result after test	No crack		——
14	Resistance to low concentrations of acids and alkalis	——	Manufacturer to state classification	Class GLA		——
15	Surface abrasion	——	Report abrasion class and cycles passed	1500 cycles		Class 3
16	Coefficient of linear thermal expansion	$℃^{-1}$	Report the coefficient of linear thermal expansion	6.9×10^{-6}		——
17	Moisture expansion	%	Report the test result after test	<0.01		——
18	Impact resistance	——	Report the average resiliency coefficient	0.84		——
19	Static coefficient of friction	——	Report the value after the test	Dry	0.65	——
				Wet	0.43	
20	Lead release	mg/L	Report the release	<0.1		——
21	Cadmium release	mg/L	Report the release	<0.01		——
22	Internal exposure index I_{Ra} (Decorative materials)	——	Type A: $I_{Ra}\leqslant1.0$	0.6		Type A
			Type B: $I_{Ra}\leqslant1.3$			
	External exposure index I_r (Decorative materials)	——	Type A: $I_r\leqslant1.3$	0.8		
			Type B: $I_r\leqslant1.9$			
			Type C: $I_r\leqslant2.8$			

Checked by : 吴伟彪 Tested by : 赵海静