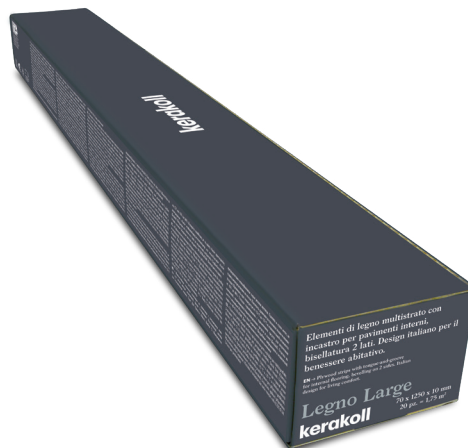


Legno Large

Engineered tongue-and-groove wood planks for internal flooring and paneling, chamfer on 2 sides. Timber type Oak. Format 70x1250 mm, thickness 10 mm. Adhesive laying.

Pre-sanded, unfinished surface, hand-worked texture. Absorbent, it requires finishing treatment to be carried out with Microresina or Legno Nat.



1. Eco-sustainable, compliant with regulation EUTR no. 995/2010 (Timber regulation)
2. Oak (Quercus Robur) a top quality raw material that is strong, hard and flexible
3. Stable thanks to the fact that it is seasoned in drying kilns and thanks to the support in birch plywood
4. Contemporary format, ideal for realising endless surfaces in wood in every environment
5. Hand-crafted texture on every single plank

Characterostocs

Nominal dimensions of elements

fixed width	70 mm
fixed length	1250 mm
Total thickness	10 mm
surface layer thickness	4 mm
Pack of 20 strips = m ² 1.75	
Weight ≈ 6.6 kg/m ²	

Mechanical properties

resistance: good
average Brinell hardness ≈ 35 N/mm ²
durability: high
stability: medium/high

→ Structure

Two layer elements with surface layer in Oak timber type (*Quercus Robur*, broad leaved), top quality natural raw material, grown in the European continental area, and support provided by many layers of birch arranged diagonally to the wood fibre, so as to guarantee greater stability to the section. Bonding the surface layer to the support is conducted with non-harmful, high resistance adhesives, complying with the bonding requirements for class D3, according to the UNI EN 204 standard and with formaldehyde emissions within the limits of class E1 of EN 14342. Single strip visible surface, the underside is grooved to encourage fixing to the adhesive. The integrated joints are formed on all four sides, 2 tongue and 2 groove; the edges of two long sides have a chamfer 0.5 mm in width with an angle of 45°.

→ Texture and finish

The visible side of individual elements is pre-sanded unfinished wood textured with handcrafted surface brushing, sawing and scraping, carried out in Italy. Absorbent, it requires final finishing treatment to be carried out after laying, using a cycle such as Microresina (150 colours of the Color Collection – 10 colours of the Warm Collection)

or Legno Nat (natural finish). Assessment of any differences, such as the levelling of elements or differences/absences of machining on certain individual elements, is to be considered an essential characteristic of handcrafted solid wood products with their genuine imperfections. Bear in mind that the surface finishing might occasionally result in splinters and chips in the wood that would be felt when walking barefoot and when passing a cleaning cloth during maintenance.

→ Appearance class

Light yellow-brown colour, wide grain, straight, medium-large fibres with clearly defined growth rings and medulla lines. Mixed lined and flamed veining with moderate variegations in colour that ensure the floor will have a generally natural and material appearance. Possible presence of bird's eye holes, natural signs typical of the type of timber, and of small areas of brighter veining known as "ray flecks" which indicate quality and are formed when the trunk is cut radially. The characteristics of this selection comply with the requirements of appearance class " " as indicated by standard UNI EN 13489 (up to 3% of the elements of a batch of material can be of other appearance classes).

Areas of application

→ Intended use:

Flooring and paneling suitable for any type of indoor environment, in domestic and commercial applications with medium foot traffic. Also suitable for bathrooms, with the exception of the shower area. Suitable for laying on heated floors, subject to the requirements indicated in the section on substrates, the design indications provided by the heating technician and those

provided by the company installing the system. Do not use outside or on substrates that are subject to rising damp; on substrates with a residual moisture higher than the one prescribed; on substrates in direct, continuous contact with water, on fresh, uncured, non-cohesive, excessively rough and/or absorbent, cracked, fragile and deformable, dirty, powdery substrates; on textiles or resilient substrates.

Instructions for use

→ Substrates

The substrate on which the hardwood floor is to be fitted must guarantee the best possible adhesion for the wooden floor, and must be at the correct level, cured, solid, even, not excessively rough and absorbent, and with an adequate surface strength and resistance. The substrate must also be dimensionally stable, non-deformable, dry, free from rising damp, without cracks, clean and free from detaching substances and dust. In general, cement-based screeds, or those based on special binders and calcium sulphate, must guarantee the performance levels and properties indicated in standard UNI 11371. A structural DPM (damp proof membrane) must be inserted before the substrate at design and construction phase to prevent transfer of residual water vapour and moisture from the underlying layers. Before laying the floor, use a calcium carbide hygrometer in the manner set down by standard UNI 10329 to check that the residual damp level falls within the maximum limits foreseen for the specific types of substrate and thicknesses:

substrate type	maximum residual moisture value
cement-based screed, maximum thickness 80 mm	≤ 2.0%
cement-based screed with under-floor heating	≤ 1.7%
anhydrite screed, maximum thickness 50 mm	≤ 0.5%
anhydrite screed with under-floor heating	≤ 0.2%

Legno Large can also be laid on screeds made using Keracem Eco, Keracem Eco Pronto, Keracem Eco Prontoplus or on synthetic substrates obtained by mixing EP21 with Quarzo 5.12.

When laying on timber based panels (plywood or composite wood panels, except for chipboard) check that the moisture is compatible with that of the wooden flooring to be laid and that the panels are properly fastened to the substrate using mechanical fixing elements.

Do not lay directly on existing textile layers (carpet) or resilient layers (PVC, linoleum, etc...); this type of flooring must be removed completely, also making sure that any residual traces of old adhesives are removed by sanding.

Make sure that the hydraulic system seal test has already been carried out. In substrates

containing an underfloor heating system, check that the pipes are covered by at least 30 mm of support materials and ensure that the initial start-up cycle has been carried out as foreseen by UNI EN 1264-4; a double polyethylene barrier, of suitable thickness according to UNI 11371, must be installed under the radiating panels.

→ Preparation of substrates

Non-cohesive, fragile and powdery substrates must be treated with EP21 according to the indications provided on the product technical data sheet. In the presence of high residual moisture (MC max 5% CM – RH max 90%) use EP21 as a waterproofing agent, making sure that the last coat is saturated with Quarzo 5.12. Self-levelling anhydrite and cement-based screeds must first be sanded as indicated by the manufacturer, cleaned and then treated with EP21 according to the indications provided on the product technical data sheet.

Expansion/construction/fractioning joints must be opened with an angle grinder. The edges of the joints must be impregnated with EP21 and immediately closed with EP21 mixed with Quarzo 5.12 according the instructions detailed in the related technical data sheet. On pre-existing substrates such as marble, granite, tiles or the like, first check that they are solid and anchored to the substrate; then perform in-depth cleaning, mechanical abrasion of the surface with a diamond disk, and finally apply the adhesion promoter Keragrip Eco Pulep; in the event of high residual moisture (MC max 5% CM – RH max 90%) apply 3CW.

To regulate uneven substrates, and to make adjustments (minimum thickness ≥ 3 mm with UNI 11371), use Wallzero, Keralevel Eco Ultra, Keratech Eco R30, Keratech Eco Flex, Floorzero or a synthetic mortar obtained by mixing EP21 with Quarzo 5.12. Any cracks must be repaired with Kerarep.

→ Laying

Legno Large must be laid by professionals and must only be laid using the even, continuous method of gluing to the substrate indicated in standard UNI 11368. Use L34 adhesives for hardwood flooring, L34 Evolution Rapid, specifically, as this is suitable for laying and colouring in a short time period.

Clean the substrate carefully and make sure that all the other operations foreseen on site have been completed and that the doors and windows have been fitted; no further operation that might involve damp must be carried out after the hardwood floor has been fitted (e.g. plastering and/or painting).

Check that the room temperature is between

Instructions for use

+15 °C and +25 °C with a relative air humidity of between 45% and 60%; outside these levels the adhesive materials might be subject to alterations in drying time; optimum reference values for solid wood flooring are a temperature of +18 – 20 °C and a relative air humidity of 55%. In the presence of an underfloor heating system this must be turned off 3 days before laying, and in any case the surface temperature of the screed, at the time of laying, must not be less than +15 °C (UNI 11371).

Keep the hardwood floor in its packaging, covered, in a dry room, protected from the weather and not in direct contact with the ground; only open the boxes when the floor is to be laid, and only as the strips are required. When completing laying of the hardwood floor, always allow a percentage for offcuts and rejects, setting aside any elements considered for any reason unsuitable or not in compliance with the laying operation. During installation, the applicator must select, distribute and mix the material in an optimum manner, to guarantee the best possible aesthetic performance according to the laying chart required.

Lay the adhesive evenly on the substrate using a suitable toothed spreader (such as no. 4) slotting the individual pieces of floor together and pressing adequately to guarantee complete and even contact with the adhesive; if necessary tap the elements using tools coated with materials that will not damage the hardwood floor.

Ensure that no adhesive rises to the surface and avoid accidental contact with the joints, removing any excess immediately with alcohol (not to be used when laying is to be followed by the Legno Nat cycle); eliminate any hardened

excess mechanically with a metal brush, taking care not to damage the surface.

Always leave a dilation gap around the edges of the individual rooms, to allow for natural movement of the wooden flooring; cover the gap with the Invisible skirting board. This procedure also applies when fitting wooden flooring adjacent to other floors and/or rigid surfaces (for example doors and windows): in this case the dilation gap must be covered using joint cover elements and/or connecting lintels.

Always respect structural joints formed in the substrate and repeat them on the laying surface; these joints are specifically inserted in the design to compensate for movements in the structures themselves.

Should any defects be found during the application phase the layer must suspend installation and inform Kerakoll Spa immediately.

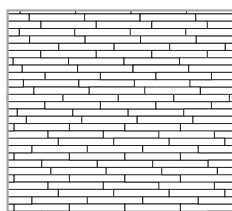
When laying has been completed, remove any dust and solid dirt using a vacuum cleaner with a soft bristle brush suitable for hardwood floor; if necessary, protect the floor with clean sheets and/or cardboard (do not cover with plastic sheeting).

Before proceeding with the cycle Microresina or Legno Nat ensure that the hardwood floor is adjusted to its final position.

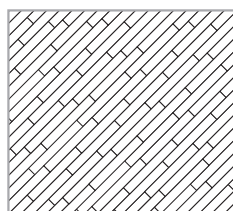
→ Disposal

When laying has been completed, do not discard any product; all packing materials, waste materials and discarded and/or unused materials must be handed over to public waste disposal systems in compliance with current regulations in force.

Laying layout designs



Staggered



Diagonal staggered

Certificates and marks



* Émission dans l'air intérieur Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).

Working conditions

- Wood is a living material, and because of its nature is subject to changes caused by external factors such as sunlight, damp, surrounding temperature and daily use; the phenomena described below are not to be considered as faults, but as natural behaviour intrinsic to the type of material.
- The colour of unfinished hardwood floor or hardwood floor with transparent finishing changes based on how it is exposed to air and light, causing a darkening of the natural colour over time. This phenomenon can be avoided by fitting the windows with U.V. filter film or curtains.
- As this is wood the surface of which is subjected to polishing, sawing and shaving operations, any slight differences (e.g. in level between elements, differences or absence of machining on certain individual strips) should not be seen as a fault, but merely as a sign of value and an essential feature of craftsmanship and the genuine imperfections it entails; these machining operations might cause slight differences in surface level that would be perceived when walking barefoot, as well as occasional light splintering and/or chipping of the wood.
- Maintain the ambient climate at a temperature ranging between +15 °C and +25 °C and with relative air humidity ranging between 45% and 60%; such thermal and humidity conditions shall be maintained over time to ensure that the hardwood floor characteristics at the time of installation remain unchanged, through the use of suitable humidification or dehumidification systems.
- Maintain the working temperature of the underfloor heating system so that the surface temperature of the floor is lower than +27 °C.
- The type of wood used is sufficiently hard to guarantee the performance required; however in spite of this, avoid impact or falling objects as well as the concentration of loads on small areas (e.g. ladders, stiletto heels, stones stuck in the soles of shoes, passage of pets, etc.).
- Protect the feet of chairs, sofas and armchairs using suitable felt pads. Provide suitable clean door mats at the entrance to rooms with wooden floors, upon which to clean your shoes.
- falling sparks or the propagation of flames will cause burns on the floor.
- The time between cleaning and maintenance operations, both ordinary and extraordinary, on Legno Kerakoll wood finished with Microresina, Legno Nat or other finishes of the Kerakoll line will depend on the intensity and manner in which the finished floor is used; for more information refer to the related technical data sheets.

Special notes

- Use Kerakoll substrate preparation coats, consolidating/waterproofing agents and adhesives as indicated in the respective product technical sheets.
- The photographic images in the catalogue and on the website, as well as the colours shown in the samples are to be considered purely indicative.
- Use material from a single production batch for each project.
- Materials from different batches may have slight colour and sheen variations.

Abstract

Hardwood floors and/or paneling for internal applications such as Legno Large by Kerakoll Spa, two-layer elements measuring 70x1,250x10 mm, pre-assembled with high-resistant, non-harmful adhesive, consisting of a single strip surface veneer in Oak (*Quercus Robur*) nominal thickness 4 mm and support in birch plywood with crossed transversal fibres, cut with grooving for elevated stability of the product, with integrated tongue-and-groove made on 4 sides of every single element.

Elements with long side edges marked by a 0.5 mm deep, 45° angle chamfer and with the heads cut off with a sharp edge, with a pre-sanded, unfinished exposed surface complying with aesthetic class "O" according to UNI EN 13226 standard, textured with handcrafted surface polishing, sawing and no. 3 scrapings (at right angles on 100% of the material, left diagonal and right diagonal on 10% of the material).

Technical characteristics in compliance with the requirements for CE Marking under standard EN 14342 (September 2013):

- Reaction to fire (EN 13501): Class Dfl-s1
- Formaldehyde emission (EN 13986 / EN 717): class E1
- Flexural strength: NPd
- Slipperiness: NPd
- Thermal conductivity: 0.12 W/(m K)
- Biological durability: Class 1-2

Timber grown in the European continental area, for which Kerakoll Spa implements the provisions envisaged by regulation No. 995/2010 EUTR through an adequate DDS system. Tested in class A+ for VOC emissions (EN ISO 16000).

Hygroscopic stabilisation carried out in drying and storage cells, moisture content of 5–9%.

To be fitted by means of even and continuous gluing using suitable Kerakoll adhesives. Pre-sanded unfinished surface, absorbent, needing final finishing treatment to be carried out on site such as Microresina or Legno Nat cycle by Kerakoll to obtain a Legno+Color Large or Legno+Color Large Nat continuous surface with Kerakoll 3-layer technology (K3S), with fire reaction class Cfl S1 according to standard EN 13501.

Warning

- Product for professional use
- abide by any standards and national regulations
- during storage, installation and use of the flooring, maintain a constant working temperature in the room of between +15 °C and +25 °C and an air humidity of between 45% and 60%; consider as optimum reference values for solid wood flooring a temperature of +18 – 20 °C and an air humidity of 55%
- keep the hardwood floor in its packaging, covered, in a dry room, protected from the weather and not in direct contact with the ground; only open the boxes when the floor is to be laid, and only as the strips are required
- prolonged exposure to direct sunlight may cause fading/darkening of the unfinished flooring. The finish should be applied within a few days or it should be covered completely and evenly with suitable materials
- avoid concentrating loads on small areas (e.g. ladders, stiletto heels, little stones)
- in spite of careful quality control, some elements might show characteristics unlike those of the appearance class indicated, as wood is a natural material
- when finished with Legno Nat and prolonged exposure to sunlight, areas covered by home furnishing components (carpets, furniture etc.) may show a different colour fading from the rest of the floor
- the samples displayed at our dealerships and the photographs provided are only to be understood as general examples of appearance, and are not binding. Floors made from the same type of timber will have more or less obvious natural differences in fibre and colour, particularly once they are exposed to light and air (oxidation process)
- if any faults appear during application the laying specialist must suspend installation and inform Kerakoll SpA immediately, penalty the loss of all rights; Kerakoll SpA's obligations will not extend beyond the collection and replacement of material acknowledged to be faulty. Testing of the material must take place at the time of delivery, any complaints must be raised within 8 days of receipt of the material, sent to Kerakoll SpA by registered mail with receipt, and in any case not later than the start of laying operations of the material deemed improper
- the product is an item according to the definitions of the EC Regulation No. 1907/2006 and therefore does not require a Safety Data Sheet
- for any other issues, contact the Kerakoll Worldwide Global Service +39 0536 811 516 - globalservice@kerakoll.com



The Rating classifications refer to the GreenBuilding Rating Manual 2013. This information was last updated in December 2023; please note that additions and/or amendments may be made over time by KERAKOLL SpA; for the latest version, see www.kerakoll.com. KERAKOLL SpA shall therefore be liable for the validity, accuracy and updating of information provided only when taken directly from its institutional website. The technical data sheet given here is based on our technical and practical knowledge. As it is not possible for us to directly check the conditions in your building site and the execution of the work, this information represents general indications that do not bind Kerakoll in any way. Therefore, it is advisable to perform a preliminary test to verify the suitability of the product for your purposes.