



VW - 335 (Gold) Polymer-Based Adhesive

Polymer-modified adhesive for fixing tiles and natural stone on interior & exterior floors and walls.



Features / Benefits

- Single-component, just add water
- Polymer-modified for high strength
- Excellent transfer, no hollow sound
- Crack & shrinkage resistant
- High impact resistance
- Easy to apply & economical
- Strong bond on multiple substrates
- Application thickness up to 15 mm
- Meets EN 12004 (C2T) & IS 15477:2019 Type 2 T
- Exceeds ANSI A118.4 standards

Suitable Substrates

- Cast-in-situ concrete and concrete block surfaces
- Mivan construction and structural shear walls
- VDF / Tremix finished concrete floors
- Cement-based screeds and mortar beds
- Cement plastered surfaces
- Ceramic, vitrified tiles and natural stone surfaces
- Brickwork and masonry walls
- Cement terrazzo flooring*
- Existing natural stone surfaces*

* Surfaces must be thoroughly cleaned and mechanically roughened prior to tile or stone installation.

Application

Suitable for interior floors and walls, and exterior floor applications for ceramic tiles, vitrified tiles, precast cement terrazzo, and natural stone on concrete and cement-based substrates, including low-absorbent surfaces like Mivan and shear walls. Supports application thickness up to 15 mm

PERFORMANCE PROPERTIES

VW-335 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 (30 Minutes at 28 days): ANSI A118.4 Clause -5.3	≥75 psi (0.50 Mpa)	100 psi – 120 psi(0.68 – 0.82 Mpa)
Sag: ANSI A118.4 - Clause 6.0	≤0.02 Inches (0.50 mm)	0.012 – 0.016 Inches (0.30-0.40 mm)

Glazed wall tile Shear Strength

7 Days: ANSI A118.4 – Clause7.1.2	>300psi (2.07Mpa)	0.012 – 0.016 Inches (0.30-0.40 mm)
7 Days Water immersion: ANSIA118.4- Clause 7.1.3)	>200psi (1.38Mpa)	0.012 – 0.016 Inches (0.30-0.40 mm)

Porcelain Mosaic Tile Shear Strength

1 Day: ANSI A118.4 – Clause7.2.2	>75psi (0.50Mpa)	0.012 – 0.016 Inches (0.30-0.40 mm)
7 Days: ANSI A118.4 – Clause7.2.3	>200psi (1.38Mpa)	0.012 – 0.016 Inches (0.30-0.40 mm)
7 Days Water immersion: ANSIA118.4 – Clause 7.2.4	>150psi (1.03Mpa)	0.012 – 0.016 Inches (0.30-0.40 mm)
28 Days: ANSI A118.4 – Clause7.2.5	>200psi (1.38Mpa)	0.012 – 0.016 Inches (0.30-0.40 mm)
28 Days : Freeze- Thaw cycling. ANSIA118.4 – Clause 7.2.5	>175psi (1.20Mpa)	0.012 – 0.016 Inches (0.30-0.40 mm)
12 Weeks: ANSI A118.4 – Clause 7.2.7	>200psi (1.38Mpa)	0.012 – 0.016 Inches (0.30-0.40 mm)

Quarry Tile Shear Strength

28 Days : ANSI A118.4 – Clause 7.3.2	>150psi (1.03Mpa)	200 – 250 psi (1.37 – 1.72 Mpa)
28 Days :Freeze- Thaw cycling. ANSIA 118.4	>100psi (0.69Mpa)	150 – 200 psi (1.03 – 1.37 Mpa)

The adhesive mortar conforms to ANSI A118.4 T

EN / ISO Data

Property: Test Method	Requirement	Typical Values
Open Time: EN1346 at 20 minutes	$\geq 0.50 \text{ N/mm}^2$	0.75 – 0.85 N/mm ²
Slip Resistance: EN1308	$\leq 0.50 \text{ mm}$	0.25 – 0.35 mm

Tensile Adhesion Strength

Initial: EN 1348 – Clause 8.2	$\geq 1.00 \text{ N/mm}^2$	1.35 – 1.45 N/mm ²
After Water Immersion: EN 1348 – Clause 8.3	$\geq 1.00 \text{ N/mm}^2$	1.25 – 1.35 N/mm ²
Heat Ageing: EN 1348 – Clause 8.4	$\geq 1.00 \text{ N/mm}^2$	1.00 – 1.10 N/mm ²
Freeze- Thaw: EN 1348 – Clause 8.5	$\geq 1.00 \text{ N/mm}^2$	1.25 – 1.35 N/mm ²

The adhesive mortar conforms to EN12004 / ISO 13007 as C2T

IS Data

Property: Test method	Requirement	Typical Values
Tensile Adhesion		
Dry Conditions – Annex A (Clause 5.1)	Minimum 1.00 N/mm ²	1.35-1.45 N/mm ²
Wet Conditions – Annex A (Clause 5.1)	Minimum 1.00 N/mm ²	1.25-1.35 N/mm ²
Shear Adhesion		
Dry Conditions – (Annex B (Clause 5.2)	Minimum 1.25 N/mm ²	1.30-1.40 N/mm ²
Heat Ageing – Annex B (Clause 5.2)	Minimum 1.00 N/mm ²	1.10-1.15 N/mm ²
Wet Conditions – Annex B (Clause 5.2)	Minimum 1.00 N/mm ²	1.15-1.25 N/mm ²
Slip resistance – Annex E (Clause 5.5)	$\leq 0.5 \text{ mm}$	0.3-0.4 mm

The Adhesive mortar conforms to IS 15477: 2019 - Type 2 T Adhesive

Packaging : 20 and 25 kg bags

Colour : Grey and White

Coverage : Per 20 Kg bag when mixed with water : Coverage will vary depending on trowel notch size, type and size of tile and substrate smoothness and evenness.

Trowel Size	Bed Thickness	Minimum Coverage	Maximum Coverage
6 x 6 mm Square Notch	3 mm	137 ft ²	150 ft ²
9 x 9 mm Square Notch	4.5 mm	87 ft ²	100 ft ²
12 x 12 mm Square Notch	6 mm	67 ft ²	80 ft ²

Working Properties at 70° F (21° C) VELWIIN 335 Adhesive mixed with Water

Open Time	20-25 minutes
Adjustability Time	20-25 minutes
Pot Life	4-5 hours
Time to Foot Traffic	16 - 24 hours
Time to heavy Traffic	28 Days

Specifications subject to change without notification.

Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

INSTALLATION

Surface Preparation

All surfaces must be structurally sound, clean, and free from dust, oil, grease, loose paint, curing compounds, sealers, laitance, or any contaminants. The application temperature should be maintained between 4°C and 40°C.

Ensure that the substrate is level and plumb. Surface variation should not exceed 6 mm over 3 m. Uneven or rough concrete must be leveled using a suitable cement-based screed or plaster to achieve a smooth, float-finished surface.

Dry and dusty concrete or masonry surfaces should be lightly moistened prior to application, with excess water removed. Installation is permissible on damp surfaces. Newly cast concrete must be properly cured and at least 28 days old before adhesive application.

No minimum curing time is required when thin-set adhesive is mixed with a latex additive.

Expansion joints from the substrate must be continued through the tile or stone installation. Do not bridge expansion joints with adhesive. Follow standard guidelines for expansion joint placement as per applicable industry specifications.

For installations over cement backer boards, adhere to recommended installation practices as per standard tile application details.

Important Notes:

Tile or stone installation over plywood or wooden substrates requires the use of appropriate waterproofing or bonding systems. Refer to the relevant Velwiin Technical Data Sheet for specific recommendations.

For natural stones with a protective backing mesh, the mesh and epoxy layer must be completely removed by light mechanical grinding to ensure proper adhesion.

Do not install tiles or stones without removing the back mesh and cleaning the surface thoroughly.

Mixing :

Pour clean, potable water into a clean mixing container. Gradually add Velwiin tile adhesive powder while mixing. Use approximately 13.5–15 litres of water for every 50 kg bag of adhesive. Mix manually or with a slow-speed mechanical mixer until a smooth, lump-free, and workable consistency is achieved. Allow the mix to rest for 5–10 minutes (slaking period). After slaking, remix the adhesive, adjust consistency if required, and apply using a suitably sized notched trowel.

Note: Replacing part or all of the mixing water with a latex admixture improves bond strength and flexibility of the adhesive mortar.

For large-format tiles or stone installations, especially in exterior applications, refer to the Velwiin Technical Team or product-specific Technical Data Sheet.

Application Method :

Tile / Stone Installation

Apply the adhesive onto the prepared substrate using the flat side of the trowel, pressing firmly to ensure proper contact with the surface. Then, comb additional adhesive using the notched side of the trowel. Select an appropriate notch size to achieve full coverage beneath the tile or stone.

Apply only as much adhesive as can be covered within 10 minutes. For large-format tiles (larger than 300 × 300 mm), back-buttering is strongly recommended to ensure complete bedding and adequate support.

Place tiles or stones into the fresh adhesive bed and press firmly. Tap gently using a rubber mallet and beating block to properly embed the tile and achieve level alignment. Periodically lift a tile to verify full adhesive transfer on the back surface.

Use tile spacers to maintain consistent joint widths between tiles or stones, as specified by the architect or engineer. Remove spacers once the adhesive has sufficiently set.

If the adhesive surface forms a skin or loses tackiness, remove it and apply fresh adhesive before continuing installation.

For highly absorbent natural stones that may show moisture marks during installation, it is recommended to apply a suitable impregnating sealer on all sides of the stone prior to fixing. Alternatively, a latex admixture may be applied as a bottom coat to minimize moisture-related staining. Refer to the relevant Velwiin Technical Data Sheet for detailed guidance.

Important Notes for Specifiers & Installers :

- For exterior wall and floor installations, movement joints must be provided between tiles or stones. These joints should be filled using a cement-based grout mixed with a grout admixture or a flexible grout system.
- Absence of movement joints can lead to tile displacement or debonding due to thermal or structural movement.
- Peripheral joints must be provided around the edges of external tiled areas, ensuring tiles or stones are not rigidly restrained by surrounding masonry or plaster.

Hot & Cold Weather Installation

Refer to the Velwiin technical guidelines for recommended practices during hot and cold weather conditions.

Grouting :

Grouting should be carried out only after a minimum curing period of 24 hours at 21°C. Use a sanded or unsanded cement-based grout, mixed with an appropriate grout admixture for enhanced performance.

- For interior applications requiring high stain resistance, use a stain-resistant grout system.
- For exterior applications, use a UV-resistant, flexible grout capable of accommodating movement and weather exposure.

Shelf Life & Storage :

When stored in original, unopened packaging, off the ground, and in a dry environment, the product has a shelf life of 12 months.

High humidity and improper storage conditions may reduce the shelf life of bagged material.

CUSTOMER CARE

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