

Façade construction for thin  
cladding materials like fiber  
cement & HPL.



# Basic information for fiber cement & HPL.

When it comes to façade cladding it is about the outer appearance of the cladding which gives the building a stand-alone look. Furthermore, it is important to guarantee the aesthetics of the building for years to come. Both are equal prerequisites and optimally fulfilled by HPL and fiber cement.

Both are artificial materials, which are industrially manufactured based on natural products. That is why there is a very wide range of various colours and surface textures.

## About HPL:

HPL claddings are high-pressure laminates consisting of multiple layers. These layers are combined in laminate presses under high pressure and at high temperature in order to ensure long term durability and performance.

By using heat-resistant resins the fire protection can be increased. It is also easy to maintain and clean the surface of HPL which is a big advantage for façades as they are exposed to weather and can get dirty quickly.

## About fiber cement:

Fiber cement is a composite material made of cement reinforced with cellulose fibers. The natural durability of the material makes it highly sustainable. Additionally, due to the high density and compression of fibers, the material has excellent characteristics including superb freeze-thaw resistance as well as resistance to fungi, mold and bacteria. Façade panel thicknesses range from 8 mm to 12 mm. Common fixing methods are colour-coated rivets for exposed fixing and undercut anchors for concealed fixing.

The relatively lightweight panels enable many possibilities in design, e.g. floor-to-floor spanning subframe or wide cavity zone to cover thick insulations which are required on energy efficient buildings.

Backed with 35 years' experience fischer supports in material testing to evaluate design resistances.



Various fiber cement and HPL manufactures provide a great variance in the properties and colours of the boards to the worldwide market. Despite all differences they have one thing in common - they can be installed with fischer products.



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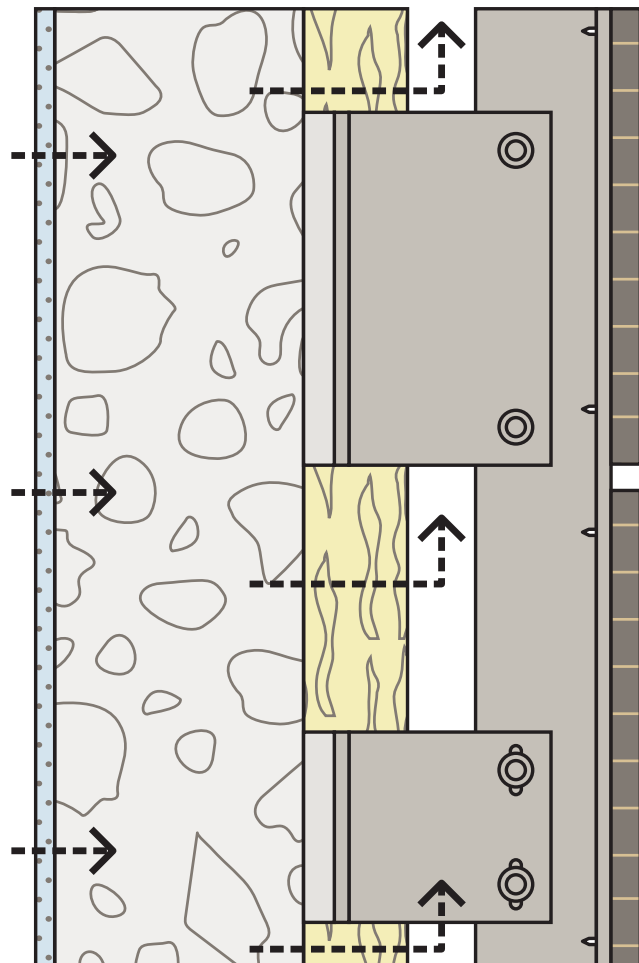
# Functional principle rainscreen façades.

A rainscreen façade is a ventilated double-layer cladding system which structurally separates the weather protection and insulation functions. Based on many advantages compared to sealed façade systems rainscreen systems have become very popular nowadays. Besides the aesthetic advantages there are in addition functional and safety benefits, which include the rear ventilation cavity and non-combustible insulation materials. These systems are less susceptible to damage than other façade systems and provide a wide freedom of design. In addition, fire, noise and lightning protection requirements can be implemented.

fischer offers innovative, high-quality full façade systems for rainscreen façades. Besides functional and economical advantages, the fischer façade systems provide especially an outstanding architectural creative scope.

**fischer goes beyond the state of the art by offering the following benefits:**

- Subframe systems for all different cladding materials
- Flexible system for concealed and exposed applications
- Fast and uncomplicated installation reduces costs for the whole façade
- Complies with low and zero energy building standards
- Project-specific training, consultation and product solutions
- Global support by local representatives
- Experienced in façade systems for 35 years
- Complete façade system supplied out of one hand
- ETA and CE approved



Functional principle rainscreen façade  
with system components

# The appearance they deserve with the fischer undercut technology.

## Thin cladding materials

The fischer Zykon Panel Anchors FZP II allow a concealed fixing of fiber cement and HPL boards for rainscreen façades. The fitting drill hole is created by a conical undercut in a cylindrical hole. The harmonized geometry of the installed undercut anchor and the drill hole create a stress-free fixing. Only the impact of external forces causes internal reaction forces in the connection of the undercut anchor and fiber cement or HPL.

Similar to the undercut anchor, just as much know-how goes into the other components of the fischer façade system. The drilling techniques, quality assurance of drill holes and installation methods integrate the system perfectly.

With this complete system for undercut anchors,

fischer offers architects and planners an innovative, high-quality solution for rainscreen façades. In addition to processing and economic advantages, the fischer façade system with undercut anchors provides an outstanding freedom of architectural design.



## Benefits



On-site support



Technology leadership beyond the state-of-the-art



Cost efficiency of the overall system with fischer quality



Fast supply and installation of the system

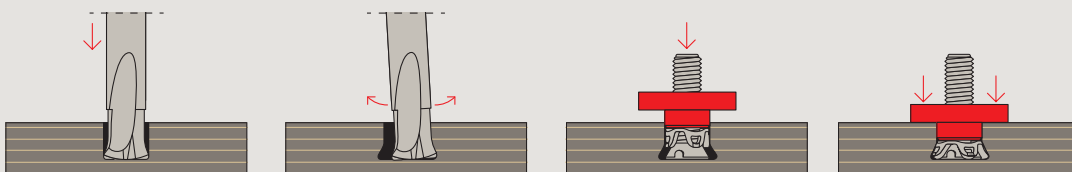


Global availability and supply of a complete system from a single source



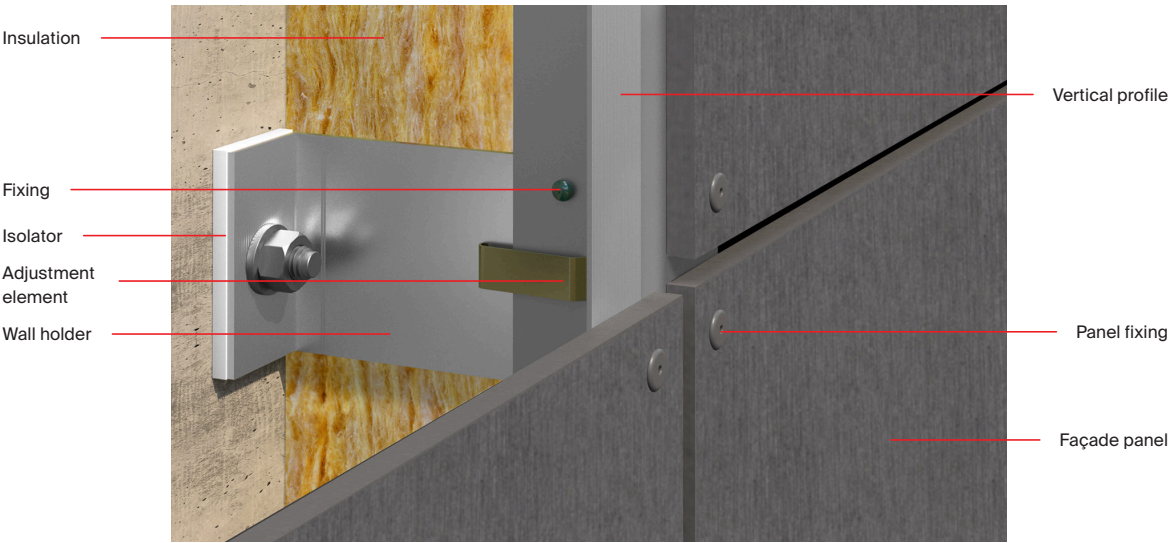
Approved and third-party certified systems and in-house test laboratory

## Installation



# Subframe system for exposed fixing of fiber cement & HPL cladding.

## Exposed system



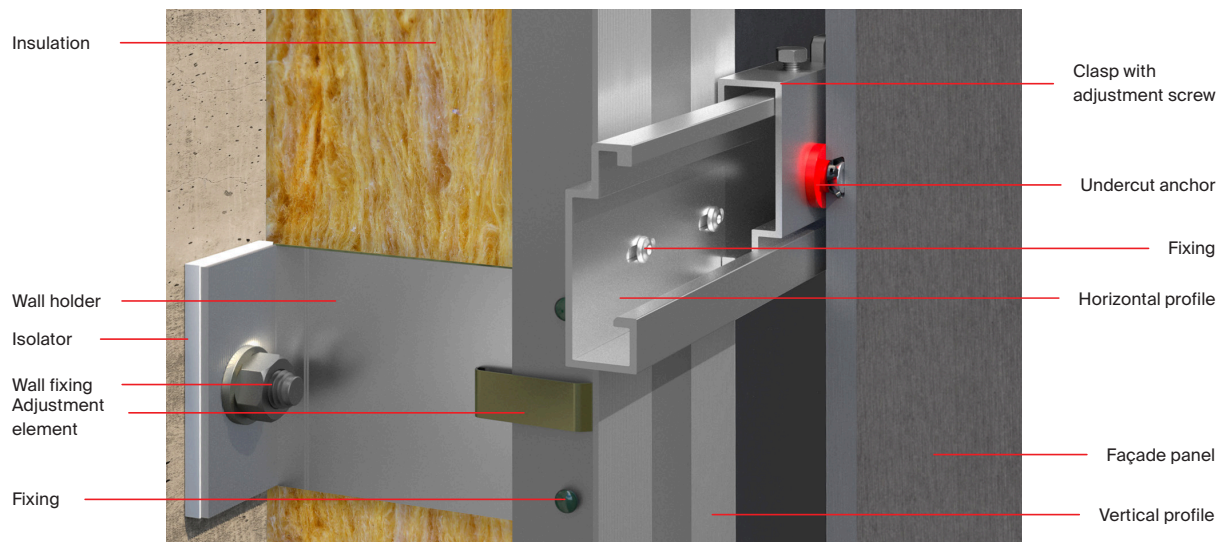
## Technical data

| Exposed system     |                              |          |                          |
|--------------------|------------------------------|----------|--------------------------|
| Product type       | Product description          | Item No. | Annotation               |
| Isolator           | Thermostop 40x150x6/11       | 546156   | For fix points           |
| Isolator           | Thermostop 40x80x6/11        | 540741   | For sliding points       |
| Wall holder        | FLH 160x150x3/11/F-SP AL     | 548107   | Fix point holder         |
| Wall holder        | FLH 160x80x3/11/SP AL        | 548105   | Sliding point holder     |
| Wall fixing        | FAZ II 10/10 A4              | 501403   | Bolt anchor for concrete |
| Wall fixing        | SXRL 10 x 80 FUS             | 522730   | Frame fixing for masonry |
| Adjustment element | Helping Hand clip            | 547170   | -                        |
| Vertical profile   | T-Profile 100/52/2           | 548170   | Aluminum profile, 6m     |
| Fixing             | Special Rivet SNA 5 x 12 K14 | 545591   | -                        |

Typical items for a subframe systems as depicted. For more items, specific information and quotations we kindly ask you to refer to: [facades@fischer.de](mailto:facades@fischer.de) or [www.fischer-international.com/fischer-facade-systems](http://www.fischer-international.com/fischer-facade-systems)

# Subframe system for concealed fixing of fiber cement & HPL cladding.

## Concealed system



## Technical data

| Concealed system   |                                      |          |                             |
|--------------------|--------------------------------------|----------|-----------------------------|
| Product type       | Product description                  | Item No. | Annotation                  |
| Isolator           | Thermostop 40x150x6/11               | 546156   | For fix points              |
| Isolator           | Thermostop 40x80x6/11                | 540741   | For sliding points          |
| Wall holder        | FLH 140x150x3/11/F-SP AL             | 548089   | Fix point holder            |
| Wall holder        | FLH 140x80x3/11/SP AL                | 548087   | Sliding point holder        |
| Wall fixing        | FAZ II 10/10 A4                      | 501403   | Bolt anchor for concrete    |
| Wall fixing        | SXRL 10 x 80 FUS                     | 522730   | Frame fixing for masonry    |
| Adjustment element | Helping Hand clip                    | 547170   | -                           |
| Vertical profile   | T-Profile 100/52/2                   | 548275   | Aluminum profile, 6m        |
| Fixing             | Special Rivet SNA 5 x 12 K14         | 545591   | -                           |
| Horizontal profile | H-Profil ATK103S-20/ t=2mm           | 545584   | Aluminum profile, 6m        |
| Clasp              | ATK103 S20, t2, B60, D6,5 adjustable | 547532   | Including fix point locking |
| Clasp              | ATK103 S20, t2, B36, D6,5 rigid      | 545579   | For sliding points          |
| Undercut anchor    | FZP II 11x6 M6/T/10 PA               | 520365   | For panels >8mm thickness   |

Typical items for a subframe systems as depicted. For more items, specific information and quotations we kindly ask you to refer to: [facades@fischer.de](mailto:facades@fischer.de) or [www.fischer-international.com/fischer-facade-systems](http://www.fischer-international.com/fischer-facade-systems)

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**fischer stands for**

Fixing Systems  
Automotive  
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LNT Automation

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