

Use of Woods in Acoustic Guitars

Sitka Spruce

Sitka Spruce is the most popular wood for guitar tops today. A native of the Pacific coast from Alaska to northern California, Sitka Spruce is a strong, straight-grained, even textured softwood. Sitka Spruce is sometimes called Silver Spruce. Because of its large size (trees grow to nearly 300 feet in height), straight grain, and elasticity, Sitka Spruce is valued for many applications requiring strong, light weight lumber. Color is creamy white to light pink or brown heartwood. A very tough wood that resists minor dings and scratches very well.

Mahogany

Mahogany is a medium-dense wood that has superior sustain and excellent resonance. It produces a round, rich, warm tone that has plenty of high-end sheen and good mid-range presence. The mahogany body's chambering also enhances its mellow acoustic resonance and contributes more to the midrange content. Mahogany is much lighter than rosewood, koa or maple, and it gives out a nice, loud sound that puts an emphasis on clear, bright trebles. Mahogany has relatively high velocity of sound, which contributes to overtone coloration.

Maple

A hard dense wood. Great for a bright sounding guitar. Has longer sustain, and more bite. Different species of maple, such as big leaf, sugar, and bearclaw, tend to be more acoustically transparent due to their lower response rate and high degree of internal damping. This allows the tonal characteristic of the top to be heard without the addition of significant tonal coloration. Maple has less overtone than rosewood or mahogany.

Indian Rosewood

Indian Rosewood is known for its high response rate and broad range of overtones, and is also characterized by strength and complexity in the bottom end and an overall darkness of tone in the rest of the range. Like mahogany, rosewood gets more high end sizzle and deeper on the low end. While it has a good midrange, when you add more of a broad stretch, you get less of a perception of midrange due to more exaggerated lows, and highs. Strong mids and highs also contribute a richness of tone to the upper registers. Rosewood gives you a bigger sounding guitar.