











### **TEST REPORT**

REPORT NO.:	25202005046		
NAME OF SAMPLE:	UNGLAZED ENAMEL GLASS MOSAIC		
APPLICANT:	FOSHAN GLOBAL BRIDGE BUILDING MATERIALS CO.,LTD.		
DATE OF TEST	23/11/2020 – 03/12/2020 (dd/mm/yy)		

STATE KEY TESTING LABORATORY OF BUILDING CERAMICS AND SANITARY WARE COMPREHENSIVE TECHNOLOGY CENTRE OF FOSHAN CUSTOMS



### COMPREHENSIVE TECHNOLOGY CENTRE OF FOSHAN CUSTOMS STATE KEY TESTING LABORATORY OF BUILDING CERAMICS AND SANITARY WARE

### **TEST REPORT**

Report No: 25202005046

Page 2 of 5

Report No: 25202005046				
Name of sample	UNGLAZED ENAMEL GLASS MOSAIC Length of sheet		296mm×296mm×6mm	
Tile Type	Mosaic Glass Tile	Length of tile	_	
Mark of samples	EY	Aesthetic Classification	on —	
Quantity of samples	15 Sheets	Description of Sample	The samples are sound, intact and fit for test.	
Applicant	FOSHAN GLOBAL BRIDGE BUILDING MATERIALS CO.,LTD.	Address of Applican	NO.6 BUILDING, HUIZHAN 2ND RING ROAD, HUAXIA CERAMIC EXPOSITION CITY, NANZHUANG TOWN, CHANCHENG DISTRICT, FOSHAN CITY, GUANGDONG, CHINA.	
Telephone of applicant	86-757-89985233-820	Fax of Applicant	_	
Source of Samples	Samples selected by applicant	Received on	19/11/2020	
1.ANSI A 137.2-2019 American National Standard Specifications for Glass Tile 2.GB/T 21114-2007 Chemical analysis of refractory products by XRF—Fused cast bead method 3.EN 15771:2010 Vitreous and porcelain enamels - Determination of surface scratch hardness according to the Mohs scale 4.ASTM C 895-87 Standard Test Method for Lead and Cadmium Extracted from Glazed Ceramic Tile				
Conclusion of Test The test results see page 3~5.				
Stamp of Test Unit	京台 東京 東京 Date: 04/12/2020	Address of Test Unit	Address: 2/F, Building 18, Lanshi International Metal Exchange Center, Kuiqiyi Road, Chancheng District, Foshan, Guangdong, China (528000) Tel: 86-757-83960558 86-757-83827991 Fax: 86-757-83827971 E-mail: fsiqtc@163.com Url: http://www.fsiqtc.com/	
Notes	1.All inspections are carried out conscientiously to the best of our knowledge and ability.  This report does not in any respect absolve the other related parties from his contractual and legal obligations.  2.This report shall not be reproduced, except in full, without the prior written approval from the issuing laboratory.  3.The results in this report apply to the samples only.  4.The product information are declared by applicant, and laboratory is not responsible for the authenticity.			

Tested by Inspected by



### COMPREHENSIVE TECHNOLOGY CENTRE OF FOSHAN CUSTOMS STATE KEY TESTING LABORATORY OF BUILDING CERAMICS AND SANITARY WARE

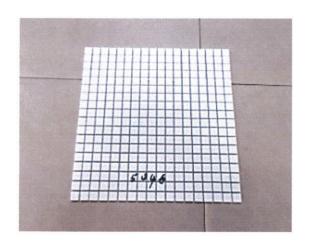
### **TEST REPORT**

Report No: 25202005046

Page 3 of 5

#### **Photo of Samples**







# COMPREHENSIVE TECHNOLOGY CENTRE OF FOSHAN CUSTOMS STATE KEY TESTING LABORATORY OF BUILDING CERAMICS AND SANITARY WARE

### **TEST REPORT**

Report No: 25202005046

Page 4 of 5

Clause	Properties	Test Method	Requirements	Results	Verdicts
5.2.3.1	Water Absorption	ASTM C373-18	≤0.5%	0.02%~0.06%	P
5.2.3.3	Compressive Strength, in N/mm <sup>2</sup>	7.8	≥17.24	18.1	P
5.2.3.5	Chemical Resistance				·
	Acetic acid, 3% (v/v)	ASTM C650-04	As Reported	Not affected	
	Acetic acid, 10%( v/v)	ASTM C650-04	As Reported	Not affected	_
	Ammonium chloride, 100g/L	ASTM C650-04	As Reported	Not affected	_
	Citric acid solution, 30g/L	ASTM C650-04	As Reported	Not affected	
	Citric acid solution, 100g/L	ASTM C650-04	As Reported	Not affected	_
	Lactic acid, 5% (v/v)	ASTM C650-04	As Reported	Not affected	_
	Phosphoric acid, 3% (v/v)	ASTM C650-04	As Reported	Not affected	_
	Phosphoric acid, 10% (v/v)	ASTM C650-04	As Reported	Not affected	_
	Sulfamic acid, 30g/L	ASTM C650-04	As Reported	Not affected	_
	Sulfamic acid, 100g/L	ASTM C650-04	As Reported	Not affected	100000
	Sodium hypochlorite solution, 20mg/L	ASTM C650-04	As Reported	Not affected	_
	Hydrochloric acid solution, 3% (v/v)	ASTM C650-04	As Reported	Not affected	_
	Hydrochloric acid solution, 18% (v/v)	ASTM C650-04	As Reported	Not affected	_
	Potassium hydroxide, 30g/L	ASTM C650-04	As Reported	Not affected	_
	Potassium hydroxide, 100g/L	ASTM C650-04	As Reported	Not affected	_
	Chemical Resistance Class	6.2.3.8	As Reported	Class A	_
5.2.3.6	Stain Resistance				
	Contrasting Grout	ASTM C1378-04	As Reported	Not affected	_
	Carbon Lamp Black	ASTM C1378-04	As Reported	Not affected	_
	Waterproof ink Black	ASTM C1378-04	As Reported	Not affected	×
	Washable Ink	ASTM C1378-04	As Reported	Not affected	_
	Potassium Permanganate Solution, 1%	ASTM C1378-04	As Reported	Not affected	
	Methylene Blue Solution, 1%	ASTM C1378-04	As Reported	Not affected	_
	Stain Resistance Class	5.2.3.6	As Reported	Class A	_



## COMPREHENSIVE TECHNOLOGY CENTRE OF FOSHAN CUSTOMS STATE KEY TESTING LABORATORY OF BUILDING CERAMICS AND SANITARY WARE

### **TEST REPORT**

Report No: 25202005046

Page 5 of 5

ANSI A 137.2-2019 American National Standard Specifications for Glass Tile					
Clause	Properties	Test Method	Requirements	Results	Verdicts
5.2.3.8	Thermal shock resistance: From (15±5)℃ to (71±5)℃, 10 cycles	7.9	Pass	Fully resistant	P
5.2.3.9	Freeze/Thaw Cycling resistance: From-(-3±0.25)°C to (16±11)°C, 300 cycles	ASTM C1026-13	Pass	None of tiles show evidence of degradation, chipping or crack after 15 cycles.	-

#### Possible test case verdicts

- 1. P(ass): Test item does meet the requirement.
- 2. F(ail): Test item does not meet the requirement.
- 3. —: Verdict was not carried out.
- 4. N/A: Test case does not apply to the test item.

GB/T 21114-2007Chemical analysis of refractory products by XRF—Fused cast bead method				
Chemical elements	Test result, in%	Chemical elements	Test result, in%	
${ m SiO_2}$	73.08	K <sub>2</sub> O	0.34	
$Al_2O_3$	1.33	Na <sub>2</sub> O	12.67	
Fe <sub>2</sub> O <sub>3</sub>	0.09	SO <sub>3</sub>	0.24	
${ m TiO_2}$	0.05	P <sub>2</sub> O <sub>5</sub>	<0.01	
CaO	8.02	MnO	<0.01	
MgO	3.77	LOI	0.37	

EN 15771:2010 Vitreous and porcelain enamels - Determination of surface scratch hardness according to the Mohs scale				
Properties	Method	Results		
Scratch hardness of surface according to Mohs	EN 15771:2010	5		

ASTM C 895-87 Standard Test Method for Lead and Cadmium Extracted from Glazed Ceramic Tile					
Properties	Method	Results			
Lead and Cadmium release					
a) Lead release, in mg/dm <sup>2</sup>	ASTM C 895-87 (2014)	<0.1			
b) Cadmium release, in mg/dm <sup>2</sup>	ASTM C 895-87 (2014)	< 0.02			

\*\*\* \*\*\*