

Due to the wider use of *in situ probe* testing (RH testing) versus calcium chloride testing (MVER testing) VPI has developed the following addendum to our standard installation instructions.

Before installing VPI tile, the concrete substrate must be tested for moisture using the methodologies specified in either ASTM F1869 Standard Test Method for measuring Moisture Vapor Emission Rate (**MVER Testing**) of Concrete Subfloor Using Anhydrous Calcium Chloride or ASTM F2170 Standard Test Method for Determining Relative Humidity (**RH Testing**) in Concrete Floor Slabs using *in Situ Probes*.

WARNING: ASTM F1869 determines the portion of free moisture, in the test area, that is near the surface of the slab that can be released from the slab over a short time period at any single point in time. Separately, F2170 measures the existing relative humidity within the slab at a specific depth at any single point in time.

HOWEVER, BOTH TEST METHODOLOGIES PROVIDE A “SNAP SHOT IN TIME”. THIS INDICATES MOISTURE AT THE DATE OF THE TEST AND NOT THE MOISTURE LEVEL IN THE SLAB AT ANY DATE IN THE FUTURE. THEREFORE INSTALLING A WARRANTED MOISTURE BARRIER OR VAPOR RETARDER IS STRONGLY RECOMMENDED TO PROPERLY SAFEGUARD AGAINST PROBLEMS CAUSED BY MOISTURE.

Before conducting any testing of the installation area, the concrete temperature range must be maintained between 65°F (19°C) and 85° F (30°C) for at least 48 hours prior to testing, during the testing and there after, as the temperature (and the associated atmospheric humidity) can also impact the test results. If you use ASTM F 2170 testing methodologies and your equipment has been independently calibrated & certified no more than 30 days prior to testing the substrate, your equipment can be used.

WHEN TESTING RH, THE TEST LEVELS SHOULD NOT EXCEED A LIMIT OF 75% FOR IN SITU PROBE TESTING. MVER TEST LEVELS SHOULD NOT EXCEED A LIMIT OF 5 LBS. DO NOT INSTALL THE TILE IF EITHER LIMIT IS EXCEEDED OR IF THERE IS ANY RISK OF HYDROSTATIC PRESSURE.

