

# Ultrabond P990 1K

**Ready-to-use polyurethane one-component, solvent-free, elastic adhesive for all types of wooden flooring**



## WHERE TO USE

The bond of all sizes and types of wooden flooring.

## Some application examples

**Ultrabond P990 1K** is used for bonding all types of wooden flooring including prefinished parquet laminates, small and large sized planks, wood mosaics and blocks, onto cementitious and anhydrite screeds, **Mapecem, Topcem, Topcem Pronto** screeds and similar; existing wood flooring, ceramic tiles, marble, terrazzo tiles, and is also suitable for use with underfloor heating systems.

## TECHNICAL CHARACTERISTICS

**Ultrabond P990 1K** is an adhesive based on hydro-hardening polyurethane resin prepared to technology developed in the MAPEI research laboratories and has the following characteristics:

- it is a ready-to-use one-component adhesive that does not require remixing and if stored correctly, can be reused for other applications;
- hypoallergenic, therefore can also be used by installers that are allergic to epoxy-polyurethane products;
- easily applied in hot weather and at low temperatures, the adhesive retains its serrations, making adjustment of the wood during installation easier;
- has a 20-30% lower consumption rate than traditional two-component products and because of its low viscosity it is easily trowelled;
- the low expansion of the adhesive will not alter the flatness of the installation;

- contains no solvents or substances that emit unpleasant odours;

- **Ultrabond P990 1K** forms an elastic acoustic layer that reduces impact transmission through the floor, reducing noise levels.

## RECOMMENDATIONS

- During the installation the area should be well ventilated.
- The moisture level of the substrate should be within the recommended levels for the installation of wooden flooring. Where the levels are above, due to residual or static moisture, it is recommended that a vapour-barrier membrane such as **Biblock, Triblock, Primer MF** etc., be installed prior to the wood flooring installation.
- Where there is a danger of rising damp, a base DPM in the form of a polythene sheet should be installed before preparing the screed.
- The moisture value of the wood should be within the recommended level.
- The installation should be carried out at temperatures between +10°C and +35°C.



# Ultrabond P990 1K

- Install only if the walls and ceilings of the area are dry.
- If applied in dry climatic conditions, the setting time will be longer.
- Contact with wet two-component adhesive should be avoided, as this will deteriorate the product.
- A primer is not necessary on non-porous surfaces such as ceramic tiles; normal adhesion promoters could be incompatible with **Ultrabond P990 1K**.

## APPLICATION PROCEDURE

### Preparing the substrate

The substrate should be checked to ensure it is suitable for the installation to proceed.

- **Cementitious screeds:** must be dry, flat and sound, the surface must be free of dust, loose particles, oil residues, paints, etc. The substrate should be checked to determine moisture levels, using the relevant acceptable testing method. If the residual moisture is higher than the acceptable level, the screed should be allowed to dry out completely or a surface membrane such as **Primer MF** or the **Biblock-Triblock** system should first be installed.

Substrates that are not solid enough should be removed or, where possible, consolidated with a primer such as **Profas**, **Primer EP**, **Primer PU60**, etc. Cracks can be repaired with products such as **Eporip**, **Eporip Turbo**, **Epojet**, etc. Rough or uneven surfaces should be smoothed using a levelling compound with a high mechanical strength, such as **Ultraplan**, **Fiberplan**, **Ultraplan Maxi**, **Nivorapid**, etc. and chosen in relation to the thickness required. Installation can continue 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**, installation can be carried out after 1 day, **Topcem**, after 7 days or **Topcem Pronto** (prepacked ready-to-use); installation can be carried out after 4 days.

- **Existing ceramic tile, marble, etc. flooring:** they must be clean with any

grease removed and the surface dry before the adhesive is applied. *Adhesion promoters should not be used prior to the adhesive being applied.*

- **Wooden flooring:** the existing flooring should be well secured and firm. Any wax, varnish or paint must be removed by abrading back to clean wood and the area vacuumed to remove any dust and loose particles.
- **Anhydrite substrates:** must be perfectly dry before any installation begins. The surface should be abraded and vacuumed to remove any dust and loose particles. **Primer MF** should then be applied to provide a barrier; the installation can be carried out after 3-4, but not over 12 hours.

### Applying the adhesive

Open the sealed aluminium bag contained within the bucket; the adhesive may then be spread using the Mapei notched trowel for wood.

Only apply sufficient adhesive that can be laid into within 60 minutes (at a temperature of +23°C).

### INSTALLING THE WOOD

The wood to be installed must be stored in a dry place protected from bad weather and not subject to vapour condensation. It must be insulated from the ground.

Before installing check that the moisture content of the wood is correct.

During installation pressure should be applied to ensure the adhesive wets the back of the wood.

The special rheological property of **Ultrabond P990 1K** allows for easy adjustment.

A 1 cm joint should be left around the perimeter of the flooring and around any columns or other protruding parts. During installation, avoid the overflow of adhesive in the joints in order not to dirty the surface. Never bond the sides of the wood.

### Preserving unused adhesive

To preserve any unused adhesive, the aluminium bag must be resealed using the band provided and placed in its original bucket, after letting out as much air as possible in order to avoid the formation of a surface film.

Where a film has formed, this should be removed prior to the adhesive being used.

### READY FOR LIGHT FOOT TRAFFIC

Floors can allow light foot traffic after approximately 12 hours.

### POLISHING

The floors can be polished after 3 days. Any residual adhesive on the floor surface can be easily removed by sandpapering.



The Ultrabond P990 1K packaging



Opening the aluminium bag and folding it over the bucket



The adhesive is poured onto the screed



Cleaning off the adhesive from the bucket with a trowel



## TECHNICAL DATA (typical values)

### PRODUCT IDENTITY

<b>Consistency:</b>	creamy paste
<b>Colour:</b>	beige, brown
<b>Specific gravity (g/m<sup>3</sup>):</b>	1.50
<b>Dry solid content (%):</b>	100
<b>Free monomer (%):</b>	< 1
<b>Brookfield Viscosity (mPa·s):</b>	43,000 (7 shaft, 50 RPM)
<b>Storage:</b>	12 months
<b>Hazard classification according to EC 99/45:</b>	irritant Before using refer to the "Safety instructions for the preparation and application" paragraph and the information on the packaging and safety data sheet
<b>Customs class:</b>	3909 50 00

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

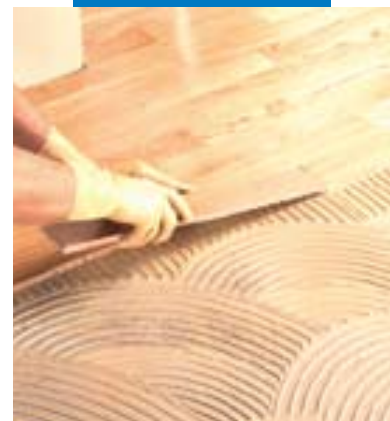
<b>Application temperature range:</b>	from +10°C to +35°C
<b>Open time (skin formation):</b>	110 minutes
<b>Adjustability time:</b>	3 hours
<b>Set to light foot traffic:</b>	after 12 hours
<b>Polishing:</b>	after 3 days

### FINAL PERFORMANCES

<b>Shore A Hardness (7 days at +23°C):</b>	58
<b>Adhesion (pull out) wood - concrete (N/mm<sup>2</sup>):</b>	2.5
<b>Adhesion (pull out) wood - ceramic (N/mm<sup>2</sup>):</b>	1.8
<b>Elongation at break (7 days at +23°C) (%):</b>	180
<b>Temperature when in use:</b>	from -10°C to +70°C



Applying the adhesive



Installing the parquet



Squeezing the adhesive out of the bag



# Ultrabond P990 1K



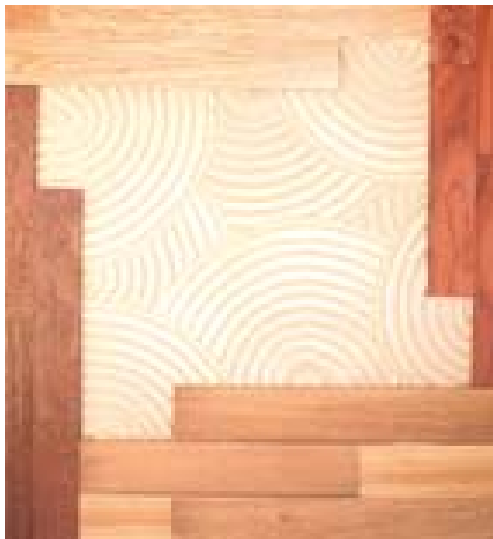
Partially used product to be stored



Closing the bag with the special band found in the bucket



Sealing the bag



### Cleaning

Whilst still fresh Ultrabond P990 1K can be removed with alcohol or special products; once hardened it can be removed by mechanical means or with Pulicol.

### CONSUMPTION

800-1000 g/m<sup>2</sup>.

### PACKAGING

15 kg aluminium bag contained in a plastic bucket.

### STORAGE

12 months in original sealed packaging and stored in normal conditions.

### SAFETY INSTRUCTIONS FOR THE PREPARATION AND APPLICATION

The product, in contact with the eyes could cause serious eye damage. The vapours that could develop when used at high temperatures, could provoke allergies for those predisposed. Protect the eyes and avoid inhaling the vapour.

FOR PROFESSIONALS.

### WARNING

*N.B. - Although the technical details and recommendations contained in this product report 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 applications: 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.*

**All relevant references of the product are available upon request**



BUILDING THE FUTURE

## MAPEI GROUP CERTIFIED MANAGEMENT SYSTEMS (Quality, Environment and Safety)



MAPEI S.p.A. - ITALY



MAPEI FAR EAST Pte Ltd



MAPEI Sro - CZECH REP.



MAPEI FRANCE



RESCON MAPEI AS - NORWAY



MAPEI KFT. - HUNGARY



MAPEI INC - CANADA



MAPEI ARGENTINA S.A.

www.mapei.com