



Structural Thermal Breaks for Concrete Parapets.

Prevent condensation while reducing heat loss by up to 90%.



- ▶ Prevent condensation that can lead to mold formation
- ▶ Reduce heat loss up to 90%
- ▶ Sustainable, durable solution with no maintenance costs
- ▶ Initial construction cost savings up to 10% compared to wrapping with insulation
- ▶ No further thermal bridges or waterproofing problems at tricky connections
- ▶ Certified Passive House Component
- ▶ Compliance with new energy codes requiring continuous insulation

Concrete parapets are a weak spot in the often highly insulated rooftops of modern buildings. They are, in fact, just as prone to the problems of thermal bridging as balconies. The conventional method of insulating parapets is to wrap the perimeter of the wall with an insulation barrier. This is costly and has associated long-term risks.

However, Schöck Isokorb® concrete parapet connections offer a more thermally efficient and cost-effective alternative. Each module has a 4 ¾" (120mm) insulation thickness that results in low assembly U-values and reduces heat loss up to 90%. It is a functional continuous insulation that keeps internal surfaces warm even in cold outdoor conditions, so that there is no risk of mold formation in challenging locations such as the underside of the roof slab.

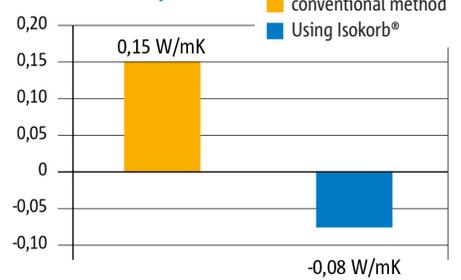
The Schöck Isokorb® concrete parapet module is ICC-ES approved and a Certified Passive House Component.

Insulate concrete parapets with Isokorb® Structural Thermal Breaks.

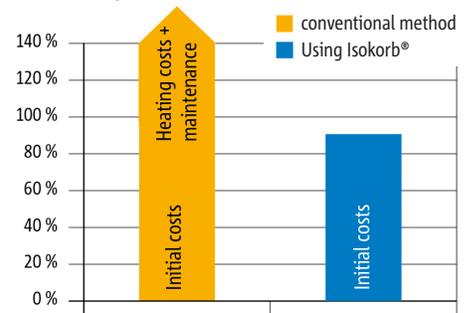
Comparisons of construction costs show initial cost savings through the use of Schöck Isokorb® structural thermal breaks of up to 10% depending on the structure. The product allows simplification of the formwork process, and improves the building energy balance resulting in long-term savings through reduced heat loss. It permits greater freedom of design and eliminates the risk of additional thermal bridging.

Other key factors are durability and water impermeability. Schöck Isokorb® concrete-to-concrete parapet connections do not require maintenance and eliminate the risk of expensive restoration due to waterproofing problems. Wrapped components are similar in principle to an insulated flat roof, with many of the associated problems – prone to damage and inevitable repair and maintenance outlay, particularly where railings or covers pierce the insulating layer. With thermally separated parapets, railings and covers can be attached directly into the concrete.

Heat Loss Comparison



Cost Comparison

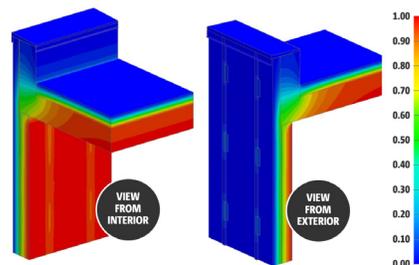


Concrete-to-concrete parapet connections



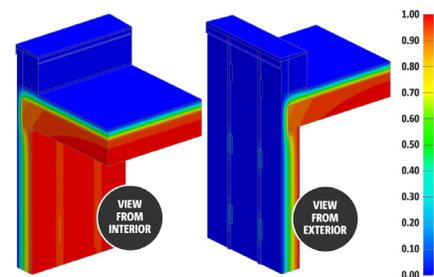
Isokorb® structural thermal breaks for concrete parapet construction are insulated, engineered assemblies with stainless steel rebar for casting into concrete roof slabs.

Concrete parapet w/ exterior insulation



Concrete parapets with exterior insulation permit heat to escape and cold to seep into the interior slab, allowing an environment where condensation can form, leading to staining and hazardous mold issues.

Insulated with Isokorb® parapet modules



Concrete parapets insulated with structural thermal breaks greatly minimize heat transfer and any risk of mold formation. The U-value of the assembly is reduced by 40% and the linear transmittance, is reduced by 84% compared to the wrapped assembly, eliminating the problems of thermal bridging.

All assembly model thermal images referenced from the 2019 BC Hydro Power Smart, Building Envelope Thermal Bridging Guide (Details 5.5.9 and 5.5.18-5.5.22)

Why work with Schöck North America?

- ▶ **TAILORED SOLUTIONS** Schöck's dedicated engineering team creates solutions specific to your project, every time.
- ▶ **TECHNICAL EXPERTISE** Our RSMs are architects or engineers, so they understand your world and your challenges.
- ▶ **DESIGN AIDS** Schöck provides easy-to-access CAD files and product specs ready to drop into your design.
- ▶ **PEACE OF MIND** All final drawings signed & sealed by a professional engineer licensed in project's jurisdiction.
- ▶ **PROVEN RELIABILITY** Schöck has completed over 10 million installations worldwide since 1983.

Schöck North America
www.schock-na.com
 Email info@schock-na.com
 Phone 855 572 4625

Schöck USA Inc.
 281 Witherspoon Street
 Suite 110
 Princeton, NJ 08540

Schoeck Canada Inc.
 116 Albert Street
 Suite 300
 Ottawa, Ontario K1P 5G3

