

LET THE JOINTS BE OPEN! WHY JOINT PROFILES SHOULD BE AVOIDED IN VENTILATED FAÇADES

In modern ventilated façade construction, proper moisture management is essential for achieving long-term durability, appearance, and performance. Yet one common mistake still appears regularly in practice:

The use of joint profiles in combination with porous façade materials

At TWEHA®, we have advised for many years to avoid the use of joint profiles with materials such as:

- Fiber cement panels;
- Natural stone;
- Cement-based façade boards;
- Other porous cladding materials.

And there is a very important technical reason behind this recommendation.

Why Joint Profiles Cause Problems

Although joint profiles may initially appear to provide a clean finish, they often create unfavorable moisture conditions inside the façade system.

The narrow space between the façade panel and the joint profile creates Capillary Action. This causes rainwater to be drawn into the small gap between the panel edge and the profile.

As a result:

- Moisture remains trapped;
- The porous façade panels absorb water continuously;
- The panel edges remain damp for long periods.

Over time, the façade panels slowly accumulate moisture, which can lead to serious aesthetic and technical problems.

The Consequences of Moisture Accumulation

When porous façade materials are repeatedly exposed to retained moisture, the following issues may occur:

- Fungal growth;
- Green deposits;
- Moss and algae contamination;
- Crumbling panel edges;
- Surface deterioration;
- Reduced lifespan.

In many situations, the façade material itself is not the actual problem. The real cause is the presence of the joint profile, which prevents the façade from drying properly.

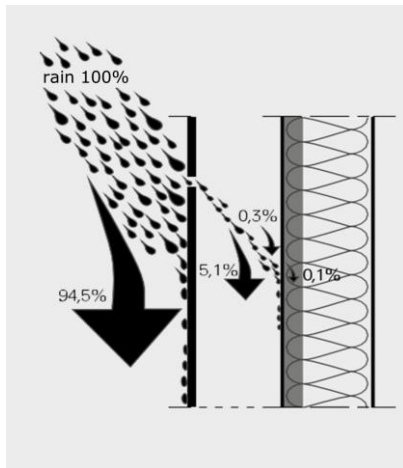
Open Joints Are the Better Solution

Experienced façade professionals understand that ventilated cladding systems must be able to:

- Ventilate;
- Drain;
- Dry efficiently.

That is why knowledgeable installers strongly recommend: Use Open Joints Instead of Joint Profiles

Open joints are not a weakness of the façade system. On the contrary — they are an essential part of proper rainscreen façade performance.



How Open Joints Improve Moisture Management

In a properly designed ventilated façade, the cavity behind the cladding creates continuous airflow.

This airflow ensures that:

- Moisture can evaporate rapidly;
- Condensation can dry efficiently;
- Water penetration can be safely managed.

During rainfall, most water drains naturally along the exterior façade surface.

Only a limited amount of moisture may enter through the open joints. Thanks to the negative pressure and ventilation within the cavity, this moisture is safely discharged behind the façade panels.

Ventilation Is the Key to a Healthy Façade

The effectiveness of open joints depends on one important condition: Sufficient Ventilation Behind the Cladding

A permanent airflow within the ventilated cavity allows the construction to dry quickly and evenly.

This rapid drying process significantly reduces the risk of:

- Moisture accumulation;
- Mold formation;
- Algae growth;
- Biological contamination.

Even condensation forming behind the façade due to temperature differences can be effectively removed through proper ventilation.

Proven Performance of Open Joint Systems

Research and practical experience demonstrate that ventilated façade constructions with: Open Joints of Approximately 8–10 mm

offer excellent moisture management and long-term façade durability.

Open joint systems contribute to:

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- Faster drying;
- Better air circulation;
- Cleaner façade surfaces;
- Reduced maintenance;
- Longer service life of façade materials.

Better Ventilation Means Better Façade Performance

Modern rainscreen cladding systems are designed to function as ventilated and self-drying constructions.

By omitting joint profiles and allowing open ventilation, the façade can perform exactly as intended:

- Moisture is removed quickly;
- The façade remains healthier;
- Materials last longer;
- The risk of damage is significantly reduced.

At TWEHA®, we believe that durable ventilated façades start with intelligent moisture management — and that starts by simply letting the joints remain open.

TWEHA®, 2026