

## DESCRIPTION

Z-5 UV is a two-component, 100% solids (no VOCs, no solvents), exothermic, rapid curing, polyaspartic polyurea lining system. Z-5 UV is based on aliphatic chemistry which has excellent color and gloss stability. This product combines the durability of a tough polyurea elastomer with excellent color and gloss stability of a topcoat into one product. An ideal coating for applications that require a UV-stable, high-gloss finish.

## TYPICAL APPLICATIONS

- Applications requiring a color stable impact and abrasion resistant lining.
- Excellent protective lining for abrasion, impact and corrosion resistance.
- Outdoor industrial or commercial surfaces.
- Marine Environments.
- Walkways, balconies, warehouse floors.
- Parking garage decks.
- Safety curbs, emergency lanes, fire hydrants, etc.

## KEY FEATURES

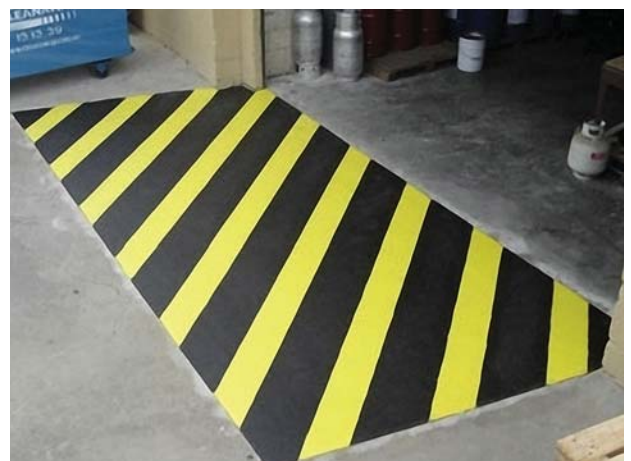
- Excellent color and gloss retention for both light and dark colors.
- Excellent corrosion, impact and abrasion resistance.
- Stable from -40° to 175° F (-40° to 80° C).
- High tensile strength and tear strength.
- Spray-on application creates a monolithic, seamless lining which conforms to any shape and size.
- Combines the durability of a tough polyurea elastomer with excellent color and gloss stability.



Z-5 UV Over Steel



Z-5 UV Pipe Coating



Z-5 UV Safety Marking

**TYPICAL PHYSICAL PROPERTIES**
**(For components)**

|                                  | <b>COMPONENT A</b> | <b>COMPONENT B</b> |
|----------------------------------|--------------------|--------------------|
| Solids by weight and volume      | 100%               | 100%               |
| Viscosity at 77°F (25°C)         | 550 cps            | 225 cps            |
| Specific Gravity (grams/cc)      | 1.14               | 1.03               |
| Mixing ratio by volume           | 1                  | 1                  |
| Shelf Life - Unopened Containers | 12 months          | 12 months          |

**(For cured material)**

|   | <b>TEST METHOD</b> | <b>RESULTS</b>  |
|---|--------------------|-----------------|
| Shore D hardness  | ASTM D-2240        | 65 ± 5          |
| Tensile strength  | ASTM D-412         | 2200 – 2500 psi |
| Elongation  | ASTM D-412         | 42 % ± 5        |
| Tear, Die C   | ASTM D-624         | 530 – 640 pli   |
| Impact Resistance   | ASTM D-256         | 160 lbs         |
| Compressive Strength (psi)  | ASTM D-695-96      | 800             |
| Taber Abrasion Resistance (mg of loss/1000 cycles)<br>CS17 Wheel; 1000 grams weight | ASTM D-4060        | 9               |
| Mandrel Bend, 180°, 2 inch mandrel  | ASTM D-522         | Pass            |
| Water Absorption – 24 hours   | ASTM D-570         | 1.0             |
| Cathodic Disbonding   | ASTM G-8           | Pass            |
| Elcometer Adhesion Pull Test  | ASTM D-4541        | Pass            |

**PROCESS SPECIFICATIONS**

|                                   |                 |         |
|-----------------------------------|-----------------|---------|
| Equipment pre-heater temperature  |                 |         |
| Component A                       | 150°F           | 65°C    |
| Component B                       | 150°F           | 65°C    |
| Hose temperature                  | 150°F           | 65°C    |
| Spray pressure                    | 2300 PSI        | 158 Bar |
| Gel time at equipment temperature | 15 – 18 seconds |         |
| Tack free time                    | 45 – 50 seconds |         |
| Recoat                            | Max 4 hrs       |         |

**MIXING**

Z-5 UV may not be diluted under any circumstances.

Mix Z-5 UV Side-B (Polyol) Base material with a mechanical drum mixer until a homogeneous mixture and color is obtained. Do not allow air to be incorporated into the product. Total suspension must be achieved.

Z-5 UV Side-A (Isocyanate) requires no mixing.

**COVERAGE**

Due to its fast set nature Z-5 UV may be applied at any rate to achieve desired thickness. Theoretical coverage per gallon is 1600 sq. ft. at 1 mil. Practical coverage @ 100 mils = 50 ft<sup>2</sup>/ 3 gal.

Dry film thickness range varies based on application, typically a minimum of 1/16" (62.5 mils; 1.5mm) up to unlimited thickness.

**HANDLING PROCEDURES**

During Processing, both A & B drums should be fitted with desiccant dryer system. Keep containers closed, when possible, to exclude any atmospheric moisture. Blanket both components with dry nitrogen when storing drums that have been opened.

### STORAGE

Z-5 UV components should be stored in sealed containers at 60 – 90° F (15 – 32° C) in a dry area. Avoid exposure to freezing temperatures. Store on wooden pallets to avoid direct contact with the ground.

### PACKAGING

A set of Z-5 UV consists of one (1) 55 gallon (208 L) drum of 'A' component and one (1) 55 gallon (208 L) drum of 'B' component. Net weight per set is 910 pounds (412.7 kg).

### COLOR OPTIONS

Colors - Black, Industrial Tan, Industrial Grey, Industrial Brown, Graphite, Spice Brown, Red, Indigo Blue, Emerald Green or unpigmented (natural). Custom colors are also available by special order.

### PRECAUTIONS

Protect from exposure to moisture. Water will cause the "A" component (ISO) to generate carbon dioxide with resulting high pressure in closed containers.

Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your Pinnacle representative or visit our website for current technical data and instructions.

### TECHNICAL SUPPORT

We have a dedicated technical support team offering knowledgeable support for everything from preventative maintenance, equipment calibration and servicing through to coating and foam application advice. If you have any questions regarding the use of this product please call us toll free at 1-800-901-0088 or email us [info@pinnaclewest.net](mailto:info@pinnaclewest.net).

### ON-SITE TRAINING

Our on-site training programs provide the necessary equipment and application training, including the health and safety aspects, needed to apply a wide variety of products. The goal of our programs are to give the skills required to be a professional and productive installer.

### LIMITED WARRANTY

Pinnacle West Enterprises Inc. warrants its products to be free of manufacturing defects and that they will meet Pinnacle West Enterprises Inc. current published physical properties when properly installed according to Pinnacle West Enterprises Inc. guide specifications and product data sheets over a sound, properly prepared substrate. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. There are no other warranties by Pinnacle West Enterprises Inc. of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Pinnacle West Enterprises Inc. shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Pinnacle West Enterprises Inc. shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Pinnacle West Enterprises Inc. reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

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