

VW - 325 (Silver) Polymer-Based Adhesive

for Ceramic Tile & Small-Format Natural Stone
Suitable for interior dry floors and interior walls



Key Advantages

- Ready-to-use single-component product – only water required
- Polymer-modified formulation designed for interior environments
- Cost-effective and user-friendly application
- Excellent adhesion to a wide range of common building substrates
- Surpasses ANSI A118.1T shear bond strength criteria
- Conforms to EN/ISO standards with C1E classification
- Meets and exceeds IS 15477:2019 – Type IT Adhesive performance specifications
- Can be enhanced with latex admix for outdoor tile and stone installations

Suitable Substrates

- Concrete
- Concrete blockwork
- Cement screeds
- Cement plasters
- Existing ceramic tile
- Brick masonry
- Cement terrazzo
- Existing natural stone

Existing tile/stone surfaces must be properly cleaned and mechanically roughened prior to installation.

Application

Formulated for dry interior floors and walls, this adhesive is ideal for fixing a wide range of small ceramic tiles and small-format natural stones onto concrete and other cement-based substrates. Suitable for installation with a bed thickness of up to 12 mm.

PERFORMANCE PROPERTIES

VW-325 Tile Adhesive mixed with Water

Applicable Standards:

ANSI A118.1-1999; EN 12004 & ISO 13007; IS15477:2019

ANSI Data

Property : Test Method	Requirement	Typical Values
Open Time (20 Minutes at 28 days): ANSI A118.1 Clause -5.3	≥75 psi (0.50 MPa)	95 psi – 100 psi (0.65 – 0.69 MPa)
Sag: ANSI A118.1- Clause 6.0	≤0.02 Inches (0.50 mm)	0.016 – 0.018 Inches (0.40-0.45 mm)

Glazed wall tile Shear Strength

7 Days: ANSI A118.1 – Clause 7.1.2	>200psi (1.38 MPa)	200-225 psi (1.38 -1.55 MPa)
7 Days Water immersion: ANSI A118.1- Clause 7.1.3)	>150psi (1.03 MPa)	150-175 psi (1.03 -1.20 MPa)

Porcelain Mosaic Tile Shear Strength

1 Day: ANSI A118.1 – Clause 7.2.2	>50psi (0.34 MPa)	50 -75 psi (0.34 -0.51 MPa)
7 Days: ANSI A118.1 – Clause 7.2.3	>150psi (1.03 MPa)	150-175 psi (1.03 -1.20 MPa)
7 Days Water immersion: ANSI A118.1 – Clause 7.2.4	>100psi (0.69 MPa)	125-150 psi (0.86 -1.03 MPa)
28 Days: ANSI A118.1 – Clause 7.2.5	>150psi (1.03 MPa)	150-175 psi (1.03 -1.20 MPa)
12 Weeks: ANSI A118.1 – Clause 7.2.6	>150psi (1.03 MPa)	150-175 psi (1.03 -1.20 MPa)

EN / ISO Data

Property: Test Method	Requirement	Typical Values
Open Time: EN 1346	$\geq 0.50 \text{ N/mm}^2$	0.65 – 0.69 N/mm^2
Slip Resistance: EN 1308	$\leq 0.50 \text{ mm}$	0.40-0.45 mm
Tensile Adhesion Strength		
Initial: EN 1348 – Clause	$\geq 0.50 \text{ N/mm}^2$	0.50 – 0.60 N/mm^2
After Water Immersion : EN 1348 – Clause	$\geq 0.50 \text{ N/mm}^2$	0.50 – 0.60 N/mm^2
Heat Ageing: EN 1348 – Clause	$\geq 0.50 \text{ N/mm}^2$	0.50 – 0.60 N/mm^2
Freeze- Thaw: EN 1348 – Clause	$\geq 0.50 \text{ N/mm}^2$	0.50 – 0.60 N/mm^2

IS Data

Property: Test method	Requirement	Typical Values
Tensile Adhesion		
Dry Condition – Annex A (Clause 5.1)	Minimum 0.50 N/mm^2	0.60-0.70 N/mm^2
Shear Adhesion		
Dry Condition – Annex B (Clause 5.2)	Minimum 1.00 N/mm^2	1.10-1.20 N/mm^2
Slip Resistance		
Slip Resistance – Annex E (Clause 5.5)	$\leq 0.50 \text{ mm}$	0.25-0.35 mm

Adhesive mortar conforms to IS 15477: 2019 – Type IT Adhesive

Packaging : 20 kg & 25 kg bags

Colour : Grey

Shelf Life : Factory sealed containers of this product are guaranteed to be of first quality for One (1) year if stored off the ground in a dry area.

*High humidity will reduce the shelf life of bagged product

Coverage : Approx. 55-60 Sft per 20 Kg pack, using 1/4" x 1/4" (6 mm x 6 mm) square notched trowel for a bed of 3mm.

Coverage will vary depending on trowel notch size, type and size of tile and substrate smoothness and evenness.

Working Properties at 70° F (21° C)

VW-325 Adhesive mixed with Water

Pot Life : 2 – 3 Hours

Time to Heavy Traffic : 16 – 24 hours

Specifications subject to change without notification.

Important Note:

Performance values shown are based on laboratory tests using standardized methods. Actual on-site results may vary based on substrate condition, installation techniques, and environmental factors.

INSTALLATION

Surface Preparation

All substrates must be structurally sound, clean, and free from dust, oil, grease, paint residue, curing agents, sealers, or any loose contaminants. Substrate temperatures during installation must be between 4°C (40°F) and 40°C (104°F).

Check surfaces for levelness. Concrete slabs must be within 6 mm in 3 m (¼" in 10 ft). Irregular surfaces should be corrected using compatible Velwiin cementitious screed or plaster material to achieve a smooth wood-float finish.

Porous or dry substrates should be lightly dampened and excess water removed prior to application. Adhesive may be applied over damp surfaces. Newly placed concrete must cure for approximately 28 days prior to installation.*

*In accelerated systems or when using latex-modified mixtures, full 28-day cure may not be required.

Movement joints must be honored through the tile work in line with substrate expansion and construction joints. Do not cover or bridge joints with adhesive. Follow industry standards for expansion joints.

Mixing :

Place clean potable water in a mixing container and slowly add Velwiin powdered adhesive while mixing.

Recommended mix ratio: 4.4 – 4.8 liters of water per 20 kg bag, adjusting for desired workability. Allow mixture to stand for 5 minutes (slake time), then remix. Do not add extra water after slaking. Where enhanced flexibility or bond performance is required (e.g., exterior applications, demanding substrates), Velwiin latex additives may be used in place of water. Refer to Velwiin Technical Data Sheets for compatibility.

Application :

Using the flat side of a notched trowel, first key a thin layer of adhesive into the substrate, followed by combing an additional layer using the notched side. Apply only as much adhesive as can be covered within 10 minutes while it remains tacky.

Tiles larger than 300×300 mm (12"×12") should be back-buttered to ensure full bedding. Check bond transfer by periodically lifting tiles during installation.

After placement, tap tiles with a rubber mallet or beating block to ensure proper seating. Use spacers to maintain uniform grout joints as specified by project design. Remove spacers once adhesive has set firm.

If the adhesive skins over or loses tack, remove and replace with fresh material.

For moisture-sensitive stones, pre-sealing with suitable Velwiin stone care products may be required to prevent staining or wet marks.

Grouting :

Grouting may commence after approximately 24 hours under standard temperature conditions (21°C / 70°F). Grout joints using high-quality cementitious, epoxy, or performance grouts depending on specification. Velwiin epoxy or stain-resistant grouts are recommended for areas requiring superior cleanability.

Hot & Cold Weather Installations :

Follow Velwiin guidelines for tile installation during extreme temperature conditions to prevent premature curing or drying issues.

CUSTOMER CARE

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