

ULTRABOND ECO P909 2K

Two-component, solvent-free, polyurethane adhesive with very low emission of volatile organic compounds (EMICODE EC1 R Plus), for all types of parquet



WHERE TO USE

Bonding of all types and formats of wooden flooring.

Some application examples

Ultrabond Eco P909 2K is used for bonding of mosaic parquet elements (EN 13488), solid lamparquet products (EN 13227), solid parquet elements with grooves and/or tongues (EN 13226), pre-assembled hardwood boards (EN13629), multi-layer parquet elements (EN 13489) and all types of wood and pre-finished wood on cementitious screeds; **Mapecem, Mapecem Pronto, Topcem, Topcem Pronto** screeds and similar products; existing flooring in: ceramic tiles, marble, terrazzo tiles. Existing bonded wooden flooring, anhydrite screeds it is also suitable for heating systems.

TECHNICAL CHARACTERISTICS

Ultrabond Eco P909 2K is a two-component, water- and solvent-free adhesive, with very low emission of volatile organic compounds (EMICODE EC1 R Plus). Component A is a polyurethane polymer and component B is a hardener in liquid form. By mixing the two components together, a uniform coloured product is obtained that can be easily applied with a notched trowel and has an excellent rib stability. After hardening (approximately 24 hours at room temperature) by chemical reaction, **Ultrabond Eco P909 2K** becomes a strong film with high bonding strength to all types of substrates, including those that are non absorbent.

RECOMMENDATIONS

- Before the installation of wooden flooring, always ensure that the rooms are provided with window and door frames and other suitable closures.
- The moisture of the screed must be suitable for the laying of wooden flooring in accordance with current standards.
- If the substrate is not dry or the residual moisture is above that level prescribed, it is recommended to use a suitable waterproofing primer such as **Primer MF, Primer MF EC Plus, Eco Prim PU 1K, Triblock P**, etc.
- If there is danger of rising damp, always insert a vapour barrier before preparing the screed.
- Make sure that the moisture content of wood conforms the level prescribed.
- Install at temperatures between +10°C and +30°C.
- Mix only whole packs; do not carry out partial mixtures of the adhesive.

APPLICATION PROCEDURE

Preparing the substrate

It is necessary to carefully check the substrate to verify its condition and make it suitable for installing wood.

- **Cementitious screeds:** must be cured, dry, flat and mechanically strong. The surface must be free from dust, loose parts, oil residues, paints, etc. The moisture of the screed must be measured with a carbide hygrometer. If the residual moisture is higher than required, wait until the screed is dry or apply a suitable waterproofing primer such as **Eco Prim PU 1K**, **Eco Prim PU 1K Turbo**, **Primer MF**, **Primer MF EC Plus**, **Triblock P**, etc. in order to make a vapour barrier. Substrates that are not sound enough must be removed or where possible, consolidated with a primer such as **Eco Prim PU 1K**, **Eco Prim PU 1K Turbo**, **Primer MF**, **Primer MF EC Plus** etc. Cracks can be repaired with products such as **Eporip**, **Eporip Turbo**, **Epojet**, etc. Particularly rough or uneven surfaces can be smoothed with levelling compounds with very high mechanical strength, such as **Ultraplan**, **Ultraplan Eco**, **Ultraplan Maxi**, **Nivorapid**, **Fiberplan**, etc. that should be chosen in relation to the thickness needed. Special MAPEI hydraulic binders can be used for the preparation of fast drying and shrinkage compensated screeds: for example **Mapecem** or **Mapecem Pronto**, which allow installation after 1 day, **Topcem** or **Topcem Pronto** after 4 days. Screed laid onto light weight concrete or onto a grade concrete slab must be provided with a suitable vapour barrier.
- **Existing ceramic tile, marble, etc. flooring:** flooring must be clean and free from all grease, polish/paint before proceeding to bond.
- **Bonded wooden floorings:** check that the strips of existing flooring are well bonded to the substrate. Remove any paint or wax by abrasion until perfectly clean underneath wood. Vacuum clean the dust. Proceed with the next bonding.
- **Anhydrite substrates:** check and follow the instructions of the manufacturer of the screed. Always check if the screed should be sanded and primed. MAPEI recommends sanding and priming with **Eco Prim PU 1K**, **Eco Prim PU 1K Turbo**, **Primer MF** and **Primer MF EC Plus**. MAPEI declines all responsibilities if all the screed manufacturer's recommendations have not been followed. In case of doubt do not hesitate to contact your local MAPEI's Technical Services Department.

Mixing the adhesive

The two components of **Ultrabond Eco P909 2K** are packed in plastic containers and are already pre-measured:

- component A: 9 parts by weight, colour ochre;
- component B: 1 part by weight, colour dark brown.

Any type of modification of the ratio between component A and component B compromises the correct cross-linking of the product. Mix with a low speed stirrer until a uniform colour is obtained. Setting time and pot life strictly depends on the ambient temperature. During the summer the product hardens quickly while in winter it takes longer. At temperatures below +10°C the reaction is too slow, therefore it is not recommended to lay wooden flooring.

Applying the product

Apply **Ultrabond Eco P909 2K** on the substrate using MAPEI parquet trowel for wood. The open time is approximately 1 hour under normal temperature conditions (+23°C).

Installing wood flooring

The wood that will be installed must be compliant with that prescribed by the local standards.

SET TO LIGHT FOOT TRAFFIC

The floors are set to light foot traffic after approximately 24 hours.

POLISHING

Polishing can be carried out after a minimum of 3 days, depending on the season. However, it is recommended to wait 7-10 days so the parquet can settle.

CLEANING

Whilst fresh **Ultrabond Eco P909 2K** can be removed with alcohol or specific products (**Cleaner H/Cleaner L**). Once the product has hardened, it can only be removed mechanically.

CONSUMPTION

Depending on the type of substrate, 800-1,000 g/m² with a MAPEI parquet trowel.

PACKAGING

5 kg (A+B) units:

- component A: 4.5 kg bucket;
- component B: 0.5 kg bucket.

10 kg (A+B) units:

- component A: 9 kg bucket;
- component B: 1 kg bucket.

STORAGE

In original well sealed containers and stored in a normal environment, **Ultrabond Eco P909 2K** is stable for at least 12 months.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Ultrabond Eco P909 2K part A is not considered dangerous according to the current regulations regarding the classification of mixtures.

Ultrabond Eco P909 2K part B irritates the eyes, the skin and the respiratory tract. It is harmful when inhaled and may cause irreversible damages after prolonged use. It may cause sensitization when inhaled and when in contact with the skin to those who are sensitive to isocyanates. When applying the product, we recommended using protective clothing, gloves, safety goggles, a safety mask to protect the respiratory system and to work only in well ventilated areas. If the product comes into contact with the eyes or skin, wash immediately with plenty of water and consult a doctor.

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 ONLY FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)		
PRODUCT IDENTITY		
	component A	component B
Consistency:	paste	liquid
Colour:	ochre	dark brown
Density (g/cm ³):	1.65	1.20
Dry solids content (%):	100	100
Brookfield Viscosity (mPa·s):	60,000 (7 shaft - rpm 50)	20 (1 shaft - rpm 50)
EMICODE:	EC1 R Plus - very low emission	
APPLICATION DATA (at +23°C and 50% R.H.)		
Mix ratio:	A : B = 9 : 1	
Viscosity of the mix (mPa·s):	32,000 ± 4,000 (7 shaft - rpm 50)	
Density of mix (g/cm ³):	1.55 ± 0.50	
Pot life of mix:	40-50 minutes	
Application temperature range:	from +10°C to +30°C	
Open time:	60 minutes	
Adjustment time:	70-90 minutes	
Set to light foot traffic:	after 24 hours	
Polishing:	after 3 days	

FINAL PERFORMANCES	
Adhesion (pull-out) wood-concrete (N/mm ²):	2.5
Adhesion (pull-out) wood-ceramic (N/mm ²):	2.5
Flexibility:	yes
Shore A Hardness (after 7 days at +23°C):	80

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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