

M59 FLEXIBLE TILE ADHESIVE



Technical Data Sheet

PRODUCT DESCRIPTION

M59 Flexible is a high-performance tile adhesive formulated with highly flexible cementitious adhesives, premium synthetic resins, and specialized additives.

It is designed for versatile applications, effectively bonding various tile types and sizes, including polished tiles, vitrified tiles, and natural stones, on both interior and exterior walls and floors. M59 is particularly well-suited for large-format tiles and natural stones, ensuring strong adhesion and long-lasting durability.



FEATURE

- Exceptional Bonding Strength
- Suitable for Extra-Large Format Ceramic Thin Panels and Sintered Stones
- Applicable for Large-Scale Natural Stones and Heavy-Duty Tiles
- Ideal for Flexible Substrates, such as gypsum board, cement fiberboard and insulation boards
- Resistant to Sustained High-Temperature Environments, such as underfloor heating systems

APPLICATION SPECIFICATION

1. Substrate Preparation:

- The substrate surface must be clean, solid, and free from dust, dirt, grease, curing agents, loose particles, and any substances that may compromise adhesion to ensure strong bonding and the ability to withstand tile weight.
- Cement-based leveling layers must be cured for at least 14 days with a tensile strength exceeding that of the tile adhesive used.

2. Mixing Instructions

- Pour clean water into a container, then gradually add the powder while stirring.
- Mix until a smooth, lump-free, easily workable mortar is obtained. Mechanical mixing is recommended for optimal results.
- Mixing ratio: For 25 kg of powder, add approximately 6L of clean water. The recommended water amount is based on standard mechanical mixing under room temperature conditions. Variations in mixing equipment may slightly affect water requirements.
- The mixed mortar should be used immediately, with an open time of approximately 2 hours at 23°C.

3. Tile and Mosaic Installation

- Use a notched trowel to apply the mortar in a striped pattern on the substrate, ensuring firm adhesion of tiles onto the wet and pliable mortar layer.

4. Trowel Recommendations

- 3mm x 3mm notched trowel for mosaics and thin flat-backed wall tiles.
- 6mm x 6mm notched trowel for standard wall tiles.
- 10mm x 10mm notched trowel for floor tiles and large-format tiles

SPECIAL NOTES

1. For floor tiles and wall tiles with back grooves, the grooves must be pre-filled to ensure full adhesion without air pockets.
2. For large-format tiles, it is recommended to apply adhesive on both the wall and the tile back for enhanced bonding.
3. M59 has an open time of approximately 30 minutes and a bucket life of about 120 minutes. Mix only what can be used within this period and complete tile placement within the open time.
 - a. Prolonged standing time before application will significantly reduce open time.

CONSUMPTION

1. After mixing, one 25kg bag of M59 produces approximately 19L of adhesive mortar.
2. Estimated consumption: Approximately 1.3 kg of powder per mm thickness per square meter.
3. The actual consumption varies depending on tile back grooves, notched trowel size, and adhesive thickness.
4. Using a 6mm x 6mm square-notched trowel at a 45° angle, one 25kg bag of M59 covers approximately 9m².

PRECAUTIONS AND GUIDELINES

1. Surface Condition: Avoid applying tiles on a mortar layer that has developed surface crusting.
2. Material Integrity: Do not mix cement or any other materials into the adhesive. Once dried, the slurry must not be rehydrated with water.
3. Mixing Restrictions: This product should be mixed only with water following the recommended ratio; the use of additional materials is strictly prohibited.
4. Application Temperature: Suitable for use in temperatures ranging from 5°C to 35°C.
5. Mixing Adjustments: The mixing ratio may be adjusted appropriately depending on substrate type, weather conditions, construction environment, and application methods (please seek tech support).
6. Usage Time: The mixed slurry should be used within 2 hours (subject to weather conditions); do not attempt to rehydrate dried slurry with water.
7. Curing Time: After tiling is completed, the adhesive will be fully cured for approximately 24 hours. Grouting may proceed after.
8. Tile Spacing: Seamless tiling is strictly prohibited. A minimum grout joint of ≥ 2 mm between tiles is required.
9. Wall Tiling: Ensure proper stabilization measures are in place when tiling on vertical surfaces.
10. Tile-Specific Adhesive Selection: Different tile types may require specific adhesive grades. For guidance on selecting the appropriate product, please consult your local dealer or contact our customer support.

PACKAGING AND STORAGE

- Available in 25 kg, 20 kg, or 50 lb (22.68 kg) Paper-Plastic Valve Bag
- In dry and cool conditions
- Unopened packs can be stored for 12 months

EXECUTION STANDARD

JC/T547-2017 C2TES1

ANSI A118.15 HET (ISO 13007 C2TES1)

PRODUCT DATA

Packaging	20kg/pack, 25kg/pack or 50 lb (22.68 kg)	
Color	Grey/White	
Drying time	30 min	
Working time	15 min	
Coverage	1.4~1.5 kg/mm/m ²	
Tensile bond strength(28 days)	Original	> 1.0 N/mm ²
	After Water-submersion	> 1.0 N/mm ²
	After Heat-aging	> 1.0 N/mm ²
	After Freeze	> 1.0 N/mm ²
Lateral Formation	≥ 2.5mm	

SAFETY INFORMATION

PLEASE READ THE SAFETY DATA SHEET THOROUGHLY PRIOR TO APPLYING THE PRODUCT

Ensure suitable PPE (Personal Protective Equipment) such as protective gloves, respiratory, face, skin and eye protection are worn at all times while handling this product. Avoid breathing dust, fumes, gas, mist, vapors or spray. Avoid contact with eyes and skin. If this product comes in contact with skin, rinse with soap and plenty of water. If the product comes in contact with eyes, wash out immediately with water. Ensure adequate ventilation during mixing and application. Wash contaminated clothing before reuse. Keep out of the reach of children. Call a doctor if you feel unwell. Safety Data Sheet (SDS) is available on request.

TECHNICAL SERVICES

Adhere to all product limitations, and if unsure about a particular application, contact Morient Mortar at:

USA: (908) 809-5672

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