



Wesley Acoustics

Est 2003

Humidity Factsheet

Wesley Acoustics guitars are hand crafted solid-wood guitars and so are susceptible to the effects of humidity changes in the environment and must be cared for the same as any quality solid wood guitar. Cheaper guitars often use layers of thin wood laminated together. While stronger and less susceptible to changes in humidity, the sound just doesn't compare to an all solid-wood guitar. Fortunately, properly caring for your solid-wood guitar is not difficult, but does require some additional care over plywood guitars.

While a guitar can become too wet or too dry, getting too dry is probably the more common concern. Air can naturally hold a certain amount of moisture, warm air capable of holding more. That's why during the summer months humidity outside is higher than during the winter. Heating and cooling units in most of today's houses have contributed to the concern around guitar humidity as they affect the amount of moisture in the house's air.

During the summer months when air conditioners are running, the air conditioner works much as a small dehumidifier unit. They chill the air and dump the water outside the house. For this reason, over humidifying guitars is less of a hot issue than over-drying. The amount of humidity even with this effect taking place is generally safe for guitars. Symptoms of a guitar that is too wet include an unusually swollen top or back and so often results in higher action than the guitar was originally setup. There are a variety of other situations that cause high action though, so don't assume that these symptoms mean a overly-humidified guitar. Just be aware of the environment and if it is overly wet (70-80% or more) for several months at a time, consider getting a dehumidifier.

In contrast, the winter months usually already have a low relative humidity. In addition, the heat gets turned on in homes and raises the air temperature and lowers relative humidity. You're probably familiar with terms dew point and relative humidity from weather forecasts. These are related terms as the closer the temperature gets to the dew point, the higher the relative humidity. Since the air is being heated by a furnace, it raises the temperature and increases the difference between dew point and current temperature, thus lowering the relative humidity. In these conditions the furnace can cause humidity to fall as low as 5-10% in homes, a devastating environment for your nice guitar.

When a guitar gets too dry, the wood contracts. This can cause the top to sink, the string action to lower, and ultimately results in increased string buzzing. Prolonged low-humidity environments can cause so much contraction in the wood that the guitar may begin to literally rip itself apart, cracking or splitting along the grain or glue joints.

Wesley Acoustics are assembled in a controlled 45-50% relative humidity environment. This allows them to exist in a variety of conditions, but some additional care is still require for your guitar to lead a healthy life.

Fortunately, all you need to properly handle this is a few best practices.

- 1) Be aware of the humidity conditions for your area. Do you live in a really wet or dry area?
 1. When winter comes around and you turn on the heat, make sure to start using a guitar humidifier. They run about \$10 and will need to be refilled about every 1 to 2 weeks depending on conditions.
 2. When summer comes and you start running your air, be aware of humidity conditions in the house. If you live in an area with higher humidity, stop using your guitar humidifier. If you live in low humidity areas like the mid-West, you may need to continue using your humidifier.
- 2) Keep your guitar stored in it's case. The case creates a controlled environment and conditions inside the case will change slower than outside, protecting your guitar.

Additional information about the effects of humidity can be found on a variety of other guitar-related sites on the Internet and most dealers of fine guitars will understand the effects as well. With these precautions and a little education about the effects of humidity you will prolong your instruments life and maintain its unique sound for many years to come.