

Your link to the façade.

Schöck Isolink® – Façade fasteners for design flexibility.

Breakthrough in façade connections.

For rainscreen cladding façades.

Insulation and support in the façade

Schöck is a well known specialist in all areas of insulation and support for cantilevered structural elements. Schöck Isolink® extends this competence to façades – enabling freedom of design and repetitive issues.

Further improving a tried and trusted solution

Building on the former Thermoanker for core-insulated concrete sandwich walls, we have expanded our portfolio and brought all façade products together under the Schöck Isolink® brand. Now we are adding a new thermal bridge free fastener for rainscreen cladding façades. It is the ideal enhancement for the product portfolio increasing your planning options and design scope.



Example of a rainscreen cladding façade: REWE Markt, Laatzen
© AS Hibbeln GmbH



Example of a rainscreen cladding façade: Training Centre, Niedersachswerfen
© Dach Schneider Weimar GmbH



Schöck reference: Multi-purpose hall, Volkertshausen
© Schöck Bauteile GmbH



Schöck reference: School, Osnabrück
© Schöck Bauteile GmbH

"Focus entirely on façade design. Schöck Isolink® ensures reliable façade connection." Architect Andreas Decker, Key Account Manager at Schöck



No thermal bridges in the façade connection

With EnEV requirements becoming stricter, the need is growing for products that are free of thermal bridges. Thicker insulation on its own is no longer able to satisfy these requirements. After all, the thicker the insulation, the more powerful is the effect of thermal bridges. Stainless steel or aluminium fasteners, for example, can cause thermal bridges in rainscreen cladding façades. Thermal bridge-free connections, such as Schöck Isolink® are therefore the key to standard-compliant thermal insulation.

Developed in collaboration with our customers

When developing Schöck Isolink®, we first approached those who deal with façades on a daily basis: our customers. Clear requirements were defined with the aid of experienced architects and façade builders: Until now, a means of connecting rainscreen cladding façades that met all the specified requirements has been missing. This was the basis for our joint development of Schöck Isolink® for rainscreen cladding façades.

Your link to the rainscreen cladding façade.

Schöck Isolink® type TA-S offers new design scope.

Thermal bridge-free structures

As a Certified Passive House Component, Schöck Isolink® guarantees dependable thermal separation and enables structural designs that are free of thermal bridges. This performance is achieved by using Schöck Combar® – a glass fibre composite with extremely low thermal conductivity. Expressed in figures, that means: The thermal insulation performance of Schöck Isolink® is about 200 times better than that of wall brackets made of aluminium and 15 times better than wall brackets made of stainless steel.



Slim wall structure

Using a façade fastener that is free of thermal bridges enables a significant reduction in insulation thickness. Compared directly to aluminium wall brackets, around 50% less insulation material is required.

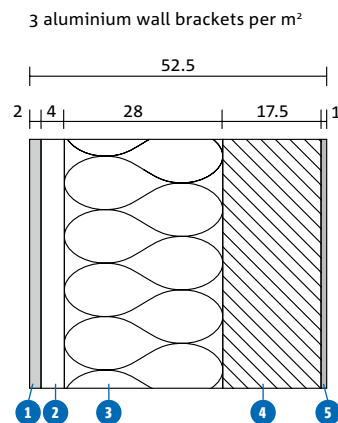
Measurable space gain

A slim wall structure also means more space inside the building. As demonstrated in our calculation example: A building with an external footprint of 10 x 10 m has a total gross area of 100 m². An external wall with Schöck Isolink® is 38.5 cm thick, producing a usable area of 85.2 m². Which is 6.4% more space than would be available if the wall structure were built using aluminium, as shown in the illustrations.

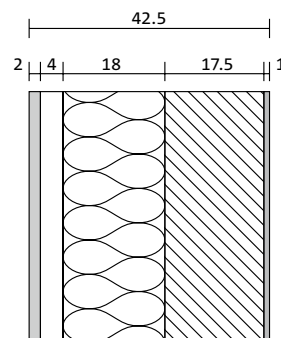
Requisite wall structure

for $U = 0.24 \text{ W/m}^2\text{K}$

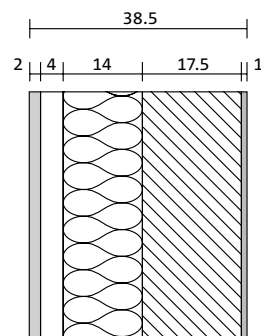
WLG 035 mineral wool



3 stainless steel wall brackets per m²



3 Isolink® wall brackets per m²



- 1 Façade cladding
- 2 Back ventilation
- 3 Thermal insulation
- 4 Brickwork
- 5 Interior plaster



Approved by building authorities

Schöck Isolink® has been tested and approved by the German Institute for Construction Technology (Deutsches Institut für Bautechnik (DIBt)).

Extensive standard fire tests assured its suitability for use in façades. Isolink® type TA-S for connecting rainscreen cladding façades satisfies the requirements of building classes 1–5 as per federal state building regulations (LBO).

Huge planning scope

Versatile façade fasteners for new buildings and renovation projects: Schöck Isolink® can be used for connections in concrete and brickwork, and is superbly suited for integration into existing systems.

No award obligation

Schöck Isolink® is suitable for all standard rainscreen cladding façades and can be quoted and installed by any façade builder.

	Schöck Isolink® glass fibre composite	Stainless steel	Aluminium
Thermal conductivity λ_{eq}	1 W/mK	15 W/mK	200 W/mK
Wall structure	38.5 cm	42.5 cm	52.5 cm
Insulation thickness	14 cm	18 cm	28 cm
Usable area based on a total gross area of 100 m ²	85.2 m ²	83.7 m ²	80.1 m ²
Space gain compared to wall structure with aluminium wall brackets	6.4 %	4.5 %	0 %
Thermal bridge supplement ΔU [W/m ² K]			

Calculated for U = 0.24 W/m²K; WLG 035 mineral wool; 3 wall brackets/m²

For façade structures without thermal bridges.

Schöck Isolink® type TA-S: technical facts.



Example of a rainscreen cladding façade:
Grammar school, Hoyerswerda
© bauhoys Planungsbüro

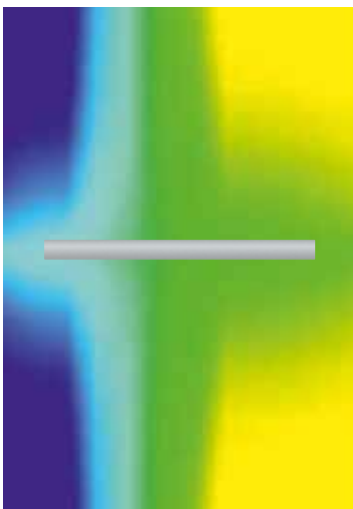


Example of a rainscreen cladding curtain façade:
St. Konrad childcare centre, Burghausen
© AS Fassaden GmbH

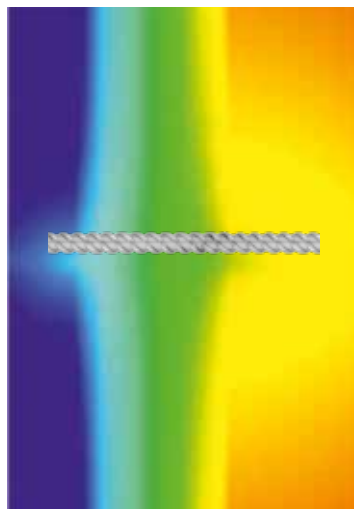
For structures without thermal bridges.

Schöck Isolink® ensures connections of rainscreen cladding façade substructures to concrete or brickwork that are arithmetically free of thermal bridges.

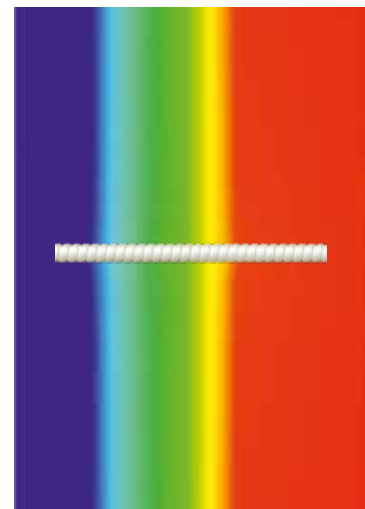
Thermal imaging visualises the outstanding thermal insulation performance. Added to which, the load bearing capacity guarantees superb structural stability.



Thermal conductivity of aluminium
 $\lambda = 160 - 200 \text{ W/(m}\cdot\text{K)}$



Thermal conductivity of stainless steel
 $\lambda = 13 - 17 \text{ W/(m}\cdot\text{K)}$



Thermal conductivity of Combar®
 $\lambda = 0.9 \text{ W/(m}\cdot\text{K)}$

You can rely on the thermal and structural performance of Schöck Isolink® for rainscreen cladding façades. And you can take advantage of our personal consultation service for architects and planners.



Mounted on an adapter plate

Personal consultation

If you are planning and building with Schöck Isolink®, feel free to contact us for personal and professional advice: Please don't hesitate to ask our engineers and design support department for advice if you have any questions about structural stability or design and for help with suggesting possible solutions complete with calculations and detailed drawings.

- ▶ You can reach us at:
www.schoeck.com/en/contact



Technical details are subject to change
Issued: September 2019

Schöck Bauteile GmbH
Vimbucher Strasse 2
76534 Baden-Baden, Germany
Telephone: +49 7223 967-144
Fax: +49 7223 967-7634
export@schoeck.com
www.schoeck.com

