

PERFECT BONDING STARTS WITH PERFECT SURFACE PREPARATION

In bonded façade systems, the quality of the adhesive connection does not depend on the adhesive alone. Successful long-term bonding starts with one critical factor:

Proper surface preparation.

Even the most advanced bonding system can only perform optimally when the surfaces to be bonded are completely clean, dry and free from contamination. With decades of expertise in bonded façade technology, TWEHA® understands that surface preparation is the foundation of every durable adhesive connection.

Why Surface Cleaning Is So Important

To achieve strong and reliable adhesion, the adhesive must fully wet and connect to the substrate surface. This requires sufficiently high surface tension and perfectly prepared bonding surfaces.

Any contamination between the adhesive and the substrate can seriously compromise the bond performance.

Grease and Oil Contamination

Even minimal traces of grease, oil or skin fats caused by touching the surface with fingers can negatively affect adhesion.

These contaminants create a barrier between the adhesive and the substrate, preventing the formation of a strong and durable bond.

Dirt, Dust and Rust

If dust, dirt or rust particles remain on the surface, the adhesive will bond to the contamination instead of to the actual substrate.

As a result, the adhesive connection becomes unreliable and may fail prematurely under load or environmental influences.

Moisture: The Invisible Risk

Moisture is one of the biggest enemies of constructive bonding.

Even a very thin invisible film of water between the adhesive bead and the substrate can completely frustrate adhesion performance.

That is why all surfaces must always be:

- Clean
- Dry
- Dust-free
- Grease-free

before adhesive application begins.

TWEHA® Cleaning Solutions

Using TWEHA® Cleaner+ is one of the most effective methods to achieve professional surface preparation, regardless of the type of contamination present.

TWEHA® Cleaner+ helps create the clean surface conditions required for optimal adhesive performance and long-term bonding reliability.

Proper cleaning contributes directly to:

- Better adhesive wetting
- Higher bonding integrity
- Improved durability
- Reduced risk of bonding failure

Mechanical Surface Preparation

In some applications, mechanical preparation may further improve bonding performance.

This can include:

- Sanding with abrasive paper
- Grinding
- Sand blasting

Mechanical abrasion increases the available bonding surface area and improves mechanical adhesion.

After abrasion, all generated dust must be removed thoroughly — ideally using TWEHA® Cleaner+ — to ensure a perfectly clean substrate.

Surface Improvement for Porous Materials

Some façade materials require additional surface conditioning.

Highly porous substrates and surfaces with limited surface structure, such as fiber cement boards, can benefit significantly from the use of TWEHA® Prefix X-tra surface improver.

This surface treatment:

- Enhances adhesion performance
- Stabilizes porous substrates
- Improves long-term bond reliability

As with all bonding applications, careful cleaning before application remains essential.

No Primer Required

One of the major advantages of TWEHA® Bonding Systems is that they do not require a traditional primer.

This offers significant practical advantages:

- One less processing step
- Faster installation
- Lower labor costs
- Reduced application risks
- No aggressive or toxic primer chemicals

Many conventional bonding systems depend heavily on primers containing organic solvents to prepare and soften the substrate surface before adhesive application.

Typically, these systems require:

1. Cleaning
2. Primer application
3. Immediate adhesive application before the primer dries

This process increases complexity and creates additional timing-sensitive operations during installation.

The Advantage of TWEHA® Prefix X-tra

Unlike many traditional primer systems, TWEHA® Prefix X-tra does not require immediate adhesive application after treatment.

This provides installers with:

- Greater flexibility during processing
- Easier project planning
- Reduced installation pressure
- More reliable application conditions

The result is a safer, cleaner and more efficient bonding process.

The Foundation of Reliable Bonding

In bonded façade technology, proper surface preparation is not an option — it is a necessity. By combining professional cleaning, advanced surface treatment solutions and primer-free bonding technology, TWEHA® helps façade professionals achieve:

- Stronger adhesion
- Safer installations
- Faster processing
- Long-term façade durability

Because reliable bonding always starts with a perfectly prepared surface.

TWEHA®, 2026