

Product Description

Poly-Caulk® 50A is a two-component, 1:1 ratio, aromatic, rapid setting, self leveling, polyurea polyurethane, 50 Shore A caulking compound for interior application.

Features

- Down Time 30-90 Minutes
- Flexible
- Meets USDA Criteria
- Meets VOC Regulations
- Non Toxic
- Odorless
- Remains Flexible, Even in Cold Temperatures

Typical Uses

Poly-Caulk® 50A is used on interior concrete surfaces, to repair random cracks, control joints, and other areas where down time is limited. Poly-Caulk® 50 will discolor in exterior applications.

- Airports
- Bridge Headers
- Food Processing Plants
- Freezers & Cold Storage
- Grade Matching
- Parking Garage Decks
- Saw/Utility Cuts
- Water Treatment Plants

Packaging

10-gallon kit	One 5 gallon (3.78 liters) pail of Side-A and One 5 gallon (3.78 liters) pail of Side-B
100-gallon kit	One 55 gallon drum (net 50 gallons, 189 liters) of Side-A and One 55 gallon drum (net 50 gallons, 189 liters) of Side-B

Color

Concrete Grey

Coverage

Coverage's and yields shown do not include allowances for loss or waste and variations in job conditions. Each user must establish their own factors for loss from experience.

Surface Preparation

Allow concrete to cure 28 days before installation. Saw cut the joint to ACI Recommendations. All joints must be clean and dry prior to installing Poly-Caulk® 50A.

If joint is damp, dry with heat torch. If primer is required, use Polyprime® 2180 or Polyprime® EBF-LV.

Technical Data (Based on Draw Down Film)

Mix Ratio by Volume	1A : 1B
Specific Gravity, Side A	1.06 ± 0.1
Side B	1.07 ± 0.1
Viscosity at 75°F (24°C), Side A	1600 ± 500 cps
Side B	1200 ± 500 cps
Gel Time at 75°F (24°C), ASTM D2471	35 ± 5 seconds
Hardness, ASTM D2240	50 ± 5 Shore A
Tensile Strength, ASTM D412	425 ± 50 psi 2.93 ± 0.35 MPa
Elongation, ASTM D412	550 ± 50%
Tear Strength Die C, ASTM D624	50 ± 5 pli 8.76 ± 0.8 kN/m
Total Solids by Weight, ASTM D2669	95 ± 2%
Total Solids by Volume, ASTM D2697	95 ± 2%
Volatile Organic Compounds, (Parts A&B Combined) ASTM D2369-81	0.0 lb/gal 0 gm/liter

Depth of Joint	Width of Joint						
	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
1/4"	308	205	154	123	102	88	77
3/8"	205	136	102	82	68	58	51
1/2"	154	102	77	61	51	44	38
5/8"	123	82	61	49	41	35	30
3/4"	102	68	51	41	34	29	25
7/8"	88	58	44	36	29	25	22
1"	77	51	38	30	25	22	19

Remove all dust from the concrete pores prior to installing Poly-Caulk® 50A. If backer rod is used in control joints, the recommended depth is not greater than 25% of the total depth of the slab.

Construction joints are to be filled to full depth using no backer rod or silica sand. To repair T-joints, the joint should be cut a minimum of 25% of the total depth of the slab. The side of the T-joint must be cut 1/2" (1.27 cm) from the joint and a minimum of 1/2" (1.27 cm) deep.

For random crack and spall repairs, each side of the crack should be cut to create a minimum 1/2" (1.27 cm) deep vertical edge. Ensure that all joint edges are at 90° angles to grade with no V-grooving or feather edges.



Mixing

Poly-Caulk® 50A may not be diluted under any circumstance. Side-A material requires no mixing. Pre-mix Side-B material before application using a mechanical mixer at a low speed. Mix until a homogeneous mixture and color is attained.

Do not mix in an up and down motion. Use only a proportioning dispensing system which transfers, meters and mixes the Side-A with Side-B components at the desired rate and at the required proportion of 1:1 by volume.

Application

For best results, machine dispense using a 1:1 ratio pump, with or without heater as required. Use a disposable static mixing tube with restrictor before dispensing. Material left in static mixing tube will thicken in approximately 30-60 seconds and mixing tube needs to be discarded at that point. This material can be applied at environmental temperatures from 20°F (6.6°C) to as high as 135°F (57°C). The product needs to be conditioned at 75-80°F (25-27°C) prior to use.

This material may be used to fill the entire crack/joint. Excess/overflow material from joints should be shaved off in about 60 to 90 minutes after application.

Finishing

Slice off any over-pour flush to grade. Open to traffic once Poly-Caulk® 50A has set. Surface can be utilized to light traffic typically within 90 minutes of application.

Cleanup

Cured product may be disposed of without restriction. Mix excess Side-A with Side-B material and allow to cure. Check local, state and federal laws before disposing of material.

Storage

Poly-Caulk® 50A has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C).

Limitations

Discoloration will occur if exposed to UV, however no change will occur in the physical properties.

Warning

This product contains Isocyanates and Solvent.

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