

FIRE SAFETY IN VENTILATED FAÇADES: HOW DO TWEHA® ADHESIVE CONNECTIONS PERFORM?

Fire safety has become one of the most important challenges in modern façade engineering — especially in ventilated façade systems.

Ventilated façades offer major advantages in:

- thermal performance
- moisture control
- energy efficiency
- architectural freedom
- long-term durability

But because these systems contain an open ventilation cavity between the cladding and the structural wall, they also require careful fire-safe engineering.

When poorly detailed or combined with unsuitable materials, fire can spread rapidly through the cavity behind the façade.

That is why growing attention is being paid to every component within the façade system — including the fixing method itself.

Is adhesive façade systems fire-safe?

Within the façade industry, a frequently asked question is whether structural adhesive systems negatively affect the fire performance of ventilated façades.

The answer is clear:

Extensive international fire testing has demonstrated that TWEHA® adhesive connections **do not** contribute to fire spread within ventilated façade systems.

On the contrary, the adhesive systems perform within established safety parameters and do not initiate or accelerate fire development.

This confirms that TWEHA® adhesive bonding systems are a safe and reliable solution for modern fire-conscious façade engineering.

Fire safety depends on the complete façade system

A façade's fire performance is never determined by a single component alone.

True fire safety is achieved through the intelligent interaction between:

- cladding materials
- insulation systems
- cavity barriers
- substructure components
- ventilation detailing
- and fixing technologies

This means that every façade must always be assessed as one completely engineered system.

When properly designed, ventilated façades can combine:

- exceptional aesthetics
- structural reliability
- energy efficiency
- and high levels of fire safety

Why adhesive bonding offers important advantages

Modern adhesive bonding systems offer several technical benefits in ventilated façade applications.

Unlike traditional mechanical fixings, adhesive systems:

- distribute stress evenly
- allow controlled façade movement
- eliminate visible fixings
- reduce stress concentrations
- improve façade aesthetics

At the same time, extensive testing has shown that properly engineered adhesive connections can safely perform within fire-rated façade systems.

This makes adhesive bonding an increasingly preferred solution in modern architectural façade design.

Engineering and detailing remain essential

Even the highest-quality façade products cannot guarantee fire safety without proper engineering.

Critical factors include:

- correct façade composition
- suitable insulation selection
- compliant cavity barriers
- proper ventilation detailing
- certified façade components
- professional installation

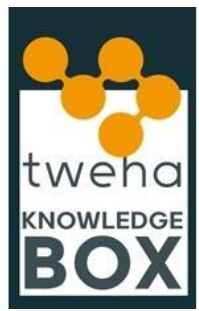
At TWEHA®, we understand that façade fire safety requires a complete system approach — combining tested bonding technologies with expert façade engineering knowledge.

Safe façades without compromising design

Modern architecture demands more than performance alone.

Buildings must also inspire visually.

With the right engineering approach, ventilated façades can be:



- visually striking
- lightweight
- energy-efficient
- durable
- and fire safe

TWEHA® adhesive systems help architects, engineers, and installers achieve this balance — combining clean aesthetics with reliable structural and fire performance. Because the future of façade construction is not only about design. It is about designing safely.

TWEHA®, 2026