about cork
natural and light

A vegetal tissue, that weighs just 0.16 grams per cubic centimeter.

elastic and compressible

It can be compressed to a third of its thickness without losing any flexibility, and recovers its shape and volume as soon as it is released. It is the only solid which, when compressed on one side, does not increase in volume on the other, and as a result of its elasticity it is able to adapt, for example, to variations in temperature and pressure without suffering alterations.

thermal and acoustic insulator

Cork has low conductivity to heat, noise and vibration. This is because the gas-filled components contained in cork are enclosed in impermeable compartments, isolated from each other by a moisture-resistant substance.

impermeable to liquids and gases

Thanks to the suberin and cerasin contained in the cell walls, cork is practically impermeable to liquids and gases. Its resistance to moisture enables it to age without deteriorating.

fire retardant

Cork is also a natural fire retardant: it burns without a flame and does not emit toxic gases during combustion.

natural touch

The natural texture of cork combines softness and flexibility to the touch with a naturally uneven surface. The variable degree of irregularity is given by the type of cork used and the fresh chosen.

sustainable

Portugal, which produces more than 50% of the world’s cork, has been particularly careful to safeguard this valuable resource. New plantations of cork oak trees are planted each year to ensure the level of cork production is maintained. The cork oak is protected by law since the 19th century and in 2011 was nominated the Portuguese national tree, thus ensuring that this species cannot be felled or removed without a special government authorization. The aerials.

The regular extraction of cork is a fundamental contribution to the environmental, economic and social sustainability of the rural areas where the cork oak is found. Its value is not only on the products extracted from the tree but also on the agricultural, forest and hunting activities that revolve around the cultivation of the cork oak. It is the basis of an ecosystem unique in the world, where abundant fauna and flora coexist with animal and cereal farming. From a social perspective, this activity allows for the creation and maintenance of a significant volume of employment in rural areas, thus combating social desertification.

Regular stripping of the cork oak also strengthens another of its surprising features: its ability to absorb carbon dioxide. A stripped cork oak absorbs, on average, five times more CO₂. It is estimated that every year cork oak forests retire up to a million tonnes of carbon dioxide, a considerable contribution for reducing greenhouse gas emissions, the main cause of climate change.

Inventing consistently in innovation and state-of-the-art technological processes, Amorim’s worldwide leadership is in the utmost importance for the ecosystem it is based upon, in what can be considered a thoroughly sustainable industry.

applications

Due to its remarkable properties, cork has been an important material since ancient times. Today, it is used for cork stoppers, floor and wall coverings, as well as insulation and cork composites.

Cork stoppers

An iconic product in the cork industry, cork stoppers are divided into several categories according to different sizes and formats, in order to adapt to the wide variety of bottles and spirits for which they are intended. The composition and manufacturing processes vary from natural cork stoppers, obtained by punching a piece of cork strip, to agglomerated stoppers, manufactured by individual moulding or by extrusion from granulated cork.

The cork stopper has unique innate qualities, which interact beneficially with wine. It contributes to developing its character, giving its authenticity and bringing it value.

Floor and wall coverings

By combining the most recent technology with traditional production methods, cork is incorporated into sophisticated wall and floor coverings in a wide range of textures and colours. These products are a unique blend of high technical performance, design and comfort.

Thanks to the innate properties of cork, these solutions offer clear advantages in terms of acoustic and thermal insulation (providing energy savings) and flexibility, targeting both residential and commercial market segments.

Agglomerates and composites

Expanded insulation Cork

This is a natural, durable and recyclable product. It is sourced from “falca”, a unique type of cork from the upper branches periodically pruned from the cork oak, which is ground into small granules.

These granules, placed into an autoclave and exposed to superheated steam at 350°-370° C undergo an expansion process and create their own resin (suberin), the particles are self-bonded without artificial additives to the cork.

In a production plant, production takes place in different grades and densities – the ideal solution for thermal, acoustic and anti-vibration insulation – to be applied in floors, interior partition walls and other specific applications.

Composite Cork

Composite cork is made from granulated cork combined together using different binding agents or incorporating other components such as rubber, carbon fiber, plastic, asphalt, cement, polyurethane resins, and thus offering a wide range of products. In construction, the product range offers solutions from housing to major public works, such as underlayment for final flooring, to expansion joints in the transportation industry, providing highest standards core structures for panels and flooring in high speed trains, coaches and metro. Likewise, interiors, contemporary design objects are other industries where cork composites are being employed.

Grainboxed Cork

There are, however, many other applications in which granulated cork can be used: insulators in agriculture, construction, environmental protection, energy and in several industrial applications in such areas as electronics, chemical and engineering applications, among others. Available in various grain sizes, its density (or mass density) can range from up to no more than 250 kg/m³.

Cork is

Above all, a material that is one hundred percent natural, recyclable, renewable and unique in the world, an environment friendly and sustainable society.

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