



Ulmo

Eucryphia cordifolia Cav., *E. glutinosa*

Commercial names:

Spanish:	Ulmo
English:	Ulmo
French:	Ulmo
Italian:	Ulmo
German:	Ulmo

Common names:

Chile	Ulmo, Muermo, Voyencum, Toz, Urmo, Mquinqu
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Physical properties:

Density:	800 kg/m ³	
Shrinkage:	Moderately unstable	
Coefficientes de Shrinkage:	Total	Unitary
Volumetric:	13,0%*	(-)
Tangencial:	8,0%*	(0,31-0,36)
Radial:	4,0%*	(0,16-0,20)
Hardness:	3,5-4,5	Semi-hard

* (ASTM)

Mechanical properties (Wood free of defects)

Static bending:	890 Kg/cm ²
Modulus of elasticity:	-
Compression parallel to fibres:	655 Kg/cm ²
Normal fibres compression:	165 Kg/cm ²
Parallel Fibre traction:	1.050 Kg/cm ²
Normal Fibre traction:	80 Kg/cm ²
Tangential shear:	140 Kg/cm ²

Origin and availability:

Botanical gender of trees or big bushes of the Antarctic flora, originated in template regions of South America, and the eastern coasts of Australia. Traditionally it was classified as Eucryphiaceae, its own family, there are more recent classifications which consider it belonging to the Cunoniaceae. There are seven species known distributed as follows: two of them in South America, and five of them in Australia, as well as several hybrids. Most of them are green coloured with the exception of one species (*E. glutinosa*) which is deciduous.

Description of the wood:

Veins have a nice shape, with thin straight lines and thin lines shaped like flames. The colour is light brown, very heterogeneous, from sapwood to heartwood. In the wood of older trees, the heartwood and sapwood are well differentiated, and they are generally dark reddish, whereas the colour of the wood from younger trees is notably lighter.

Year rings are visible (face and head). Depending on the cut used, the steaks are nice.

The Ulmo, whose characteristics resemble those of the oak tree, and tino, is easily workable; brushing and gluing are easily performed as well. Once it is dried up, it is not easy to work with nailed joints, since it tends to break up.

Modular rays are heterogeneous, uniserial, and biserial.

The wood from the ulmo, weights around 800Kg/m³, and 12% moisture, therefore it is classified as heavy wood:

There are average problems during the drying process, which are translated into deformations and cracks from the head and occasionally the face. The maximum temperature recommended for this process must not exceed 65°C.

Even though the ulmo's wood is basically stable once it is dried, it tends to bend under the influence of moisture (the same as for the Coigüe).

Natural durability and ease to penetrate:

As regards to natural resistance against fungi and insects, the ulmo is classified as "not resistant". The mechanical resistance is high. The wood is classified as "not resistance" for the purpose of permanent moisture. In order to increase durability, It is recommended to protect it using constructive protection means or a suitable superficial treatment. The ulmo can be used as it comes in interiors.

The absorption and penetration of wood after applying waterproof material is moderate, thus obtaining higher levels in the pressure chamber.

Good results in superficial treatment are obtained with varnish, lacquer, paint, and oil. There exist occasional problems associated with walnut stain application

Applications:

Thanks to its features, similar to those of the oak tree or tino, the ulmo's wood is frequently used for the construction of: bridges, structures of houses, roofs, exterior panelling, floors, parquets, veneers, mine's mainstays. It can also be used for the manufacturing of vessels, tools, and bodyworks parts for trucks.