

# CSS V-Wrap™ PF

## Epoxy Putty Filler



### DESCRIPTION

CSS V-Wrap PF is a two-part, 100% solids epoxy for high-strength composite bonding applications. CSS V-Wrap PF matrix material is combined with CSS V-Wrap carbon and glass fabrics, CSS V-Wrap carbon bar, and CSS V-Wrap carbon plate to provide a composite for strengthening of structural members. It provides a long working time for application, with no offensive odor. CSS V-Wrap PF may also be used as a filler or finish coat depending upon the project requirements.

### CODE REPORTS AND COMPLIANCE

ICC-ES ESR-4930



### MATERIAL PROPERTIES\*

#### Part A & B Properties

Approximate Pot Life	1 to 3 hours at 68°F (20°C)
Color	<b>Part A:</b> Light Gray <b>Part B:</b> Black <b>Mixed:</b> Gray
Density	<b>Part A:</b> 9.6 lb./gal (1.15 kg/L) <b>Part B:</b> 8.7 lb./gal (1.04 kg/L) <b>Mixed:</b> 9.3 lb./gal (1.11 kg/L)
Mixing Ratio	100A:35B volume 100A:32B weight
Shelf Life	24 months in unopened container.
Storage	Store material in a dry area between 40°F (4°C) and 90°F (32°C) with no exposure to moisture.

Cured Epoxy Properties	Average Values
Tensile Strength (ASTM D638)	3,380 psi (23.3 MPa)
Tensile Modulus (ASTM D638)	367,800 psi (2,530 MPa)
Elongation at Break (ASTM D638)	2.0%
VOC Content (ASTM D2369)	0% VOC

\* Curing schedule: 72 hours post cure at 140°F (60°C)



### PERFORMANCE FEATURES

- ICC-ES ESR-4930 listed product
- 100% solvent-free
- No Volatile Organic Compounds (VOC) or solvents
- Good high / low temperature properties
- High elongation
- NSF/ANSI Standard 61 listed product for drinking water systems

### APPLICATIONS

CSS V-Wrap PF is a multiuse epoxy putty that performs as a tack coat/putty for the CSS V-Wrap carbon and glass fiber systems. CSS V-Wrap PF can also be used for NSM (near-surface-mounted) applications and bonding of composite plate.

### PACKAGING

**Kit Size**  
3.67 US gallons (13.9 L)

**Model No.**  
CV-PF4KT

## HOW TO USE

### Surface Preparation

CSS V-Wrap PF should be applied to substrates that are free of protrusions, dust, oils, and other surface contaminates or bond-inhibiting materials. Substrates should be dry and free of moisture.

### Basic Application Equipment

Application processes for CSS V-Wrap PF will require a mixing drill, mixing paddle, trowels and spatulas.

### Mixing

Premix Part B for 2 minutes. Add the full contents of Part B pail to the full contents of Part A pail. Blend Part A and Part B with a mechanical mixer for 2 minutes until uniformly blended. Transfer all material into another pail, scraping the sides clean with a trowel, then mix for an additional 2 minutes.

### Application

Apply putty to substrate surfaces using a trowel. Use a paste profiler or trowel when applying to laminates. This product may also be used for near-surface-mounted (NSM) applications.

### Observe Working Time Limitations

Mix no more material than can be applied within the working time. Available work time, temperature and complexity of the application will determine how much material should be mixed at one time. Keep material cool and in shaded area, away from direct sunlight in warm weather. During hot weather, work time can be extended by keeping the material cool before and after mixing or by immersing the pot in ice water.

### Maintenance

Periodically inspect the applied material and repair localized areas as needed.

### Limitations

Only apply CSS V-Wrap PF when the ambient temperature is between 40°F and 100°F (4°C to 38°C). Topcoat selection should be based upon requirements for protection from environmental exposures, aesthetics and fire protection/burn characteristics.

### Storage

Store in a cool, dry area at 40°F to 100°F (4°C to 38°C) away from direct sunlight, flame or other hazards.

## CAUTION

**Component “A”:** Causes skin and serious eye irritation. May cause an allergic skin reaction.

**Component “B”:** **CORROSIVE!** Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction.

**Protective Measures:** The use of safety glasses and chemically-resistant gloves is recommended. Use appropriate clothing to minimize skin contact. The use of NIOSH-approved respirator is required to protect respiratory tract when ventilation is not adequate to limit exposure below the PEL. Refer to Safety Data Sheets (SDS) available at [strongtie.com/sds](http://strongtie.com/sds) for detailed information.

These products are for professional and industrial use only and are to be installed by trained and qualified applicators. Trained applicators must follow installation instructions.

## FIRST AID

**Eye Contact:** Immediately flush eyes with plenty of cool water for at least 15 minutes while holding the eyes open. If redness, burning, blurred vision, or swelling persists, seek medical advice.

**Skin Contact:** In case of contact, remove product and immediately wash affected area with plenty of soap and water for at least 5 minutes. Do not apply greases or ointments. Remove contaminated clothing. Clean contaminated clothing with soap and water before re-use. If redness, burning or swelling persists, seek medical advice.

**Ingestion:** DO NOT INDUCE VOMITING. Never administer anything by mouth to an unconscious person. Rinse out mouth with water, then drink sips of water to remove taste from mouth. Seek medical advice. Do not leave victim unattended. If vomiting occurs spontaneously, lay victim on side and keep head lower than waist to prevent aspiration.

**Inhalation:** If respiratory irritation or distress occurs, remove victim to fresh air. If breathing is difficult, give oxygen. If breathing stops, apply artificial respiration. Seek medical advice.

## CLEAN-UP

**Environmental Precautions:** Construct a dike to prevent spreading. Keep out of sewers, storm drains, surface waters and soils.

**Equipment:** Use methyl ethyl ketone or acetone. Observe fire and health precautions when using solvents. Dispose of in accordance with local regulations.

**Small Spills:** Soak up with an absorbent material, such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal.

**Large Spills:** Approach suspected leaks with caution. Construct a dike or trench to contain material. Soak up with an absorbent material, such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal.

**Disposal:** Dispose of container and unused portions in accordance with local, state and federal regulations. Emptied container may contain product residue and should not be reused.

## LIMITED WARRANTY

This product is covered by the Simpson Strong-Tie RPS Product Limited Warranty, which is available at [strongtie.com/limited-warranties](http://strongtie.com/limited-warranties) or by calling Simpson Strong-Tie at (800) 999-5099.

## IMPORTANT INFORMATION

It is the responsibility of each purchaser and user of each Product to determine the suitability of the Product for its intended use. Prior to using any Product, consult a qualified design professional for advice regarding the suitability and use of the Product, including whether the capacity of any structural building element may be impacted by a repair. As jobsite conditions vary greatly, a small-scale test patch is required to verify product suitability prior to full-scale application. The installer must read, understand, and follow all written instructions and warnings contained on the product label(s), Product Data Sheet(s), Safety Data Sheet(s) and the [strongtie.com](http://strongtie.com) website prior to use. For industrial use only by qualified applicators. **KEEP OUT OF REACH OF CHILDREN!**

**⚠️ WARNING!** Cancer and reproductive harm — [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).