Two-part epoxy resin mortars

Uses
For use in exceptionally wet conditions and for underwater applications.

Advantages
- Possesses outstanding strength and adhesive powers
- Resistant to physical damage
- Excellent chemical resistance
- Can be used underwater

Description
Nitomortar UA is recommended for fixing slip bricks and for reinstating structures exposed to heavy battering from the sea, such as sea walls and concrete jetties and for repairing submerged steelwork and concrete. Mixed mortar may be transported underwater in polythene bags.

Properties

| Form:               | Two-part compounds —
|                    | Base: firm putty
|                    | Hardener: soft putty
| Solids content:    | 100%
| Fresh wet density: | 2000 kg/m³
| Colour:            | Base: off-white
|                    | Hardener: black
|                    | Mixed colour: dark grey
| Pot life:          | 30 to 45 minutes at 20°C
| Water immersion:   | Nitomortar UA may be applied and cured underwater.
| Cure time:         | Initial cure: 24 hours at 20°C
|                    | Final cure: 7 days at 20°C
|                    | After 48 hours at 20°C Nitomortar UA will have achieved between 60% to 70% of its final compressive strength
| Compressive strength (BS 6319, Pt 2): | After 1 week at 20°C — 65 N/mm²
| Flexural strength (BS 6319, Pt 3): | After 1 week at 20°C — 35 N/mm²
| Tensile strength (BS 6319, Pt 7): | After 1 week at 20°C — 12 N/mm²
| Thermal expansion: | Coefficient of linear expansion: –25°C to +25°C — 3.0 x 10⁻⁶ per°C

Application instructions

Mixing Nitomortar UA
The 1.5 litre pack of Nitomortar UA is suitable for hand mixing (wearing protective gloves) on a flat, clean surface. The mixing surface should be wetted and the whole of the base material spread out approximately 10 to 20 mm thick. All of the hardener should be emptied out onto the middle of the base and the base folded over the hardener and kneaded until the resultant mortar is of an even consistency and uniform colour.

Underwater application
Surfaces must be mechanically cleaned, free of weak or loose material, marine growth, rust, scale, etc. Mixed Nitomortar UA should be carried in plastic bags to work area and small quantities, approximately 5 mm thick, pressed into position ensuring that all water is expelled from between the repair surface and the Nitomortar UA. Mixed mortar should be applied within 30 minutes of mixing. Contact between the mixed mortar and water should be avoided until the point of application. Uncured material should be protected from scouring and displacement by moving water until cured.

Fixing of slip bricks, tiles, etc
The concrete surface should be scabbled, wire brushed and washed with clean water. Scrub bond face of brick or tile with clean water and shake to remove excess water. Rub Nitomortar UA into the wetted bond surfaces. Apply 25 mm thick sausage of Nitomortar UA to the tile. Firmly press tiles onto concrete with twisting action to ensure complete material bed of required thickness (usually 6 to 12 mm). Very thick beds should be made up by previous application of Nitomortar UA to the prepared concrete surface. The tiles should be supported for 12 to 48 hours until the Nitomortar UA has cured sufficiently to prevent slipping. The use of Nitomortar UA is recommended as it allows the surfaces of the bricks and concrete to be thoroughly washed down immediately prior to fixing.

Cleaning
Nitomortar UA should be removed whilst uncured using water or detergent solution. Cured mortar can only be removed by mechanical means.

Estimating
Nitomortar UA is supplied in 9 x 1.5 litre packs containing base and hardener in separate plastic buckets. Coverage rate is 1 litre/m² per mm thickness.
Limitations
Nitomortar UA should not be used when the temperature is below 5°C and falling. Never mix part packs.

Storage
All products have a shelf life of 18 months at between 5°C and 20°C and kept in a dry store in the original, unopened packs. Storage at higher temperature may reduce shelf life.

Precautions
Health and safety
For further information refer to appropriate Product Safety Data Sheet.