

MANNINGTON COMMERCIAL

INSTALLATION INFORMATION BULLETIN

RE: Maximum Acceptable Moisture Levels for Mannington Commercial Resilient Products.

All concrete slabs must be tested for moisture emissions regardless of the grade level or time in place before covering with resilient floor coverings.

The two most commonly accepted moisture test methods are insitu Percent Relative Humidity (% RH – ASTM F 2170) and the Moisture Vapor Emission (MVE) test (ASTM F 1869 Calcium Chloride method). These procedures must be strictly followed in order to achieve accurate and repeatable results.

Insitu % RH (ASTM F 2170) measures percent relative humidity in the slab providing an indication of amount of moisture that potentially may come out of the subfloor. ASTM F 1869 measures the rate of moisture or MVE coming out of the surface of the subfloor. Mannington accepts either test criteria as basis for determining moisture acceptability, however, if either test indicates a high moisture rate, the slab must be considered wet.

ASTM F 710 – Preparing Concrete Floors to Receive Resilient Flooring, references industry acceptable levels for insitu % RH as 75% RH or lower or a maximum 3 lb/1000 sq-ft per 24 hr as acceptable MVE, tested according to ASTM F 1869. ASTM F 2170(% RH) is becoming the flooring industry standard as a reliable predictor of potential moisture issues.

More specific to Mannington Commercial Resilient products*, using ASTM F 1869 “Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor using Anhydrous Calcium Chloride,” a maximum MVE up to 5 lb moisture per 1000 sq-ft per 24 hr is acceptable for Mannington Commercial Vinyl Composition Tile, Premium Tile and felt-backed inlaid sheet products. A MVE up to 3 lb moisture per 1000 sq-ft per 24 hr is the maximum acceptable MVER with homogenous vinyl backed sheet, heterogeneous vinyl back and cushioned felt backed products and luxury vinyl tiles and planks. Utilizing ASTM F 2170 the maximum permissible percent insitu relative humidity is not to exceed 75% RH for all Mannington Commercial resilient products. *

*Recent advancements in adhesive properties have permitted Mannington Commercial to warrant higher acceptable moisture values for both % RH and MVE readings when products are installed with these newer adhesives. These

newer adhesives are designed to be moisture resistant to accommodate the water of hydration contained in newer concrete subfloors; they are not to be considered remedial solutions to concrete subfloors with a history of moisture problems. Additionally these adhesive are not adversely affected by higher PH levels (See Table1 for more detail). PH testing must be conducted at the time of moisture testing.

Moisture testing only indicates conditions at the time of the test and cannot predict future changes in the moisture levels of the concrete. Neither Mannington nor the flooring contractor can be responsible if moisture levels change in the future.

TABLE #1 ACCEPTABLE MOISTURE LEVELS

Product	RH %	MVER	RH% / M-Guard Adhesive	MVER / M-Guard Adhesive.
Fine Fields; Magna;	≤75% V-81	5 lbs. V-81	NA	NA
Insight Plus Aberdeen	≤75% V-81	3 lbs. V-81	NA	NA
VCT &PT products Essentials: Designer Essentials; Inspirations; Brushworks; Solid Point; Color Point Safewalks	≤75%	5 lbs.	≤ 85 % M-Guard V-11	8 lbs. M-Guard V-11 11 pH
BioSpec MD; Lifelines: Relay RE; Assurance II; Assurance Squared; Natures Paths Create Realities; Primus; Vivendi	≤75% V-82 or V-95	3 lbs. V-82 or V-95	≤ 90 % M-Guard V-88	8 lbs. M-Guard V-88 10 pH

February 2012