

CLEANER OR PRIMER? UNDERSTANDING THE DIFFERENCE IN FAÇADE BONDING

In professional façade bonding, proper surface preparation is essential for achieving a safe and durable adhesive connection.

One of the most common misunderstandings in the industry is the difference between:

- a cleaner,
- and a primer.

At TWEHA®, we believe simplicity, reliability, and safety go hand in hand. That is why TWEHA® bonding systems are designed to work without the need for aggressive primers in many applications. This means in most cases: proper cleaning of the surfaces is sufficient.

This offers major advantages in:

- installation speed,
- application reliability,
- labor costs,
- health and safety,
- and environmental impact.

Why Surface Preparation Matters

No adhesive system can perform correctly on contaminated surfaces.

Before bonding, the substrates must be free from:

- oil,
- grease,
- dust,
- production residues,
- moisture,
- and other contaminants.

Proper cleaning ensures that the adhesive can establish direct contact with the substrate surface, creating a strong and durable bond.

What Does a Cleaner Do?

A cleaner is specifically intended to:

- clean the substrate surface,
- remove contamination,
- and prepare the material for bonding.

In façade applications, cleaners are commonly used on:

- the backside of façade panels,
- and the front side of aluminum support profiles.

Cleaners remove:

- oils,
- grease,
- dirt,
- production residues,
- and protective film contaminants.

Residues Left Behind During Production

Many façade materials contain invisible residues from the manufacturing process.

Release Agents

For example, HPL panels are often produced by pressing multiple sheets together under extremely high pressure.

To prevent these sheets from sticking together during production, manufacturers use:

- release agents,
- often grease-based or silicone-based substances.

Even after production, microscopic traces of these substances may remain on the panel surface and negatively affect adhesion.

Protective Films

Some façade panels are supplied with protective films to prevent:

- scratches,
- damage,
- or warping during transport and storage.

After removing these films, a thin residue layer may remain on the surface.

That is why professional surface preparation often includes:

- light sanding,
- followed by proper cleaning,
- before adhesive application.

What Does a Primer Do?

A primer has a completely different function. Instead of cleaning the surface, a primer acts as: **a chemical bridge between the substrate and the adhesive.**

Most primers contain:

- reactive chemical agents,
- dissolved in aggressive solvents.

After application:

- the solvent evaporates,
- leaving behind chemically active substances.

These chemicals partially “etch” or modify the substrate surface, allowing the adhesive to mechanically and chemically anchor itself more deeply into the material.

This creates a microscopic crater-like structure that improves bonding capability.

The Disadvantages of Primers

Although primers can improve adhesion in certain applications, they also introduce several disadvantages:

- additional processing steps,
- increased risk of application errors,
- strict timing requirements,
- higher labor costs,
- and additional procurement costs.

Furthermore, many aggressive primer systems are:

- harmful to human health,
- unpleasant to process,
- and environmentally unfriendly.

The adhesive must also be applied within a very specific time window after primer application. If this timing is not respected, bond quality can be negatively affected.

The TWEHA® Advantage: Primer-Free Bonding

TWEHA® bonding systems are specifically developed to minimize dependence on aggressive primers.

In many façade bonding applications: **cleaning the surfaces correctly is sufficient.**

This offers major practical benefits:

- simpler installation,
- reduced application risks,
- faster processing,
- lower costs,
- safer working conditions,
- and reduced environmental impact.

By eliminating unnecessary primer use wherever possible, TWEHA® provides a more efficient and sustainable bonding solution.

Simpler, Safer, More Reliable

Professional façade bonding should not be unnecessarily complicated.

With decades of experience in adhesive technology, TWEHA® focuses on systems that combine:

- high bonding performance,
- practical usability,
- environmental responsibility,
- and long-term durability.

Because the best bonding solutions are not only strong — they are also safe, efficient, and reliable in daily practice.