The Tramex RWS is a multi-mode non-invasive impedance moisture scanner designed for the instant, precise and non-destructive evaluation of moisture conditions and leak tracing in the roofing and walls systems of the building envelope. The RWS is used to perform ASTM D7954.

**Features**

- For non-destructive moisture evaluation of roofs, EIFS, foam insulation systems & other building envelope applications.
- To evaluate the extent of the moisture problem and help trace and pin-point its source.
- Multi-mode functions allowing for depth penetration and sensitivity selection.
- Fast and easy to operate giving instant clear readings.
- “Hold” function facilitates ease of recording readings.
- Lightweight, handheld and battery operated.
- Inexpensive to purchase and operate compared to other non-destructive testing methods.

The Problems of Excess Moisture in the Building

By visual inspection, locating excess moisture and decay in or behind EIFS or Roofing Systems can be extremely difficult as normal evidence of this moisture and decay may not be visible on either side of the wall or roof. Excess moisture can be hidden and trapped in the substrate and within the thickness of the wall or roof construction. If these conditions are allowed to continue the moisture will increase, eventually leading to rot and decay and possible failure of the system and the structure. Also wet insulation loses its thermal value, resulting in unnecessary heat loss or gain and thermal movement in the structure. Early detection of wet areas and corrective remedial action makes good economic sense.
PRODUCT DESIGN

The Roof & Wall Scanner detects and evaluates the moisture conditions within roofing and wall systems by non-destructively measuring the electrical impedance. A low frequency electronic signal is transmitted into the material under test via the electrodes in the base of the instrument. The strength of this signal varies in proportion to the amount of moisture in the material under test. The Roof & Wall Scanner determines the strength of the current and converts this to a comparative moisture content value, displaying it on a large clear analog dial.

OPERATING PROCEDURE

Moisture detection testing can be done at the time of installation, as part of an ongoing maintenance program, or prior to reparation of damaged roofing and wall systems. The RWS is a handheld, hardwearing instrument with dual operating modes for roofing and EIFS/Foam insulation systems, each with two ranges of signal penetration. Having calibrated the RWS on a known acceptably dry area, the RWS gives instant readings for the moisture survey.

SPECIFICATIONS

| Size:          | 4.9” x 10.8” x 2.9” (125mm x 275mm x 75mm) |
| Weight:       | 1.88lbs (853g) |
| Construction: | ABS Body |
| Power:        | 9 volt PP3 Battery (included) |
| Display:      | Analog |
| Depth of penetration: | 4” (100mm) |

Sensitivity: Four Ranges: Roofing Mode with high and low sensitivity. EIFS / Foam Roof Insulation Mode with high and low sensitivity.

Accessories: Leather carry case. Telescopic handle for use on roofs only.

Limitations:
Some EPDM, Butyl rubber roofing and other conductive roofing. Hard Coat Stucco, wire lath or wire mesh reinforced finishes.