LIGNOBOND

Two-component, water and solvent-free epoxy-polyurethane adhesive for laying parquet. Suitable for laying any size and type of wood on all substrates.
Ideal for heated screeds.







BENEFITS AND FEATURES

- Can be applied on all substrates and for all types of parquet floors
- Solvent-free.
- High yield and ease of application
- High adhesion
- Perfect rib stability

WHERE TO USE

Bonding all types and shapes of parquet.

Some application examples

Lignobond is used for bonding lamparquet, solid hardwood strips, planks and all types of parquet on cementitious screeds, anhydrite screeds, screeds made using **Mapecem**, **Mapecem Pronto**, **Topcem**, **Topcem Pronto** and similar products, old wooden, ceramic, marble, terrazzo etc. floors and metal sheets.
Also suitable for heated substrates.

TECHNICAL CHARACTERISTICS

Lignobond is a two-component adhesive made from component A, an epoxy-polyurethane polymer, and component B, a special hardening paste. The consistency of the two pastes makes mixing much easier and helps to reduce the possibility of errors being made by users.
When the two components are mixed together, they form a product with an even colour which is easy to apply with a notched trowel and which has excellent rib stability.
Once hardened, approximately 24 hours after application at normal temperatures, **Lignobond** forms a tough film with high bond strength on any type of substrate, including those which are not absorbent (such as ceramic).

RECOMMENDATIONS

- Do not lay on screeds which are not protected against the risk of rising damp (always lay a vapour-proof sheath between the ground and the load-bearing screed).
- Do not lay in rooms if the doors and windows have not been installed.

- The humidity level in the screed must be according to current norms and standards.
- Do not lay on asphalt which has not been sufficiently cured (minimum 15-20 days).
- Do not lay if the temperature is lower than +10°C or higher than +30°C.
- Only lay floors if the walls and ceiling in the room are completely dry.

APPLICATION PROCEDURE

Preparation of the substrate

Substrates must be dry, flat, have good compressive and tensile strength and must be free of cracks, dust, loose portions, paint, wax, oil, rust and traces of gypsum or any other product which may compromise the bond.
The maximum humidity level must be within the range prescribed by the manufacturer of the flooring material.
Check the humidity content of the screed through its entire thickness with an electric or carbide hygrometer.
Please note that this instrument supplies only an indication of the humidity content. Use MAPEI special hydraulic binders to make quick-drying, controlled-shrinkage screeds, such as **Mapecem** or **Mapecem Pronto** which allow floors to be laid after only 24 hours, or **Topcem** or **Topcem Pronto** pre-blended, ready-to-use mortar, which allow wood to be laid after 24 hours and 4 days respectively.
Floating screeds installed on lightened sub-layers or insulating material and screeds laid directly on the ground must be cast on a vapour barrier to avoid humidity building up.
Hot-poured asphalt surfaces must have a consistency suitable to bear the foreseen loads. Floors must not be laid on bitumen with a low melting point or which may bleed oil.
Concrete surfaces which are not sound enough must be removed or, where possible, consolidated with **Prosfas**, **Primer EP**, **Primer MF** and **Primer MF EC Plus**, **Eco Prim PU 1K**, **Eco Prim PU 1K Turbo** or **Primer PU60** (see relative Technical Data Sheet).
Cracks must be repaired with **Eporip** or **Eporip Turbo** (see relative Technical Data Sheet).
If the flatness of the screed is not suitable for laying wood or if the screed is at the wrong level, skim the surface with **Ultraplan**, **Nivorapid**, **Fiberplan** or **Ultraplan Maxi** high-strength skimming compounds, applied in layers at least 3 mm thick. Before applying the skimming compound, treat the surface with a primer which complies with the requirements of the substrates and follow the indications on the relative technical data sheet.
When laying on old floors (cement terrazzo, ceramic or marble), the surface must be cleaned thoroughly with a solution of 15% caustic soda or another suitable product in warm water and then rinsed with clean water.
Wait until the surface is completely dry before laying the floor.
To improve the bond, apply a coat of **Primer KL** on the dry surface.

Mixing the adhesive

The two components which make up **Lignobond** are supplied in separate pre-dosed tubs:

- component A: 9 parts by weight;
- component B: 1 part by weight.

Mix the two components with a mechanical mixer until an even-coloured paste is formed.
The setting time and workability time in the tub are highly dependent on the surrounding temperature (see table).
Mix one complete package (component A + component B) at a time.
Never use the product if the temperature is lower than +10°C, the setting time may be too long.
If the product is used at around or slightly lower than the lower limit temperature, mix component A for a few minutes before mixing it with component B. This operation will help to improve the catalysing process of the adhesive.
Attention: the mixing ratio between components A and B must be absolutely adhered to.
Any modification in the ratio could compromise reticulation of the product.

Setting time of Lignobond according to temperature						
Temperature in °C	30	25	20	15	10	5
Time in hours	3	5	8	11	18	34

Spreading on the adhesive

Apply **Lignobond** on the substrate with a notched trowel using MAPEI notched trowel for wood.
The open time of **Lignobond** is approximately 60 minutes, which must be taken into consideration when spreading on the adhesive.

Laying the parquet

Before laying, the parquet must be stored in a dry, condensation-free area protected against bad weather and must not be left standing directly on the floor.
Before laying, make sure the level of humidity in the wood is within the limits recommended by the manufacturer.
Apply the flooring by pressing down slightly to make sure it is well buttered with **Lignobond**.
Never lay the parquet directly against walls and leave a joint approximately 1 cm wide around pillars and other protruding objects.
Never bond the sides of the stripts together (carefully follow the instructions given by the manufacturer of the wood).



Laying solid wood parquet on a substrate made from Topcem



Laying large size wood



Installing wide surfaces thanks to its excellent open time



Wood adhesion in compliance with standards

SET TO LIGHT FOOT TRAFFIC

Floors may be stepped on after approximately 24 hours.

POLISHING

Floors may be polished after approximately 3 days.

CLEANING

Lignobond may only be removed from parquet before it has hardened with **Cleaner L**. Once hardened, it may be removed mechanically or with **Pulicol 2000**. Do not use **Pulicol 2000** to remove **Lignobond** from pre-finished parquet.

CONSUMPTION

800-1000 g/m² with a MAPEI trowel for wood according to the type of substrate.

COLOUR

Brown and beige.

PACKAGING

5 and 10 kg kits.

STORAGE

Lignobond remains stable for at least 24 months if stored in its original, sealed packaging in a normal environment.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

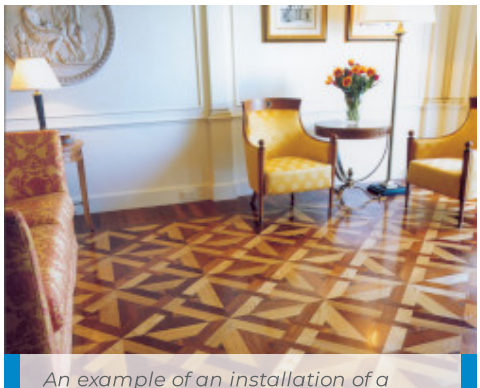
Lignobond component A is irritant for the skin and the eyes. Both components A and B may cause sensitization in contact with the skin of predisposed subjects. **Lignobond** component B is corrosive and may cause burns and damage to eyes. The product contains low molecular weight epoxy resins that may cause sensitisation if cross-contamination occurs with other epoxy compounds.
When applying the product, we recommend the use of protective gloves and goggles and to take the usual precautions for handling chemicals. If the product comes into contact with the eyes or skin, wash immediately with plenty of clean water and seek medical attention.
Furthermore **Lignobond** component A and B are dangerous for aquatic life, do not dispose of the product in the environment.
For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet.
PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)		
PRODUCT IDENTITY		
	component A	**component B**
Consistency:	thick paste	fluid paste
Colour:	light brown dark brown	brown
Density (g/cm³):	1.5	1.2
Dry solids content (%):	100	100
Brookfield viscosity (mPa·s):	130,000 (rotor 7 - 10 rpm)	20,000 (rotor 6 - 10 rpm)
APPLICATION DATA (at +23°C - 50% R.H.)		
Mixing ratio:	A : B = 90 : 10	
Brookfield viscosity of mix (mPa·s):	100,000 (rotor 7 - 10 rpm)	

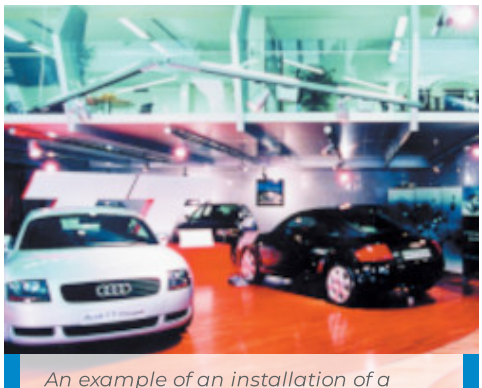
Density of mix (kg/m³):	1.46
Pot life of mix:	60 minutes
Application temperature range:	from +10°C to +30°C
Open time:	60 minutes
Adjustment time:	< 2 hours
Time to start of setting:	< 7 hours
Time to end of setting:	< 8 hours
Set to foot traffic:	after 24 hours
Sanding:	after approximately 3 days (according to the surrounding temperature)
FINAL PERFORMANCE	
Tensile bond strength EN 14293 (N/mm²): **– after 7 days a +23°C:** **– after 28 days a +23°C:** **– after hot cycle:**	 > 2.0 > 2.0 > 2.0
Shear resistance EN 14293 (N/mm²): **– after 3 days a +23°C:** **– after hot cycle:**	 > 3.0 > 3.5
Resistance to ageing:	excellent
Resistance to solvents and oils:	good
Resistance to acids and alkalis:	good
In-service temperature range:	from -40°C to +100°C
Flexibility:	yes



An example of an installation of a wooden floor with Lignobond - The Kremlin - Moscow - Russia



An example of an installation of a wooden floor with Lignobond - Palazzo Versace Hotel - Gold Coast - Queensland (Australia)



An example of an installation of a wooden flooring with Lignobond - Buccinasco Audi Show Room - Milan (Italy)

WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com

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