

Propard SUPERIOR WOOD FLOORING

Why Proparq



The world of Proparq

A passion for wood, respect for man and the environment, the perfect combination of advanced technology and design, these values are at the very core of Proparq.

A dynamic company, 100% Italian, thanks to the deep knowledge of wood and the care and attention we apply to all our work, we are offering a "Made in Italy" product that is the epitome of excellence to the international market.

Our Proparq wooden flooring is the perfect combination of traditional craftsmanship and hightechnology production processes.

The long, laborious transformation of the wood takes place exclusively in Italy, in modern and safe factories, where the knowledge and technical expertise of a team of professionals, combined

with advanced production techniques, allow us to create products of the highest technical and aesthetic quality.

The company prides itself in the attention it puts into selecting the best woods, as well as its compliance with health, safety and environmental regulations.

The FSC and PEFC compliance marks guarantee that the Proparq wood flooring comes from forests that are managed correctly and responsibly according to strict environmental, social and economic standards.

The wood we use is taken from sustainable managed forests and then processed using treatments and finishes that are safe and comply with the most important certifications covering environmental sustainability and safety.

Proparq wooden flooring: passion, quality and technology bring nature into your home.



Why choose a Proparq wood floor?

Proparq is a two layers wood flooring meaning that each piece (plank) is composed of a thick layer of hardwood, glued to a resistant multi-layered core of marine Finnish birch plywood.

The hardwood top layer, which gives the parquet its aesthetic qualities, and the wood used to create it are very carefully selected. During the entire production cycle, each hardwood each of the hardwood top layer is repeatedly examined by expert staff that reject any material that does not meet our established quality standards.

The multi-layered core is equally important as it provides support in the form of five to nine layers of Finnish birch, each of which is transversely positioned to the layer below so as to cross the fibres of the wood; this strong structure balances the natural tension of the material and gives the flooring its stability, elasticity, and its resistance to twisting and compression.

The bonding of the hardwood top layer to the Finnish birch plywood core is carried out at high pressure

with high performance phenolic adhesive, designed for water resistant bonding compliant to UNI EN ISO 204 Class D4: the result is a perfect adhesion between the two pieces of wood, which makes separation practically impossible.

Next, each board (plank) is profiled in order to make the high precision make/female joints (tongue and grove) assuring after installation a micro millimetrical joint between the planks. This level of accuracy prevents dirt from penetrating into the flooring, causing damage and threatening household hygiene. It also provides a floor with excellent aesthetics and durability.

Additionally, the bottom of each piece is manufactured with transverse incisions to make it more elastic and better able to flex and adapt to the underlying surface, even in the presence of possible imperfections of the screed or the existing flooring.

Thanks to these features, our Proparq flooring is perfectly flat, with excellent aesthetics.



Our use of Finnish birch results in high resistance to moisture and changes in ambient temperature.



Marine birch plywood core, an excellent building material with many uses.





the structural core is formed by five or nine layers of Finnish birch wood stacked alternately at 90 degrees to each other, then glued together.

The wood fibres are arranged transversally to increase the elastic capacity of the core, offering increased resistance to twisting and compression.



Plywood flooring is now the most common and important type of hardwood floor. Proparq is at the cutting edge in world production.

With a modern and efficient production process, Proparq is distinguished by our conscious and sustainable use of timber, using this noble material in a rational manner that minimises material waste, benefiting nature and the environment.

The cross-bonding of the layers of Finnish birch compensates for the natural tensions of the wood and makes this durable and stable flooring, effectively counteracting the structural and dimensional deformations. Finnish birch plywood offers greater resistance to weathering and moisture, which are the main causes of unsightly deformation and blemishes. To mitigate such effects would require constant polishing and maintenance to restore its flatness. This has a considerable impact on the cost of maintenance and durability of a hardwood floor.

The layered core of Proparq flooring allows us to produce large boards, extremely stable, with joints calibrated to ensure a perfect co-planar fit between the slats. This greatly reduces

co-planar fit between the slats. This greatly reduces installation time and results in a product that is even more resistant, through its bonding with the screed; its increased stability and reduced thickness also allows its installation over any form of underfloor heating system.

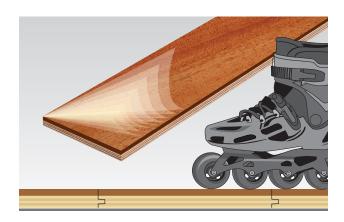
Proparq flooring installs quickly and does not require subsequent machining after installation, or time for settling. Choose the pre-finished solution and the floor will be immediately available for use after installation. This provides a considerable saving in installation times and consequent installation cost.

Thanks to these features, the multilayer Proparq flooring allows immediate use of the surface, a much longer lifetime, and minimal maintenance when compared to other types of wooden flooring.



High precision profiling on all four side of each board provide excellent fit between male and female joints.

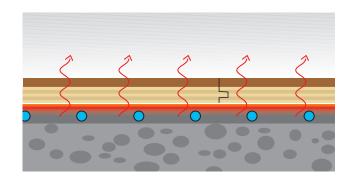
- The precision of the joints makes installation easier and provides excellent flatness.
- Excellent aesthetics and durability.
- The spaces between planks are effectively non-existent. This prevents dirt from penetrating into the wood, damaging and threatening household hygiene.



7 - 9 layers of non-toxic UV varnish make the surface of the slats highly resistant to abrasion, decreasing the effects of aging.



Quick and easy to install: Proparq floors are ready to use just one day after installation.



Proparq is ideal for installation on under-floor heating systems.



Weaknesses of our competitors

Solid wood block parquet

How it is made

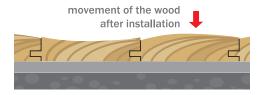
Traditional parquet floors are made entirely of solid wood blocks that are then sanded and polished after the installation and before use.

Disadvantages

It is a common misconception that this type of flooring is more durable and long-lasting than others because of its construction of thicker wood but, in fact, this feature causes many problems related to weathering and irregular screeds that cause continual deformation problems, including the gradual separation of the blocks, leaving unsightly cracks that in turn are filled with dirt and allow infiltration of water, causing serious maintenance problems.

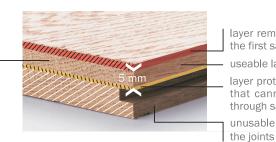
These problems alter the original appearance of the parquet and require frequent maintenance and refinishing; the latter reduces the parquet by 2/3 mm. each time. In addition, of the total thickness of 15/20 mm, of each block, only 5 or 6 mm above the male / female joints are usable, so this process causes rapid thinning and consequent shortening of the life of the parquet, resulting in anti-ecological waste of large amounts of the remaining hardwood that functions solely as the support structure. Furthermore, the installation of this type of flooring sometimes requires as much as forty days before it can be used, with consequent high costs involved in laying, sanding and varnishing. Such flooring is also unsuitable for installation on under-floor heating systems, resulting in a market that is increasingly focused on the use of multi-layered flooring slats.





Occurs immediately after the installation due to the natural adjustment of the interlocked wooden blocks that cannot expand freely thus forming humps and bumps that must be sanded down to make the floor level.

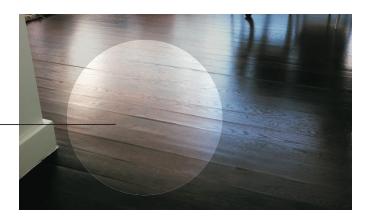
The useful part of any solid wood slat is just that between the layer which is removed with the first sanding, and the layer above the interlocking tooth. This part is about 5 mm. Over time, the continuous movement of the wood requires frequent parquet sanding to restore a level surface.



layer removed during the first sanding useable layer layer protecting the joints that cannot be removed through sanding unusable layer beneath



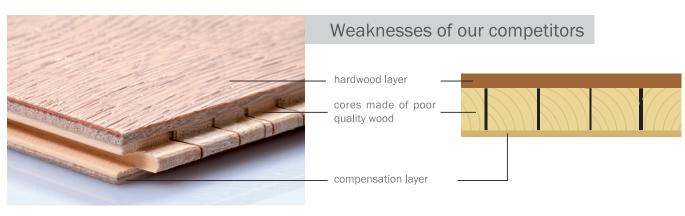
With Propaq there is no wastage of valuable wood



Over time, wood flooring using solid blocks requires periodic sanding due to the continuous movement of the wood



After repeated sanding there is a risk that the teeth of the joints that connect the slats together will be exposed, ruining the floor. You should therefore retain at least 1 to 2 mm of wood above the joints.





elastic behaviour of the boards

Three-layer parquet

How it is made

This type of flooring features a pre-finished top layer with a thickness ranging from 2.5 to 3.5 mm. The underlying substrate is composed of lamellae in spruce or another poor quality timber, laid side by side and glued into a sandwich between the top layer and an underlying panel of thickness from 1 to 2 mm.

The three-layer parquet is mainly used in floating floor applications and is not glued to the screed. This reduces installation time.

Disadvantages

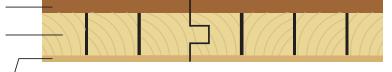
The three-layer design has major drawbacks thanks to the structure of the boards, which limits flexibility and resistance to twisting; due to the spaces created between the wood flooring and the underlying surface, the flooring is very noisy. Furthermore, the fact that the installation does not provide a seal between the boards makes this type of parquet particularly susceptible to infiltration, which can easily penetrate fir wood support, a type of wood known to be very sensitive to liquids and that is notorious for causing bulges, delamination and warping. The latter, very important, problem affects the flooring's durability: the floating installation does not allow for further relevelling after installation, making it impossible to repair scratches, wear or other damage.

hardwood layer

blocks of low quality softwoods laid alongside one another

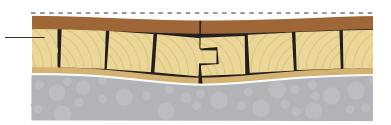
This solution forms a layer that is non-cohesive and serves mainly to thicken the strip that provides the tongue and groove joint

compensation layer with thin wood of poor quality

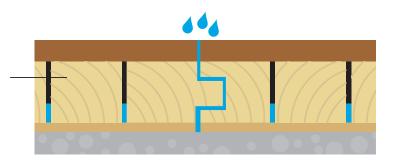


The different characteristics of the three woods used are an inherent weakness of this form of parquet flooring as they react very differently to stress, changes in humidity and temperature.

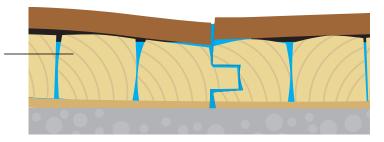
The two hardwood surface layers have a different thickness, giving each a different level of elasticity. When the parquet slat flexes, the thin layer yields while the other resists. Over time, this causes the wood in the central layers to detach from one or both of the surfaces.

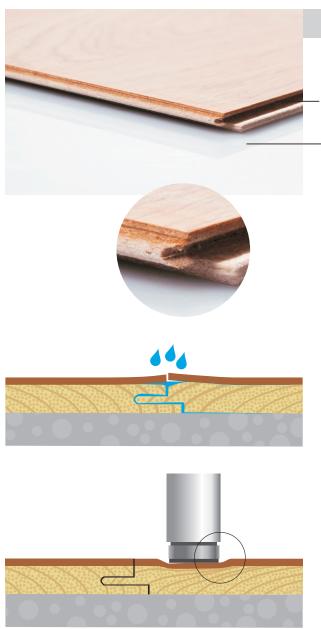


1) Liquids can infiltrate the gaps between the slats and joints, propagating into the spaces beneath the flooring.



2) The low-quality wood in the slats not only rots, but also swells, becoming deformed dramatically with an increase of the effects that quickly ruin the entire floor.





Weaknesses of our competitors

Very thin wood strips

Structures made from MDF or low-quality wood



Veneered parquet

How it is made

Veneered parquet consists of a base of wood fibre panels and a lamella of hardwood just 1 mm thick for the surface.

With this type of flooring, the surface presents the same characteristics of the wood, but it does not have the same structural qualities.

Disadvantages

In this parquet, the hardwood layer is very thin and therefore extremely delicate, because it can be damaged by the weight of heavy furniture, easily damaged by knocks, and with frequent footfall. Worse still: this floor cannot be re-polished once damaged.

Even the support structure is very thin and made with poor materials that lack resistance to moisture, so the flooring tends to come unstuck easily from the screed below. For these reasons, the life of this type of flooring is very limited.

soft support layer and very thin top layer react badly to impacts and compression



comparison of materials

the hardwood layer the support proparq From 5 to 9 layers of marine birch plywood: remarkably elastic, Seasoned and treated hardwood layer thickness from $3.2\ \text{to}\ 5$ mm. that does not deform after the installation and does not resistant to compression and moisture require sanding solid wood The useful part is that above the joints, much of which will be No support, just wood. destroyed by sanding after installation. veneer The hardwood layer is about 1 mm thick, which prevents Wood fiber panel, with poor resistance to compression and refinishing when scratched or worn and needs to be replaced moisture. instead. three layers The hardwood layer is approx. 2.5 to 3.5 mm thick. Due to the $\,$ Sandwich comprised of layers of fir laid side by side and glued technical characteristics of this parquet flooring, refinishing of to a thin layer of wood.

the floor due to wear and tear is not recommended.

proparq

feature comparison

installation type

V V V V

Glued to the screed or existing floor with two-component glue

sealing the slats



Highly accurate joints on all four sides of the slat make the floor perfectly planar and leave no spaces between the slats, thus avoiding infiltration of liquids and dirt



Glued to the screed or existing floor with two-component glue

solid wood



Joints that tend to become deformed due to movement of the wood at the time of laying and over the entire life of the flooring. Dirt and liquids penetrate gaps and spaces, ruining the wood.



Floating floor resting directly on the surface, or on the screed, without the use of glue

veneer



Gaps susceptible to infiltration. Dirt and liquids penetrate gaps and spaces, ruining the wood and deforming the floor structure.



Glued to the screed or existing floor with two-component glue

three layers



Gaps subject to deformation due to the differing characteristics of the materials used. Dirt and liquids penetrate gaps and spaces, ruining the wood and deforming the support structure.

feature comparison

deformation sanding



proparq



It does not deform and keeps a perfect flatness

It is ready and does not need to be polished as part of the installation. If necessary, the floor can be sanded safely over its lifetime.



solid wood



It deforms noticeably after installation, and continues to do so over the life of the floor. It requires periodic sanding.

Deep sanding required from the start at installation, as well as subsequently. The thickness of the wood means it can be sanded once or twice at most.



veneer



It becomes deformed visibly due to humidity and the different expansion coefficients of the two materials. The top layer tends to detach from the support structure.

The very thin top layer prevents sanding when scratches and wear occur, it must be removed and replaced.



three layers



It becomes deformed visibly due to humidity and the different expansion coefficients of the two materials. The top layer tends to detach from the support structure.

Sanding is not recommended. As the flooring is not anchored to the surface below with adhesive, the sanding machine itself can move the slats and loosen the joints.



CERTIFICATIONS







ISO 9001

Certification of Quality Management System of the company.





MADE IN ITALY

Proparq products are completely made in Italy and 100% MADE IN ITALY mark is synonymous of quality and guarantee.

EN 143



CE MARK

Proparq products are in compliance with the requirements of wood flooring CE marking regulations.



FSC

Certification of the chain of custody that guarantees the origin from forest managed according to strict environmental, social and economic.



PEFC

Certification of the chain of custody that guarantees the origin of products from sustainably managed forest.



SUITABILITY FOR INSTALLATION ON UNDER-FLOOR HEATING / COOLING

Proparq products are siutable for underfloor heating/cooling systems. N.B.: Underfloors and heating/cooling system must be in compliance with the relative regulations and supplier's instructions.



REACTION TO FIRE

CE MARKING regulations UNI EN 14342: 2005+A1: 2008.



FORMALDEHYDE

Proparq products are fully in copliance with the limits enforced by Class E1 regulations, which is the most strict class in European regulations EN 13986 and D:M. (Italian departmental decree) 10/2008.



SOLVENT FREE

CE MARKING regulations UNI EN 14342: 2005+A1: 2008.



RADIATION FREE

At Proparq we have engaged in a system af self-discipline including strict controls and limits concerning radioactive release of both incoming raw materials and finished products.





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