

# Package V2-1M

## Applications

For monitoring water remediation jobs and checking for leaks and moisture infiltration in the building envelope after water damage. Cables can be installed during water damage repair in areas, which are later-on covered and not reachable for measurements any longer. Add EL pins to measure to 7" deep.

For anyone who wants to use pin and pinless measuring modes side by side. To keep close tabs on wood moisture during production, flooring installations, inspections, water damage repairs. Measures across the product in pinless mode, measures down for core readings in pin mode.

## Advantages

Pin – pinless – RH: When every job is different, the Ligno-VersaTec is the most versatile meter, all-in-one. It measures moisture in a wide range of materials and in relative humidity of air (with RH BluePeg probe). System also complies to ASTM F2170 for in-situ RH concrete testing.

Too much moisture, undetected for a prolonged time can have bad consequences for the building structure. Detection is the first step in prevention. This simple cable system can help you detect water infiltration in inaccessible areas early. Install the cable when the repairs are under way, then you can connect the cables periodically to make sure a leak is not happening again.

Adding Electrode E12 allows accurate surface and core measurements with insulated pins up to 2" deep. The industry standard for quality control in wood, wood floors and structural lumber.

## Description

The cable/pin system allows monitoring for moisture changes in hard-to-reach, inaccessible areas, during drying-out after water damage and long-term leak surveillance.

Cables and pins work well for monitoring inaccessible areas and making sure a leak is not happening again.

Water infiltration through a leaking roof, improperly installed windows, broken pipes often has bad consequences. Dry rot develops and structural components disintegrate.

Once a problem has been detected and repairs are done, you want to make sure that the leak does not happen again. Leak surveillance is easily done by installing screws (option: EG or EL teflon-coated pins) and a cable at the trouble spot before closing up the area. Leave the open cable-ends to be reached easily. Now, measurements can be taken periodically to watch for changes in moisture content. Cables and pins can already be installed to monitor the drying-out process and then left in place for long-term monitoring.

Undetected high, low or uneven moisture is often the cause for moisture problems in wood. The electrode E12 allows measuring the moisture gradient between surface and core. True moisture levels can be detected up to 2" deep, even behind wet surfaces.



Multi-function meter with Electrode E12 for **depth measurements**.

No matter which function you use, the Ligno-VersaTec gives superior results.



Slide-hammer to pin-point moisture distribution from surface to core.

For quality control, for restoration jobs, when installing, inspecting floors.



Install cables and pins in moisture critical areas.

Measure periodically to check, if moisture problems are back.

As the pins are hammered into the wood, consecutive readings show if wood is dry throughout the core. The E12 is the only tool to give accurate measurements at a defined level. Taking numerous readings indicate if a moisture gradient exists. The thicker the wood, the more important core readings become. At least 1/3rd of the board thickness should be penetrated to reach the core. In addition: Pin insertion is easier with the slide hammer especially when measuring hard wood. Sub floors can be measured without removing the floor planks.

When assessing water damage, the pins of the E12 can be driven to different depth levels and thus indicate how far water has been absorbed or if there is still residual moisture inside the structure after drying. Insulated pins can measure dry material behind a wet surface.

The ability to measure a moisture gradient is one of the main reasons our customers still prefer pin over pinless meters. No other tool can achieve the same measuring accuracy at a defined depth level.

## Ligno-VersaTec

The Ligno-VersaTec combines the accurate and dependable buffermeasuring technologies of Lignomat's pin, pinless (dual-depth) and RH meters. Everybody needing a versatile, accurate meter will appreciate the multiple functions and the reliability of the Ligno-VersaTec. The Ligno-VersaTec includes over 125 different calibrations for testing a variety of domestic and tropical wood species and bamboo.

With the Ligno-VersaTec you can choose the right measuring mode and the right accessories for the job on hand for fast estimates or accurate percent measurements.

It could be tracking moisture problems with a pin electrode or measuring humidity in a crawl space. Floor installers can check cupped floors with the dual-depth pinless mode. Pinless Search and Compare Mode can track moisture in walls, ceilings and floors. Lumber mills use the meter to make sure QC requirements are followed.

## Meter Specifications

Size: 4.75"L X 2.5"W X 1"H

Measuring Range:

- Wood: 5-99%
- Gypsum, Sheetrock, Wall Boards: 0-22%
- Reference Scale: 0-99

Display: Resolution: 0.1% below 10% and 1% steps above 10%, life-time warranty  
 Calibrated for a wood temp of 70°F (20°C).

A correction table for different wood temperatures is listed in the manual.

## Species Corrections

over 125 settings to correct for:

- domestic and tropical wood species
- bamboos, vertical, horizontal and strand
- laminates and wood-based panel products
- 4 Scales for gypsum, drywall, wall boards (%)

1 Reference Scale for building materials, for identification of moisture levels in Search and Compare Mode



**Pinless mode:** fast and easy moisture checking of lumber and flat boards. Domestic and tropical woods, wood floors, engineered products, bamboo.



Stainless steel screws are used as probes for in-kiln monitoring



The electrode E12 has a slide hammer to insert and extract pins easily. For measurements up to 2" deep.

## Electrode E12 Specifications

Weight 3.5 lbs. Length without pins 12".

The electrode E12 can be connected to

- Ligno-Versatec
- Lignometer K
- mini-Ligno DX/C
- mini-Ligno S/DC
- mini-Ligno MD/C

A cable connector (BNC) is mounted at the head of the electrode.

For **Ligno-Versatec**: BNC Cable

**E12 pins** are teflon coated to only measure at the tip and come in three options:

- DZ Pins insulated, measuring depth 1"
- DA Pins insulated, measuring depth 1.5"
- DB Pins insulated, measuring depth 2"

DB Pins are not included in the package and must be ordered separately.

## Package Includes

- 1 ligno-versatec meter
- 1 9V battery
- 1 laminated wood group card and 1 instruction manual
- Built in connector for an assortment of external electrodes and in-kiln probes
- 1 slide-hammer electrode E12
- 1 BNC Cable
- 1 pair stainless steel screws
- 1 LP-H cable
- 1 adapter H
- 2 pair pins: 1 pair 1" DA pins and 1 pair 1.5" DZ pins
- 1 case M



Pins for E12: DZ, DA, pins can only be used with the Electrode E12.

Insulated pins measure only at the tip



Optional EG, EL Pins can be ordered for deeper measurements.