KREVO Carbon Lamination EP

Solvent-free, Epoxy lamination resin | Carbon-fibre fabric impregnation

PRODUCT DESCRIPTION

KREVO Carbon Lamination EP is a two-component, solvent-free epoxy resin system specified for impregnating KREVO Carbon Fabric strengthening fiber. Its semi-thixotropic consistency supports thorough fibre wet-out and helps minimise drainage and sag during application to vertical or horizontal structural surfaces. The cured fabric-resin laminate is designed to provide high-strength reinforcement and durable performance.

ADVANTAGES

- Solvent-free formulation with zero-VOC performance specification.
- Semi-thixotropic resin for effective fabric impregnation and controlled sag.
- High-strength epoxy system with strong bonding characteristics.
- Suitable for vertical and horizontal reinforcement applications.
- Available in Standard and Tropical grades for different working conditions.

TYPICAL USES

Impregnation and bonding of compatible carbon-fibre reinforcement fabrics • Wet lay-up reinforcement of structural members • Beam and column strengthening • External composite reinforcement on vertical and horizontal surfaces.

PRODUCT INFORMATION

PARAMETER	SPECIFICATION
Chemical base	Two-component, solvent-free epoxy resin and hardener
Formulation	Semi-thixotropic impregnation and lamination adhesive
Available grades	Compatible
Application	Wet lay-up resin for compatible carbon-fibre strengthening fabrics
VOC	Zero VOC — specified formulation characteristic
Theoretical coverage	0.6–0.8 kg/m^2; actual consumption depends on the lay-up
Packaging	5 kg complete packs
Shelf life / storage	12 months; store dry, shaded and below +35 °C

MECHANICAL PERFORMANCE SPECIFICATION

PROPERTY / TEST METHOD	SPECIFIED VALUE
Tensile strength | 7 d / +20 °C	45 MPa
Flexural strength | 7 d / +20 °C	60 MPa
Compressive modulus | 7 d / +20 °C	1.67 GPa
Glass transition temperature	65 °C

Application & System Data

KREVO Carbon Lamination EP | Grade properties, substrate preparation and wet-lay-up system

GRADE-SPECIFIC APPLICATION PROPERTIES

PROPERTY	KREVO Carbon Lamination EP	CONDITION
Viscosity	7,000 cps	At +20 °C
Pot life	20 minutes	Std: +25 °C / Trop: +35 °C
Mixing	Full matched pack	500 rpm for 3 minutes

Pot life is temperature-dependent.

TYPICAL SYSTEM BUILD-UP

LAYER	MATERIAL / METHOD
1 | Substrate	Sound, repaired and thoroughly prepared structural surface
2 | Primer	KREVO Prime EP
3 | Wet resin coat	KREVO Carbon Lamination EP applied to the prepared substrate
4 | Carbon fabric	KREVO Carbon Fabric
5 | Additional plies	Further resin and fibre layers as designed; full fibre wet-out

SUBSTRATE PREPARATION

Ensure the concrete or other specified substrate is structurally sound, clean and suitably prepared to receive bonded reinforcement. Remove oil, grease, dust, loose material, coatings and bond-reducing contamination by an approved mechanical method. Repair weak or defective areas and confirm the substrate can transfer the required load to the composite system before application.

SYSTEM COMPATIBILITY & PRIMING

Follow the approved structural strengthening design and application method statement for any substrate primer, fabric type, resin coverage and required number of layers. Verify compatibility of KREVO Carbon Lamination EP with the proposed fabric and substrate; do not substitute unapproved components.

APPLICATION STAGE	REQUIRED PRACTICE
Preparation	Clean and profile the substrate; remove weak material and bond inhibitors.
Resin mixing	Add Part B to Part A; mix complete unit for 3 min at 500 rpm.
Wet lay-up	Apply wet resin, place fabric, consolidate and fully impregnate each ply.

Theoretical resin consumption is 0.6–0.8 kg/m^2. Actual usage depends on fabric mass, substrate roughness, substrate absorbency, the number of plies and application losses.

APPLICATION PROCEDURE

Apply freshly mixed resin to the prepared substrate, position compatible carbon-fibre fabric into the wet resin and consolidate thoroughly for uniform impregnation. For subsequent layers, apply sufficient resin to wet out the next sheet. Follow the approved installation sequence and allow the composite to cure before protective finishing or loading.

Installation & Product Support

KREVO Carbon Lamination EP | Mixing, placement, site controls, safety and global contacts

MIXING PROCEDURE

- Use clean mixing equipment and complete, factory-matched two-component packs.
- Add the hardener (Part B) to the resin base (Part A).
- Mix using a slow-speed drill at approximately 500 rpm for 3 minutes.
- Move the paddle throughout the vessel until both components are fully dispersed and the mixture is uniform in colour.

FABRIC IMPREGNATION & PLACEMENT

- Apply the mixed resin while within its usable pot life and in accordance with the project method statement.
- Place KREVO Carbon Fabric directly into the wet resin; press and roll to achieve full contact and wet-out.
- Build additional fabric plies with adequate intermediate resin; avoid folds, dry fibres, voids and entrapped air.
- Protect the installed composite and allow suitable curing before coating or service loads.

APPLICATION LIMITATIONS & SITE CONTROL

- Use only materials, reinforcement details and installation procedures approved for the structural design.
- Do not add solvent or alter the supplied resin-to-hardener ratio; mix full packs only.
- Avoid applications on contaminated, unstable or inadequately prepared surfaces.
- Keep tools clean; remove uncured residues with an approved compatible cleaner and hardened resin mechanically.

HEALTH, SAFETY & ENVIRONMENT

For industrial use by trained applicators only. Review the current Safety Data Sheets for both components before handling. Wear suitable chemical-resistant gloves, eye protection, protective clothing and respiratory protection where required. Provide adequate ventilation. Prevent resin contact with skin and eyes and dispose of unused product and packaging according to applicable regulations.

QUALITY & PRODUCT INFORMATION

Product performance depends on correct component proportioning, full mixing, preparation, impregnation, temperature and curing. Numerical properties and performance statements are specification criteria requiring validation against KREVO production-material quality records and applicable test results prior to project approval.

KREVO | GLOBAL CONTACTS

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