

Digital Floor Hygrometer

Product Code: BLD4600

INSTRUCTIONS

Please read before use



Understanding the Digital Floor Hygrometer

The Digital Floor Hygrometer is designed to assist flooring professionals in determining the equilibrium relative humidity (ERH) of floor screeds and sub floor slabs as set out in BS8203 and BS5325. These two standards both state that a sub floor is considered dry at an ERH of 75% or less. Readings above these levels indicate the need for either further drying and/or the use of a DPM system. Particular care should be taken when fitting solid and laminate timber floors. Timber flooring is typically supplied at a kiln dried moisture content of between 8.5% and 9.5% (by weight). This is equivalent to approximately 35% to 45% ERH.

The Digital Floor Hygrometer incorporates an accurate thermo-hygrometer which indicates both relative humidity and air temperature. Temperature measurement can be important as it affects the humidity reading. For a given level of moisture in the air, humidity decreases as temperatures rise and increases as temperatures fall, hence the term, "relative humidity" i.e. relative to temperature.

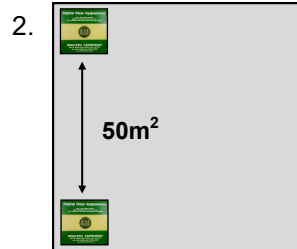
The thermo-hygrometer also records minimum and maximum values whilst it remains switched on. This memory will be lost if the instrument is switched off. However, it is useful to switch the hygrometer off and then back on to reset the memory before each new test is carried out. By recording the minimum and maximum values, it is possible to see if under floor heating has been switched on for example or what the overnight temperatures may have fallen to.

The hygrometer has been pre-calibrated at 75% RH (+/- 5%) at 20°C and should not require further attention. The unit may be returned to Martin Lishman Ltd for calibration verification. In practice it will be more economical to treat the complete unit as a consumable item in the costing for larger contracts.

Using the Digital Floor Hygrometer



Use a Protimeter MMS or Protimeter Surveymaster in search mode to establish the area(s) of greatest concern on the sub floor.




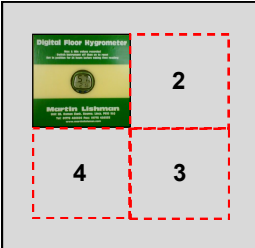
If possible, use one Digital Floor Hygrometer for every 50m² of floor under investigation. **It is recommended to use the floor hygrometers in multiples in order to take an average of the readings.**

3.  Use the butyl tape provided to make an airtight seal around the base of the unit. If necessary, two layers of tape can be applied if the floor is uneven (*see below for information about replacement supplies*).

4. Before positioning the unit on the floor, switch the thermo-hygrometer ON and then OFF again in order to reset the memory. Now, position the unit on the test area and switch the thermo-hygrometer ON. Leave under test for a minimum of 24 hours.

5. Obtaining results: The MAX/MIN button on the thermo-hygrometer will allow you to view the maximum and minimum temperature and humidity readings recorded within the test period.

6.  Remove the hygrometer and place it on its side to rest. This will allow the unit to return to the ambient temperature/humidity of the room - which should take no more than 4 hours.

7.  Once the hygrometer has rested, re-position the unit (as image to the left illustrates). Repeat the procedure in step 4.

NB. The RH reading may vary between two different Digital Floor Hygrometers by up to +/- 5% RH, which means they can be up to 10% apart.

Specifications of the Digital Floor Hygrometer

Dual display for humidity and temperature	Display resolution: 1% RH; 0.1°C
Maximum & Minimum value display	Display reading update: 10 seconds
Measurement range: 20-99% RH; 0-50°C	Battery: 3 volt coin type CR2032
Display accuracy: +/- 5% RH; +/- 1°C	Battery life: In excess 5000 hours continuous use

Spare Parts

Digital Floor Hygrometer Butyl Tape (pack of 3) - Product Code: BLD4603-SPARE
3 volt coin battery (CR2032) - Product Code: ELB-2032

Please Note:

Since it is exposed to varying external conditions, Martin Lishman Ltd cannot guarantee that the Digital Floor Hygrometer will not experience functional or calibration issues during use. Users are advised to make regular, independent checks to ensure the instrument is working correctly. As the method of use of the instrument and the interpretation of the readings are beyond the control of the manufacturers and selling agents, Martin Lishman Ltd cannot accept responsibility for consequential or indirect loss suffered by users of the unit.

Advice & Guidance:

Users should refer to the British Standards, manufacturers recommendations and best practice guidelines as outlined in the CFA's "Guide to Contract Flooring", available to download from www.cfa.org.uk