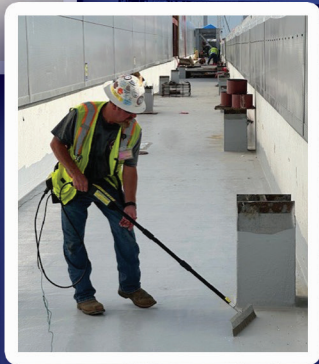
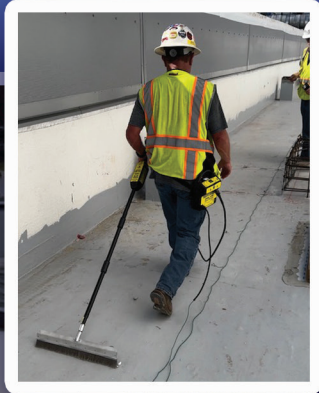
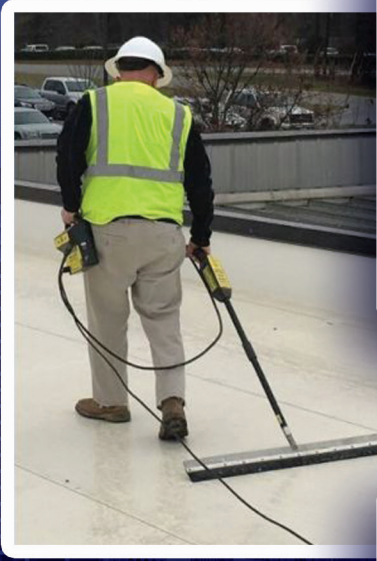


TINKER & RASOR

MODEL ELD

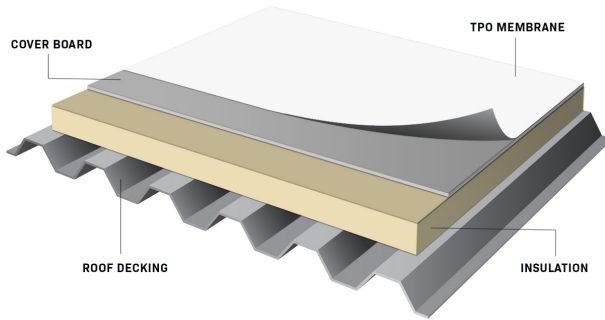
ELECTRONIC LEAK DETECTOR



What is Electronic Leak Detection?

High Voltage Electronic Leak Detection is a sophisticated method used to locate leaks in waterproofing membranes without the risks that come with flood testing a roof. It is particularly effective for detecting even the smallest breaches in non-conductive waterproofing membranes such as single-ply membranes, modified bitumen, and other types of waterproofing layers. This method ensures precise damage location without the risk of disrupting the existing structure. Here's a detailed description of how it works:

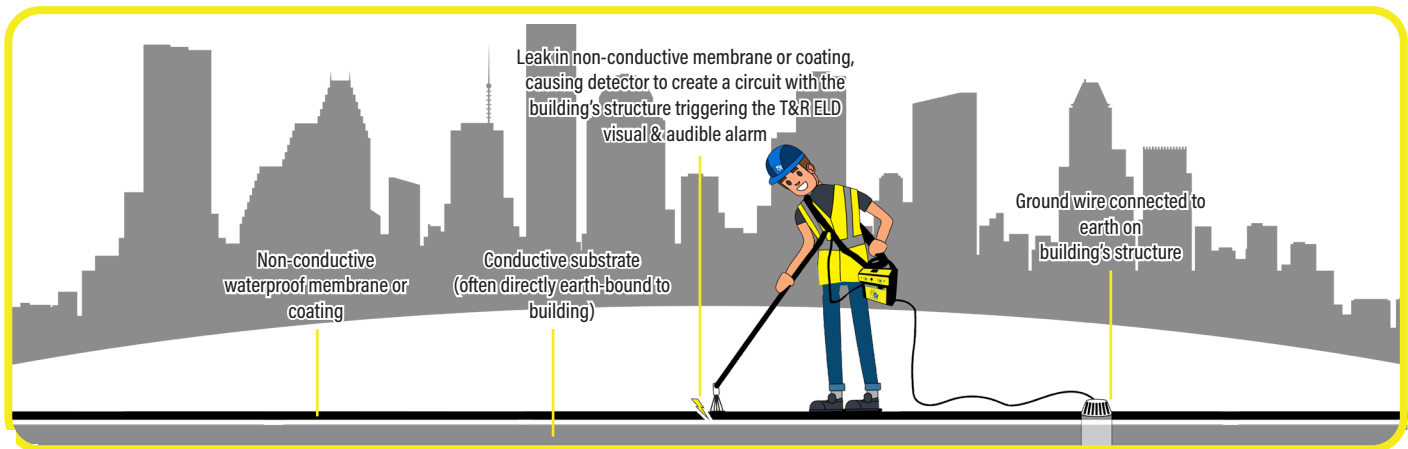
Example: TPO Membrane Roof System



Components of T&R High Voltage Electronic Leak Detector

1. **High Voltage Electronic Leak Detector:** This device generates a high voltage output (800 to 35,000 volts). This device indicates the presence of a leak by detecting a current flow through a breach in the non-conductive membrane.
2. **Electrode Wire Brushes:** Is used to apply the high voltage to the non-conductive waterproofing surface of the roof.
3. **Grounding Connection:** A grounding wire is connected to the conductive undelay or substrate below the membrane. Example connection points can be to a drain or the edge of the roof.

**Proper grounding is imperative to a successful inspection process!*



Testing Method

Using a High Voltage Electronic Leak Detector, pass the provided wire brush electrode over a non-conductive waterproof membrane.

When there are no leaks present, the non-conductive membrane or coating acts as an electrical insulator by stopping the flow of current out of the High Voltage Electronic Leak Detector.

When the electrode passes over a hole (leak), the high voltage current jumps the gap between the brush electrode and the conductive layer under the non-conductive waterproof membrane or coating to complete the circuit by causing the current to flow through to the conductive substrate and back through the ground wire to the High Voltage Electronic Leak Detector. The audible and visual alarm on the High Voltage Electronic Leak Detector will alert the operator of a leak, the area can then be marked to for repair.

Advantages of High Voltage Electronic Leak Detection

- **Precision:** High Voltage Electronic Leak detection can locate very small breaches in the membrane that might be missed by other testing methods.
- **Non-Destructive:** The method does not damage the waterproof membrane or the underlying structure.
- **Immediate Results:** Leaks are detected in real-time, allowing for immediate marking and subsequent repair before they escalate into major issues.
- **Applicability:** Suitable for testing on a variety of applications including: Roofs, Plazas, Parking Decks, Foundations, Pools, Water Features, Covered Reservoirs, etc..

Model ELD



Rugged, dependable, portable High Voltage Electronic Leak Detector that offers accurate, reliable inspection of any non-conductive waterproof membrane or coating surface over a conductive substrate. Tinker & Rasor Model ELD meets ASTM D8231 the industry standard for Electronic Leak Detection.

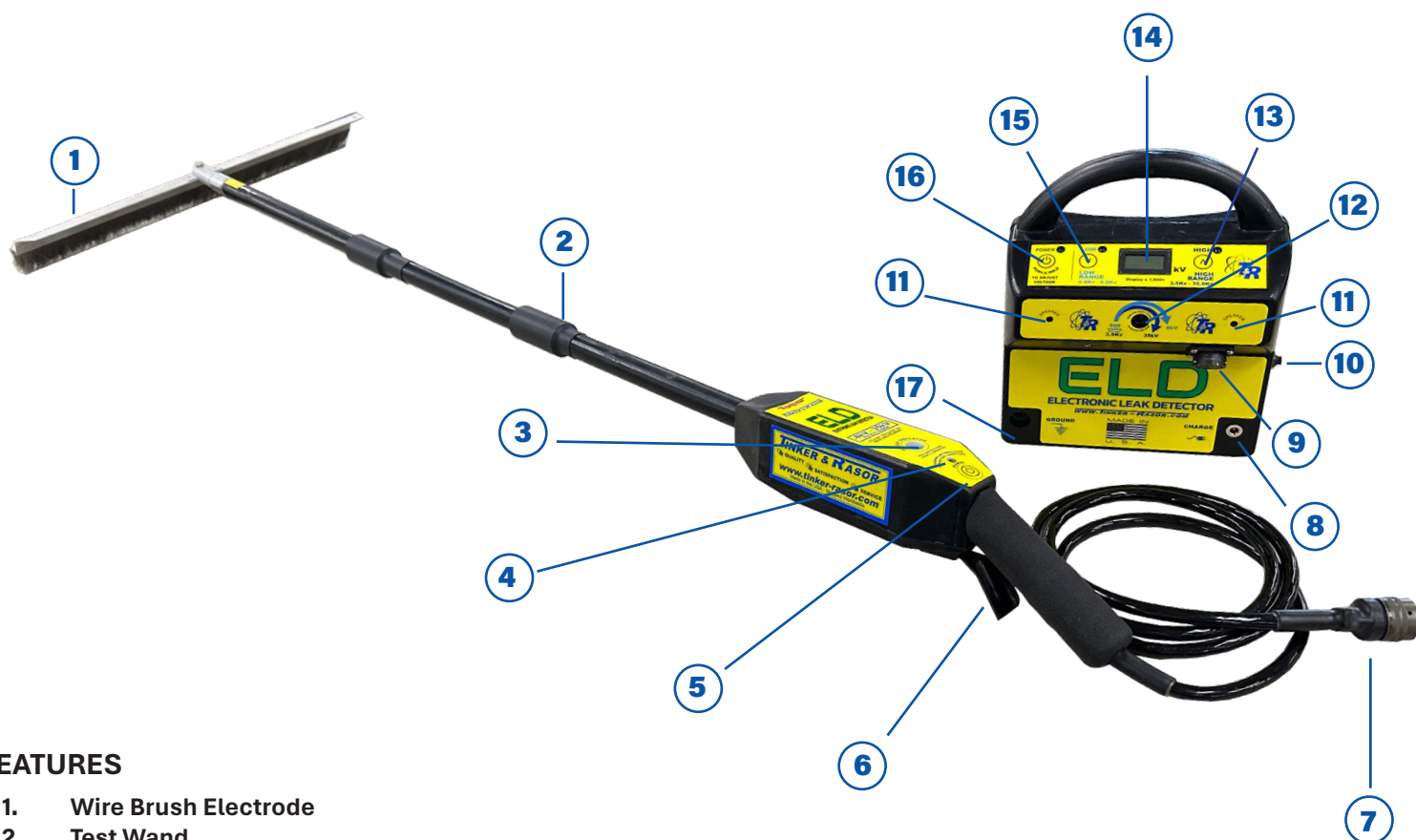
INFINITE VOLTAGE SETTING: You have the control! With a voltage range from 800-35,000 volts and voltage setting increments in 100v steps you can set the voltage exactly to the level you desire for the waterproof membrane or coating thickness you are inspecting.

AUTO REGULATED VOLTAGE: Keeps your voltage constant! Over a range of 20-750 mils the output voltage automatically adjusts under the working load to the voltage levels you set.

SENSITIVITY SWITCH: Never miss a leak! The unit features a 6-position sensitivity switch allowing the instrument to be adjusted on the fly and as needed to be more sensitive to make certain all leaks are found.

RE-CHARGEABLE BATTERY: Never run out of power! The unit offers a lightweight internal rechargeable battery with a built-in recharging port offering the operator the convenience of charging the battery without taking the battery out of the unit. A spare battery and charging cable are also provided as backup for those long testing jobs.

LOW BATTERY INDICATOR: We have you covered! The green power LED on the main panel of the ELD unit will blink when the battery is low. This indicates the battery needs charging/charging.



FEATURES

- | | |
|-----------------------------------|-------------------------------------|
| 1. Wire Brush Electrode | 12. Voltage Adjustment Port |
| 2. Test Wand | 13. High Voltage Selector |
| 3. Visual Leak Indicator | 14. LCD Meter Output Display |
| 4. Low Battery Indicator | 15. Low Voltage Selector |
| 5. Power Switch | 16. Voltage Adjustment Power Switch |
| 6. Voltage Safety Cutoff Switch | 17. Ground Connection Port |
| 7. Mil Spec Power Pack Connector | |
| 8. Charging Port | |
| 9. Power Pack Connection Port | |
| 10. Sensitivity Adjustment Switch | |
| 11. Audible Leak Indicator | |

FEATURES

- Voltage Safety Cutoff Switch
- Low / High Range Adjustment
- LCD Output Meter
- Integrated Voltmeter
- Audible & Visual Leak Indicators
- Low Battery Indicator
- Sensitivity Adjustment Switch
- Mil-Spec, Locking Power- Pak Cable
- Integrated Belt Loop System
- Lightweight, Long Life, Rechargeable Battery
- 3 YEAR WARRANTY

CONSTRUCTION.

- Built Rugged for extreme field environments
- Power cutoff placed on Power-Pak
- 5 ft Power-Pak cable
- Form fitting Ergonomic design for wearing on hip or over the shoulder Reducing Operator Fatigue

TECHNICAL SPECIFICATIONS

| MODEL | ELD |
|---|---|
| Voltage Output Type | DC, Pulsed |
| Output Voltage Adjustment | 100 Volt Steps |
| Voltage Output | Low 800-8,000 volts High 3,500-35,000 volts |
| Output Accuracy | + / - 5% |
| Battery Type | LiFePO4 |
| Battery Output | 6 VDC |
| Battery Charger Output | 7.4V, 2A DC |
| Voltage Range | 0.8 - 35 kV |
| Maximum Current Output | 1.3 mA |
| Operating Temperature | 14°F to 122°F (-10°C to 50°C) |
| Unit Weight | 8 lbs |
| Unit Dimensions | 6.75" x 8.5" x 3.5", 8 lbs (171.5mm x 216mm x 89mm, 3.62kg) |
| Backpack Weight | 17lbs |
| Backpack Dimensions | 18" x 23" x 9" |
| Domestic/International Standards Unit Complies With | ASTM D7877-14, D8231 |
| Environment | -10 ° C to 50 ° C (14 ° F to 122 ° F) |

Model ELD Kit

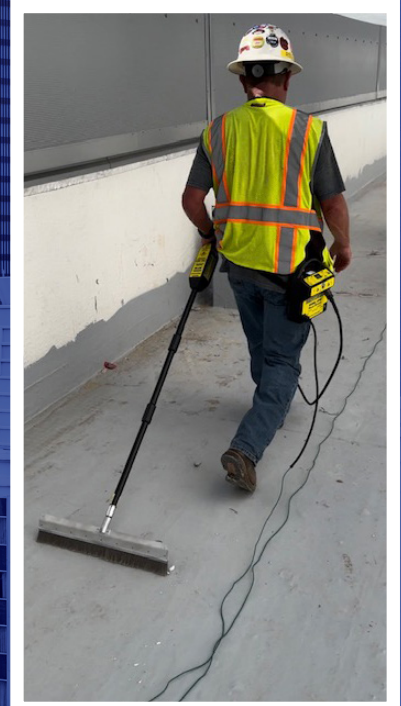
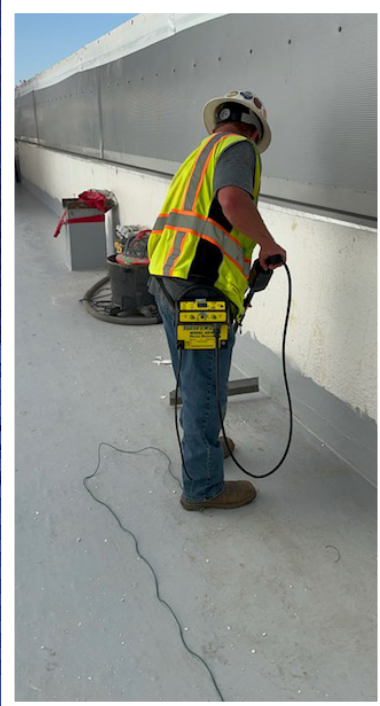
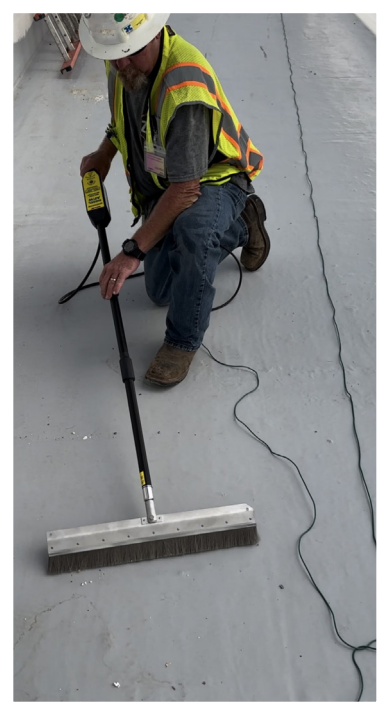


KIT INCLUDES

- ELD Unit
- ELD Power Pack w/5 ft Cable
- (1) Extra Battery
- Battery Charger 110V/240V
- Battery Charger Adapter
- 18" Wand
- (2) 16" Extension Wands
- 54" Equipment Belt
- Voltage Adjusting Screw Driver
- 24" Wire Brush
- 4" Wire Brush
- 8" Fan Brush
- 150' Ground Cable with large clamp
- Backpack Carrying Case
- Certificate of Calibration
- Operating Manual

TINKER & RASOR

WWW.TINKER-RASOR.COM



Tinker & Rasor quality is found in our products, our people and our customer service.

Contact our product experts M-F 7:30 am to 4 pm:

Info@tinker-rasor.com

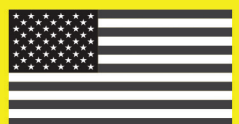
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Intl: 830-253-5621

Rental Equipment: T&R is ready to meet your emergency equipment needs. Rental equipment in stock.

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