

HUMIDIFICATION

INFORMATION BULLETIN

HUMIDIFICATION OF THE SHOWROOM CAN BE COST EFFECTIVE

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You would like to fulfill your wish and purchase a high-quality guitar? Or you already have your dream guitar? To ensure that your instrument is exposed to optimal conditions at all times and thus remains well playable and can give you many wonderful moments, read this brochure carefully.

A thorough understanding of humidity and its effects on guitars is essential for any instrument. Many manufacturers of high quality solid wood guitars require their dealers to maintain safe humidity levels in their stores. You should force implement this at home as well! You can prevent your acoustic guitar from being at risk if the humidity in your home becomes too low or too high, thus voiding any warranty claims. The information in this guide is provided to help you gain and understanding of how to control humidity.

HOW DOES RELATIVE HUMIDITY AFFECT GUITARS?

Every organic, porous substance tries to equalize to the surrounding air, both in temperature and humidity. Wood also equalizes to the surrounding conditions. When wood takes on moisture, it swells, and when wood gives up moisture, it shrinks. This is a physical characteristic of wood. Fifty percent relative humidity is considered optimum for effective preservation of wooden objects like guitars. If the humidity in your store stays around 50% relative humidity, you minimize the risk that guitars will become damaged. We believe that if these levels are maintained in a music store, then the instruments in inventory will benefit by remaining stabilized and close to factory specification.

WHAT CAN YOU DO?

Guitars show symptoms of improper moisture content, and these symptoms can be detected. Remember, just because a guitar hasn't cracked yet doesn't mean it's in good condition. Keeping a watchful eye on your guitar will help you maintain proper humidity levels and keep your guitar in perfect shape.

You will find that your high quality acoustic guitar is at risk if the humidity gets too low or too high.

LOW HUMIDITY

Low humidity is usually more of a problem. The guitar slowly dries, the wood slowly shrinks and the top slowly lowers, bringing the strings along with it. With no other way of relieving the stress, the wood cracks. The obvious answer is to use a humidifier. The largest problem lies in determining how humid you should make the air, so you will need a hygrometer to measure humidity. Hygrometers are available in various price ranges with less expensive models sacrificing accuracy.

EXCESSIVE HUMIDITY

Guitars that are exposed to excessive humidity begin to swell. When they reach their limit, seams separate, bridges become loose and action is unbearable. Humidity can be subtracted with a dehumidifier. In the summer, when it is humid outside and you air-condition your rooms, you are in effect dehumidifying your home. In some areas additional dehumidification may be required, and there are desiccant and refrigerant varieties of dehumidifiers available.

TYPICAL EFFECTS OF HUMIDITY CHANGES ON GUITARS

AT 60% RELATIVE HUMIDITY OR ABOVE

High levels of humidity can be detrimental as well. Typical symptoms are tarnished frets and strings, corrosion to nickel, chrome or gold plating material on tuning machines, swelling of the top and other wood components, high action and loose braces and bridges.

AT 50% RELATIVE HUMIDITY

Your guitar is in good condition.

AT 40% RELATIVE HUMIDITY

Guitars may begin to show sharp fret ends. The area of the fingerboard that extends over the body may begin to develop a small crack from the 12th or 14th fret down toward the soundhole.

AT 35% RELATIVE HUMIDITY

Tops begin to shrink; the surface of the soundboard may look and feel rippled or "dried in." Sharp fret ends will be more evident. Instruments just arriving in the store do not show these symptoms since they have not been exposed.

AT 30% RELATIVE HUMIDITY

A guitar or two may crack, but even those that are not cracked have lost a considerable amount of moisture and the tops are sunken. Often a higher saddle is necessary to make the guitar playable.

AT 25% RELATIVE HUMIDITY

More guitars crack. A lot of fret filing is needed.



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