Lignomat USA, Ltd.
Moisture Measurement and Control Systems
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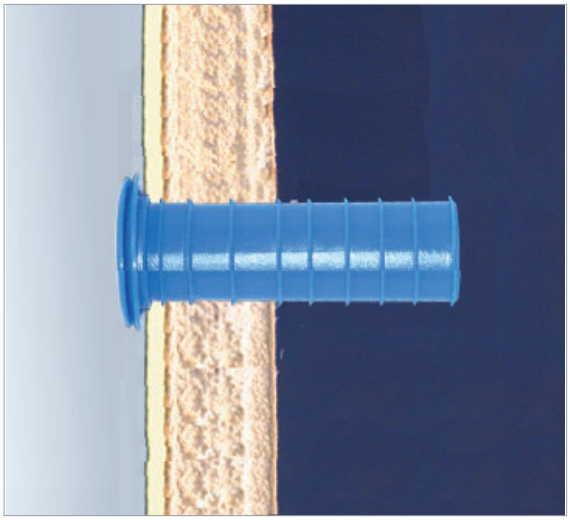
Monitoring Wall Cavities with in-situ RH Sleeves

If you want to monitor drying or looking for a way to check on moisture accumulations behind walls, we offer plastic tubes or sleeves to be installed to the depth you want to measure. The tubes can be up to 12" long.

At the end of the tube or at the end of the sleeves a relative humidity probe (RH BluePeg probe) is installed and the RH cable connected. The other cable end is left in an area, where it can be easily plugged into the meter or data logger.

At any time now, you can connect one of Lignomats RH meters to the RH cable to measure the probe.
The RH cable is a regular Stereo Cable, therefore long cables are always possible.

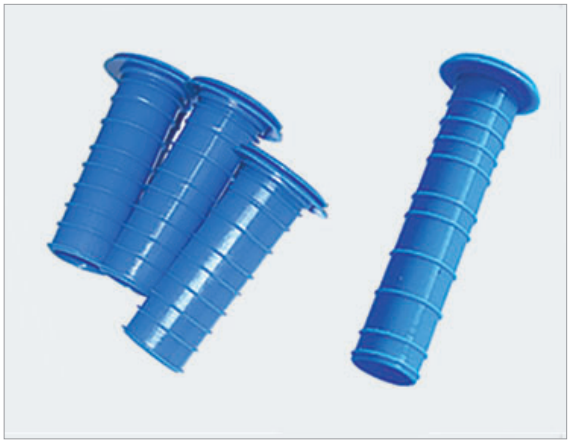


If you wanted to record continuously you can use the BL2, a **data logger for relative humidity with an alarm** for too high or too low.

RH BLuePeg probe from Lignomat can be measured with the following devices from Lignomat:

Hand-held meters for on-the-spot measurements:
Ligno-Tec RH
Ligno-DuoTec BW
Ligno-VersaTec

Data loggers to save values and set alarms:
Memo-Chip BL2
MC/RH Tracker



Parts:
RH Sleeves #RH-S
RH BluePeg # RH-BP
RH Cable with Sleeve Cover # RH-CB

See page 2: Relationship between material moisture and relative humidity. EMC Chart.

Call 800-227-2105 for more info or a quote

EMC: Relative Humidity and Wood Moisture Content

From the US Dept. of Agriculture Wood Handbook, "Wood as an Engineering Material"
Humidity recommendations range from **30% – 50%** in a building.
Temperature recommendations range from **60°F – 80°F** in a building.
If ambient conditions stay within these recommendations, the moisture content of wood stays between 6% and 9% and the amount of expansion and contraction of wood is limited.

Examples:
(1) Lumber at 7.7% will not change its moisture content if kept at 40% relative humidity and a temperature of 70°F.
(2) Conditions in a warehouse are 60% relative humidity at 50°F. If dry wood is left in the warehouse for an extended period of time, the wood will pick up moisture until a moisture content of 11.2% is reached, regardless of wood species and initial moisture content.

EMC Table

T		Relative Humidity																		
°C	°F	5	10	15	20	25	**30**	**35**	**40**	**45**	**50**	55	60	65	70	75	80	85	90	95
-1	30	1.4	2.6	3.7	4.6	5.5	6.3	7.1	7.8	8.7	9.5	10.4	11.3	12.4	13.5	14.9	16.5	18.5	21.0	24.3
4	40	1.4	2.6	3.7	4.6	5.5	6.3	7.1	7.8	8.7	9.5	10.4	11.3	12.4	13.5	14.9	16.5	18.5	21.0	24.3
10	50	1.4	2.6	3.6	4.6	5.5	6.3	7.1	7.9	8.7	9.5	10.3	11.2	12.3	13.4	14.8	16.4	18.4	20.9	24.3
16	**60**	1.3	2.5	3.6	4.6	5.4	6.2	7.0	7.8	8.6	9.4	10.2	11.1	12.1	13.3	14.6	16.2	18.2	20.7	24.1
21	**70**	1.3	2.5	3.5	4.5	5.4	6.2	6.9	7.7	8.5	9.2	10.1	11.0	12.0	13.1	14.4	16.0	17.9	20.5	23.9
27	**80**	1.3	2.4	3.5	4.4	5.3	6.1	6.8	7.6	8.3	9.1	9.6	10.8	11.7	12.9	14.2	15.7	17.7	20.2	23.6
32	90	1.2	2.3	3.4	4.3	5.1	5.9	6.7	7.4	8.1	8.9	9.7	10.5	11.5	12.6	13.9	15.4	17.3	19.8	23.3
38	100	1.2	2.3	3.3	4.2	5.0	5.8	6.5	7.2	7.9	8.7	9.5	10.3	11.2	12.3	13.6	15.1	17.0	19.5	22.9
43	110	1.1	2.2	3.2	4.0	4.9	5.6	6.3	7.0	7.7	8.5	9.2	10.0	11.0	12.0	13.2	14.7	16.6	19.1	22.5
49	120	1.1	2.1	3.0	3.9	4.7	5.4	6.1	6.8	7.5	8.2	8.9	9.8	10.7	11.7	12.9	14.4	16.2	18.6	22.0

The values shown in the table above represent moisture content of wood in %

Lignomat moisture measurement

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