



# STERLING<sup>®</sup> TechnoWrap EP LV

**100%-Solids, Low-Viscosity, Epoxy Resin Primer for the TechnoFix<sup>®</sup> CarboRez Composite Structural Strengthening System.**

## Description:

**Sterling<sup>®</sup> TechnoWrap EP LV** is a 100%-solids, low-viscosity, two-component, epoxy resin that is used as a seal coat for consolidating and priming concrete substrates used for surface preparation before installing an appropriate **TechnoFix<sup>®</sup> CarboRez** composite structural strengthening system. **Sterling<sup>®</sup> TechnoWrap EP LV** penetrates cementitious pore structures and provides a high bond for the other system components of the **TechnoFix<sup>®</sup> CarboRez** structural strengthening system.

## Application Includes:

Sterling<sup>®</sup> TechnoWrap EP LV is the first component of the **TechnoFix<sup>®</sup> CarboRez** composite structural strengthening system that is applied to concrete, steel, and masonry substrates for following application:

- Use on interior, exterior, horizontal, vertical and overhead surfaces.
- Use on concrete, masonry, wood and steel.
- Use as the first component in the TechnoFix<sup>®</sup> Conwrap CP System installation.
- Use to promote excellent adhesion for the TechnoFix<sup>®</sup> Conwrap CP System.

## Features & Benefits:

- 100%-solids epoxy
- Solvent-free
- Moisture-tolerant
- Low viscosity allows for excellent penetration of cementitious pore structures
- Low odor
- Low VOC's

## Storage & Shelf Life:

Sterling<sup>®</sup> TechnoWrap EP LV has a shelf life of 24 months if kept in dry store in its original packaging and storage @ 10°C to 30°C. Protect from freezing in shipment and storage. High temperature and humidity storage may reduce this period.

## Packaging:

Sterling<sup>®</sup> TechnoWrap EP LV is supplied in 4 Ltr dual pre-measured composite working pack. Packaging size may vary subject to local regulations and requirements.

## Typical Properties at 20°C and 40% relative humidity

Color (mixed)	Transparent yellow
Consistency (mixed)	Liquid
Specific gravity	0.99 g/cm <sup>3</sup>
Complete curing	7 days
Adhesion to concrete at 7 days	> 3 MPa
Tensile strength at 7 days (ASTM D638)	> 29 MPa
Compressive strength at 7 days (ASTM C579)	>80 MPa
Mix ratio (by weight)	Part A : Part B = 3 : 1
Setting Time	3 to 4 hours
Working time	90 minutes
VOCs	< 50 g per L

Note: Results performed in the laboratory at 20°C and 40% RH, under controllable conditions. These values may vary depending on the application, climatology, or substrate conditions.

## Application Instructions:

### Substrate Preparation

Substrate should be fully cured, clean, sound, and dry. Any damaged areas, spalled areas, delaminated areas, or areas with corrosion damage must be repaired prior to applying the Sterling<sup>®</sup> TechnoWrap EP LV system. Concrete substrates should be fully cured (at least 28 days old).

### Surface Preparation

Prior to completing surface preparation, ensure that all concrete repairs have been properly applied and cured per ICRI guidelines. Ensure that all substrates are fully cured, structurally sound, stable, clean and free of dust, oil, grease, paint, tar, wax, sealers, curing compounds, form release agents, primers, laitance, loose particles, and any foreign substance or debris that could reduce or impair adhesion.

All sharp edges that may be found on rectangular beams and columns must be ground smooth and flush, with a bending radius (bullnose) of not less than 3/4" (19 mm) on all corners. For concrete and masonry substrates, mechanically prepare the substrate to provide a proper surface profile, as determined by the engineer in charge.

The surface profile typically should be a minimum of the International Concrete Repair Institute (ICRI) concrete surface profile (CSP) #3 to #5. In all cases, it is the responsibility of the engineer in charge to assess and specify the surface profile required to ensure system performance.

For steel substrates, achieve a minimum 3-mil profile by abrasively blasting to white metal per the Society for Protective Coatings (SSPC) Spec. SP-5.89 or NACE No. 1. 6.

## Health & Safety Instructions:

Sterling® TechnoWrap EP LV may cause irritation to skin or eyes. In case of accidental contact with eyes, immediately flush with plenty of water for at least 10 minutes and seek medical advice if necessary. 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.

\*Further protection: emergency showers and eyewash stations. Get immediate medical attention as needed

**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 on-site 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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Seal any surface cracks with \*STIPL's epoxy injection products, such as TechnoSeal® EP LV Grout or TechnoFix® Epomast InjectoSeal 2K.

## Mixing:

Combine the two components together that make up Sterling® TechnoWrap EP LV by pouring Part B into Part A. Mix with a low-speed mixer (at 400 to 600 rpm) and a standard Jiffy paint-mixing paddle for about 3 minutes, until the mixture has a smooth, homogenous consistency. Part A and Part B components are pre proportioned (mix ratio: 3 parts by weight of Part A and 1 part by weight of Part B) and should be mixed as full units. Partial mixing of Part A and Part B is prohibited.

## Application:

Prime the surface that needs to receive the **TechnoFix® CarboRez** structural strengthening system with a short bristle brush or 3/8" (10-mm) nap roller and an even coat of Sterling® TechnoWrap EP LV at a rate of 3.67 to 4.65 m<sup>2</sup> per L. Very porous substrates may require a second coat after the first coat has been completely absorbed. When applying the products in a closed environment, provide good ventilation.

## Cleaning:

Tools and containers may be cleaned using **TechnoFix® CleanzolPlus** when the adhesive is still fresh. The hardened adhesive can be removed from tools mechanically.

## Coverage Estimates:

Approximately 3.5 to 4.0 m<sup>2</sup> per L/Coat.

\* The consumption rates of dry powder are based on lab trials and might vary subject to variation of subfloor level and surface regularity. The reverse profile of the used ceramic and the surface structure of the substrate to be covered are also important factors, besides the tile size, for the consumption of mortar.

## Limitations:

- Apply Sterling® TechnoWrap EP LV when the ambient temperature is between 10°C and 30°C.
- Contact \*STIPL's Technical Services Department regarding applications below 10°C and above 30°C
- Do not thin Sterling® TechnoWrap EP LV with solvents.
- Do not mix partial units of Sterling® TechnoWrap EP LV

**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.

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