

SECTION 07186  
PARKING DECK TRAFFIC COATINGS

PART 1 GENERAL

1.1 SUMMARY

- A. Fluid applied 100% solids, zero VOC, waterproof, parking deck traffic deck coating on concrete substrate.

1.2 RELATED SECTIONS

- A. Section 03300 – Cast-In-Place Concrete.

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's product data, installation instructions and Material Safety Data Sheets (MSDS) for each product indicated.
- B. Samples:
  - 1. Submit samples of selected coating colors for approval by Architect.
  - 2. Submit 12 inch by 12 inch sample of fully cured traffic coating, prepared on rigid base indicating color and texture.
  - 3. Submit maintenance manual.

1.4 QUALITY ASSURANCE

- A. Qualifications:
  - 1. Manufacturer of the coating systems shall have a minimum of 5 years experience in the manufacture of fluid applied traffic coatings.
  - 2. The Applicator shall be qualified in writing by the Manufacturer and shall have a minimum of 5 years experience in application of fluid applied traffic coatings.

1.5 DELIVERY AND STORAGE

- A. Deliver materials to jobsite in sealed, undamaged containers. Each container shall be identified with material name, date of manufacture and lot number.

1.6 ENVIRONMENTAL CONDITIONS

- A. Install coating materials under the following conditions:
  - 1. Rain is not anticipated within 8 hours of application.
  - 2. Substrate surface temperatures are above 40 deg. F. (5 deg. C.) and lower than 110 deg. F. (44 deg. C.).

1.7 GUARANTEE

- A. Completed installation shall be guaranteed against defects of material and workmanship for a period of 5 years, beginning with date of substantial completion of the deck coating system

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Parking Deck Traffic Coating: Pacific Polymers, Inc., ELASTO-DECK™ 6500VT two component, aliphatic, 100% solids, zero VOC, elastomeric, traffic coating system consisting of the following:
  - 1. Primer: Pacific Polymers, Inc., ELASTO-POXY™ Primer, zero VOC, epoxy primer.
  - 2. Coating: Pacific Polymers, Inc., ELASTO-DECK™ 6500VT liquid applied, two component, flexible, low odor polyurea deck coating.
  - 3. Color: As selected by Architect.
- B. Aggregate: 20 mesh Monterey sand or as recommended by coating manufacturer.
- C. Sealant: Pacific Polymers, Inc., ELASTO-THANE™ 230, one-part self-leveling or gun grade, non-staining, polyurethane sealant.
- D. Flashing Tape: Tietex polyester tape.
- E. Sheet Flashing: .050" thick, pre cured, commercial grade neoprene.

2.2 TECHNICAL DATA

Property	Test Method	Results
Pot Life (@ 75° F)		20 minutes
Cure Time (@ 75° F)		48 hours minimum
Viscosity at 77°F (25°C)	Brookfield Viscometer	35 + 5 poises
Weight per Gallon		
A Component		10.5 lbs
B Component		8.60 lbs.
Percent Solids Content	ASTM D2369	100% (weight) 100% (volume)
Hardness (Shore A)	ASTM D2240	80A
Tensile Strength	ASTM D412	3000 psi ± 10%

Percent Elongation	ASTM D412	300% ± 10%
Adhesive Peel Strength on Primed Concrete	ASTM D903	35 pli cohesive failure
Water Absorption	ASTM D471	1.2% by weight
Moisture Vapor Transmission	ASTM E96	3.9 perms
Abrasion Resistance	ASTM D4060 30 mil dry mil film on 4" x 4" metal CS17 wheel, 1000 rev, 1000 gram weight	2 mg. wt loss.
Tear Resistance	ASTM D624	280 pli ± 10%
VOC Content		0 grams/litre
UV Stability	Q Panel Weather-O-Meter	2000 hrs No discoloration No physical damages

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine substrates and remove loose surface material, grease, oil and contaminants.
- B. Metal surfaces shall be dry, clean, and free of grease, oil, dirt, rust, corrosion and contaminants.
- C. Metal surfaces shall be sound and fastened, free of voids and without offsets at joints. Ensure fasteners are driven flush.

#### 3.2 PREPARATION

- A. Surfaces, which are to receive coating, shall be free of contamination including water, curing compounds, hardeners, bond-breakers and paint.
- B. Cracks shall be sealed with traffic coating and shall be reinforced by imbedding a 4-inch (10 cm) wide strip of flashing tape in wet coating, which is brushed evenly over the seam in a width of about 5 inches (12.7 cm).

#### 3.3 APPLICATION

- A. Prime surfaces as at a rate of 200-250 square feet per gallon in accordance with manufacturers recommendations.

- B. Lightly stir the A-Component (pigmented side) for 2-3 minutes using a jiffy blade to evenly distribute the pigments.
- C. Pour the B Component into the A Component. Mix thoroughly using a jiffy mixing blade attached to a low speed drill to a uniform color without any streaks. Mix 2-3 minutes.
- D. Once mixed, immediately pour coating onto the surface of the substrate.
- E. Use squeegee to evenly apply the coating, then backroll using a roller to break air bubbles.
- F. Apply coating to primed concrete substrate at a rate of 80 square feet per gallon.
- G. Allow to cure 24 hours.
- H. Apply second coat at a rate of 80 square feet per gallon and while coating is in fluid condition, broadcast aggregate at the rate of refusal.
- I. Allow to cure 24 hours.
- J. Sweep off loose aggregate and apply third coat at a rate of 80 square feet per gallon.
- K. Allow to cure a minimum of 72 hours before allowing traffic onto the finished system.

#### 3.4 CLEANING

- A. Clean stains from adjacent surfaces with approved cleaner.
- B. Remove construction barricades, debris and other items of work, including empty containers, from the Project site.
- C. Remove foreign matter from finished coating surfaces.

#### 3.5 FIELD QUALITY CONTROL

- A. After membrane has cured, flood test horizontal areas by adding water to a depth of 2 to 3 inches at outlets. Retain water at specified depth for a period of 24 hours. If leakage occurs, repair coating to the satisfaction of the Architect and retest.

END OF SECTION