



ANSI A 137.2-2019 American National Standard Specifications for Glass Tile

Properties	Test Method	Requirements	Results	Verdicts
Physical property				
Water absorption percent mass fraction	ASTM C373-18	equal or less than 0.5%	0.06%~0.14%	P
Thermal shock resistance: From (15±5)°C to (71±5)°C, 10 cycles	7.9	Pass	Fully resistance	P
Freeze/Thaw Cycling resistance: From(-3±0.25)°C to (16±11)°C, 300 cycles	ASTM C1026-13	Pass	No evidence of degradation after 15 cycles	-
Chemical Property				
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	—
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	—
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	—

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 21114-2007 Chemical analysis of refractory products by XRF—Fused cast bead method

Chemical elements	Test result, in%	Chemical elements	Test result, in%
SiO ₂	72.20	K ₂ O	1.58
Al ₂ O ₃	3.96	Na ₂ O	14.65
Fe ₂ O ₃	0.07	SO ₃	0.09
TiO ₂	<0.11	P ₂ O ₅	<0.01
CaO	4.04	MnO	<0.01
MgO	<0.03	LOI	3.29

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 ²	ASTM C 895-87 (2014)	<0.1
b) Cadmium release, in mg/dm ²	ASTM C 895-87 (2014)	<0.02