

BUCKLEYS

MANUFACTURERS OF SPECIALIST TEST EQUIPMENT

Dry Roof Leak Detectors



locate roof leaks in dry weather conditions



Dry Roof Leak Detectors

Buckleys Roofing Test Kits enable inspectors to quickly and effectively test non-conductive roof finishes (such as bitumen, liquid-applied, single-ply and asphalt) for pinholes, porosity and other defects.

Our dry roof leak detectors are able to test a wide range of membrane thicknesses - between 16 μ m and 25.6mm depending on which model you choose. Kits contain everything required to start testing immediately (even batteries and charger), all contained in a robust, high-visibility transit case.

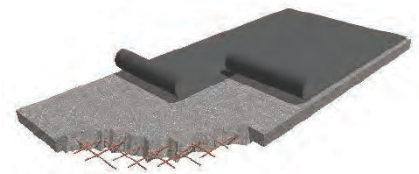
Dry roof leak detectors utilise the non-conductive properties of roof membranes as an electrical insulator whilst the substrate beneath the membrane conducts electrical current and is earthed to the structure of the building. The detector unit is also earthed to the building and the test probe is connected to the positive side of the detector, creating an 'open circuit'. As the detector passes a defect in the membrane, the current required to complete an electrical circuit reduces due to the lower dielectric strength of the membrane.

As an electrical circuit is created, current 'jumps' the gap to earth; triggering the detector unit's alarm.

Typical roof types

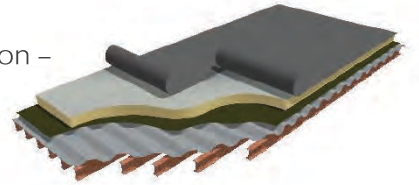
Concrete roof deck

Concrete retains a suprisingly high water content. Even when concrete is 'dry', this ambient moisture content is enough to conduct current and test for leaks. Flaws in the membrane allow the detector to complete an electrical circuit to earth via the concrete and trigger the detector's alarm.



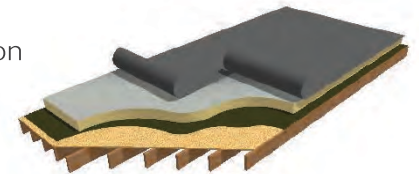
Steel roof deck

The steel structure below the roof membrane – as well as foil-faced slab insulation – conducts electrical current to earth. Faults in the membrane provide a path for current to pass through and complete an electrical circuit, triggering the detector's alarm.



Timber roof deck

Whilst the timber structure of the roof itself is non-conductive; foil-faced insulation and any water which has 'tracked' to earth through leaks will provide enough conductivity to test with a dry roof leak detector. Many timber-deck roofs with foil-faced insulation have additional earth bonding to the insulation to aid the leak detection process.



What's in the kit?

Buckleys PD30R and PD40R dry roof leak detector kits contain everything you need to test flat roofs for leaks. Even batteries and a charger. The full kit contains the following items:

- Detector unit
- Battery charger and rechargeable batteries
- Shoulder bag
- Test probe handle
- Coiled interconnecting lead
- 5m earth lead
- 50m earth extension lead
- 2 x 460mm extension rods
- Electrode shoe
- Screwdriver
- 450mm phosphor bronze brush electrode
- Drum brush electrode
- Pointed probe
- Test voltage calculator
- Robust high-visibility carrying case
- Comprehensive instruction manual and calibration certificate

Features

- Lightweight & portable
- Easy to use
- Test voltage calculator included
- Audible & visual alarm fault indicators
- Clear LCD with backlight
- Membrane keypad operation
- Microprocessor controlled
- Automatic voltage selector
- Accurate sensitivity control
- Rechargeable batteries
- Displays electrode current
- Volume control for quiet environments
- Power limited to avoid coating damage
- Wide range of accessories & electrodes available
- One year back-to-base warranty

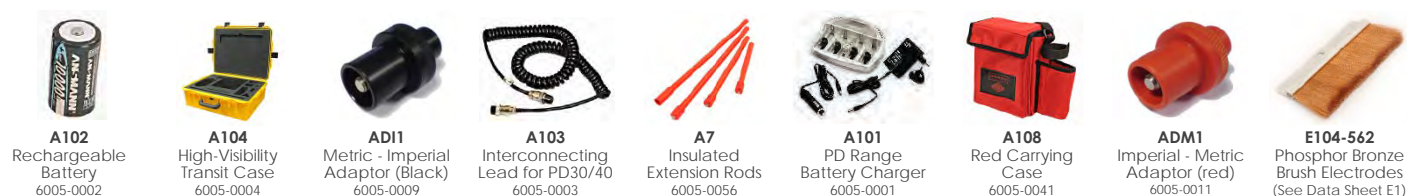


Specifications

Model	Output voltage range	Polarity	Set output	Battery life
PD30R	1kV-30kV	Positive	30kV	10 Hours
PD40R	2kV-40kV	Positive	40kV	8 hours

- Maximum output current: <1mA (continuous)
- DC sensitivity: Adjustable - 10 μ A to 450 μ A
- Batteries: 4 x D cell batteries
- Meter accuracy: Volts: +/-1.0% +/-1 digit
- Current: +/- 2.0%
- Current meter FSD: 450 μ A
- Test voltage formula: NACE SP-02-74
- Unit dimensions: 16cm(W) x 6cm(H) x 20cm(D)
- Unit weight: 1.6Kg - Including carry bag
- Handle weight: 600g
- Unit and handle weight: 2.3Kg (including bag and batteries)
- Maximum relative humidity: 80% non-condensing
- Altitude: Up to 2000m
- Temperature range: 0° C - +40° C

Accessories



Also available

We also manufacture a roof leak detector for use in wet weather conditions. The Wet Roof Pro' uses the **conductive properties of water (from either rainfall or a hose) to pinpoint leaks in a variety of non-conductive roof finishes.**

The kit comprises two main components; a generator and a detector. The generator creates a field of electrical current on the roof surface and to earth via any leaks or defects. The detector unit uses two test probes to measure the direction of current flow and therefore location of the leak.



Contact us for more information on Buckleys' range of roof leak detection equipment, call our sales team on +44 (0)1303 278888, email sales@buckleys.co.uk or visit our website: www.buckleys.co.uk

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