



**Pacific Polymers® Elasto-Deck BT DG
Guide Specification-5 Year (60 Mil)**

SECTION 07141
FLUID APPLIED WATERPROOFING

Pacific Polymers® – Elasto-Deck BT DG Guide Specification

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PART 1 - GENERAL

1.1 SUMMARY

- A. Fluid applied waterproofing 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 (SDS) for each product indicated.
- B. Samples:
 - 1. Submit 2 inch by 4-inch sample of fully cured waterproofing.
 - 2. Submit maintenance manual.

1.4 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Manufacturer of the waterproofing system shall have a minimum of 5 years' experience in the manufacture of fluid applied waterproofing.
 - 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 waterproofing.

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 100 deg. F. (38 deg. C.).

1.7 GUARANTEE

- A. Completed installation shall be guaranteed against defects of material and for a period of 5 years, beginning with date of substantial completion of the waterproofing system.
- B. Consult Holcim Solutions and Products US, LLC for warranty requirements prior to system installation.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. A. Fluid Applied Waterproofing: Pacific Polymers® Elasto-Deck BT DG, cold applied liquid, moisture-cured, monolithic polyurethane elastomeric waterproofing membrane, complies with ASTM C836.
- B. Detail Fabric: Tie-Text Polyester Fabric
- C. Substrate Primer: DECKTHANE Primer or Elasto-Poxy Primer VOC.
- D. Metal/Flashing Primer: Elasto-Poxy Primer VOC.
- E. Sealant: PERMATHANE® SM7120 PU, single-component, moisture-cured sealant mfg. by Holcim Solutions and Products US, LLC.

2.2 TECHNICAL DATA

Property	Test Method	BT DG
Viscosity (poise)	Brookfield	250-450 Poise
VOC Content (grams per liter minus exempt solvent) - Calculated		<75 g/l
Weight per Gallon (Pounds, Kilograms)		7.8± .2
Percent Solids (Weight, Volume)	ASTM D-2369-98	92 + 2, 90 + 2
Tack free Time and 55% R.H.		12-16 hrs at 77°F (25°C)
Recoat Time and 55% R.H.		16-24 hrs at 77°F (25°C)
Hardness (shore OO)	ASTM D2240-97	80 +/- 2
Tensile Strength (psi) (N/sq.m)	ASTM D412-98	436 3.0
Percent Elongation	ASTM D-412-98	500 +/- 50
Water Vapor Transmission (grains/ hr/ sq.ft)	ASTM E-96-00 (procedure B) water method	0.72
Adhesion to Concrete	ASTM D-903-98	19 lb/in (3.38kg/cm) No peel/film break

Hydrostatic Pressure Resistance	ASTM D-751-00	94 psi (0.65 N/sq.m)
Resistance to Decay	ASTM D-154	No surface defects
Moisture Vapor Transmission		1.563 (after decay test)
Flash Point		150°F (66°C)
Dimensional Stability/Water Absorption [4-days immersion in water @ 50°C (122°F)]	CAN/CGSB-37-58-M86	4% change in volume dimension 2% change in mass
Adhesion-in-Peel after water Immersion [24-hour immersion in water @ 50°C (122°F)]	CAN/CGSB-37-58-M86	No peel away from concrete
Crack bridging (10 cycles)	CAN/CGSB-37-58-M86	No evidence of cracking or splitting or adhesion loss
Low Temperature Flexibility (-20°C)	CAN/CGSB-37-58-M86	No cracking
Water Tightness	CAN/CGSB-37-58-M86	No evidence of leakage

PART 3 - EXECUTION

3.1 EXAMINATION

A. Concrete:

1. Concrete surfaces shall be trowel finished followed by a light brooming, left free of loose particles, ridges, projections, voids and droppings that can interfere with the application of the coatings.

2. Concrete surfaces shall be water cured in lieu of curing compounds for a minimum of 28 days. If curing compounds are used, pre-approve with manufacturer.
 3. If concrete is poured in metal pans or decks, they shall be vented to permit proper cure of concrete.
 4. If vented pans are not available, then Elasto-Poxy Primer VOC (a two component VOC compliant primer) shall be used. Apply epoxy primer at approximately 250 square feet per gallon and provide a minimum of 2-hour cure time before proceeding. At no time shall materials be applied over concrete surfaces having greater than 15% moisture content.
- B. Metal: Metal surfaces shall be clean and free of oil, rust or other contaminants that can affect bond of coatings. Metal flashing shall be primed with Elasto-Poxy Primer VOC.
- C. Substrate conditions and surfaces to be coated shall be subject to examination and acceptance by Manufacturer and Applicator. Commencing of waterproofing work shall constitute acceptance.

3.2 PREPARATION

- A. Provide applicator with surfaces that are broom clean, dry, sound and free of voids, bug holes, rock pockets, honeycombs, protrusions, excessive roughness, foreign matter, frost, ice and other contaminants which may inhibit application or performance of the waterproofing membrane system.
- B. Concrete: Surfaces to receive elastomeric waterproofing system shall be completely cleaned by sandblasting or blastac.
- C. Metal: Metal surfaces shall be dry, clean, and free of grease, oil, dirt, rust and corrosion. Other coatings and contaminants could affect bond of coating system.
- D. Prime metal surfaces with Elasto-Poxy Primer VOC.
- E. Cracks and Control Joints: Except for non-moving shrinkage cracks, all other cracks and joints shall be sealed with sealant and fabric reinforced (Tie-TEX).
- F. Plywood: Plywood that is to receive waterproofing shall be exterior grade plywood, 5/8" (16 mm) thick minimum, with "A" side up, fastened with ring-shank nails. OSB and particle board are not acceptable as substrates.

3.3 APPLICATION-Detail

- A. Pacific Polymers® Elasto-Deck BT DG
1. All cracks 1/16" and over must be V-Grooved and filled with Permthane SM7120 PU polyurethane sealant.
 2. At intersections of membrane and horizontal and vertical walls, corners, columns, pipes and other penetrations, caulk a 3/8"-1/2" fillet bead at the meeting angle using Permthane SM7120 PU polyurethane sealant. Allow for a minimum overnight cure of the sealant before applying Tie-TEX fabric reinforcement embedded in a stripe coat of Elasto-Deck B.T. applied at 40-42 square feet per gallon (35 mils WFT)

- B. Pacific Polymers® Elasto-Deck BT DG (Membrane Application 60 Mils DFT Thickness)
1. After detail work is completed and allow to cure a minimum of "Overnight" 12-16 hours). All surface areas to receive membrane are to be primed. with all cracks 1/16" and over must be V-Grooved and filled with Permathane® SM7120 PU polyurethane sealant.
 2. Apply by, roller, trowel, brush or squeegee the first coat of Elasto-Deck B.T. at a rate of 40-42 square feet per gallon (35 mils WFT)
 3. After an overnight cure (16-24 hours), apply a second coat of Elasto-Deck B.T. at the same 40-42 square feet per gallon (35 mils WFT)
- C. Flood test: Allow completed system to cure a minimum of 5 (Five) days.
- D. Follow ASTM D 5957. Plug drains on deck surfaces and use sandbags or other means to restrict runoff. Flood deck with water to depth of 2" (50 mm) and allow to stand at least 48 hours. As an alternative, Electronic Field Vector Mapping may also be used.

3.4 PROTECTION COURSE

Install protection course (PB4, J-Drain 700 or accepted equal) on cured membrane system, after testing, without delay, prior to back fill or topping so that the period of exposure is minimized.

END OF SECTION