

## TECHNICAL DATA SHEET

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# Geocel 500™ ONE-PART POLYURETHANE SEALANT

## Product Description

500™ is a one-part, moisture curing polyurethane sealant that cures rapidly to a durable, medium modulus, flexible, weatherproof sealant.

## Applications

- Exterior and interior caulking of perimeters of frame openings
- Expansion, control and isolation joints
- Coping and coping-to-facade joints
- Cornice and wash joints
- Panels
- Poured in place
- Tilt up
- Underside of precast planks
- Top of non-load-bearing wall
- Steps and risers
- Roofing

## Benefits

- Excellent adhesion to most building surfaces
- Asphalt compatible
- Paintable
- Cleans up easily
- Fast curing

## Packaging

500™ is supplied in 10.3 oz. cartridges. Available in gray, black, bronze, tan, terra cotta and white. Packaged 24 cartridges per case.

## Technical Data

Form	Test Method	Results
		Viscous paste
Tack Free Time	ASTM C 679	1 1/2 hours
Slump	ASTM C 639	Nil
Cure Time (77 ° F)	Varies with RH	1 1/2 - 3 days
Adhesion-in-Peel	ASTM C 794	>25 lbs PIW
Modulus @ 100% Elongation		65 psi
Tensile Strength	ASTM D 412	301 P.S.I.
Joint Movement	ASTM C 719	± 25%
Hardness, Shore A	ASTM D 2240	41
Staining		None
Service Temperature		-40° F to 180° F (-40° C to 82° C)
Application Temperature		-40° F to 180° F (-40° C to 82° C)
Shelf Life		12 months

## SPECIFICATIONS

Meets or exceeds the requirements of Federal Specification TT-S-00230C (COM-NBS) for one-component sealants as Class A non-sag; ASTM C920-79 standard specifications for elastomeric joint sealants as Type S, Grade NS, Class 25, use NT, A and M; CAN/CGSB-19,13 Canada.

ARCHITECTURAL

**Joint Design**

The width of the joint should be a minimum of 4 times the anticipated movement. In joints up to 1/2" wide, the depth of the sealant should be equal to the width, but not less than 1/4". In joints wider than 1/2", the depth should be maintained at 5/8". Lap shear joints should have a width of at least twice the anticipated movement. Joint depth should not exceed 5/8".

**Joint Preparation**

Joints to receive sealant must be sound, smooth, uniform in dimension and free from defects and foreign material. They must be clean, dry and free of frost and all contaminants, such as curing compounds, sealers (waterproofing), coatings, etc. A backer rod should be used to control joint depth. In shallow joints, a bond breaker tape should be installed to prevent three-point contact. Sealant adhesion should be tested on each different substrate prior to caulking. To test adhesion, apply a sealant bead and allow to cure thoroughly. Then pull one end of the bead to test adhesive strength.

**Priming**

**500™** exhibits good primerless adhesion to most common construction substrates. However, for joints where high movement is anticipated, the use of a primer is recommended. Please contact **Geocel's Technical Service Department** for specific advice.

**Application**

Cut cartridge end at 45° to required size and place into a cartridge gun. Firmly extrude into slot ensuring complete contact with joint faces. Fill joints from the back to prevent voids and air pockets. If application temperature is below 40° F (5° C), precautions should be taken to ensure the substrates are completely dry and frost free. Do not apply on wet substrate. For optimal performance, dry tooling is the preferred method. Sealant should not be applied with wet tooling techniques. Using solvents, water or detergent solutions is not recommended. Where necessary, the joint edges can be masked with tape to prevent contamination of adjacent substrates and to ensure a neat sealant line. The tape should be carefully removed immediately after tooling.

**Limitations**

- Not for use in glazing
- Not for use on plastic materials with high plasticizer content
- Not for use on corrosive/crack sensitive plastics
- Do not apply over damp or contaminated surfaces
- Do not apply to absorbent surfaces such as marble, limestone or granite without prior testing for discoloration or staining

**Cleaning**

Remove **500™** from gun and tools before it cures. This may be done by scraping and use of solvents such as Xylol. Cured materials may be removed by cutting with sharp tools or sandpapering.

**Health & Safety**

Combustible. Keep away from sparks and flames. The following precautions should be taken:

- Keep out of reach of children
- Wear gloves and eye protection
- Avoid ingestion or inhalation of vapors
- Use only in well ventilated areas
- Wash hands prior to eating or smoking
- If accidental contact with skin occurs, skin should be cleaned immediately with soap and water
- Any eye contact should be treated by rinsing with clean water and medical advice should be sought

**Technical Service**

For further technical information, advice on suitability for specific applications, or detailed Health and Safety information, contact **Geocel's Technical Service Department**.

**IMPORTANT NOTE** While all reasonable care is taken in compiling technical data on the company's products, all recommendations regarding the use of such products are made without guarantee since the conditions of use are beyond the company's control. It is the customer's responsibility to satisfy themselves that each product is fit for the purpose for which they intend to use it.

