

Ultrabond P902 2K

Two-component epoxy-polyurethane adhesive for wooden flooring



WHERE TO USE

Bonding of all sizes and types of wooden flooring.

Some application examples

Ultrabond P902 2K is used for bonding small and large sized planks and all types of wood on: cementitious screeds; **Mapecem, Mapecem Pronto, Topcem, Topcem Pronto** screeds and similar; existing flooring in wood, ceramic tiles, marble, terrazzo tiles, etc.; anhydrite screeds and metallic sheets. Suitable for underfloor heating systems.

TECHNICAL CHARACTERISTICS

Ultrabond P902 2K is a two-component adhesive. Component A is an epoxy-polyurethane polymer and component B is a hardener in paste form. The consistency of the two pastes is such that mixing is very easy to carry out and errors are easily avoidable. 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 P902 2K** becomes a strong film with high bonding strength to all types of substrates, including those that are non-porous (ceramic).

RECOMMENDATIONS

- Before installation, make sure that windows and doors have been fitted and that the building is weathertight.
- The moisture content of the screed must be in accordance with relevant standards.

- If the substrate is not dry or the residual moisture is above that provided, it is recommended to use a suitable waterproofing primer, such as **Primer MF, 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 the moisture content of the wood is that advised.
- Install at temperatures between +10°C and +30°C.
- Install only if the walls and the ceilings of the room are dry.
- Mix only whole packs; batching partial quantities requires extreme precision in weighing the two components.

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 content of the screed must be measured with a carbide hygrometer. If the residual moisture is higher than that required, wait until the screed is dry or apply a suitable waterproofing primer, such as **Eco Prim PU 1K, Primer MF, Triblock P, Primer PU60**,

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Removing component B from the lid



Pouring component B into component A

etc. in order to make a vapour barrier. Substrates that are not solid enough must be removed or where possible, consolidated with a primer such as **Eco Prim PU 1K, Primer MF, Primer EP, Primer PU60, Prosfas**, 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 Maxi, Nivorapid, Fiberplan**, etc. and should be chosen in relation to the thickness needed (the minimum thickness required must be of 3 mm). Installation of another flooring can be carried out once the product has dried (See Technical Data Sheet).

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 tiles, marble, etc.:** must be free from all grease, polish/paint before proceeding to bond. This adhesion can be further improved by applying a coat of **Primer KL**, bonding promoter, immediately before installation.
- **Wooden flooring:** check that the strips of existing flooring are well bonded to the substrate. Remove any paint or wax by abrasion until perfectly clean wood is exposed. Vacuum all dust. Proceed with the installation.
- **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. MAPEI declines all responsibilities if all the screed manufacturer's recommendations have not been followed; in case of doubt do not hesitate to contact you local MAPEI's Technical Services.

Mixing the adhesive

The two components of **Ultrabond P902 2K** are packed in plastic containers and are already pre-measured:

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

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 time 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 adhesive

Apply **Ultrabond P902 2K** on the substrate using a MAPEI notched trowel for wood.

The open time is approximately 1 hour under normal temperature conditions (+23°C).

INSTALLING THE WOOD FLOORING

The wood that will be installed must be stored dry, insulated from the ground and in a place protected from bad weather that is not subject to vapour condensation. Before installing check that the moisture content of the wood is correct.

While installing apply pressure on the wood to make sure the adhesive wets the back of the wooden strips.

Leave a 1 cm joint around the perimeter of the flooring and around columns or other interruptions in the floor.

When installing predefined strips, avoid squeezing the adhesive in the joints between the strips, in order not to contaminate the surface.

Never bond the edges of wood.

SET TO LIGHT FOOT TRAFFIC

The floors are ready to take 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 better.

Cleaning

Whilst fresh **Ultrabond P902 2K** can be removed with alcohol or specific products. Once the product has hardened, it can only be removed mechanically or with **Pulicol 2000**.

CONSUMPTION

Depending on the type of substrate, 1000-1500 g/m² with a MAPEI wooden trowel.

COLOUR

Beige and brown.

PACKAGING

10 kg (A+B) units:
component A: 9 kg bucket;
component B: 1 kg jar (bottle).

STORAGE

In original well sealed containers and stored in a normal environment, **Ultrabond P902 2K** is stable for at least 24 months.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Ultrabond P902 2K component A is inflammable. It is recommended to store it away from naked flames and sparks, to avoid smoking, to prevent the build-up of electrostatic energy and to work in well-ventilated areas. Furthermore, it may irritate the eyes and skin.

Ultrabond P902 2K component B is corrosive and may cause burns. Both component A and B may cause sensitization

TECHNICAL DATA (typical values)

PRODUCT IDENTITY

	component A	component B
Consistency:	paste	paste
Colour:	beige brown	whitish
Density (g/cm³):	1.66	1.29
Dry solids content (%):	96.8	100
Brookfield viscosity (mPa-s):	37,000 (7 shaft - rpm 50)	9,000 (7 shaft - rpm 10)

APPLICATION DATA (at +23°C and 50% R.H.)

Mix ratio:	A : B = 9 : 1
Viscosity of the mix (mPa-s):	32,000 (7 shaft - rpm 50)
Density of mix (kg/m³):	1,600
Pot life of mix:	60-70 minutes
Application temperature range:	from +10°C to +30°C
Open time:	1 hour
Adjustment time:	2 hours
Set to light foot traffic:	after 24 hours
Polishing:	after 3 days

FINAL PERFORMANCE

Shore A hardness (after 7 days at +23°C):	88
Adhesion (pull-off) wood-concrete (N/mm²):	> 3 (concrete failure)
Adhesion (pull-off) wood-ceramic (N/mm²):	> 3
Temperature when in use:	from -30°C to +70°C
Flexibility:	yes



Mixing component A with component B



Spreading the adhesive

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if they come in contact with the skin of predisposed subjects. The product contains low weight molecular epoxy resins which may cause sensitization if cross-contamination with other epoxy compounds occurs. During use, wear protective gloves and goggles and take the usual precautions for handling chemicals. If the product comes in contact with the eyes or skin, wash immediately with plenty of clean water and seek medical attention.

Furthermore, **Ultrabond P902 2K** component A and B are dangerous for aquatic life. Do not dispose of them 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.

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

**All relevant references
for the product are available
upon request and from
www.mapei.com**



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