

BONDING NATURAL STONE WITH CONFIDENCE

Natural stone façades create a timeless, premium appearance that architects and developers around the world continue to demand. With TWEHA® StoneMate, bonded cladding systems for natural stone and ceramics have become a proven solution for modern façade construction worldwide.

However, successful bonding starts with understanding the unique characteristics of natural stone.

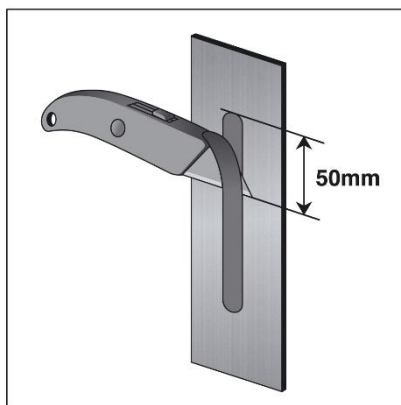
Every Natural Stone is Different

Unlike manufactured materials, natural stone varies significantly in density, porosity, composition, and internal structure. These physical differences can directly influence adhesive performance.

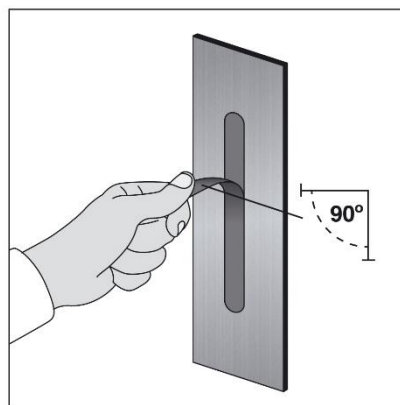
That is why a hand pull-test must always be carried out on a representative sample of the selected stone before installation. This simple but essential procedure helps ensure maximum bonding reliability and long-term façade safety.

Simple On-Site Test Procedure

To verify proper adhesion, apply the adhesive bead exactly as it will be used during installation on site. Testing can normally take place once the adhesive is fully cured — typically after 5 days.



1. Make a vertical cut approx. 5 cm (two inches) long in the length of the glue bead only.



2. Grasp the cut loose piece of glue bead firmly between the fingers and pull down at a 90° angle or more, and try to pull the glue bead off.

Step-by-Step Hand Pull-Test

1. Make a vertical cut approximately 5 cm (2 inches) long along the adhesive bead.
2. Firmly grasp the loosened section of adhesive between your fingers.
3. Pull downward at an angle of 90° or greater to detach the adhesive bead.

What Indicates Good Adhesion?

A successful result is achieved when the adhesive tears cohesively within itself, rather than separating from the stone surface. This confirms sufficient bonding strength and compatibility with the material.

Porous Natural Stone Requires Extra Attention

Porosity is another critical factor when bonding natural stones. Highly absorbent stones can affect adhesive curing and performance.

For moisture-absorbing natural stone types, the use of TWEHA® Prefix X-tra surface improver is strongly recommended. This treatment enhances adhesion performance and contributes to a durable, secure façade installation.

Important Warning About Slate

Bonding layered natural stones such as slates is strongly discouraged.

Slate naturally consists of thin layers that can split easily, making the material structurally inconsistent. In addition, moisture penetration combined with frost conditions can lead to delamination between layers.

In worst case scenarios, only a thin flake of slate remains attached to the adhesive while most of the façade panel detaches — creating a serious safety risk.

For this reason, slate cannot guarantee the consistent structural integrity required for bonded façade applications.

Global Expertise for Guaranteed Results

Every bonded stone project deserves expert evaluation and the right technical guidance. If there is any uncertainty regarding stone suitability, adhesion performance, or installation conditions, rely on the global expertise of TWEHA® and our Partners in Bonding.

Our specialists are ready to support you in achieving a safe, durable, and fully guaranteed bonded stone façade solution.

Need technical advice?

Contact our helpdesk: **+31 88 600 3 600**

TWEHA®, 2026