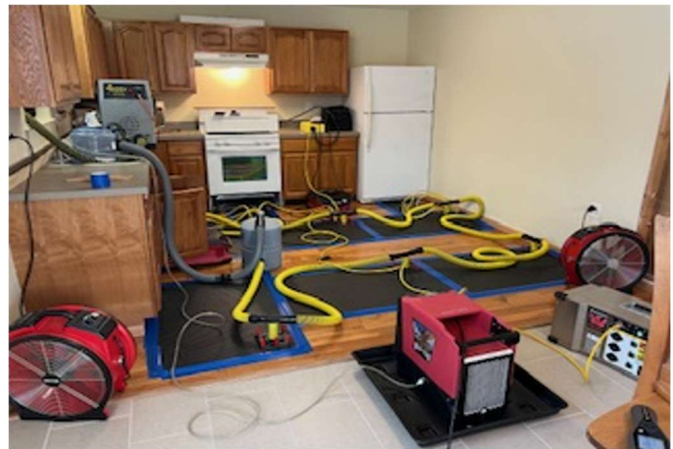


How to Take Moisture Content Readings of Hardwood Floors

Wood & stone have been used in the construction of homes since prehistoric times, but wood needs a little more attention due to being more susceptible to moisture issues than stone. Wood naturally expands and contracts depending upon ambient air conditions. Have you ever had a wood door or drawer stick on a humid day, but shut just fine on a dry day? Moisture is continually going into and out of wood and because it is an organic food source for mold, we need to make sure it gets dried quickly and properly when it gets wet.



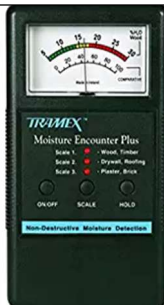
When drying hardwood flooring you have 2 options for taking moisture content readings, Pin-Type Meter or Pinless Meter. The Pinless or Non-Invasive/Non-Penetrating Moisture Meter does NOT measure actual moisture content; rather, they measure moisture presence within its depth through conductance measurement. This means **the Pinless Meter can be helpful to "scan" the material to identify if it "might" be wet but is not a conclusive way to show it is wet or it is dry. It does NOT give you true moisture content.**

Whereas **the Pin-Type Meter can provide a conclusive moisture content reading to measure the moisture content and if was dried to a state that will inhibit microbial growth**, which is critical in the restoration industry to avoid allegations of incomplete drying or causing mold. Pin-Type or Invasive/Penetrating Moisture Meters are best because their readings provide a quantitative measurement, meaning they tell you the moisture content (as a percentage) in the wood you're testing. For example, 10% Moisture Content (MC) means 10% of the wood's weight is water. With these readings, you'll have the best idea possible about whether the wood or other material being tested has excessive moisture or is within an acceptable range.

Always take photos of final MC readings to document reached drying targets! **There is a misconception that you should put holes in the hardwood planks to obtain accurate readings, and this is not true.** You need to simply touch the pins to the surface of the wood. At worst, your pins should leave barely noticeable indents on the wooden surface. Also, you should take multiple readings to get the most accurate picture of the wood's moisture content. I recommend recording a reading for every 50 SF of hardwood floor showing each 50 SF quadrant on a Moisture Map as Quadrant A, B, C, D, etc. This will make it easier for your customer and other third parties to identify you dried properly and where you took your readings.

Don't forget to take photos of your final readings of the subfloor from below, if possible, to show **subfloor under the hardwood planks are within 4% of hardwood planks, as long as less than 20% moisture content, because at 20% moisture content or above destructive microbial growth can occur on wood materials.** Best to target around 15% moisture content to be safe for non-destructive microbial growth can occur from 17%-19% on wood. Also, the species of the wood and the temperature of the wood can influence the moisture content to some degree.

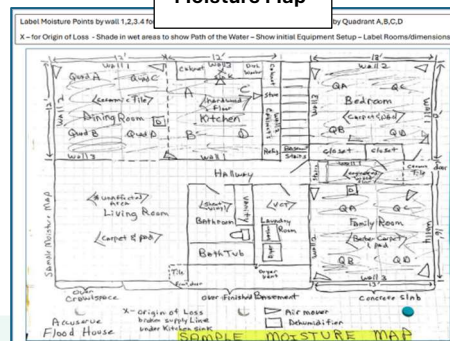
Pinless Moisture Meter



Pin-Type Moisture Meter



Moisture Map



In Summary, use the non-invasive/non-penetrating moisture meter to "scan" the hardwood floor to see if it might be wet, but then use an invasive/penetrating moisture meter to provide accurate moisture readings to ensure you dry the hardwood planks to a state that would inhibit the growth of mold. Only touch the pins to the surface of the wood and record readings on a Moisture Map to show where you took your readings. Finally, take photos of your final penetrating moisture content readings to prove you left the wood at an acceptable moisture level.

MEET ED

Instructor Ed Jones has more than 30 years of experience in the industry, has the title of Master Water Restorer, is an Institute of Inspection Cleaning and Restoration Certification (IICRC)-approved instructor, and has served on the S500-2021 consensus body committee to develop the most recent standard.



Happy Drying! Ed

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