

Design Your Custom Guitar

Designing a custom guitar that fits you can be a daunting task. Body styles and sizes vary widely while the list of available tonewoods seems to be changing every day. A basic understanding of the variables which affect the voice and projection of an instrument will help you focus on the the best choices for your playing style.

Consider these questions as you design your custom guitar.

What style of music do you play?

Do you have a light, medium or heavy attack?

Will you be singing while playing your guitar?

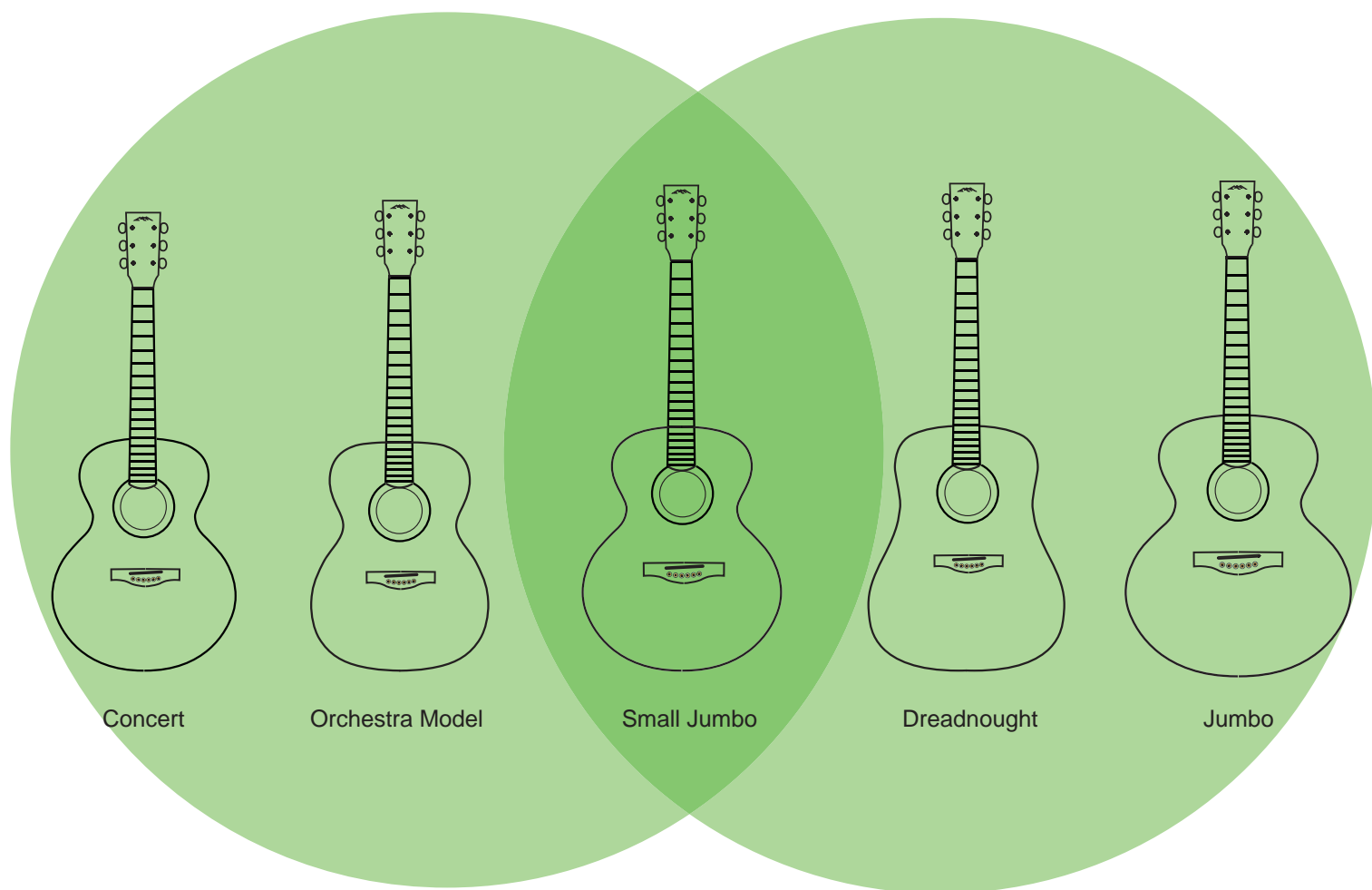
What tonal properties do you prefer?

Do you play higher up the neck?



#1. Choose The Guitar Shape That Best Fits You

Your personal size can have a big influence on the guitar you choose. Smaller guitars can be more comfortable to hold and a bigger guitar may be more suited to a larger person. Generally smaller guitars tend to sound brighter with more treble response, while bigger guitars can have potential for greater bass response. One may expect a larger guitar to have a big sound and a smaller guitar to be diminished in volume but this is not necessarily the case. The experienced luthier can make a smaller guitar shockingly powerful in volume.



Concert

Orchestra Model

Small Jumbo

Dreadnought

Jumbo

Finger Style

All Around

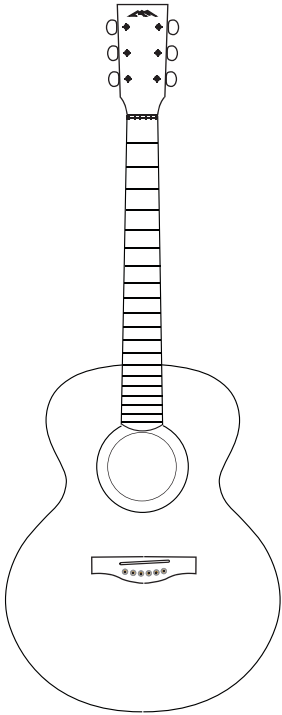
Rhythmic

Smaller body styles are popular for fingerstyle playing, and tend to have more high-end treble response.

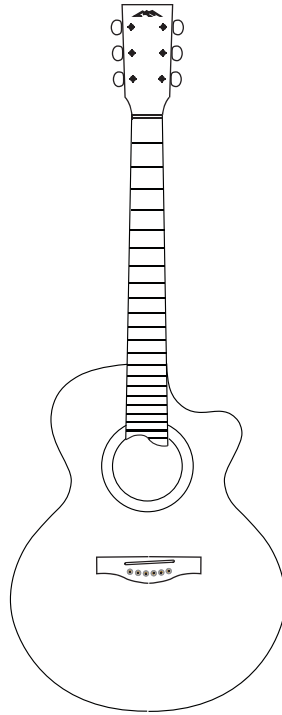
Midsized guitars are well balanced across all notes making them suitable for a variety of playing styles.

Larger body styles are popular for aggressive strumming and have more resonate bass frequencies.

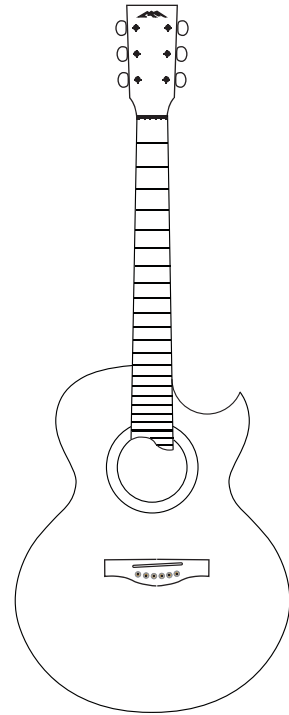
#2. Options



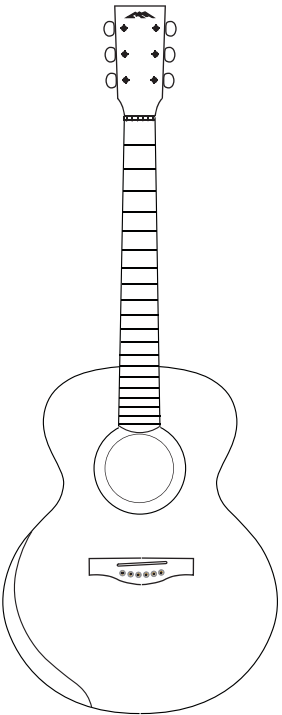
Full Body



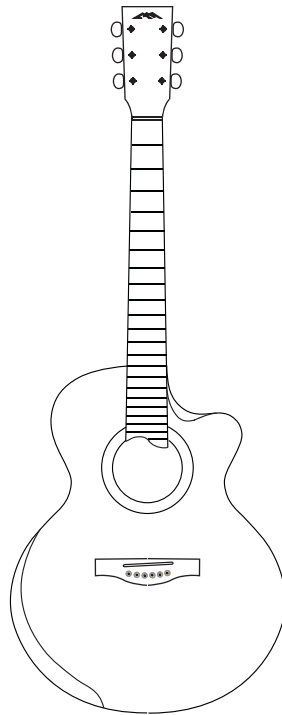
Venetian Cutaway



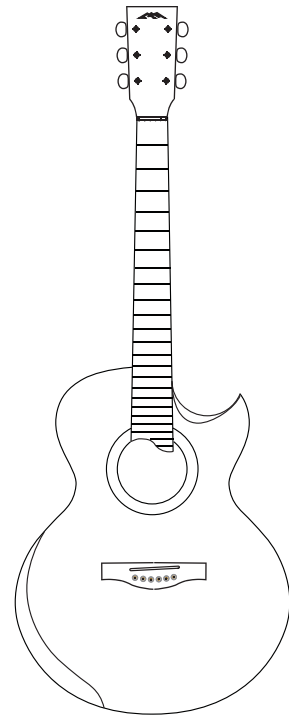
Florentine Cutaway



Full Body
w/ Arm Bevel



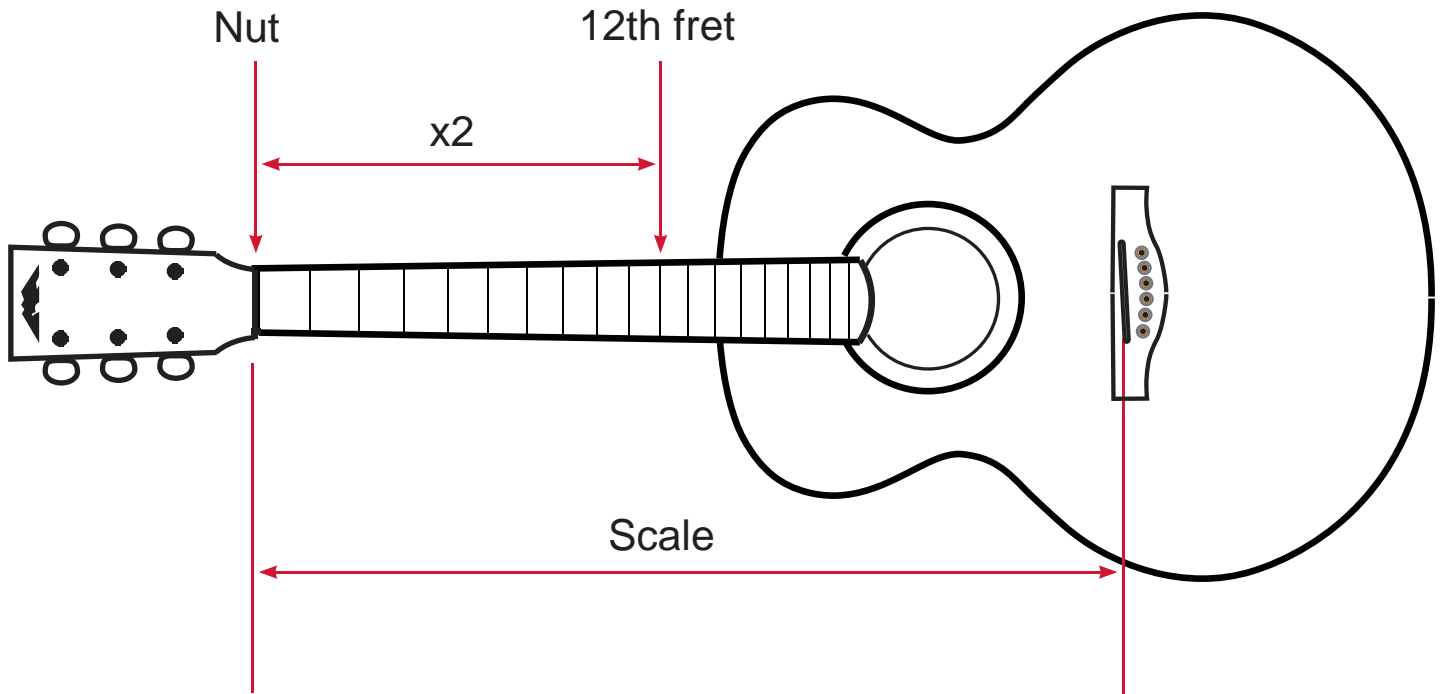
Venetian Cutaway
w/ Arm & Cutaway Bevel



Florentine Cutaway
w/ Arm & Cutaway Bevel

#3. Choose Scale Length

Scale length is calculated by measuring the distance from the nut to the center of the 12th fret and then doubling that measurement.



Strings tuned to the same pitch have greater tension on longer scales.

Shorter scale lengths are lighter to the touch and easier to fret while longer scale lengths are stiffer with more volume.

Typical scales for acoustic guitars are:

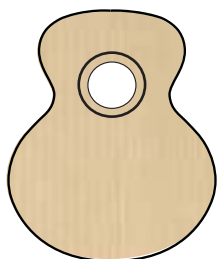
Short - 24.9" (smaller guitars)

Standard - 25.5" (medium size guitars)

Long - 25.7", 26.0" (alternate or dropped tunings)

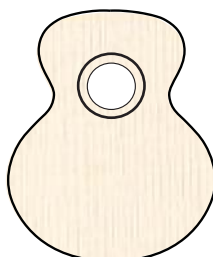
Baritone - 27.5", 28.5" (larger guitars)

#4. Top Woods - Soundboards



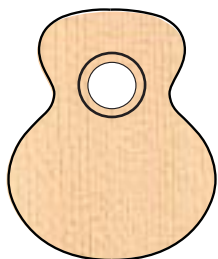
Adirondack Spruce

- Has lots of “Headroom”
- High Overtone content
- Strumming, Flatpicking, Agressive Fingerpicking



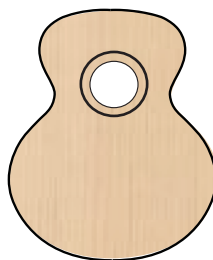
European Spruce

- Strong fundamental
- Good Overtone content
- Strumming, Flatpicking, Agressive Fingerpicking



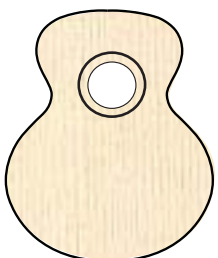
Sitka Spruce

- Punchy direct sound
- Lower Overtone content
- Strumming, Flatpicking



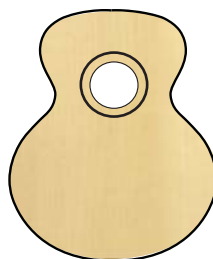
Port Orford Cedar

- Has lots of “Headroom”
- High Overtone content
- Strumming, Flatpicking, Agressive Fingerpicking



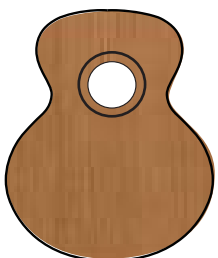
Englemann Spruce

- Warm & Mellow
- High Overtone content
- Light Strumming, Fingerpicking



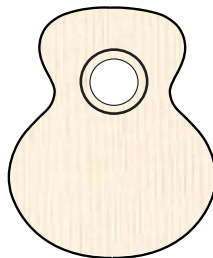
Alaskan Yellow Cedar

- Strong Bright Attack
- High Overtone content
- Great Sustain
- Strumming, Flatpicking, Agressive Fingerpicking



Western Red Cedar

- Warm & Expressive
- High Overtone content
- Great for Celtic style, Fingerpicking



Carpathian Spruce

- Similar to Adirondack
- High Overtone content
- Sensitive to ligh touch
- Strumming, Flatpicking, Fingerpicking



Redwood

- Similar to Cedar but Crisper, w/more Punch
- Strong Overtone content
- Great Sustain
- Medium Strumming, Fingerpicking



Sinker Redwood

Old-Growth Redwood logs reclaimed from the depths of Northern California rivers

#5. Back & Sides

Resonant Woods

- Complex Overtones
- Fast Response
- Piano-like Bass
- Low Dampening



African Blackwood



Zircote



Cocobolo



Madagascar Rosewood



Bubinga



Indian Rosewood



Macassar Ebony



Brazilian Rosewood

Harder Woods

- Transparent Quality
- Clear Tone
- Brighter
- Predictable Dampening



Cherry



Maple



Myrtlewood



Ovangkol

Lighter Woods

- Subdued Overtones
- Strong Fundamental
- Dry, Woody, Warm
- Higher Dampening



Koa



Mahogany



Quilted Sapele



Claro Walnut

#6. Pairings

Each guitar, as each person, has its own voice. These are just a few of the seemingly endless combinations possible.



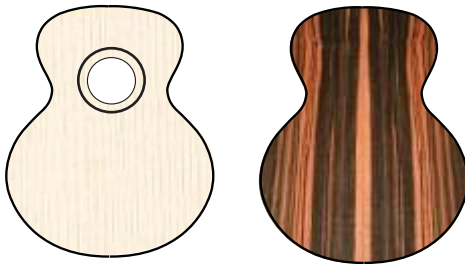
Sitka Spruce / Indian Rosewood

A long time favorite combination for a variety of playing styles. Possibly the most versital combination.



European Spruce / Quilted Sapele

A striking wood and sonic combination which works well in a smaller size guitar.



Carpathian Spruce / Macassar Ebony

A great combination for solo finger style. Immediate crisp response yeilding complex lingering overtones.



Englemann Spruce / Cocobolo

Also great for solo fingerstyle this combination responds easily to a light touch.



Western Red Cedar / Claro Walnut

Great for Celtic style, fingerpicking and voice accompaniment.



Port Orford Cedar / Myrtlewood

Good for voice accompaniment. Strong fundamental with limited overtone content.