

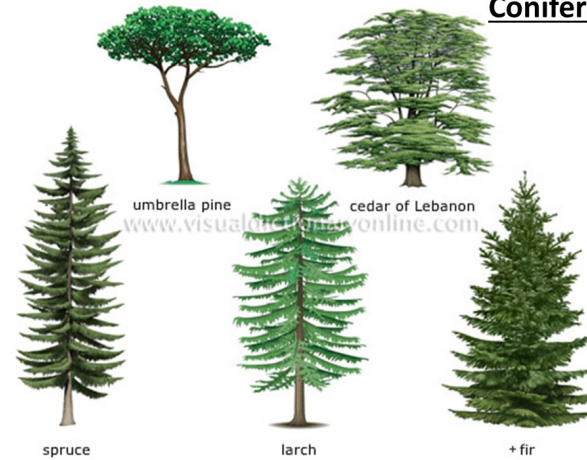
Trees come in all shapes and sizes. They produce many different types of wood that can be used for many different jobs. All trees grow relatively slowly, some take 20 – 30 years to reach full size and others 300-400 years. A few can live for thousands of years. And reach over 120 meters in height.

The bark of the tree is there to protect the living part of the tree from the weather and insects. The heart wood is the strongest part of the tree.



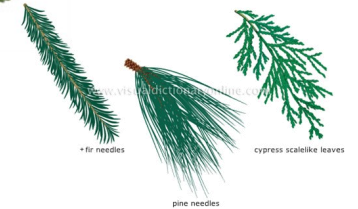
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Coniferous trees



Coniferous trees are also known as 'Evergreens'. This group of trees keeps their leaves all year. They tend to have tall, flexible trunks to allow them to bend in heavy winds and under the weight of snow. They are generally found in milder, temperate climates such as northern Europe, Russia and North America.

The wood produced from Coniferous trees is known as **softwood**. This does not necessarily mean it is 'soft'. 80% of the world's production of wood is softwood. **Some coniferous trees are very fast growing and reach maturity in 25 years.**



Thin needle like leaves.

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Farming Trees???



Due to the amount of time it takes a **deciduous tree (hardwood)** to grow there is little point in landowners planting these and hoping to make a return (profit) in a short amount of time. Because of the speed they grow, hardwood is expensive.

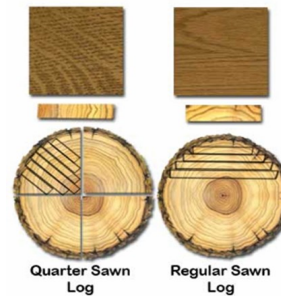


Conifers (softwood) mature much quicker and as a result landowners plant these with the aim of cutting them down to sell. You often see these growing in neat, straight rows. Because of the speed they grow, softwood is cheap.

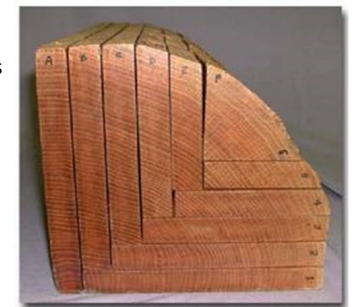


Once the trees have been cut down, they need to be converted into planks and boards that we can use. However at this point 80% of the tree's weight is water, this has to be reduced before we can use it. This process is known as seasoning. Wood that isn't dried is known as **'Green'** wood.

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Once cut down the timber is cut into workable planks. This is either done by 'slab' sawing or quarter sawing. Both have advantages and disadvantages. Once cut the timber needs to dry out before it can be used.



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Deciduous trees

Deciduous trees are the group of trees that lose their leaves during the winter seasons. They tend to have rigid trunks with visible branches. These trees lose their leaves during changes in climate to protect themselves. This is usually to protect from freezing and snow, but it can be to protect from drought.



Broad leaves

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The wood produced from Deciduous trees is known as **Hardwood**. This does not necessarily mean it is 'Hard'. 20% of the world's production wood is hardwood. **Most deciduous trees are slow growing and take over 100 years to reach maturity.**

Trees can be split into two main groups – Coniferous and Deciduous



Coniferous trees; tall single trunk, generally small needle like leaves.



Deciduous trees; large trunk with large visible branches and broad leaves.

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Seasoning is the name given to the methods of drying timber

There are two methods by which timber can be dried:

- (i) natural drying or air drying,
- (ii) artificial drying.

Air drying

Air-drying is the drying of timber by exposing it to the air. The technique of air-drying consists mainly of making a stack of sawn timber (with the layers of boards separated by sticks) on raised foundations, in a clean, cool, dry and shady place. This can take up to 18 months to dry the timber.

Artificial or Kiln drying

The process of kiln drying consists basically of introducing heat. In this process, deliberate control of temperature, relative humidity and air circulation is provided.

For this purpose, the timber is stacked in chambers, called wood drying kilns, which are fitted with equipment for manipulation and control of the temperature and the relative humidity of the drying air and its circulation rate through the timber stack. This process is quick and can dry the wood in 48 hours



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The Forest Stewardship Council (FSC) helps take care of forests and the people and wildlife who call them home.

FSC is an international, non-governmental organisation dedicated to promoting responsible management of the world's forests.

The FSC are an independent organisation that check that managed forests meet internationally and nationally agreed standards of responsible forest management.

Forest products like timber can then carry the FSC label, guaranteeing that it comes from a well-managed forest and enabling you to pass on the benefits of certification to your customers.

