

# CI-SLV Super-Low-Viscosity Injection Epoxy

CI-SLV super-low-viscosity structural injection epoxy is a two-component, high-modulus, high-solids, moisture-tolerant epoxy specially designed for pressure injection, gravity feeding and flood coat filling of concrete cracks when substrate temperatures are between 60°F (16°C) to 90°F (32°C). Available in 3-gallon bulk kits or convenient side-by-side cartridges dispensed through a static mixing nozzle using either a manual or pneumatic dispensing tool.

## Features

- Chemically bonds with the concrete to provide a structural repair. CI-SLV seals the crack from moisture, protecting rebar in the concrete from corrosion.
- Moisture-tolerant, can be used on dry and damp surfaces.
- Low surface tension allows the material to effectively penetrate narrow cracks.
- Formulated for maximum penetration under pressure.
- Non-shrink and resistant to oils, salts and mild chemicals.
- Can be used with metered pressure-injection equipment.
- Freeze-thaw resistant.

## Applications

- Pressure injection
- Gravity feed
- Underwater pressure injection
- Flood coat

## Product Information

Mix Ratio/Type	2:1
Mixed Color	Clear
Crack Width	0.002"–0.25" (0.05 mm–6 mm)
Shelf Life	24 months
Storage Temperature	45°F (7°C)–90°F (32°C)
Volatile Organic Compound (VOC)	8 g/L mixed
Yield	231 in. <sup>3</sup> /US gal. (0.001 m <sup>3</sup> /L)
For Flood-Coat Applications	150–200 ft. <sup>2</sup> /US gal. (3.7–4.9 m <sup>2</sup> /L) depending on surface profile and porosity
Pot Life, 1 Quart	6 minutes at 90°F (32°C) 25 minutes at 72°F (22°C)
Thin Film (5 mil)	Set to touch: 4 hr.
Set Time at 72°F, ASTM D5895	Dry through: 9 hr.
Manufactured in the US using global materials	

## Code Reports, Standards and Compliance

ASTM C881 and AASHTO M235      Type I/IV; Grade 1; Class C

## Installation Instructions

Installation instructions are located at the following locations: pp. 210–215, product packaging or on the CI-SLV Technical Data Sheet at [strongtie.com/rps](http://strongtie.com/rps).

## Accessories

See p. 209 for information on crack repair accessories.

## CI-SLV Packaging Information

Model No.	Capacity (ounces)	Packaging Type	Package Quantity	Carton Quantity	Dispensing Tools	Mixing Nozzle
CISLV32	32	Side-by-side cartridge	1	5	ADT30S, ADT30P	EMN022 (included)
CISLV3KT	384	3-gallon bulk kit	1 case of (3) gallon cans	—	Metering pumps offered by third-party manufacturers	—

1. Cartridge estimation guidelines are available at [strongtie.com/apps](http://strongtie.com/apps).



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## Technical Information

### Compressive Strength

Cure Time	60°F (16°C) psi (MPa)	72°F (22°C) psi (MPa)	90°F (32°C) psi (MPa)	Test Standard
4-hour cure	—	—	10,250 (70.7)	ASTM D695
8-hour cure	—	4,450 (30.7)	11,500 (79.3)	
16-hour cure	5,750 (39.6)	10,200 (70.3)	11,700 (80.7)	
24-hour cure	7,600 (52.4)	11,250 (77.6)	11,900 (82.0)	
3-day cure	12,800 (88.3)	13,150 (90.7)	12,250 (84.5)	
7-day cure	13,400 (92.4)	13,300 (91.7)	12,500 (86.2)	
14-day cure	13,700 (94.5)	13,600 (93.8)	12,500 (86.2)	
28-day cure	13,700 (94.5)	14,200 (97.9)	12,500 (86.2)	

Temperature Range	>60°F (16°C)	Test Standard
Epoxy Classification	Types I, IV; Grade I (LV)	ASTM C881
Viscosity — mixed <sup>1</sup>	150 cP	ASTM D2556
Gel Time — 60 gram mass <sup>1</sup>	40 minutes	ASTM C881
Bond Strength, Slant Shear: Hardened to Hardened Concrete — 2-day cure <sup>2</sup> Hardened to Hardened Concrete — 14-day cure <sup>2</sup>	2,200 psi (15.2 MPa) 3,600 psi (24.8 MPa)	ASTM C882
Tensile Strength — 7-day cure <sup>2</sup>	7,500 psi (51.7 MPa)	ASTM D638
Elongation at Break — 7-day cure <sup>2</sup>	2.14%	ASTM D638
Flexural Strength — 7-day cure <sup>2</sup>	7,300 psi (50.3 MPa)	ASTM D790
Modulus of Elasticity in Compression — 7-day cure <sup>2</sup>	318,000 psi (2,192.5 MPa)	ASTM D695
Heat Deflection Temperature — 7-day cure <sup>3</sup>	122°F (50°C)	ASTM D648
Glass Transition Temperature — 7-day cure <sup>3</sup>	128°F (53°C)	ASTM E1356
Water Absorption — 14-day cure <sup>4</sup>	0.57%	ASTM D570
Linear Coefficient of Shrinkage <sup>3</sup>	0.005	ASTM D2566
Coefficient of Thermal Expansion <sup>3</sup>	2.89 x 10 <sup>-5</sup> in./in.°F 5.20 x 10 <sup>-5</sup> cm/cm°C	ASTM C531
Shore D Hardness — 24-hour cure <sup>3</sup>	82	ASTM D2240
Shore D Hardness — 7-day cure <sup>3</sup>	82	ASTM D2240
Adhesion to Concrete — 24-hour cure <sup>3</sup>	1,100 psi (7.6 MPa)	ASTM D7234

1. Tested at 72°F (22°C).

2. Cured at 60°F (16°C).

3. Cured at 72°F (22°C).

4. Cured at 72°F (22°C), immersed in water 24 hours.