

# BEECH

#### Name

- Scientific: Fagus sylvatica L.
- English: European Beech

#### Description of the wood

- Light and hard grain: white to pinkish white
- Fibre: Straight.
- Grain: Fine
- Characteristic flaws: Growth tensions. Red false heart due to chromogen attack.

#### **Physical properties**

- Apparent density of 12% humidity 730 kg/m<sup>3</sup> heavy wood
- Dimensional stability
  - Volumetric contraction coefficient 0.51 % nerve wood.
  - Relation between contractions 2.05% without tendency to deform.
- Hardness (Chaláis-Meudon) 4.0 semi-hard wood.

## Impregnability

Impregnable

#### Machining

- Sawing: Easy, risk of deformation
- Drying: Difficult and slow. Risk of splits.
- Planing: Easy. It can be bent, lathed and carved relatively well.
- Gluing: Easy.
- Nailing and bolting: Without difficulties.
- Finish: Easy, accepts dyes well.

## **Mechanical properties**

- Resistance to static flexion 1,100 kg/cm<sup>2</sup>
- Elasticity module 145,000 kg/ cm<sup>2</sup>
- Compression resistance 580 kg/ cm<sup>2</sup>
- Parallel traction resistance 1200 kg/ cm<sup>2</sup>



# Applications

- Furniture and fine interior cabinetwork. Carving, bending and lathing.
- Interior opening and cladding carpentry: Doors, flooring, friezes, mouldings.
- Decorative veneer and plyboard.
- Sports articles.

#### To be taken into account

- The heartwood of the trunk may be brown or reddish colour.
- Also present in North America, although with many knots.
- The trend is toward light steamed ash, with a pale pink colour, as more uniform tones are achieved.



Citation: Distribution map of Beech (Fagus sylvatica ) EUFORGEN 2009, www.euforgen.org.

First published online on 30 August 2006 - Updated on 23 July 2008

250 500 1,000