

MAX 4002 N.S.A.-99

(Polymer Modified Tile on Tile Adhesive)

DESCRIPTION:

MAX 4002 N. S. A.-99 is highly polymer modified pre mixed special tile adhesive for "Tile on Tile" (TOT) application. **MAX 4002 N. S. A.-99** a non-shrink, high bonding, self-curing and high flexible adhesive having excellent waterproofing properties. It is specially made for Ceramic Tiles, Vitrified Tiles flooring etc. It is both for exterior and interior applications. It compiles to **ISO 9001: 2015 & BS 5980: 1980**

IS 15477: 2019 Type 2

IS 15477: 2004 Type 2'T'

EN 12004 / ISO 13007: C2TE

ADVANTAGES:

Ready to use, high bonding and durable, Suitable for indoor and out-door, No need for hacking or mechanical key on surface, Ideal for fixing tiles on tiles and tiles on wall, Excellent waterproofing characteristics, Ideal adhesive for wall, floor, showers area, dry and wet areas etc.

TECHNICAL INFORMATION:

Chemical base: Portland cement, selected aggregates, water retention additives, re-dispersible polymer

Appearance / Colour: Grey powder

Fresh mortar density (EN ISO 2811-1) @27°C

Grey: 1.55 ± 0.20 kg/l

Mixing ratio W/P ratio Water for 20 kg bag

Grey 0.26-0.30 6.50-7.50 ltr

Substrate temperature: +5 °C min. /+35°C max

Maturing time: ~5 minutes

Pot life: ≥ 120 minutes (100 g mass, +27 °C)

Open time

(EN 12004-2 / ISO 13007-2): > 30 min

Adjustability time @ 27° C: ~30 min

Applied product ready for use

Grouting floors / walkability: 24–36 hours

Grouting walls: 4–6 hours

Water immersion: ~21 days

(Values determined in laboratory conditions: +23 °C ± 2 °C, R.H. 50 % ± 5 %.)

Higher temperatures will reduce the indicated waiting time, lower temperatures increase waiting time.

Tensile adhesion strength:

(EN 12004-2/ISO 13007-2)

Dry condition ≥ 1.5 N/mm²

Wet condition

After heat ageing

After > 30 minutes, open time

Typical Value

≥ 1.0 N/mm²

≥ 1.0 N/mm²

≥ 1.0 N/mm²

≥ 0.5 N/mm²

Shear adhesion strength:

(EN 12004-2/ISO 13007-2)

Dry condition

Wet condition

After heat ageing

After > 30 minutes, open time

≥ 1.25 N/mm²

≥ 1.0 N/mm²

≥ 1.0 N/mm²

≥ 0.5 N/mm²

Slip resistance

(EN 12004-2/ISO 13007-2)

≤ 0.5 mm

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Important: Do not apply on metal surfaces, Wood and old ceramic tiles outdoor.

- The substrate can be one of the following materials: Cementitious screed, concrete, plaster, ceramic tiles
- Cementitious substrates must be sufficiently cured and dried (2-6 weeks).
- All substrates must be structurally sound, able to support the weight of the new tiling and provide a firm and securely fixed background.
- Substrates must be clean, dry, and free of any loose or friable particles, contaminants such as dust, dirt, oil, wax polish, grease, cement laitance or efflorescence.
- Use adequate mechanical preparation techniques to remove from the substrate, all traces of any materials that could reduce the product's adhesion to the substrate.
- Smooth surfaces must be roughened lightly to improve adhesion.
- To confirm adequate surface preparation and adhesion, carry out a small trial before full application.
- Any small surface defects and variations in level, profile, or around exposed aggregates, prefill and level with an additional layer of **MAX 4002 N. S. A.-99** to a maximum thickness of 5 mm, applied at least 24 hours before full adhesive application.



- When laying tiles on non-absorbent or substrates with limited absorbency, such as existing ceramic tiles, painted surfaces etc., check these surfaces are all sound, firm and securely bonded. Use suitable degreasing / descaling products to thoroughly and completely clean the substrate.
- For applications in hot climates / environments, or on absorbent substrates, thoroughly pre-dampen the substrate immediately before product application. Avoid any ponding / standing water on the substrate. Surface must not be damp to touch.
- If a waterproofing layer is required under the tiles, cement-based and acrylic-based **SEMITRONE** waterproofing product/systems must be applied to the substrate before tiling.

MIXING

Important: Avoid over-mixing to minimise air entrainment.

Requirement: Use a low speed electric single paddle mixer (< 500 rpm) with spiral paddle for mixing.

1. Pour the minimum recommended quantity of clean cold water into a clean mixing container.
2. Gradually add **MAX 4002 N. S. A.-99** powder to the water while mixing.
3. Mix thoroughly for ~5 minutes until a uniformly coloured, smooth mix is achieved. Add additional water, if necessary, to the maximum specified amount.
4. Do not mix for ~5 minutes to allow mixed product to 'mature'.
5. Remix for ~30 seconds.

APPLICATION

Important: Apply sufficient adhesive to ensure adequate 'wetting' of the backs of the tiles.

Important: Coverage on the back of the tiles must be 100 %.

Important: Tiling must be carried out on freshly applied adhesive. Exert adequate pressure to ensure 100 % complete and uniform contact with the adhesive to achieve optimum adhesion.

Important: If a skin forms on the surface of the adhesive, immediately remove the adhesive layer with a trowel, discard material and apply a fresh layer of **MAX 4002 N. S. A.-99** adhesive.

Important: Protect freshly applied material from freezing conditions and rain, etc.

Important: For natural stone tiles, always carry out a preliminary test application first.

1. Apply sufficient adhesive to the prepared fixing surfaces with the flat side of trowel.
2. Comb additional adhesive with appropriate Square notched trowel to the required bed thickness.
3. Back butter the tiles for full bedding.
4. Place tiles into wet, sticky adhesive and use rubber mallet or tile vibrator to fully embed the tiles.
5. Adjust tiles if required. Provide support wherever needed.
6. Clean off surplus adhesive from tile face and between tile joints before the adhesive has dried.

COVERAGE:

Approx. 55-60 Sq. Ft. per 20 Kg bag (6mm x 6mm) square notched trowel for average bed of 3mm. Coverage will vary depending on trowel notch size, type and size of tile and substrate smoothness and evenness.

Packing: 20 kg Bag

HEALTH & SAFETY:

- Use rubber hand gloves & safety goggles, while using **MAX 4002 N. S. A.-99**
- In case of contact with skin, wash with plenty of water.
- Keep out of reach of children.

STORAGE & LIFE:

Best before one years from the date manufacture when in sealed pack and stored in cool & dry place in unopened condition away from direct sunlight.

TECHNICAL INFORMATION & SERVICES:

Further information and advice, including practical demonstration are freely available with the Technical Service Department of **SEMITRONE CONCHEM LTD - AHMEDABAD**.

DISCLAIMER: The product information & application details given by the company & its agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure on the suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of other materials used and the on-site workmanship are factors beyond our control, there are no expressed or implied guarantee / warranty as to the results obtained. The company does not assume any liability or consequential damage for unsatisfactory results.



Regd. Office: 2nd Floor, Neelmani Chambers, B/h. Sales India,
Ashram Road, Ahmedabad - 380009. Gujarat, INDIA
Ph.: +91 - 79 - 26584951 | 26584197 | 26573759
E-mail: info@semitrone.com | www.semitrone.com

SEMITRONE
CONCHEM LTD.
A CONSTRUCTIONS CHEMICAL COMPANY