

TechnoFix[®] ResiCon 585

High performance pure epoxy 3:1 resin cartridge system for
Anchoring reinforcement and fixings into a variety of substrates.

Description:

TechnoFix[®] ResiconPlus 585 is a two-component Epoxy anchoring material, supplied in 3:1 ratio side-by-side cartridges with a static mixer nozzle. When applied it sets and cures to firmly secure a variety of steel fixings into concrete and solid masonry substrates.

It is essential for deep embedment and large diameter holes due to its longer working time and zero shrinkage. For use with both carbide & diamond drilled holes, and in areas of high chemical exposure.

Application Includes:

TechnoFix[®] ResiConPlus 585 can be used for following application:

- Use in indoor and outdoor environments.
- Fixing of building substructures.
- Can be applied to almost any size of fixing for horizontal, vertical and overhead application
- Bonding and surface crack sealing applications
- Steel dowels, staircases, hand rails, facade, sound barriers, pipelines, awnings, brackets, post-installation rebar connections.
- Fixing machines, steel constructions, wooden constructions, reinforcement bars, especially suitable for big diameter rebars/rods.
- For heavy loading, threaded rod anchoring, rebar doweling into concrete and masonry.
- Suitable for wall, vertical, and overhead applications.

Features:

- Resistant to a variety of chemicals
- Low VOC, Long gel/working time
- Waterproof, protecting the fixing from corrosion
- Non-sag ideal for overhead application
- Excellent performance in hammer and diamond core drilled holes
- High Bond strengths, No additional mixing equipment required
- Does not apply expansive force to the substrate
- Fixings can be spaced closer together than mechanical anchors
- Enables fixings closer to edges than mechanical anchors

TechnoFix[®] ResiconPlus 585 Gel & *Dry Curing Times

Substrate Temp.	+5°C	+10°C	+20°C	+30°C	+40°C
Gel time(mins)	120	90	50	35	20
Dry time(hrs)	72	48	24	12	6

*The table is for dry conditions. In wet/damp conditions, the curing time will double. Be aware that the substrate temperature can vary significantly from the ambient temperature.

Properties & Performance Indexes

Appearance when mixed	Grey or Red
Flexural Strength (EN196)	≥40MPa
Compressive Strength (EN196)	>110 MPa (7days)
Shore D Hardness	85
Density	1.41kg/L
Mixture ratio (weight ratio)	3:1

Colloidal Performance	Tensile strength (ASTM D638)	≥55Mpa
	Tensile modulus (ASTM D638)	≥3500Mpa
	Elongation at break (ASTM D638)	≥1.7%
	Flexural strength (ASTM D790)	≥70Mpa
	Compressive strength (ASTMD695)	≥82Mpa
	Thixotropy index	≥4.0
	Sagging mobility (25°C)	≤2.0mm
	Distortion temperature	≥65°C
Adhesion performance	Steel-steel tensile anti-shear strength	≥16Mpa
	Under the constraint drawing condition, ribbed steel bars and C30, Φ25, L=150mm tensile strength	≥11Mpa
	Boding strength with concrete C60, Φ25, L=125mm	≥17Mpa
	Steel-steel T impact stripping length	≤25mm
Non-volatile matter content (solid content)	≥99%	
Supply	585ML / piece, 30 pieces / carton	
Storage Conditions: Cartridges should be stored in their original packaging, the correct way up, in cool conditions (+10°C to +30°C) and out of direct sunlight.		
Shelf Life: When stored correctly, the shelf life will be at least 12 months from the date of manufacture.		

Long-term performance	Wet and heat ageing	Compared with the short-term results at room temperature, the decrease rate of shear strength: ≤12%
	Heat ageing resistance	Compared with the short-term results at same temperature 10min, the decrease rate of shear strength: ≤5%
	Freezing and thawing	Compared with room temperature, short-term results, the shear strength decrease rate is not greater than 5%
	Fatigue stress	After 2×10 ⁶ times continuous sine wave fatigue loads,

Limitations

Load calculations should always be undertaken by a qualified engineer. For designing under conditions where seismic forces or fire is a consideration, please consult the relevant certification to make suitable adjustments for loading. TechnoFix® ResiConPlus 585 may stain natural or decorative stone, please check suitability before using for such applications.

Health and Safety instructions

If eye or skin contact, get immediate medical attention. Wash hands thoroughly after handling. Wear protective clothing, gloves, eye and face protection. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Dispose of unused, contents, container and other contaminated wastes in accordance with local, state, federal and provincial regulations. Keep container closed when not in use.

Cleanup Information

Clean tools and equipment with industrial type solvents immediately after use. Dried material can only be removed mechanically.

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.

EDITION: 10/2019/001

IDENTIFICATION NO: PD-376

Please note that this datasheet supersedes all previous versions.

		specimen does not destroy
	Resistance to stress	Steel - steel tensile shear specimens does not destroy, and creep deformation value is less than 0.4 mm
Resistance to corrosion medium	Resistance to salt	Compared with the control group, the strength decrease rate: ≤5%, and shall not have cracks or come unglued
	Alkaline medium	Compared with the control group, the strength does not decrease, and as the concrete damage, and shall not have cracks or come unglued
	Acid medium	Concrete damage, and shall not have cracks or degumming

Product Installation

The following methodology is for installation into solid substrates such as reinforced concrete. For other substrates or fixings please request a separate method statement.

1- Mark up Hole Position and Drill Hole

Drill holes in designed position. The depth and diameter of the hole should meet the requirements in order to meet bonding area and ensure the pulling strength. If rebar is struck immediately stop drilling and seek the advice of the designing engineer.

2- Clean Hole

Clean holes immediately prior to installation of fixings to avoid them becoming re-contaminated. Brush and blow for three times at least is recommended.

3- Glue Preparation

TechnoFix ® ResiConE is equipped with a special static mixer and dispenser. Squeeze out the glue without fully mixed in the front part of the cartridge.

4- Injection

Inject the glue from the bottom of the hole until fill the two-third of the hole.

5- Rust Removal of Steel Rebar

Remove the rust if any form the steel bar or anchor bolt before inserted through the hole.

6- Anchoring

Inserting in one single direction until to the bottom of the hole.

7- Standing and Curing

Keep stand for maintenance before curing.

Note: ResiConE Anchoring Adhesive can be equipped with the following materials: Screw thread steel, round steel, lead screw, threaded rod, anti-crack anchor.

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.

STERLING TECHNOTRADE INDIA PRIVATE LIMITED

The Specialist Construction Chemical Company®

Head Office: 109-111-112, 1st Floor, Vijaya Building, No. 17, Barakhamba Road, Connaught Place, New Delhi- 110001

Manufacturing Unit: Plot No-J-3, UPSIDC Site C, Surajpur Industrial Area, Greater Noida, Uttar Pradesh 201306

WEB: sterlingtechnotrade.com | **EMAIL:** support@sterlingtechnotrade.com | **TEL:** 01145084212