



ABOUT LASTIC 508

LASTIC 508 is a high-performance, multipurpose, and highly polymer-modified adhesive formulated for installing very large format tiles and stones over a variety of substrates. Engineered with advanced flexibility and very high deformability, it can accommodate surface movements and offers reliable performance even under stress. It supports bed thicknesses of up to 18 mm and provides excellent sag and slump resistance for vertical and horizontal installations in both interior and exterior environments.

LASTIC 508 exceeds the performance standards-

IS 15477:2019 (Type 4TS2)

EN 12004/ISO 13007 C2ETS2

ANSI A118.4ET

SURFACE APPLICATION MATERIALS

- | | |
|---|--|
|  Glass mosaic tiles |  Vitrified tiles & paver bricks |
|  Marble & natural stones |  Low-thickness slabs & slim tiles |
|  Precast terrazzo |  All types of ceramic tiles |
|  Large-format tiles |  Brick & terracotta pavers |
|  Terracotta tiles |  Cement body tiles |

RECOMMENDED SURFACES / SUBSTRATES

- | | |
|--|---|
|  Brickwork & AAC blocks |  Drywall panels (cement, bison, gypsum boards) |
|  Cement-based screeds & mortar beds |  Existing tiled & stone surfaces |
|  Cement-plastered & rendered surfaces |  Other cement-based substrates |
|  Concrete surfaces |  Waterproofing-treated surfaces |

APPLICATION AREAS

- | | |
|---|--|
|  Flooring & walls (internal & external) |  External shaded & open areas |
|  Residential & commercial applications |  Vibrational areas |
|  Terraces, balconies & podium decks |  Window & door frames |
|  Dry & wet areas (saunas, spas, fountains, swimming pools) |  New construction & renovation projects |

PRODUCTS HIGHLIGHTS

- ❖ **EXCELLENT IMPACT RESISTANCE** – Offers cushioning effect to absorb external force and prevent tile damage.
- ❖ **LOW VOC** – Promotes a healthier and safer environment for installers and occupants.
- ❖ **VERY HIGH DEFORMABILITY** – Provides flexibility to accommodate substrate movement and minimize tile stress.
- ❖ **WATER & SHOCK RESISTANT** – Excellent choice for wet zones and areas with high foot traffic or impact.
- ❖ **NON-SAG AND NON-SLUMP** – Ideal for vertical wall applications and large-format floor tiles.
- ❖ **GOOD CRACK-BRIDGING ABILITY** – Resists crack propagation from underlying substrates.
- ❖ **SUPERIOR ADHESION** – Highly polymer-modified formula bonds strongly with various tile and stone surfaces.
- ❖ **MEDIUM BED ADHESIVE WITH EXTENDED OPEN TIME** – Supports precise positioning of large tiles.

TECHNICAL DETAILS

ANSI DATA

PROPERTY	TEST METHOD	REQUIREMENT	LASTIC 508 VALUES
Open Time (30 Minutes at 28°C)	ANSI A118.4 Clause 5.3	≥75 psi (0.50 MPa)	30 Minutes
Sag	ANSI A118.4 Clause 6.0	≤0.02 Inches (0.50 mm)	0.009–0.013 inches (0.23–0.33 mm)
Glazed Wall Tile Shear Strength (7 Days)	ANSI A118.4 Clause 7.1.2	>300 psi (2.07 MPa)	351–401 psi (2.42–2.77 MPa)
7 Days Water Immersion	ANSI A118.4 Clause 7.1.3	>200 psi (1.38 MPa)	251–301 psi (1.73–2.08 MPa)
Porcelain Mosaic Tile Shear Strength (1 Day)	ANSI A118.4 Clause 7.2.2	>75 psi (0.50 MPa)	101–176 psi (0.70–1.21 MPa)
Porcelain Mosaic Tile Shear Strength (7 Days)	ANSI A118.4 Clause 7.2.3	>200 psi (1.38 MPa)	251–351 psi (1.73–2.42 MPa)
7 Days Water Immersion (Porcelain)	ANSI A118.4 Clause 7.2.4	>150 psi (1.03 MPa)	201–301 psi (1.39–2.08 MPa)
28 Days	ANSI A118.4 Clause 7.2.5	>200 psi (1.38 MPa)	301–401 psi (2.08–2.77 MPa)
28 Days Freeze–Thaw Cycling	ANSI A118.4 Clause 7.2.5	>175 psi (1.20 MPa)	276–326 psi (1.90–2.25 MPa)
12 Weeks	ANSI A118.4 Clause 7.2.7	>200 psi (1.38 MPa)	316–431 psi (2.18–2.97 MPa)
Quarry Tile Shear Strength (28 Days)	ANSI A118.4 Clause 7.3.2	>150 psi (1.03 MPa)	301–351 psi (2.08–2.42 MPa)
28 Days Freeze–Thaw Cycling (Quarry Tile)	ANSI A118.4 Clause 7.3.3	>100 psi (0.69 MPa)	201–251 psi (1.39–1.73 MPa)

EN / ISO DATA

PROPERTY	TEST METHOD	REQUIREMENT	LASTIC 508 VALUES
Open Time (30 Minutes)	EN 1346	$\geq 0.50 \text{ N/mm}^2$	30 Minutes
Slip Resistance	EN 1308	$\leq 0.50 \text{ mm}$	0.21 – 0.31 mm
Tensile Adhesion Strength (Initial)	EN 1348 Clause 8.2	$\geq 1.00 \text{ N/mm}^2$	1.76 – 2.26 N/mm^2
After Water Immersion	EN 1348 Clause 8.3	$\geq 1.00 \text{ N/mm}^2$	1.51 – 1.76 N/mm^2
Heat Ageing	EN 1348 Clause 8.4	$\geq 1.00 \text{ N/mm}^2$	1.51 – 2.01 N/mm^2
Freeze-Thaw	EN 1348 Clause 8.5	$\geq 1.00 \text{ N/mm}^2$	1.51 – 2.01 N/mm^2
Transverse Deformation	EN 12002	$> 5.00 \text{ mm}$	$> 5.21 \text{ mm}$

IS DATA

PROPERTY	TEST METHOD	REQUIREMENT	LASTIC 508 VALUES
Shear Adhesion (Dry)	Annex B (Clause 5.2)	$\geq 1.50 \text{ N/mm}^2$	2.01–3.01 N/mm^2
Shear Adhesion (Heat Ageing)	Annex B (Clause 5.2)	$\geq 1.00 \text{ N/mm}^2$	1.31–2.01 N/mm^2
Shear Adhesion (Wet)	Annex B (Clause 5.2)	$\geq 1.00 \text{ N/mm}^2$	1.31–1.56 N/mm^2
Tensile Adhesion (Dry)	Annex A (Clause 5.1)	$\geq 1.50 \text{ N/mm}^2$	1.76–2.26 N/mm^2
Tensile Adhesion (Wet)	Annex A (Clause 5.1)	$\geq 1.00 \text{ N/mm}^2$	1.51–1.76 N/mm^2

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION GUIDELINES

- 1) **CLEAN & STABLE SURFACE** – Ensure the surface is structurally sound, free from dust, oil, grease, curing compounds, sealers, or any loose particles that may affect bonding. Any contaminants should be mechanically removed before installation.
- 2) **EVEN & LEVEL BASE** – The substrate should be flat and even, with surface variation not exceeding 3 mm over 3 meters (1/8" in 10 ft) and 2 mm over 600 mm (1/16" in 24"). Uneven surfaces may lead to tile cracking, especially with large-format tiles.
- 3) **DRY & MOISTURE-CONTROLLED** – The substrate must be dry and moisture-controlled. For concrete, perform a water drop test—if water is absorbed, the surface is ready. If it beads, surface contaminants must be removed.
- 4) **PRE-WET IF NECESSARY** – Slightly dampen dry, dusty concrete or masonry surfaces before tiling. Ensure no standing water is present.
- 5) **CURE NEW CONCRETE** – New concrete must be cured for a minimum of 28 days to allow shrinkage and hardening before tiling.
- 6) **PRESERVE EXPANSION JOINTS** – Maintain all expansion, contraction, and control joints. Fill with a flexible sealant and avoid covering them with adhesive or tiles.

HOW TO MIX THE ADHESIVE

1. **MIXING RATIO** – Mix 5.5 to 6 liters of clean water per 20 kg of powder. Do not exceed the recommended ratio.
2. **BLENDING PROCESS** – Use a clean mixing container and a low-speed mechanical stirrer (50–100 rpm) to mix until a smooth, lump-free, paste-like consistency is achieved.
3. **RESTING PERIOD** – Allow the mixture to rest (slake) for 5–10 minutes, then re-stir before application. Do not add water once the mix has begun to set.
4. **APPLICATION CAUTION** – Mix only the amount of adhesive that can be used within its pot life. Do not remix or retemper with additional water.

STEP-BY-STEP TILE APPLICATION GUIDE

1. SURFACE PREPARATION

- Apply a skim coat using the flat side of a notched trowel.
- Then use the notched side to comb adhesive in straight lines.
- Trowel Size Recommendations:
 - Small tiles (up to 30x30 cm): 6 mm notch
 - Medium tiles (30x60 cm): 8–10 mm notch
 - Large tiles (60x60 cm and above): 10–12 mm notch

2. TILE PLACEMENT

- Fix tiles within 30 minutes of applying adhesive.
- If a dry film forms, remove and reapply fresh adhesive.
- Firmly press tiles using a slight twisting motion.
- Adjust level with a rubber mallet as needed.

3. ACHIEVING FULL ADHESION

- For large or uneven tiles, back-buttering is mandatory.
- Ensure full contact between tile and substrate to eliminate voids.

4. SPACING & CLEANING

- Use spacers to maintain consistent joint gaps.
- Clean off excess adhesive before it sets.

5. SPECIAL CONSIDERATIONS

- Provide temporary support for wall tiles until adhesive sets.
- Pre-seal absorbent stones to avoid moisture patches.

❖ Consult technical guidelines for special surfaces like mesh-backed tiles, glass mosaics, or gypsum boards

PRO TIPS & PRECAUTIONS

- ✓ Protect installed tiles from water exposure and foot traffic for at least 24 hours.
- ✓ Do not modify LASTIC 508 with any on-site additives like sand or cement.
- ✓ Stick to the prescribed water-to-powder ratio to maintain bond strength.
- ✓ For high-rise installations or wall applications above 3 meters, use mechanical supports like steel hooks.
- ✓ Always add powder to water while mixing, never the reverse.
- ✓ Avoid using the adhesive to level surfaces beyond 15 mm of variation—use a proper leveling compound.
- ✓ Ensure the substrate is fully cured and not wet before starting application.

PRODUCT SPECIFICATIONS & STORAGE GUIDELINES

AVAILABLE PACKAGING:

- Grey: 20 kg bag
- White: 20 kg bag

SHELF LIFE: 12 months from the manufacturing date when stored properly.

STORAGE LIFE:

- Keep in original sealed packaging
- Store in a cool, dry place (10–30°C)

- Protect from:
 - Direct sunlight
 - Moisture/humidity
 - Extreme temperatures (<5°C or >35°C)

QUALITY CHECK: Discard if the bag is torn or the contents have hardened.

GROUTING INSTRUCTIONS

- 1. WAITING TIME:** Begin grouting after a minimum of 24–48 hours of curing at 21°C (70°F).
- 2. RECOMMENDED PRODUCTS:**
 - Use HYDAPOXY grouts such as HYDAPOXY 711 or HYDAPOXY 712 for best performance.
 - For internal areas with high stain resistance requirements, use stain-free grouts.
 - For external areas, use UV- and movement-resistant grouts such as HYDAPOXY UV 10 .
- 3. APPLICATION TIP:** Always maintain uniform joint gaps before grout application. Note that grout is not a substitute for waterproofing. If waterproofing is needed, use a proper membrane system

COVERAGE DETAILS

- 20 kg bag:
 - 5-6 m² at 3 mm thickness (using a 6×6 mm notched trowel)
 - 2.5-3 m² at 6 mm thickness (using a 12×12 mm notched trowel)
- Usage Rate: ~1.2 kg/m² per mm thickness

FACTORS AFFECTING COVERAGE:

- Trowel size & application technique
- Tile size & material
- Surface smoothness & porosity

SAFETY & APPLICATION GUIDELINES FOR LASTIC 508

1. PERSONAL PROTECTION

- Wear protective gloves, clothing, and eye/face protection while handling.
- Keep out of reach of children at all times.
- For professional use only – not for consumer DIY applications.

2. EMERGENCY PROCEDURES

- **SKIN CONTACT:** Wash immediately with plenty of clean water.
- **EYE CONTACT:** Rinse thoroughly with water for 15 minutes and seek medical attention.

3. MIXING INSTRUCTIONS

- Always add powder to water – never reverse the order.
- Follow recommended water ratios – excess water weakens adhesion.
- Do not mix with cement, sand, or other additives.

4. SURFACE PREPARATION

- Ensure the substrate is dry, level, and fully cured before application.
- Not suitable for wet screeds or fresh concrete (must be at least 28 days old).
- For uneven surfaces (>15 mm variation), use a leveling compound.

5. INSTALLATION & PROTECTION

- Protect newly installed tiles from rain, foot traffic, and heavy loads for at least 24 hours.
- For high-rise applications or heavy cladding:
 - Consult a structural engineer.
 - Use mechanical fastening systems if required.
 - Check substrate load capacity.

PERFORMANCE LIMITATIONS

- Not a self-leveling compound – use appropriate leveling materials if needed.
- Curing time may vary based on environmental conditions.
- Test on a small area if uncertain about substrate suitability.

End of TDS