

FischerTHERM Carrier

Design and aesthetics with excellent thermal insulation





Pöing Logistics Centre SBF, Munich
Architect: io-consultants GmbH & Co. KG

CLEAR AND AESTHETICALLY PLEASING – AND WITH UNMISTAKEABLE CHARACTER

Who says that building contractors, planners and architects can't have both?

A cost-effective façade solution that also represents the best that design, diversity and individuality can offer.

The new FischerTHERM Carrier façade is made of double-skinned wall panelling:

The steel Fischer Sandwich element is there, as illustrated below, and is combined with the rear-ventilated curtain façade which is suspended in front.

The unit is installed using Carrier rail or the SE

modular click rail and a newly-developed fastening.

The rail is only fastened to the outer sheet – it does not penetrate the sandwich element. This avoids the requirement for an additional substructure.

Gries Deco Company GmbH
Niedernberg (D)
Architect: netzwerkarchitekten
Darmstadt



The FischerTHERM Carrier Façade – the innovative façade solution

“Experienced partners in the building industry, Fischer Profil and Tata Steel, have demonstrated through their new Carrier product range that bundling competences within the company makes it possible to launch systems that satisfy the demand for functionality combined with aesthetic appeal while maintaining cost-effectiveness and sustainability. This gives architects and planners an interesting product with which to create sophisticated façades in industrial and commercial properties”, affirms Heiner Schmidt, architectural adviser at Fischer Profil.



Quick, cost-effective installation of FischerTHERM Carrier sandwich elements with DUO sealant.

Design and cost-effectiveness

The combination of energy efficiency, cost-effectiveness and diversity of top-quality design makes the FischerTHERM Carrier system the innovative façade solution for the industrial and commercial building industry.



Non-directional installation of the Kalzip FC panels.

Discover all the advantages at a glance!

- **Excellent thermal insulation:** The hybrid facade reduces energy consumption during heating and cooling
- **Greatest possible joint tightness:** Efficient energy saving Thanks to DUO sealant
- **Easy installation** without additional substructure
- **Efficient planning:** Façade panels available digitally for BIM-aided planning
- **Corrosion protection:** The sandwich elements gain additional protection from the various systems associated with the curtain façade
- **Cost-effective overall concept** compared with cassette constructions and other building methods such as aerated concrete, for example
- **Tendering support** and texts

Berief Feinkost, Beckum
Architect: Thiele | Linnenberg
Planning company mbH



Multi-function wall systems - Endless possibilities

Freedom of design and individualised combinations in façade architecture

A striking façade arouses curiosity because customers, passers-by and visitors alike see the outside of the building as your company's business card.

The innovative FischerTHERM carrier + support rail concept opens up a whole host of design possibilities for curtain façades in virtually every style under the sun.

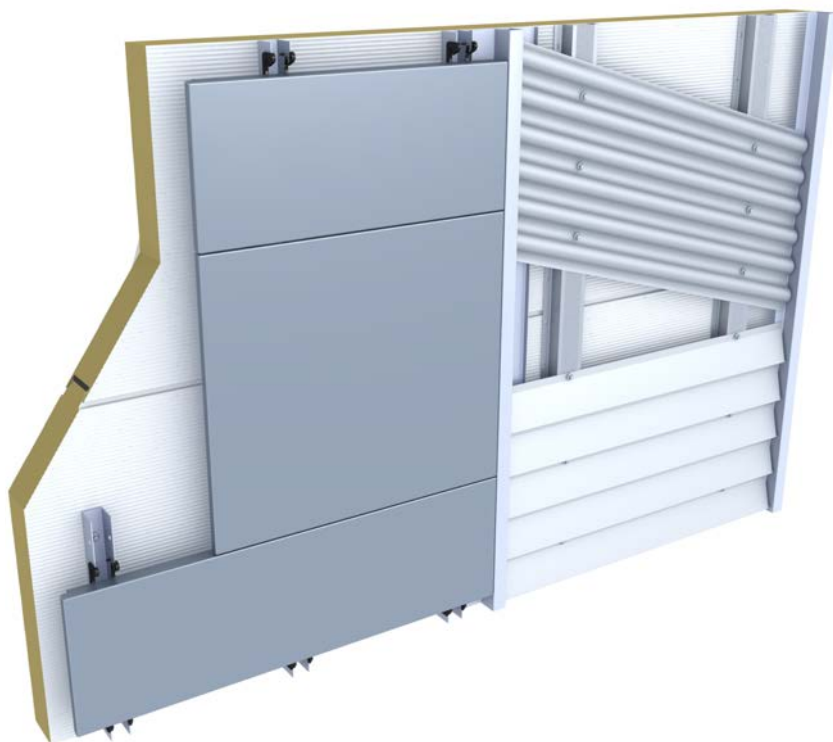
It opens up the possibility of installing tailor-made combinations of different materials such as metal or wood on the same rail system.

So you can set new benchmarks in futuristic or practical design or a combination of both by using the FischerTHERM carrier-rail system. It encourages and delivers a totally new way of thinking, focusing attention on the architecture of tomorrow.



Sandwich element + support rail + ...

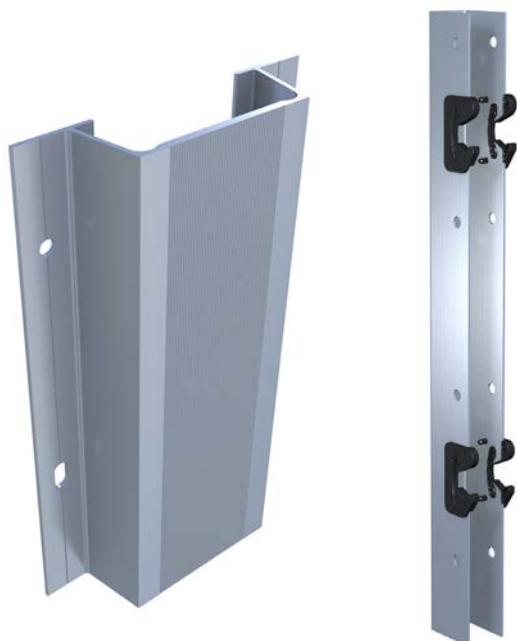
- Support rail fastened only in the outer skin – no additional thermal bridge points
- The rail system can be used to install any type of façade/cladding made of metal, wood or other materials
- The wall system also has all the advantages of FischerTHERM, such as excellent thermal insulation, high levels of airtightness, quick, easy assembly and individual design





Design options: FischerTHERM Carrier façades

Support rail + SE modular click rail



FischerTHERM Carrier - Montaline + Skinrock



FischerTHERM Carrier - FC Paneel



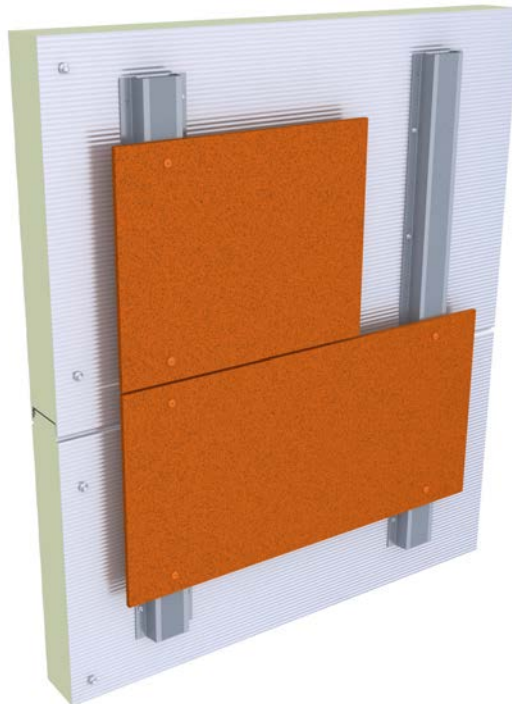
FischerTHERM Carrier - SWC Montaline



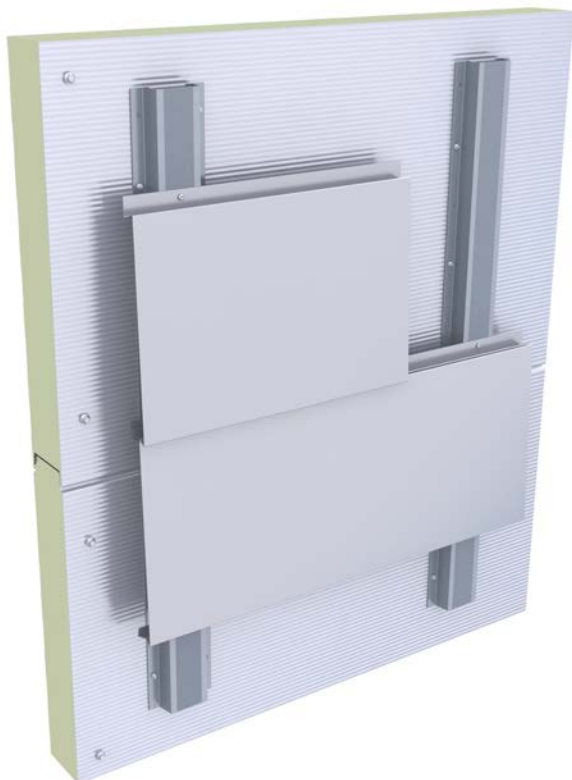
FischerTHERM Carrier - Trespa



FischerTHERM Carrier - Trespa



FischerTHERM Carrier - Rheinzink faceplate



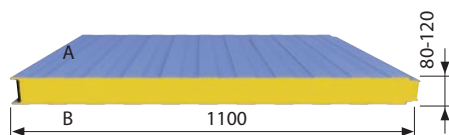
FischerTHERM Carrier - Megawood



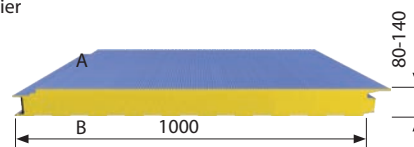
FischerTHERM Carrier – forms of delivery and dimesions

Wall elements

FischerTHERM ML Carrier
80, 100, 120



FischerTHERM plus ML Carrier
80, 100, 120, 140



A = outside surface

B = inside surface

Table 1: FischerTHERM Carrier product range

Element designation	Sheet thickness t [mm]		Element-thickness d [mm]	Element-length recom. max. L [m] ¹⁾	Element-weight g [kg/m ²]	U _{ds} Thermal transmis- sion coefficient ²⁾ W/(m ² K)	U _{n,s} according to DIN 14509 (without joint) W/(m ² K)	R _{tot} Total thermal resistance ³⁾ (m ² K)/W
	Outer skin t _a [mm]	Inner skin t _i [mm]						
FischerTHERM ML Carrier								
80	0.55	0.50	80	16 ¹⁾	12.0	0.288	0.278	3.6
100	0.55	0.50	100	16 ¹⁾	12.8	0.231	0.224	4.5
120	0.55	0.50	120	16 ¹⁾	13.4	0.192	0.187	5.3
FischerTHERM plus ML Carrier								
80	0.63	0.50	80	16 ¹⁾	13.5	0.297	0.278	3.6
100	0.63	0.50	100	16 ¹⁾	14.3	0.235	0.224	4.5
120	0.63	0.50	120	16 ¹⁾	14.9	0.195	0.187	5.3
140	0.63	0.50	140	16 ¹⁾	15.7	0.167	0.161	6.2

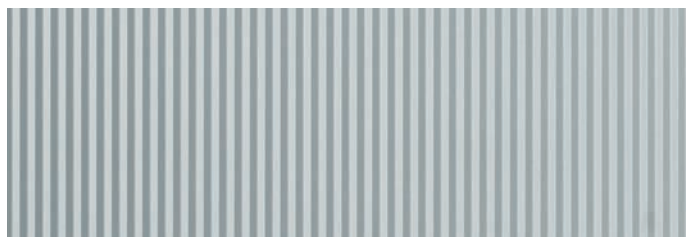
1. Letter = Outer skin (A)

2. Letter = Inner skin (B)

¹⁾ recommended maximal Length, other Lengths available on request

²⁾ Exact procedure with FEM according to DIN EN ISO 10211

³⁾ according to DIN EN 6946 (without joint)



M = Microprofiling (8mm)
(outside surface)

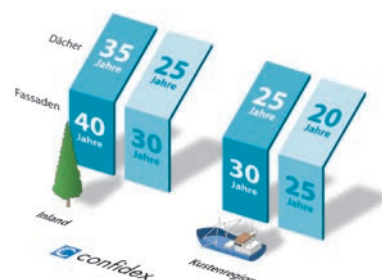


L = Profiling
(inside surface)



Your Confidex® Guarantee

Confidex® is the Tata Steel product performance warranty for Colorcoat Prisma® and Colorcoat HPS200 Ultra® and has a warranty period of up to 40 years, including cut edges.



Example: Confidex Guarantee
Colorcoat Prisma



IronMaxx® Nutrition GmbH
Hürth
Zimmermann Architekten
Bensheim

Efficient energy saving with the tightest of sandwich joints

Reduces
energy
consumption by
up to 10 %

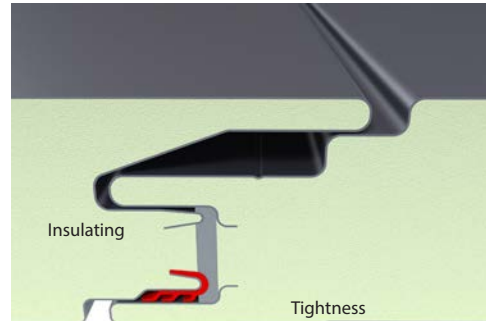
Joint tightness

Fischer sandwich elements are fitted with a DUO seal before leaving the factory. The soft sealing strip fills the entire joint, providing excellent thermal insulation and particularly high joint tightness.

An additional EPDM tightness profile creates maximum security against airflow.

The tight sandwich joints significantly minimise energy consumption! The DUO seal system turns complying with EnEV airtightness requirements into child's play!

- Greatest possible joint tightness- Efficient energy saving with DUO sealant
- Excellent thermal insulation - reduced energy consumption for heating and cooling
- Particularly light, stable and easy to install
- Concealed fastening - for sophisticated buildings



Thermal insulation

Thermal insulation in buildings is important for:

- reducing heat loss through the peripheral surfaces of a building
- the health of the occupants by providing a hygienic room atmosphere
- protecting the building itself from the damaging effects of climate-induced damp.
- minimising energy consumption for heating and cooling
- keeping production and operating costs down

FischerTHERM Carrier with its PU core and impermeable cover sheets achieves a better level of thermal conductivity than any other form of insulation. Favourable heat conductivity coefficients can therefore be calculated for

every type of element U up to $0.17 \text{ W}/(\text{m}^2\text{K})$.

The thermal retention capacity of Fischer sandwich elements is very limited.

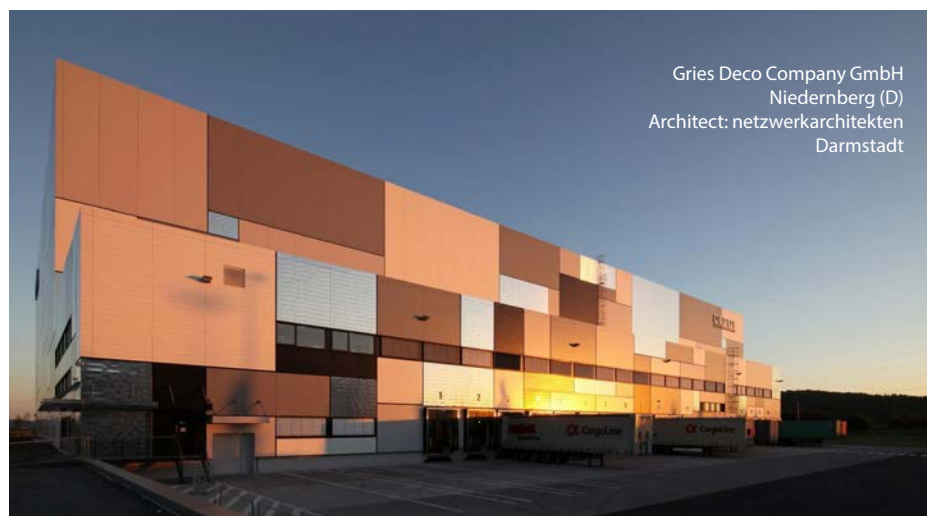
This represents a considerable advantage compared with heavier building materials when used on commercial properties which are utilised only on a part-time basis as significant amounts of energy can be saved. There is no need to be concerned about moisture protection with FischerTHERM Carrier. The moisture-proof cover sheets prevent any moisture from being diffused either into or out of the element, thus ensuring a high level of long-term insulation. There is no need to calculate the "moisture balance" as is usual with many other building systems.





Berief Feinkost, Beckum
Architect: Thiele | Linnenberg
Planning company mbH

Design and cost-effectiveness for both the indus- trial and commercial




Gries Deco Company GmbH
Niedernberg (D)
Architect: netzwerkarchitekten
Darmstadt

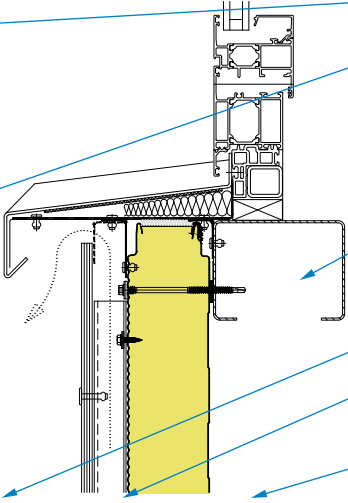
Construction details for FischerTHERM Carrier

In order to improve planning, construction details and the various options for the design of the substructure are set out on the following pages.

Example of construction



Detail 5-A 106



Detail 106 Schnitt Detail-Nummer

Fensterbank Vertikal S-A 106

Detail number

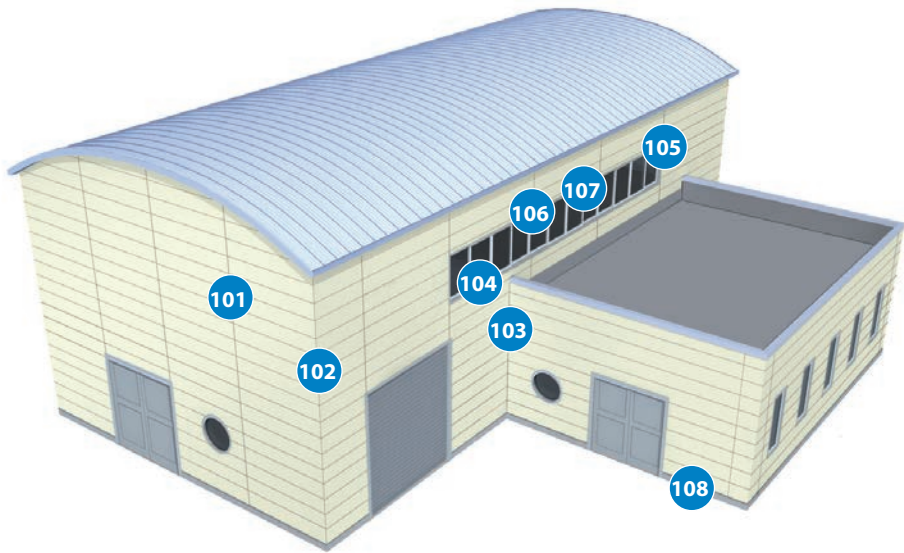
3-D view of detail

Cross-section of detail as a technical drawing (see right "Description of building elements used")

Detailed description (101 to 109)

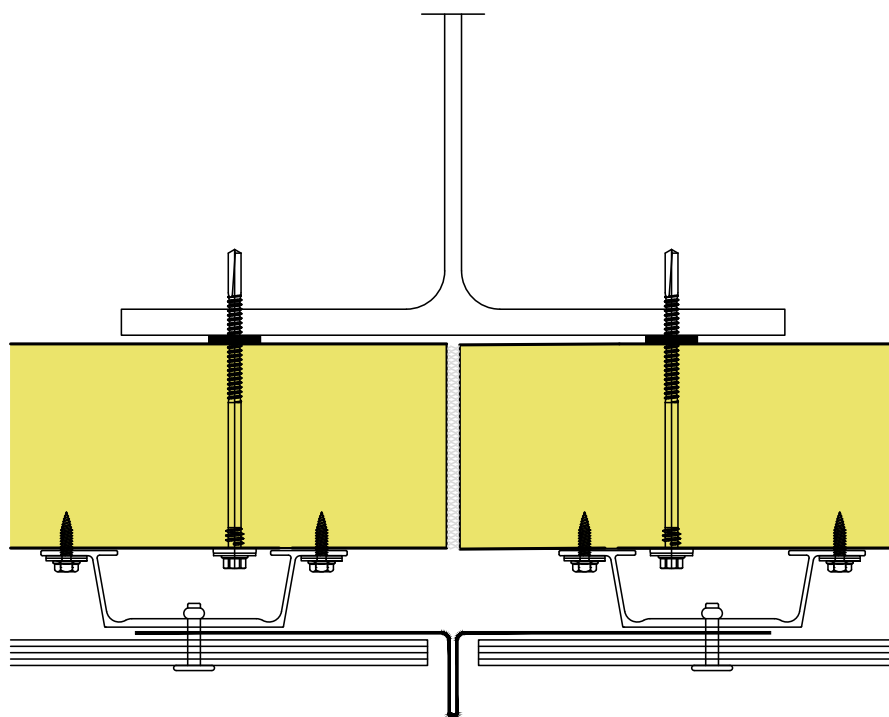
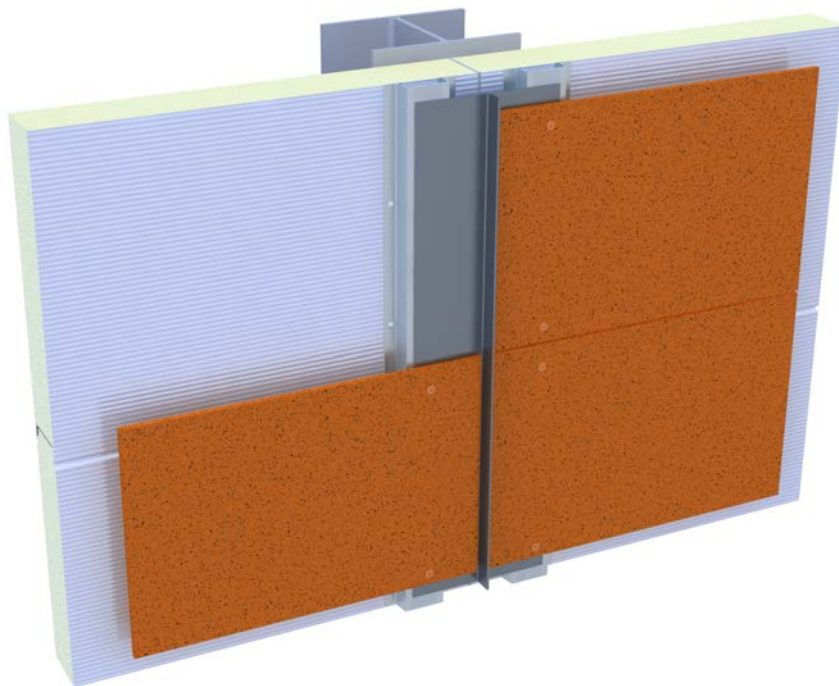
Section of technical drawing (horizontal or vertical)

Complete detail number (see composition of detail number)



Details	
Number	Description
101	Pilaster strip
102	Outer corner
103	Inner corner
104	Windowsill
105	Door-/ Gate-/ Window-soffit
106, 107	Door-/ Gate-/ Window-lintel
108	Base
109	Console

Detail 10-A 101



Detail 101

Section

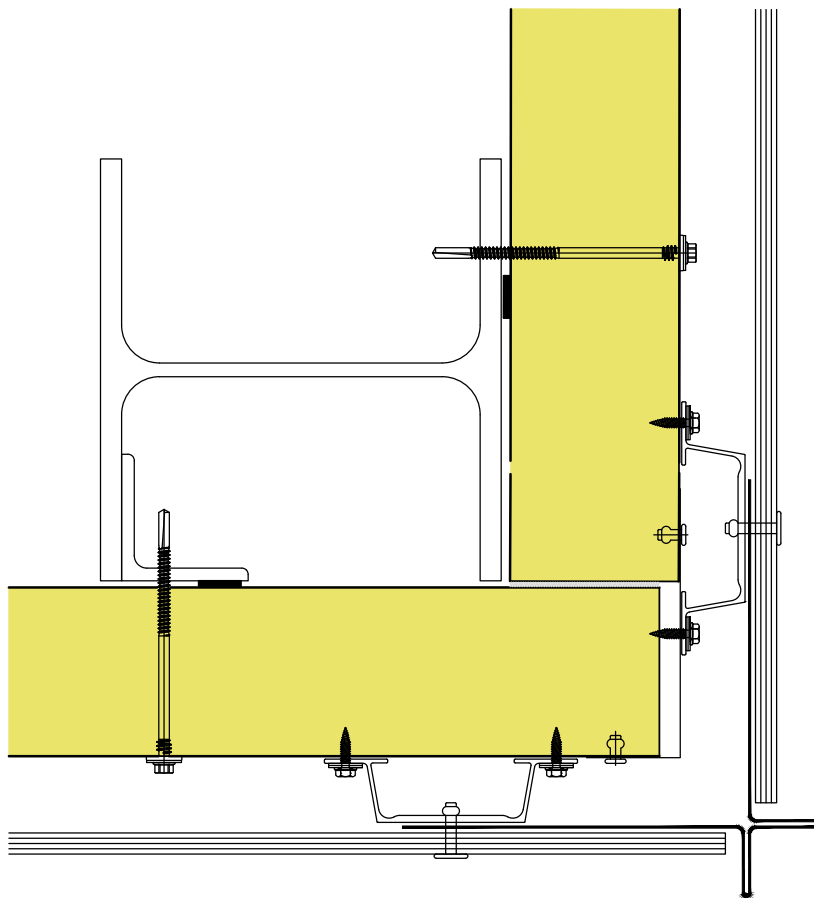
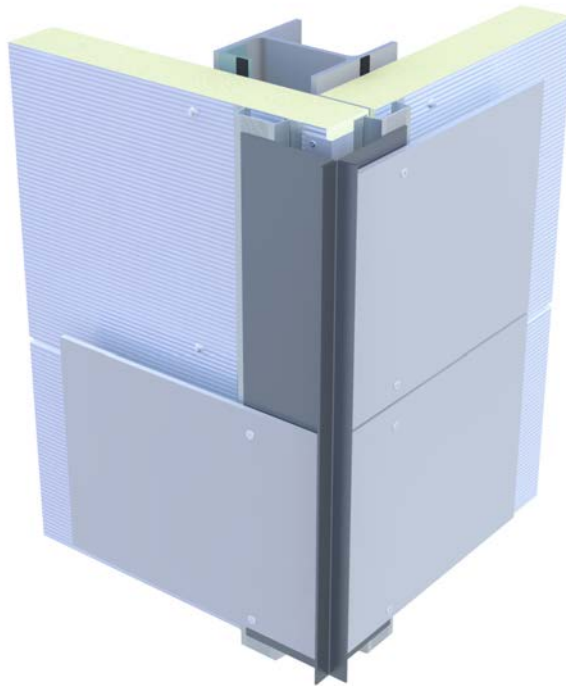
Detail number

Butt (pilaster strip)

Horizontal

10-A 101

Detail 10-A 102



Detail 102

Section

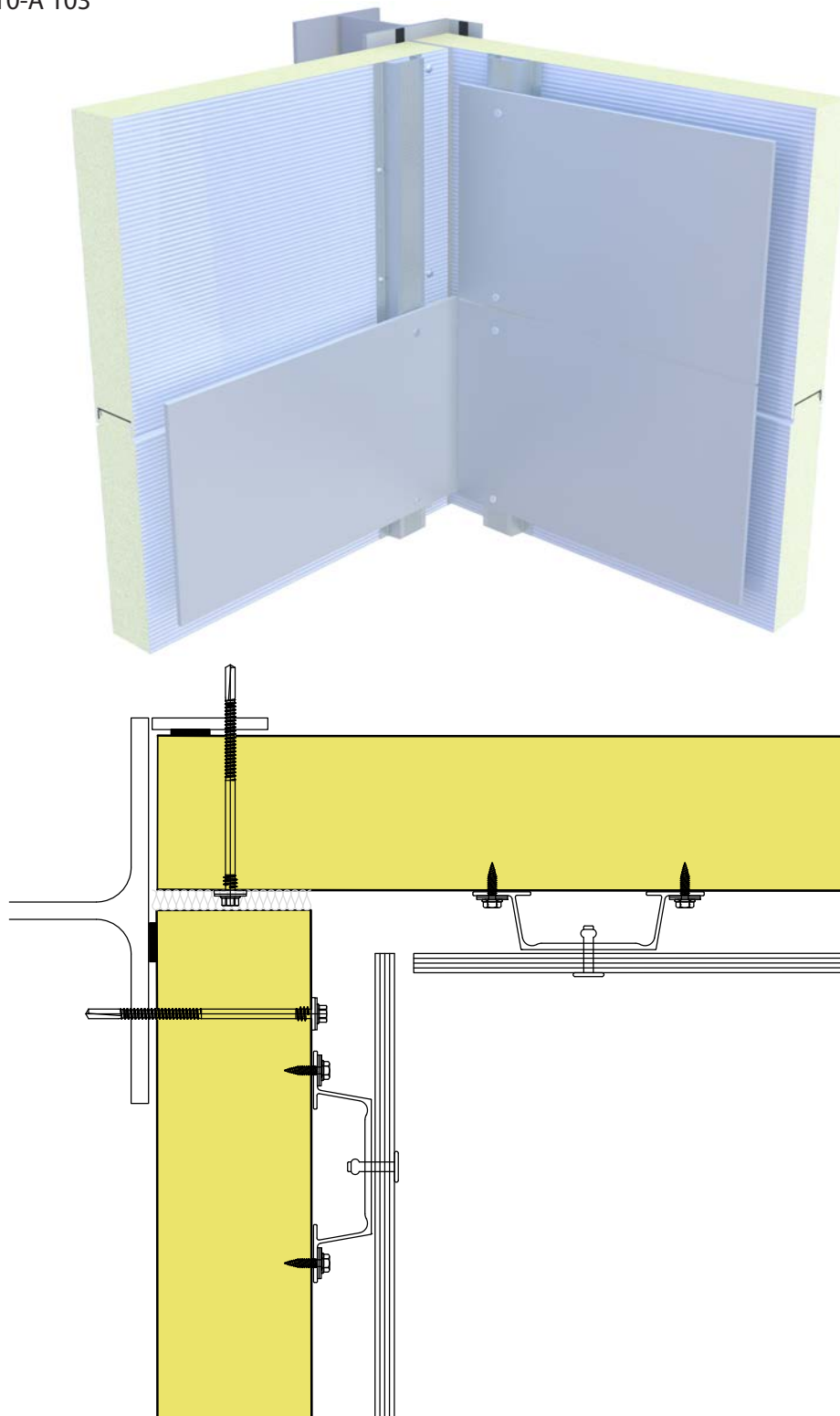
Detail number

Outer corner 90°

Horizontal

10-A 102

Detail 10-A 103



Detail 103

Section

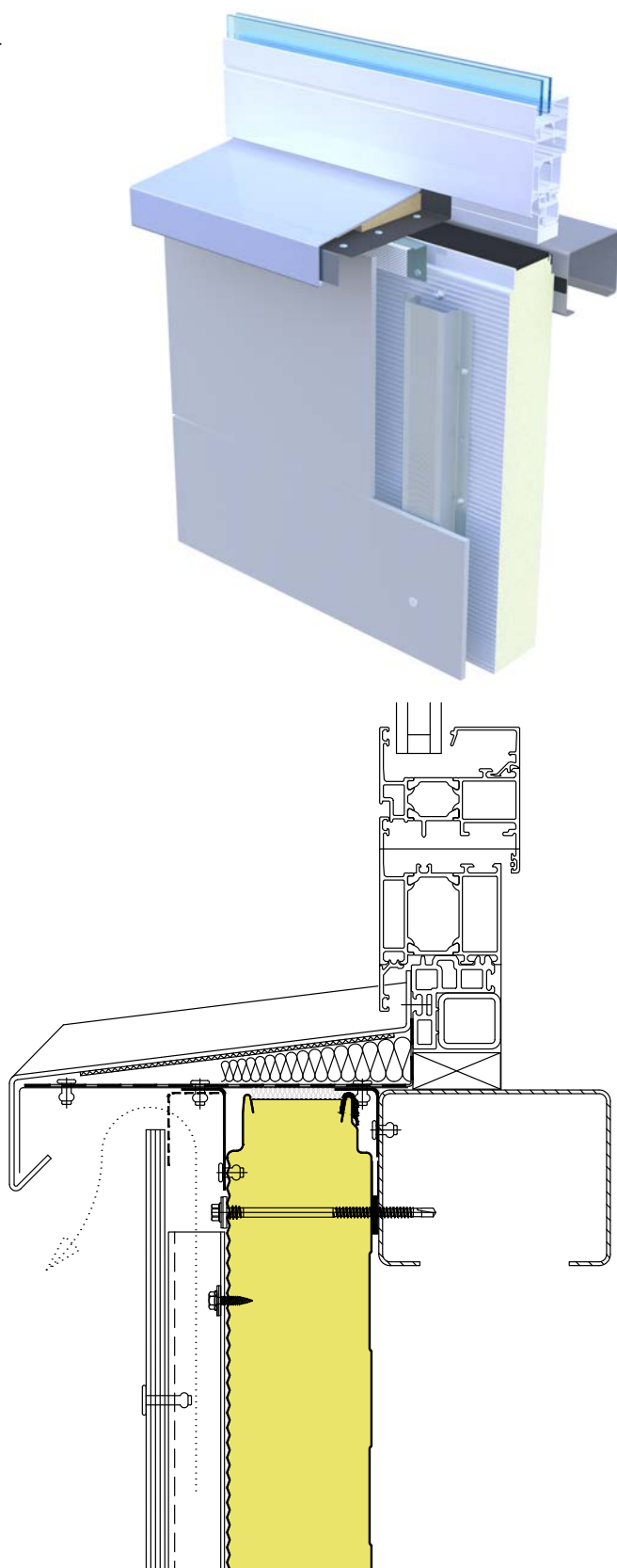
Detail number

Inner corner 90°

Horizontal

10-A 103

Detail 10-A 104



Detail 104

Section

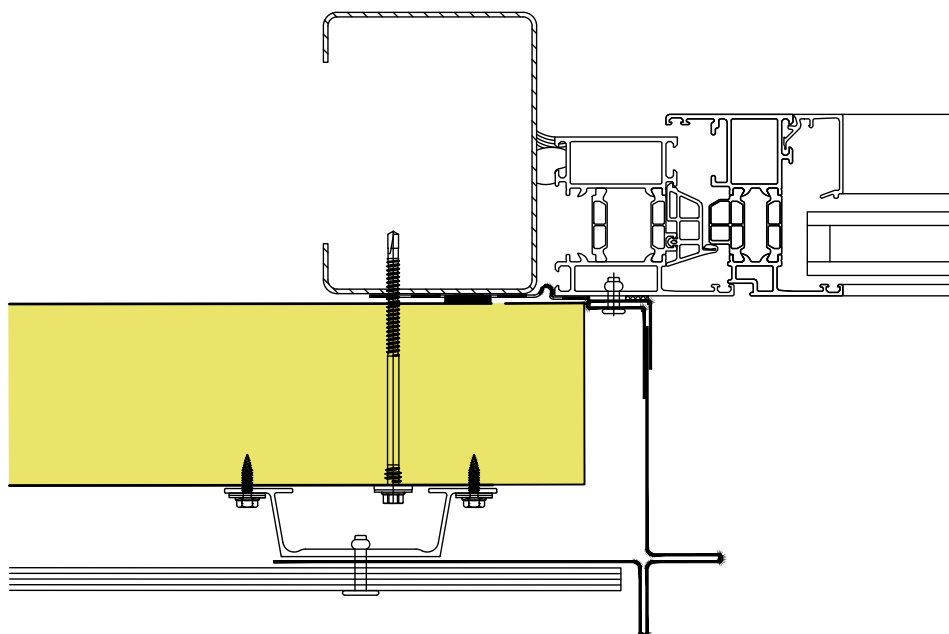
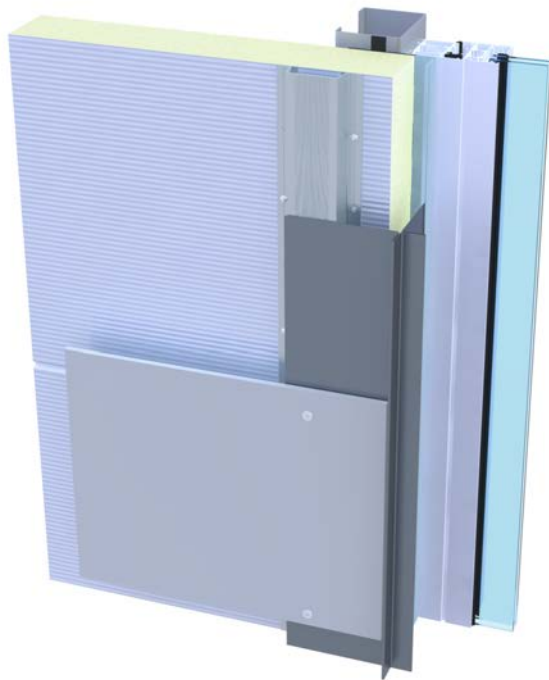
Detail number

Windowsill

Vertical

10-A 104

Detail 10-A 105



Detail 105

Section

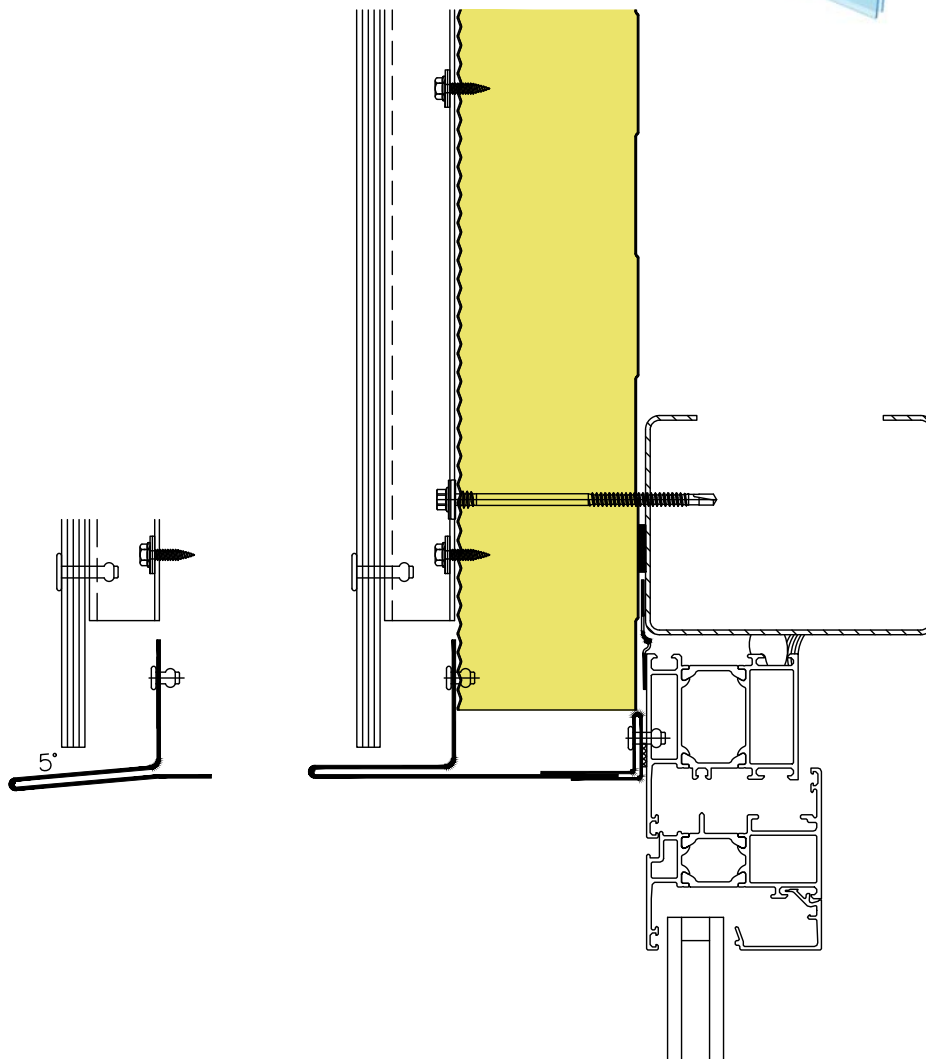
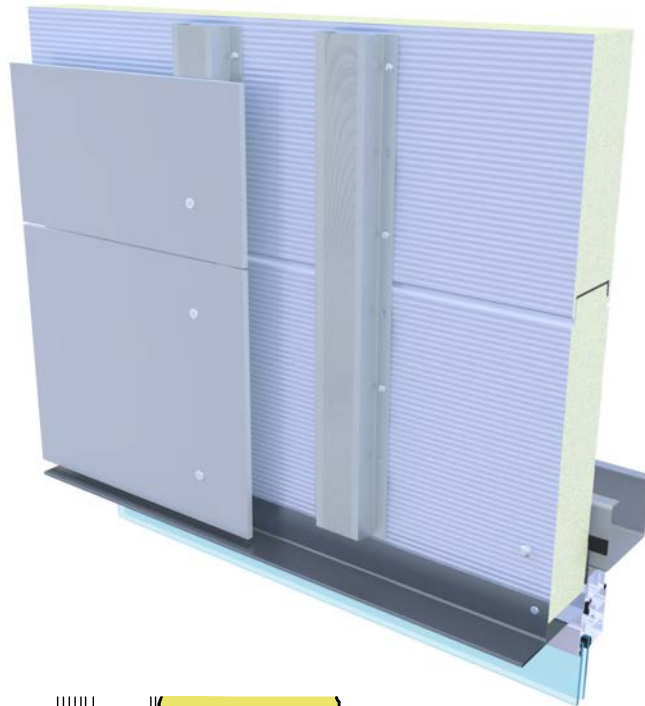
Detail number

Window soffit

Horizontal

10-A 105

Detail 10-A 106



Detail 106

Section

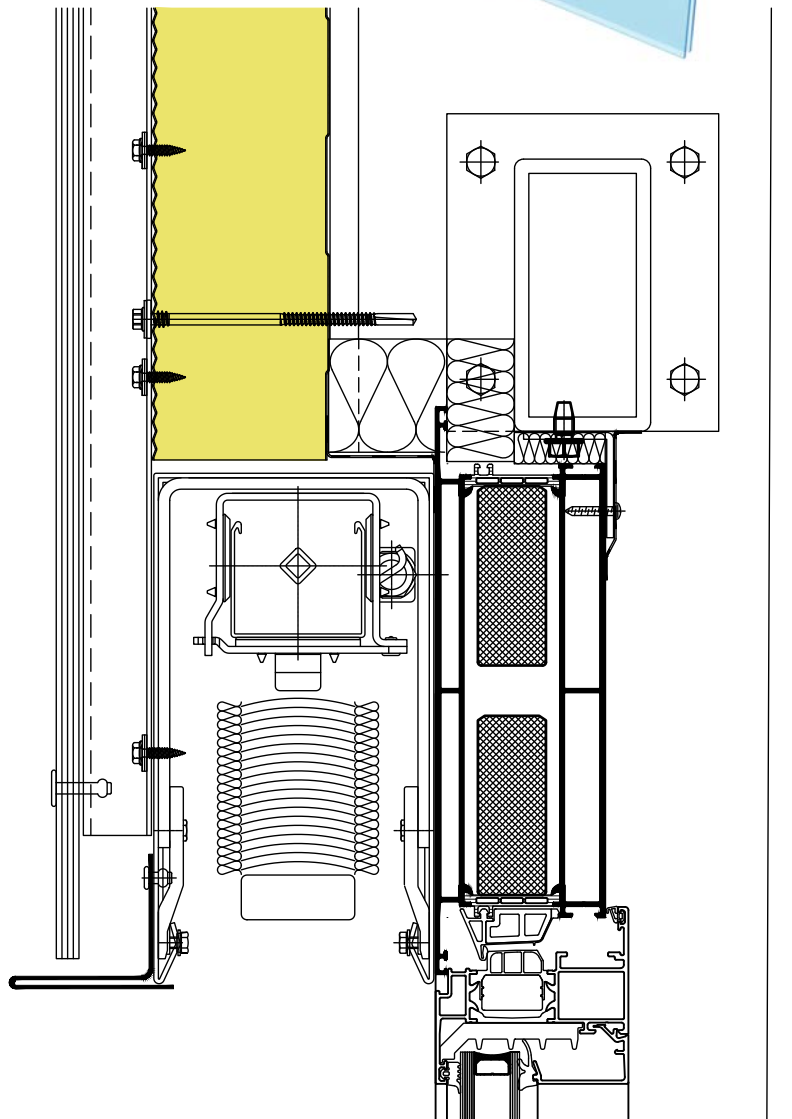
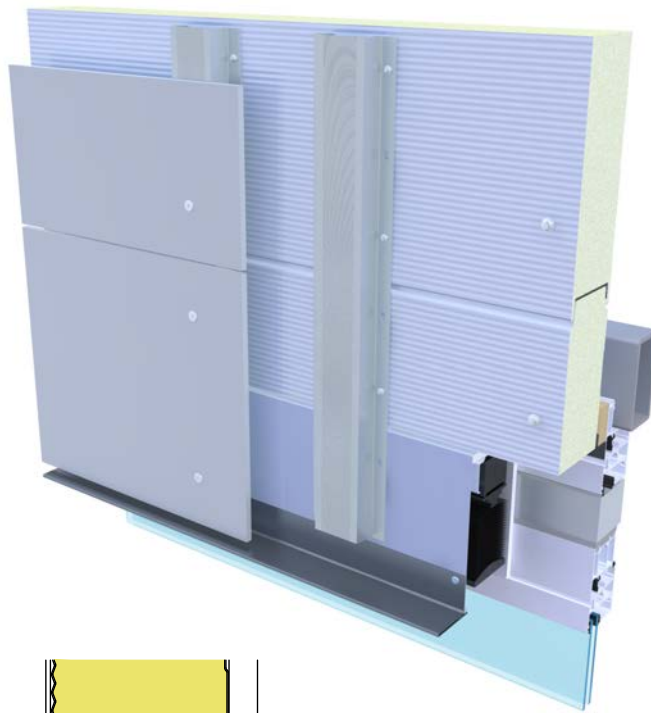
Detail number

Window lintel

Vertical

10-A 106

Detail 10-A 107



Detail 107

Section

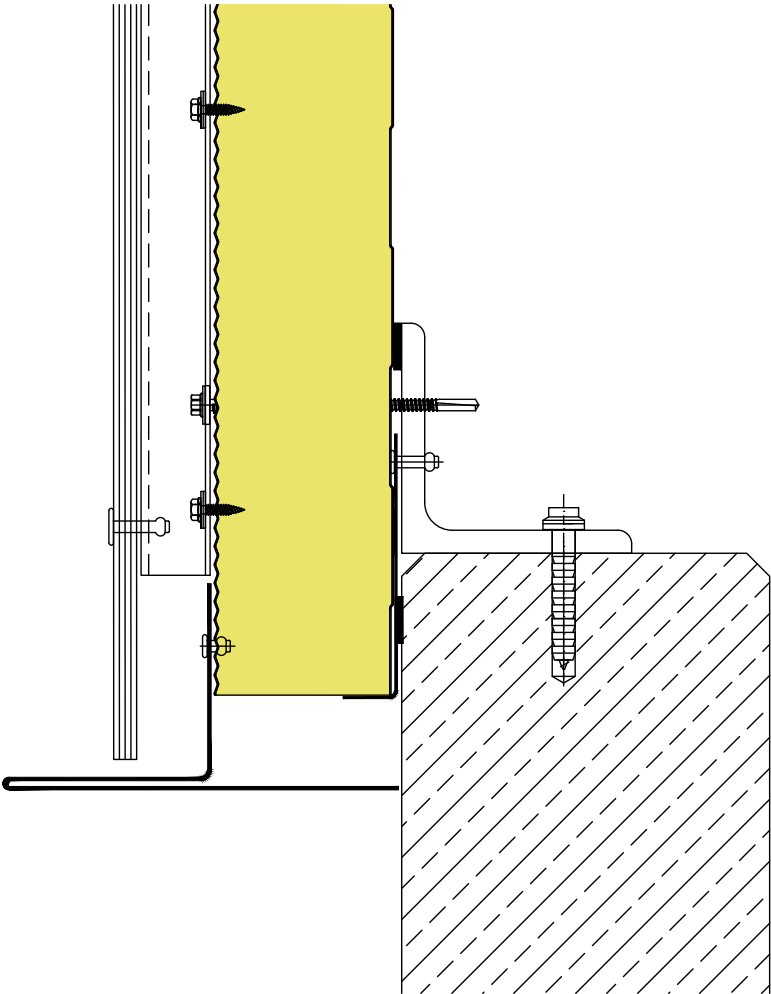
Detail number

Window lintel

Vertical

10-A 107

Detail 10-A 108



Detail 108

Section

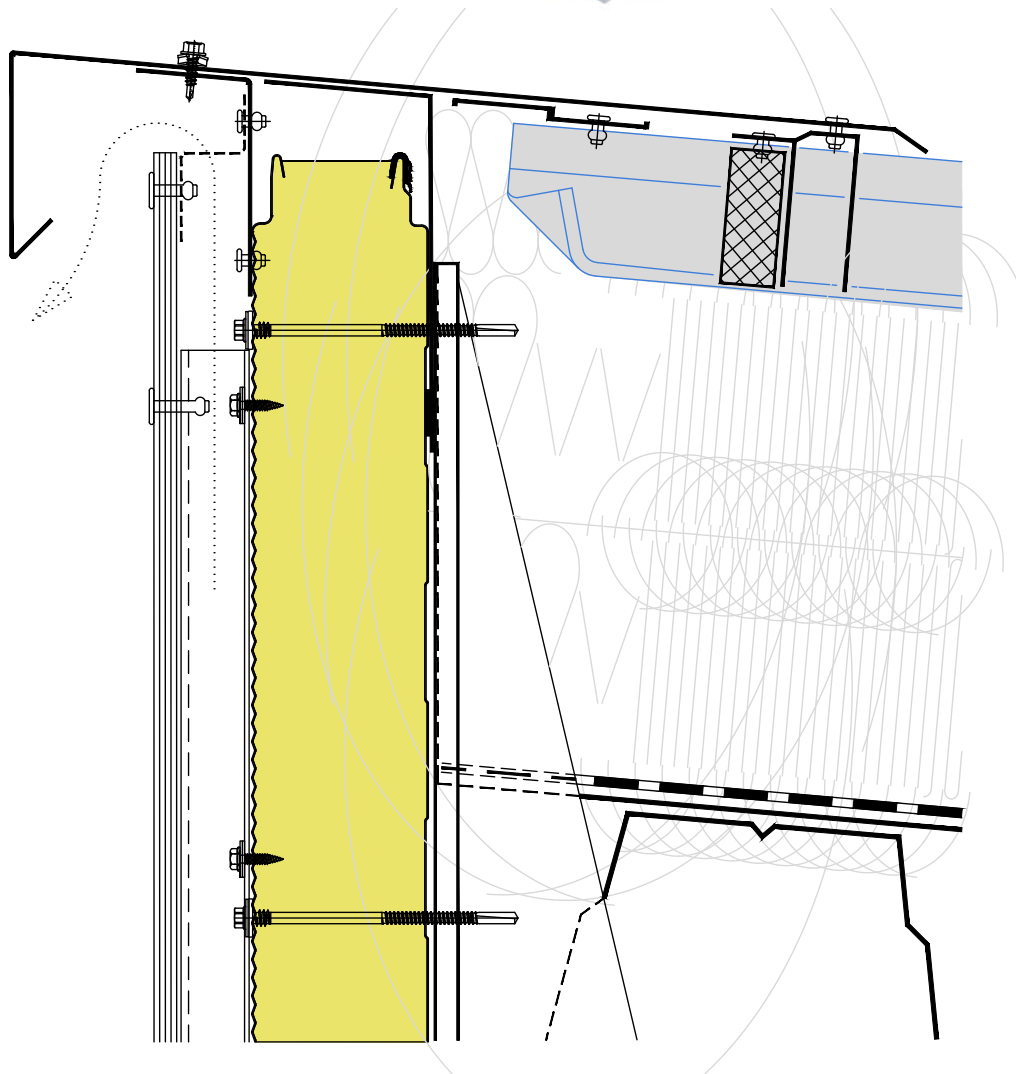
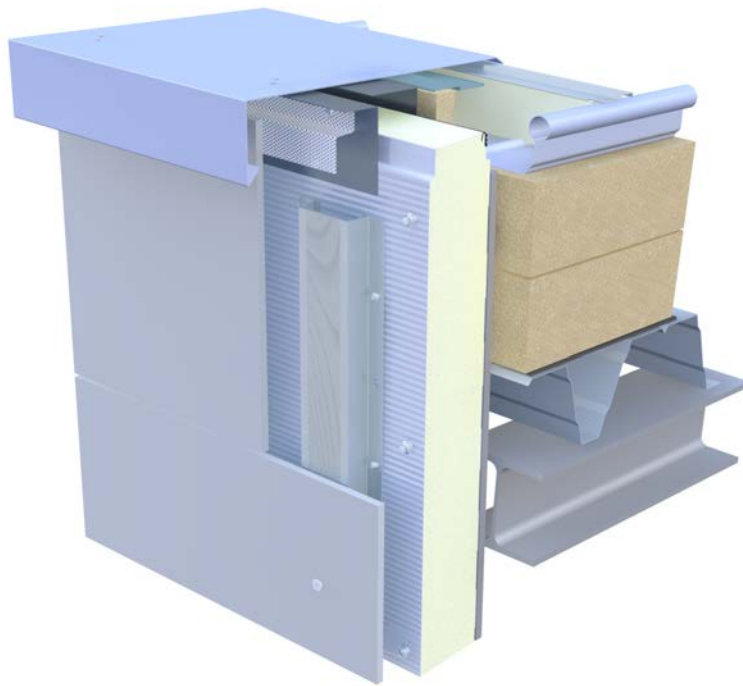
Detail number

Base

Vertical

10-A 108

Detail 10-A 109



Detail 109

Section

Detail number

Fascia

Vertical

10-A 109

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The wide range of products and services provided by Fischer Profil form the basis of comprehensive end-to-end solutions with a high degree of flexibility and individuality.

To help you plan creatively and reliably right from the start we can provide you with the whole product range of modern building components for industrial and commercial construction. And all from one single source.

Fischer Profil GmbH is one of Europe's leading

manufacturers of prefabricated roof, wall and floor elements.

Fischer Profil GmbH has comprehensive expertise in manufacturing and building technology.

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Innovative solutions such as FischerTHERM, FischerTHERM Carrier or connecting systems for photovoltaic systems have enabled us to set new global standards in product development. Personal contacts and direct lines of communi-

cation matter and so you can always find us close to where you are. If you have any questions or requests our sales office staff will be pleased to advise you.

We are always available to help you.

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Fischer Profil GmbH,
Netphen

www.fischerprofil.de

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