



# LCR™ – Epoxy Injection Resin | AVAILABLE IN LOW AND HIGH VISCOSITY FORMULAS

**POLYGEM**  
polygem.com

Manufactured by Polygem, 5600 Lower Macungie Rd. | Macungie, PA 18062 | 630-231-5600 | Made in USA

## PRODUCT DESCRIPTION

**LCR™ Epoxy Injection Resin** is a 100% solids, two-component, moisture insensitive epoxy designed to permanently restore structure and design strength to cracked concrete structures. Unique wetting properties allow maximum penetration of LCR into cracks above .005". LCR liquid concrete repair injection epoxy can be used on wet or dry surfaces, as well as underwater.

## ADVANTAGES

- **100% Solids**
- **No VOCs**
- **No Solvents**
- **Chemical Resistant**
- **Restores Structural Strength**
- **Excellent Adhesion**  
To Concrete, Wood, Fiberglass, & Metal Surfaces

## RECOMMENDED USES

**LCR RESIN** permanently repairs cracks in many concrete surfaces or forms.

- **Basement Foundations**
- **Industrial Warehouses**
- **Residential Flooring**
- **Patios, Sidewalks & Balconies**
- **Parking Decks**
- **Reservoirs & Tank Repair**
- **Pool Leak Repair**

## SURFACE PREPARATION

Surface must be dry, and free of all contaminants before proceeding. Remove all loose or flaking concrete with a wire brush. Dirt, grease and flaking paint must also be removed prior to application.

## APPLICATION INSTRUCTIONS

### WEAR GLOVES & EYE PROTECTION

1. Detailed instructions for mixing the cartridge can be found on or in the packaging that came with the cartridge(s). Follow those instructions then proceed to step 2.  
**Note:** When repairing a wall, crack must be temporarily sealed with LCR Epoxy Repair Paste and injection ports properly mounted. See the technical data sheet for LCR Epoxy repair paste or the instructions that come with the paste for more information on sealing a crack and mounting ports.
2. Once fully mixed, screw the threaded nozzle onto the cartridge and load the cartridge into a standard caulking gun to dispense.
3. When dispensing, make sure to do so with a slow & even pressure. Pay attention to how the resin is flowing into the crack or repair surface making sure it is penetrating the concrete and not overflowing onto the surface.  
**Note:** Mixed resin will begin to harden within 30 minutes and cannot be saved for later. Resin must be injected within 30 minutes of having been mixed.

4. Once repair has been made and the crack has been fully injected if there is any unused resin left in the cartridge, back off pressure on the caulking gun, remove cartridge, and allow it to solidify before disposing of the cartridge.
5. Clean up any uncured epoxy with isopropyl alcohol or acetone.

## PACKAGING

**LCR RESIN** comes in **10 fl. oz. single caulk style cartridges** available in low, high, and extra high viscosity formulas.

## STORAGE & HANDLING

We recommend to store the material at 72°F (23°C).

## LIMITATIONS

Not for use on contaminated or oily surfaces.

**DO NOT** install when surface temperature is below 40°F (4°C) or above 90°F (32°C).

During damp and/or cool conditions LCR Resin will cure slower. **DO NOT** put repaired concrete into service until fully cured.

## TECHNICAL DATA

**All values measured after 7 days at 73°F (23°C).**

### TYPICAL PROPERTIES

|   |  |
|---|--|
| <b>Pot Life:</b> (100 gms) .....55 min.<br>ASTM D-2471  |  |
| <b>Working Time:</b> (73°F - 23°C) .....30 min.   |  |
| <b>Thin Film Set Time:</b> (73°F - 23°C) .....2-3 hrs.  |  |
| <b>Full Cure Time:</b> .....24 hrs.   |  |
| <b>Compressive Strength:</b> ..... 7,908 psi<br>ASTM D-695  |  |
| <b>Compressive Modulus:</b> ..... 135 ksi<br>ASTM D-695   |  |
| <b>Tensile Strength:</b> ..... 5,868 psi<br>ASTM D-698  |  |
| <b>Flexural Modulus:</b> ..... 270 ksi<br>ASTM D-790  |  |
| <b>Flexural Strength:</b> .....948 psi<br>ASTM D-790  |  |
| <b>Elongation at Break:</b> .....2.73%<br>ASTM D-638  |  |
| <b>Shrinkage:</b> ..... 0.001 in./in.   |  |
| <b>Heat Deflection Temp:</b> (at 66 psi) ..... 120 °F (49 °C)   |  |
| <b>Shore D Hardness:</b> ..... 80D<br>ASTM D2240  |  |
| <b>Viscosity:</b> .....   |  |
| <b>Low Viscosity Cartridge (LV):</b> .....580 cps.<br>Specific Volume - Mixed (ASTM D-638) ..... 26.10 cu in/lb   |  |
| <b>High Viscosity Cartridge (HV):</b> .....1,910 cps.<br>Specific Volume - Mixed (ASTM D-638) .....25.55 cu in/lb |  |

## POLYGEM LIMITED WARRANTY:

Polygem warrants that during the shelf life of the product (as determined from the date of manufacture), the product will conform to the specifications provided in this technical bulletin. **POLYGEM MAKES NO OTHER WARRANTIES, EXPRESSED, IMPLIED, OR STATUTORY, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.** Neither any performance or other conduct, or any oral or written representation, statement or advice provided by Polygem or any of Polygem's distributors, agents, or employees will create a warranty, or in any way increase the scope or duration of this limited warranty. Polygem will have no warranty obligation if the product becomes defective, in whole or in part, as a result of: (i) the transportation of the product; (ii) any alteration or modification to the product by third parties; or (iii) improper handling or storage of the product (including improper handling or storage by third-party carriers or distributors).

011626PA | Data sheets are subject to change without notice.