



**Here's everything you need to test the moisture content of concrete, wood and gypsum**

## DELMHORST TOTAL CHECK Kit



### DI.2000

- TOTAL CHECK Meter
- Ten 2" sleeves DI.2200.20
- 1 Humidity probe w/cable DI.2500.05
- 1 Pin probe (for testing wood) DI.2E
- Computer software
- Carry case

### **and NOW INCLUDES:**

- 1 Drill bit DI.625.DRILL
- Wire brush
- Vacuum nozzle
- Salt Solution 75% DI.SALT.75

**OR...If you already have a surface meter and wood moisture meter  
\$SAVE with the**

## DELMHORST RELATIVE HUMIDITY Meter Kit

### DI.4000.RH

- RELATIVE HUMIDITY Meter
- Ten 2" sleeves DI.2200.20
- 1 Humidity probe w/cable DI.2500.05
- Carry case

### **and INCLUDES:**

- 1 Drill bit DI.625.DRILL
- Wire brush
- Vacuum nozzle
- Salt Solution 75% DI.SALT.75



taylortools.com  
303-371-7667

# Relative Humidity Testing Using In-situ Probe

## Site Conditions

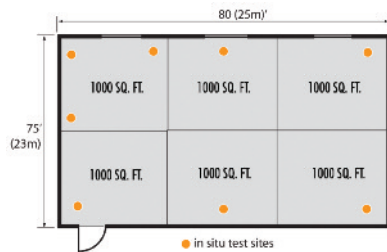
For all moisture testing, the site should be acclimated to normal use conditions:

- 65°-85°F (18°-30°C)
- 50% (± 10%) relative humidity (RH)

Maintain these conditions 48 hours prior to and during testing.

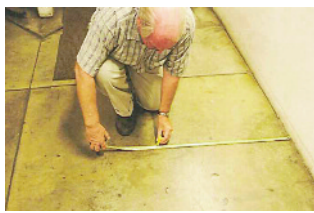
Number of tests required:

- 3 tests for the first 1000 sq. ft.
- 1 additional test for each additional 1000 sq. ft.



## Test Placement

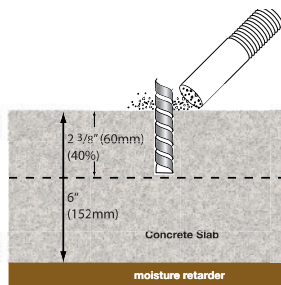
- Spread tests out across the entire area and within 3 feet of each exterior wall.
- Use the hand-held TOTAL CHECK or other surface meter to determine high moisture areas for test locations.
- Allow for traffic patterns.



## Drill Hole

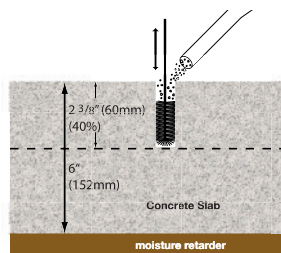
With a 5/8" diameter drill bit, drill a hole to a depth equal to 40% (± 1/4") of the thickness of the slab. (For slabs that dry from top and bottom, drill to 20% of the thickness of the slab)

Drill the hole dry (do not use liquid lubricant) and vacuum the concrete dust while drilling.



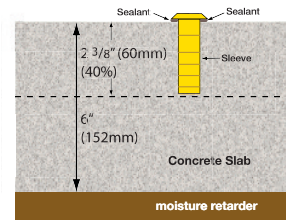
## Clean Hole

When the hole has been drilled to the proper depth, use a wire brush and vacuum nozzle to clean the hole of all concrete dust.



## Insert Plastic Sleeves

Sleeves are 2" (51mm) in length for standard 6" thick slabs. For 8" (203mm) slabs, order 3" (76mm) sleeves.



## Equilibration

Insert the plastic sleeve after applying a sealing material around the rim of the cap and install the sleeve cap. Allow 72 hours before taking a reading (per ASTM requirements). The probe can be inserted at any time during this period for a preliminary reading but we recommend that probes not be exposed to the hostile conditions for more than 2 to 3 hours. The corrosive environment in the hole can affect the performance and accuracy of the humidity probe with prolonged exposure.

## Calibration Check

ASTM 2170-09 states that, unless the probe is new and unused, the calibration shall be checked within 30 days of use. (Revisions to 2170 are being considered to change the frequency to a longer period of time).

Probes can be tested by inserting into test salts for 1-2 hours and then taking a reading.



## Measurement

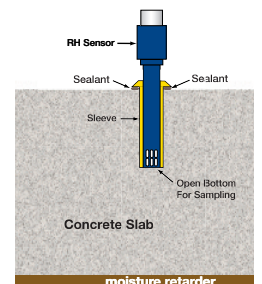
Probes can be placed after the site is prepared. It is recommended that probes are exposed long enough to equilibrate (30 minutes or more). Do not expose probes to high moisture levels (94%+) for long periods.

Equilibration is reached when readings do not drift more than 1% in 30 minutes.

Take humidity readings to the nearest percent and temperature to the nearest degree and record.

Record the ambient humidity and temperature in the vicinity of the test site (ASTM requirement).

Recheck probe calibration when conditions indicate high (94%+) moisture levels to ensure that probes have not been damaged.



## Record Results

Forms available at [taylortools.com](http://taylortools.com)

In Situ Probe Site Result Log		reference to ASTM E 2170-09	
PROJECT OR MOISTURE HUMIDITY IN CONCRETE			
Name and address of client		Agency/Title	
Location	Reference	Moisture (%)	Temperature (°F)



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