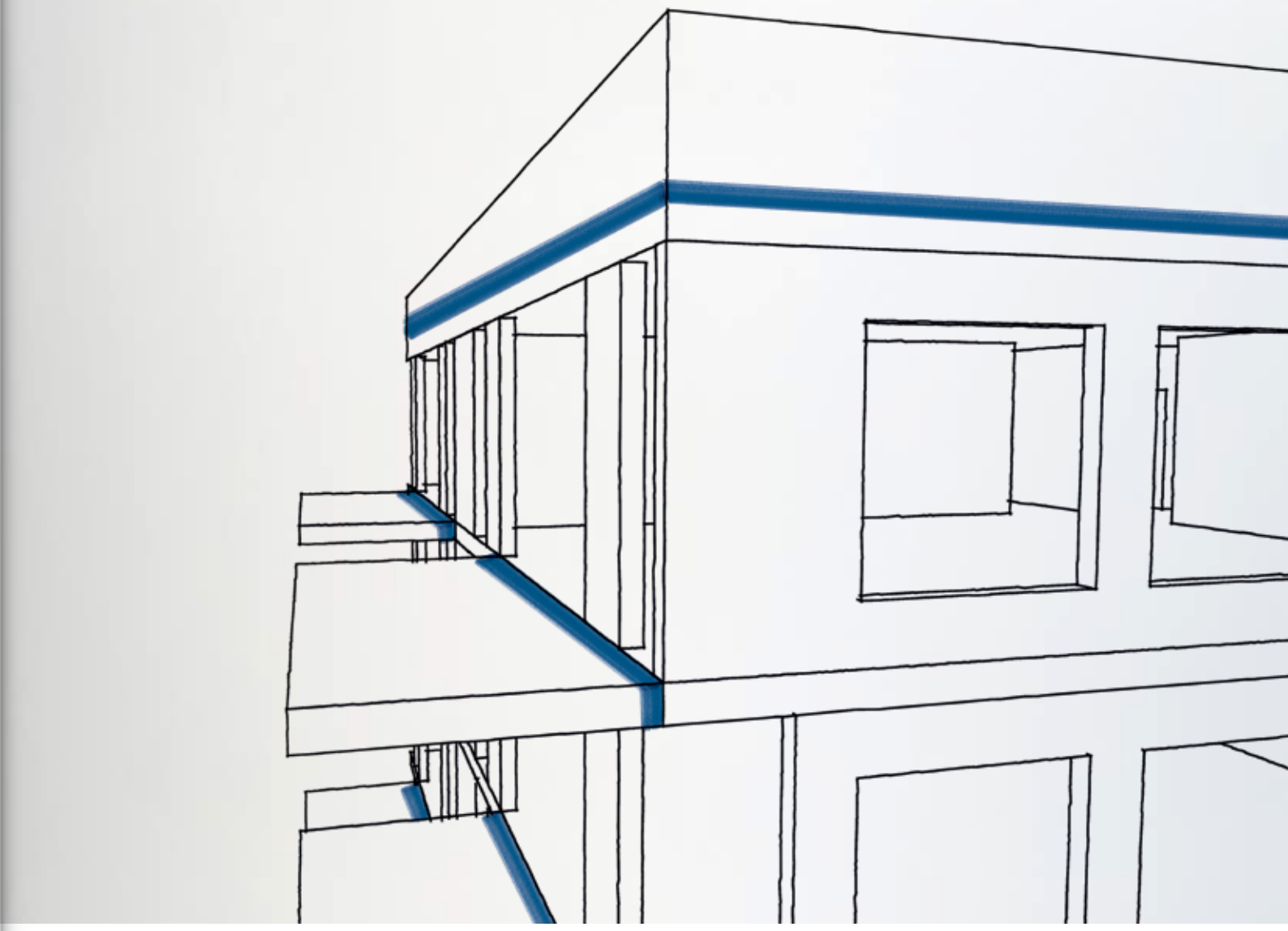
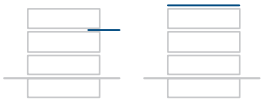
SCHÖCK
Dependable by design



SCHÖCK ISOKORB®

# Thermal separation
# A better alternative to wrapping



Structural thermal breaks for an efficient reduction of thermal bridges at balconies, access ways and parapets.

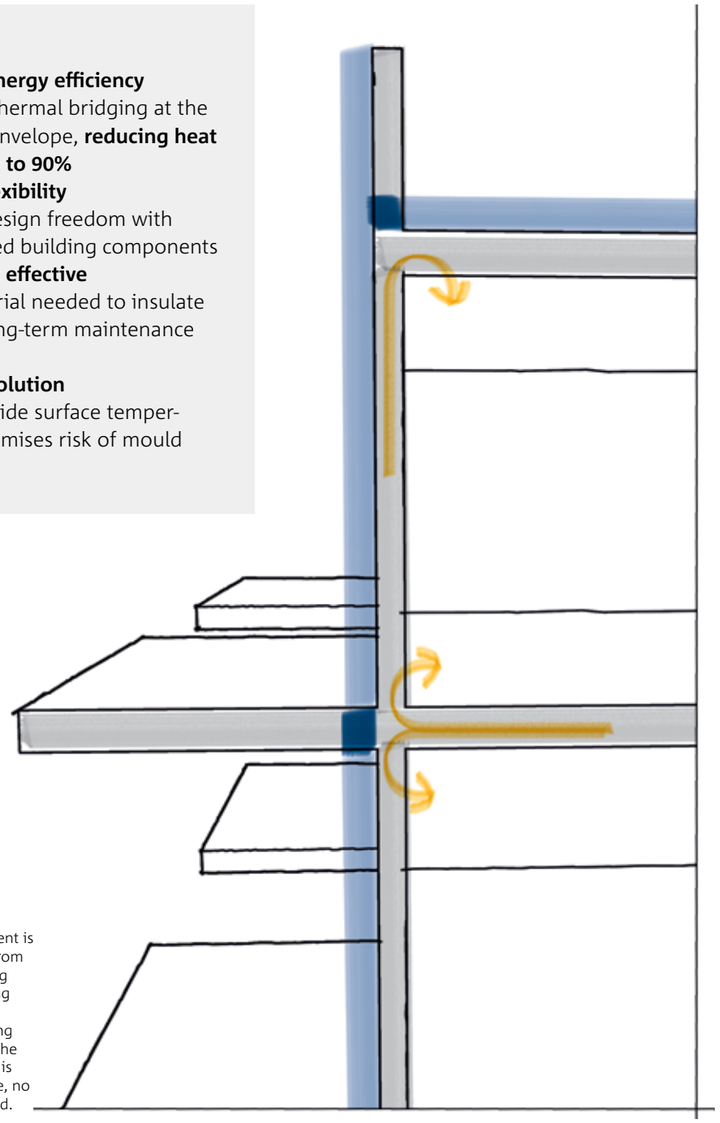
A BETTER ALTERNATIVE

# Thermally separated balconies and parapets

The most effective method to prevent thermal bridges on cantilevered concrete building components such as balconies or parapets is thermal separation. This interrupts the flow of heat to the outside, maintaining the warmth inside the building. The separation is achieved by using a load-bearing thermal break known as Schöck Isokorb®.

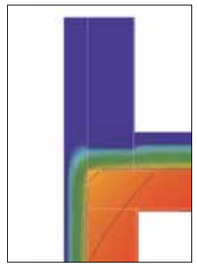
**BENEFITS**

- **Greater energy efficiency**
  Prevents thermal bridging at the building envelope, **reducing heat loss by up to 90%**
- **Design flexibility**
  Greater design freedom with streamlined building components
- **More cost effective**
  Less material needed to insulate and no long-term maintenance issues
- **Durable solution**
  Higher inside surface temperature minimises risk of mould formation

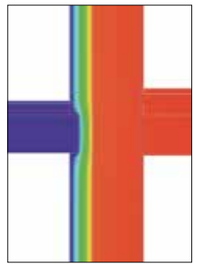


**Thermal break**
The building component is thermally separated from the rest of the building through a load-bearing thermal break. It is installed at the building envelope and cast in the concrete slab. Since it is embedded in concrete, no maintenance is needed.

**Separated parapet**
Heat transfer is stopped at the roofline.



**Separated balcony**
Heat transfer is stopped at the building envelope.



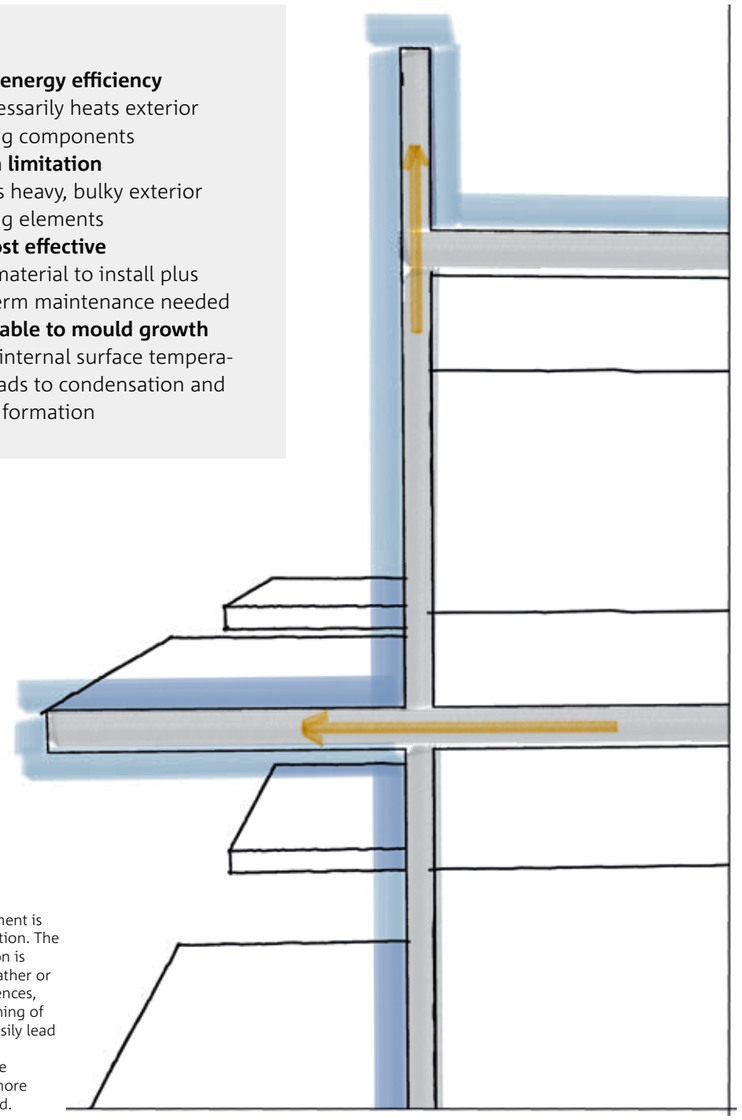
A COMMON SOLUTION

# Wrapped balconies and parapets

The conventional way to insulate concrete balconies and parapets is to wrap them completely in insulating material. Although this method may seem like an effective solution for minimising thermal bridges, it also has disadvantages to consider – both during construction and throughout the lifetime of the building.

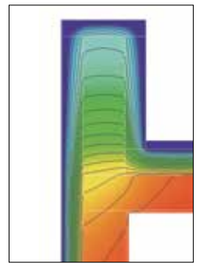
**IMPACT**

- **Lower energy efficiency**
  Unnecessarily heats exterior building components
- **Design limitation**
  Creates heavy, bulky exterior building elements
- **Less cost effective**
  More material to install plus long-term maintenance needed
- **Vulnerable to mould growth**
  Lower internal surface temperature leads to condensation and mould formation



**Wrapping**
The building element is encased in insulation. The exposed insulation is vulnerable to weather or mechanical influences, such as the fastening of railings, which easily lead to damage. The installation is time consuming and more material is needed.

**Wrapped parapet**
Valuable energy is lost through the parapet.



**Wrapped balcony**
Valuable energy is lost through the balcony.

A BETTER ALTERNATIVE

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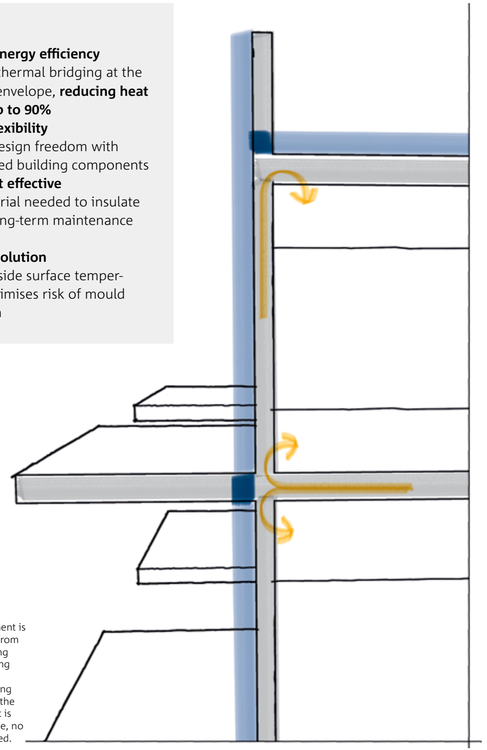
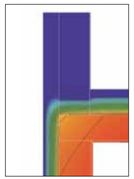


**Separated parapet**
Heat transfer is stopped at the roofline.



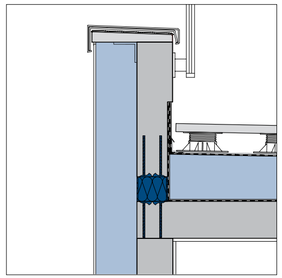
**Separated balcony**
Heat transfer is stopped at the building envelope.

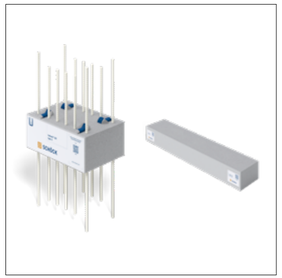
**Thermal break**
The building component is thermally separated from the rest of the building through a load-bearing thermal break. It is installed at the building envelope and cast in the concrete slab. Since it is embedded in concrete, no maintenance is needed.

As the inventor of the load-bearing thermal break, Schöck has been successfully implementing this solution worldwide for decades using their Isokorb® structural thermal breaks. The assembly of the structural elements has been optimised to allow the maximum amount of high-performance insulation at the connection, while ensuring proper transfer of all loads over the lifetime of the building.

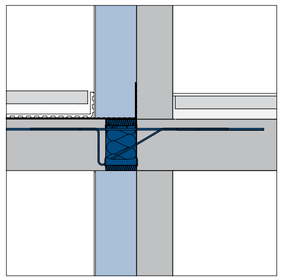
40 years Isokorb®

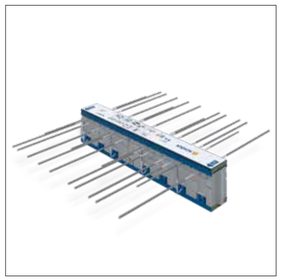
Schöck was a pioneer in dealing with thermal bridging, launching the first thermal break in Germany in 1983.





**Suitable for parapets**
Schöck Isokorb® type A is the sustainable solution for the insulation of concrete parapets.





**Suitable for balconies**
Schöck Isokorb® type K is the sustainable solution for the connection of concrete cantilevered balconies. Many other types are available for all kinds of balcony geometries.

**SERVICE AND CONTACT**
Schöck is happy to offer services from design consultation through to planning and installation. Phone: **+49 7223 967 144**, email: **export@schoeck.com**

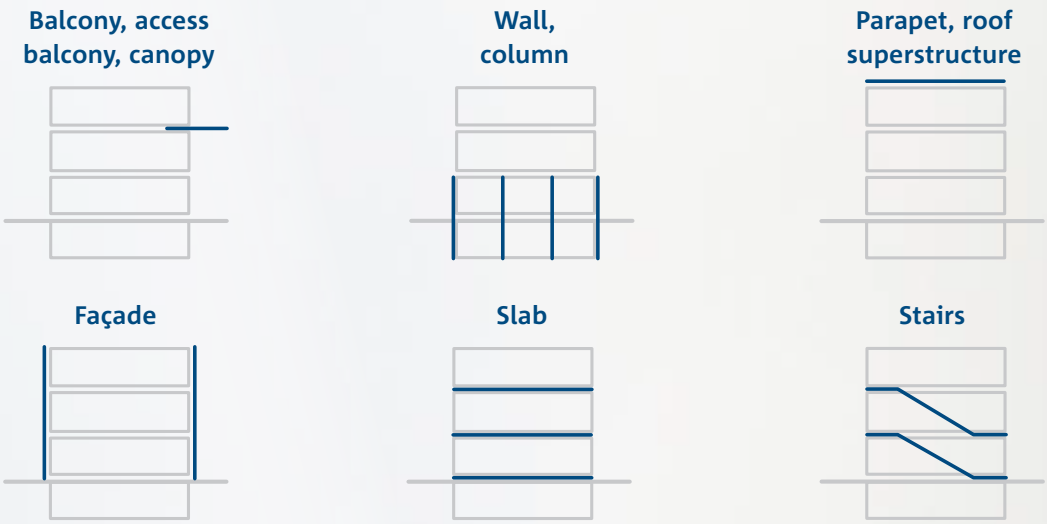
The flat roof is a common design element in modern living spaces. An elegant parapet offers the final touch.
Photo: Daniel Vieser

Acting as an extension of the living space, balconies contribute to increasing the value of urban spaces and have become an essential part of modern architecture. They come in many different shapes and sizes and have become an increasingly important design element.
Photo:
Luuk Kramer

COMPREHENSIVE EXPERTISE

# Dependable solutions

Using our future-proof product solutions and systems, we fulfill all structural, physical and construction requirements of the respective application for new construction projects and existing buildings. Our main areas of focus are the reduction of thermal bridges, impact sound insulation and reinforcement technology.




SCHÖCK
Dependable by design

Schöck Bauteile GmbH
Schöckstrasse 1
76534 Baden-Baden, Germany
Telephone: +49 7223 967-144
export@schoeck.com
www.schoeck.com



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