

BONDED WALL PANELS IN INTERIOR APPLICATIONS

Adhesive bonding technology is not only transforming exterior façades — it is also becoming an increasingly popular solution for modern interior wall applications.

Bonded wall panels offer architects and designers:

- clean and seamless aesthetics,
- hidden fixing systems,
- greater design freedom,
- and fast, efficient installation.

At the same time, they provide a reliable and durable solution for a wide range of interior environments.

Different Requirements for Interior Applications

Unlike exterior façade systems, interior wall panels are not exposed to:

- wind loads,
- extreme weather conditions,
- UV radiation,
- or major thermal stress.

As a result, the mechanical loads acting on bonded interior wall panels are significantly lower than those experienced in exterior façade constructions.

In most interior applications, only temporary or accidental loads may occur, such as:

- a person leaning against the wall,
- impact from furniture,
- or accidental collision or shoulder impact.

Designed to Withstand Impact

Even under accidental impact conditions, bonded wall panel systems are designed to maintain their integrity.

In the event of an impact:

- the panel itself may temporarily deform,
- or minor cracking may occur depending on the material type,
- but the bonded connection itself must remain secure and intact.

This is a crucial aspect of safety and long-term reliability in interior construction systems.

Research Supports Reliability

Research conducted by Struck has shown that the maximum peak force generated by a shoulder impact against partition walls generally lies between: **3 to 4 kN**

Compared to the load levels typically used in standard façade engineering calculations — for example loads generated by façade maintenance installations — these impact values are relatively low.

As a result, the structural demands placed on bonded interior wall systems are considerably less severe than those encountered in exterior façade applications.

Minimal Risk of Failure

Thanks to the lower load conditions in interior environments, the risk of failure of properly bonded interior wall panels can be considered extremely low.

When combined with:

- correct substrate preparation,
- professional installation,
- and high-quality adhesive systems,

bonded interior panels provide a highly reliable and durable solution for:

- commercial interiors,
- office buildings,
- hotels,
- residential projects,
- public spaces,
- and architectural feature walls.

The Advantages of Bonded Interior Panels

Using adhesive bonding systems for interior wall applications offers multiple benefits:

- no visible screws or mechanical fasteners,
- sleek and modern appearance,
- faster installation,
- reduced material stress,
- improved aesthetics,
- and greater architectural freedom.

In addition, elastic adhesive systems help absorb small structural movements and vibrations, contributing to long-term stability and durability.

TWEHA®: Reliable Bonding for Interior Applications

With decades of expertise in façade and panel bonding technology, TWEHA® provides advanced adhesive systems suitable for both exterior and interior applications.

Our solutions combine:

- proven safety,
- durable performance,
- technical reliability,
- and modern architectural possibilities.

Because whether applied outside or inside, professional bonding technology creates clean, durable, and future-proof building solutions.