

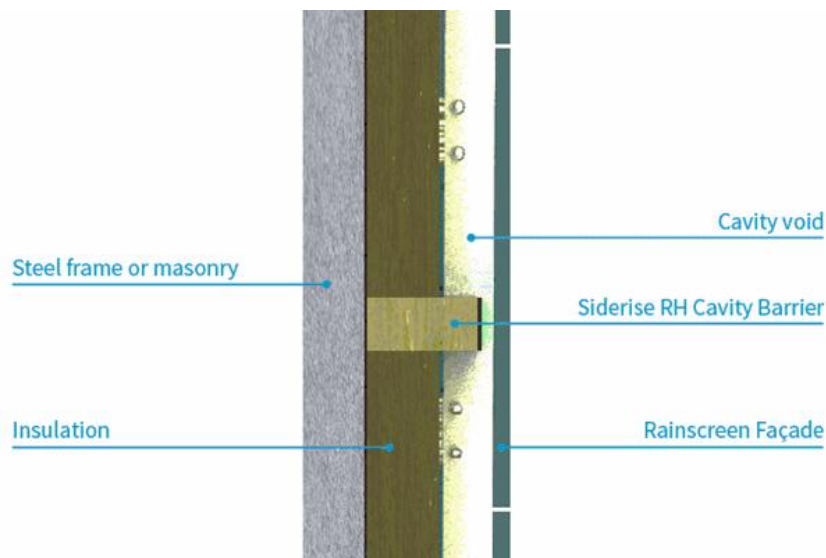
PREVENT FIRE SPREAD IN VENTILATED FAÇADES WITH HIGH-PERFORMANCE CAVITY CLOSERS

Modern ventilated façades offer outstanding thermal and moisture performance, but they also introduce a critical fire safety challenge: the air cavity behind the façade can accelerate the vertical spread of smoke and flames during a fire. To ensure safe façade design, controlling fire movement through this cavity is essential.

Why Fire Spreads Faster in Ventiladed Façades

In the event of a fire, the temperature difference between hot and cold air creates a strong chimney effect inside the ventilated cavity. This causes smoke, heat, and flames to move rapidly upward through the façade construction, significantly increasing the risk of fire spread and flashover between floors.

Without adequate compartmentation, a localized fire can quickly escalate into a major façade fire.



The Solution: Fire-Resistant Cavity Closers

To stop fire propagation through the air cavity, ventilated façades should be equipped with certified fire-resistant cavity closers, also known as cavity barriers.

These specially engineered components are designed to:

- Allow normal airflow and façade ventilation during everyday use
- Automatically expand when exposed to high temperatures
- Seal the cavity during a fire
- Prevent the passage of flames and smoke for 30 or 60 minutes

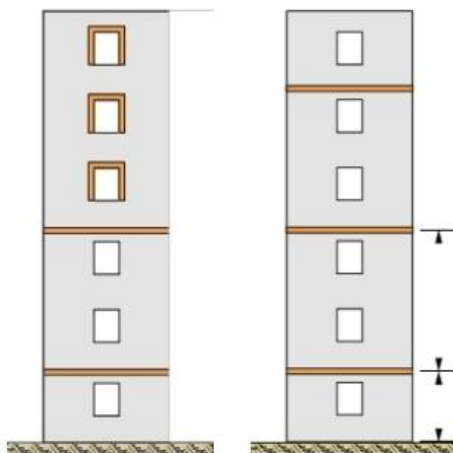
By interrupting the airflow inside the cavity, cavity closers dramatically reduce the chimney effect and help contain the fire to its point of origin.

Advanced Fire Protection Technology

Cavity closers with fire reaction classification A2-s3, d0 are manufactured from materials that react to heat by swelling and sealing the ventilation gap. This intumescent action blocks the airflow path behind the façade and delays fire spread throughout the building envelope. The result is a significant improvement in overall façade fire safety, helping protect:

- Occupants
- Escape routes
- Adjacent building compartments
- Structural integrity of the façade system

Flexible Installation Methods



Fire-resistant cavity closers can be integrated into the façade in two effective ways:

1. Window Perimeter Protection

Horizontal and vertical cavity barriers are installed around each façade opening, including:

- Above windows
- Along both vertical sides of openings

2. Continuous Horizontal Fire Barriers

A continuous cavity closer is installed across the full width of the façade to create fire compartments between floors.

This method provides targeted fire protection around the most vulnerable façade penetrations.

Recommended Installation Strategy

For optimal fire safety performance, the following installation approach is recommended:

- Install the first horizontal cavity closer at the level of the second floor
- Ensure the vertical distance from ground level does not exceed 4 meters
- Add continuous horizontal cavity barriers every two storeys across the entire façade width
- Optionally enhance protection by adding cavity barriers around every window opening

This strategy helps create effective fire compartmentation within the ventilated façade system.

A Critical Component in Safe Façade Design

The use of high-quality cavity closers is no longer optional in modern façade engineering — it is an essential part of responsible, regulation-compliant fire safety design.

By integrating properly tested cavity barriers into ventilated façades, architects, engineers, and contractors can significantly reduce fire risks while maintaining the aesthetic and performance benefits of modern cladding systems.

Investing in effective cavity closer solutions means investing in safer buildings, improved compliance, and greater peace of mind.