

NESCOAT® GROUT PLUS

Structural Grout Mortar

DESCRIPTION

NESCOAT® GROUT PLUS is a cement-based grout mortar with high adhesion and strength properties. It has a fluid consistency and can be applied in a single layer with a thickness of 10-75 mm.

APPLICATION AREAS

- Filling voids in reinforced concrete structures in both indoor and outdoor environments.
- Repairing and filling wide cracks, cavities, and damaged areas on high-strength old or new concrete surfaces.
- Repairing airplane and helicopter runways.
- Bedding industrial machinery and equipment.
- Manufacturing wall and column caps.
- Fixing steel columns and precast concrete structural elements to foundations and filling foundation sockets.

ADVANTAGES

- High compressive strength.
- Excellent adhesion even on old surfaces.
- Resistant to shrinkage and cracking.
- Waterproof and resistant to corrosive salts.
- Fluid consistency allows it to self-level, providing ease of application.

SURFACE PREPARATION

The substrate must be clean, dry, and structurally sound to support the application. In restoration works, weak plaster layers should be removed mechanically. Cracks should be widened in a V-shape to reach stable areas. If there are rusty reinforcement bars, they must be cleaned of rust and treated with an anti-corrosion primer.

The surface must be free from dirt, dust, and other adhesion-impairing materials. It should be dampened without allowing water pooling. Old concrete surfaces should be primed with **NESCOAT® LATEX** before application.

MORTAR PREPARATION

Gradually add 25 kg of **NESCOAT® GROUT PLUS** into **3.5-4 liters of clean water** (14-16% water by weight) while mixing with a low-speed mixer. Mix for approximately 3 minutes until a lump-free consistency is achieved. Use the prepared mortar within **30 minutes**, and only prepare the amount that can be used within this time frame. Do not add water or product to reuse hardened material.

APPLICATION

- If the mortar is to be poured into a mold, ensure the mold is sealed, the joints are isolated with an appropriate material, and the mold is fixed securely.
- The surfaces of the mold that will come into contact with the mortar should be lubricated with mold release oil.
- Pour the mortar continuously from one side of the mold to prevent air entrapment.
- If necessary, use a steel rod to release trapped air and facilitate the spread of the mortar.
- The mortar thickness should be at least 1 cm in a single layer. In wide areas, the thickness should not exceed 7.5 cm. For thicker applications, wait for the first layer to dry before applying the second and third layers.
- For a single-layer application of up to 15 cm, mix the mortar with 30% fine gravel (5-12 mm size). However, adding excessive gravel may reduce the strength, so it should be used with caution.

SERVICE TIME

- The surface can be opened to service approximately 24 hours after application.
- Setting times may shorten in high temperatures and extend in low temperatures.

CONSUMPTION

- Approximately 2 kg of powder is required for 1 liter of mortar.
- A sample application is recommended to determine the exact consumption.

WARNINGS AND RECOMMENDATIONS

- The ambient and surface temperature during application should be between +5 °C and +35 °C.
- Avoid application if freezing weather conditions are expected within 24 hours after application.
- Avoid applying under direct sunlight in hot weather or in strong winds.
- Mixing water should be between 20-25°C.
- For outdoor applications in hot weather, protect the surface from direct sunlight and wind. For this purpose, cure with NESCOAT® CURE A acrylic curing agent or cover with damp burlap for 48 hours.

STORAGE AND SHELF LIFE

- The product should be protected from rain, moisture, intense sunlight, and frost.
- Do not stack more than 2 pallets on top of each other.
- The shelf life is 12 months from the date of manufacture under proper storage conditions.
- Opened packages should be tightly sealed and consumed within one week if not used immediately.

PACKAGING

25 kg kraft bag (PE reinforced)

SAFETY RULES

- Appropriate protective equipment (clothing, gloves, goggles, mask) should be used during application.
- In case of contact with the skin, the affected area should be washed with plenty of water.
- For more detailed information, please refer to the Material Safety Data Sheet (MSDS).

QUALITY CERTIFICATES

- Complies with the ISO 9001:2015 quality management standard.
- Complies with the TS EN 1504-3/R4 building materials standard.
- CE marked, compliant with EU standards.



TECHNICAL SPECIFICATIONS

Feature	Value
Appearance	Grey Powder
Grain Size	Dmax: 3 mm
Fresh Mortar Density	2.3 ± 0.1 kg/L
Compressive Strength (24h)	≥ 30 N/mm ²
Compressive Strength (28d)	≥ 60 N/mm ²
Flexural Strength (28d)	≥ 9 N/mm ²
Bond Strength	≥ 2 N/mm ²
Elastic Modulus	≥ 2.000 N/mm ²
Shrinkage Expansion	≥ 2 N/mm ²
Chloride Ion Content	< %0,05
Capillary Water Absorption	< 0,1kg/m ² h ^{0,5}
Reaction to Fire	A1

*The values mentioned above are valid for +23°C and 50% relative humidity.

LEGAL DISCLAIMER

The information in this document has been prepared based on NESCAOT's laboratory tests and field experience. NESCAOT is not responsible for any adverse outcomes resulting from the use of the product outside of its intended purpose or failure to comply with the conditions stated above.