

Multilayer engineered hardwood floor, state of the art technology and high performance, available with a special natural oils finish, interlocking tongues and grooves for easy and precise installation.

Assorted widths 90/125/140/190 mm for the "ancienne" installation patterns, assorted lengths from 1000 to 2000 mm, total thickness 16 mm.

Material is supplied in random lengths subject to availability.

All shipments may have about 15% lengths shorter than the standard ones.

SPECIFICATIONS

Top layer

Available with a thickness of approximately 5 mm in the **European Walnut** wood species.

The outline of each strip is characterized by *chamfered edges (about 0,5 mm depth)* that enhances the natural appearance of the wooden boards.

Support base

Made up of 9 layers of birch plywood all bonded with moisture resistant adhesives ("marine" plywood). The first layer is laid at a right angle to the fibre of the top layer to guarantee greater stability of the transversal section.

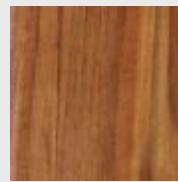
The top layer is joined to the base using special adhesives which conform to the *JAS Type II (Japanese Agricultural Standard)* requirements, and also to those of the class D4 of the UNI EN 204 regulation, not noxious, formaldehyde and VOC free.

Locking system

The boards interlock on all four sides and have two tongues and two grooves.

Finish *Natif*

Listone Giordano® Atelier **Ancien** is available with *Natif* finish in the **Walnut Puro** version:



Walnut Puro

Natif is an essential vegetable oils based treatment.

The specific application technique, along with the quality of the especially created blend, allows the oils to penetrate deeply into the wood, offering the most natural appearance, both visual and tactile, whilst enhancing the characteristic grain of the wood and camouflaging the small marks caused by normal every day use.

The *Natif* finish requires more specific cleaning and maintenance and ensures good results in terms of resistance to household liquid penetration if very quickly removed.

The natural oil finishing has the characteristic to continue over time to permeate the wood fibres even while the material is still inside the packaging. The possible appearance of *surface dryness* that you should notice on newly laid planks, will be *reset with the application of the specific product for periodic maintenance*.

Light colour wood floors and white pigmented areas with natural oil finishes may appear with a *slightly yellowish tone* when wood is kept in boxes or it is not exposed to the light and the air for a long time. This may be considered as an utterly natural and temporary phenomenon for natural vegetable oils.

By exposing the boards to direct sun light and to the air will gradually restore the original and acknowledged appearance of the product within a few hours; whilst indirect exposure to the light, as a domestic environment, can take up to a few weeks time before utter restoring.

Listone Giordano® Atelier Ancien is always proposed with a *smooth* surface.

The **finish process of the hardwood floor Listone Giordano® Atelier Ancien** can create non homogeneity of the colour tone that cannot be considered to be a defect, but a natural feature of these hardwood floors.

Moreover *due to the nature of the product, the surface may present signs of the passing of time and non homogenous effects caused by the wear and tear of the surface.*

Varied grain figure and colour tone with the presence of small or big, firm or filled knots. Open knots may occur.

LAYING

Make sure that all work on site (decoration, installation of sanitary fixtures, etc.) has been completed.

Maintain the humidity level between 45% and 65% and the temperature between 16 and 25°C: because outside of these ranges, adhesives and other chemical products may be affected during drying/curing.

We recommend the boxes of hardwood flooring are stored in secure, dry and weather proof rooms and not placed directly on the ground (i.e. should be placed on dry pallets).

Open the boxes only as the flooring is being installed and no more than one box at a time as needed.

Subfloor

The subfloor on which the hardwood flooring is to be installed must be smooth, level, and have a compact surface so as to guarantee the best possible contact between the underside of the planks and the subfloor itself.

We recommend the following checks are carried out before installation:

Smoothness/Flatness of the subfloor

A 2 metre long straight edge should be placed on the subfloor, the maximum allowable tolerance is 2 ÷ 3 mm.

Concrete subfloor superficial structural strength

When hammering the surface no marks or deep cracking should appear.

Concrete subfloor superficial compactness control

It should not be possible to create deep scratches or excessive dust when scrapping the surface of the subfloor with a nail.

Fissuring

Small fissures created as a result of the normal shrinkage of the cement are allowable, but excessive cracks, in particular those which permeate throughout the complete thickness of the subfloor, must be properly consolidated by suitable and permanent means.

Cleaning

Before the installation begins it is very important to carefully clean and check the surface of the subfloor.

Make sure that the moisture content of the subfloor is within the recommended limits for the specific thickness and type of subfloor.

The subfloor residual moisture control has to be executed only using calcium carbide hygrometer and the maximum values allowed for the installation are:

- 2,0% for a concrete slab (max. thickness 80 mm);
- 0,4% for anhydrite slab;
- 10,0% for Wooden panels.

The laying of Listone Giordano® can also be carried out on pre-existing flooring, provided that they are checked all the conditions of rigidity, flatness, solidity, compactness, the absence of residual moisture or lift necessary to ensure proper contact at every point of the surface and the protection from external side. For installation over existing hard flooring (ceramic, stone, etc.), should in particular ensure that the surface is likely to ensure proper bonding. Where necessary action must be taken with a preliminary treatment of deep cleaning, degreasing, scratch the surface by mechanical means and/or suitable chemicals.

The glued installation is not compatible with pre-existing type textile floor coverings (i.e carpets) or resilient (linoleum, PVC, etc.), which must therefore necessarily be removed.

Installation

Choose an adhesive that is compatible with the characteristics of the sub-floor and that won't transmit humidity to the wood (do not to use adhesives that contain water).

Ecolfit® Listone Giordano® is the one component adhesive recommended for all the range of our hardwood floors. The residues of the adhesive can be removed both during the installation and after the hardening of the glue.

We do not recommend the use of Puliplus® Listone Giordano or aggressive solvents to remove adhesive residues **on oil finished hardwood floor** especially if stained.

Spread the adhesive on the subfloor only using a suitably notched trowel and lay the boards on top by interlocking them, if possible, using only your hands. The use of other tools (for instance the mallets) can create damages on the surface of the boards. The planks should also be locked together, taking care not to allow adhesive into the joints.

Listone Giordano® can only be installed by fully adhering it to a suitable subfloor.

Around the entire perimeter of the environments, including the point of junction with thresholds of other flooring materials, *it is compulsory to form an expansion joint amplitude of about 10 mm* (or higher when the size of the premises are consistent), to be filled with appropriate skirting along the vertical walls and thresholds in connection with other joints in the floors.

The glue down installation of Listone Giordano® on an area with an **underfloor heating system** confers greater dimensional stability on the planks while the perfect adherence of the wood to the sub-floor guarantees the best conduction of heat into the rooms.

Note that in this condition Listone Giordano® Atelier Ancien, despite its total thickness of 16 mm, is able to offer a limited thermal resistance ($R=0,092 \text{ m}^2\text{K/W}$).

When the glue down installation is over an underfloor heating system, it is necessary first of all to make sure that the heating system is one that functions at a low temperature, then that the distance between the wood and the heating pipes or

cables embedded in the screed is at no point less than 30 mm, and finally that the contact temperature of the hardwood floor surface will not exceed 26/27°C
Should these indications not be fully complied the floor could suffer some damages such as dimensional deformations, gapping between the boards, checks and/or cracks on the top layer.

The construction characteristics of the sub-floor must be determined; it must be protected against the possibility of moisture intrusion and must be level, solid, clean and, in the case of concrete slab, have a maximum residual humidity of 1.7% CM.

For any further information about installation see the sheets PO 1 - Listone Giordano® over underfloor heating system and PO 5 – Installation of Listone Giordano®.

Operations to be performed during and at the end of the laying

At the end of the laying, first of all, *remove the dust found on the floor's surface by cleaning with a vacuum cleaner* equipped with a brush suitable for hardwood floors.

Then apply Oleonetto® Listone Giordano water down in double dose (2 caps diluted in 1 litre of clean water) passing it over the floor's surface using a soft cotton cloth well-wrung according to the instructions on the tin.

CLEANING AND MAINTENANCE

Maintain the humidity level of the atmosphere between 45% and 65% and the temperature between 15 and 30°C. This is also the same environmental conditions recommended for ensuring people's comfort and health.

Use protective felt pads for furniture, chair legs, etc.

Any armchair on castors should be covered with suitable rubber.

We recommend the use of a proper door-mat to clean the shoes.

Rugs and carpets should be removed from time to time. Leaving a rug on the same spot for a long time, especially soon after hardwood floor installation, may create an area of different colour tone.

Objects with weight concentrated over small surface areas can cause localised indentations in the surface of the wood.

Rubber shoes soles may leave dirty marks on the surface which could prove hard to remove.

Not to use sticky tape and adhesives materials on the surface because in case of remaining for a prolonged time or with high temperature, they can leave marks difficult to remove.

After a long period of time a *slight darkening effect can appear in the deeper parts of the wood* (brushings, sawings, etc.) due to the accumulation of the dust. Regular maintenance of the floor will reduce this appearance.

Never wash the floor with water only: it will not efficiently clean the surface of the floor and, moreover, the minerals contained in water may leave behind a residue that could affect the surface appearance of the floor.

Do not use liquids containing acid or basic concentrations, such as bleach or ammonia, which could create marks/halos on the wood that would be impossible to remove.

We advice to only use products recommended by ourselves for this finish.

Finish	Daily cleaning	Deep cleaning	Periodical care
Natif	Oleonetto	Extraclean	Oleovivo

Oleonetto

Remove the dust found on the floor's surface by cleaning with a vacuum cleaner equipped with a brush suitable for hardwood floors.

Shake very well.

Then wash the floor with Oleonetto® Listone Giordano: pour a cap per each litre of water and pass it over the floor's surface using a soft cotton cloth well-wrung according to the instructions on the tin. No need to rinse.

In case the cotton-cloth touches other surfaces dry quickly to avoid marks or halos.

Extraclean

For periodical care, in case of presence of tough dirt, wash the floor with Extraclean Listone Giordano®, a product for the deep cleaning of the varnished and oiled hardwood flooring.

Shake well. Water down the Extraclean Listone Giordano® *at the 50% or 66% (2 parts of Extraclean and 1 of water)*.

Pour onto the floor and wipe by a cotton cloth in typical action of deep cleaning of a surface in order to remove the dirt by means of chemical and mechanical action.

This operation can be done also by a single-brush buffer machine fitted with a white pad and a soft cotton cloth.

After the application of Extraclean Listone Giordano®, you will have a liquid contaminated with the dirt that you will have to remove very carefully avoiding that it remains on the floor (dry this liquid by means of soft cotton cloths or extractor liquids fan). Leave the floor dry not using any product nor buffing.

In case of need repeat the cleaning operations two times consecutives.

For Nativ finished hardwood floors, after the application of Extraclean Listone Giordano®, particularly if applied all over the parquet surface, it is recommended a periodical care treatment with Oleovivo® Listone Giordano (see direction for use below).

A 1 litre bottle of Extraclean diluted with water is generally sufficient for treating a surface area of approximately 40–50 m².

Oleovivo

For periodical care apply Oleovivo® Listone Giordano, a solution natural oils based specially formulated to restore the surface film of protection when it begins to loose its uniform appearance due to foot traffic and general wear.

The use of Oleovivo® Listone Giordano must be scheduled based on the intensity of the floor's use. It is estimated that *it must be applied every 6-12 months*; however it is advisable to *apply the product for the first time 3-6 months after the installation*.

Remove the dust found on the floor's surface by sweeping with a broom or, better yet, clean with a vacuum cleaner equipped with a brush suitable for oiled hardwood floors.

The floor should firstly be cleaned with Extraclean Listone Giordano®, according to the instructions above, in order for the application of Oleovivo® to be more effective.

Shake very well.

Pour Oleovivo® Listone Giordano **pure** directly on the floor, a small amount at a time. Using a cotton cloth, spread the solution over the floor as if to clean, always wiping in the direction of the wood grain (this operation can be performed either by hand or with a large brush).

Once the product is applied, the floor's surface should appear to be slightly wet.

Wait some minute (anyway no longer than 10-15 minutes).

Polish the floor's surface using a domestic buffer fitted with a felt pad or other soft material (do not use brushes). If you do not have a buffer, the floor can be polished by hand using a soft cloth underneath a long-handled floor brush.

While *the floor can be walked upon as soon as the treatment has been completed*, it would be best to wait a few hours to ensure the best results.

Immediately after these operations have been completed, hang the cotton rags used during the application process in fresh air or soak in water. Rags that are left to pile up in poorly ventilated areas may spontaneously combust.

A 1 litre bottle of Oleovivo® Listone Giordano is generally sufficient for treating a surface area of approximately 80–100 m². By taking into account possible waste, ***it is recommended that you order 1 litre of product each 60 m² of parquet.***

Characteristic of the free class grade

(according to EN13489 - Wood and parquet flooring - Multi-layer parquet elements)

Characteristic	
Sound sapwood	<i>Not permitted</i>
Knots sound and intergrown	
Light colour tone	
Medium colour tone	
Knot unsound	
Yellow stain	<i>Permitted</i>
Checks	<i>Not permitted</i>
Bark pockets	<i>Not permitted</i>
Lightning shake	<i>Not permitted</i>
Curly grain	<i>Permitted</i>
Slope of grain	<i>Permitted without limit</i>
Sound heart	<i>Permitted</i>
Colour variation <i>(including blackheart, red heart, etc.)</i>	<i>Permitted</i>
Stick marks	<i>Not permitted</i>
Medullary ray	<i>Permitted</i>
Biodeterioration	<i>Not permitted</i>
Non-visible parts	
All features permitted without any limitation as to size or quantity if these do not impair the strength or wearing quality of the parquet flooring.	

**All dimensional estimation are optically done without using any measurement device.
For this reason allowance are permitted in the above dimensional data.**

CERTIFICATIONS

Biosphera



Biosphera is a marking system based upon Listone Giordano's green procurement policy.

Listone Giordano® Atelier Ancien offers both in its top layer and in its support the Biosphera the Biosphera certified mark that identifies raw materials whose forestry management is certified according to international standard (FSC, PEFC, SFI, OLB, LEI, etc.)..



CE certifications

All the products of the collection Listone Giordano® Atelier Ancien strictly comply to all CE rules.



Solvent free

No emission of solvents, as resulting from the analyses conducted on Listone Giordano® by the SERECO BIOTEST chemical laboratory.



Formaldehyde

All the products of the collection Listone Giordano® Atelier Ancien fully comply to the class E1, which is amongst the strictest European regulations (UNI EN 14342).



Fire reaction Certification

Listone Giordano® Atelier Ancien Walnut complies to the Dfl-s1 fire reaction class according to the requirements of the EN14342 regulation on the CE mark.



ISO 9001

Quality Management System certification.



ISO 14001

Environmental Management System certification for the Miraldo di Torgiano (PG) factory.

Made in

All the products of the collection Listone Giordano® Atelier Ancien are Made in Italy.

Important information about hardwood floors



We invite you to read this page which contains important information on the basic characteristics and natural performance features of hardwood floors

Wood is a "living" material. For this reason it is susceptible to changes caused by external factors such as sunlight, temperature, humidity and everyday use.

It's important to know that:

- the colour of a hardwood floor depends not only on the wood fibres, but also on other substances that are naturally found in the wood itself, known as *extractives*. Since the colour of these substances may vary based on exposure to air and light, the hardwood floor's original colour will naturally and inevitably change over time, generally towards darker colour tones.

This behaviour is the same in *stained versions*, in direct proportion to the colour tone.

- Due to their elevated content of extractives, **tropical woods** are particularly susceptible to chromatic changes. Over time, they generally take on a brownish-dark tone. This phenomenon is most commonly seen in *Iroko* and *Doussié* wood. Intense and rapid oxidation may rapidly occur in localized areas, particularly in Doussié wood, which may cause different types of colour variations even on elements that were originally similar. In certain conditions, this oxidation process can make the silica traces naturally found in the structure of the wood species appear even more evident.

Teak, on the other hand, is characterised by its typical colour variations in its natural state. When exposed to sunlight, Teak's colour tends to lighten and become more uniform with a medium-light tone, reducing or even eliminating the differences that may have initially appeared to be evident.

- On the contrary **long exposure of the floor to the sunlight** (maybe through windows), can create a discolouring of the floor (U.V. sun rays are able to discolour also materials other than wood). To prevent this phenomenon we advice to use suitable curtains, blinds or special protective film coverings to the windows to filter U.V. rays.

- The natural characteristics of the extra wide wood boards combined with the typical varied grain of the tangential cut *might show minor fractures in correspondence to the medullary rays*.

These standard features of the product may become marked should the wood floor be exposed to particularly severe climate conditions.

- in certain wood species (particularly Oak and Beech) the strips of wood that are taken from a perfectly radial section of the log, are characterised by a striped grain along with shinier band and flecks known as **silver figures and ray fleck** (visible also in coloured finishes). Woods with these characteristics, which indicate an intersection with medullary rays, constitute an increasingly sought-after feature.

These characteristics clearly distinguish the more valuable strips in terms of both aesthetic appearance

(fibre regularity) and technical performance (dimensional stability, impermeability, etc.).

- **wood is naturally susceptible to dimensional variations** that depend on room temperature and humidity. To prevent these factors from generating undesirable effects on the floor, the room's climate must always be kept within the recommended limits (**air temperature between 15°C and 30°C and, most importantly, air humidity between 45% and 65%**).

What's more, these temperature and humidity ranges are the same ones recommended for people's comfort and health.

Despite of the stabilising effects given by the flooring support, *prolonged exposure to an excessively dry climate* can lead to the appearance of **small gaps between strips** even on multilayer products. However, these gaps will tend to diminish, until disappearing completely, once the proper climatic conditions are re-established.

- On the other hand, *extremely humid or dry conditions* may generate tension inside the wood that may even be elevated at times; in more severe cases **micro-fractures may appear on the top layer of the wood** (due to the shifting of the interface between the growth rings once the elastic compression limit has been surpassed).

For these reasons it is important that the proper climatic conditions be guaranteed, both during the installation process and later on, even if the areas are not inhabited.

- *The hardwood floor finish serves a protective function.* Over time, foot traffic and maintenance lack may cause the floor to lose its homogeneity and shine, the extent of which depends on the intensity of the solicitations received and the maintenance executed.

- All of the wood species used for manufacturing hardwood floors Listone Giordano® are **hard enough to fully guarantee the required performance characteristics for its specific use**.

However, damage caused by blows or fallen objects, along with highly concentrated loads (high heels, work ladders, etc.) can leave marks on the surface.

- Wood does not have the same uniform appearance as synthetic materials. For this reason no two floors in the same wood will ever be exactly identical.

For the same reason **a sample consisting of just a few strips will give a general idea of how the entire floor will look**. However, it can never fully represent the floor's final aesthetic result.

The phenomenon described above constitute the natural features of hardwood floors.

For this reason these characteristics cannot be considered to be defects.

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The indications reported in this technical sheet derive from the research and the direct experience of the Firm and have to be considered generally valid, because of it's impossible to foresee all the applicative and environmental variables. All contents of this information sheet are intended for guidance only and may be subject to change at any time and without prior notice.