



TECHNICAL BULLETIN

Purpose: Concrete Moisture & Vapor Transmission Testing

PLI DEK
WATERPROOFING SOLUTIONS

Rev Date: 07/28/2016

No: TB-111

System Type: Con-Dek and Con-Dek “U”, PD Texture Coat, Resinyte, and Fluid Applied Systems.

Purpose: All Con-Dek and PD Texture Coat Testing was based on a substrate with less than 5% moisture content and low moisture vapor transmission rating less than 3lbs. The below site testing is required to ensure the substrate to be coated meets these minimum requirements. High moisture content and vapor transmission ratings in the slab will have detrimental results.

RECOMMENDED VERIFICATION MOISTURE FIELD TESTING BY APPLICATOR:

1. TARMEX Moisture Test:
 - a. Confirm Content is less than 5%.
2. Plastic Sheet Test (Visual Inspection):
 - a. Confirm the absence of moisture.
3. If Moisture exceeds 5% or presence of moisture, contact Pli-Dek for recommendations.

MOISTURE & VAPOR TRANSMISSION PER ASTM TESTING BY OWNER:

1. TARMEX Moisture Test <5% Per ASTM F2170:
 - a. Pre-test Conditioning and Preparation:
 - i. All artificial heating/drying equipment must be turned off for at least 96 hours before final readings.
 - ii. Remove all coverings, adhesive residue, curing compound, sealers, paints, etc. when applicable, exposing a clean bare concrete test 48 hours prior to tests. *Use of water based cleaning methods will result in skewed readings.
 - iii. Verify there is no water on the surface.
 - iv. Don't test in locations subject to direct sunlight or a source of heat.
 - b. Testing Procedure:
 - i. Push on button and press the meter directly onto the surface of the material ensuring that all of the electrode spring loaded pins are fully compressed. Read the moisture measurement.
 - ii. Take a number of readings in close proximity to one another, 3 to 5 readings within an area of 1 ft² at each location. *Use the highest value.
 - iii. Perform at least eight tests for first 1000ft² and at least five additional tests for each additional 1,000ft². Include test locations in the center of the floor within 3 ft. of each exterior wall.
 - iv. If moisture reading is >5% contact Pli-Dek for recommendations.
2. Plastic Sheet Test per ASTM D4263 (Visual Inspection):
 - a. Plastic Sheet Test to be performed by others in accordance with ASTM D4263-83.
 - b. Third Party to perform at least one test area per 500ft².
 - c. Report the presence or absence of moisture.
3. If moisture content exceeds 5% or moisture is present, perform Calcium Chloride per ASTM F1869 and contact Pli-Dek for further recommendations:
 - a. Perform at least 3 test areas per 1,000ft² and one additional test for each 1,000ft² or fraction thereof.
 - b. Report the moisture vapor emission rate (MVER).
4. **IF OWNER HAS NOT PERFORMED THE TEST DETAILED ABOVE, THE OWNER ASSUMES FULL LIABILITY DUE TO UNKNOWN SURFACE CONDITIONS.**

MITIGATION OPTIONS:

1. MVER is between 5lbs and 10lbs per 1,000ft², install PD Vapor Prime.
2. MVER above 10lbs per 1,000ft², contact Pli-Dek.