USE OF TRAMEX MOISTURE METERS FOR TESTING CONCRETE SUBSTRATES

OVERVIEW

Tramex concrete moisture meters provide instant, nondestructive readings of moisture conditions in concrete using electrical impedance technology. They are ideal for rapid screening, identifying potential problem areas, and guiding where standardized moisture testing may be needed.

Proper Testing Procedure

- Ensure concrete is clean, bare, and free of sealers, coatings, dust, and adhesives.
- Substrate should be acclimated to jobsite temperature and conditions.

How to Test

- Place the meter flat on the concrete surface with full contact.
- Minimum 3 readings per 1,000 ft^2, more for large or variable slabs.
- Document readings, date/time, temp, and site conditions.

Typical Acceptance Threshold

- Most coating and flooring systems require Tramex readings <4% moisture content (verify manufacturer requirements

Advantages

- Instant moisture assessment
- Nondestructive and fast
- Useful for locating high-moisture zones
- Excellent pre-screening tool before ASTM testing

Limitations

- Provides relative moisture content, not a vapor emission rate.
- Readings may be influenced by concrete type, density, or aggregates.
- Not a replacement for required standardized tests:

    ASTM F1869 – Moisture Vapor Emission Rate (MVER)

    ASTM F2170 – In-slab Relative Humidity (RH)

Best Practices

- Use Tramex readings for initial evaluation, then confirm with ASTM testing when necessary.
- Test at consistent times of day to avoid temperature shifts.
- Map and record all reading locations for traceability.
- Allow new concrete to cure as required before testing.