



**For the Builders  
of a Better World™**

## LEVEL PLUS

Level Plus is an economical, easy-to-use, self-leveling underlayment designed for use over various substrates including concrete and ceramic tile. Level Plus provides a smooth and flat surface on which sensitive finished floor goods can be installed. Level Plus can be placed from feather edge to 10mm in one pour



### FEATURES/BENEFITS

- Pourable and pumpable
- Inorganic; will not contribute to mold/mildew growth
- Suitable surface for most finished floor goods
- Can be applied directly over concrete testing at RH of 95% or less per ASTM F2170

### MANUFACTURER

LATICRETE (Malaysia) Sdn Bhd  
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58100 Kuala Lumpur, Malaysia  
Tel: +603 7989 9188 Fax: +603 7972 0331  
Internet: <https://ma.laticrete.com>

### SUITABLE SUBSTRATES

- Concrete
- Cement terrazzo\*\*
- Vinyl Tile^
- Linoleum^
- LATICRETE® MVB^
- Certain Gypsum Substrates
- Cement backer board\*
- Cement tile & stone\*\*
- Exterior Glue Plywood\*\*
- Cement mortar beds
- Non-cushioned Sheet Vinyl^

\* Consult cement backer board manufacturer for specific installation recommendations

\*\*See 5. Installation – Surface Preparation

^ See section 5 installation over Vinyl tile, Linoleum, Sheet Vinyl and LATICRETE MVB

### USES

- Used to level floor & correct any surface irregularities prior to installation of screed or finished floor like tile, stone, wood, carpet etc
- Fix uneven surfaces, smoothing rough, spalled concrete & finishing rough screed concrete slab especially floor surface
- Interior and dry areas for new and upgrading projects in both residential and commercial applications

### PACKAGING/COLOUR

- 25kg bag; 56 and 80 bags per pallet
- Grey

### Approximate Coverage

Yield/coverage is only an estimated and may vary depending on the mixing ratio and field conditions. 25kg bag of Leve Plus will yield approximately 1.5m<sup>2</sup> to 1.8m<sup>2</sup> per mm thick

### Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for six (6) months\* if stored off the ground in a dry area, at temperatures > 0°C and < 40°C

\* High humidity will reduce the shelf life of bagged product

### Limitations

- For interior use only
- Do not install when surface temperature is below 8°C or above 35°C or when ambient air temperature is expected to fall below 10°C during placement or before material takes final set
- Do not install over painted surfaces
- Do not install over certain moisture-sensitive gypsum-based surfaces. Check with gypsum-based underlayment manufacturer for installation recommendation
- Do not exceed recommended mixing ratio as indicated in mixing instructions. Over watering may weaken product properties
- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not designed as replacements for waterproof membranes. When a waterproof barrier is required, use a LATICRETE® waterproof membrane
- Do not bond directly to OSB, particle board or Masonite® surfaces
- Not for use in submerged applications
- Level Plus should not be installed over any moving joints or structural cracks (cracks greater than 1.5mm in width or any crack that experiences any vertical displacement). All existing expansion joints, cold joints and control joints must be brought up through the underlayment and the finish. Failure to honor movement joints will result in cracking and/or loss of bond. Do not bond directly to luan, interior glue plywood, OSB, particle board, contaminated concrete, moisture sensitive gypsum underlayment or dirty surfaces

- **Note:** Substrate deflection under all live, dead and impact loads, including concentrated loads, shall comply

### Cautions

Before using any LATICRETE product:

- Check [ma.laticrete.com](http://ma.laticrete.com) for any technical bulletins or updated information about the product and its application
- Contact your local LATICRETE Technical Sales representative with any questions
- Consult Safety Data Sheet for more safety information
- During cold weather, protect finished work from traffic until fully cured
- Contains Portland cement and silica sand. May irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin. In case of contact, flush thoroughly with water
- Do not take internally. Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas
- Keep out of reach of children

### TECHNICAL DATA

#### Performance Properties

Test	Test Method	Results
Compressive Strength (28 days)	ASTM C109	>37N/mm <sup>2</sup>
Tensile Strength (28 days)	ASTM C307	>2.5N/mm <sup>2</sup>
Flexural Strength (28 days)	ASTM C348	>10N/mm <sup>2</sup>
Shrinkage (28 days)	ASTM C531	< 0.15%

#### Working Properties

Open Time (25°C)	30 Minutes
Time to Light Traffic	24 Hours

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions

## INSTALLATION

### Surface Preparation

#### *Installation over Concrete Slabs*

- ALL CONCRETE SURFACES MUST BE SHOT BLASTED/MECHANICALLY ABRADED if minimum 0.5MPa bond strength is not achieved as per ASTM C1583
- All surfaces must be primed with Admix & Primer and should be between 8C and 35C. Surfaces should be structurally sound, clean and free from all dirt, oil, grease, adhesives, paint, sealers or curing compounds
- Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Follow ANSI specification A108.01-3.7 "requirements for movement joints: preparations by other trades" or TCNA detail EJ-171 "Movement Joints-Vertical & Horizontal". Do not cover expansion joints with mortar

#### *Installation over Wooden Sub-floors*

- Installer must verify that deflection under all live, dead and impact loads of interior plywood floors does not exceed industry standards of L/360 for ceramic tile and brick or L/480 for stone installations where L= span length
- Minimum construction for interior plywood floors:
- SUBFLOOR: 15mm thick exterior glue plywood, either plain with all sheet edges blocked or tongue and groove, over bridged joists spaced 400mm o.c. maximum; fasten plywood 150mm o.c. along sheet ends and 200mm o.c. along intermediate supports with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 3mm between sheets and 6mm between sheets edges; all sheet ends must be supported by a framing member; glue sheets to joists with construction adhesive
- UNDERLAYMENT: 15mm thick exterior glue plywood fastened 150mm o.c. along sheet ends and 200mm o.c. in the panel field (both directions) with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 3mm to 6mm between sheets and 6mm between sheet edges and any abutting surfaces; offset underlayment joints from joints in subfloor and stagger joints between sheet ends; glue

underlayment to subfloor with construction adhesive

- Prime, cleaned and properly prepared surface with Admix & Primer as described in "Priming" section
- Allow primer to dry accordingly. Install 3.2# galvanized diamond metal lath over entire wood floor. Ensure proper fastening to eliminate any loose sections. Do not install over wet primer

#### *Installation over Cutback Adhesive (Over Concrete Only)*

- Mechanical removal of cutback (ie. Grinding, sanding and blasting) can be hazardous, as old cutback adhesive may contain asbestos. Consult adhesive manufacturer and any governmental agencies for proper removal of any adhesive containing asbestos
- Level Plus can be installed over a thin layer of non-water soluble cutback or other non-water soluble adhesive residue
- Since the weakest link of the system will be the bond of the adhesive to the substrate, it is important that the adhesive be very thin, firm and have a good bond to the substrate. After scraping the non-water soluble cutback down to a thin "transparent" residue, and if the floor then passes the 0.5MPa pull strength test pour Level Plus without shot blasting. If the floor does not pass the 0.5MPa pull strength test you must thoroughly shot blast the floor to a CSP of 3-5. It is the responsibility of the installation contractor to ensure the substrate is properly prepared prior to the installation of any LATICRETE material
- Water soluble vinyl adhesives must be completely removed (E.g. shot-blasted) from the floor surface
- For adhesives that do not contain asbestos remove the non-water soluble cutback adhesive to a thin residue by razor scraping or equivalent and then remove any loose particles by thoroughly sweeping, vacuuming and then wet mopping the substrate

#### *Installation over Vinyl Tile, Linoleum, Sheet Vinyl and MVB (over concrete only)*

All vinyl tile, linoleum, non-cushioned sheet vinyl and MVB must be well adhered to the substrate and

free from any bond breaking or bond inhibiting surface contaminates. Ensure bond strength of the vinyl tile to the substrate is a minimum 0.5MPa. If the floor does not pass the 0.5MPa pull strength test you must remove the tile and thoroughly shot blast the floor to a CSP of 3-5. It is the responsibility of the installation contractor to ensure the substrate is properly prepared prior to the installation of any LATICRETE material. Cementitious decorative coatings are excluded from this application. Consult Technical Services prior to any installation over vinyl tile. See "Priming" section for specific instructions over vinyl tile, linoleum, sheet vinyl and MVB

#### *Installation over Existing Ceramic Tile, Stone or Cement Terrazzo*

- All tile and stone must be well adhered to the substrate and free from any bond breaking or bond inhibiting surface contaminates. Ensure bond strength of the tile or stone to the substrate is a minimum 0.5MPa. If the floor does not pass the 0.5MPa pull strength test you must remove the tile or stone and thoroughly shot blast the floor to a CSP of 3-5
- Mechanically abrade existing ceramic tile and stone with a carborundum disk. Wash and rinse thoroughly with clean water. Allow to dry. Skim coat existing ceramic tile, cement terrazzo or stone with Premium Skim coat Patch Underlayment (min. 3mm thick continuous coating). Allow to dry
- Prime surface according to "Priming" section and install Level Plus according to "Application" section

#### **Priming**

Use Admix & Primer with every application of LATICRETE self-levelling products. Shake Admix & Primer thoroughly before using. Pour, mop or spray Admix and Primer onto the surface and distribute evenly using a bristle broom to ensure complete saturation of the entire surface.

Remove any puddles or areas where Admix & Primer is especially thick

Allow Admix & Primer to dry to a clear film (tacky) prior to application of Level Plus. Admix & Primer should not be applied when the surface temperature is below 4°C or above 32°C. Insufficient drying time or poor film formation of Admix & Primer due to low

temperature and/or high humidity may result in pinholes in the surfacing layer. Maintain adequate ventilation during and after application of Admix & Primer to help ensure quicker drying. If LATICRETE Admix & Primer dries within 45 minutes, substrate is excessively dry and will require another application as directed on Admix & Primer data sheet. For installation of Admix & Primer over sheet vinyl, linoleum, VCT/VAT, or MVB; apply Admix & Primer over entire substrate then lightly scatter LATICRETE self-levelling underlayment powder over the wet primer and broom to form a light slurry. Allow slurry to dry (tacky) prior to applying LATICRETE self-levelling product.

**Note:** Keep primed surface clean. Do not allow any foot traffic onto primed surface. Admix & Primer is milky when wet and clear when dry. Admix & Primer is not allowed to sit on substrate for more than 24 hours without a LATICRETE self-levelling product being installed must be re-primed

#### **Mixing**

Place 5.3L – 5.8L of clean potable water into a clean pail. Add one 25kg bag of Level Plus slowly into the pail mix as the material is poured. Use a high speed mixer (1000 – 14000rpm) and mix thoroughly for 5 minutes for a smooth creamy mix with no clumps. Follow all mixing instructions on bag. Be sure to not add too much water. Mix no more than two bags at a time with appropriate water

#### **Application**

##### *Perimeter Isolation Strip*

Note: It is recommended to install a perimeter isolation strip before the installation of Level Plus. Attach the perimeter isolation strip to the perimeter wall of the entire subfloor, as well as around the perimeter of any protrusions, in order to isolate the floor and wall/restraining surfaces. Temporarily fasten perimeter isolation strip in place with staples or masking, duct, or carpet tape. The perimeter isolation strip can then be removed after the tiles have set firm. The joints can then be filled with LATASIL™

Pour or pump the Level Plus over the primed substrate and spread with a spike roller or gauging rake. Use a smoothing paddle to combine pours and to obtain a flat smooth surface. Floor will be ready for foot traffic after 24 hours. Follow manufacturer's

recommendations for installing vinyl tile, linoleum, carpet or wood parquet over concrete.

Before installing wood or resilient flooring, consult manufacturer for recommendations on substrate moisture content requirements. Allow Level Plus to dry in accordance with those recommendations

#### *Topping*

A finish coat of a LATICRETE self-levelling wear surface (such as Level DL) may be applied to Level Plus after material has set 24 hours). It is extremely important that Level Plus is primed with two coats of Admix & Primer following instructions for highly absorptive substrates prior to application of a LATICRETE self-levelling wear surface. (Refer to Admix and Primer data sheet chart for dilution ratios on installations over highly porous surfaces)

#### *Flooring Installation*

Floor goods can be applied to surface from 24 – 72 hours after application, depending on thickness, drying conditions and type of finished floor. Due to the relatively low pH level of LATICRETE self-levelling underlayment, finished floor goods can be applied rapidly without risk of adhesive bond failure. Always test performance suitability and compatibility of finished floor systems prior to their application. Sample surfaces should be installed as a field test so as to be representative of entire surface and tested for intended use. Always refer to finished floor manufacturer's recommendations regarding installation instructions, restrictions and compatibility

### **AVAILABILITY AND COST**

#### **Availability**

LATICRETE materials are available worldwide

For distributor information, call:

Telephone: +603 7989 9188

Fax: +603 7972 033

For online distributor information, visit LATICRETE at <https://ma.laticrete.com>

#### **Cost**

Contact a LATICRETE distributor in your area

### **WARRANTY**

LATICRETE (Malaysia) Sdn Bhd warrants that Level Plus is free from manufacturing defects and will not break down, deteriorate or disintegrate under normal usage for a period of one (1) year from date of purchase subjected to terms and conditions stated

### **MAINTENANCE**

LATICRETE grouts require routine cleaning with a neutral pH detergent and water. All stone and tiles should be maintained and sealed with STONETECH® products as appropriate for the specific tile / stone and installation situation

All other LATICRETE materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers

### **TECHNICAL SERVICE/CONTACT**

#### **Technical Assistance**

Information is available by calling:

LATICRETE (Malaysia) Sdn Bhd  
#18-08, Faber Tower 2, Jalan Desa Bahagia,  
Taman Desa, 58100 Kuala Lumpur,  
Malaysia

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#### **Technical and safety literature**

To acquire technical and safety literature, please visit our website at <https://ma.laticrete.com>