

Resin vs Cement Terrazzo

Nasco Stone + Tile is the leading tile supplier since 1965 and humble beginnings started by a simple product— marble trophy bases. **Nasco Stone + Tile** transitioned to a resin-based terrazzo to improve the quality, aesthetics, and performance of the material.

This shift has proven to be a strong decision, enabling Nasco Stone + Tile to supply resin-based marble products to a wide range of residential and commercial projects worldwide, including stadiums, airports, transit stations, and shopping centers.

Here are key differences between resin-based and cement-based terrazzo:

Color Options

Resin-Based Terrazzo: Offers greater flexibility in creating vibrant and custom color options. Resin's clear nature allows for an extensive palette based on RAL or Pantone systems.

Cement-Based Terrazzo: Typically offers a more muted, limited color palette due to the cement binder.

Thickness

Resin-Based: Can be produced as thin as 9mm, offering shipping efficiency, reduced cost per sq ft, and easier installation.

Cement-Based: Generally available at a minimum thickness of 2cm.

Application Areas

Resin-Based: Suitable for both interior and exterior use, though exterior applications require attention to freeze/thaw conditions and potential yellowing over time due to UV exposure.

Cement-Based: Also applicable for both interior and exterior use.

Moisture Absorption

Resin-Based: Exhibits very low absorption and typically does not require sealing.

Cement-Based: Porous and absorbent; requires sealing.

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Finish

Resin-Based: Can be finished to a honed, polished, or brushed look-ideal for a range of design aesthetics.

Cement-Based: Offers finishes from honed to low-gloss.

Flexural Strength

Resin-Based: Higher flexural strength, helping to minimize cracking over time due to structural movement.

Cement-Based: More prone to cracking under structural stress.

Technical Comparison Table

Property	Resin-Bonded (Nasco Stone + Tile)	Cement-Bonded
Flexural Strength	EN14617-2: 15-25 MPa	EN13748-1: >=8 MPa
Water Absorption	EN14617-1: <=0.15%	EN13748-1: <=4%
Abrasion Resistance	EN14617-4: 40-44 mm	EN13748-1: <=20/50 cm^2
Compression Resistance	EN14617-15: 90-150 MPa	EN14617-15: >=60 MPa
Breaking Load	N/A	EN13748-1: >=2.5 kN
Slip Resistance	ANSI A326.3: 0.42 (honed 320)	DIN51130: R9
Fire Resistance	EN13501-1: A2fl-s1	EN13501-1: A1-fl
Frost Resistance	Not Tested	EN13748-1: Class 2/B

