

4.4.3 CB-G EG Epoxy Grout

Advantages

- Non-hazardous and non-corrosive per DOT shipping classification
- High early and ultimate strengths
- High vibration resistance
- Deep pour, low shrinkage
- Self-leveling
- High resistance to a variety of chemicals

Trades and Facilities

- Civil projects
- Concrete professionals
- Energy facilities
- General contractors / construction managers
- Industrial plants
- Ornamental steel artisans
- Steel erectors

Purposes and Uses

- Grouting of machinery and equipment with high load requirements
- Precision alignment under dynamic load conditions
- Structural grouting of baseplates, columns, beams, crane rails, bridge seats, dowels, etc.
- Chemical processing facilities

4.4.3.1 Product Description

Hilti Epoxy Grout is a Buy-American compliant, three component, 100% solids, VOC and BGE free, non-corrosive, high performance epoxy grouting system. This specially formulated grout offers high strength providing excellent

resistance to impact and vibration. Using the most advanced amine technology this grout meets today's needs of an effective and easy to use epoxy grout designed to help protect people and the environment.

4.4.3.2 Material Specifications / Technical Data

Color: Concrete gray			
	Aspect	Imperial	Metric
Compressive strength, psi (MPa) per ASTM D 695	8 hour	6,000	(41)
	16 hour	12,000	(83)
	1 day	12,500	(86)
	3 days	14,000	(97)
	7 days	15,000	(103)
Flexural strength, psi (MPa) per ASTM C 580 - 7 days		3,900	(27)
Tensile strength, psi (MPa) per ASTM C 307 - 7 days		2,100	(14)
Heat distortion temperature, °F (°C) per ASTM D 648		170	(77)
Working time at 72°F (22°C), minutes		45	

4.4.3.3 Installation Instructions

Read product instructions and MSDS before use

Preparation

The surfaces to be grouted must be solid, clean and free from oil, grease, and other contaminants that may act as a bond breaker. Remove all loose material and laitance. Concrete surfaces must be dry, sound and roughened to obtain proper bond. The grout and the affected grouting area should be kept between 50° F and 90° F (10° C and 32° C) and shaded from direct sunlight. During cold weather it is important that the grouted areas be kept warm (above 50°F or 10°C) until the grout has cured

completely. Store material at room temperature for at least 24 hours before use. Set time and strength development are dependant on ambient temperature. Hot temperatures will accelerate the setting process of the grout where cold temperatures will have a retarding effect. Metal surfaces to come into contact with the epoxy grout should be sandblasted to a white metal finish and wiped clean with a solvent before grout is applied. Apply grout immediately to prevent re-oxidizing or moisture condensation.

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Form Work

Standard wood or metal forming may be used. The formwork must provide rapid, continuous grout placement and needs to retain grout without leakage. The forms should be protected with heavy coats of paste wax, grease or form release agent.

For baseplates, forms should be at least 1" (2.54cm) higher than the bottom of the baseplate. The forms should have 45° chamfer strips at all vertical corners and horizontal grout grade elevation in order to eliminate sharp corners. The clearance for remaining sides (distance between the baseplate and the form) shall be 2" - 6" (50 mm - 152 mm).

Mixing

Pour the hardener into the resin container and mix with a slow speed mixer (400 - 600 rpm) for approximately 1 - 2 minutes until thoroughly blended (the mix will show a uniform color). Keep the mix paddle submerged to avoid air entrapment. Pour mixed resin and hardener into a larger container. While mixing at low speed, slowly add the included aggregate and mix until thoroughly blended (aggregate must be completely wet). Always mix in complete units - do not mix smaller batches.

Application

Immediately after mixing, place grout from one side allowing it to flow to the opposite and adjacent sides thereby avoiding air entrapment. Provide vent holes where needed to prevent air entrapment. Where grout cannot be adequately worked to fill the cavity, because of large size or limited space, a headbox will greatly assist flow. Compaction can be achieved by rodding, chaining or light vibration.

Minimum application thickness per pour: 1" (25.4mm)

Maximum application thickness per pour: 8" (203mm)

Finishing

If a smooth finish is desired, the surface of the grout may be ground and painted with an appropriate paint or protective coating.

Clean-up

All tools and equipment may be cleaned with warm water and a detergent solution before material hardens.

Storage

Always keep in closed container in a dry warm place unexposed to sunlight.

Limitations

- Do not use if the container is damaged
- Aggregate (part C) must be kept dry before use
- Do not add solvent, water, or any other material to the grout

Yield

- One 59 lb. (26.8 kg) kit yields approximately 0.4 ft³ (0.011 m³).

Shelf life

24 months from date of manufacture when stored in original unopened container

Packaging

Three component kit in one plastic container

Aspect	Imperial	Metric
Part A: Resin	0.58gal.	2.18 L
Part B: Hardener	0.14gal.	0.51 L
Part C: Aggregate	48.0lbs.	21.8 kg



4.4.3.4 Ordering Information

Description	Package Contents	Qty
Epoxy Grout	65 lb. Bucket	1