

## PowerStick™ Adhesive Sealant

### PRODUCT DESCRIPTION

PowerStick is a one-component universal adhesive/sealant based on proprietary MS Polymer chemistry. PowerStick is the first professional grade product on the market that delivers high bond strength and superior flexibility.

PowerStick does not shrink, can be applied on wet surfaces, is virtually odorless and has excellent UV resistance. PowerStick also features high aggressive initial tack, and is non-reactive with the substrate and can be painted after curing.

In short, PowerStick can be used on a variety of substrates, indoors or outdoors and removes the guesswork by having one universal product solution for almost all applications.

PowerStick is non-hazardous, safe for the environment and does not require special shipping procedures. It does not contain solvents, isocyanates and is VOC compliant. Cleaning up is easy with just soap and warm water or mineral spirits.

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PowerStick Tube

### GENERAL APPLICATIONS AND USES

#### Caulks

- |               |               |         |
|---------------|---------------|---------|
| • Tubs        | • Sinks       | • Sills |
| • Showers     | • Mouldings   | • Pipe  |
| • Tiles       | • Foundations | • Trim  |
| • Floor Seams | • Thresholds  |         |

#### Bonds

- |           |              |              |
|-----------|--------------|--------------|
| • Masonry | • Porcelain  | • Concrete   |
| • Brass   | • Wood       | • Copper     |
| • Tile    | • Aluminum   | • Glass      |
| • Steel   | • Ceramic    | • Marble     |
| • Canvas  | • Plywood    | • Fiberglass |
| • Drywall | • Foam Board |              |

#### Seals

- |           |                |            |
|-----------|----------------|------------|
| • Gutters | • Windows      | • Ductwork |
| • Doors   | • Small cracks | • Joints   |

### CARTRIDGE SIZES

10 oz.

### COLORS

White

Gray

### GENERAL APPLICATIONS AND USES

- Elastic properties — can be used as a sealant for filling cracks and joints
- No harmful components, solvent free and is VOC compliant (No Isocyanates)
- Can be shipped without restriction and is environmentally friendly
- Inert formula will not interact with substrates such as metal trim, silver lining on mirrors or foam insulation board
- Works on virtually every base material
- MS formula is not affected by water, moisture or mildew during service
- UV resistant formula is suitable for outdoor use
- Superior initial tack (grab)
- Accepts primer and paint unlike silicone based sealants

### TECHNICAL DATA

Base	Proprietary MS Polymer
Shelf life	14 months in unopened package (when stored in a cool dry place, 41°F to 86°F). Short term storage temperature should not exceed 110°F (43°C).
Curing system	One-component moisture cure
Full cure/Bonding	Less than 24 hours (full cure of bonding later of 0.0788-inch)
Tack free time	Approximately 15 minutes (depending on temperature and humidity)
Skin formation	5 to 7 minutes (depending on temperature and humidity)

Base	Proprietary MS Polymer
Freeze / Thaw stability	No impact on sealant by frost
Application temperature	34°F to 95°F (1°C to 35°C)
In-Service temperature	-40°F to 194°F (-40°C to 90°C)
Ideal storage temperature	41°F to 86°F (5°C to 30°C)
Density	0.94 oz./in <sup>3</sup> (1.62 g/ml)
Hardness	50 + 5 Shore A
Elasticity modulus (100%)	109 psi (0.75 MPa) per DIN 53504
Tear strength	290 psi (2.0 MPa) per DIN 53504
Maximum elongation	20%

(b)

## INSTALLATION GUIDELINES AND SUGGESTED USE

### Application

- Method: Caulking gun.
- Cleaning: Warm water and soap or mineral spirits immediately after application and before curing.
- Tooling: Clean with soapy solution before skin formation.

### Installation Preparation

- PowerStick should be applied to surfaces that are clean and free of dust, dirt and grease.

### Health and Safety

- Hand and eye protection is highly recommended. As with all adhesives, consult the MSDS.

### Chemical Resistance

- Good resistance to aquatic solutions with a pH range between 5 and 9. Preliminary compatibility tests should be conducted for aquatic solutions with higher pH.
- Good resistance to water, aliphatic solvents, mineral oils, grease, diluted inorganic acids and alkalis.
- Good resistance to mineral oils and grease.
- Some resistance to aromatic solvents, concentrated acids, chlorinated hydrogens.

### Curing Process

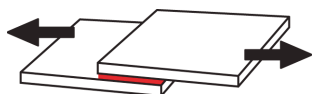
- PowerStick is a moisture cure system. In bonding applications, one of the surfaces should be porous to allow for air and/or moisture to transfer to the adhesive for normal curing speed. If two non-porous surfaces are bonded together with PowerStick, full curing time may require several days depending on the application and the project conditions.

### Special Applications

- PowerStick should not be installed in submerged conditions for load bearing applications.
- PowerStick may be painted, however, due to the large number of paints and varnishes available a compatibility test before application is strongly suggested. The drying time of alkyd resin based paints may increase.
- PowerStick can be applied to a wide variety of substrates. Performance with specific substrates, such as plastics, polycarbonates, etc, may differ according to manufacturer, therefore it is suggested that preliminary compatibility tests be conducted.

## PERFORMANCE DATA

### Bond Strength (Lap Shear)



The bond strength capacities listed below are for the lap shear strength traction of the PowerStick used with different substrates.

#### Metals

Building Material	Bond Strength psi (MPa)
Steel	127 (0.88)
Aluminum	109 (0.75)
Copper	144 (0.99)
Brass	81 (0.56)
Galvanized Steel	116 (0.80)

#### Masonry

Building Material	Bond Strength psi (MPa)
Brick	112 (0.77)
Hollow Block	112 (0.77)
Block	112 (0.77)

#### Concrete

Building Material	Bond Strength psi (MPa)
Concrete	128 (0.88)

#### Wood

Building Material	Bond Strength psi (MPa)
Oak	131 (0.90)
Beech	134 (0.92)
Pine	125 (0.86)
Douglas Fir	125 (0.86)
Cedar	125 (0.86)

#### Plastics

Building Material	Bond Strength psi (MPa)
Epoxy (Typ.)	118 (0.81)
Polystyrene	112 (0.77)
Makrolon (PC)	128 (0.88)
PVC	76 (0.52)
PA6	123 (0.85)
PMMA	95 (0.66)
ABS	119 (0.82)

Yield: 10 fl. oz. = 18 in.<sup>3</sup> (30.5 Lineal Feet with 1/4" bead)

## ORDERING INFORMATION

### PowerStick Cartridges

Cat. No.	Size	Color	Dispenser	Standard Box
8166	10 oz. Tube	White	Caulk Gun	12
8168	10 oz. Tube	Gray	Caulk Gun	12



### Caulking Guns for PowerStick

Cat. No.	Description	Standard Box	Standard Carton
8437	Manual Caulking Gun	1	1
8479	High Performance Manual Tool	1	1

