

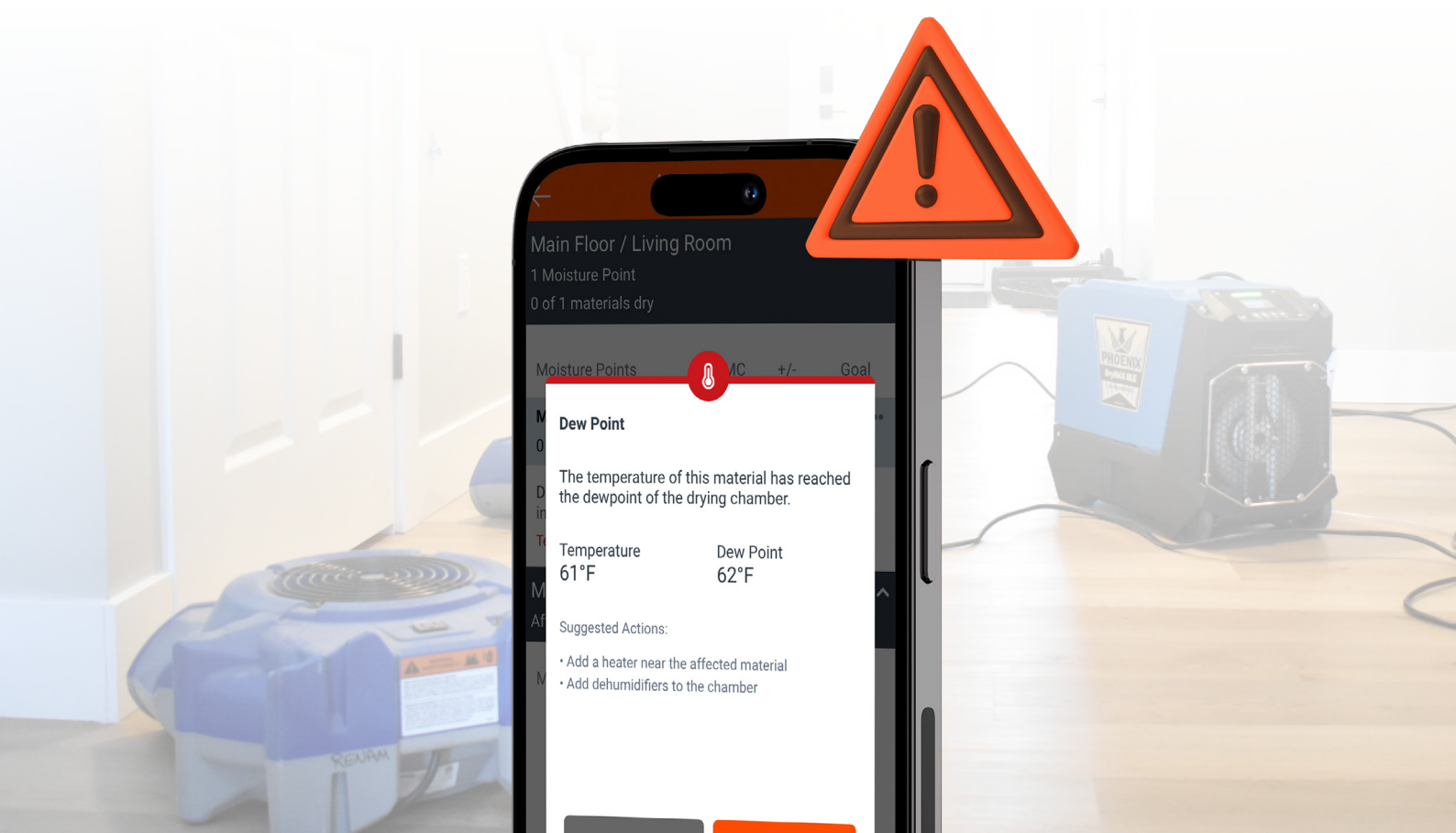
Guide to **Hydro Alerts**

What are alerts?

Hydro has a series of built-in warnings to help ensure your drying job is staying on course.

What types of alerts are there?

Here's a breakdown of the different types of alerts you may come across during your moisture documentation, and what they mean.



DEW POINT DIFFERENTIAL ALERT

What is this:

The app will alert you if the temperature reading for a material exceeds the dew point differential you set up under chamber settings.

Example:

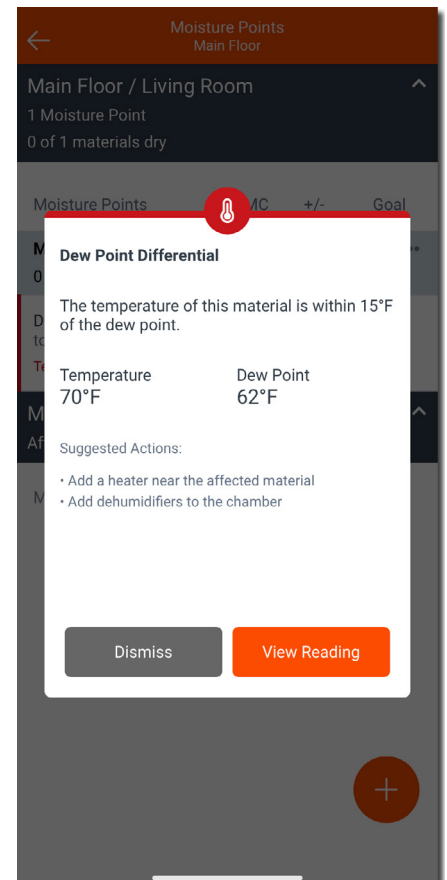
- *WHEN* Dew Point Differential is set to 15°F (8.3°C)...
- *IF* the surface temperature of the material comes within 15°F (8.3°C) of the dew point.
- *THEN* a dew point differential alert is triggered.

Why it's important:

When you exceed the dew point differential, you're entering dangerous territory. If you continue down this path, you could end up reaching dew point, which is NOT GOOD.

Corrective action:

Add heat to affected material and/or add dehumidifiers to the chamber.



DEW POINT ALERT

What is this:

The app will alert you if the temperature of a material is equal to or less than the dew point of the affected area reading. Dew point is calculated based on a number of variables, including air chamber temperature, relative humidity of the chamber, and the surface temperature of the material.

Example:

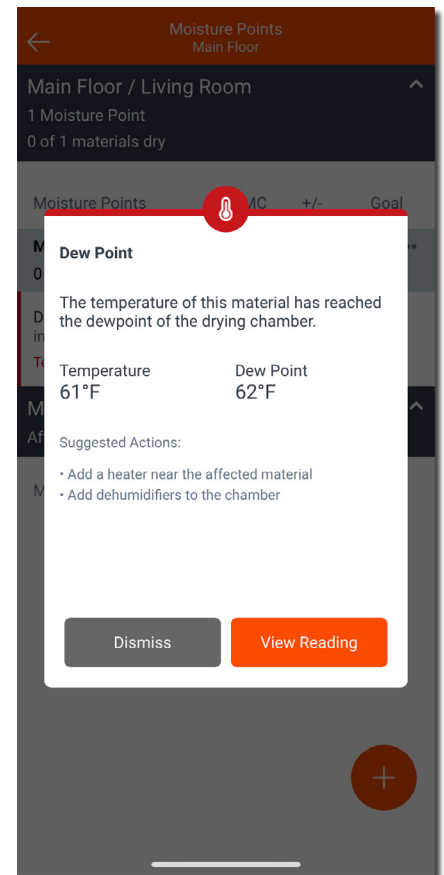
- *WHEN* a material has a dew point of 62°F...
- *IF* the surface temperature measurement reaches 62°F or lower.
- *THEN* a dew point alert is triggered.

Why it's important:

Dew point is the temperature in which water vapor is no longer vapor, and changes to a liquid form (condensation). You DO NOT want condensation on the materials you are drying as it will extend the drying time and more dangerously, create an opportunity for mold and microbial growth.

Corrective action:

Add heat to affected material and/or add dehumidifiers to the chamber.



TEMPERATURE ALERT

What is this:

The app will alert you if the RH readings in your chamber go outside of the temperature range you set up under chamber settings (either higher or lower).

Example:

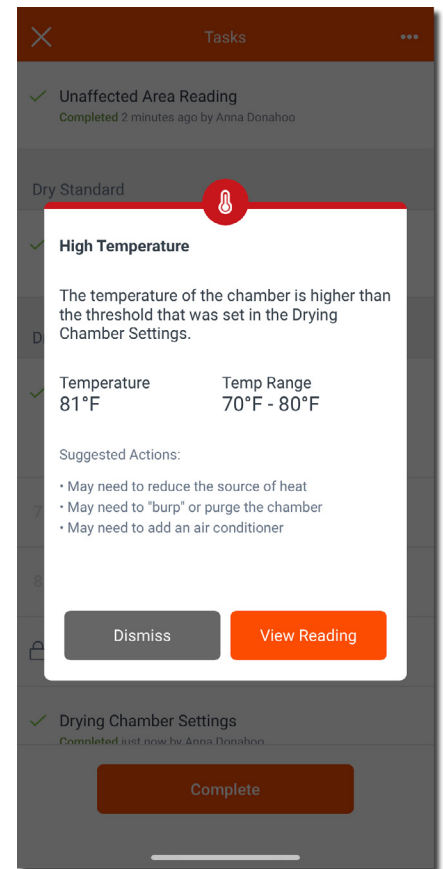
- *WHEN* Temperature Range is set to 70°F - 80°F (21.1°C - 26.7°C)...
- *IF* an Affected Area Reading in the chamber has a temperature of 70°F (21.1°C) or lower, *THEN* a low temperature alert is triggered.
- *IF* an Affected Area Reading in the chamber has a temperature of 80°F (26.7°C) or higher, *THEN* a high temperature alert is triggered.

Why it's important:

Air temperatures in the chamber impact your drying efforts. Too high, and you can create secondary damage to the environment (warping furniture, damaging collectibles, etc). Too low, and condensation can form on the materials.

Corrective action:

Remove or add heat from the drying chamber.



RELATIVE HUMIDITY ALERT

What is this:

The app will alert you if the RH readings in your chamber go outside the range you set up under chamber settings (either higher or lower).

Example:

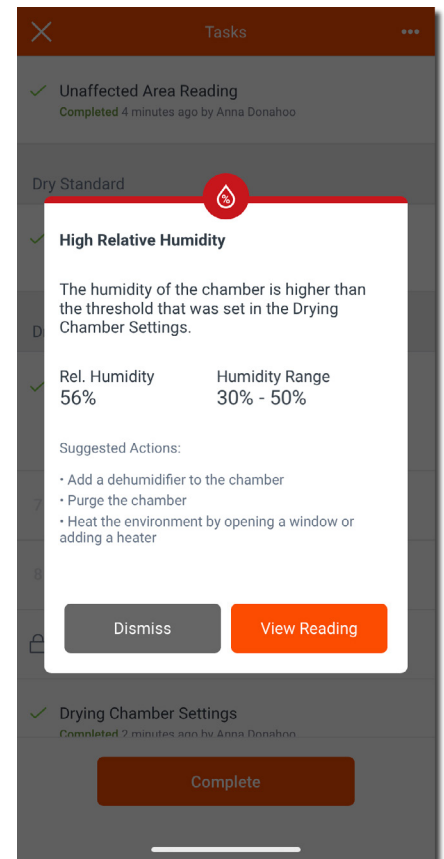
- *WHEN* Relative Humidity Range is set to 30% - 50%...
- *IF* an Affected Area Reading in the chamber is 29% or lower, *THEN* a low RH alert is triggered.
- *IF* an Affected Area Reading in the chamber is 51% or higher, *THEN* a high RH alert is triggered.

Why it's important:

Restorers care primarily about preventing mold or other microbial growth. Secondly they care about preventing damage to contents and materials in the building. Too high (>70%) can result in mold or other microbial growth. Too low (<30%) can result in issues like cracked wood, shrinkage of materials, damage to taxidermy, paintings, artwork, plants, etc.

Corrective action:

Add or reduce dehumidification in the chamber. Add or reduce dehumidification in the chamber.



LOW GRAIN DEPRESSION ALERT

What is this:

The app will alert you if the grain depression of a dehu falls below 5gpp.

Example:

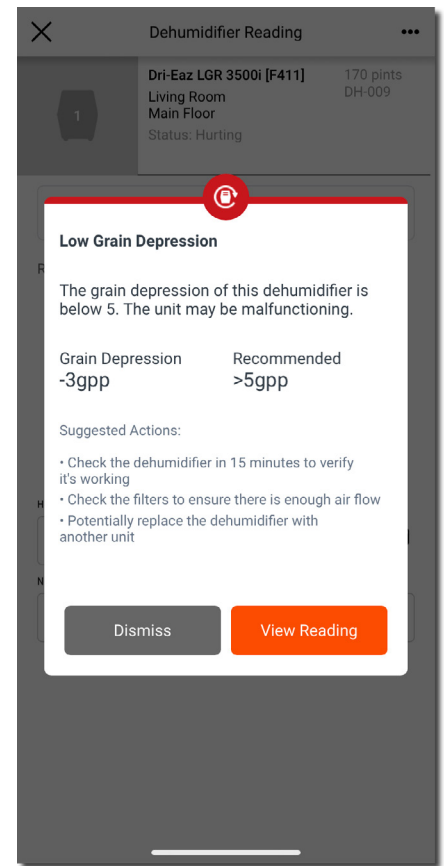
- *WHEN* a dehu reading is entered...
- *IF* it yields a GPP measure of less than 5.
- *THEN* a low grain depression alert is triggered.

Why it's important:

A low grain depression (between 0-5GPP) is a metric often used by reviewers to question the need or effectiveness of a dehu. Many reviewers will not pay for a dehu on site that registers a GPP of 5 or less. A negative grain depression (less than 0 GPP) can indicate a dehu is malfunctioning or is actually putting moisture back into the room. Ideally, the grain depression for each dehu will be above 5gpp.

Corrective action:

- Check the dehumidifier in 15 minutes to verify it is working.
- Check the filters to ensure there is enough air flow.
- Remove the unit for inspection and/or service.
- Replace the unit with another dehumidifier.



UNDERSIZED EQUIPMENT ALERT

What is this:

The app will alert you if you place less than the recommended amount of equipment.

Example:

- *WHEN* 486 pint capacity is recommended...
- *IF* you place too few dehumidifiers to meet the pint capacity for the chamber.
- *THEN* an equipment recommendation alert is triggered.

Why it's important:

You want to use the appropriate amount of equipment to ensure that drying doesn't take too long. You also want to be able to document the justification for undersizing the equipment. For example, there might be a lack of power on site to meet the equipment requirements. This is important to document in order to justify additional days of drying.

Corrective action:

- Add more equipment until the recommendation is met.
- Make a note explaining why the recommendation is not being met (i.e lack of power, etc).

