

# SYSTEM FOR THE INSTALLATION OF CERAMIC, STONE OR BRICK SNAP CLADDING

C09



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|---|--|---|---|--|---|--|
| <p>concrete substrate</p> <p><b>1</b></p> |  <p>repair and smoothing render (if required)</p> <p><b>Planitop Smooth &amp; Repair R4</b></p> <p><b>2</b></p> |  <p>cementitious waterproofing membrane</p> <p><b>Mapelastic Smart</b></p> <p><b>3</b></p> |  <p>CLASS A STONE</p> <p><b>Kerabond Plus and Isolastic 50</b></p> <p><b>4</b></p> |  <p>adhesive</p> <p>CLASS B STONE</p> <p><b>Granirapid</b></p> <p>CLASS C STONE</p> <p><b>Keralastic T</b></p> <p><b>5</b></p> |  <p>stone</p> <p>grout</p> <p><b>Ultracolor Plus</b></p> <p><b>6</b></p> |  <p>silicone</p> <p><b>Mapesil LM</b></p> <p><b>7</b></p> |
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Please refer to the corresponding Work Method Statement for complete list of suitable products and installation information

## PART 1 SYSTEM

### 1.1 INFORMATION

- This work method statement covers the system to install ceramic, stone or brick snaps tiles on walls, in accordance with industry best practice, relevant standards and as per MAPEI technical data sheets (TDS).
- MAPEI provides technical data sheets (TDS) and safety data sheets (SDS) for all products which should be read in conjunction with this Work Method Statement (WMS). Where necessary, conduct a chemical risk assessment and SWMS to ensure each products' correct and safe use. These documents can be obtained from [www.mapei.com.au](http://www.mapei.com.au), or by clicking directly on the products listed within the PDF.
- Products in this WMS can contribute towards satisfying the relevant Green Star credits. The VOC content of products can be found under section 9 on the product SDS, while VOC emissions certificates can be found on the product webpage.

### 1.2 USER NOTES

### 1.3 RELEVANT DOCUMENTATION

**A. Australian Standard(s):**

1. AS 3958.1-2007 – Ceramic Tiles; Part 1: Guide to the Installation of Ceramic Tiles
1. AS 3740-2021 – Waterproofing of Domestic Wet Areas
2. AS 4654.2-2012 – Waterproofing membranes for external above-ground use – Part 2: Design and installation

**B. MAPEI Technical Notebook(s):**

1. [Laying Stone Materials](#)
2. [Guide for the Installation of Ceramic Materials](#)
3. [Ceramic Substrate Preparation Guide](#)

**C. Other References:**

1. ASAA Natural Stone Manual

This Work Method Statement (WMS) provides general recommendations only and is not intended to be interpreted as a generic specification for the application/installation of the listed products. As each project differs in exposure and site conditions, specific recommendations may vary from the information contained above. For recommendations for specific applications/installations please contact MAPEI Australia Pty Ltd.



#### 1.4 SUBSTRATE PREPARATION

1. All substrates must be structurally sound, dry, solid and stable. Any laitance, dust, grease, oil, paint or curing compounds present on the surface of the concrete substrate that may inhibit bond, shall be mechanically removed. The substrate should then be cleaned and prepared in accordance with the relevant standards and as per the MAPEI technical data sheets (TDS).
2. Substrates such as plasterboard, fibre cement boards, and plywood are generally not suitable in external environments. Some proprietary sheets may be suitable, but it is imperative that advice from the manufacturer is sought. There may be limits such as the height of installation, weight of tiling, degree of exposure to weather, and the need for mechanical fixing.
3. It is advisable to use mechanical fixings, such as metal angles or pin fixings, where the tile/stone is to be applied at a wall height exceeding 3 m above the ground with a stone/tile mass greater than 32 kg/m<sup>2</sup> or a size of 600 x 600 mm or larger.

#### 1.5 SMOOTHING COMPOUND - CEMENTITIOUS SUBSTRATES WHERE REQUIRED

##### A. PLANITOP SMOOTH & REPAIR R4 -

Structural R4 class, rapid setting, shrinkage compensated, thixotropic, fibre reinforced, cementitious mortar, applied in a single layer from 3 to 40 mm thick, for repairing and smoothing concrete.

• **APPLICATION:**

- ◇ Saturate the substrate with water, then wait until excess water has evaporated.
- ◇ Apply mortar with a smooth trowel in a single layer from 3-40 mm in thickness.

#### 1.6 WATERPROOFING MEMBRANE – WHERE REQUIRED

• **NOTE:** Prior to the application of the waterproofing membrane:

- ◇ Ensure all pipe penetrations & angles are primed with **ECO PRIM GRIP PLUS**. Ensure penetrations are appropriately detailed.
- ◇ Use a **MAPEFLEX** product as general sealant/adhesive where required.
- ◇ Ensure all wall/wall & wall/floor junctions are treated with a bandage or flexible fillet, and all structural joints are detailed using the options in the below table:

PRODUCT	JUNCTIONS / JOINTS			STRUCTURAL JOINTS
	BANDAGE		FLEXIBLE FILLET	
	MAPEBAND EASY	MAPEBAND SA	MAPEFLEX	MAPEBAND TPE
A.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> - 35 mm reinforced with <b>MAPETEX SEL</b>	<input type="checkbox"/>

##### A. MAPELASTIC SMART

Two component, Class II high flexibility cementitious mortar applied by trowel or roller for waterproofing balconies, bathrooms and swimming pools. Certified to AS/NZS 4858:2004 and AS 4654.1-2012.

• **APPLICATION:**

- ◇ Waterproofing membrane must be applied to walls in a minimum of two even coats to form a final flexible, continuous dry film thickness of 2 mm.
- ◇ For sheeted substrates, the waterproofing membrane should include a reinforcement fabric along all joints with **MAPETEX SEL** in accordance with the TDS.



## 1.7 ADHESIVE

- **NOTE:**

- ◇ Some natural and engineered stones can be prone to warping (moisture sensitivity) and staining. Therefore, Mapei recommends when using stone materials to consult the manufacturer/supplier for any recommendations or guidelines. Please refer to the Mapei technical notebook 'Laying Stone Materials' for more information.
- ◇ S2 adhesive is required when applying externally with >5000 cm<sup>2</sup> (700 x 700 mm) tiles.

**Adhesive to be chosen from the following options:**

	PRODUCT	CLASSIFICATION (AS ISO 13007-1)	SETTING SPEED
<input type="checkbox"/>	ULTRALITE S1 FLEX	C2 TE S1	Normal Set
<input type="checkbox"/>	KERAFLEX MAXI S1	C2 TE S1	
<input type="checkbox"/>	KERABOND PLUS + ISOLASTIC 50	C2 S1	
<input type="checkbox"/>	ULTRALITE S2 FLEX	C2 TE S2	
<input type="checkbox"/>	KERAPOXY ADHESIVE	R2 T	
<input type="checkbox"/>	KERALASTIC T	R2 T	
<input type="checkbox"/>	GRANIRAPID	C2 F S1	Rapid Set
<input type="checkbox"/>	KERAQUICK MAXI S1 + LATEX PLUS	C2 F S2	

- **APPLICATION:**

- ◇ Prepare and mix adhesive in strict accordance to the packaging and TDS.
- ◇ To ensure good adhesion, apply with pressure a thin coat of the adhesive with the straight edge of the trowel. Immediately follow this with a layer of adhesive at the correct thickness using a suitable notched trowel in straight lines.
- ◇ Adhesive should also be pressure applied to the back of the tile/stone with a thin coat using the straight edge of the trowel (*back-buttering*).
- ◇ Ensure the adhesive stays "fresh" and does not form a skin, especially in hot environments, prior to the application of the tile/stone.
- ◇ Place the tile/stone firmly into position wet-on-wet with a slight back and forward motion perpendicular to the trowel lines to collapse the notches.
- ◇ It is recommended to periodically remove and assess adhesive coverage. Continue if acceptable, otherwise reassess trowel and application technique.



## 1.8 GROUT

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- **NOTE:** To estimate the consumption rate according to specific project data, use the **MAPEI GROUTS AND SEALANTS CALCULATOR**.

**Grout to be chosen from the following options:**

- A. KERACOLOR RANGE** -  - **GOOD SOLUTION**  
High performance, polymer-modified, cement-base grouts.
- B. ULTRACOLOR PLUS** -  - **BETTER SOLUTION**  
High-performance, anti-efflorescence, quick-setting and drying polymer-modified mortar with water-repellent technology.
- C. KERAPOXY** -  - **BEST SOLUTION**  
Two component, acid resistant epoxy grout for joints of at least 3 mm.

- **APPLICATION:**

- ◇ Mix the grout and fill the joints completely using a grouting gun, an appropriate trowel or rubber float. Ensuring the joints are completely compacted with no unevenness.
- ◇ When the stone/tile has a rough surface texture, it is recommended to avoid applying the grout over the entire surface of the stone to minimise and facilitate the cleaning procedure.
- ◇ Remove excess grout while still fresh from the surface of the tile/stone by moving the float diagonally across the joints.

- **CLEANING:**

- ◇ **KERACOLOR RANGE & ULTRACOLOR PLUS:** When the grout loses plasticity and becomes opaque, clean excess grout with a hard, damp sponge working diagonal to the joints. Rinse sponge regularly using clean water.
- ◇ **KERAPOXY:** After grouting, cleaning should commence immediately before the product dries. Wet the surface thoroughly and emulsify with an abrasive pad, taking care to not wash-out the joints. **KERAPOXY CLEANER** is recommended for removing grout haze. Refer to TDS for further information.

## 1.9 SILICONE

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**Silicone to be chosen from the following options:**

- A. MAPESIL AC** -   
Solvent-free, acetic crosslinking mildew resistant silicone for ceramics and porcelain.
- B. MAPESIL LM** -   
Neutral mould resistant silicone sealant for stone and marble.

- **APPLICATION**

- ◇ Movement joints should be installed in accordance with AS 3958.1-2007.



