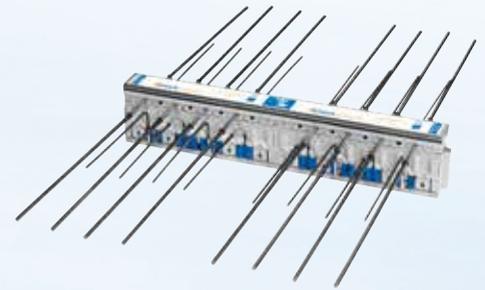




The Tower rises approximately 30 stories in Pittsburgh, PA.



Schöck Isokorb® type CM for concrete cantilevers.

Reference

The Tower at PNC Plaza

Unique Technology Facilitates Building's High Performance System

Schöck Isokorb® structural thermal break solution was a key component in the design of The Tower at PNC Plaza, the new headquarters of PNC Financial Services Group in Pittsburgh, Pennsylvania. Installation of the Isokorb® structural thermal break element was included in the 32-story building, billed as the "world's greenest" office tower.

According to Erleen Hatfield, PE, LEED AP, AIA, Partner, Buro Happold, "To provide fully integrated engineering service for The Tower at PNC Plaza, it was incumbent on the team's structural engineers to understand and embrace the high-performance goals of the project. Working with Buro Happold building systems engineers, energy experts and computational analysts, we saw the introduction of the thermal break into the structural system as a way to improve the envelope and energy performance, and reduce the need for the perimeter mechanical systems, which prevent condensation and drafts."

The Building That Will Breathe

The project is a high-rise steel structure and a "building that will breathe," explained Hao Ko, design director for Gensler architects, which created the plan for this naturally ventilated office tower. The "breathing" building's steel structure is wrapped in a double curtain wall, with automated windows on the exterior and flaps on the interior that will bring in fresh air. Architectural Record noted that, on completion in summer 2015, it is expected to be the country's "tallest tower relying on such a passive strategy for environmental control," and exceed LEED Platinum requirements.

Schöck Isokorb® installation is within the tower's interior curtain wall, contributing to the building's high efficiency and thermal performance of the facade. Generally employed as a thermal insulation element for cantilevered concrete slabs such as balconies, this unique installation will use more than 3,000 meters of Isokorb® type CM structural thermal break modules along the edge of 30 levels with double-skin façade.

Schöck U.S. sales manager Matt Capone noted that "the Isokorb® thermal breaks went through a very rigorous

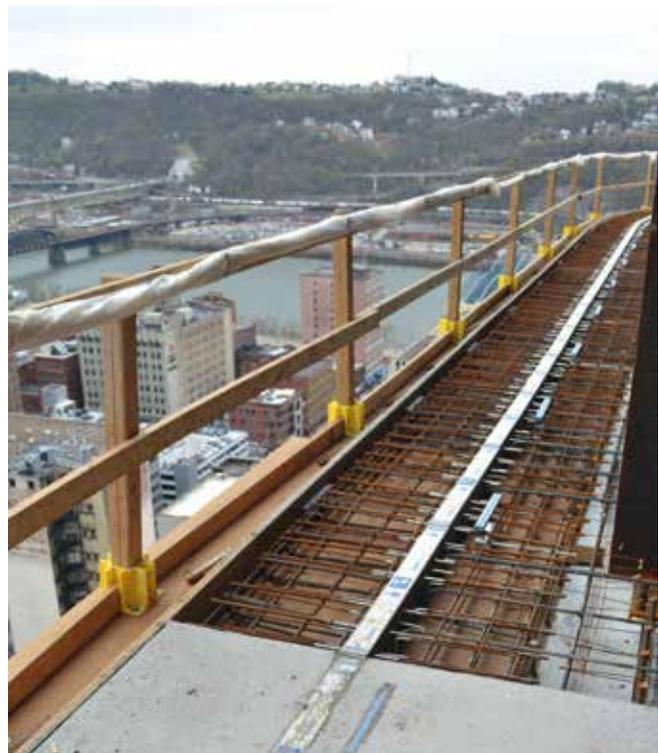
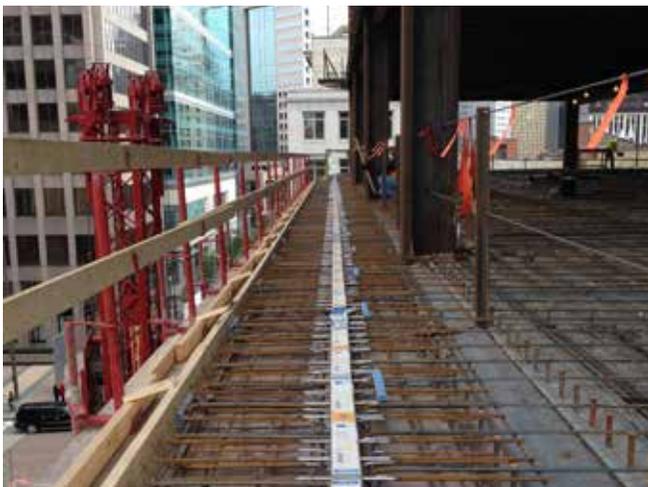


Rendering of tower's interior, showing the layers at the curtain wall.

submittal and approval process with PNC's design team to ensure that the project's demanding criteria for thermal and structural performance were met. Because the installation is unique – with the outer curtain wall attached to the end of the concrete cantilever supported by the Isokorb modules –

very low deflection and movement tolerances were key to making the complete façade work."

Installation of Schöck Isokorb® was completed in 2014, and the tower completion is expected in Fall 2015.



Details:

Architect: Gensler
Structural Engineer: Buro Happold
Construction Company: PJ Dick

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