



# Hychem E50 LV

## Product Description

HYCHEM E50 LV is a 2 component low viscosity epoxy injection resin, designed principally for the bonding, sealing and structural repair of cracked concrete, tanks, facings and supports. E50 LV consolidates concrete and inhibits liquid absorption and ingress increasing the longevity of the concrete. HYCHEM E50 LV crack injection resin may be applied in a number of ways, dependant upon the size, depth and location of the crack. Gravity feed is most often used for cracked roads, pavements & rooftops. Low pressure injection is the most common repair technique for simple structures such as walls, columns & beams.

## Features

- Compliant to 5100.8-2017 - Rehabilitation & strengthening of existing bridges
- Structural refurbishment of cracked beams, columns & footings.
- Sealing of cracked roads, pavements, rooftops, ponds, dams & tanks.
- Crack sealing and bonding of plaster, brickwork, cement renders etc.

## Technical Data

Test	Test Result	Method
Viscosity	120 cP	ISO 3219-2 : 2021
Compressive Strength	80.8 MPa	ASTM D695 : 2015
Tensile Strength	54.6 MPa	ASTM D638 : 2022
Slant Shear Bond	26.6 N/mm <sup>2</sup>	EN 12618-3 : 2004
Flexural Strength	125.1 MPa	ASTM D790 : 2017

Pot Life (25°C)	20 minutes
Mix Ratio - by volume	2:1 ( Part A to Part B )
Crack size	> 0.2mm
Chemical Resistance	Resistant to many chemicals, consult Hychem for further advice.

## Application

### Surface Preparation

Prior to the application of E50 LV, the substrate must be thoroughly prepared.

- The concrete substrate must be firm, clean and dry with a minimum compressive strength of 25 MPa and a minimum surface tensile strength of 1.5 MPa.
- New concrete must be allowed to cure for a minimum of 28 days.
- Remove all surface laitance, contaminants, existing coatings, curing compounds and any weak or loose materials.
- Prepare the concrete surface by Grinding, Shot Blasting, Scarifying, Ultra High-Pressure Water Jetting or Scabbling to provide the appropriate concrete surface profile (CSP) for optimum mechanical keying.
- The extent of surface preparation required is dependent upon but not limited to the thickness of the coating system to be applied. It is highly recommended that all surface preparation is carried out in accordance with industry standards and publications such as NACE 02203 item No. 22420 or ICRI Technical Guideline No. 03732.

### Mixing

In a clean container, mix Part A and Part B together @ 2:1 ratio by volume using a helical mixer at a speed of 350 rpm. Mix until it becomes homogeneous, approximately 1–2 minutes.

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## Safety Precautions

Wear gloves, eye protection, masks and overalls during mixing and application.

## Packaging

6 Litre or 30 Litre

## Warranties and Disclaimers

Hychem warrants that this product shall conform to the technical specifications published in the product literature. The quality and fitness of the product is dependent upon the proper use and application of the product by the applicator. Hychem has no role in the application of the finished polymer other than to manufacture and supply its components. It is vital that the person applying this product understands the product and is fully trained and certified in the use of spray equipment and application of sol-gel materials. There are no warranties that extend beyond the description on the face of this instrument, except when provided in writing, directly by Hychem and executed under seal by a company officer.

## Field Support

Field support where provided, does not constitute supervisory responsibility. Suggestions made by HYCHEM either verbally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they and not HYCHEM are responsible for carrying out procedures appropriate to a specific application.

## Customer Responsibility

The technical information and application advice given in this publication is based on the best information available at the time of print. As the information herein is of a general nature, no assumption can be made as to the product suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by Commonwealth or State Legislation. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use.