

Solid base to build on.

Epoxy Grout

Hilti Epoxy Grout is a Buy American-compliant, three component, 100% solids, VOC and BGE free, 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. Hilti's Epoxy Grout comes with a non-corrosive hardener, avoiding the risk of burns like with other epoxy products and making it a DOT-non-hazardous product simplifying transportation and storage.



Order Information

Description	Package Contents	Qty	Item No.
Epoxy Grout	59 lb. bucket	1	00430898

Technical Data	Epoxy Grout			
	Standard	Aspect	Imperial	Metric
Compressive strength, psi (MPa) at 73°F (23°C)	ASTM C 579 B	8 h 16 h 1 day 3 days 7 days	6,000 12,000 12,500 14,000 15,000	(41) (83) (86) (97) (103)
Compressive modulus, psi (MPa)	ASTM D 695		568,000	(3,917)
Flexural strength, psi (MPa)	ASTM C 580	7 days	3,900	(27)
Tensile strength, psi (MPa)	ASTM C 307	7 days	2,100	(14)
Bond to concrete (complete concrete failure), psi (MPa)	ASTM C 882		≥ 550	(4)
Adhesion to steel (clean, sandblasted), psi (MPa)			2,500	(17)
Coefficient of thermal expansion, 10-5 / °C	ASTM D 696		1.74	
Heat distortion temperature, °F (°C)	ASTM D 648		170	(77)
Working time at 72 °F (22 °C), min			45	
Gel time at 72 °F (22 °C), min	ASTM D 2471		90	
Yield, 59 lb (26.8 kg)			0.40 ft ³	(0.011 m ³)
Packaging, three component kit in one plastic container		Part A: Resin Part B: Hardener Part C: Aggregate	0.58 gal 0.14 gal 48.0 lb.	(2.18 L) (0.51 L) (21.8 kg)
Shelf life		24 months from date of manufacture when stored properly in original unopened container		

The data shown above reflect typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result.

Application 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 (70°F-80°F) for at least 24 hours before use. Set time and strength development are dependent on ambient temperature. Hot temperatures will accelerate the setting process of the grout while cold temperatures will have a retarding effect. Metal surfaces to come in contact with the epoxy grout should be sandblasted to a white metal finish and wiped clean with solvent before grout is applied. Apply grout immediately to prevent re-oxidizing or moisture condensation.

Formwork

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" (2.54 cm) higher than the bottom of the baseplate. The forms should have 45° angle 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 to 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 mixing 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

Advantages

- Non-corrosive hardener — no risk of burns
- Non-hazardous per DOT shipping classification
- VOC and BGE free
- High early and ultimate strengths
- High vibration resistance
- Deep pour, low shrinkage
- Self-leveling
- Easy to use, all-in-one kit
- High resistance to a variety of chemicals
- Best in class epoxy grout for worker safety

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

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 head box will greatly assist flow.

Minimum application thickness per pour: 1" (25.4 mm)
Maximum application thickness per pour: 8" (203 mm)

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 strong 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

Hilti. Outperform. Outlast.