



1. Product Name

- QUIKRETE® Polyurethane Construction Adhesive #9902-10
- QUIKRETE® Polyurethane Non-Sag Sealant #8660-11
- QUIKRETE® Polyurethane Self-Leveling Sealant #8660-10

2. Manufacturer

The QUIKRETE Companies
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3. Product Description

BASIC USE

QUIKRETE® polyurethane products are suitable for general-purpose sealing applications. These 1-component, permanently flexible materials provide a superior cure in the presence of atmospheric moisture. This line of sealants is suitable for a variety of applications, including:

QUIKRETE Polyurethane Construction Adhesive #9902-10

- Repairing broken concrete
- Fastening wood, polystyrene insulation, metal or glass to concrete and masonry
- Fastening wood panels to drywall, concrete and masonry

QUIKRETE Polyurethane Non-Sag Sealant #8660-11

- Vertical and horizontal expansion joints in concrete, stucco and masonry
- Caulking around window and door openings
- Waterproofing cracked concrete

QUIKRETE Polyurethane Self-Leveling Sealant #8660-10

- Waterproofing horizontal expansion joints in concrete
- Flashing and below-grade waterproofing membranes
- End dams in glazing systems

COMPOSITION & MATERIALS

QUIKRETE Polyurethane Sealants are a uniformly blended mixture of polyurethane polymers, plasticizers, fillers and other ingredients necessary to provide the desired properties.

PACKAGING

- QUIKRETE Polyurethane Construction Adhesive #9902-10 - 10.1 oz (300 mL) caulk tubes. Available in gray
- QUIKRETE Polyurethane Non-Sag Sealant #8660-11 - 10.1 oz (300 mL) caulk tubes. Available in gray
- QUIKRETE Polyurethane Self-Leveling Sealant - 10.1 and 29 oz (300 and 858 mL) caulk tubes. Available in gray. The 29 oz (858 mL) size is also available in sandstone

YIELD

QUIKRETE polyurethane products will seal approximately 12 lineal feet (3.7 m) of a 1/2" x 1/4" (12 x 6 mm) joint, per 10 oz (300 mL) tube.

LIMITATIONS

QUIKRETE Polyurethane Construction Adhesive #9902-10

- Apply above 40 degrees F (5 degrees C)
- Service temperature (after placing) - -40 - 200 degrees F (-40 - 93 degrees C)

QUIKRETE Polyurethane Non-Sag Sealant #8660-11

- Do not apply to frozen surfaces or through standing water
- Do not apply over silicones or in the presence of curing silicones
- Avoid contact with alcohol and solvents during cure
- Application to moisture-laden substrate can cause bubbling to occur
- Protect unopened containers from heat
- Do not apply over freshly treated wood. Allow treated wood to age at least 6 months

QUIKRETE Polyurethane Self-Leveling Sealant #8660-10

- Do not apply to frozen surfaces or through standing water
- Do not apply over silicones or in the presence of curing silicones
- Do not apply in high temperatures, high humidity or if rain is expected before sealant has partially cured, as bubbling may occur
- Avoid contact with alcohol and solvents during cure
- Avoid contact with bitumen, strong acids and alkalis



QUIKRETE® Polyurethane Sealants and Construction Adhesive

- Avoid joints that are too deep or damp, as bubbling may occur
- Joints between nonporous substrates require slightly longer cure time, depending on surface area

4. Technical Data

APPLICABLE STANDARDS

ASTM International - ASTM C920 Standard Specification for Elastomeric Joint Sealants

Canadian Standards Association (CSA) - CAN/CGSB 19.13-M87 Sealing Compound, One-Component, Elastomeric, Chemical Curing

Federal Specification TT-S-00230C - Interim Federal Specification for Sealing Compound, Elastomeric Type, Single Component

Note - Both sealants meet the California Air Resources Board 2003 requirements for VOC content.

PHYSICAL/CHEMICAL PROPERTIES

See Tables 1 and 2.

5. Installation

PREPARATORY WORK

QUIKRETE Polyurethane Adhesive
Remove dirt, oil, moisture and/or old sealant/adhesive. Sand or grind as necessary to expose a sound surface.

QUIKRETE Polyurethane Sealants

The key to long-term sealant performance is proper substrate preparation. The substrate must be clean, dry, frost-free, sound and free of any oils, greases or incompatible sealers, paints or coatings that may interfere with adhesion and good joint performance.

Porous surfaces should be cleaned of dust and debris using a stiff brush or oil and moisture-free compressed air. Mechanical methods, e.g., wire brushes, grinders, etc., may be required to remove surface contamination, debris and failed sealants, such as in recaulking applications.

JOINT DESIGN

QUIKRETE Polyurethane Sealants

A thin bead of sealant will accommodate more movement than a thick bead. Working joint depths should never exceed 1/2" (12 mm) or be thinner than 1/8" (3 mm). The ideal working joint depth is 1/4" (6 mm). The ratio of joint width to depth should be 2 to 1.

Joints should be designed or cut to work

well within the movement capability of the sealant/adhesive, allowing for erection and installation tolerances, time of year of installation and sealant movement capability.

QUIKRETE Backer Rod (#6917) should be used, depending on application, to prevent 3-sided adhesion (see Figure 1). If joint depth does not allow for backer rod installation, use polyethylene bond breaker tape.

METHODS

QUIKRETE Polyurethane Adhesive

Cut the plastic tip to the desired size and puncture airtight seal at base of tip. Using a caulk gun, apply caulking to one of the surfaces to be bonded.

Force adhesive into gaps or cracks and smooth bead to desired shape. Be certain to fill all gaps when working on rough surfaces. QUIKRETE polyurethane adhesive will bridge gaps up to 3/8" (9 mm) wide. It may be necessary to use mechanical fasteners to hold the surfaces in place until the adhesive is fully cured.

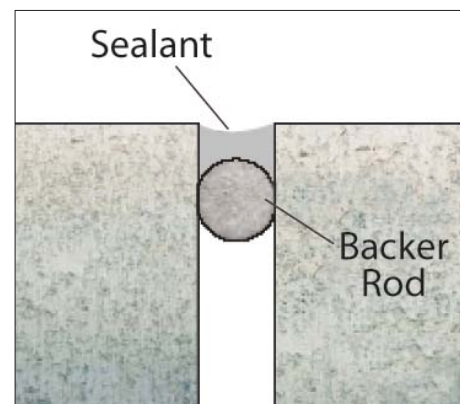


Figure 1

QUIKRETE Polyurethane Sealants

Avoid applying sealant below 40 degrees F (4 degrees C) unless following specific instructions for cold weather caulking.

Do not apply in ambient conditions where the threat of rain is imminent. If the ambient temperature exceeds 85 degrees F (29 degrees C) and, particularly when substrates will be exposed to direct sunlight, monitor surface temperatures to ensure that they do not exceed the maximum recommended - for example, 140 degrees F (60 degrees C) for polyurethanes and certain silicones.

Mask adjacent surfaces to be sealed if necessary to ensure neat sealant lines and minimize cleanup. Avoid placing masking in areas to be sealed.

Remove masking immediately after tooling sealant. Apply sealant using consistent, positive pressure to force it into the joint. Tool sealant to thoroughly wet out joint surfaces. A tool with a convex profile is recommended to create a concave sealant joint that maximizes the thickness at the bond line and minimizes it at the center of the joint. Do not use soapy water or other liquids when tooling.

CURING

QUIKRETE Polyurethane Construction Adhesive will be tackfree in approximately 90 minutes at 75 degrees F (22 degrees C) and 50% relative humidity. It will be fully cured in 5 - 8 days. Low humidity, cool temperatures and nonporous substrates will extend cure times.

QUIKRETE Polyurethane Sealants will be tackfree in 4 - 8 hours and achieve full cure in 7 - 14 days. Allow sealant to cure for 72 hours before painting or exposing the surface to traffic. Allow 7 days for temporary water immersion.

TABLE 1 APPLICABLE STANDARDS FOR QUIKRETE® POLYURETHANE SEALANTS

	Non-Sag Sealant	Self-Leveling Sealant
ASTM Method	C920 Type S, Grade NS, Class 25, Use NT, M, G, A, O	C920, Type S, Grade P, Class 25, Use T, M, G, A, O
Federal Specification CSA	TT-S-00230C, Type II, Class A CAN/CGSB 19.13-M87	TT-S-00230C, Type I, Class A CAN/CGSB 19.13-M87

Note: Both products meet California Air Resources Board 2003 requirements for volatile organic compound (VOC) content.

TABLE 2 PHYSICAL/CHEMICAL PROPERTIES OF QUIKRETE® POLYURETHANE PRODUCTS

	Construction Adhesive #9902-10	Self-Leveling Sealant #8660-10	Non-Sag Sealant #8660-11
Tackfree time 77°F (25°C), 50% RH	90 minutes	8 hours	4 hours
Cure depth 77°F (25°C), 50% RH, per 24 hours, inches (mm)	3/16 (5)	1/16 (1.6)	1/8 (3)
Durometer hardness, Shore A	50	40	38
Ultimate tensile strength, psi (MPa)	325 (2.2)	300 (2.1)	275 (1.9)
Elongation, %	615	725	800
Modulus at 100% elongation psi, (MPa)	175 (1.2)	150 (1.0)	95 (0.7)
Dynamic joint movement, %	-	± 25	± 25

PRECAUTIONS

QUIKRETE recommends that gloves be worn during application. QUIKRETE polyurethane products are difficult to remove from the skin and clothing. Should these products come in contact with the skin, immediately wipe the affected area with a dry cloth.

CLEANUP

Remove excess sealant/adhesive from glass, metal and plastic surfaces, while still uncured, using a commercial solvent, such as xylene or similar solvent, or a citrus based cleaner.

6. Availability

QUIKRETE polyurethane products are available at leading concrete construction supply houses and distributors. Contact QUIKRETE Construction Products for the name of the nearest dealer.

7. Warranty

The QUIKRETE Companies warrant this product to be of merchantable quality when used or applied in accordance with the instructions herein. The product is not warranted as suitable for any purpose or use other than the general purpose for which it is intended. Liability under this warranty is limited to the replacement of its product (as purchased) found to be defective, or at the shipping companies' option, to refund the purchase price. In the event of a claim under this warranty, notice must be given to The QUIKRETE Companies in writing. The limited warranty is issued and accepted in lieu of all other express warranties and expressly excludes liability for consequential damages.

8. Maintenance

None required.

9. Technical Services

The QUIKRETE Companies maintain technical field representatives throughout the country. Contact a local distributor for the name and number of the nearest representative or call QUIKRETE Construction Products.

10. Filing Systems

Additional product information is available from the manufacturer.