



Ultrabond Eco 350

Adhesive for resilient floor coverings in water dispersion with very low emission of volatile organic compounds (VOC) with high bonding strength and extended open time



WHERE TO USE

Internal bonding of vinyl, semi-flexible vinyl, rubber, needlepunch and carpet flooring.

Some application examples

Use **Ultrabond Eco 350** for bonding:

- homogeneous and heterogeneous vinyl flooring in sheets or in tiles for floor or wall covering;
- semi-flexible vinyl tiles;
- smooth or textured rubber flooring with smooth back, for light interior traffic only;
- PVC-backed cork;
- synthetic-back linoleum;
- all types of latex-primed, PVC and polyurethane foam, natural jute, and Action Bac® backed carpets;
- needlepunch woven flooring also in latex

ON

all normal absorbent moisture-stable substrates normally used in construction.

TECHNICAL CHARACTERISTICS

Ultrabond Eco 350 is a solvent-free synthetic polymer-based single-coat adhesive in water dispersion, formulated in a ready-to-use light beige paste.

Ultrabond Eco 350 is distinguishable due to its excellent trowelable feature, wettability, and rapid initial grab which stops eventual flexible memory of the applied product.

Ultrabond Eco 350 maintains these features for a very long open time (approx. 60 min. at +23°C).

After hardening (approx. after 24 hours at +23°C) the **Ultrabond Eco 350** film is flexible and strong and has excellent bonding strength on all types of substrates. It can also be used for heavy foot and wheeled chair traffic and underfloor heating systems.

Ultrabond Eco 350 is not flammable and has very low emission of volatile organic compounds (EMICODE EC1), so it is absolutely harmless to the health of the installer and the end-user of the areas where applied. It can be stored with no particular precautions.

RECOMMENDATIONS

- Install in recommended temperatures, normally between +15°C and +35°C.
- On non-absorbent substrates, install only after evaporation of the water contained in **Ultrabond Eco 350** and when the film gets transparent.
- Use **Adesilex V4** or **Ultrabond Eco V4 SP** for installing floors with a high plasticiser content (PVC foam, very flexible resilients, etc.).

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Example of PVC laid in a hospital environment - Montluçon Hospital - France



Example of carpet laid on a stairway - Judges Tower for the ski-jumping event at the 2002 Salt Lake City Winter Olympic Games - USA

TECHNICAL DATA (typical values)

PRODUCT IDENTITY

Consistency:	creamy paste
Colour:	light beige
Density (g/cm³):	1.15
pH:	8
Dry solids content (%):	63
Brookfield viscosity (mPa·s):	110,000 (D rotor - 2.5 rpm)
EMICODE:	EC1 - very low emission

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

Application temperature range:	from +15°C to +35°C
Waiting time:	approx. 10-20 minutes
Open time:	60 minutes
Set to light foot traffic:	3-5 hours
Ready for use:	approx. 48-72 hours

FINAL PERFORMANCE DATA

Resistance to moisture:	good
Resistance to ageing:	excellent
Resistance to solvents and oils:	fair
Resistance to temperature:	excellent
Resistance to wheeled chair stress:	very good
Underfloor heating systems:	suitable

PEEL bonding at 90° according to EN 1372 standards (N/mm):	> 2
– homogeneous PVC:	1.5
– polyolefin-based flooring:	

- Do not install on substrates not insulated from possible rising damp (screed laid directly onto earth without a vapour barrier, damp walls, etc.).
- Use **Adesilex G19** or **Adesilex G20** in areas subject to continuous presence of water (common kitchens, showers, balconies, porches, etc.).

APPLICATION PROCEDURE

Preparing the substrate

Substrates must be uniformly dry, absorbent, level, sound, mechanically strong free of dust, loose particles, cracks, paint, wax, oil, rust, traces of gypsum or other products that can interfere with bonding and must have no cracks.

All ruling laws of each single country must be respected.

The moisture content must be as follows: for cement substrates, a maximum of 2.5%-3%; for gypsum- or anhydrite-based substrates, a maximum of 0.5%.

It is essential to make sure there is no rising damp present.

Screeds over layers of insulation and screeds laid directly onto earth must be isolated by a vapour barrier to prevent rising damp.

To repair cracks in the substrate, consolidate screeds, form fast-drying screeds and level uneven screeds, it is recommended to refer to the section in the MAPEI catalogue concerning the preparation of substrates or contact the Technical Advisory Department.

Acclimatisation

Before installing, make sure that the floor and substrate are acclimatised to the recommended temperature. The floor covering must be removed from the packaging several hours before installing; rolls must be freely laid or at least loosened to permit acclimatisation and reduction of tensions produced by packaging.

Spreading the adhesive

Before using, stir the adhesive well in the container.

Spread enough **Ultrabond Eco 350** on the substrate with a notched trowel (MAPEI trowel No. 1 or No. 2 depending on the type of substrate and floor) to cover the surface evenly.

Installing the flooring

Follow the flooring manufacturer's installation instructions.

The floor or wall covering can be installed after the waiting time has elapsed (between 10 and 20 minutes at +23°C), that is when

Ultrabond Eco 350 has the proper viscosity and has developed sufficient tack to maintain the covering in contact with the substrate.

Non-absorbent substrates require longer waiting time so that all the water can evaporate (the adhesive becomes transparent), without going beyond the open time (60 minutes at +23°C), i.e. when the adhesive is transferred to the back of the flooring.

The tiles and sheets must be pressed with a wooden trowel or a roller immediately after laying, moving from the centre out to the edges in order to ensure complete transfer of the adhesive and eliminate air bubbles.

For very thin coverings, make sure that the pressing eliminates all ridges that would otherwise be visible on the surface.

The floor is set to light foot traffic, with caution, after 3-5 hours (depending on temperature and absorbency of substrate).

Ultrabond Eco 350 dries completely after 48-72 hours.

Cleaning

While still wet, **Ultrabond Eco 350** can be cleaned from floor or wall coverings, tools, hands and clothing with water.

When dry, use alcohol or **Pulicol 2000**.

CONSUMPTION

Consumption varies with uniformity of substrate, the back of the flooring and type of trowel used.

MAPEI trowel No. 1: 0.25-0.30 kg/m²

MAPEI trowel No. 2: 0.30-0.35 kg/m²

PACKAGING

Ultrabond Eco 350 is available in 16 kg plastic buckets.

STORAGE

Under normal conditions **Ultrabond Eco 350** is stable for at least 12 months in its original sealed packaging.

Avoid prolonged exposure to frost.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Ultrabond Eco 350 is not considered dangerous according to the current norms on the classification of mixtures. It is recommended to wear protective gloves and goggles and to take the usual precautions for handling chemical products.

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



Example of rubber laid in a public changing room - Oquirrh Park Olympic Arena, 2002 Salt Lake City Winter Olympic Games - USA

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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



This symbol is used to identify Mapei products which give off a low level of volatile organic compounds (VOC) as certified by GEV (Gesellschaft 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
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



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