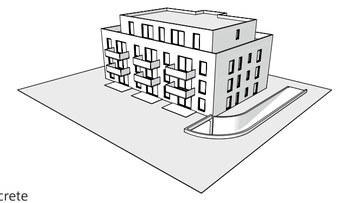
CALCULATION BASIS

Sconnex® improves your thermal performance.

The constant increase in demands on the energy efficiency of buildings has a significant effect on construction costs and thermal performance requirements. For planners and building contractors, the question arises as to how an efficient Energy saving can be implemented as cost effective as possible.

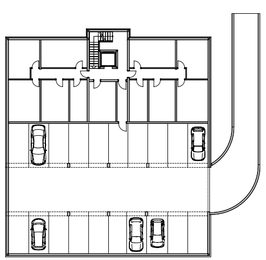
The adaptation of the insulation concept through systematic use of Schöck Sconnex® enables significant cost savings and superior thermal performance. Efficient insulation concepts are presented on the following pages with Schöck Sconnex® compared to typical insulation solutions. The calculation is based on a single apartment building block, demonstrating different detail designs for each thermal junction.

Building data

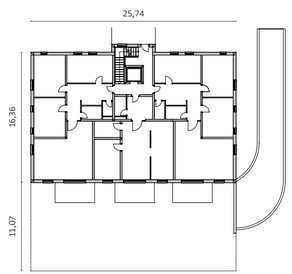


Project:
- 11 Apartments
- 4 Floors
- Underground 20 Parking Spaces

Construction:
- Outer walls 250 mm Reinforced Concrete
- Load Bearing Interior Blockwork 200 mm
- Typical Insulation 160 mm / Highly Insulated 240 mm
- Typical Insulation under ceiling 100 mm / Highly insulated 125 mm



Ground Floor Layout



First Floor Layout

COMPREHENSIVE EXPERTISE

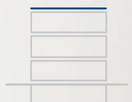
Dependably the right solution.

Using our future-proof product solutions and systems, we fulfil 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, footfall noise insulation and reinforcement technology.

Balcony, access balcony, canopy

Wall, column

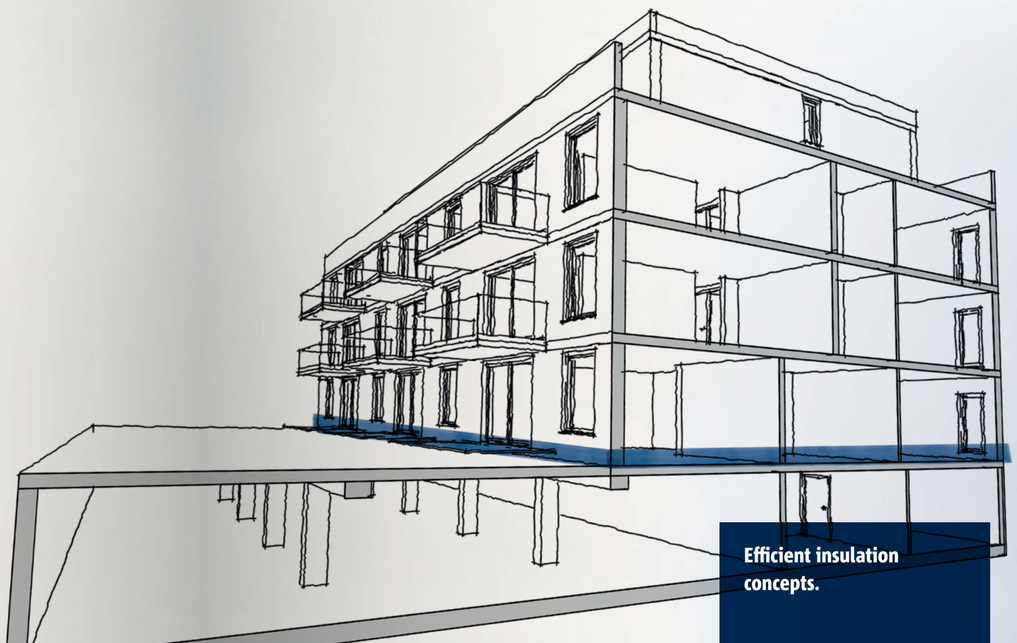
Roof structures



Façade

Floor

Stairs



Efficient insulation concepts.

Thermal performance comparison of different insulation concepts using example apartment block building.

SCHÖCK
Dependable by design

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07.2023/GB/230128

STUDY CASE

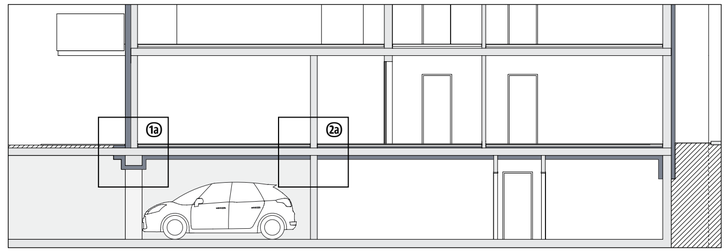
Thermal Optimization with Sconnex®

Load-bearing thermal insulation elements for the effective reduction of thermal bridges on walls and columns.

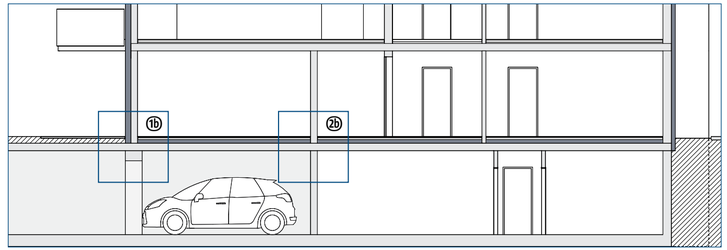
CASE STUDY

Comparing insulation concepts.

Conventional insulation

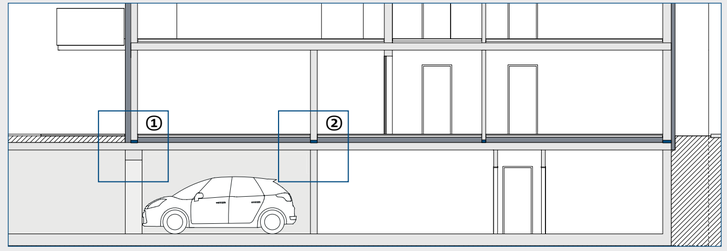


Variant A: Insulation thickness 100 mm below the slab and sound insulation 40 mm above the slab



Variant B: Insulation thickness 130 mm above the slab

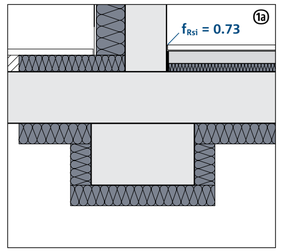
Optimised insulation course with Sconnex®



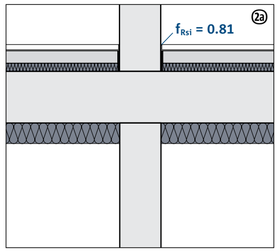
Optimized with Sconnex, Insulation completely laid on-slab thickness 130 mm and exposed concrete ceiling.

Details reviewed.

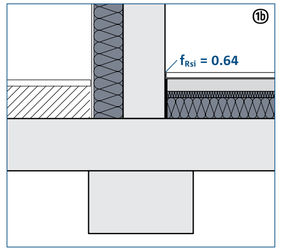
Details with conventional insulation



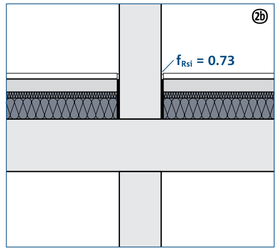
Variant A: Ceiling insulation without Sconnex®



Variant A: Ceiling insulation without Sconnex®

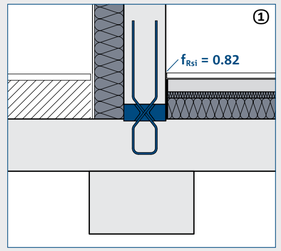


Variant B: No ceiling insulation to the Beam

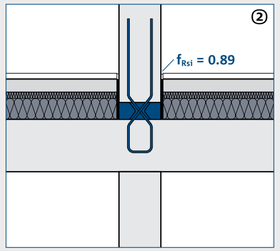


Variant B: No ceiling or flanking insulation

Details with Sconnex®



Beam and ceiling exposed concrete finish

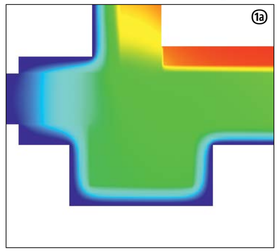


Wall and ceiling exposed concrete finish

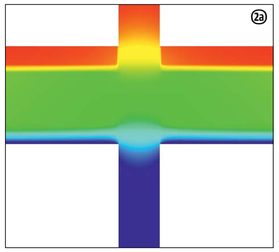
Schöck Sconnex® Typ W

Thermal Performance at a Glance.

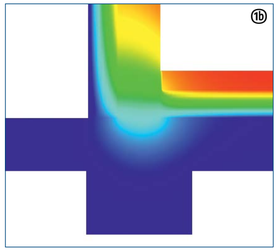
Conventional with flanking insulation variant



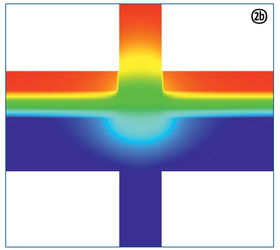
Variant A: Ceiling insulation without Sconnex®



Variant A: Ceiling insulation without Sconnex®

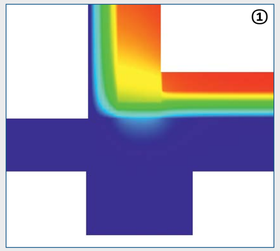


Variant B: No ceiling insulation to the Beam

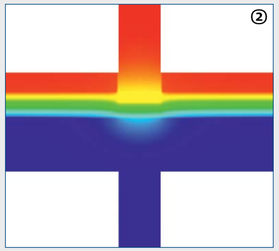


Variant B: No ceiling or flanking insulation

Comparable thermal performance with Sconnex®



Beam and ceiling exposed concrete finish



Wall and ceiling exposed concrete finish

Temperature scale