

# ARMORFIX 109 FLEX

**HIGH PERFORMING FLEXIBLE TILE ADHESIVE WITH WATERPROOFING PROPERTIES**



## PRODUCT DESCRIPTION

ARMORFIX -109 Flex is a high-performing, standard-setting, cement-based tile adhesive with water-resistant properties. It is suitable for thin and thick bed applications, internal and external applications of mosaic tiles and stone materials on floor and wall of concrete.

## FEATURES

- Suitable for laying tiles on walls and floors for internal and external applications
- Easy to use, just add water
- strong adhesion and stability under dry, wet, and heat-aged conditions
- Non-sag and anti-slip properties with high initial adhesiveness
- Greater workability due to high pot life
- Has waterproofing properties.
- Suitable for wet areas like bathrooms and swimming pools.
- can be applied up to a maximum bed thickness of 12 mm
- Exceeds ANSI A118.1T shear bond strength requirements
- Complies with EN with a C2TE classification. (Type 3 T Adhesive standards.)
- Can be fortified with Armortalax admix for external use.

## SURFACE PREPARATION

All surfaces should be structurally sound, clean, and free of all dirt, oil, grease, loose peeling paint, concrete sealers, or curing compounds. Standard practice requires at least seven weeks before tiling on concrete and two weeks before tiling on screed.

## MIXING

Pour ARMORFIX-109 Flex into a clean plastic or metal bucket containing clean water, pour an adequate quantity of ARMORFIX-109 Flex that can be used within the pot life of 4 hours. 20kg of ARMORFIX. 109 flex requires approximately 4 -5 litres of water. Stir with a mixing device or by hand. Let the mixture rest for 10-15 minutes and restart briefly before application. No further water should be added after mixing.

## APPLICATION AND INSTALLATION

4 mm notched trowel is recommended to achieve an optimal bed thickness of 1.5–2 mm for standard tile installations."

Only apply enough adhesive that can be tiled within 10-15 minutes or while the adhesive remains tacky. The tiles should then be positioned and gently tapped with a mallet or grouting float to ensure full bedding. Tiles should be aligned for uniform joints and allowed to set until firm. Any excess adhesive must be wiped off the tile surface with a wet cloth or sponge while the adhesive is still fresh and not yet hardened.

### GROUTING

- Grouting may be carried out **24 hours after tile installation** under normal conditions.
- For **swimming pools or submerged areas**, allow a **minimum of 3 days** after tiling before grouting.
- After grouting, **wait at least 7 days** before filling the pool with water to ensure full curing and performance.

## COVERAGE

For thin solid bed application (3mm thickness) 1-5 kg of ARMORFIX - 109 flex will cover approximately 1m<sup>2</sup>. 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

## USES.

For the installation of floor and wall, ceramic, mosaic, vitrified tiles and Natural stones. Note that ARMROLATEX is required when ARMORFIX 109 FLEX is used on WOOD, PLASTERBOARD AND GYPSUM PLASTER.

## CLEANING AND HEALTH

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

## SHELF LIFE

**12 months. Store in a dry place**

### Packaging:

20 kg

### Colour:

Grey

### Coverage:

Approx. 4- 6 m<sup>2</sup> 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)

The adhesive mortar conforms to EN12004 as C2TE

Armorfix 109 flex 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***

**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. The user shall rely on his or her own information and tests to determine the suitability of the product for the intended use, and the 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 instructions for each product as outlined in the current Technical Data Sheet, product label and Safety Data Sheet before product use.

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 (7) working days of being detected.

**TECHNICAL INFORMATION**

**Performance Properties:** Armorflox 109 flex conforms with **EN 12004:** C2TE – Improved cementitious adhesive with slip resistance and **ANSI:** A118.15 – Improved modified dry-set mortar.

Test Property	EN 12004 Requirement	ANSI Requirement	Typical Product Values
<b>Tensile Adhesion – Dry</b>	≥ 1.0 N/mm <sup>2</sup> (C2)	≥ 1.0 N/mm <sup>2</sup> (145 psi)	1.55–1.65 N/mm <sup>2</sup>
<b>Tensile Adhesion – Wet</b>	≥ 1.0 N/mm <sup>2</sup> (C2)	≥ 0.7–1.0 N/mm <sup>2</sup> (100–145 psi)	1.10–1.20 N/mm <sup>2</sup>
<b>Shear Adhesion – Dry</b>	≥ 1.0 N/mm <sup>2</sup>	≥ 1.0 N/mm <sup>2</sup> (145 psi)	1.60–1.70 N/mm <sup>2</sup>
<b>Shear Adhesion – Heat Aged</b>	≥ 1.0 N/mm <sup>2</sup>	≥ 1.0 N/mm <sup>2</sup> (145 psi)	1.10–1.20 N/mm <sup>2</sup>
<b>Shear Adhesion – Wet</b>	≥ 1.0 N/mm <sup>2</sup>	≥ 0.7–1.0 N/mm <sup>2</sup> (100–145 psi)	1.15–1.25 N/mm <sup>2</sup>
<b>Slip Resistance</b>	≤ 0.5 mm (Class T)	≤ 0.5 mm	0.35–0.45 mm