# **Description:**

TechnoProof® LWC is an innovative specially formulated integral liquid waterproofing compound based on a specialised polymers active ingredients to make concrete and plaster mixes waterproof and resist water through hydrostatic pressure or capillary absorption.

TechnoProof® LWC waterproofs by improving the quality of the concrete and plaster mixes by reducing the water demand for required workability and makes concrete cohesive and prevents segregation. Thus it is more efficient compared to traditional powder Waterproofers as its use results better improvement in concrete & plaster mixes. TechnoProof® LWC meets the requirements of IS: 2645-2003 and IS: 9103-2000.

## **Application:**

TechnoProof® LWC is recommended to minimise permeability and increase the waterproofing properties of concrete and cement sand mortars for critical applications such as like:

- Roof slabs and screeds.
- Basements.
- External plastering.
- Bathroom floors.
- Water tanks, sumps, drains etc.

### **Features:**

- Liquid admixture: Instant and complete dispersion throughout the mix. Uniform waterproofing throughout concrete matrix.
- High efficiency: Dramatic reduction in permeability of concrete/ mortar.
- Improved workability: Improves compaction of concrete and mortar, even where harsh sands or aggregates
- are used.
- Improved concrete quality: Minimises porosity and honey combing & Produces dense homogenous concrete.

## **Method of Application:**

- Add 70% of water (0.45 w/c ratio) to concrete mixer.
- Charge cement & aggregates to concrete mixer as per mix design; mix it for 1-2 minutes for a cohesive mix.
- Mix the measured quantity of TechnoProof® LWC (200ml per 50 kg of cement) to the remaining gauging water in a bucket and stir thoroughly.
- Add the gauging water mixed with TechnoProof® LWC to the concrete in the concrete mixer and mix thoroughly for 2-3 minutes.
- Discharge the concrete / mortar for application.
- Cure the applied concrete/ mortar in accordance with good construction practices.

## Typical Properties at 25°C:

Form	Free flowing liquid
Colour	Brown liquid
Specific Gravity	1.06 ± 0.02
Setting Time	No change
Chloride content	Nil as per BS:5075
Water permeability IS: 2645: 2003	Passes
pH value	8-11
Non-Volatile Content, %	15 ± 1

# **Packaging:**

TechnoProof® LWC is supplied in 10, 20, 30, 50, 100 & 225 litre drums.

## Dosage:

As a guide, a dosage of 200 ml per 50kg bag of cementitious material is recommended. Optimum dosage TechnoProof® LWC should be determined with trial mixes. Higher dosages may be required when certain combinations of materials and conditions are present or water reduction in excess of 15% is required. Because of variations in concrete materials, job site conditions, and/or applications, dosages outside of the recommended range may be required. In such cases, contact STIPL's local representative.

Points to remember when producing waterproof concrete

- Ensure w/c ratio is in the range of 0.40 to 0.60.
- Keep water content as low as possible.
- Place concrete quickly and compact it well.
- Ensure complete curing with a TechnoFinish™ ConKure 101/102 curing compound.

## **Effects of over dosage:**

A severe over-dosage of TechnoProof® LWC shall result in some of the followings:

- Extension of initial and final set
- Increase in air entrainment
- Bleed/segregation of mix, quick loss of workability
- Increased plastic shrinkage

A slight overdosing may not adversely affect the ultimate strength of the concrete and can achieve higher strengths than normal concrete, provided it is properly compacted and cured. Due allowance should be made for the effect of fluid concrete pressure on formwork, and stripping times should be monitored. In the event of over dosage, contact \*STIPL's local representative immediately.

## Shelf Life & Storage:

24 months from the date of manufacturing when stored in unopened, original sealed and dry condition at a temperature range from  $+5^{\circ}$ C to  $40^{\circ}$ C.

#### **Precaution & Limitations:**

Do not add TechnoProof® LWC directly to dry cement & aggregate mix. Maintain water-cement ratio as low as possible. Do not increase the dosage of TechnoProof® LWC than the recommendation.

## **Health and Safety instructions:**

Protect your health while working with this material, always use safety goggles, gloves and safety clothing. When handling hazardous materials or pressurized materials, or during any application that may result in spills, splashes or airborne particles, a full face shield is strongly recommended. Protect yourself and others on the jobsite. Consider property in proximity of the application area to prevent loss or damage. Protect your jobsite from unauthorized persons. Store all materials and equipment safely and out of reach of children and animals.

Observe container labels, SDS, applicable laws and regulations and all instructions before using the product and equipment. In case one of the components comes in contact with the skin, wash thoroughly with soap and water. Provide adequate ventilation in volume and pattern in working area.

**Additional Information:** Techno Builders Solutions® By Sterling Technotrade India Pvt.Ltd -The Specialist Construction Chemicals Company® range of associated products includes high performance concrete Admixtures, Adhesives, Protective Coatings, Concrete Repairs, Industrial Flooring, Grouts & Anchors, Joint Sealants, Surface Treatments, curing compounds, repair mortars, release agents, Grinding Aids & Waterproofing.

\*Separate datasheet are available on these products.

**DISCLAIMER:** The product information & application details given by the company & its agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure on the suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of other materials used and the onsite workmanship are factors beyond our control, there are no expressed or implied guarantee / warranty as to the results obtained. The company does not assume any liability or consequential damage for unsatisfactory results, arising from the use of our products.

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Please note that this datasheet supersedes all previous versions.