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## Cork

### Definition of cork and its Origin?

Cork is the outer layer of the cork oak tree, *Quercus Suber L.*

Cork is harvested from the renewable bark of the cork oak tree and is a completely natural product. The trees are not damaged or felled during the harvest - this 100% ecological product meets the requirements to protect and conserve the environment.

In cork oak plantations, the first cork bark will not be harvested from a tree until it is 25 years old. Today, cork oaks are stripped of their bark by hand in the same way they traditionally have been for several hundred years. The trees are not damaged in the harvest and the bark grows back completely time and time again, taking on a smoother texture after each harvest.

A cork oak can live for up to 200 years. Harvesting only occurs once every nine years. Over the course of their long lives, cork oaks can be harvested up to 20 times - it is one of nature's truly inexhaustible resources.

The cork oak tree is native to the Western Mediterranean Basin, where it finds the ideal growing conditions:

- Sandy, chalk-free soils, with low nitrogen and phosphorus, high potassium levels and ph of 4.8 to 7.0
- Rainfall 400-800 mm (16–32ins) a year
- Temperature between -5° C and 40° C
- Altitude 100–300 meter (330–990 ft)

### **Chemical composition of cork?**

Cork's structure is very similar to that of a honeycomb: each cubic centimeter contains around 40 million cells. These cells and the spaces between them are filled with a gaseous mixture similar to air. That is what makes cork so remarkable.

The average chemical composition of cork is:

- Lignin (approx 20%) – the binding compound responsible for cork's unique structure
- Suberin (approx 45%) is the main component of the cell walls; almost completely impermeable liquids and gases, it is also fire and insect resistant and unaffected by water; responsible for the resilience of the cork
- Ceroids (approx 5%) – hydrophobic compounds that ensure water imperviousness
- Polysaccharides (approx 20%) cell components that help define cellular structure
- Tannins (approx 5%) – polyphenolic compounds
- Remaining compounds are normally called extractable and are organic components of cork's cell walls, although they are not considered structural compounds of cork

Cork cells are a minute, straight-sided pentagonal or hexagonal prism. The cell height rarely exceeds 0.045 millimeters but decreases to 0.02 to 0.01 millimeters in the last cork bark formed in the autumn.

### **Physical and Chemical properties of cork?**

Insulation Cork is a very good insulator and also gives a range of other uses in thermal, sound and vibrational insulation.

Near impermeability Cork is almost totally impermeable to liquids and gases. Because it resists moisture, it can age for long periods without deteriorating.

#### Compressibility

Cork is easy to compress and so less liable to. It can be compressed to about half its width without losing any flexibility and it is the only solid that can be compressed in one dimension without increasing in another dimension.

#### Lightness

Cork weighs only 0.16 grams per cubic centimeter. Most of its volume consists of an air-like gas.

#### Elastic memory

The cushion-like cork cells also display what is known as elastic memory. When compressed they constantly try to return to their original size, thus maintaining a tight seal. Because it is elastic, it is also able to accommodate some temperature and pressure variations without compromising the integrity of the seal.

### Place where it is produced and total Production?

There are over 2.2 million hectares of cork forest and the annual global production is around 340,000 tons a year. With around 730,000 hectares, Portugal has a third of the total land under cork forests; these forests represent 23 per cent of the country's forested land. Therefore, Portugal accounts for over half of global cork production.

In Portugal, the area under cork is growing by around 10.000 hectares a year, thanks to a reforestation program supported in part by the Portuguese Government and the European Union. With these programs in action, Cork production is growing all the time.

Cork oak forests make a substantial contribution to the economy and ecology of several Western Mediterranean countries (Portugal, Morocco, Spain, France, Italy, Algeria and Tunisia).

It is estimated that there is enough harvestable cork in Portugal to meet market demand for the next 100 years:

Country	Area	
	(hectares)	(%)
Portugal	730,000	32,5
Spain	500,000	22
Algeria	410,000	18
Morocco	340,000	15
France	100,000	4,5
Tunisia	99,000	4,3
Italy	90,000	3,7
<b>Total</b>	<b>2,269,000</b>	<b>100</b>

Source: Direcção Geral das Florestas DGF (National Forestry Services) Year: 2004

Country	Av. Annual Production*	
	(tons)	(%)
Portugal	185,000	54
Spain	88,000	26
Algeria	20,000	6
Italy	18,000	5
Morocco	15,000	4
Tunisia	9,000	3
France	5,000	1
<b>Total</b>	<b>340,000</b>	<b>100</b>

\* Source: APCOR

### Productive life span of a cork oak?

In its lifetime an average cork oak tree will generate enough closure-quality cork for 17 harvests, with an average lifespan between 170 and 200 years.

### Average yield of cork per harvest?

In Portugal, the average yield of cork per hectare is 200-250kg per hectare and the average yield per cork oak tree is 45kg of cork per harvest.

### Does the cork have the same quality between countries?

Once that the genome of the *Quercus Suberus* L is the same, regardless of its origin, so there are no significant differences whether the raw material is sourced from oaks in Portugal or any other country. However, individual differences are noted from tree to tree.

### How the increasing quantities of raw materials originated from North Africa affects product's quality?

It is not expected any impact on quality!

Corkwood from North Africa is subject to the same quality regime as raw material from all other sources.

### Factors that will determine the amount of cork harvested each year?

- The number of harvestable trees, which in turn depends on the 9-year harvest cycle of each tree
- Climatic conditions and Genetic/Biological conditions
- Individual farmers' forestry management and commercial practices

### **Factors that will determine the price of cork?**

Like other product, price is determined by supply and demand.

Visual grade (defects, thickness, porosity) affects price paid for individual lots. More recently, sensory-related performance also plays an important role in establishing raw material prices.

### **Where is cork used?**

Besides its ecological value, every part of the tree serves some useful economic purpose, being the bark the most valuable part of the tree.

More than 50% of the cork bark goes into stoppers. Other uses explore cork's exceptional properties as sound, thermal and vibrational insulation as well as its lightness and resilience.

Bark from the tree's first two harvests (known as virgin and secondary bark) is used to make corkboard insulation and cork tiles.

Cork from the third and subsequent harvests (known as reproduction cork) is used for natural and technical cork stoppers.

The Corkwood is used in granulated cork products such as floor tiles, handles of fishing rods, memo boards, gaskets, golf and hockey balls.

We can also use cork combined with rubber for gaskets, valves and insulation in buildings and railways. It is even found in the nose cone of the space shuttle.

Nothing is wasted and all of the cork bark is used in production. As cork waste is generated in the production process, it is granulated and returned into the process as re-works. Even the fine particles of cork dust are collected and used as fuel to heat the factory boilers.

### **Environmental advantages of cork?**

Cork is a matter of increasing importance to consumers and retailers, especially in Europe and the United States.

Cork is natural, biodegradable, renewable and recyclable.

Each part of the cork tree serves an ecological or economic purpose and almost nothing is wasted.

Unlike alternative closures, cork stoppers require little energy in production and capture greenhouse gases from the atmosphere.

Cork forests not only contribute to a mixed agrarian economy that has sustained farmers for many centuries but also support a unique and fragile ecology that provides a habitat for endangered species.

The cork oak helps protect the soil from desertification and is well suited to the hot, arid conditions of southern Portugal. It is far less susceptible to the wildfires that ravage eucalypt and pine forests in the north of the country from time to time.

### **Why we should use cork?**

Besides being an eco-friendly product, Cork provides the most beautiful flooring available that combines ease of maintenance, beauty, functionality and environmental sensitivity together.

## **Cork Flooring**

### **Can I use cork flooring in a kitchen?**

Yes, cork can be used in kitchens, it is very comfortable to stand on and is easy to maintain. Nevertheless, it is advised to place area rugs or mats in front of the kitchen appliances and sink to protect your cork floor from a lot of traffic, grease, dropping food, water spillages and everything else that can cause premature wear of your kitchen floor. Use felt pads on chair and furniture legs and do not drag furniture across the floor. Also avoid moisture on the floor.

Regarding maintenance, we recommend regular sweeping and damp mopping as dirt and grit can act as sandpaper and damage the cork flooring finish.

Once a year or more frequently, you will want to refurbish you cork floor (according to the maintenance guidelines supplied) if there is a lot of traffic and the floor starts to show some signs of wear. This will reinforce the protective layer and will restore the original appearance.

### **Can I use cork flooring in bathrooms?**

Yes, it can also be used in bathrooms. Cork floors are warm, soft and make a very comfortable flooring surface for a bathroom. However, we recommend you take certain precautions because of the high risk of spillage.

Floating floors are not recommended for bathrooms, only tiles should be used. After installation, it is important to caulk the perimeter of the room, prior to installing molding or baseboard as this will prevent spills from damaging the sub-floor or walls. An additional protection layer should be applied to completely seal the joints, please use only our recommended products for Care and Maintenance.

### **Can I install cork flooring in a basement?**

In basements there is a high probability of occasional moisture migration from the slab which can cause glue-down tiles to delaminate and cup! Therefore, tile is not recommended for this type of application.

For basements, we recommend installing our Cork Floating Floor over a moisture barrier 6 mil film of polyethylene. As the floating floor is not attached to the sub-floor it will rest on top of the moisture barrier.

### **Will the changes of moisture and temperature affect Cork floors?**

Like other wood products, cork is subject to the phenomenon of expansion and shrinking in response to climactic changes but as a general rule, more stable than wood flooring.

Of course that with extreme environmental conditions, meaning exposure to extreme heat, moisture or dryness (more than 65%, less than 35% R.H) can cause cork to shrink and make joints more visible. When humidity levels are higher, cork flooring can expand. When wood expands, it does so only across the grain, so the expansion is concentrated in one dimension. However with cork, any expansion or shrinkage is dispersed in all directions. With proper acclimation, installation, and maintenance, expansion and shrinkage of your cork floor will be less noticeable.

### **Should I install Floating Floors or Glue Down Floors?**

In this case, the shape of the subfloor is usually the deciding factor! If the subfloor is in poor condition with many cracks, old vinyl tiles or sheet vinyl, grimy or dirty the use of floating floors would be recommended.

Installation of a floating floor is easier, faster and cheaper. The use of a floating floor over poor subfloors avoids the need to prepare costly subfloors as long as the floor is reasonably level. Also, if there is any risk of moisture migration from a concrete slab than a floating floor properly installed with a moisture barrier is also recommended.

Besides, a floating floor is one that is not attached to the substrate. Each plank is secured to those adjoining so that the floor system functions as a single unit instead of as a series of individual pieces. This means that visible signs of expansion and shrinking, normal to any wood product, are severely reduced.

The glue down cork floors can be used over any subfloors (wood or concrete) which are dry, clean and free of dirt, grease, wax or anything that would hinder a good bond and where cracks have been filled.

### **Are cork floors a recent product?**

No, cork floors have been used since early in the last century!

The Europeans are particularly familiar with cork flooring but more recently, cork floors have also become very popular in North America and Australia and are now sold virtually around the world.

CORKSRIBAS is recognized as leader in innovation, quality and unique solutions for interior design. Superior quality products that provide innovative solutions for decoration and unparalleled performance compose our

offer. By combining know-how, traditional production methods and the latest technology, CORKRIBAS produces solutions of different style, décor, durable and comfortable using a material with characteristics that science cannot overcome: the cork.

### **Why purchase a cork floor?**

They are a natural product, environmentally friendly and produced from a renewable resource (bark of cork oak tree when peeled does not damage the tree) and they are as durable as most other floors.

In addition cork flooring is sound absorbing, insulating (both heat and cold), antistatic and a relief for those with allergies. No other flooring material combines these benefits. When maintained properly, cork flooring can last for generations.

### **Can we walk on cork, especially in high heels? Will the furniture damage the floors?**

CORKSRIBAS cork flooring is produced in a density high enough to withstand heavy traffic and weight. A durable surface finish further protects the cork and allows for easy maintenance.

One of the characteristics of cork is that it has a "memory" and therefore recovers well from compression, very much like a wine cork stopper being pulled out of a bottle expands. Nevertheless, just like other flooring materials, we recommend the use of protective pads under furniture legs.

### **Is the coloring of the cork flooring homogeneous?**

Some shade variation due to raw material nature is an inherent and attractive characteristic of all natural products, whether cork, wood, or bamboo. Exposure to sunlight can also result in shade change. Cork floorings are high quality, natural materials and should be recognized as such.

### **Can cork floors be dyed or stained with specific colorings? Can they be also stenciled?**

Yes, cork floors can be stained in any color. CORKSRIBAS offers a wide range of colors and in special situations others can be also available.

### **Do cork floors fade in the light?**

Yes, like any other natural product, the exposure to UV light as well as sunlight will cause color variations to cork; typically a yellowing.

This is normal and should not be considered a manufacturing defect! Area rugs and large furniture will block light exposure and cause uneven coloration. To minimize, furnishings and floor coverings should be moved periodically. Covering large exposed windows will help as well.

### **I have pets! Will they damage my cork floor?**

Only you can know what are the habits, activities, and potentially destructive actions of your pet better than anyone else!

Our cork floors are coated with a finish that could be scratched by the claws of cats and dogs running on the floor. Anyway, because cork is resilient and will move away from pressure the surface will be less subject to abrasion than a similarly treated hardwood floor. Keeping your pet's nails trimmed will help keep your floors looking beautiful.

### **Is cork flooring a good soundproof material?**

Sure, cork is being widely used for sound reduction in buildings and it is a very effective way to meet building codes for sound control.

### **What does HRF stand for?**

High Resistance Finish – A multilayer UV cured finish that due to its composition of ceramic beads confers to the cork flooring a high resistance to the abrasion, scratches and stains without changing the natural texture of the flooring.

### **What is Acrylic/UV Finish?**

Acrylic/UV Finish is a traditional varnish offering a standard protection to the floor. Due to its characteristics we recommend its use in divisions where is common to have bare feet traffic as it gives a cosier and warmer feel.

### **Will I have a health indoor environment by installing a cork floor at home?**

Definitely! Dirt, dust and bacteria do not embed themselves in cork flooring as they do in other flooring options.

A simple regular maintenance, such as dust mopping, sweeping or vacuuming keeps cork floors sanitary.

### **If a heavy object falls, will it crack my cork floor finish?**

The surface damage will depend of the object and height of fall. CORKSRIBAS has products with different impact resistance, depending of wear layer.

### **Can I install a cork floor on a hairdresser salon?**

The surface of CORKSRIBAS products has good stain resistance but it is recommended that you wash off immediately any spillage.

### **Can I use cork floors in commercial areas or areas with high traffic?**

CORKSRIBAS has products suitable for commercial areas with heavy traffic like schools, department stores, corridor, lobbies and open plan offices. No CORKSRIBAS products are recommend for multi-purpose halls and counter halls.

### **Can I use cork floors in an external application? Also around a swimming pool?**

Please note that CORKSRIBAS cork flooring products are only recommended for interior applications.

### **Meaning of CORK LOC®?**

This means that the product is a floating floor with a glueless system. CORKSRIBAS products have a locking system patented by Välinge.

### **What does the R10 rating means for slip resistance?**

DIN 51130 is used for testing shoe-trafficked areas over a surface lubricant. In this test a person walks back and forth on a platform (in a laboratory) covered with tiles and the angle of inclination if the test area is steadily increased until the person begins to slip. The angle at which the person slips is recorded and averaged out over a number of tests. The higher the rating, the more a tile may be considered anti-slip. DIN 51130 then relates these R ratings to particular fields of use.

Generally, R9 is the accepted minimum for use of a tile in public areas.

### **Are the Cork Floors resistant to fire?**

The fire resistance is classified (EN 13501-1) based in energy (flame) and smoke contributions. Regarding energy contribution for floor covering the best classification is A1 (no flammable) and the worst is D.

Smoke contribution is classified in two levels – S1 and S2 – being S1 the best.

All CORKSRIBAS range products are tested following EN ISO 9239-1.

### **For which level of use do you recommend CORKSRIBAS products?**

Corksribas range has products suitable for domestic application – moderate to heavy, commercial application – moderate to heavy and moderate industrial application.

### **What does the symbols used in the level of use stands for?**

Those symbols follow the European standard (EN685) that identifies the levels of use:

- House – product suitable only for domestic areas
- Building – product suitable for domestic and commercial areas

The number of human symbols indicates if the product is recommended for low medium or heavy use.

### **What is the gloss parameter?**

Gloss is an optical property that is based on the interaction of light with physical characteristic of a surface. The lower is the value, lower is the gloss.

### **How can I know if cork products have good acoustic properties?**

All CORKSRIBAS floor products are tested in an official laboratory - impact and step sound are evaluated. As a general rule, cork floors have good behavior in both characteristics.

### **Why should I choose AC/UV or HRF finish?**

HRF finish is recommended for domestic and moderate commercial areas. For residential areas we recommend the AC/UV finish.

### **Are cork floors more comfortable to walk when compared to other flooring solutions? Why?**

Cork floors are resilient and consequently more comfortable to stand on than harder and unyielding floors.

### **Does CORKSRIBAS cork floors contribute to LEED points?**

Yes! Based on the LEED framework, CORKSRIBAS products contribute points towards achieving the following credits:

#### **Indoor Environmental Quality – EQ**

- **EQ 4.4 (1 Point):** Use Low-Emitting Materials (wood or agrifiber products) that will reduce the amount of indoor air contaminants that may be potentially irritating and/or harmful to the comfort and well-being of the installer and occupants. CORKSRIBAS Cork products have no added urea-formaldehyde resins as stated under this credit.

#### **Materials and Resources – MR**

##### **Credits:**

- **MR 4.1 (1 Point):** Use materials with recycled content such that the sum of the post-consumer recycled content plus one-half of the pre-consumer content constitutes 10% of the total value of the materials in the project.
- **MR 4.2 (1 Point):** Use materials with recycled content such that the sum of the post-consumer recycled content plus one-half of the pre-consumer content constitutes an additional 10% (total of 20%) beyond MR credit 4.1 of the total value of the materials in the project. 100% of the cork content in all CORKSRIBAS Cork products is recycled from other cork pre-consumer manufacturing processes.

- **MR 6 (1 Point):** Use rapidly renewable materials and products (made from plants that are typically harvested within a ten year cycle or shorter) for 2.5 % of the total value of all building materials and products used in the project.

#### **Innovation and Design Process – ID (1-4 points)**

- The intent of this credit is to provide design teams and projects the chance to earn additional points for exceptional performance above the LEED requirements. Cork's natural characteristic such as its cellular structure provides sound proofing properties. The transmission of vibrations from mechanical equipment can be reduced using cork flooring and underlayment. All CORKSRIBAS Cork products qualify for one category, or more, under LEED credit program.

#### **Can cork flooring be installed near a “fireplace”**

The installation of a cork floor near fireplaces must be avoided. A safety distance should be guaranteed.

#### **On areas with a high incidence of natural light, which range of products should I apply?**

As cork and wood are natural products, therefore are influenced by UV and IR radiations. It's expectable that color can change due to natural light incidence.

All CORKSRIBAS products classified as usable in commercial areas are suitable for installation on areas with high incidence of natural light.

## **Installation**

#### **Where can be installed CORKSRIBAS cork flooring?**

It can be installed virtually anywhere on, above, or below grade.

Although, never leave pooling water on cork floor! This can cause swelling of the seams.

#### **Usually, how do cork floors are installed?**

CORKSRIBAS cork floors are available mainly in two installation methods: planks or tiles, glue-down or floating installation methods. They can be installed half break, break or random installation. There is no design to match in the installation process.

### **Can I do my own installation of the cork floor?**

Floating floors simply lock together and do not use any adhesive. Besides, there is a wide variety of floating cork flooring available that offers easy installation for a self installer.

Glue-down installation methods usually require a little more attention to preparation of the subfloor than floating floors. Also, glue-down installation methods require more patience and special tools.

### **How much cork flooring should be considered for waste?**

It is very difficult to calculate as it depends on the complexity of the layout and the skills of the installer!

First, measure the length and width of individual room. Then, multiply the length by the width of each individual room to get the total square meters/footage.

Please note that, diagonal layouts or floors with curved walls may require more careful calculation of the quantity required.

As a rule, add an additional 5-10% of the total square meters/footage to cover the waste factor.

### **Can the cork floor be installed on the walls?**

Yes. In the case of glue down floors with PVC backing you must use a neoprene contact adhesive (solvent based).

For glue down floors with cork backing, you can use a contact water based adhesive.

Substrate must be level, permanently dry, firm and free of cracks, dirt and adhesion-inhibiting substances.

Old chalk, adhesive and oil paint residues must be roughened with a steel brush in order to obtain an absorptive substrate. Oil residues must be removed completely with an alkaline detergent.

As for the floating floors, they should be installed on a framed wall.

### **Can I install cork wall coverings on the floor?**

No, due to the density of wall coverings we do not recommend to install them on the floor.

### **Can I install a cork floor tile over a ceramic floor?**

Yes, if the ceramic tile is firmly attached, without cracks and if it is stable.

These types of subfloors are non-absorbent. All soiling (e.g. waxes, soap, grease, etc.) must be thoroughly removed mechanically and with detergents, especially if floors like this have already been in use for some time. Any loose tiles must be re-fixed. Subfloors of this type have to be roughened (e.g. by sanding, brushing

with wire brushes, sandblasting), primed and leveled with coat of a Portland cement based leveling compound.

Or, you can simply install a floating cork floor directly over the existing ceramic tile.

### **What is recommended before I begin to install my cork flooring?**

Prior to installation, the sub-floor must be properly cleaned of dirt and debris, dried, and leveled. Failure to properly prepare your subfloor can cause problems in the future.

During storage and installation, maintain temperature and relative humidity to a level consistent with the conditions which will prevail when the building is occupied. In most cases, this means maintaining temperature range of 18°C to 28°C (65 F to 82F) and relative humidity range of 35% to 65%. In order to reach this climate, use heating or air conditioning in the appropriate length of time prior to beginning installation.

Packaged tiles and adhesive should be acclimatized at job site in dry, well-ventilated area for a minimum of 48 hours so that flooring may acclimate.

Remove the cork tiles from the packages just before starting laying them.

### **Can cork be installed and used over radiant floor heating systems?**

In fact, cork flooring can be used over radiant floor heating systems. Due to the insulation properties of the cork floor, this will heat up more slowly than conventional laminates or wood floors, providing a slower release of heat over time.

The surface temperature of the subfloor must not exceed 28°C (82°F).

Don't forget that rugs or mats placed on top of the floor may function as heat accumulators and will increase the floor surface temperature more than the maximum surface temperature recommended (must not exceed 20 – 22°C).

### **What residual subfloor moisture value is acceptable to assure the correct laying of a glue down cork floor?**

The subfloor is usually made of cement or anhydride. Some subfloors may also contain under floor heating.

The residual moisture of an anhydride screed is 0.5% (for unheated) and 0.3% (for heated). If there is any doubt about the level of residual moisture (e.g. in a new building), an accurate concrete moisture measurement must be made because excessive screed moisture would certainly damage a new laid floor.

The residual moisture of a cement screed is 2.0% (for unheated) and 1.5% (for heated) Calcium Carbide (CM) Test, less than 75% RH or less than 3 lbs/1000ft<sup>2</sup>/24 hours (USA and Canada) calcium chloride moisture tests.

Subfloors to be covered with Glue-down floors (almost vapor-proof) require sealing (insulation) against rising damp if there is no cellar underneath (basement). Water-repellent concrete, crawl spaces, or similar materials are not sufficient to prevent the migration of damp into the subfloor.

### **What kind of adhesive is recommended when installing cork tiles?**

Normally, we recommend adhesives specially developed for ease of use, safety and quality of the application.

For the correct use follow the instructions on the packaging labels of each product, as well as the information from technical data sheets.

Water based contact Adhesive for cork floors with cork backing: This adhesive should be applied to the subfloor and also to the tiles.

One-side Adhesive for cork floors with vinyl backing: This adhesive should be applied to the subfloor with the recommended notched trowel.

### **Should I roll my glue down cork floor after installation? What type of roller should I use?**

You should roll the floor after installing glue-down cork to ensure proper bonding to the subfloor. This will also help to ensure proper spreading of the adhesive.

Spread small areas at a time from the middle of the tile or plank outwards before the working time expires. To do this you can use a 100/50Kg professional roller. Before you finish make sure that all the edges are down flat. If you cannot get an edge to stick set some weight on it until it sets.

### **How can I replace a damaged tile/plank in my cork flooring?**

As a floating installation does not require any glue, you can simply remove the damaged piece and install a new one. This is one of the many advantages of Corkloc floating installation methods.

When replacing glue-down cork flooring, it is a very different and more complicated situation! We recommend that you contact your manufacturer or a professional installer for further instructions based on your individual situation.

## Cleaning and Maintenance

### How to maintain a cork floor as new for a long life?

Besides regular maintenance, several steps must be taken to help maintain cork floor:

- If works will take place in the room where the floor is installed, protect with craft paper, plywood or hardboard
- Avoid moisture on the floor. When mopping use a damp, not soaking wet mop and keep liquid off the floor as much as possible. Liquids can make the seams swell or ruin your subfloor.
- Place quality walk-off mats at all entrances to collect any dirt, moisture or other abrasive substances that can harm your floor.
- Cork, as a natural material, may tend to fade when exposed to sunlight. Cork and wood, are natural products, color change may be expected when exposed to light over a period of time. Cork will tend to fade while wood tends to mellow or darken. It is important to move area rugs and furnishings to allow for even color change.
- Use blinds, curtains or other sun screening system to keep direct sunlight off the cork floor on sunny days when possible.
- Using felt pads floor protectors on chairs and furniture legs are always recommended to reduce scratching or gouging.
- Keep large animals with long nails off the floor as they can scratch and damage the cork.
- Do not drag furniture across the floor. If you are moving appliances or heavy furniture never slide them across the floor.
- Office roller chairs must comply with DIN 68131 (Type W1). Use protective office mats under the rolling chairs.
- Place area rugs or mats in front of the kitchen appliances and sink to protect your cork floor from a lot of traffic, water spillages, dropping food, grease, and everything else that can cause premature wear of your kitchen floor.
- Never use cleaning products with abrasive ingredients or solvent based, e.g. acetone.
- Never use latex or rubber backed mats as they can permanently stain the floor.
- Never use wire brushes.
- When using intensive room heating, the indoor air humidity may drop so low that the floor is prone to dry out. As cork is a natural material, this may cause shrinkage of the tiles that will result in minor gaps in the flooring joints. Use a room humidifier to prevent this.
- Ideal and healthy room conditions are 35 - 65 % R.H. at 20°C (68°F).

### How to properly clean and maintain a cork floor?

Our Cork floors are very easy to maintain and you only need a mild detergent and a vacuum cleaner.

For daily/weekly maintenance, you may use a broom handle with a cloth on the end. The removable cloth has a substance with anti-static characteristics, which will clean all the dust and prevent its settling on the floor.

Before wiping the floor with a damp mop - vacuum, broom or sweep the cork floor to remove all loose dirt. This avoids dirt to penetrate on the embossing and joints of the floor.

Use a damp but not soaking wet mop and water to clean general spills. When deep cleaning the floor, use a damp mop with recommend floor cleaners formulated for cork floors. You should avoid excessive moisture, so never flood the floor when mopping. Where a more shiny appearance is desired, apply liquid floor polish.

Oil Soaps and Ammonia Cleaners – There are many products oil soap based or silicone, wax, or ammonia based cleaning products that will damage and dull the finish of your cork floors. Always avoid the use of harsh abrasives and oil or ammonia-based cleaning products.

Remember to only use cleaning products approved by CORKSRIBAS.

### **Can I walk over the cork floor and clean it immediately after it's installed?**

In the case of a glue-down installation method, you should wait 24-36 hours after installation of the floor to allow the flooring adhesive to dry completely before walk on or mop your new cork flooring. This helps to avoid shifting the flooring before it is set in place.

As for a floating or glue-less installation, it can be walked on and mopped only with a damp mop, immediately after installation.

### **How to remove a dried adhesive from the surface of my cork flooring after installation?**

As soon as the adhesive has dried, you can remove any excess by wiping with a soft cloth and mineral spirits.

### **How to move heavy objects over my flooring?**

The ideal scenario should be lifting and place your object into the location you want it. If you cannot do this, lay down a hard surface such as plywood and create a path to the location where your object will be placed. Please make sure the plywood is thick and large enough to disperse the weight of the object. A moving blanket should also be placed under the plywood to prevent any scratching.

### **Can I re-finish my cork floor?**

Yes, Varnishing is as simple and all our cork products are low-VOC, low-odor and water-based.

In this situation, we recommend a range of varnishes, which will give pleasant results. For the correct use, follow the instructions on the packaging labels of each product, as well as the information from technical data sheets.

Please note that in the Glue-down floors, you should wait 24-36 hours after installation of the floor, to allow the flooring adhesive to dry completely.

### Refurbishment

The renovation of an old and used floor cannot be recommended if we don't know its history, especially the kind of maintenance products which have been used.

If we know all about maintenance products and we can guarantee that all maintenances products are removed completely, we can apply one coat of the recommended varnishes.

Residues of maintenance products will cause lack of adhesion and it is recommendable to make an adherence test between the old and new coat, on a small area before the final varnishing.

The floor should not be cleaned with water or detergent for about two weeks, after applying the varnish. After this period use CORKSRIBAS recommended maintenance products.

Once again, for the correct use follow the instructions on the packaging labels of each product, as well as the information from technical data sheets.