

# Sealing and bonding of natural stone <sup>9</sup>

Sealing and bonding of natural stone as granite, marble and slate, might cause various degrees of discoloration of the stone. Therefore it is important to choose a sealant or adhesive, which not only shows sufficient adhesion, but also is chemical neutral, compared to the stone – and is of a special composition to avoid staining.

Discoloration of natural stone, related to sealing or bonding, can often be seen as a weak darkening ("wet" look) on the part of the stone, immediate to the sealant or adhesive. Because of that, it is also often named staining. The degree of discoloration is related to the type and porosity of the stone.

Besides sealant and adhesive, many other factors might discolour natural stone. The complex and heterogeneous composition of minerals, could itself result in staining, if the stone is affected by moisture. Also inappropriate or lack of cleaning, might lead to staining.

Even though the products recommended for natural stone are similar types, we recommend distinguishing between sealing and bonding. For both applications the products must be neutral. But for bonding a hard joint is often preferred, whereas sealing demands more elastic joints, which is able to maintain adhesion, even at joint movements.

## Sealing of natural stone

Sealing natural stone, is distinguished between hard, weakly elastic powder-based mortars, and traditional elastic sealants. This paper only refers to the last-mentioned group.

Where an elastic joint is required, we recommend MS-polymer based sealants or neutral silicone sealants, as mentioned in this table:

Recommended	Combi Flex 524	MS Sealant & Adhesive 526	Danaseal Universal 510	Sanitary Silicone 512
Marble*			•	•
Granite	•	•	•	•
Slate*				

\* When sealing Carera marble and slate, a careful test is recommended, due to high risk of discoloration.

## Bonding of natural stone

For bonding natural stone we recommend products, as mentioned in this table. Please note that the recommendations only consider the risk of discoloration and adhesion. For every adhesive application, the strength of the joint must be evaluated in relation to the design and strength requirements.

Recommended	Combi Flex 524	MS Sealant & Adhesive 526	Danaseal Universal 510	Sanitary Silicone 512
Marble*	•	•	•	•
Granite	•	•	•	•
Slate*				

\* When bonding Carera marble and slate, a careful test is recommended, due to high risk of discoloration

## Use of primer

Using a primer, often increases adhesion and avoids discoloration. For natural stone, we only recommend Primer 961.

**IMPORTANT INFORMATION: As the composition of natural stone vary from stone to stone, it is important to carry out preliminary tests – especially before starting larger applications.**

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HOW TO DO

