



Regular maple (bottom) and Sonowood Maple (top)



Example of color variations with Sonowood Maple



Sonowood Spruce



Swiss Wood Solutions is a start-up company in fields of novel, wood-based materials and products. We provide pioneering product solutions which help to preserve endangered tropical woods and replace harmful plastics.

For musical instruments, we offer the innovative product **Sonowood®** made from European and North American wood species from sustainably managed forests. Sonowood matches the favorable properties of tropical woods and even outperforms them in terms of hardness, density and sound quality, while being a completely legal alternative.

Product advice and technical information:

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Web-shop: sonowood.ch



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Sonowood

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Sonowood®

In response to the ecological, ethical and legal concerns associated with the use of tropical woods in string instruments, Swiss Wood Solutions has developed the sustainable product **Sonowood®**.

Sustainable domestic European and North American woods are treated in an innovative modification process to such an extent that they achieve properties which equal those of tropical hardwoods. The outstanding hardness and density of Sonowood helps to ensure that your stringed instruments deliver the highest acoustic performance.

Sonowood advantages for the musician:

- Outstanding acoustic performance thanks to extraordinarily low damping and high sound velocity.
- Durability and scratch-resistance thanks to complete pore closure. Signs of wear and dirt are greatly reduced.
- Optimal playability thanks to a hard and smooth surface that nevertheless remains open to absorb hand perspiration.
- Support of sustainable, domestic forestry by use of an ecologically friendly material.
- No travel restrictions thanks to the avoidance of endangered wood species.

Sonowood advantages for the luthier:

- Authentic wood without any synthetic colours, resins or polymers added.
- Straightforward workability: Sonowood can be milled, particularly well and precisely. This makes it ideal for filigree components as well as inlays.
- Although being a very compact material with complete pore closure, Sonowood is easier to plane and shape than ebony.
- Sonowood can be sanded and polished very well.
- Reliable availability with constant quality.
- No trade restrictions and conservation of value thanks to the avoidance of endangered wood species.
- Leveraging your sales and marketing, as Sonowood is associated with the promotion of sustainable, domestic forestry and the protection of tropical resources.

What we offer for strings

Sonowood is available in **Maple, Spruce and Beech**. On demand we also provide other wood species. The wood species make up for an interesting and wide colour spectrum between light caramel (spruce), brown (beech) and mocca brown (maple).

Sonowood standard blank dimensions are available in our web-shop: sonowood.ch. For customized dimensions please contact us: info@swisswoodsolutions.ch

Sonowood fittings

Violins and viola: fingerboard, tailpiece, chinrest, peg and end button

Cello: tailpiece and peg

These fittings can be purchased through **our partners:**

- USA & Canada: Vermont Violins, vermontviolins.com
- Switzerland: W-fittings, w-fittings.com
- France: Bois d'Harmonie, boisdharmonie.net
- Germany: Berdani, berdani-shop.de

Sonowood Maple (*Acer pseudoplatanus*)

Density [kg/m ³]	1'200 – 1'400
Brinell hardness ^{a)} [N/mm ²]	> 80
Colour	Mocca
Dimensional stability (Diff. swelling [% per % moisture content change])	Height ~ 0.7 Width ~ 0.3
Damping (Log. Decrement)	~ 0.053
Sound velocity ^{b)} [m/s]	4'200 – 5'400
Elastic modulus ^{c)} [N/mm ²]	> 21'000

Sonowood Spruce (*Picea abies*)

Density [kg/m ³]	1'200 – 1'400
Brinell hardness ^{a)} [N/mm ²]	> 80
Colour	Caramel
Dimensional stability (Diff. swelling [% per % moisture content change])	Height ~ 0.75 Width ~ 0.33
Damping (Log. Decrement)	~ 0.04
Sound velocity ^{b)} [m/s]	5'000 – 6'300
Elastic modulus ^{c)} [N/mm ²]	> 30'000

Sonowood Beech (*Fagus sylvatica*)

Density [kg/m ³]	1'200 – 1'400
Brinell hardness ^{a)} [N/mm ²]	> 80
Colour	Brown
Dimensional stability (Diff. swelling [% per % moisture content change])	Height ~ 0.7 Width ~ 0.37
Damping (Log. Decrement)	-
Sound velocity ^{b)} [m/s]	4'200 – 5'400
Elastic modulus ^{c)} [N/mm ²]	> 21'000

Comparison values of Ebony

Density [kg/m ³]	1'200 – 1'400
Brinell hardness ^{a)} [N/mm ²]	~ 84
Sound velocity ^{b)} [m/s]	~ 4'500

- a) perpendicular to grain direction
- b) in grain direction
- c) determined via sound velocity