



Structural Thermal Breaks for Concrete Parapets.

Reduce heat loss by up to 90% while preventing condensation.



Efficient solution with Schöck Isokorb® Type CPA

- ▶ 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.

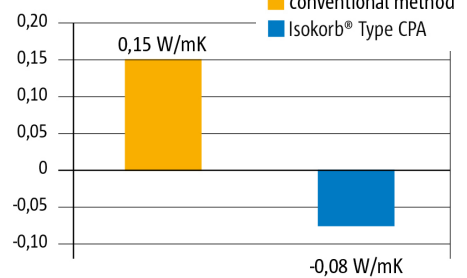
However, the Schöck Isokorb® Type CPA offers a more thermally efficient and cost-effective alternative. Its 4 ¾" (120mm) insulation thickness results in low assembly U-values and reduces heat loss up to 90% – and it is assessed as a “Certified Passive House Component.” It is a functional continuous insulation 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.

Insulate concrete parapets with Isokorb® Structural Thermal Breaks.

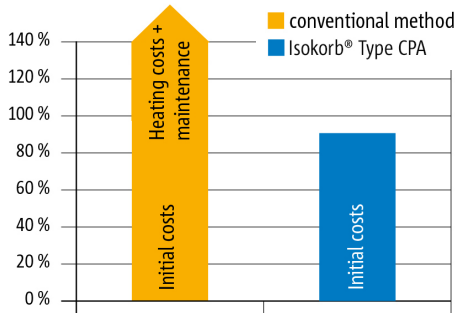
Comparisons of construction costs show initial cost savings through the use of Schöck Isokorb® structural thermal breaks of up to 10% depending on the structure. The product allows simplification of the formwork process, and improves the building energy balance resulting in long-term savings through 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. The Schöck Isokorb® Type CPA solution does not require maintenance and eliminates 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

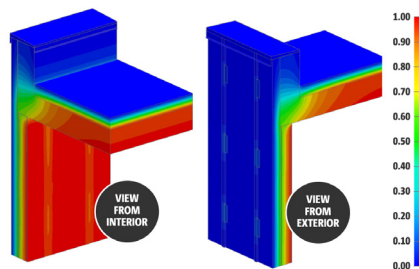


Concrete-to-concrete parapet connections



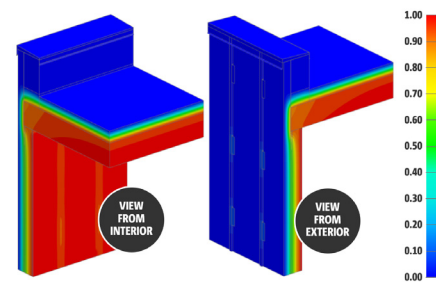
Isokorb® STBs for concrete parapet construction are insulated, engineered assemblies with stainless steel rebar for casting into concrete roof slabs.

Concrete parapet w/ exterior insulation



Concrete parapets with exterior insulation (above), 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® CPA



Concrete parapets insulated with structural thermal breaks (above) 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 94% compared to the wrapped assembly, eliminating the problems of thermal bridging.

All assembly model thermal images referenced from the 2016 BC Hydro Power Smart, Building Envelope Thermal Bridging Guide

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/BIM 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.

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