

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

LEVELMAX BondMax is a professional-grade, one-component adhesive based on advanced MS Polymer (Modified Silane) Technology. Engineered specifically for the Australian timber flooring market, it combines superior bond strength with permanent elasticity.

Unlike traditional polyurethane adhesives, BondMax is solvent-free and isocyanate-free, providing a safer working environment. It features an extended working window, making it ideal for precision installation of solid and engineered timber.

KEY FEATURES

- High Performance Bond: Achieves a peak shear strength of 2.2 MPa (after thermal aging), ensuring long-term stability.
- Rapid Green Strength: Capable of accepting light foot traffic after just 12 hours.
- Extended Adjustability: Offers an adjustment time of approximately 120 minutes, reducing stress during complex layouts.
- Timber Safe: Contains no water or solvents, eliminating the risk of timber swelling or cupping.
- Installer Friendly: Easy-to-spread thixotropic formula with excellent ridge retention.
- Acoustic Comfort: High-density structure (1.41 g/cm³) aids in dampening impact sound.



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Property	Value
Consistency	Thixotropic paste
Colour	Light Timber / Beige
Density	1.41 +/- 0.03 g/cm³
Solids Content	100%
VOC Content	Low VOC Formula
APPLICATION DATA (at +23°C and 50% R.H.)	
Open Time (Skin Formation)	80 minutes
Adjustment Time	approx. 120 minutes
Set to Light Foot Traffic	after 12 hours
Full Cure / Sanding	after 48 hours
FINAL PERFORMANCE (after 7 days at +23°C)	
Shore A Hardness	48
Shear Strength (Standard)	> 1.5 MPa
Shear Strength (Thermal Aged at +60°C)	2.2 MPa
Elongation at Break	320%
Service Temperature	from -40°C to +90°C

AREAS OF APPLICATION

Suitable Flooring:

Solid Timber Planks & Strip Flooring
Engineered Timber (Multi-layer)
Parquet & Mosaic Flooring
Bamboo Flooring

Suitable Substrates:

Concrete slabs and cementitious screeds
Plywood and Particleboard
Existing ceramic tiles, terrazzo, or natural stone (surface abraded & cleaned)
Heated subfloors (underfloor heating systems)

APPLICATION PROCEDURE

Preparation of the Substrate

It is essential to thoroughly inspect the substrate to assess its condition.

- **Concrete & Screeds:** Must be properly cured, dry, flat, and mechanically strong. The surface must be free from cracks, dust, loose particles, residues of oils, paints, or curing compounds.
- **Moisture Content:** The moisture content of the screed must comply with the values prescribed by local regulations (e.g., AS 1884). If the substrate is not well dry or when the residual moisture exceeds the prescribed limits, a suitable Epoxy Moisture Barrier must be applied.
- **Levelling:** Excessively rough or uneven surfaces should be smoothed with a high-performance self-levelling compound. Installation can be carried out once the levelling compound is fully cured.
- **Existing Tiles:** Glazed surfaces (ceramic, terrazzo) must be degreased and mechanically abraded to ensure a strong bond key.

Spreading the Adhesive

1. Open the 15kg pail and cut the protective foil liner.
2. Apply the adhesive uniformly to the substrate using a notched trowel suitable for the type of flooring (e.g., 3mm - 6mm V-notch).
3. Ensure the adhesive ridges are firm and well-defined.
4. **Important:** The adhesive has an open time of approximately 80 minutes at +23°C. Only spread as much adhesive as can be covered with flooring within this timeframe to ensure proper wetting.

Trowel Recommendations & Special Applications

To achieve optimal performance, specific trowel sizes and coverage rates are recommended based on the application requirements:

- **Standard Bonding:** Use a 3mm or 4mm V-notch trowel for standard timber flooring installations.
- **Moisture Barrier Application:** When moisture barrier properties are required on concrete subfloors, apply the adhesive using a minimum 5mm V-notch trowel. It is critical to achieve 100% subfloor coverage to form an effective moisture layer.
- **Acoustic (Soundproofing) Application:** Where an acoustic rating is required, a 6mm V-notch trowel with 100% subfloor coverage is recommended. To maximise sound performance, we recommend using the adhesive in conjunction with a certified acoustic rubber underlay.

Installing the Flooring

1. **Acclimatisation:** The timber flooring must be stored in the installation environment for the period recommended by the flooring manufacturer prior to installation to achieve moisture equilibrium.
2. **Installation:** Place the timber planks into the wet adhesive and press firmly to support good wetting of the board backing.
3. **Checking Transfer:** Periodically lift a board to verify adhesive transfer (aim for minimum 80% coverage on the back).
4. **Expansion Joints:** Leave an expansion joint of approximately 10-15 mm along the perimeter of the room and around fixed obstacles (columns, door frames).

Closing Partially Used Packages

To preserve the remaining product after work is completed:

1. Press the foil liner down against the remaining adhesive to expel as much air as possible (air causes skin formation).
2. Twist the top of the liner tightly and seal with a zip tie or strong tape.
3. Replace the plastic lid securely. Store in the original pail.

Cleaning

- **Fresh Adhesive:** LEVELMAX BondMax can be removed from finished flooring surfaces and tools, while still fresh, with a clean cloth or alcohol (e.g., methylated spirits).
- **Cured Adhesive:** Once cured, the material can only be removed mechanically.

CONSUMPTION

Typical pail (15kg) coverage depends on the trowel notch size and substrate roughness:

- **3mm V-Notch:** 16 - 18 m² per pail
- **4mm V-Notch:** 12 - 14 m² per pail
- **5mm V-Notch:** 10 - 12 m² per pail
- **6mm V-Notch:** 8 - 10 m² per pail

PACKAGING & STORAGE

Packaging: 15kg Plastic Pail

Shelf Life: 12 months in original, unopened packaging.

Storage: Store in a cool, dry place (+5°C to +25°C).

LIMITATIONS

Temperature: Recommended application temperature is between +10°C and +35°C. Application outside this range may affect curing times and workability.

Moisture: Do not use on wet substrates or substrates subject to rising damp without a moisture barrier.

Use: Strictly for professional use. Not suitable for structural glazing or continuous water immersion.

DISCLAIMER

The information provided in this Technical Data Sheet is based on internal laboratory testing and practical experience. It is intended as a general guide only. As site conditions, substrate quality, and application methods are beyond our control, LevelMax Australia cannot guarantee the performance of the product for every specific application. Users are advised to conduct preliminary tests to verify suitability. Liability is limited to the replacement of defective product.

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