

PRODUCT DESCRIPTION

PlekoMortar NST is a high specification, single component shrinkage compensated, thixotropic, fiber reinforced structural repair mortar. It is composed of hydraulic binders, selected aggregates, polymer fibers, bonding agents, and special chemical additives; contains no metallic aggregate and is chloride free. It is extremely durable, non-shrink, chemical resistant and easy to use by just adding water, improving on-site quality control.

USES

Structural .repair of concrete surfaces where load bearing is expected and where formwork cannot be erected: honeycombing, edges of steps, weakened or damaged structures from balconies to beams, columns and slabs even in industrial or marine environments.

Its thixotropic properties allows for horizontal or vertical use in thickness up to 50mm in one layer. May be hand applied or sprayed with suitable equipment.

Shrinkage compensation eliminates failure due to shrinkage cracking and ensures full contact with substrate and therefore improves performance and durability.

APPROVED SUBSTRATES

PlekoMortar NST can be used directly onto concrete, in vertical, horizontal or overhead situations.

PACKAGING

25 kg in multiply paper bag.

YIELD

One 25kg bag mixed with 4.4 liters of water will yield approximately 13.8 liters of mortar covering 1.38m² at 10mm average thickness

Manufacturer does not warrant square meter coverage, which can vary greatly according to application techniques.

PROPERTIES

- **Easy to use**
- **High Strength**
- **Shrinkage Compensated**
- **Superior Chemical Resistance**
- **Enhanced Durability**
- **Factory Controlled Quality**

TECHNICAL DATA

Appearance	Free-flowing Grayish powder containing fibers
Bulk Density (Kg/L ± 0.5)	1.52
Water Demand (%)	17-19
Application Thickness (mm): Overhead use Vertical use For small pockets	5-50 5-70 Up to 100
Tensile Strength* (N/mm ²)	≥ 4
Compressive Strength* (N/mm ²)	≥ 70
Flexural Strength* (N/mm ²)	≥ 10

*after 28 days

INSTALLATION

SUBSTRATE PREPARATION

Surface must be sound, clean, dry, free of bond-inhibiting materials such as paint, grease, oil, efflorescence, form release agents and curing compounds. It should have been sufficiently cured in a way that any shrinkage has already occurred.

Clearly identified damaged areas of concrete to be removed. Remove damaged concrete and laitance by saw cutting or cold-chiseling to a depth of 10mm keeping the sides square and cutting the edges as neatly as possible.



Feather-edging is not permitted and a minimum thickness of 10mm must be maintained over the whole repair area. Corroded steel must be exposed and cleaned around its whole circumference and treated by power tool, metal brush, or abrasive blasting to remove all rust particles. Reinforcing steel should be prepared to SA 2½.

Saturate the substrate with clean water to provide a saturated surface dry condition, if possible soak surface for few hours before application. Any surface water should be removed using an oil free compressed air.

MIXING

Use a clean container free of all foreign substances for preparing and mixing material. Use a heavy duty electric drill and mixing paddle; forced action mixer or pan mixers can also be used. Add powder to the water in small increments while mixing thoroughly to achieve lump-free consistency. Avoid working excessively to prevent air entrapment. Let mixture set for 5 minutes and re-temper. If needed add water (within limits given) to adjust consistency. Do not add water once the mixed mortar starts to harden.

APPLICATION

Apply Pleko PlekoMortar NST using steel trowel or spray machine making sure the mortar is tightly forced onto substrate to promote contact with the pre-wetted substrate. Level surface using trowel and let the mix partly set, then smooth surface using steel float.

For thicknesses higher than specified limits it is recommended to apply 2 layers roughening the surface of first layer to create mechanical grip; allow the first layer to completely set, wet the surface and apply second layer.

CURING

Pleko PlekoMortar NST should be cured by spraying clean potable water for 3 to 5 days and covering with plastic sheeting. In hot and windy climate curing using a PlekoCure product is recommended.

LIMITATIONS

Apply only to unfrozen surfaces above 4 °C (40°F). Maintain minimum 4 °C (40°F) ambient temperature for 24 hours after application. Protect from direct sunlight, wind and rain during application. For ambient temperatures above 35°C, use cool water for mixing to maintain mortar temperature below 30°C.

Do not mix with any additive or product unless recommended by Pleko.

Pleko bears no responsibility for the defects due to the improper or non-recommended use of the product.

CLEANING

While still fresh, soluble in water. Clean all equipment with water immediately after use. After hardening, tools should be cleaned mechanically.

STORAGE

Store in cool, dry, well-ventilated area, protected from freeze, heat and direct sunlight and at a temperature between 4°C (40°F) and 38°C (100°F), in tightly sealed original container off the ground. Storage time must not exceed one year.

HEALTH AND SAFETY

Avoid contact with eyes and skin. Prevent inhalation of dust.

The product contains cement powders which, when mixed with water, release alkalis that could be harmful to the skin. It is preferable that the application be done in a ventilated area, and to wear protective gear for hands, eyes and respiratory system and to avoid breathing of the dust. Splashes on the skin should be washed away by cleaning with soap and water. In case of contact with eyes, wash thoroughly with clean water. If swallowed, do not induce vomiting, in both cases seek medical attention.

The product is non-flammable



PRODUCT DATASHEET
PlekoMortar NST

Attention

This product is intended for use by qualified professional contractors, as a component of a larger construction system and specification. It should be installed in accordance with given instructions and specifications. Information listed above reflects the criteria for our internal quality test and practical experience. Results depend on listed instructions and consumer skills and are therefore out of our responsibility whether expressed or implied. All values are valid for the product when dispatched from the plant. Technical data are generated under laboratory conditions, some variations are expected due to weather, site, and application conditions which are beyond the control of the manufacturer. We reserve the right to change any given specification without notice.