

Technical Guidelines

Installation and Precautions for Limestone Materials

Limestone Installation & Precautions

to minimise colour contamination and moisture sensitivity

Due to its suitability for contemporary design, Limestone tiles & pavers are in high demand for both internal and external natural stone finishes. As the product is porous and lower in density when compared with granite or marble, the Limestone will change and mature in appearance over time due to impact of the weather, moisture ingress and possible colour contamination.

This is managed effectively by adhering to various precautions which vary depending on it being internal or external, or the type of background in each case. See below an outline of typical applications and in the event, you require further assistance, please consult the technical information on our website or discuss with our staff.

Preparation and Adhesive

to Internal Mono Concrete Substrate.

- Consider possible need for grinding to prepare, that is to remove high spots or removal of glue residue from previous floor finishes. Often not required.
- Apply **Mapei Primer (tbc)** or equal approved primer, prior to installation.
- Install with **Mapei Keraquick**, a fast setting, flexible cement based adhesive suitable for limestone and moisture sensitive stones. (In the case of excessively moisture sensitive products consider, **Mapei Ganirapid (2 Part)** or equal approved. If in doubt, please check with our office for where this may apply.
- Minimise risk of Efflorescence by use of Efflock as an additive to water when used at any stage of the install process
- To improve long term performance shower or wet area, it is recommended to pre-seal with a 6 sided dip seal prior to installation with **Sealers Plus Aqua-Seal Ultra Block**, followed by sealing with **Sealers Plus Aqua-Seal Gold +**.
- When dip sealing, stand upright after dipping with spacers in between to allow run-off of excess sealer and, or wipe with a cotton cloth to remove excess. This is for visual reasons on the top surface and adhesion on the underside. Contact our showroom for further advice.
- On completion of all installations of natural stone a typical penetrating sealer such as **Sealer Plus Aqua Seal Gold +** is recommended.

NOTE:

- Please note, all information given in this document should be considered as a guide only and will be required to use in addition to the relevant Australian Standards for trade practices.
- Any of the above recommendations for products are intended to be indicative only of product type as, generally, there will be equally approved options from other manufacturers. For further clarification regarding suitability please consult the manufacturer, your builder or installation contractor.
- The above recommendations are made without full knowledge of your project environment and conditions. For a complete and conclusive specification for your project please contact the manufacturer for a project specification and full guidelines and procedures for the related products.

Limestone Installation & Precautions

to minimise colour contamination and moisture sensitivity

Preparation and Adhesive

to External Concrete Substrate including Pool Coping.

Limestone installations to balcony, alfresco, pool areas, pool & pond coping and any general outdoor areas with a concrete substrate.

- Generally external areas are installed on a screed due to requirement for falls.
- Apply waterproofing **Mapelastic Smart** to concrete slab.
- Screed with **Mapei Topcem Pronto** minimum depth 30mm plus requirement for falls.
- Apply **Moisture Barrier** (TBC) to screed prior to tiling.
- Install with **Mapei Keraquick**, a fast setting, flexible cement based adhesive suitable for limestone and moisture sensitive stones. In the case of excessively moisture sensitive products consider, **Mapei Ganirapid (2 Part)**, or equal approved. If in doubt, please check with our office for where this may apply.
- Minimise risk of Efflorescence by use of Efflock as an additive to water when used at any stage of the install process.
- To improve long term performance to pool & pond coping or wet areas, it is recommended to pre-seal with a 6 sided dip seal prior to installation with **Sealers Plus Ultra Block**, followed by sealing with **Sealers Plus Aqua Seal Gold +**.
- When dip sealing, stand upright after dipping with spacers in between to allow run-off of excess sealer and, or wipe with a cotton cloth to remove excess. This is for visual reasons on the top surface and adhesion on the underside.
- Any installation Dip Sealed with **Ultra Block** still requires sealing on completion with a standard penetrating sealer such as **Sealers Plus Aqua-Seal Gold +**.
- On completion of all installations of natural stone a typical penetrating sealer such as **Sealer Plus Aqua Seal Gold +** is recommended.

NOTE:

- Please note, all information given in this document should be considered as a guide only and will be required to use in addition to the relevant Australian Standards for trade practices.
- Any of the above recommendations for products are intended to be indicative only of product type as, generally, there will be equally approved options from other manufacturers. For further clarification regarding suitability please consult the manufacturer, your builder or installation contractor.
- The above recommendations are made without full knowledge of your project environment and conditions. For a complete and conclusive specification for your project please contact the manufacturer for a project specification and full guidelines and procedures for the related products.

Limestone Installation & Precautions

to minimise colour contamination and moisture sensitivity

Preparation and Adhesive

to Non-Concrete Substrate.

- Provide a stable, well drained substrate, of compacted crushed granite aggregate road base/blue metal fines, to a nominal depth of 70-100mm. (beware of variations that include limestone, cracker dust which may include salts or mineral impurities that could result in colour contamination or corrosion of the finished surface when rising moisture escapes).
- Extend slightly beyond perimeter to avoid perimeter breakdown or failure.
- Pre sealing to minimise risk of colour contamination or corrosion: Dip seal individual tiles in **Sealers Plus Ultra Block**, to ensure all 6 sides sealed. Stand vertically, with spacers to separate, after sealing to minimise sealer residue on surface and, or consider wiping surface to remove excess sealer with a cotton cloth. If necessary, remove excess sealer by wiping with a cotton cloth. This is to minimise risk of corrosion from rising moisture with salts and impurities. Note: many marble and granite products will not require this however if in doubt due to risk of colour contamination or corrosion, please include dip sealing as detailed above.
- Minimise risk of Efflorescence by use of **Efflock** as an additive to water when used at any stage of the install process.
- Minimum thickness for natural stone pavers for pedestrian use is 30mm, for vehicle use 65-70 thick.
- Use approx. 50mm of compacted white river sand to create the final background surface, and, as a leveling agent to install the pavers.
- Fill joins with white sand.
- Do not compact natural stone pavers on completion.
- Driveways or vehicle areas not recommended without concrete substrate.
- Sealers recommended for natural stone pavers are of the penetrating type such as **Sealers Plus Aqua-Seal Gold +**. Where dip sealing with **Sealers Plus Ultra Block** prior to install, sealing on completion is still a requirement with **Sealers Plus Aqua-Seal Gold +**.
- For further information refer to our *'Installation Guidelines for Pavers & Cobbles on a Non-Concrete Substrate'* or contact our showroom directly.

NOTE:

- Please note, all information given in this document should be considered as a guide only and will be required to use in addition to the relevant Australian Standards for trade practices.
- Any of the above recommendations for products are intended to be indicative only of product type as, generally, there will be equally approved options from other manufacturers. For further clarification regarding suitability please consult the manufacturer, your builder or installation contractor.
- The above recommendations are made without full knowledge of your project environment and conditions. For a complete and conclusive specification for your project please contact the manufacturer for a project specification and full guidelines and procedures for the related products.