

PD TEXTURE COAT

DECORATIVE CONCRETE COATING



PART I – GENERAL

1.01 Scope

- A. Provide all labor, materials and equipment necessary to apply the Pli-Dek finish over horizontal concrete surfaces. This specification includes application over horizontal concrete, which *does not* require waterproofing.

1.02 Related Sections

- A. Concrete 03300
- B. Sealants 07900

1.03 Description

- A. Pli-Dek is a proprietary blend of high performance acrylic emulsion formulations and sealers, providing a wide variety of colors and textures. Its intention is to be used as a decorative traffic coating only.

1.04 Submittals

- A. Samples:
 - 1. The applicator shall make and submit a sample of the proposed finish to the architect and/or owner for approval.
- B. Manufacturer Information:
 - 1. The applicator shall submit manufacturer product information and specifications to the architect and/or owner for approval.

1.05 Quality Assurance

- A. Qualifications:
 - 1. Manufacturer shall be Pli-Dek Systems, Inc.
 - 2. The applicator shall be listed with Pli-Dek Systems, Inc. as a trained* installer.
- B. Substrates:
 - 1. PD Texture Coat shall be applied over the following horizontal concrete substrates when prepared in accordance with this specification and PD Texture Coat Application Instruction TC-120.
 - A. Sound concrete substrate where waterproofing is not required.
 - B. Maxxon Underlayment's for interior application only. Please contact Pli-Dek for details
 - 2. The applicator*/contractor shall verify that the proposed substrate has been properly prepared in accordance with the PD Texture Coat Application Instructions, TC-120, before application of the Pli-Dek materials.
- C. Performance Requirements:
 - 1. Water Vapor Transmission (ASTM E 96)
 - 2. Bond Strength (ASTM C 297)
 - 3. Abrasion Resistance (ASTM D 1242)
 - 4. Accelerated Weathering (ASTM G 23)
 - 5. Surface Burning (ASTM E 84)

1.06 Delivery, Storage and Handling

- A. All materials shall be delivered to the job site in the original, unopened packages with labels intact. Upon arrival, materials shall be inspected for physical damage or freezing. Questionable materials shall not be used.
- B. Minimum storage temperature shall be 4.44°C (40°F). Maximum storage temperature shall be 43°C (110°F). All materials shall be stored in a dry location, out of direct sunlight and protected from weather and other damage in accordance with material data safety sheets.

1.06 Job Conditions

- A. Existing Conditions:
 - 1. The applicator shall have access to electrical power, clean potable water and clean work area at the location where the Pli-Dek materials are to be applied.
 - 2. Additional control joints may be necessary to control movement.
- B. Environmental Conditions:
 - 1. The ambient air and surface temperature shall be a minimum of 10°C (50°F) and a maximum of 43°C (110°F) and shall remain so during the curing process.
- C. For additional application requirements in Inclement Weather areas, refer to Technical Bulletin TB-110.
- D. Protection:
 - 1. Adjacent areas and materials shall be protected from damage, drops and spills.
 - 2. The Pli-Dek materials shall be protected by permanent or temporary means from weather and other damage, prior to, during, and immediately after application. Care must be taken to prevent condensation and/or heat buildup when using a tarp or plastic as protection.
- E. Sequencing and Scheduling:
 - 1. Application shall be coordinated with other construction trades.
 - 2. Sufficient labor and equipment shall be employed to ensure a continuous operation.



1.07 Warranty

- A. Contact Pli-Dek Systems, Inc. for complete details.

1.08 Design Responsibility

- A. The designer selected by the purchaser shall be responsible for all decisions pertaining to design, detail structural capability, attachment details, shop drawings, placement/details of expansion joints, etc. Pli-Dek Systems, Inc. has prepared guidelines in the form of specifications, application instructions, and product sheets to facilitate the design process only. Pli-Dek Systems, Inc. is not liable for any errors or omissions in design or for any changes, which purchasers, specifiers, designers, or their appointed representatives may make to Pli-Dek System, Inc.'s published comments.

1.09 Maintenance

- A. Sealants should be inspected on a regular basis and repairs made as necessary.
- B. Contact Pli-Dek Systems, Inc. for maintenance requirements for warranty standards.

PART II. PRODUCTS

2.01 General

- A. Pli-Dek Systems, Inc. or its authorized distributors shall supply all products. Substitutions or additions of other materials will void the warranty.

2.02 Components

- A. GU80-1 Top Coat: A Portland cement and silicon dioxide composition that is combined with Liquid Admixture GU80-1. (See TC-120.)
- B. GU80-1 Liquid Admixture: An acrylic polymer emulsion.
- C. GS88-1 Pigmented Sealer: A pigmented water based acrylic surface sealer.
- D. GS13 or PD Clear Sealer: A clear water based acrylic surface sealer.

2.03 Materials

- A. Water: Shall be clean and potable.

2.04 Equipment

- A. Mixing shall be done with a clean Wind-lock B-M1 mixing blade or equivalent powered by a 13-mm (1/2") variable speed drill capable of producing 1000 RPM.
- B. Tools:
 - 1. Refer to the Pli-Dek Application Instructions, TC-120, for a complete list of recommended tools.

PART III. EXECUTION

3.01 Inspection

- A. Examination of Substrate:
 - 1. Ensure that the substrate is of a type listed in Section 1.05.B.
 - 2. Concrete areas shall be sloped for positive drainage. A minimum of 3.2 mm/3m (1/8" to 1/4" per linear foot) is recommended.
 - a. Pli-Dek requires a galvanized, stainless steel, or copper deck drain as per Drain Detail, PD-24, on all plywood installations. Please contact Pli-Dek for help in acquiring these drains. Do not use plastic, cast iron, or shower drains in the assembly.

3.02 Substrate Preparation

- A. Concrete on Grade:
 - 1. Concrete shall be structurally sound and have cured a minimum of 28 days prior to application of the Pli-Dek material. All placements of expansion/control joints shall be determined by the structural engineer or concrete contractor to allow for movement.
 - 2. All undermined, cracked, damaged, etc. concrete must be treated prior to applying the Pli-Dek coatings over the concrete surfaces. Crack Treatment is not warranted.
 - 3. All concrete surfaces must be cleaned to remove all grease, oil, dust, paint, sealers, efflorescence, curing compounds etc. that may impair the adhesion of the Pli-Dek materials. Refer to the Pli-Dek Application Instructions, TC-120, for complete information.
 - 4. All concrete surfaces shall be covered with a primer coat of GU80-1 (The primer consists of 80% water and 20% GU80-1 Liquid Admixture, applied with a roller or sprayer at the rate of 150-200 square feet per gallon) just prior to applying the Screed Coat or Knockdown Coat as described in the Pli-Dek Application Instructions, TC-120. Honor all expansion joints.
 - 5. Interior application over Maxxon Underlayment's. Contact Pli-Dek for details.
 - 6. All concrete substrates not poured over an effective vapor barrier are subject to possible moisture vapor transmissions and related high levels of alkalinity that may lead to blistering and failure of the coating system. It is the General Contractors/Owners responsibility to ensure proper vapor barriers are in place. Pli-Dek Systems, Inc and its sales agents will not be responsible for coating failures due to undetected moisture vapor emissions or related high levels of alkalinity.
 - a. Recommended Field Verification Testing by Applicator: (**Refer to Technical Bulletin TB-111 Concrete Moisture & Vapor Drive Testing**):
 - i. TARMEX Moisture Content Verification



- ii. Plastic Sheet Test
- iii. If Moisture Content exceeds 5% or presence of moisture, contact Pli-Dek Inc. for recommendations
- b. Moisture & Vapor Transmission per ASTM Testing by Owner (**Refer to Technical Bulletin TB-111 Concrete Moisture & Vapor Drive Testing**):
 - i. TARMEX Moisture Content Test per ASTM F2170
 - 1. Confirm moisture content <5%
 - ii. Plastic Sheet Test per ASTM D4263 (visual inspection)
 - 1. Confirm the absence of moisture
 - iii. If Moisture Content exceeds 5% or presence of moisture, perform Calcium Chloride per ASTM F1869 and report results to Pli-Dek Inc. for recommendations.
 - iv. If owner has not performed the test detailed above, document and provide notice to the owner of absence.
- A. General:
 - 1. Refer to the Pli-Dek Application Instructions, TC-120, for complete information. Proper ventilation masks should be worn at all times when working with all Pli-Dek Products.
- B. Screed Coat: (Not always required – refer to TC-120)
 - 1. Mix the GU80-1 Liquid Admixture, with GU80-1 Top Coat. Refer to the Pli-Dek Application Instructions, TC-120.
 - 2. If a screed coat is necessary, apply the Screed Coat with a stainless steel trowel; apply the Screed Coat to the prepared and primed substrate. Screed the material very thin, leaving just enough material to completely cover the underlying substrate and allow to dry a minimum of 2-6 hours (additional time may be necessary under adverse drying conditions).
- C. Knockdown Coat:
 - 1. Mix the GU80-1 Top Coat (see TC-120 for complete details).
 - 2. Using a hopper gun spray a desired texture, using a trowel knock down the texture before it dries.
 - 3. After completely dry, remove any sharp edges by scraping the surfaces with a scraper or a trowel.
 - 4. Apply GS88-1 Pigmented the Sealer over the dry PD Texture Coat using a roller or brush. Protect the sealed surface from the weather and traffic for a minimum of 24 hours.
- D. Custom Finish
 - 1. See PD Texture Coat Application Instructions for Finish Options (TC-120).

3.04 Field Quality Control

- A. The applicator shall be responsible for the proper application of the Pli-Dek materials.
- B. Pli-Dek Systems, Inc. assumes no responsibility for on-site inspections, application or workmanship.

3.05 Cleaning

- A. The contractor in accordance with contract provisions shall remove all excess Pli-Dek materials from the job site.
- B. All surrounding areas, where the Pli-Dek materials have been applied, shall be left free of debris and foreign substances resulting from the contractor's work.

3.06 Slip and Fall Precaution

- A. OSHA, American Disabilities Act (ADA), and The Federal Housing Act (FHA) have now set enforceable standards for slip-resistance on pedestrian surfaces. Pli-Dek Systems, Inc. recommends the use of angular slip-resistant aggregate in all coatings or flooring systems that may be exposed to wet, oily/greasy, or otherwise potentially slippery conditions. It is the end users responsibility to provide a flooring system that meets current safety standards. Pli-Dek Systems, Inc or its sales agents will not be responsible for injury incurred in a slip and fall accident. Please consult local building codes for the current coefficient of friction requirement.

Disclaimer

Information contained in this specification conforms to standard detail and product recommendations for the installation of the Pli-Dek products as of the date of publication of this document and is presented in good faith. Pli-Dek Systems, Inc. assumes no liability, expressed or implied, as to the architecture, engineering or workmanship of any project. To insure that you are using the latest, most complete information, contact Pli-Dek Systems, Inc. at:

41610 Date St, Ste 104
 Murrieta, CA 92562
 Tel.: (800) 364-0287
 Website: www.plidek.com

* The Trained Applicator Certificate indicates certain employees of the company have been instructed in the proper application of Pli-Dek products and have received copies of the Pli-Dek Application Instructions and Specifications. The Trained Contractor Program is not an apprenticeship. Each trained contractor is an independent company and bears responsibility for its own workmanship. Pli-Dek Systems Inc. assumes no liability for the workmanship of a trained contractor.

