

It's not the Relative Humidity; It's the Grains of Moisture!

Many technicians are confusing Relative Humidity with how much moisture there is in a home. Relative Humidity is only a percentage of Humidity with respect to the temperature NOT the total moisture..

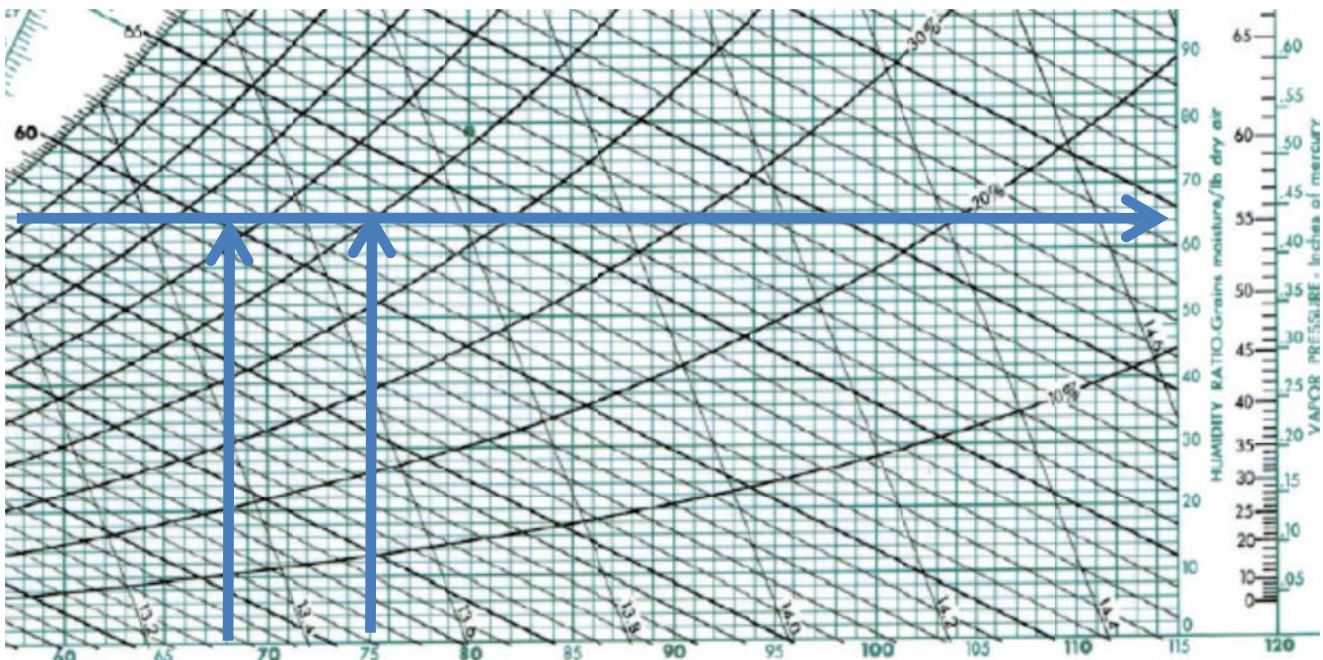
I often teach that the Return air Relative humidity may be 50% but the Supply air is much closer to 95% because as you lower temperature the Relative humidity goes up. This boggles techs minds because they think of their AC as a Dehumidifier.

Let's prove that concept here today...

Most homeowners want 50% Relative Humidity because that is what they read on the internet. That is fine if we are talking 75 degree dry bulb temperature. (Vertical Line on the right) That interception of 75degree dry bulb and 50% RH allows you to draw a horizontal line to the GRAINS OF MOISTURE line on the right side of the page. (THIS is the real amount of moisture you have in the home) Note that it is about 64 grains of moisture.

If your customer wants to run their AC at 75 they will get 50% with 64 grains of moisture in the home... BUT... if the lower the thermostat to 68 degrees (Vertical Line on the left) you can see that the upward sweeping Relativity Line is now indicating 63% RH.... Lower temp higher RH%

The only way you can reduce RELATIVE HUMIDITY is to lower the GRAINS OF MOISTURE thus lowering the RELATIVE HUMIDITY or.... raise the temperature...



Rick Kincel
Coburn Supply Tech Services