



# PROTIMETER

## MMS2 Flooring Kit

Complete, Accurate Moisture Measurement  
in Concrete Floor Slabs



# MMS2 Flooring Kit

The Protimeter MMS2 Flooring kit allows flooring inspectors to make moisture measurements in concrete floor slabs using the relative humidity in-situ probe method. The In-situ humidity test is being adopted worldwide and is considered the most accurate way for contractors and inspectors to ensure that the moisture levels in the concrete slab meet the recommended requirements prior to installing a floor covering.

Moisture levels in floor slabs are critical to understand as excessive moisture can lead to catastrophic and expensive floor failures. Global standards are in place such as ASTM F2170.

## Measurements Include:

- In-situ relative humidity and temperature - required for ASTM F2170 standard.
- Relative humidity and temperature in the ambient conditions - required for ASTM F2170 standard.
- Surface temperature - required for ASTM F2170 standard.
- Noninvasive instant moisture evaluation used prior to in-situ RH moisture test.
- Pin type moisture measurement, evaluating wood floor materials.
- Data logging.



Part Number - BLD8800-FL





## MMS2 All-in-One Moisture Meter

The Protimeter MMS2 is the industry's most advanced all-in-one moisture meter. Its ergonomic, 4-in-1 design allows one-handed operation to measure moisture on and below the surface, as well as in ambient air and humidity and in concrete floor slabs. A non-contact infrared thermometer measures surface temperature and calculates the dew point. The MMS2 incorporates instant moisture measurement using pin and noninvasive techniques to provide accurate readings in wooden floors and reference reading in concrete floor slabs.

### Features

- Pin moisture measurement.
- Noninvasive moisture measurement.
- Ambient relative humidity and temperature measurement.
- Equilibrium humidity measurement in concrete floors.
- Psychrometric calculations.
- Laser pointer surface non-contact temperature measurement.
- Data logging.
- Firmware upgradable.

### Benefits

- Easy-to-use with simple user interface.
- One instrument with all floor moisture testing capabilities.
- Durable construction with a 2 year warranty.
- Free technical support.



# MMS2 Floor Kit Components

## 20 Adjustable Humidity Sleeves

For insertion into the concrete slabs allowing measurement in slabs at 40% depth of concrete. Sleeves adjustable from 4" (101mm) to 6" (153mm) slab thicknesses. Patent Pending.

Part Number - BLD4650-20



## Carbide-Tipped Spiral Masonry 3/4" (19mm) Drill Bit and Drill Stop

Drill the correct depth holes into the concrete slab.

Part Number - Drill - BLD34DR, Drill stop collar - BLD34DRCLR

Part Number - Allen key for stop collar - BLD34DRCLR-K



## Wire Cleaning Brush

Clean out the drilled hole. Recommend using in conjunction with a properly filtered industrial grade vacuum.

Part Number - BLD4653



# MMS2 Floor Kit Components

## 5 Protimeter Mini Hygrostick Probes

These small probes are placed into the humidity sleeve that is inserted into the concrete slab and allow you to measure the %RH and temperature to the exact standard. Protimeter's Mini Hygrostick sensor is specifically designed for the harsh environments found in concrete. Protimeter's EMD sensor performance and reliability is unmatched in the market with over 20 years of use in this application. Comes complete with NIST Traceable Calibration Certificate.

Part Number - BLD4755-5



## Mini Hygrostick Insertion and Extraction Tool

For placing and removing the sensors in and out of the sleeves.

Part Number - BLD4755-EX



## Mini Hygrostick Extension Lead

Connects the MMS2 meter to the mini Hygrostick.

Part Number - BLD5806



# MMS2 Floor Kit Components

## Salts Calibration Test Bottle and Adapter

Allows users to check the humidity probe calibration at 75% RH.

Part Number - BLD4790

Adapter Part Number - BLD4790-AD



## Data Cable and Software

Protimeter MMS2 allows you to log up to 8,000 readings from all its functions making record keeping easy and simple.

Part Number - BLD7758



## Rugged Carrying Case

Secures your flooring kit in one durable, easy to carry case.

Part Number - BLD5916

*(replacement case only)*



# MMS2 Specifications

## Moisture Measurement Range

- Pin (% WME) 8% to 99, readings over 30% are relative.
- Noninvasive (RF) up to 3/4 in (19 mm) deep, 60 to 1000 (relative).

## IR Surface Temperature Probe Range

- 15°F to 120°F (-10°C to 50°C).

## Infrared Surface Temperature Range

- IR Based – With 12:1 (D:S) Ratio.
- Range -4°F to 176°F (-20°C to 80°C).
- Accuracy  $\pm 3.6^\circ\text{F}$  ( $\pm 2^\circ\text{C}$ ).

## Mini Hygrostick Data (Nominal) *package of 5 included*

- 30% to 40% RH ( $\pm 3\%$  RH) at 68°F (20°C).
- 41% to 98% RH ( $\pm 2\%$ ) at 68°F (20°C).
- Range 32°F to 122°F (0°C to 50°C)  $\pm 0.6^\circ\text{F}$  ( $\pm 0.3^\circ\text{C}$ ).

## Quikstick (used for ambient readings)

- 0% to 10% RH,  $\pm 3\%$  RH at 68°F (20°C).
- 11% to 90% RH,  $\pm 2\%$  RH at 68°F (20°C).
- 91% to 100% RH,  $\pm 3\%$  RH at 68°F (20°C).
- Range 32°F to 122°F (0°C to 50°C)  $\pm 0.6^\circ\text{F}$  ( $\pm 0.3^\circ\text{C}$ ).
- Nominal response 30% to 90% and back to 30% RH in 45 seconds @ 68°F (20°C).

## Data Storage

- Store up to 8,000 results with date and time stamp from all instrument functions with the push of a button.

## Gross Weight

- 10 oz. (283 gms).

## Dimensions (LxWxH)

- 7.5 in x 3.7 in x 2.2 in (190.5 mm x 94 mm x 56 mm).

## Maximum Needle Depth

- 0.4 in (10 mm).

## Display

- Color LCD.

## Batteries (Included)

- 1 x 9v.

## Warranty

24 months on mechanical or manufacturing defects.  
Does not include wearing parts or accessories.

For more details, including a demonstration video, go to [www.mms2meter.com](http://www.mms2meter.com).



# Simple Steps to Confident Moisture Assurance



- Use the MMS2 to rapidly evaluate the floors moisture level.
- Select your in-situ humidity test points.



- Drill holes to 40% of the depth of the concrete.
- Clean out the drilled holes and insert the adjustable sleeve at the correct depth for the slab.



- Insert the Protimeter mini Hygrostick using the insertion tool.
- Cap the sleeve and wait for moisture equilibrium. See local standards for recommended soak time.



- Measure and record the relative humidity and temperature.
- Remove the mini Hygrostick for reuse.

[www.protimeter.com](http://www.protimeter.com)

[www.amphenol-sensors.com](http://www.amphenol-sensors.com)

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