

TECHNICAL DATA SHEET FOR

NW1 CEMENT STRENGTHENER

- DESCRIPTION** : NW1 cement strengthener is specially formulated with modified acrylic polymer with excellent bonding properties to reinforce, strengthen and improve the adhesion of screeds, renders, mortars, patching materials onto concrete and cement-sand substrates. It can also be used as a bonding agent for concrete, masonry or brick surface to receive subsequent render or screed. When mixed with cement, it acts as a key coat for tile-over-tile bonding.
- TYPE** : Modified acrylic polymer cement strengthener
- APPEARANCE** : Milky white dispersion
- FEATURES** :
- Improve bonding strength, flexural strength and compressive strength of screeds, renders/plasters
 - Increase the adhesion of new and old concrete
 - Bonding agent on concrete or cement substrates to receive screeds and renders
 - Key coat on existing tile to improve adhesion of tile overlay application
 - Bonding tiles when added into cement-sand slurry
 - As admixture in cement mortar for laying brick and concrete block
 - Environmentally friendly paint certified under the Singapore Green Building Product Certification Scheme

APPLICATION DATA

- SURFACE PREPARATION** : Ensure surface is clean, dry and stable. Remove all loose particles, dust, bonding film, dirt, peeling paint, wax, oil, grease or any foreign matter that may affect adhesion by using power brush or scraper, or other means
- DIRECTION OF USE** : **Bonding Agent / Primer**
Apply as it is or dilute NW1 with 1 part of water before applying onto smooth concrete or precast concrete with brush or roller. Apply the screed and render / plasters while NW1 is tacky for the improvement of adhesion properties. The substrate shall be dampened with water before application

Key Coat for Tile-Over-Tile Bonding

Dilute NW1 with 1 part of water. Add the cement into the mixture and mix until homogenous. Thinly apply onto old tile surface by brush or trowel to about 1 mm thickness. Bond on the tiles with tile bond cement after key coat has dried for a day. Recommended ratio as follows:

NW1	1 part by weight
Water	1 part by weight
Cement	3 part by weight

NW1 CEMENT STRENGTHENER**Key Coat (Splash or spatter coats)**

While applying render and screed onto smooth concrete or precast concrete surface, it is recommended to apply a key coat to improve the adhesion. Recommended ratio as follows:

NW1	1 part by weight
Water	0.5 part by weight
Cement	3 parts by weight
Sand	0.5 parts by weight

Render/Plaster & Screed

NW1 can be diluted and used as an admixture for cement-sand screed & render for the improvement in cohesion and adhesion strength, compressive and flexural strength as well as water resistance. Recommended ratio as follow:

Render/Plaster

NW1	1 part by weight
Water	1 part by weight
Cement	3.2 parts by weight
Sand	7 parts by weight

Screed

NW1	1 part by weight
Water	1 part by weight
Cement	3.3 parts by weight
Sand	10 parts by weight

All of the above mixing ratios are based on lab testing condition. Actual ratios might vary which depend on the grade and type of cement and sand. Ratio shall be adjusted according to the workability at different application.

CLEANING : All equipment should be cleaned with water immediately after use

GENERAL INFORMATION

CONFORMITY : NW1 Cement Strengthener is listed under HDB's Material List as Bonding Aid On Concrete Surface (Internal & External Use)

SLANT SHEAR BOND STRENGTH (ASTM C1042) : Type I: 5.9 N/mm²
Type II: 11.0 N/mm²

SOLID CONTENT : 50.0 ± 2.0 % by weight

DENSITY : 1.03 ± 0.02 kg / litre

PACKING : 5 & 20 litres

STORAGE : Store in a tightly sealed container in a cool, dry place

SHELF LIFE : Up to 12 months in a tightly sealed container

NW1 CEMENT STRENGTHENER

PRECAUTION

: Ensure good ventilation during application and drying. Avoid direct contact with sensitive skin. Use appropriate personal protective equipment

Refer to the product Safety Data Sheet for more information

The information given is intended to give a description of the product performance under specific test conditions. Nevertheless, we cannot assume any responsibility for the use of it since circumstances under which the products are applied in practice are subjected to many variations. We reserve the right to alter the given data without notice.

Enquiries / Contact Details

: **Customer Service**
6265 5355 (Main Line)
6264 1603 (Fax)
www.nipponpaint.com.sg