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American National Standard Specifications for Glass Tile

Abstract

This publication presents voluntary standard specifications for glass tile. It lists and defines various types, sizes, and physical properties for glass tile, including large format, mosaic, miniature mosaic, cast, fused, and low temperature-coated glass tile. This standard provides quality criteria for buyers, specifiers, installers, manufacturers, and the public in general. It is intended for reference or inclusion in the glass tile section of product specifications and contracts.
**American National Standard**

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Foreword

This voluntary standard lists and defines various types, sizes, and physical properties for glass tile. It is intended as a guide to aid the general public, manufacturers, distributors, specifiers, architects, tile contractors, and other businesses and professionals in the tile industry.

While the existence of the standard does not in any respect preclude anyone, including those who have accepted it, from manufacturing, marketing, purchasing or using products, processes or procedures not conforming to this standard, producers of glass tiles made in conformance with this standard are encouraged individually to indicate such conformance in advertising, promotion, and on tags and labels.

This standard was processed and approved for submittal to ANSI by the Accredited Standards Committee (ASC) on Ceramic Tile A108. Committee approval of a standard does not necessarily imply that all committee members voted for its approval. The A108 Committee had the following members as of the release date of this document:

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Nyle Wadford, Vice-Chairman
Katelyn Simpson, Secretary
Eric Astrachan, Co-Secretary

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The Tile Council of North America wishes to acknowledge the contributions of the ad hoc A137.2 drafting committee: Tim Bolby, Jed Durbin, David Fatula, Brian Fitzgerald, Svend Hovmand, and Ken McGregor, and the many others, too numerous to name, who also contributed comments and suggestions during the development of the standard.
Standards

The following standards are referred to in the body of this standard by ASTM or ISO designation only and by reference are incorporated in this American National Standard. Dates following the ASTM or ISO designation indicate the year of publication or latest revision. Dates in parentheses indicate the year in which the standard was reaffirmed. Current edition of these standards should be utilized at all times.

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Glass Tile:
Recycled/Recyclable, Durable, Non-Emitting, Sustainable

For information about the sustainability of glass tiles, refer to the Green Squared℠ — American National Standard Specifications for Sustainable Ceramic Tiles, Glass Tiles, and Tile Installation Materials (A138.1)

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American National Standard Specifications for Glass Tile
ANSI A137.2—2013

1.0 Purpose

These specifications serve as a reference standard for buyers, specification writers, and installers of Standard Grade glass tile.

2.0 Scope

These Specifications describe manufacturing styles, body types, sizes, and physical properties for Standard Grade glass tile; the basis for acceptance and methods of testing before installation; the marking of packaging and certification of tile; and definition of terms employed in these specifications.

Note: At the current time¹, there are no glass-specific thin-set mortar standards for the installation of glass tiles. While many suitable mortars are available, as noted in ANSI A108.15 and ANSI A108.16, “not all ANSI A118.4 latex modified thin-sets, whether spray dried polymer or two part bonding mortar systems, are suitable for installing glass tiles. It is the responsibility of the specification writer and the installer to confirm with the glass tile and setting material manufacturers the use of required setting materials, methods, and cure times.”

Note: In this Standard, American and SI measurement units are provided. The value not in parenthesis shall be considered the normative reference, and the value in parenthesis is included for informative reference only.

3.0 Definition of Terms

**Blended Body Types:** Sheets blended with varying glass tile body types or blended with other tiles such as ceramic, natural stone, porcelain, and metal tile. Only glass units within these sheets are subject to this specification.

**Cast Glass Tile:** Glass tile formed in a liquid state at 1600°F (871°C) or higher.

**Ceramic Tile:** A ceramic surfacing unit, usually relatively thin in relation to facial area, having either a glazed or unglazed face and fired above red heat in the course of manufacture to a temperature sufficiently high to produce specific physical properties and characteristics.

**Low Temperature – Coated Glass Tile:** Sheet glass altered between room temperature and 1022°F (550°C).

**Fused Glass Tile:** Sheet glass altered through heat between 1023°F (551°C) and 1599°F (870°C).

**Glass Panels:** Glass modules with both a facial surface area and backside surface area > 3721 cm² (576 in²) [> 930 cm² (144 in²) for cast glass] or containing any single edge exceeding 24 inches (61 cm) in length [12 inches (30.5 cm) for cast glass]. Units such as these are not subject to this specification.

**Glass Tile:** A tile having an overall non-crystalline microstructure with SiO₂ as the primary constituent and manufactured by one or more of three primary processes: cast, fused, or low temperature-coated.

**Hybrid Ceramic Tile:** A tile having a crystalline microstructure body and a non-crystalline microstructure glaze where the glaze layer ranges from 10% to 85% of the overall tile thickness. Units such as these are not subject to this specification.

**Large Format Glass Tile:** Glass tile with both a facial surface area and backside surface area > 57.76 cm² (8.95 in²) and with either a facial surface area or backside surface area ≤ 3721 cm² (576 in²) [≤ 930 cm² (144 in²) for cast glass] and such that the longest side is not greater than 4.25 times the shortest side.

**Miniature Mosaic Glass Tile:** Glass tile with either a facial surface area or backside surface area ≤ 4.41 cm² (0.68 in²) and such that the longest side is not greater than 4.25 times the shortest side.

¹Updates on available standards since the last revision to this standard are available from the Committee Secretary at www.tcnatile.com.