



**MAPEI**

# Ultrabond Eco 380



**Adhesive in water dispersion with a quick and strong initial bond, long open time and extremely low emission level of volatile organic compounds (VOC) for vinyl floors**



## WHERE TO USE

Bonding internal vinyl floors.

### Some application examples

**Ultrabond Eco 380** is used for bonding internal floors in:

- rolls and tiles of homogenous and heterogenous vinyl;
- semi-flexible vinyl tiles;
- carpet with latex mesh, PVC foam and polyurethane backing

### ON

all kinds of absorbent and stable substrates normally used in the building industry.

## TECHNICAL CHARACTERISTICS

**Ultrabond Eco 380** is a solvent-free, synthetic polymer-based adhesive in water dispersion. It is available in paste form which is easy to spread, has a very low emission level of volatile organic compounds (EMICODE EC 1) and is used to bond all types of PVC floor-covering materials.

**Ultrabond Eco 380** is particularly noteworthy because it is extremely easy to spread and has a very high initial bond, which avoids the elastic return of the material being laid. It also keeps its characteristics for an extremely long time (laying may be carried up to 2 hours after applying the adhesive).

After hardening, **Ultrabond Eco 380** forms a tough, flexible film which allows for an excellent bond on all kinds of substrate. It may also be used for floors subject to heavy pedestrian use, the passage of wheelchairs and for heated floors.

**Ultrabond Eco 380** is not inflammable and has an extremely low emission level of volatile organic compounds (EMICODE EC 1), which makes it harmless for those who use the product and for those who use the environments in which it is applied. It may also be stored without taking any particular precautions.

## RECOMMENDATIONS

- Lay floors at the temperature recommended, normally between +15°C and +35°C.
- Do not lay floors on substrates which have no protection against rising damp (honeycomb substrates with no vapour barrier, damp walls, etc.).
- In areas subject to the presence of water (canteen kitchens, showers, balconies, open porches, etc.) use **Adesilex G19** or **Adesilex G20**.
- On non-absorbent surfaces, only lay floors after the water in the **Ultrabond Eco 380** has evaporated off and when the film has become transparent.
- In the case of floors which contain a high level of plasticisers (PVC foam, highly-flexible surfaces for sporting applications, etc.) use **Adesilex V4** or **Ultrabond Eco V4 SP**.

## APPLICATION PROCEDURE

### Preparation of the substrate

Substrates must be flat, dry, absorbent, resistant to compression and tensile forces, free of dust, loose portions, cracks, paint, wax, oil, rust and traces of gypsum, and products which may compromise the bond.

# Ultrabond Eco 380



Applying Ultrabond Eco 380



Installing PVC floor tiles

In all cases, local norms and standards for each single country must be adhered to. As a general rule, the humidity level must be as follows: maximum 2.5-3% for cementitious substrates and 0.5% for gypsum or anhydrite substrates. It is important to check that there is no rising damp.

Floating screeds installed on lightened sub-layers or insulating material and screeds laid directly on the ground must be isolated by laying a vapour barrier.

To repair cracks in the substrate, consolidate screeds, install quick-drying screeds and to level off the laying bed, please refer to the catalogues which illustrate the various ranges of MAPEI products for the preparation of substrates or contact the MAPEI Technical Assistance Department.

In the case of disjointed substrates or substrates which are not sufficiently smooth, apply a smoothing and levelling layer to make the surface suitable for laying.

## Acclimatisation

Before laying the floor, make sure the laying material, the adhesive and the substrate have been acclimatised at the recommended temperature.

The dressing material must be removed from its packaging a few hours before laying. The sheets must be rolled out to acclimatise it to the surrounding temperature and to remove stresses caused by the packaging.

## Spreading the product

Mix the adhesive well in its tub before using. Spread the required amount of **Ultrabond Eco 380** on the substrate with a suitable notched trowel (according to the substrate and flooring material, use a MAPEI No. 1 or No. 2 trowel) so that the adhesive is spread on in an even layer.

## Laying the floor

**Follow the instructions and indications of the floor covering material when laying.**

The floor covering may be applied in either sheets or tiles on **Ultrabond Eco 380**, and must be applied after the recommended waiting time (within 10-20 minutes at +23°C). Non-absorbent substrates require longer waiting times until all the water has evaporated off (the layer of adhesive becomes transparent), but without exceeding the open time (60 minutes at +23°C), that is, when the adhesive is still capable of being transferred onto the back of the dressing material.

The tiles and sheets must be well massaged with a wooden trowel or roller immediately after laying the floor covering, starting from the centre and working towards the edges, to make sure they are perfectly buttered and to remove all air bubbles.

If the floor covering is very thin, make sure the massaging phase also eliminates streaks in the adhesive which could show through on the surface.

The floor may be stepped on with care after 3-4 hours (according to the surrounding temperature and the absorption of the substrate).

Floors are ready for use after approximately 48 hours.

## Cleaning

While still fresh, **Ultrabond Eco 380** may be removed easily from floors, dressing materials, tools, hands and clothing with water. Once dry, it must be removed with alcohol or **Pulicol**.

## CONSUMPTION

Consumption varies according to the flatness of the substrate, the type of backing material on the flooring material and the type of trowel used.

MAPEI trowel No. 1: 0.25 kg/m<sup>2</sup>.

MAPEI trowel No. 2: 0.35 kg/m<sup>2</sup>.

## PACKAGING

**Ultrabond Eco 380** is available in 16 kg tubs.

## STORAGE

**Ultrabond Eco 380** remains stable for at least 12 months under normal environmental conditions in its original, sealed packaging. **Ultrabond Eco 380** must be protected from freezing weather.

## SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

**Ultrabond Eco 380** is not considered hazardous according to current norms and guidelines regarding the classification of preparations. However, we recommend the use of protective gloves and goggles, and to take the usual precautions for handling chemical products.

The safety data sheet is available upon request for professional users.

PRODUCT FOR PROFESSIONAL USE.

## WARNING

*While the indications and guidelines contained in this data sheet correspond to the company's knowledge and wide experience, they must be considered, under all circumstances, merely as an indication and subject to confirmation only after long-term, practical applications. Therefore, anybody who undertakes to use this product, must ensure beforehand that it is suitable for the intended application and, in all cases, the user is to be held responsible for any consequences deriving from its use.*



This symbol is used to identify Mapei products which give off a low level of volatile organic compounds (VOC) as certified by GEV (Gemeinschaft Emissionskontrollierte Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.), an international organisation for controlling the level of emissions from products used for floors.



**Our Commitment To The Environment**  
More than 150 MAPEI products assist Project Designers and Contractors create innovative LEED (The Leadership in Energy and Environmental Design) certified projects, in compliance with the U.S. Green Building Council.

**All relevant references for the product are available upon request and from [www.mapei.com](http://www.mapei.com)**

## TECHNICAL DATA (typical values)

### PRODUCT IDENTITY

<b>Consistency:</b>	creamy paste
<b>Colour:</b>	light beige
<b>Volume mass (g/cm<sup>3</sup>):</b>	1.22
<b>pH:</b>	8.8
<b>Dry solids content (%):</b>	75
<b>Brookfield Viscosity (mPa·s):</b>	80 (rotor 6 - 5 rpm)
<b>Storage:</b>	12 months in its original sealed packaging. Protect from freezing weather
<b>Hazard classification according to EC 1999/45:</b>	none. Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet
<b>EMICODE:</b>	EC1 - very low emission level of volatile organic compounds
<b>Customs class:</b>	3506 91 00

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

<b>Application temperature range:</b>	from +15°C to +25°C
<b>Waiting time:</b>	10-20 minutes
<b>Open time:</b>	70 minutes
<b>Set to light foot traffic:</b>	3-4 hours
<b>Ready for use:</b>	approx. 48 hours

### FINAL PERFORMANCE

<b>Resistance to humidity:</b>	good
<b>Resistance to ageing:</b>	excellent
<b>Resistance to solvents and oils:</b>	good
<b>Resistance to temperatures:</b>	excellent
<b>Resistance to the passage of wheelchairs:</b>	excellent
<b>Under-floor heating systems:</b>	suitable
<b>Flexibility:</b>	excellent
<b>PEEL 90° bond test according to EN 1372 (N/mm)</b>	
- homogenous PVC:	> 2
- polyolefin floor coverings:	> 1.5



Rolling PVC tiles

# Ultrabond Eco 380

