

HIGH STRENGTH ANCHORING EPOXY

PRODUCT NO. 8620-31

DIVISIONS 3 & 4

Concrete Anchoring
03 31 51
Masonry Anchorage
04 08 00

PRODUCT DESCRIPTION

QUIKRETE® High Strength Anchoring Epoxy is a two-component, high modulus, structural epoxy with an extended working time of approximately 20 minutes at 77°F (25°C).

PRODUCT USE

QUIKRETE® High Strength Anchoring Epoxy is a gray solvent-free, low odor, high strength, moisture insensitive, non-sag epoxy. QUIKRETE® High Strength Anchoring Epoxy is suitable for vertical or horizontal applications, including anchoring bolts, threaded rods and rebar dowels, pins and railings, into concrete and masonry substrates. Suitable for fastening in grout filled block and unreinforced masonry, and seismic anchoring and bracing. Not for overhead anchoring. Not for sustained long-term loads.

SIZES

• QUIKRETE® High Strength Anchoring Epoxy - 8.6 oz (254 ml) cartridges

TECHNICAL DATA

QUIKRETE® High Strength Anchoring Epoxy demonstrates typical physical properties as detailed in Table 1. Color mixed: gray.

TABLE 1 TYPICAL PHYSICAL PROPERTIES

Compressive yield strength, ASTM D695 (7 day)	10,000 psi (69 MPa)
Compressive modulus, ASTM D695 (7 day)	240,000 psi (1,650 MPa)
Pullout strength, ASTM E488 (24 hours)	28,000 lbf (124 kN)
	(5/8" threaded rod 5-5/8" deep)
VOC Content	8 g/L

A 5/8" diameter threaded rod in a 3/4" diameter hole embedded to a 5-5/8" depth and cured at 75 °F for 24 hours in 3,500 psi concrete will yield an ultimate pullout strength of 28,000 lbf (124 kN). At the minimum load time of 4 hours in the same conditions the ultimate pullout strength is 7,000 lbf (31 kN).

Reductions of 75% or greater to the ultimate pullout strength should be applied as a safety factor to determine the allowable load. For example, after a 24 hour cure at 75 °F, the ultimate pullout strength of 28,000 lbf would equate to an allowable load of 7,000 lbf.

INSTALLATION

ANCHOR HOLE PREPARATION

Prepare all anchor holes prior to placement of anchoring epoxy.



Hole diameter is typically 1/8" (3 mm) greater than the anchor diameter. Hole depth is typically nine times anchor diameter. Recommended minimum anchor hole depth is 1". Consult project specifications and regulations. Drill hole to proper diameter and depth and blow all dust from the bottom of the hole, brush and blow repeatedly to remove all dust and debris. The anchor hole must be clean and free of standing water prior to placement of material.

APPLICATION

WEAR IMPERVIOUS GLOVES such as nitrile. Use only heavy duty professional caulking gun. Remove plastic cap and plugs from the cartridge. Save for closing cartridge (match white to white). Attach mixing nozzle to cartridge. Discard small amount of gunned product until uniform color is achieved. Mixing nozzle will harden in approximately 20 min if not in use. Hardened nozzle must be discarded. Dispense the adhesive at the bottom of the hole while withdrawing nozzle. Dispense epoxy (typically 5/8 of hole) so that once threaded rod or rebar is inserted, the hole is completely full. Insert threaded rod or rebar to the bottom of the hole while turning clockwise. Promptly remove any excess material. Leave anchor undisturbed for a minimum of 4 hours (at 77°F / 25°C), or longer for colder temperatures. Load can be applied after 4 hours at 77°F (25°C). Adhesive is fully cured and achieves best strength in 24 hours at 77 °F (25 °C). Note: compressing the plunger half way fully dispenses all material simultaneously from the front and back interior sections of the cartridge.

PRECAUTIONS

• **WEAR IMPERVIOUS GLOVES such as nitrile.**
• **CAUTION:** Do not attempt to force adhesive out of a hardened mixer nozzle. Use a new mixer nozzle to avoid rupturing the container.

Alternative is to dispense without nozzle into a disposable cup and mix with a disposable stirrer before applying with the stirrer. If a leak should develop, discontinue use immediately and use a new cartridge.

- IRRITANT, SENSITIZER, CORROSIVE. May cause allergic skin reaction or sensitization, eye and respiratory reaction after prolonged or repeated use.
- Wear chemical resistant gloves and protect eyes and skin during use.
- In case of skin contact, remove immediately – May use rubbing alcohol cautiously (alcohol is flammable). Once cured, the material is extremely difficult to remove and can be removed only mechanically.
- Read SDS at www.quikrete.com
- **Not for overhead anchoring.** Not for sustained long-term loads.
- Application temperature: 40°F to 95°F (4°C to 35°C). When temperatures are below 70°F (21°C) warming the cartridge before application will improve handling and curing (warm to 77°F to 90°F /

25°C to 32°C).

- Storage temperature: 40°F to 90°F (4°C to 32°C)
- Service temperature: -30°F to 140°F (-34°C to 60°C)
- Remove from skin and tools immediately.
- Uncured material can be removed from tools and surfaces with solvents such as: WD40, citrus adhesive removers, xylene, toluene, rubbing alcohol, or nail polish remover. Cured material can be removed only mechanically. Employ solvents cautiously; follow with soap and water as appropriate.

WARRANTY

NOTICE: Obtain the applicable LIMITED WARRANTY: at www.quikrete.com/product-warranty or send a written request to The Quikrete Companies, LLC, Five Concourse Parkway, Atlanta, GA 30328, USA. Manufactured under the authority of The Quikrete Companies, LLC. © 2018 Quikrete International, Inc.

** Refer to www.quikrete.com for the most current technical data, SDS, and guide specifications*