



Maple/Arce

Acer pseudoplatanus L., *Acer platanoides* L.

Commercial names:

English: Sycamore, Sycamore, Great Maple, Sycamore plane, Harewood, Maple, Norway maple.

Spanish: Arce, Plátano falso, Arce fico.

French: Erable, Erable sycamore, Erable faux platane.

Italian: Acero montano, Acero di monte.

German: Bergahorn, stumpfblättriger Ahorn, Weissahorn.

Common names:

Catalonia: Arce, Arce blanco, Falso plátano.

Asturias: Plágano.

Physical properties:

| | | |
|-------------------|-------------------------------|-------------|
| Density: | 610-640-680 kg/m ³ | |
| Shrinkage: | Moderately unstable | |
| Shrinkage values: | Total | Unitary |
| Volumetric: | - | (-) |
| Tangential:- | (0.22-0.30) | |
| Radial: | - | (0.10-0.20) |
| Hardness: | (4.7) | Semi-hard |

Mechanical properties (Wood free of defects)

| | |
|-------------------------------------|--------------------------------|
| Static bending: | 85-135 N/mm ² |
| Modulus of elasticity: | 9,100-12,000 N/mm ² |
| Compression parallel to grain: | 46-42 N/mm ² |
| Compression perpendicular to grain: | - |
| Shear: | 8.5-11.0 N/mm ² |
| Toughness: | 6.2-6.6 J/cm ² |

Origin and availability:

This tree is found in central Europe and in western Asia. It was introduced into the British Isles in the fifteenth century. The extension of the wooded area is stable and production and export are scarce.

Wood description:

The color of this wood is white or light yellow. The sapwood is not differentiated from the heartwood. The wood rays appear in the form of very fine decorative lines. The grain can be either straight or wavy. The grain texture is fine.

Drying:

This wood dries well exposed to air, but alterations in color and blue stain can appear. Drying in kilns at a low temperature is recommended. If drying occurs quickly the wood preserves its white color. On the contrary, if it dries slowly it acquires a slightly brown tone and in addition has the disadvantage of acquiring sticker stains. Wood dried by the slow procedure is marketed under the name of weathered sycamore. Recommended drying schedules are T6-D2 (4/4) and T3-D1 (8/4) from the FPLM and schedule E (4/4) from the PRL. For species with a lighter color T2-D4 (4/4) and T2-D3 (8/4) from the FPLM and schedule A (4/4) from the PRL are recommended.

Natural durability and ease of penetration:

The wood is graded as not durable against the action of fungi and susceptible to anobiids and termites. Both the hardwood and the sapwood are penetrable.

Technological properties:

The wood possesses good qualities for obtaining rotary-cut veneer and sliced veneer. Machining can offer some problems because of the interlocked fibers, and a reduction of the blade angle to 15° is advised. The dulling rate of tools is normal. The wood displays good features for steam bending. Gluing, nailing, screwing and finishing present no problems.

Applications:

Decorative veneer./ Furniture and cabinetwork./ Interior carpentry: floors./ Turnery. When the wood is stained grey by artificial means, it is called "Harewood", and it is used extensively in decoration. Mechanical properties are similar to those of oak.