

# **Schöck** Thermoanker

**Innovation for energy-efficient precast walls.**  
**Schöck Thermoanker.**



# The awarded Schöck Thermoanker. Economical and easy to install.



Twin wall with Schöck Thermoanker



Sandwich wall with Schöck Thermoanker

## **The more economical solution for precast producers**

### **Faster installation**

Schöck Thermoanker can simply be inserted into the pre-drilled insulation. No need for time consuming filling of insulating material between conventionally used connectors (lattice girders, truss etc.).

### **Reduction in labour and materials**

The Schöck Thermoanker is a combined spacer and tension rod. Schöck provides cost-effective, feasible solutions for different wall structures with reduced quantity of connectors per m<sup>2</sup> compared with other systems.

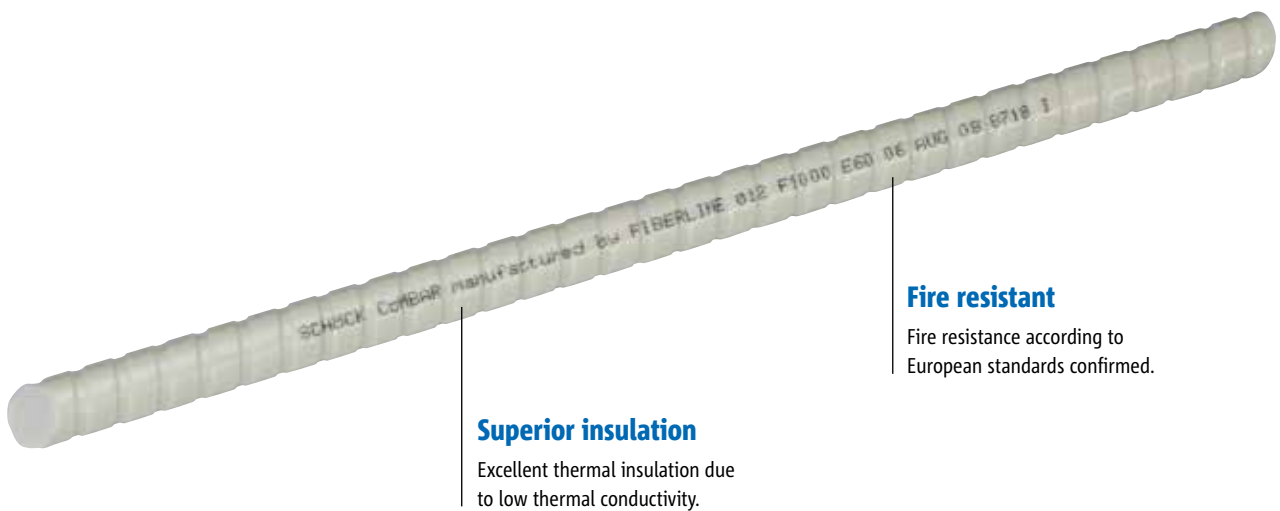
### **Efficient delivery and storage**

Order quantities can vary to suit, allowing for efficient delivery and storage.

### **More flexibility in production**

- Large panels of up to 6x12m can be manufactured easily, as standard.
- Any type of insulation can be used, including mineral wool.
- Various thicknesses possible (no limit on insulation thickness).
- Additional reinforcement layers can easily be added within outer and inner leaves.
- Schöck will provide ongoing training and advice.
- System can incorporate air cavity.

The use of steel as concrete reinforcement has been tried and tested for decades. But there are still applications where alternatives are called for. This is where Schöck ComBAR® comes in. Schöck ComBAR® is a glass fibre reinforcing bar, offering unique benefits in comparison to steel. Schöck ComBAR® has a very high tensile strength, is extremely durable and corrosion resistant and has a low thermal conductivity. Schöck Thermoanker offers precast manufacturers and designers a construction material which is a cost-effective alternative to conventional anchoring solutions for twin walls and sandwich walls.



#### Innovation awards:



#### A patented product of research and development:



German federal environmental foundation



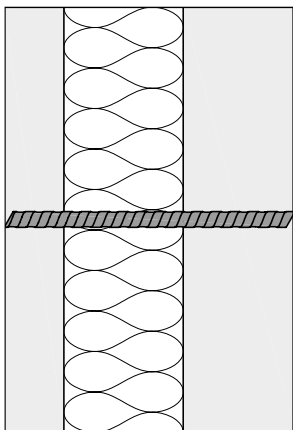
Certified by DIBt, Germany



University of Kaiserslautern, Germany

# Improved thermal performance. Thermal bridges compared.

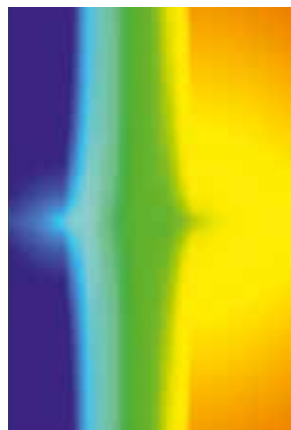
Right from the planning stage, the Schöck Thermoanker provides a connection between the outer and inner leaf of twin and sandwich walls with almost no thermal bridging. This significantly improves the U value of the finished wall.



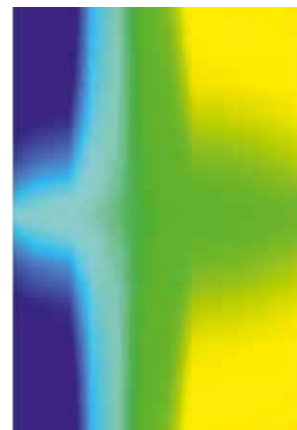
Cross section of a sandwich wall with Schöck Thermoanker



Schöck Thermoanker  
 $\lambda = 0,7 \text{ W}/(\text{m}\cdot\text{K})$



Stainless steel anchor  
 $\lambda = 15 - 17 \text{ W}/(\text{m}\cdot\text{K})$



Steel anchor  
 $\lambda = 60 \text{ W}/(\text{m}\cdot\text{K})$

## Achievable U values for sandwich walls with Schöck Thermoanker

Insulation	Wall thickness W/(m <sup>2</sup> K)			
	300 mm	360 mm	400 mm	430 mm
80	0.387	0.383	0.381	0.379
100	0.318	0.316	0.314	0.313
120	0.270	0.268	0.267	0.266
140	0.235	0.233	0.232	0.232
160	0.208	0.206	0.206	0.205
200	-	0.168	0.167	0.167
300	-	-	-	0.114

$\lambda_R$  of the insulation =  $0,035 \text{ W}/(\text{m}^2\cdot\text{K})$

# Comprehensive services. For enhanced efficiency in installation.

## Our service for you

From initial design to completion, Schöck will assist you in the implementation of the Schöck Thermoanker. We will support you in the technical development of your projects by means of design

and CAD software. Furthermore, qualified Schöck employees provide installation assistance. We also supply the tools that simplify installation and production.

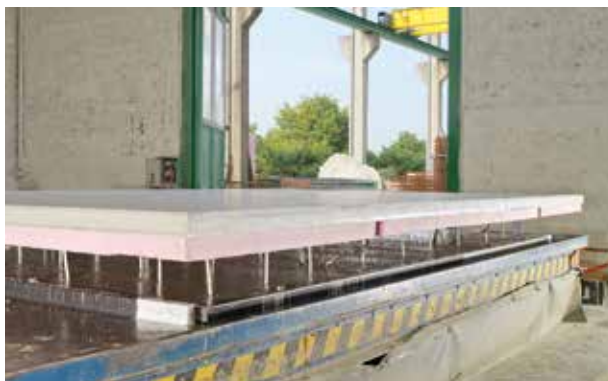
## Installation overview



1. Cover the freshly cast concrete outer leaf with thermal insulation



2. Insert the Thermoanker into holes drilled into the thermal insulation



3. Position the outer leaf on the inner leaf



4. Erect wall construction on-site

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