

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.

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 adhesives are not adversely affected by higher PH levels (**See Table Below 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.

Product	Adhesive	MVER CC / RH / pH
BioSpec FB, Insight Plus & Terrene	V-81	5 lbs. / 80% RH / 9 pH
Insight Plus GB	MT-711	3 lbs. / 75% RH / 9 pH
Assurance III, BioSpec MD/RE/SR, City Hub, Color Anchor LVT, Color Anchor Arc/Prism, Discovery, Divergent, Entwined, Mannington Select, Nature's Paths, Paradigm II, Primary Elements, Realities II, Vivendi II & Walkway	V-82 or V-95	3 lbs. / 75% RH / 9 pH
Assurance III, BioSpec MD/RE/SR, City Hub, Color Anchor Arc/Prism, Discovery, Entwined, Paradigm II, Realities II & Vivendi II	V-88 sheet	New Construction/Slab 10 lbs. / 95% RH / 12 pH
Color Anchor LVT, Divergent, Mannington Select, Nature's Paths, Primary Elements, Uninterrupted, Walkway & Walkway 20	V-88 LVT	New Construction/Slab 12 lbs. / 99% RH / 12 pH
Assurance III, BioSpec MD/RE/SR, City Hub, Color Anchor Arc/Prism, Discovery, Entwined, Paradigm II, Realities II, Vivendi II & all Mannington LVF	V-88 - Sheet & LVT	Old Slab / Renovation 8 lbs. / 90% RH / 10 pH
Sheet Vinyl & LVT (Standard)	XpressStep Spray	8 lbs. / 95% RH / 11 pH
LVT (Premium)	XpressStep Premium Spray	10 lbs. / 98% RH / 12 pH
QuickStix LVT	N/A	18 lbs. / 99% RH / 12 pH
City Park LVT	N/A	8 lbs. / 90% RH / 9 pH
Rubber Tile / Rubber Sheet	All Adhesives	3 lbs. / 75% RH / 9 pH
Wood	Ultra Spread EZ	5 lbs. / 75% RH / 9 pH