



# Epoxy

## VEN 1000 — High Chemical Resistant Epoxy Gel

## VEN 500 — Chemical Resistant Epoxy Gel

## VEN 250 — Standard Construction Epoxy

Earth Shield® VEN 1000, 500 and 250 are trowel grade epoxy gels designed to adhere Earth Shield® Retrofit Waterstop (part no. 320L, 336L, 325T, 450T, *et al*) to existing concrete surfaces.

VEN 1000 Physical Properties	
Adhesion Strength	2,800 psi
Color	Light gray
Kit Size	1 gallon
Flash Point	250°F
Specific Gravity (Resin)	1.51
Specific Gravity (Hardener)	.95
Volatile Organic Compounds	0 grams per liter
Weight Per Gallon	11.39 lbs.

Pot Life* at 40°F	5 hours, 40 min.
Pot Life* at 75°F	1 hour
Pot Life* at 90°F	25 minutes
High Temp. Dry Service	450°F
High Temp. Splash/Spill Service	360°F
High Temp. Immersion Service	300°F

VEN 500 Physical Properties	
Adhesion Strength	2,850 psi
Color	Light gray
Kit Size	1 gallon
Flash Point	250°F
Specific Gravity (Resin)	1.36
Specific Gravity (Hardener)	.82
Volatile Organic Compounds	0 grams per liter
Weight Per Gallon	10.20 lbs.
Pot Life* at 40°F	8 hours, 30 min.
Pot Life* at 75°F	45 minutes
Pot Life* at 90°F	30 minutes
High Temp. Dry Service	250°F

High Temp. Splash/Spill Service	190°F
High Temp. Immersion Service	150°F

VEN 250 Physical Properties	
Adhesion Strength	2,500 psi
Color	Light gray
Kit Size	2 gallon
Flash Point	250°F
Specific Gravity (Resin)	1.48
Specific Gravity (Hardener)	1.48
Volatile Organic Compounds	0 grams per liter
Weight Per Gallon	12.30
Pot Life* at 40°F	4 hours
Pot Life* at 75°F	45 minutes
Pot Life* at 90°F	30 minutes
High Temp. Dry Service	250°F
High Temp. Splash/Spill Service	180°F
High Temp. Immersion Service	140°F

### Mixing Instructions

1. Place all of part "B" into part "A" container.
2. Mix thoroughly until the material is uniform in color

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25811 Jefferson Avenue, Murrieta, CA 92562

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(no streaks). Scrape sides of can to insure there are no unmixed areas. Unmixed product will not properly cure.

- Once mixed, remove putty from can and place on rolling tray, cardboard, or wooden board. Spread putty over surface of board. *\*Due to exothermic heat, putty left in container will accelerate the cure time, causing epoxy to harden too quickly. Try to keep the epoxy depth below 3/8" to prolong the pot life.*

### Coverage

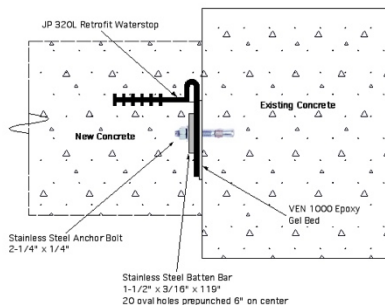
- 1/8" depth by 3" wide: 50 lft
- 1/8" depth by 4.5" wide: 37.5 lft

### Placement

Prepare existing concrete by grinding away any irregularities. Clean concrete by using wire brush, needle gun, high-pressure water or sand blasting. Remove all grease and laitance.

#### For JP320L & JP336L

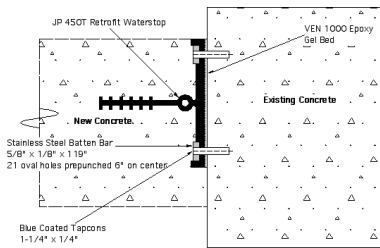
Apply continuous bed of epoxy paste using a 1/4" square notched trowel to provide approximately 1/8" finished depth by 3" wide bed of epoxy for JP320L and JP336L Retrofit Waterstop profiles.



#### For JP325T

Apply continuous bed of epoxy paste using a 1/4" square

notched trowel to provide approximately 1/8" finished depth by 3.5" wide bed of epoxy for JP325T Retrofit Waterstop profile.



#### For JP450T

Apply continuous bed of epoxy paste using a 1/4" square notched trowel to provide approximately 1/8" finished depth by 4.5" wide bed of epoxy for JP450T Retrofit Waterstop profile.

Increase epoxy depth to fill in voids or irregularities in concrete where necessary. Consult *Earth Shield® Waterstop Retrofit Jobsite Installation Guide* for additional installation instructions.

### Safety

Read and understand MSDS for all products. Wear rubber gloves and eye protection at all times. Use dust mask when cleaning. Keep fresh water on site at all times. Do not ingest or inhale.

### First Aid

- Eye contact — Flush with water for 15 minutes and seek medical attention.
- Skin contact — Wash with soap and water, consult physician if rash occurs.
- Ingestion — Give large quantities of water, do not induce vomiting, seek medical attention.

- Inhalation of vapor — Remove to fresh air, apply oxygen if necessary.

### Storage

- Keep stored in tightly sealed containers. Avoid excessive heat or flames.
- Hot environment — Store products between 70 to 75°F 48 hours prior to application.
- Cold environment — Store products at or above 80°F for 24 hours prior to application.
- Keep products in a cool area during use.
- Do not use products at temperatures above 90°F, or below 40°F (surface temperature).

### Additional Information

Please contact Earth Shield Technical Support prior to use of this product regarding any additional questions.

### Chemical Resistance Key

E = Excellent  
 G = Good  
 S = Secondary Containment (72 hours)  
 T = Temporary Service (3 hours)  
 NR = Not Recommended  
 NE = Not Evaluate

Material	Earth Shield® VEN 1000	Earth Shield® VEN 500	Earth Shield® VEN 250
Acetic Acid - 10%	E	E	NR
Acetic Acid - 33%	E	NR	NR
Acetic Acid Glac.	S - E (H C)	NE	NR

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<i>Materi al</i>	<i>Earth Shield® VEN 1000</i>	<i>Earth Shield® VEN 500</i>	<i>Earth Shield® VEN 250</i>
Acetone	E	NE	G
Aluminum Bromide	E	E	G
Aluminum Chloride	E	E	E
Aluminum Fluoride	E	E	G
Aluminum Hydroxide	E	E	E
Aluminum Nitrate	E	E	E
Aluminum Sulfate	E	E	E
Ammonia	S	S	S
Ammonia Bisulfite	E	E	E
Ammonium Chloride	E	E	E
Ammonium Fluoride	E	E	E
Ammonium Hydroxide	E	E	E
Ammonium Lauryl Sulfate	E	E	E
Ammonium Nitrate	E	E	E
Ammonium Persulfate	E	E	E

<i>Materi al</i>	<i>Earth Shield® VEN 1000</i>	<i>Earth Shield® VEN 500</i>	<i>Earth Shield® VEN 250</i>
Ammonium Sulfide	E	E	E
Amyl Alcohol	E	S	S
Barium Chloride	E	E	E
Barium Hydroxide	E	E	E
Barium Sulfide	E	E	E
Beer	E	S	S
Benzoic Acid	E	E	E
Benzyl Chloride	E	S	S
Black Liquor	E	E	NR
Bleach (Sodium Hypochlorite 20%)	E	E	G
Boric Acid	E	E	E
Brine	E	E	E
Butanol	E	S	S
Butyl Acetate	E	S	S
Butyl Acrylate	E	S	S
Butyl Cellosolve Acetate	E	S	S
Cadmium Chloride	E	E	E
Cadmium Plating Cyanide	E	E	NE

<i>Materi al</i>	<i>Earth Shield® VEN 1000</i>	<i>Earth Shield® VEN 500</i>	<i>Earth Shield® VEN 250</i>
Calcium Bisulfite	E	E	E
Calcium Chloride	E	E	E
Calcium Hydroxide	E	E	E
Calcium Hypochlorite	S	S	S
Calcium Nitrate	E	E	E
Calcium Sulfate	E	E	E
Carbon Dioxide	E	E	E
Carbon Tetrachloride	E	S	S
Castor Oil	E	E	E
Cellosolve Acetate	E	S	S
Chlorine Gas (Dry & Wet)	S	T	T
Chlorobutane	E	S	S
Chloroform	E	T	T
Chloro sulfuric Acid	S	S	S
Chromic Acid 10%	E	T	T
Chromic Acid 50%	E	E	NE
Citric Acid	E	E	G
Copper Chloride	E	E	E

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Copper Cyanide	E	S	E
Copper Nitrate	E	E	E
Copper Sulfate	E	E	E
Corn Oil	E	T	T
Cresylic Acid	S	T	T
Crude Oil (Sour)	E	E	E
Cumene	E	S	S
Cyclohexane	E	S	S
Cyclohexanone	S - E (HC)	S	S
Dibutyl Phthalate	E	E	E
Dichloro-acetic Acid	S	T	T
Dichloro-benzene	E	S	S
Diesel Fuel	E	E	E
Diethylamine	E	T	T
Dimethyl Aniline	E	S	S
Dimethyl Formamide	S	NE	NE
Dinitro Benzene	S - E (HC)	NE	NE
Divinyl Benzene	E	NE	NE
Ethoxy Ethanol	E	S	S

<i>Materi al</i>	<i>Earth Shield® VEN 1000</i>	<i>Earth Shield® VEN 500</i>	<i>Earth Shield® VEN 250</i>
Ethy Acetate	E	S	S
Ethyl Alcohol	E	S	S
Ethyl Chloride	E (HC)	NR	NR
Ethylene Dichloride	E (HC)	NR	NR
Ethylene Glycol	E	E	E
Ethyl Sulfate	E	E	E
Fatty Acids	E	E	E
Ferric Chloride	E	E	E
Ferric Nitrate	E	E	E
Ferrous Chloride	E	S	S
Fluoboric Acid	E	E	E
Fuel Oil	E	T	T
Furfuryl Alcohol	E	E	T
Gasoline	E	E	E
Glycerine	E	E	E
Grape Juice	E	E	E
Green Liqueur	E	E	E
Heptane	E	E	E
Hexane	E	T	T
Hydrobromic Acid 20%	E	S	S

<i>Materi al</i>	<i>Earth Shield® VEN 1000</i>	<i>Earth Shield® VEN 500</i>	<i>Earth Shield® VEN 250</i>
Hydrochloric Acid 25%	E	E	G
Hydrochloric Acid 36%	E	S	S
Hydrofluoric Acid 25%	E	S	S
Hydrofluoric Acid 49%	S	S	S
Hydrogen Peroxide	S	T	T
Hydrogen Sulfide Gas	E	E	E
Isopropyl Acetate	E	S	S
Isopropyl Alcohol	E	S	S
Jet Fuel	E	S	S
Kerosene	E	E	E
Lactic Acid	S	S	S
Lauryl Chloride	E	E	E
Lead Acetate	E	E	E
Lithium Bromide	E	E	E
Lithium Hydroxide	E	E	E
Magnesium Bisulfite	E	E	E

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<i>Materi al</i>	<i>Earth Shield® VEN 1000</i>	<i>Earth Shield® VEN 500</i>	<i>Earth Shield® VEN 250</i>
Magnesium Carbonate	E	E	E
Magnesium Chloride	E	E	E
Magnesium Hydroxide	E	E	E
Mercuric Chloride	E	S	S
Methanol	E	S	NR
Methyl Alcohol	E	NR	NR
Methylene Chloride	E (HC)	S	S
Methyl Ethyl Ketone	E	E	G
Milk	E	E	E
Mineral Spirits	E	E	E
Muriatic Acid	E	E	G
Naphtha	E	NR	NR
Nitric Acid 10%	E	S	S
Nitric Acid 25%	E	NR	NR
Nitric Acid 50%	S	NR	NR
Nitric Acid 98%	NR	NR	NR

<i>Materi al</i>	<i>Earth Shield® VEN 1000</i>	<i>Earth Shield® VEN 500</i>	<i>Earth Shield® VEN 250</i>
N Octyl Alcohol	E	E	E
Oils Vegetable	E	E	E
Oxalic Acid	S	S	S
Perchloric Acid	S	T	T
Phenol 85%	S	S	S
Phosphoric Acid 15%	E	E	E
Phosphoric Acid 50%	E	S	NR
Phosphoric Acid 80%	E	S	NR
Potassium Acetate	E	E	E
Potassium Chloride	E	E	E
Potassium Hydroxide 50%	E	E	G
Potassium Nitrate	E	E	E
Potassium Sulfate	E	E	E
Propylene Glycol	E	E	E
Salicylic Acid	E	E	G
Silver Nitrate	E	E	E

<i>Materi al</i>	<i>Earth Shield® VEN 1000</i>	<i>Earth Shield® VEN 500</i>	<i>Earth Shield® VEN 250</i>
Sodium Bisulfite	E	E	E
Sodium Chlorite	E	E	E
Sodium Hydroxide 50%	E	E	G
Sodium Phosphate	E	E	E
Stannous Chloride	E	E	E
Styrene	S	S	S
Sulfite Liquor	E	E	E
Sulfuric Acid 10%	E	E	E
Sulfuric Acid 50%	E	S	S
Sulfuric Acid 98%	E	S	NR
Tannic Acid	E	E	E
Tetrachloro Ethane	E	S	S
Titanium Tetrachloride	E	S	S
Toluene	E	E	E
Tricresyl Phosphate	E	E	E
Triethylamine	S	S	S
Turpentine	E	E	G
Vinegar	E	S	S

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<b>Materi al</b>	<b>Earth Shield ® VEN 1000</b>	<b>Earth Shield ® VEN 500</b>	<b>Earth Shield ® VEN 250</b>
<b>Water (DI)</b>	E	E	E
<b>White Liquor</b>	E	E	G

### **Warranty Information**

*All statements, technical information and recommendations contained herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed, and the following is made in lieu of all warranties, express or implied: Seller's and manufacturer's only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use of or the inability to use the product. Before using, user shall determine the suitability of the product for the intended use, and user assumes all risk and liability whatsoever in connection therewith. No statement or recommendation not contained herein shall have any force or effect unless in an agreement signed by officers of seller and manufacturer.*

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