

DIVISION 7 – THERMAL AND MOISTURE PROTECTION
SECTION 07 14 00 FLUID APPLIED WATERPROOFING

1.00 GENERAL REQUIREMENTS

1.01 WORK INCLUDED

- A. The objective of this specification is to cover the installation of a Fluid-applied, single component, solvent free, moisture cure, heavy bodied protective coating designed for horizontal or vertical impervious waterproofing applications. This seamless, rubber-like membrane is the ideal solution for a wide variety of uses, that cures to a dried film that is a smooth, tough, and is an excellent alternative to hot applied waterproofing systems.
- B. Typical installations include new installations or remodeling/refurbishment of planters, plazas, podiums, horizontal elevated concrete, poured concrete foundations, parged concrete masonry unity {CMU}, and elevated plywood split slab assemblies.
- C. Conduct work as indicated on the drawings and as specified herein.

1.02 RELATED SECTIONS

A. Specified elsewhere:

- 1. Section 09 97 23 Concrete and Masonry Coatings
- 2. Section 07 01 10.81 Waterproofing Replacement
- 3. Section 07 10 00 Dampproofing and Waterproofing
- 4. Section 07 14 00 Fluid Applied Waterproofing
- 5. Section 07 14 16 Cold Fluid Applied Waterproofing

B. References:

- 1. American Concrete Institute (ACI)
- 2. ICC-ES
- 3. International Concrete Repair Institute (ICRI)

C. Notes to Users of this Document (e.g., Architects, Engineers, Designers and Consulting Professionals):

- 1. This specification is supplied in an exhaustive format with the intent of achieving as comprehensive inclusion of project factors as possible.
- 2. The specifier is NOT obligated to utilize this specification in entirety, but instead is encouraged to adopt/adapt/apply those provisions which are applicable to specific projects.
- 3. The Design Services Team (DST) of the ICP Building Solutions Group has prepared this overall specification. Users of this specification are strongly encouraged to engage DST's resources and industry expertise in customizing this specification:ⁱ

- a. Web: <https://www.icpgroup.com/programs/masterworks/>
- b. Email: specifications@icpgroup.com
- c. Phone: 800-342-3755 x 2241

- 4. All construction projects are unique. Ultimately, it is the responsibility of the involved parties (e.g., Installer/Applicator, Remediator/Restorer, General Contractor, Owner, Client,

Enforcement Authority, Architect, Engineer or Consultant) to verify on a case-by-case basis that applications of this specification are appropriate.

5. Deviation: Certain projects will involve unavoidable circumstances that prevent project execution in full accord with industry professional standards of care, and the tenets of this specification. A separate and specific specification should be developed in consultation with all parties, including product manufacturers, when deviation the only option for achievement of the objectives of the property owner.
6. Where contradicted by federal, state, or local laws and regulations, any of the preceding supplant the information in this document.

1.03 QUALITY ASSURANCE

A. Cited Standards are incorporated herein by reference and govern the work:

1. ASTM E 1745 Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs
2. ASTM D 6237-09 Standard Guide for Painting Inspectors (Concrete and Masonry Substrates), 2015
3. ICRI Standard 310.2 Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair with CSP Chips.
4. Lead Standard: 29 CFR 1910.1025 and 29 CFR 1926.62, U.S. Occupational Safety and Health Administration (OSHA) (1993)
5. South Coast Air Quality Management District (SCAQMD): Rule 1113 - Architectural Coatings.
6. Hardness (ASTM D-2240)
7. Tear Resistance Die C (ASTM D-624)
8. Tensile Strength (ASTM D-412)
9. Ultimate Elongation (ASTM D-412)
10. Specific Gravity
11. Total Solids by Weight (ASTM D-236)
12. Total Solids by Volume (ASTM D-2697)
13. Viscosity
14. Service Temperature
15. Volatile Organic Compounds (ASTM D-2369-81)
16. Resistance to Decay (Water Vapor Permeance) (ASTM E-96)
17. Resistance to Water (ASTM D-2929)
18. Standard Specification for High Solids Content, Cold Liquid Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course (ASTM C-836)

B. Substrates: Systems approved and specified herein should be applied over the following horizontal and vertical concrete substrates when prepared in accordance with this specification:

1. Structural slab when a topping slab is going to be used to “sandwich” the product between the two substrates.
2. Plywood decks or walkways when a topping slab is specified.
3. CMU Subterranean walls for below grade waterproofing.
4. CMU Planters.
5. Swimming Pools and spas (Cold Rubber UV utilized for this specification).

- 6. Pli-Dek HD-250 System (Refer to Pli-Dek HD-250 Manufacturer Specifications and application instructions)
 - C. Single Source Responsibility: Obtain all product system components from a single manufacturer with not less than 20 years of successful experience in manufacturing and specifying installation of the principal materials described in this specification. Provide secondary/supplementary materials only of type and from a source recommended by the manufacturer of the primary material(s).
 - D. Contractor Experience: The installer shall be a firm or individual experienced with the objectives of this specification. Contractor must furnish proof of experience as requested.
 - E. Sampling of Material:
 - 1. When directed by Architect/Engineer, obtain test samples from material stored at the project site or source of supply (distributor or manufacturer).
 - F. Pilot Application/Mock-Up: Upon request (By Owner, Client, Enforcement Authority, Assessor, Architect or Engineer), it may be determined necessary to provide a mock-up for evaluation of surface preparation techniques, validation of performance expectations, and anticipated application workmanship.
 - 1. The applicator shall make and submit a sample of the proposed finish to the architect and/or owner for approval.
 - 2. Do not proceed with remaining work until pertinent project authority (By Owner, Client, Enforcement Authority, Assessor, Architect or Engineer), approves the mock-up.
- 1.04 SUBMITTALS (as directed to Owner, Client, Enforcement Authority, Assessor, Architect, Engineer or Consultant)
- A. Submit electronically product information including technical data, labels, and warranty (if applicable).
 - B. Submit electronically Manufacturer's Safety Data Sheets (SDS). Content of VOCs shall not exceed pertinent regulations regarding VOCs.
- Notes:
- 1. Bidders are encouraged to submit materials that meet the Basis of Design. To have a material accepted as Approved for the work outlined herein the alternate or substitute proposed must be received by the architect for evaluation and approval no less than 21 days prior to the original published bid date. Approved alternate products will be by Addendum only. Submittals circumventing this process will not be approved and will not be acceptable for inclusion in this project.
 - 2. Substitutions will only be considered for products manufactured by companies of primarily U.S. or Canadian ownership.
- 1.05 PRODUCT DELIVERY, STORAGE AND HANDLING
- A. Deliver manufacturer's unopened containers to the work site. Packaging shall bear the manufacturer's name, label, and product number.
 - B. Storage of materials:

1. Store only acceptable project materials on site.
 2. Store in suitable and secured location convenient to progress of work.
 3. Comply with health and fire regulations. No products listed in the Basis of Design are flammable or combustible.
 4. Storage temperature shall be between 40° F (4.5° C) and 110° F (43° C), or such other ambient temperature conditions as may be specifically recommended by product manufacturer.
 5. Products shall not be permitted to freeze on site, and delivery should be refused if freezing during transit is probable.
 6. Avoid storage directly in hot sun exposures or excessive temperatures.
 7. Keep containers tightly closed when not in use.
 8. Store securely closed and upright in original container. Lids or caps can leak if containers are placed on side.
 9. Keep out of reach of children.
- C. Handling:
1. Dispose of materials in accordance with requirements of local authorities having jurisdiction.
 2. Verify that products are within acceptable shelf life, and do not utilize any product that is older than the maximum shelf life stated by the manufacturer.
- D. Extra Materials:
1. Furnish extra coating materials in the quantities agreed in advance. Package with protective covering for storage and identify with labels describing contents. Deliver extra materials to Owner.
OR,
 2. Furnish Owner with sufficient additional coating to address an additional one percent of overall surface area, but not less than 1 gal (3.8 l), pail (19 l), or 1 case, as appropriate and collectively agreed upon in advance of substantial completion.

1.06 JOBSITE CONDITIONS

A. Environmental requirements

1. Comply with manufacturer's recommendations as to environmental conditions under which all chemicals and coatings can be applied.
 - a. Temperature: Do not apply products at temperatures beyond limits stated in the manufacturer's technical data sheet unless given written permission by the manufacturer.
 - i. At Application: 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 for at least 24 hours.
2. Surface/Substrate Moisture:
 - a. Moisture in excess 5% contact Pli-Dek.
 - b. Consult manufacturer regarding whether topical dampness (latent moisture tangible by touch) after wet cleaning or recent precipitation is acceptable at time of

application of coatings, or if a completely dry (absence of above-normal topical and subsurface moisture) surface is required. Applicators are expected to account for slow-drying surface elements (such as shaded areas, hairline cracks, nail holes).ⁱⁱ

- D. Surface Protection/Prevention of Cross-Contamination:
 - 1. Cover or otherwise protect adjacent areas. Identify adjacent areas which could be cross contaminated by construction activity.
 - 2. Careful attention should be paid to any occupied areas in the vicinity of the work area.
 - 3. Utilize adequate engineering controls to ensure worker and occupant safety and health and prevent cross-contamination. Engineering controls may include, but are not limited to, source containment, isolation barriers, pressure differentials, dust suppression, and high efficiency particulate air (HEPA) vacuuming and filtration.
- E. Provide adequate illumination and ventilation.
- F. The applicator shall have access to electrical power, clean potable water, and clean work area at the location where the materials are to be applied.

2.00 PRODUCTS

2.01 MATERIALS (Basis of Design)

- A. Pli-Dek LLC or its authorized distributors shall supply all products.
- B. Substitutions or additions of other materials will void the warranty.
- C. Components:
 - 1. Cold Rubber High Build Vertical (CR WC V):
 - a. Hardness (ASTM D-2240): 45 +/- Shore A
 - b. Ultimate Elongation (ASTM D-412): 300 +/- 50%
 - c. Total Solids by Weight (ASTM D-236): 92 +/- 3%
 - d. Total Solids by Volume (ASTM D-2697): 90 +/- 3%
 - e. VOC (ASTM D-2369-81): 0.83 lb/gl, 100 gm/liter
 - f. Meets the Criteria of ASTM C-836
 - 2. Cold Rubber High Build Vertical (CR WC H):
 - a. Hardness (ASTM D-2240): 30 +/- Shore A
 - b. Ultimate Elongation (ASTM D-412): 300 +/- 50%
 - c. Total Solids by Weight (ASTM D-236): 95 +/- 1%
 - d. Total Solids by Volume (ASTM D-2697): 94 +/- 1%
 - e. VOC (ASTM D-2369-81): <0.5 lb/gl, <60 gm/liter
 - f. Meets the criteria for ASTM C-836

D. Materials

- 1. Water: Shall be clean and potable.

2. Caulking: Urethane based.
 - a. Contact Pli-Dek for recommendations.
3. Cold Rubber UV:
 - a. Hardness (ASTM D-2240): 60 +/- 5 Shore A
 - b. Tensile Strength (ASTM D-412): 450 +/- 100%
 - c. Total Solids by Volume (ASTM D-2697): 89%
 - d. VOC {ASTM D-2369-81): 87 gm/liter
4. Cold Rubber Primer:
 - a. Total Solids by Weight (ASTM D-2369): 97.8%
 - b. Total Solids by Volume (ASTM D-2697): 97.7%
 - c. Viscosity @ 75°F (24°C) Past A & B Combined): 500 +/- 100 cps
 - d. VOC {ASTM D-2369-81): 21 lb/gl, 25 gm/liter
5. PD -2014 Reemay: Fabric Reinforcement Mesh
6. Polyurethane Termination Sealant: moisture cure, polyurethane sealant, medium modulus polymer modified sealing compound having the following physical properties:
 - a. Compatible with sheet air barrier, roofing and waterproofing membranes and substrate
 - b. Complies with Fed. Spec. TT-S-00230C, Type II, Class A
 - c. Complies with ASTM C 920, Type S, Grade NS, Class 25
 - d. Remains flexible with aging
7. Protection Course: must be obtained from an acceptable manufacturer to ensure total system compatibility and integrity.
 - a. APOC 5520 Protection Panels – 813.248.2101
8. Pli-Dek Drain Board: Contact Pli-Dek for job specific requirements.

2.02 MIXING

- A. Mixing shall be done with a mechanical mixer (Jiffy Mixer) at slow speeds or mix for at least 5 minutes if mixing by hand. 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. Refer to the Cold Rubber Application Instructions, CR-130, for a complete list of components mixing instructions.

3. EXECUTION

3.01 EXAMINATION

- A. Installers should conduct an initial inspection before commencing work regardless of prior evaluations by other parties.
- B. When preceding evaluations indicate that unacceptable conditions exist, an assessment should be performed prior to starting work.

3.02 PREPARATION OF WORKSITE, SURFACES

A. WORKSITE PREPARATION

1. The first responsibility of the installer upon arrival to site of is to ensure the safety of workers and occupants.
2. Coordinate commencement of work with owner so as not to cause inconvenience to the facility.
3. Post notices in conspicuous areas multiple days in advance of beginning work on specified phase (as agreed to with Owner or Owner's agent), noting start date, any instructions to occupants and business phone number. Utilize signage as recommended or required by local ordinance and industry standard.ⁱⁱⁱ

B. HAZARDOUS MATERIALS IN STRUCTURES:

1. There are many hazardous materials which can be present in older structures where installers perform work. Common hazards can include, but are not limited to, asbestos, lead, mercury, mold and PCBs.
2. Determination as to whether these or other potentially hazardous materials are present, may have been conducted by a consulting professional, certified industrial hygienist or other IEP. The installer should ask about whether such an evaluation was conducted, and what potentially hazardous materials were identified, if any. The contractor should not assume that hazardous materials are not present.
3. Lead: Even when building age suggests that lead paint is unlikely to be present, the owner or owner's agent should be consulted to verify. Use of lead-based paint was not banned for residential use in the United States until 1978, but other uses of lead continue to present day.
4. Asbestos: Even when building age suggests that asbestos is unlikely to be present, the owner or owner's agent should be consulted to verify. Use of asbestos in the United States declined significantly in the United States and Canada during the 1980s but import and uses of asbestos-containing construction products continues to present day.
5. Abatement or disturbance of asbestos or lead typically require contracting firms, supervisors and workers to have a state-issued license. License types and requirements vary, and the restoration firm or professional should contact the pertinent agency in the state where the site is located to ascertain minimum training and licensing requirements.

C. EXAMINATION:

1. Before any waterproofing work is started, the Pli-Dek applicator shall thoroughly examine all surfaces for any deficiencies. Where deficiencies exist, the Architect, Owner, or Contractor shall be notified in writing and corrections made.
2. Cold Rubber can be applied to damp or new green concrete. Ensure concrete is smooth and free from voids and honeycombing prior to application of waterproofing membrane.
3. Voids, cracks, holes, and other damages to horizontal or vertical surfaces shall be repaired before application of the membrane.
4. Confirm horizontal deck(s) are properly sloped to drain as required.

5. For detailing instructions, refer to Cold Rubber Application Instructions, CR-130, or contact Pli-Dek.

3.03 GENERAL SURFACE PREPARATION INSTRUCTIONS FOR ALL SUBSTRATES

A. SURFACE PREPARATION:

1. Traditional Concrete Substrate:
 - a. Ensure concrete is smooth and free from voids and honeycombing prior to application of waterproofing membrane.
 - b. Voids, cracks, holes, and other damages to horizontal or vertical surfaces shall be repaired before application of the membrane.
 - c. Confirm the horizontal deck(s) are properly sloped to drain as required.
 - d. For detailing instructions, refer to Cold Rubber Application Instructions, CR-130, or contact Pli-Dek.
 - e. The concrete surfaces shall be a minimum of 2500 psi compressive strength and shall be a minimum of a CSP-2 rating.
 - f. Concrete shall be cured a minimum of 28 days to receive the Pli-Dek Waterproofing System. Steel pan decks will require additional cure time and will require testing to verify the moisture content of the concrete surface. Refer to Technical Bulletin, TB-111, Concrete Moisture & Vapor Transmission Testing for additional information.
 - g. The concrete surface requires a proper profile to receive the waterproofing membrane. A steel trowel followed by a light broom or equivalent finish is recommended. Surfaces which are steel troweled require scarification or bead blasting to provide the proper profile.
 - h. Concrete surfaces shall be free of voids, exposed aggregate, honeycombs, holidays, ridges or depressions, and projections which preclude a smooth sloped surface.
 - i. All reinforcement including cut-off rebar shall be covered with a minimum of ¼" (20 mm) of epoxy or approved repair mortar. Contact Pli-Dek for additional details.
 - j. Concrete to receive waterproofing shall be water cured and free of curing compound contaminates. No silicone curing compounds may be used.
 - k. All penetrations shall be solidly grouted or epoxied in place to prevent movement in the penetration. No flexible or corrugated pipe shall be used for through slab penetration. All copper piping shall be sleeved through the concrete penetration. Penetrations require a minimum of 1 ½" of spacing between multiple penetrations.
 - l. Any variations from the specifications mentioned in the section requires written approval and system recommendations form Pli-Dek.
 - m. Some conditions over concrete will require the application of Pli-Dek Cold Rubber Primer prior to the installation of the Cold Rubber Waterproofing Membrane, contact Pli-Dek for additional information.
 - n. Contact Pli-Dek for additional information on expansion joint installation.
2. Plywood:
 - a. Plywood shall be a minimum of ¾" (20mm) exposure 1 sheathing and any approved

One Hour Rated assembly. All plywood shall be securely fastened to the supports with screws or ring shank nails spaced in accordance with APA guidelines and Building Code requirements.

- b. Framing or blocking must support all plywood edged, except per APA guidelines; blocking is not required when tongue and grooved plywood is utilized.
 - c. The plywood surface shall be clean, dry, and free of dirt, dust, oil, petroleum products, paint, and any other contaminants that may impair adhesion.
 - d. All adjacent edges of the plywood sheets shall not be more than 1/32" (0.78mm) out of plane (i.e., above or below adjacent sheet).
 - e. Plywood shall be installed with a ¼" (6.4mm/.3mm) per linear foot slope to drain. Decks with parapet enclosures must be sloped to a drain or scupper.
 - f. Any variation from the framing specifications mentioned in this section require written approval and system recommendations from Pli-Dek.
3. Concrete Masonry Unit (CMU):
- a. All CMU (Concrete Block) work requiring waterproofing requires a cementitious coating approved by Pli-Dek, contact Pli-Dek for additional information.
4. Retrofit Tear-Off Application:
- a. Asphalt, coal tar pitch, or other existing membrane shall be removed. Contact Pli-Dek to review existing conditions for site specific requirements.
5. Substrate Cleaning:
- a. Thoroughly sweep the substrate which is to receive the waterproofing membrane.
 - b. Substrate shall also be blown clean using an air compressor to remove any remaining loose debris.
 - c. Adhesion Testing is recommended to provide final check to determine if concrete has been properly cleaned by installing a test patch of Cold Rubber to the surface and check its adhesion.

B. MEMBRANE PREPARATION

1. The cold Rubber shall be kept warm, maintaining a minimum temperature of 40°F.
2. Before application, mix the Cold Rubber material with water (water must be added) at a ratio of one quart of water to five gallons of Pli-Dek Cold Rubber. This will yield 5.25 gallons of waterproofing membrane. The mixing ratio is 20 parts Pli-Dek Cold Rubber to 1 part water (20:1).
 - a. A mechanical mixer (Jiffy Mixer) should be used at slow speeds, or mix for at least 5 minutes, if mixing by hand. Mix thoroughly until a homogenous mixture and color is obtained. Use care not to allow entrapment of air into the mixture.
 - b. Allow mixture to stand for 5 minutes, then mix again before applying to the substrate.
 - c. ***DO NOT mix in an up and down motion.***
3. Pli-Dek Cold Rubber Horizontal and Vertical are ***not*** UV Stable, and must be covered with an overburden. In those cases where there might be exposure, the Cold Rubber UV can be

used, contact Pli-Dek for additional information.

C. DETAILING

1. Sloping of the structural deck surface at 1/8" to 1/4" per foot (6.4mm/.3m) or per local Building Code requirements.
2. Shrinkage cracks shall be treated with a pre-treat coat of Pli-Dek Cold Rubber (30 mil).
3. Moving construction or structural cracks greater than 1/16" (1.5 mm) shall be routed out and sealant (polyurethane/ASTM C 920) installed prior to installing a pre-treat coat of Pli-Dek Cold Rubber.
4. At all horizontal/vertical junctures and projections a sealant filled (cant) of 3/4" x 3/4" (polyurethane/ASTM C 920) shall be installed.
5. All pre-treat coats must cure a minimum of 12 hours prior to the application of the Cold Rubber.

3.04 APPLICATION

A. Waterproofing Membrane Standard Concrete Overburden:

1. Pli-Dek Waterproof Membrane – Cold Rubber shall be installed by roller, trowel, or smooth squeegee application at a rate of 60 to 120 mils (25 square feet per gallon @ 60 WFT) wet film thickness (WFT).
 - a. Allow membrane to cure a minimum of 2-4 hours before proceeding to subsequent coats. Cure time will vary depending on temperature and humidity.
 - b. If more than 48 hours pass between coats, the surface **must be** primed with Pli-Dek Cold Rubber Primer.
 - c. Contact Pli-Dek for additional information when installing at a thickness above 90 mils in a single pass, or if the Cold Rubber UV is required.
2. Protection Course:
 - a. A specific protection course is placed over the properly cured Cold Rubber (as specified).
 - b. Layout specified protection course over the cured Cold Rubber, with a minimum of 1 1/2" side overlap and 3" end lap.
 - c. Cut and fit the specified protection course around penetrations with a maximum of 1" variance from the penetration.
3. Drain Board
 - a. In some conditions, PD Drain Board can be used, and there would not be the need for a protection course. Please contact Pli-Dek for recommendations.
 - b. PD Drain Board as specified may be placed over the specified protection course and/or properly cured Cold Rubber.
 - c. Roll the specified PD Drain Board over the protection course (if specified) or over the cured Cold Rubber.
 - d. Butt the side and roll ends together and overlap the filter fabric on the adjacent roll to provide a continuous mat for separation of soils or overburden.

- e. Cut and fit the PD Drain Board around penetrations with a maximum of 1" variance from the penetration.
 - f. On horizontal application, it is recommended to apply tape to seams to prevent debris from getting into the drainage system.
- B. Waterproofing Membrane Standard Tile Overburden:
- 1. Pli-Dek Waterproof Membrane – Cold Rubber Horizontal shall be installed by roller, trowel, or smooth squeegee at 45 mils wet film thickness (WFT). Apply Cold Rubber Vertical at 45 mils wet film thickness (WFT) a minimum of 6" up the vertical surface.
 - a. Embed 4-6" strips of PD-2014 Reemay Fabric into wet the Pli-Dek Cold Rubber. Turn the PD-2014 Reemay fabric up the vertical surface a minimum of 6.
 - b. Allow membrane to cure a minimum of 2-4 hours and apply another coat of the Pli-Dek Cold Rubber Horizontal and Vertical at 45 mils wet film thickness (WFT) on the corresponding surfaces. before proceeding to subsequent coats.
 - c. Cure time will vary depending on temperature and humidity.
 - d. If more than 48 hours pass between coats, the surface *must be* primed with Pli-Dek Cold Rubber Primer.
 - 2. (Optional per Tile Installer) Apply a 10 mils wet film thickness (WFT) of Cold Rubber Horizontal and broadcast 16 grit sand into the wet Cold Rubber Horizontal prior to the application of the tile thin set or mortar.
- C. Contact Pli-Dek for additional information when installing at a thickness above 90 mils in a single pass, or if the Cold Rubber UV is required.
- D. CURING AND PROTECTIONS
- 1. Allow Cold Rubber to cure thoroughly. Protect waterproofing membrane from rain until fully cured. Allow the Cold Rubber to fully cure prior to installing drainage composite, covering material, or backfilling.
 - 2. Patch or repair damaged areas using the same material as the original coating.
 - 3. Protect the cured waterproofing membrane from damage caused by backfilling with PD Drain Board prior to commencing backfill.
 - 4. The Pli-Dek cold Rubber cannot be exposed for an extended period.

3.05 TESTING

A. FLOOD TEST

- 1. Contractor shall flood test the system upon the completion of waterproofing membrane application (ASTM D 5957).
- 2. Provide temporary stops and plugs for the roof drains within the test area.
- 3. Flood test with a minimum of 2" of water for 24 hours.
- 4. Repair and retest the system for no less than 24 hours if needed, report all deficiencies to the Consultant.
- 5. Remove temporary stops and plugs.

B. ELECTRIC FIELD VECTOR MAPPING (EVFM) (FLOOD TEST ALTERNATIVE)

1. EFVM is to be completed in conjunction with the completion of the waterproofing application and prior to placement of the root barrier or any other overburden.
2. International Leak Detection, or pre-approved test provider will need to be contacted several weeks in advance to coordinate schedules.
3. Provide temporary stops and plugs for the roof drains within the test area.
4. In the event of a breach of the membrane, repair and retest the system for no less than 24 hours.
5. Report results of the testing to the Consultant and Pli-Dek Technical Representative. Remove temporary stops and plugs.

3.06 CLEANING

- A. Remove remaining debris promptly from work area and dispose of properly.
- B. Remove spilled, splashed, or splattered coating materials from all surfaces.
- C. Do not mar surface finish of items being cleaned.
- D. Cleanup tools and other equipment with warm, soapy water before coating dries.
- E. Review product labels for proper disposal of unused product and empty containers.

3.07 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 LLC. 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 user's responsibility to provide a flooring system that meets current safety standards. Pli-Dek LLC. 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.

3.08 WARRANTY

- A. Installer shall provide Owner, through Assessor, Architect/Engineer, with an acceptable form of warranty against defects in workmanship for a period of one (1) year from date of substantial completion.
- B. Issuance of manufacturer warranty shall not be a condition precedent to extension to manufacturer an opportunity to inspect, and/or documentation of installer procedures during remediation. Manufacturer must sign warranty for document to be valid.
- C. Extent of warranty shall be limited to the repair or replacement of defective surfaces at no cost to the Owner, and for any damage directly resulting from such defects during the warranty period. The warranty shall not include any remedy for repair labor, or for defects caused by abuse, improper maintenance or operation, or by normal wear, tear and usage. Contact the

manufacturer for the entire warranty. This section is informative only and does not constitute a warranty.

END OF SECTION

END NOTES

This section is provided as a courtesy to the specifier or project designer/manager.
This section may be included or excluded in the project specific specification at their discretion.

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Web: <https://www.icpgroup.com/programs/masterworks/>

Email: specifications@icpgroup.com

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ⁱⁱ Moisture content in different types of structural materials are measured on different scales, and the measurement scales of moisture detection instruments (e.g., moisture meters can vary among manufacturers of these devices.) Consult the manual from the moisture meter manufacturer for instructions concerning substrate type and scale of measurement for that material.

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