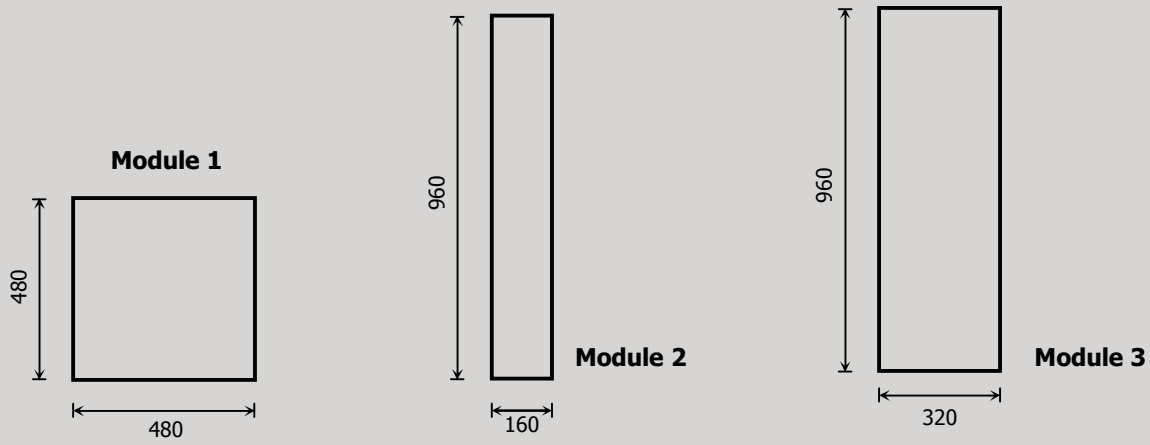
foxtrot

design Matteo Nunziati

Listone Giordano NATURAL GENIUS

Foxtrot is a modular floor covering (Ref. UNI EN 14354) made of 3 geometrical shapes: one square and two rectangles.



Information sheet

SPECIFICATIONS

The 3 modules have a thickness of 13 mm and are made of multilayer wood.
The standard order incorporates: 2 modules 480x480 mm, 6 modules 160x960 mm, 4 modules 320x960 mm.
The section of the product shows a core of 11 mm in multilayer birch plywood, a 1 mm top layer in Oak veneer and a 1 mm bottom counterbalancing veneered layer in other wood species.
The outline of each strip is characterized by *chamfered edges about 0,5 mm depth at 30° angle*.

Locking system

Each individual module is groove profiled on four sides; loose wooden tongues are supplied with the flooring to joint the modules.

Finish

Listone Giordano® Foxtrot is available with high-resistance UV oil finish in various colour tones:

Avorio **Avana** **Tortora** **Testa di moro**

The high-resistance UV oil finish ensures excellent results in terms of resistance to surface abrasion, enhances the natural beauty of the wood and the depth of the colour tone. This finish offers ease of maintenance and good results in terms of resistance to household liquid and chemical agents penetration.
The high-resistance UV oil finish is only proposed with a *"brushed"* surface: a special treatment is performed on the wood's surface before the oil is applied in order to accentuate the appearance of the wood's natural pores and fibres.

Wood is a raw material that naturally offers different absorption of the finish.
For this reason in the UV oil treatment with colour pigments there are natural variation of the colour tone. This cannot be considered a defect but a feature

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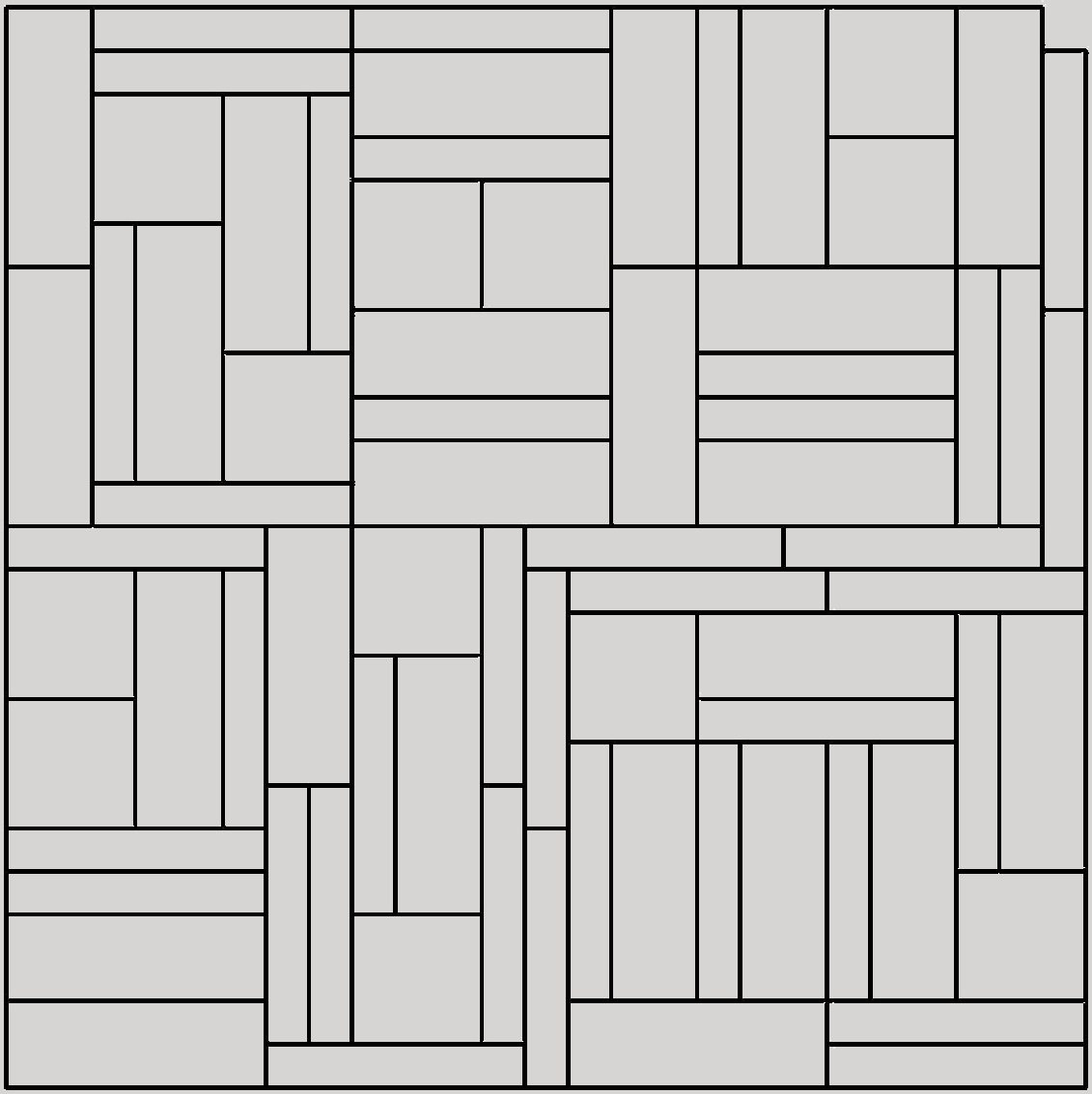
demanded to highlight the naturalness and authenticity of the material.
The top layer shows varied grain figure and colour tone with the presence of firm, filled and sometime open knots and of typical characteristics of the Oak wood species.

PLANNING

Considering the particular shape of the product, a preliminary project of the surface is necessary to order the correct number of modules and related waste due to perimeter cutting of the elements (usually measured between 5% and 10% though percentage may vary according to dimension and shape of the area to be laid).

Installation pattern



Information sheet

INSTALLATION

Preliminary checks

Before installation, make sure the site is cleared and all the finishing work (i.e. walls, sanitary installation etc..) have been completed.
Check that humidity content has to range between 45% and 65% and that the room temperature is kept between 16° C and 25° C. Outside of these ranges the glues and all other chemicals in use may be altered during the drying phase.
Foxtrot has to kept in the original boxes, well covered and placed on pallets, in order to avoid direct contact with the ground.
Packages must not be opened except at the time of actual use of the material for the installation, and only in the quantities strictly necessary for immediate use.

Conditions of the subfloor (cement or anhydrite screed)

The subfloor must have a smooth, planar and compact surface so as to ensure the best adherence between the product and the subfloor itself.
Before installation the following controls must be carried out:.

Flatness control: position 2 m long straightedge on the subfloor and verify that there are no depressions greater than 2-3 mm.

Structural solidity control: when hitting the surface of the slab with a hammer it does not have to show deep cracks or dents.

Surface compactness control: when scratching the surface top with a nail, no deep grooves should be marked and no dust appear.

Cracking: small cracks resulting from the natural shrinkage of the concrete should not prevent installation. The subfloor should in any case be consolidated using suitable products especially if they involve the entire thickness of the subfloor and/or show a tendency to spread.

Cleaning: before beginning the installation we strongly recommend to thoroughly clean the surface.

Moisture of the subfloor

It is important to verify that the moisture content of the subfloor meets the specified limits according to the specific thicknesses and types of material.

The moisture control of the subfloor must be performed only by use of a calcium carbide hygrometer. The maximum values allowed for the installation are as follows:
- 2.0% CM for cement screed (maximum thickness 80 mm);
- 0.4% CM for anhydrite screed.

If the installation is made on waterproof plywood panels or compressed wooden boards provided that a suitable vapor barrier is placed on the subfloor, you must ensure, through appropriate instruments, which measured the moisture content of wood panels, does not exceed the value of 10.0 %.

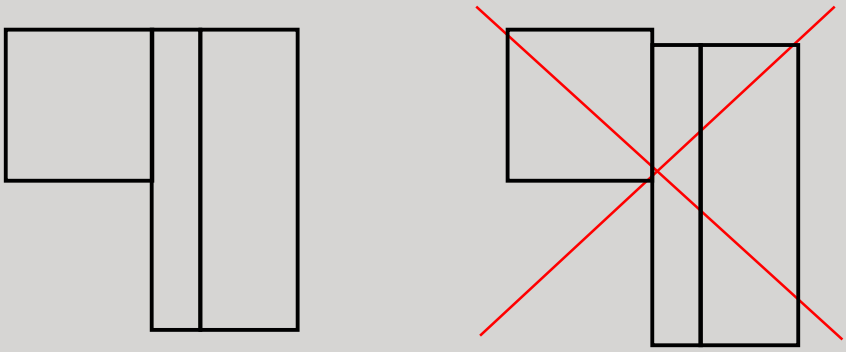
Installation over existing floors or other types of subfloors

The laying of Foxtrot 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.

To verify the suitability of the installation of Foxtrot on other substrates or special conditions, however it is recommended that you first contact the Service Department.

The installation

The installation of Foxtrot must closely follow the compositional scheme designed to ensure, in addition to the aesthetic effect desired, also the consistency of quantities and proportions of the materials sorted. For this it is essential that staff have in the pipeline laying project on paper and use it to locate the exact point of generation and then mark, module by module, the feed composition.
It also recommended a scrupulous accuracy in the approach of the elements and connecting the vertices converging at the same point, starting from the earliest stages.



YES **NO**

The interlocking and the reference of co planarity between modules occurs through the appropriate cores, which must be inserted in the outer profiling for the entire length.
To avoid that you can inadvertently create mismatches in the elements have already been installed, we recommend the same approach using the maximum sensitivity and avoiding in any case to give any kind of percussion.
This caution is even more compelling in the early stages of the pose, installed when the elements are even more vulnerable to small shifts.

Foxtrot is suitable for both glue-down and floating installation.

Specific rules for glued-down installation

Before glued installation is always essential to thoroughly clean the surface from dust, grease or other loose debris to ensure perfect adhesion of the glue to the subfloor.
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.
Choose an adhesive compatible with the characteristics of the substrate and has no ability to transmit moisture to the wood (are absolutely not recommended adhesives containing water).

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

Spread the glue only to the subfloor using an appropriate notched trowel and lay over modules, jointing them using only the hands and still striving utmost delicacy.
Avoid in particular of imparting to the floor strokes with tools of any kind, in order to avoid damage to the product and the misalignment of the geometric configuration.
Be careful not to go up the glue on profiling, nor on the surface.
Around the entire perimeter of the environments, including the point of junction with thresholds of other flooring materials, *it is obligatory 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.

Specific rules for floating installation

In the case of floating, if there is evidence or even suspicion of any possible infiltration of moisture (i.e. the ground or on floors where there was high humidity or containing lighter materials, etc..) it is necessary to lay a double layer of polyethylene on the substrate and extend it "cup" for the height of some centimetres on the walls to form an effective barrier to the rising damp.

Before starting the installation proper of the modules is absolutely necessary to lay an underlay of foamed material of a few mm thickness. Will serve to compensate the inevitable micro irregularities of the laying surface in addition to creating the necessary sound insulation, both for the reverberated sound in the environment in which it is placed on the floor, for both the sound transmitted to spaces below. In the case of laying of flooring of pre-existing textile type or resilient, depending on the nature and conditions of the same, can be evaluated with the conservation substitutive function of the mat.

The strips should be performed continuously by applying a bead of glue around the perimeter special (specific to floor coverings floating) on the lower wall of the channel forming female: the next union by the appropriate soul guarantees a stable matching in time between the different modules. In performing this operation is always recommended the greatest care and is contraindicated each technique involving the percussion of the product with tools of any kind.
Around the entire perimeter of the environments, including the point of junction with thresholds of other flooring materials, *it is obligatory 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.
In case the laying interests very wide surfaces is necessary to provide *expansion joints every 6/8 ml approximately in both directions*.

While standing the glue that is accidentally exposed to the surface of the modules must be removed quickly with a cloth wet with water.
The drying of the adhesive on the surface does not cause any deterioration of the finish but could pose a risk of damage (i.e alteration of gloss) if removed by exerting inappropriate actions chafe.

Specific rules for underfloor radiant system

In the case of underfloor radiant system, it is advisable to make a glue-down installation.

As well as to confer a better dimensional stability of the modules, the perfect union of the wood to the subfloor ensures the best heat conduction to the environment.
In this condition of installation *Foxtrot offers a limited thermal resistance (R=0.076 m²K/W)*. Conversely, in case of floating installation, the thermal resistance of the wood should be added that of the underlay of sound insulation and that of air of any gaps that may always remain below a floating floor.

In the case of bonding on an underfloor radiant system is must first ascertain that the plant is of modern design with low temperature operation, and then that the heating bodies are inserted in the screed of substrate at a distance from the wood never less than 30 mm. The temperature of contact of the upper surface of the floor must not exceed 26/27° C. They will also be assessed the constructive characteristics of the substrate that must be protected from possible rising damp, planar, compact, clean and, in the case of cement screed, must contain a maximum of 1.7% CM residual moisture.

For detailed information about the installation please consult the sheets PO 1 – Listone Giordano® on underfloor radiant system and PO 5.

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

At the end of the laying it is first necessary *to remove dust and dirt present on solid floor using a vacuum cleaner* with brush suitable for cleaning a floor covering.
Then wash the floor with **Listone Giordano® Green** cleaner, diluting half a cup (100 ml) of product in a bucket containing 5 liters of water.

CONDITIONS OF USE

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.
We strongly recommend 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.

CLEANING

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.

Due to brushing effect on the surface the deeper parts of the wood can accumulate the dust. Regular maintenance of the floor will reduce this appearance.

Maintenance of Listone Giordano® Foxtrot has to be done only by the following products.

For daily maintenance *remove the dust found on the floor's surface by cleaning with a vacuum cleaner* equipped with a brush suitable for hardwood floors.
In order to clean the grease, dirt, etc. which inevitably forms on the surface of the floor it should be periodically cleaned using **Green Listone Giordano®**, a product specially formulated to gently clean Listone Giordano® Foxtrot.

Shake well.
Dilute half a cup of Green Listone Giordano® (100 ml approximately) in a 5 l bucket of water. Immerse a lint free soft cotton rag in the solution, wring well and pass it over the floor's surface using a long-handled floor brush/mop.
Use a cloth that will not leave fibre residues. No need to rinse.

1 litre of product is sufficient for washing approximately 5 times a surface area of 100 m².

In case of tough dirt wash the floor with Green Listone Giordano® in double dose. *Never exceed this concentration.*

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CERTIFICATIONS

Biosphera

Biosphera is a marking system based upon Listone Giordano's green procurement policy.
Listone Giordano® Foxtrot offers both in its top layer and in its support the Biosphera certified mark that identifies raw materials whose forestry management is certified according to international standard (FSC, PEFC, SFI, OLB, LEI, etc.).

Solvent free

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

Formaldehyde

Listone Giordano® Natural Genius Foxtrot complies to the class E1, which is amongst the strictest European regulations for (EN 717-2:1994).

Anti-bacterial finish CrystalCare

Listone Giordano® varnished and UV oil high-resistence finishes are antibacterial certified by CATAS S.p.a laboratories according to ISO 22196:2007 regulation.

ISO 9001

Quality Management System certification.

ISO 14001

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

Made in

Listone Giordano® Natural Genius Foxtrot is a product Made in Italy.

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Important information about hardwood floors

Listone Giordano NATURAL GENIUS

Information sheet

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.

- *Long exposure of the floor to the sunlight* (maybe trough 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 medullar 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*.
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.

- 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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