

WHAT MAKES TWEHA® SMP A BETTER CHOICE?

In modern façade construction, adhesives and sealants are exposed to some of the harshest environmental conditions imaginable. UV radiation, rain, humidity, temperature fluctuations, and structural movement continuously challenge the durability and performance of bonding systems.

That is why choosing the right adhesive technology is essential.

At TWEHA®, we believe SMP technology offers major advantages over traditional polyurethane systems for bonded ventilated façade applications.

Superior UV Resistance

One of the key advantages of: SMP (Silyl Modified Polymer) is its excellent resistance to UV exposure.

Unlike polyurethane (PU), SMP adhesives maintain their performance and physical stability much better when exposed to long-term sunlight and weathering.

This is particularly important for exterior façade applications where adhesives and sealants must withstand years of:

- Sunlight;
- Rain;
- Temperature changes;
- Outdoor aging.

Better UV resistance helps preserve:

- Elasticity;
- Adhesion performance;
- Long-term durability.



No Bubbling Problems

Traditional polyurethane sealants contain Isocyanates

When PU adhesives react with moisture from the surrounding air or substrates, a chemical reaction occurs that releases Carbon Dioxide (CO₂)

This can create:

- Bubbles;
- Voids;
- Uneven adhesive beads.

Over time, these imperfections may weaken the adhesive structure and potentially lead to:

- Cohesive failure;
- Reduced bonding performance;
- Surface irregularities.

TWEHA® SMP Does Not Contain Isocyanates

As a result, No Bubbling Occurs

This creates:

- A more homogeneous adhesive bead;
- Better long-term stability;
- More reliable bonding performance.

Bonding on Damp Substrates

Another major advantage of SMP technology is its ability to bond on slightly damp substrates.

Because SMP systems are free from isocyanates, they are far less sensitive to residual moisture during application.

In practice, this means:

- Greater flexibility on-site;
- Less weather dependency;
- Faster continuation after rain;
- Reduced project delays.

With traditional polyurethane systems, bonding on damp surfaces is generally prohibited.

No Shrinkage During Curing

Many polyurethane adhesives and sealants contain:

- Solvents;
- Volatile components.

During curing, these substances evaporate, which can lead to:

- Shrinkage;
- Internal stress;
- Reduced dimensional stability.

TWEHA® SMP Is Solvent-Free and Water-Free

This means: No Shrinkage During Curing

The result is:

- Stable adhesive geometry;
- Consistent joint thickness;
- Improved long-term performance;
- Better stress distribution.

Better Performance for Modern Façades

Ventilated façade systems require adhesives that can combine:

- Elasticity;
- Durability;
- Weather resistance;
- Structural reliability;
- Long-term stability.

SMP technology successfully combines all these properties in one advanced bonding solution.

Why Professionals Choose TWEHA® SMP

At TWEHA®, our SMP bonding systems are specifically developed for demanding façade applications where long-term performance matters most.

Key advantages include:

- Excellent UV resistance;
- No bubbling;
- No isocyanates;
- Damp substrate compatibility;
- No shrinkage;
- Durable elastic bonding;
- Reliable outdoor performance.

Smarter Bonding Technology

Modern façade construction requires smarter and more reliable adhesive technologies.

With SMP bonding systems, façade professionals' benefit from:

- Easier processing;
- Greater installation flexibility;
- Improved durability;
- Reduced technical risks;
- Superior long-term façade performance.

At TWEHA®, we believe advanced SMP technology provides the future-proof solution for professional bonded ventilated façade systems.