

Documentation of Moisture Content Readings—Why So Important?

A big part of Accuserve's value proposition to our clients and its policyholders, at least in the water damage mitigation division of our business, is to not only prequalify and dispatch the most capable and best performing certified mitigation contractor (restorer), but to also hold them accountable to American National Standards Institute-approved industry standards to ensure the policyholder's home or business was dried properly and the affected materials are returned to pre-loss conditions that will not promote microbial growth from that water-loss occurrence.

To prove materials are "dry," the restorer determines "drying targets" that are reflective of what each material's normal moisture content or "dry standard" would be. It is all about preventing mold growth in structures and ensuring we have the proper documentation in the claim file that proves the restorer reached the drying targets of all affected materials being saved. The Drying goals may be at, or above the dry standard and should be documented as they relate to specific materials.

Dry Standard per the S500-2021 is "a reasonable approximation of the moisture content or level of a material prior to a water intrusion.

The restorer should establish drying goals that would be expected to:

- Return structure, systems, or contents to an acceptable condition;
- and Inhibit microbial growth

When establishing drying goals to return structure, systems, and contents to an acceptable condition, it is recommended that restorers consider:

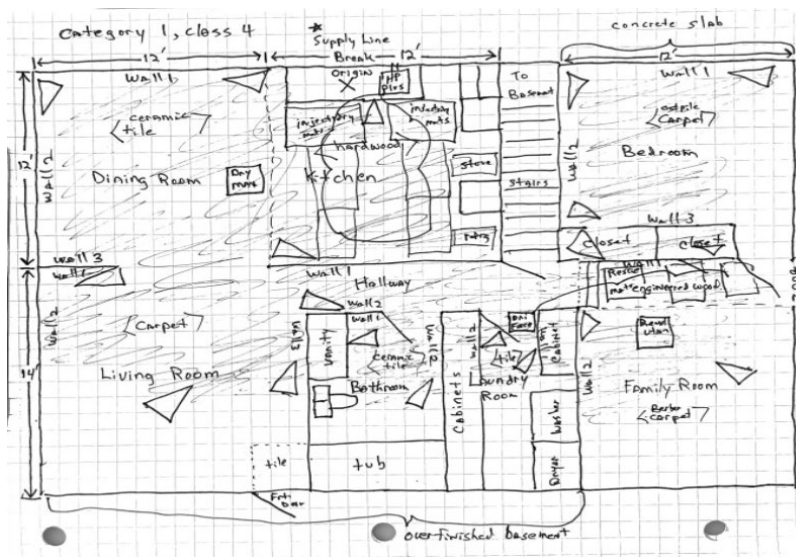
- The agreed-upon scope (i.e., mitigation or restoration);
- The dry standard;
- Project complexities and limitations;
- Assembly composition and complexity;
- Expected conditions after completion of restorative drying;
- Prevailing or seasonal weather conditions;
- Historical data for the region;
- Building assembly installation requirements or recommendations; and
- Published resources (e.g., sorption isotherms, USDA Forest Product Laboratory, Australian Timber Flooring Association or ATFA).

It is important to note that the USDA Wood Handbook states, "Softwood lumber intended for framing in construction is usually targeted for drying to an average moisture content of 15%, not to exceed 19%." The reason for this is destructive mold growth can occur on wood materials at 20% moisture content or above.

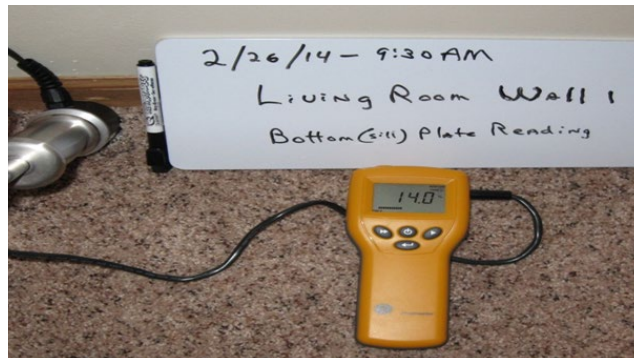
This doesn't mean we always set the dry target for wood materials at 15%, the restorer still gets to set the dry target, but it does show that there is not a risk for mold below 20% moisture content on wood so you would typically not need to charge extra days of drying to go from 15% to 10% or 12%.

Whenever there are allegations of incomplete or improper drying, it is important to obtain photos of the moisture meter reading with a time/date stamp on the photo and clear labeling that shows where the reading was taken. This is why I stress ALWAYS taking photos of ALL final moisture content readings on each material you are drying so you have proof that you left the material in a state that would prevent microbial growth from that water loss occurrence. These photos combined with your DAILY dry logs and a detailed Moisture Map will protect all materially interested parties and prove that you dried materials properly.

Sample Moisture Map



- **Identify all Moisture Points by Room/Wall/Floor/Ceiling and number or letter e.g.,**
Dining Room/Wall 1/Sill Plate /15%/Day 3
or Dining Room/Plywood Subfloor/
Quadrant A/22% Day 2.
- **Your Moisture Content Record, Readings Photos, and Moisture Map help tell your story** on how you dried materials properly and protects all materially interested parties.



Don't forget that electrical moisture meters are only calibrated for wood materials and when taking moisture content readings on drywall, plaster, or any material other than wood, the readings are only qualitative, not quantitative and can only be used to show you dried that material back within 10% of dry standard. For this reason, it is critical that the type/brand/model of moisture meter be recorded EVERY time and the simplest way to do this is provide photos of your readings. I recommend taking first day and last day photos of each reading of a material you need to dry. You should also take a photo of your dry standard reading, if possible, to show the moisture reading of that material before it got wet.

Finally, I recommend providing photos of any materials that might be close to the areas that got wet, but that didn't get wet. For example, I saw a file where the refrigerator ice maker line break got some of the kitchen cabinets wet and they had to be removed due to mold, but the restorer said the kitchen island did not get affected. Later a different reconstruction contractor alleged that they found mold under the kitchen island and that the restorer must have missed it. It would have been great to have a photo of that kitchen island proving it didn't get wet since it was in close proximity to the water damage.

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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