



PRODUCT DESCRIPTION

ARMORFIX -109 is a high performing, standard setting, cement-based tile adhesive. It is suitable for thin and thick bed applications.

ARMORFIX -109 is polymer modified and has excellent anti-slip properties, suitable for the tiling of porcelain, mosaic and ceramic tiles on floor and wall of concrete, concrete block and cement render.

FEATURES

- Single component, just add water
- Interior and exterior applications
- Can be used up to Maximum 12 mm bed thickness
- Exceeds ANSI A118.1T shear bond strength requirements
- Complies with EN with a C1TE classification.
- Can be fortified with Armortalax admix for external use.

SURFACE PREPARATION

All surfaces should be between 40° F (4 °C) and 104° F (40 °C) and structurally sound, clean, and free of all dirt, oil, grease, loose peeling paint, laitance, concrete sealers, or curing compounds. Check the surface to be true to plumb. All slabs

must be plumb and true to within 1/4" (6mm) in 10 ft (3m). Dry, dusty concrete slabs or masonry should be dampened, and excess water swept off. Installation may be made on a damp surface. New concrete slabs shall be damp cured and 28* days old before application *No minimum cure time for concrete slabs when thin-set mortar is mixed with latex additive.

Mixing:

Place clean, potable water into a clean mixing bowl. Add Armorfix 109 powder into the mixing bowl. Use approximately 3.6 – 4 L of water for 20 kg of powder. Mix by hand or with a slow-speed mixer to a smooth, trowelable consistency. Allow the adhesive to slake for 5 minutes. Adjust consistency if necessary. Remix and apply with the proper sized notched trowel.

APPLICATION AND INSTALLATION

Pour ARMORFIX-109 into a clean plastic or metal bucket containing clean water, pour an adequate quantity of ARMORFIX-109 that can be used within the pot life of 4 hours. 20kg of ARMORFIX. 109 requires approximately 4 litres of water. Stir with a mixing device or by hand. Let the mixture rest for 10-

5 minutes and restart briefly before application. No further water should be added after mixing. Spread ARMORFIX -109 tile adhesive mortar evenly over m² area at a time using a notched trowel. Fix tiles immediately within the open time of 20 – 40 minutes. Please be sure that all areas are covered with ARMORFIX-109.

ROUTING

Grouting should be done 24 hours after tiling, for SWIMMING pool leave at least 3 days before grouting and at least one week before filling

COVERAGE

For thin solid bed application (3mm thickness) 4-5 kg of ARMORFIX -109 will cover approximately 1m². Large tiles may need to have the adhesive buttered to the back as well. Ensure that tiles are well bedded into the adhesive. See further information in the technical section below

PACKAGING AND USES.

For the installation of floor and wall, ceramic tiles, mosaic, internal and external applications. It is packaged in 20kg bag.

CLEANING AND HEALTH

Remove the excess mortar on tools with copious amount of water; if already dry you can remove through mechanical means. Also prolonged contact with skin may occur as it is the case with all cementitious based material, therefore safety gloves and glasses should be used when working.

SHELF LIFE

12 months. Store in a dry place

LIMITED WARRANTY

All recommendations, statements and technical data herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty either expressed or implied. User shall rely on his or her own information and tests to determine suitability of the product for the intended use and user assumes all risk and liability resulting from his or her use of the product. Nothing contained in any supplied materials relieves the user of the obligation to read and follow the warnings and instruction for each product as set forth in the current Technical Data Sheet, product label and Safety Data Sheet prior to product use away.

Armorsil Manufacturing supplies products that comply with the properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price. Armorsil Manufacturing does not warrant or guarantee the installation of the products as it does not have control over the installation or end use of the products. Any suspected defects must be reported to Armorsil Manufacturing in writing within seven working days of being detected.

TECHNICAL INFORMATION

Performance Properties:

Armorfix 109 Adhesive mixed with Water

Applicable Standards:

ANSI A118.1-1999; EN 12004

The adhesive mortar conforms to ANSI A118.1T

ANSI Data		
Property: Test method	Requirement	Typical Values
Open Time (20 Minutes at 28 days): ANSI A118.1 Clause – 5.3	≥75 psi (0.60 MPa)	95 psi – 100 psi (0.65 – 0.70 MPa)
Sag: ANSI A118.1- Clause 6.0	≤0.02 Inches (0.55 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)	75 - 100 psi (0.51 – 0.69 MPa)
7 Days: ANSI A118.1 – Clause 7.2.3	> 150psi (1.03 MPa)	175 - 200 psi (1.20 – 1.38 MPa)
7 Days Water immersion: ANSI A118.1 – Clause 7.2.4	> 100psi (0.69 MPa)	150 - 175 psi (1.03 – 1.20 MPa)
28 Days: ANSI A118.1 – Clause 7.2.5	> 150psi (1.03 MPa)	175 - 200 psi (1.20 – 1.38 MPa)
12 Weeks: ANSI A118.1 – Clause 7.2.6	> 150psi (1.03 MPa)	175 - 200 psi (1.20 – 1.38 MPa)

The adhesive mortar conforms to EN 12004 as C1TE

IS Data		
Property: Test method	Requirement	Typical Values
Tensile Adhesion		
Dry Condition – Annex A (Clause 5.1)	Minimum 0.60 N/mm ²	0.65-0.75 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)	≤0.5mm	0.1-0.2 mm

Packaging:

20 kg

Colour:

Grey

Coverage:

Approx. 4-5 Sqm per 20 kg pack using 1/4" x 1/4" (6mm 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)

Armorfix 109 Adhesive mixed with Water

Pot Life	3 - 4 hours
Time to Heavy Traffic	16 - 24 hours

Specifications subject to change without notice. The results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions