

# POLY-TUFF SYSTEMS INTERNATIONAL

2250 E. Tropicana Ave  
Suite 19-600  
Las Vegas, NV 89119



Phone: (866) 977-8833  
Fax: (800) 804-0182  
Email: sales@polytuffus.com  
Web: www.polytuffus.com

## SPECIFICATION

# FLEXIDECK™ C-WD

## SYSTEM DESCRIPTION

**1.01 Flexideck™ P-WD is a liquid applied, high solids, water catalyzed polyurethane, waterproof Pedestrian Deck System.**

**A.** The system utilizes a primer, one coat of a water induced urethane basecoat and one coat of an aliphatic urethane topcoat.

**B.** Flexideck™ C-WD can be applied to protect surfaces against spalling, freeze/thaw damage, and chemicals commonly encountered on these surfaces. It is an elastomeric system designed to expand and contract with normal structural movements. It will not soften in heat nor become brittle in cold. Flexideck™ C-WD is a proven waterproofing system primarily used on concrete and metal surfaces. Installed and maintained properly, Flexideck™ C-WD decking system will ensure years of service. The data sheet C-WD does not take in account any sloping or fill in work but is intended to supply the minimum coverage rates as a competitive system where only waterproofing is desired. CAUTION: When only waterproofing of the deck takes place without creating proper positive slope, any low or negative slope will greatly enhance the creation of ponds on the newly waterproof deck. Slope to drain and the filling of pond areas are corrected by using the Poly-Tuff Sand Slurry and should be considered where there is any chance of water ponding or the existence of negative slope both for the longevity of the waterproofing and because ponding water creates a slip hazard for the tenants \* See PSI Tech-Note (WATERPROOFING WITHOUT CREATING POSITIVE SLOPE AND CORRECTING WATER PONDS)

## 1.02 FEATURES

- ❖ Seamless
- ❖ TDI Free
- ❖ Non-Gassing
- ❖ Recoatable
- ❖ Meets California VOC and AQMD Requirements
- ❖ Elastomeric
- ❖ Fast-Curing
- ❖ Good Weatherability

## 1.03

### TYPICAL USES

- ❖ Walkways / Stairs
- ❖ Over Occupied Space
- ❖ Patios
- ❖ Balconies
- ❖ Sun Decks
- ❖ Roof Decks

## 1.04 PRODUCT INSTRUCTIONS

- A.* For complete information associated with the application of Flexideck™ C-WD, refer to the general guidelines section of the PSI catalog which describes the surface preparation, job conditions, finishing details and other necessary information.
- B.* All products/materials to be used on this system should be purchased from Poly-Tuff Systems International (PSI) or its distributors or approved by PSI. For details on individual product, please refer to Product Technical Data Sheet.

## **APPLICATION**

### **2.01 Inspection**

- A.* **Check the areas of application to ensure that it conforms to the substrate requirements, as stated in the general guidelines section.**

### **2.02 Repairs**

- A.* Apply a polyurethane caulking or P-Tuff® Classic mixed material over all joints, cracks and flashing. **P-Tuff™ Mixed Material is a mixture of 4 part P-Tuff® Classic and 1 part of water by volume.**
- B.* Bridge the joints, cracks, and flashings with 4" (10 cm) Straight Jacket tape pushing it into the PTS E-101 or E-102 Hybrid Fast Curing Sealant with a trowel. NOTE: Using P-Tuff® Classic mixed material as a caulking compound will shorten the curing time appreciably over conventional polyurethane caulks.
- C.* Over reinforcement tape, apply a stripe coat of P-Tuff® Classic mixed material and taper it onto the adjacent surface.
- D.* Allow the surface to cure for 1 to 2 hours.

### **2.03 Priming**

- A.* Prime surface with Envirogrip® EP#2, #1 or #5 at a rate of 1 gallon (mixture of Part-A & Part-B) 300 sq. ft. (0.14 liters/m<sup>2</sup>). Apply using a brush or phenolic core roller. This will result in 3 dry mils (76 microns) of coating.
- B.* Allow PSI Primers to become tack free before proceeding to Coating First Application.
- C.* Primer is optional on new plywood.
- D.* Metal flashings should be sealed with PSI Super Seal Tape prior to the coating application or primed with Envirogrip® EP#1. All metal flashings should be mechanically abraded with an angle grinder and wire brush cup, followed by a rag with xylene solvent wipe to remove loose particles or oil film.

### **2.04 Coating Application**

- A.* Apply P-Tuff® Classic mixed material to substrate at a rate of 2 gallons/100 sq. ft.. Application will require more or less material depending on substrate conditions.

**B. Use a notched trowel or squeegee to spread P-Tuff® Classic mixed material evenly over the entire deck resulting in a min. 32 ± 2 dry mils thick membrane.**

**C.** When P-Tuff® Classic mixed material begins to slightly gel, or thump print tacky broadcast 14-30 mesh rubber granules or 16-30 mesh clean silica sand till refusal. The amount of rubber used will vary. (Normal usage is 20 lbs rubber granules or sand /100 sq. ft.)

**D.** When the P-Tuff™ Classic mixed material is stiff enough to support the weight of the installer without damaging the coating, or when coating is dry (approximately 2-3hours), remove all loose aggregate, preferably by vacuum.

## **2.05 Top Coat Application**

**A.** Apply desired color of Topshield™ EST at a rate of 1gallons/100 sq. ft. (0.4 liters/m<sup>2</sup>). This coat will result in an additional 12 ± 2 dry mils thick coating.

**B.** At 70°F and 50% relative humidity allow a minimum of 16 and a maximum of 48 hours for topcoat to cure.

**C.** Optional second coat: It is recommended to apply a second coat of desired color of Topshield™ EST at a rate of 1 gallons/100 sq. ft. (0.31 liters/m<sup>2</sup>). This coat will result in an additional minimum 12 ± 2 dry mils thick coating.

### **D. OPTIONAL FAST CURE**

Topcoat: The addition of Topshield™ Accelerator will shorten cure time to 6 to 8 hours for each coat.

### **E. OPTIONAL TOPCOATS**

Topshield™ EST may be substituted with:

- 1) Chem-sentry™ II for chemical resistance
- 2) Topshield™ ALP-150 for value engineered projects
- 3) StainTuff™ 3072 for fast cure
- 4) Topshield AR

## **2.06 FINISHED SYSTEM**

**A.** When applied as directed above, P-Tuff® C-WD decking system will provide min. 47 ± 5 dry mils with single topcoat and 69 mils ± 5 dry mils with 2 top coat applications waterproofing protection.

## **2.07 LIMITATIONS**

### **A. Concrete:**

- 1) The following conditions must not be coated with PSI deck coating systems or products: on grade or below grade slabs, split slabs with buried membrane, sandwich slabs with insulation, slabs over unvented metal pan, suspended pool decks, swimming pools, magnesite, gypsum lightweight concrete, asphalt surfaces, asphalt overlays and where chained or studded tires may be used.
- 2) Concrete must exhibit 3000 psi minimum strength Concrete surfaces to be coated must be trowel finished in compliance with the American Concrete Institute (except that hand troweling is not required), followed by a fine hair brooming, left free of loose particles, and

shall be without ridges, projections, voids and concrete droppings that would be mechanically detrimental to coating application or function.

- 3) New concrete must be cured for 28 days.
- 4) Concrete cleaning (see general guidelines).

**B. Plywood:**

- 1) *The only acceptable grade of plywood is APA rated exterior grade or better.*
- 2) The appearance characteristics of the panel grade should be considered.
- 3) Plywood should be new or cleaned and sanded (see general guidelines).

**C.** PSI Decking Systems will not withstand rising water tables or hydrostatic pressure on slab-on-grade decks.

**D.** Uncured materials are sensitive to heat and moisture.

**E.** A continuous coating application should ensure a deck with no lines or streaks.

**F.** The substrate must be structurally sound and sloped for proper drainage.

**G.** PSI assumes no liability for substrate defects.

**2.08 Job Completion**

**A.** Equipment should be cleaned with an urethane grade environmentally safe solvent, as permitted under local regulations, immediately after use.

**B.** Field visits by PSI personnel are for the purpose of making technical recommendations only and are not to supervise or provide quality control on the job site.

**WARNING: The products in this system contain Isocyanates, Solvent, Epoxy Resin and Curatives.**