



Technical datasheet

FLY WP 01

Waterproofing cement-based slurry

Description

Fly WP 01 is a one component, cement based, and brush-able waterproofing slurry

Modified with special resins and quartz fillers

Offering:

- Total waterproofing against positive hydrostatic pressure up to 5 Atm according to EN 12390-8
- Total waterproofing to negative pressure
- Perfect bonding to substrate like concrete, masonry, plaster, etc.
- Suitability for potable water tanks as well as food contact surfaces according to the Egyptian code of practice for damp and water proofing
- Comply with the requirement of National organization for potable water
- Protect concrete from carbonation
- No corrosive effect on the reinforcing steel in concrete

Certified according to EN 1504-2 and classified as a coating for surface protection of concrete.

Fields of application

It is used for waterproofing concrete, elements, masonry, and plaster surfaces. (In cases ranging from simple moisture to water under pressure)

Suitable for:

- Waterproofing basements
- Water tanks
- Swimming pools
- Sewage tanks

It enables the internal waterproofing of underground areas since it can withstand negative water pressure

In case the surface to be sealed shows or expected to show hairline cracks the two component waterproofing product (FLY WP 05) is recommended instead

Elastification

For waterproofing unstable substrates subjected to vibration or expansion-contraction such as gypsum boards, chipboards, heated floors, terraces, balconies, swimming pools, etc. it is necessary to add 5-7 KG of FLY Flex-bond to each sacks of FLY WP 01 in order to increase its flexibility and enhance waterproofing ability

Consumption

Depend on the water load, minimum consumption and relative thickness should be as follows:

Water load	Min. consumption	Min thickness
Moisture	2 Kg/m ²	1.5 mm
Water without pressure	3 Kg/m ²	2 mm
Water under pressure	3.5-4 Kg/m ²	2.5 mm



Construction Chemicals

Technical data

Form: cementitious powder

Colors: grey and white

Water demand: about 30% from the powder ratio

Density of dry mortar: 1.7 ± 0.05 Kg/l

Density of fresh mortar: 1.9 ± 0.10 Kg/l

Compressive strength

After 28 days (ASTM C 942): ≥ 25.00 N/mm²

Flexural strength

After 28 days (ASTM C580): ≥ 7.00 N/mm²

Adhesion strength

(EN 1542): ≥ 1.0 N/mm²

Permeability to CO₂: 177 m

(EN 1062-6 Method A, requirement: Sd > 50 m)

Capillary absorption

And permeability to water: 0.056 Kg/m²

(EN 1062-3), requirement of EN 1504-2 w < 0.1

Water permeability (7bar) Din 1048: NIL (at 3mm thickness)

Direction for use

Substrate preparation

- The substrate must be clean, free of oil or grease, loose material, dust, etc.
- Any cavities on concrete surface should be filled and smoothed out with a cement mortar improved with SBR liquid after all loose aggregate has been removed and the surface has been well dampened.
- Starter bars and wooden molds should be cut to a depth of about 3cm into the concrete and the holes should be sealed.

- Existing construction joints are opened longwise in a V shape to a depth of about 3cm and are subsequently filled as above.
- Corners like wall-floor junctions should be filled and smoothly rounded with a cement mortar improved with SBR (formation of a Fillet, triangular in cross section, with sides of 5-6cm.
- In case of masonry walls, joints should be first filled carefully; otherwise, it is recommended to apply a cement mortar layer first improved with SBR.
- For waterproofing basements in old buildings, any existing plaster coat should be removed to a height of at least 50cm above the water level and then proceed as above.
- Wherever flat surface formation is required (smoothing, slope creation, etc.) the use of a mortar improved with SBR is recommended.

Application

FLY WP 01 is gradually added to water under continuous stirring, until a uniform, viscous mixture is formed, suitable for brush application. The substrate must be pre-wetted to a saturated surface dry condition before application. The surface to be covered with FLY WP 01 must be free of standing water. The material is applied in two or more layers, depending on the water load and the consumption required. Layers thicker more than 1 mm should be avoided, because the material may crack. Each new coat is applied after the previous one has dried. The freshly coated surface should be protected from high temperature, rain, and frost

Packaging

25 Kg paper bags

12 months from production date

Stored unopened packaging in dry condition