

## Why Cork Flooring

Cork Flooring is making a comeback as a “green” environmentally friendly flooring product. Although cork flooring has been around for years, little is known about the benefits of cork. Today, Cork flooring comes two ways, a floating cork panel very similar to a laminate flooring structure and also as a solid glue down tile and plank. Cork is also used as a sound deadening underlayment under hardwood flooring, ceramic tile, and laminate flooring. JJ Haines and Wheeler has partnered with We Cork to bring you such a product, <http://www.wecork.com/>



Cork flooring comes from the bark of the cork oak tree which is a **renewable** source. Stripped from the cork oak tree, the bark is peeled away without destroying the tree itself. Trees are not cut down, and the bark completely grows back within nine years, allowing the process to be completed again. Cork floors are just as durable as others – as well as anti-static, sound absorbing and insulating. Unlike carpet, it is naturally resistant to mold and mildew, and hypo-allergenic. Corks biggest selling feature is that it is comfortable under foot.

The bark of the cork oak tree known botanically as QUERCUS SUBER, is an evergreen which grows in commercial stands only in areas bordering the Mediterranean Sea. Of the important cork producing countries, Portugal supplies approximately 50%, Spain 25%, with the balance being divided between Algeria, France, Morocco, Italy and Tunisia.

The cork bark is stripped off 2/3 of the tree. The first harvest does not occur until the tree is approximately 20 years old. A thin layer of protective inner bark gives the cork oak its unique ability to survive and regenerate itself after the debarking process. Stripping the bark requires great skill, as the inner bark must not be damaged. The subsequent strippings of the tree will take place every nine years until the cork oak is 150-200 years old. The tree is then replaced by a much younger one. A tree in its prime at 80 years old can yield 440 lbs. of cork bark.

The first bark taken from a tree is called “virgin” bark. It has a very irregular exterior surface and is grayish in color. This bark is suitable for grinding into various minute sizes ideal for cork insulation and composition cork. The bark which grows out after the “virgin” bark has been stripped is called “refugo” bark. It looks entirely different as it has a much smoother surface which is brown in color. The first crop of “refugo” is used mostly for grinding purposes. The subsequent strippings yield better quality cork composed of fewer and more closed graining. The quality not only varies from forest to forest but also from tree to tree, but even the same tree may produce varying degrees of quality cork depending on its exposure to sunlight.



Stripping the bark



Stripped QUERCUS SUBER Tree



The Cork Bark

## **Benefits of Cork Flooring;**

### **Durable**

One cubic inch of cork contains 200 million air cells; making 50% of cork air. Essentially cork acts as an “air cushion”, absorbing vibrations and direct impacts. A cubic inch of cork can withstand up to 14,000 lbs. of pressure per square inch without breaking, and retains 90% of its original form after the pressure is released. No matter how much it is walked on or how long furniture stands on it, cork always retains its elasticity. Most cork patterns found in the floating floor structure have a textured face. This helps hide and disguise normal wear and tear that all floors see over their lifetime. Cork flooring withstands the test of time.



Cork Cell structure

### **Elasticity**

Heavy pressure does not break down or destroy the tiny air cells, but compresses the air within the cells, the cork begins to spring back when the pressure is removed. A roll or sheet of agglomerated cork can be compressed in one direction without losing its dimensions in the other direction. This is of great importance for many applications of agglomerated cork.

### **Insulation/Noise Reduction**

90% of the cork tissue consists of gaseous matter. Density of cork flooring is extremely low giving the materials wonderful insulating properties, thermal as well as acoustical. This makes all cork flooring very pleasant to the touch, even with bare feet as they provide an optimal floor temperature all year round and reduces sound transmission between and within rooms, creating a quieter, and therefore peaceful, environment in your home. Unlike hard materials like tile, wood or vinyl, cork is quiet and reduces impact noise such as something dropping on the floor or the sound of walking by people or pets.

### **Resistance to Wear**

The honeycomb structure of the suberose surface gives cork a high friction coefficient and makes it very durable. It does not absorb dust and is fire resistant in its natural state.

### **Comfort & Softness**

The air trapped inside the cellular structure of cork provides a natural shock absorbing feel to the floor. It's great for applications where you are standing a lot such as in a Kitchen providing relief for your feet, back and legs.

### **Beauty**

Cork has a natural beauty rivaled by few other natural materials. It comes in many colors and different manufacturers provide various planks and tile sizes and shapes and patterns as well.

### **Healthy and Safe**

Cork has natural properties that are anti-allergenic and anti-fungal. A naturally occurring waxy substance in cork called **suberin** repels insects, mold and mildew and protects cork from rotting when wet for a long time. In addition, suberin is naturally fire resistant and cork doesn't release any toxic off-gassing when it burns. These natural properties plus the coatings used to seal cork flooring make it healthy and safe for adults, pets and baby.

### **Durability and Ease of Maintenance**

Durability is a strong trait of cork and cork floors have been used in public buildings such as churches and libraries since 1898, long before residential applications. We Cork flooring is finished with Greenshield high performance urethane with aluminum oxide for long term wear and scratch resistance.

### **Light weight**

Due to the fact that more than 50 % of the cell volume of a cork piece consists of air, cork is one of the lightest solid substances, with a specific gravity of .25.