

UPDATE

ANSI A137.2 (An American National Standard)

AMERICAN NATIONAL STANDARD SPECIFICATIONS FOR GLASS TILE

Secretariat

The Tile Council of North America

Release Date

January 31, 2014



This Update, released January 31, 2014, provides changes to the A137.2-2012 standard that were balloted and approved by the ANSI Accredited Standards Committee A108 in 2013. It accompanies and brings current all printed and digital copies of A137.2-2012. Additions and alterations to the standard appear in red on the following pages. These changes have been incorporated into the digital version of the standard released on January 31, 2014. The nomenclature for specifying the most current standard is ANSI A137.2-2013.

Use this update in combination with a printed or digital copy of ANSI A137.2-2012 in order to have all of the information contained in the current standard, ANSI A137.2-2013. **Digital copies of A137.2 purchased after January 31, 2014 are marked A137.2-2013 and do not require use of this Update.**

Page vi—Standards, Should Read as Follows:

Standard Designation	Title
ASTM C90-13	Standard Specification for Loadbearing Concrete Masonry Units
ASTM C372-94 (2012)	Standard Test Method for Linear Thermal Expansion of Porcelain Enamel and Glaze Frits and Fired Ceramic Whiteware Products by the Dilatometer Method
ASTM C373-88 (2006)	Standard Test Method for Water Absorption, Bulk Density, Apparent Porosity, and Apparent Specific Gravity of Fired Whiteware Products
ASTM C424-93 (2012)	Standard Test Method for Craze Resistance of Fired Glazed Whitewares by Autoclave Treatment
ASTM C482-02 (2009)	Standard Test Method for Bond Strength of Ceramic Tile to Portland Cement Paste
ASTM C484-99 (2009)	Standard Test Method for Thermal Shock Resistance of Glazed Ceramic Tile
ASTM C485-09	Standard Test Method for Measuring Warpage of Ceramic Tile
ASTM C499-09	Standard Test Method for Facial Dimensions and Thickness of Flat, Rectangular Ceramic Wall and Floor Tile
ASTM C502-09	Standard Test Method for Wedging of Flat, Rectangular Ceramic Wall and Floor Tile
ASTM C609-07	Standard Test Method for Measurement of Light Reflectance Value and Small Color Differences Between Pieces of Ceramic Tile
ASTM C648-04 (2009)	Standard Test Method for Breaking Strength of Ceramic Tile
ASTM C650-04 (2009)	Standard Test Method for Resistance of Ceramic Tile to Chemical Substances
ASTM C1026-13	Standard Test Method for Measuring the Resistance of Ceramic Tile to Freeze-Thaw Cycling
ASTM C1027-09	Standard Test Method for Determining Visible Abrasion Resistance of Glazed Ceramic Tile
ASTM C1028-07e1	Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method
ASTM C1378-04 (2009)	Standard Test Method for Determination of Resistance to Staining
ISO 10545-4 (2004)	Ceramic tiles—Part 4: Determination of Modulus of Rupture and Breaking Strength

Page 2—Footnote 2, Should Read as Follows:

²The TCNA Thin-Set Testing Mortar or the equivalent has been found satisfactory. The sole source of supply of the TCNA Thin-Set Testing Mortar known to the committee at this time is Tile Council of North America, 100 Clemson Research Blvd. Anderson, SC 29625. This mortar was developed for controlled bond strength testing to eliminate the mortar variable when testing and comparing glass tile products. If you are aware of alternative suppliers, please provide this information to [Tile Council of North America](#).

Page 8—Table 7, Should Read as Follows:

Table 7: Miniature Mosaic Glass Tile

Miniature Mosaic Glass Tile: Mounted and Un-Mounted							
Glass tile with both a facial surface area or backside surface area $\leq 4.41 \text{ cm}^2$ (0.68 in ²) and such that the longest side is not greater than 4.25 times the shortest side.							
Property		Requirement					
		Cast		Fused		Low Temperature	
		Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
Nominal Size (ASTM C499)	Standard ¹	-10.00%	10.00%	-10.00%	10.00%	-10.00%	10.00%
	Natural ²	As Reported	As Reported	As Reported	As Reported	As Reported	As Reported
Caliber Range (ASTM C499)	Standard	-5.00%	5.00%	-5.00%	5.00%	-5.00%	5.00%
	Natural	As Reported	As Reported	As Reported	As Reported	As Reported	As Reported
Thickness (ASTM C499)	Standard	N/A	Range: 0.30 in. (0.76 mm)	N/A	Range: 0.30 in. (0.76 mm)	N/A	Range: 0.30 in. (0.76 mm)
	Natural	N/A	As Reported	N/A	As Reported	N/A	As Reported
Mounting ³ Allowable Deviation from Nominal Joint Size (Test Method: Section 7.6)	Standard	As Reported	As Reported	As Reported	As Reported	As Reported	As Reported
	Natural	As Reported	As Reported	As Reported	As Reported	As Reported	As Reported
Compressive Strength (Test Method Section 7.8)	Minimum Average: 2500 PSI (17.24 N/mm ²)		Minimum Average: 2500 PSI (17.24 N/mm ²)		Minimum Average: 2500 PSI (17.24 N/mm ²)		
All Miniature Mosaic Glass Tile							
Minimum				Maximum			
Water Absorption (ASTM C373)	N/A			0.5%, Impervious			
Crazing Resistance (ASTM C424)	Pass			N/A			
Bond Strength ⁴ (Test Method Section 7.7)	28-Day Dry: 150 PSI (1.0 N/mm ²) 21-Day Dry + 7-Day Submerged: 100 PSI (0.7 N/mm ²)			N/A			
Recycled Content (Section 5.2.4.1)	As Reported (see Table 12)			N/A			
Chemical Resistance (ASTM C650)	As Reported						
Static Coefficient of Friction Tiles intended for use on floors (ASTM C1028)	As Reported						
Freeze/Thaw Cycling Resistance (ASTM C1026)	Pass						
Thermal Shock Resistance (Test Method Section 7.9)	Glass tile intended for dry interior wall applications: As Reported Glass tile intended for all other applications: Pass						
Stain Resistance (ASTM C1378)	As Reported						
Color Uniformity (ASTM C609)	As Reported (tiles reported as V0 require color consistency data as per Section 5.2.2.1.12)						
Visible Abrasion Resistance (ASTM C1027)	As Reported						
Linear Thermal Expansion (ASTM C372)	As Reported						

¹For the purposes of this specification, 'standard' glass tiles are those which are manufactured to meet specific sizing tolerances.

²For the purposes of this specification, 'natural' glass tiles are those which are manufactured with inherent variation and thus not held to specific sizing tolerances. This does not refer to sustainability criteria.

³Mounted Miniature Mosaic Glass Tile Only: Glass tiles that are assembled into units, sheets, or strips by suitable material to facilitate installation.

⁴Bonded with "TCNA Thin-Set Testing Mortar." As defined in Section 3.0.