

NEWSLETTER April 2009

[South Campus Chiller Plant](#) University of Chicago wins [2008 National Best of Construction & Design Award](#), Category: "Power/ Utility"

STUTZKI Engineering, as a subcontractor to the curtain wall contractor [HARMON Inc.](#), engineered and detailed the glass curtain walls for the South Campus Plant and for the West Campus Plant.



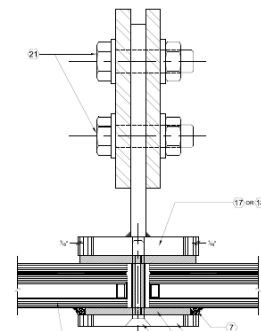
The architects of [Murphy/Jahn](#) Chicago focused on the integration of engineering and architecture for this project constructed to house machines. To expose the technical elements of the plant, the architects designed a glass curtain wall facade supported on steel bar mullions.

In order to maximize transparency the typical glazing mullions were given up completely. Instead the architects chose a structural silicone joint and an offset of the glazing from the steel with the brackets shown here. This creates a floating glass wall in front of the steel mullions.

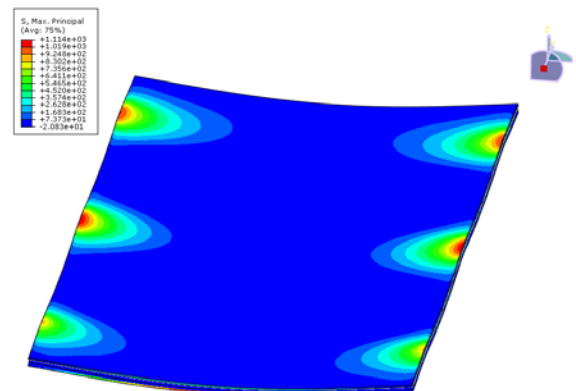


Typical glazing bracket

The stress in the insulating glass unit was tested and analyzed with the Finite Element Method. This included not only the glass, but also the structural silicone, and the air seal under wind pressure and temperature.

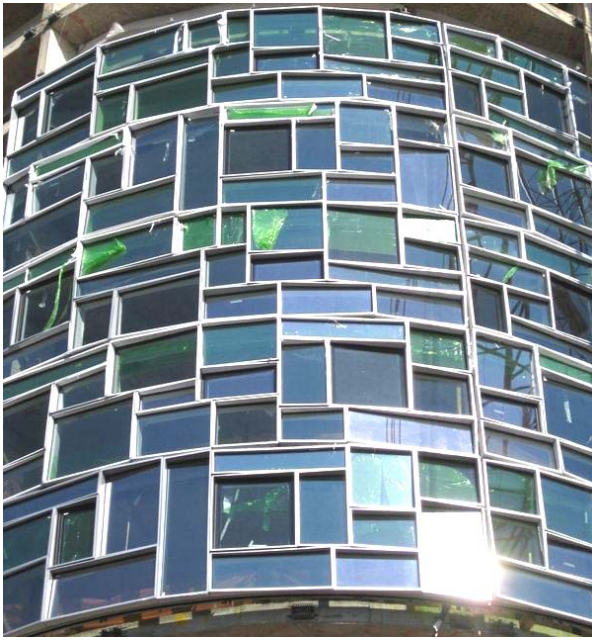


Detail of the glazing system

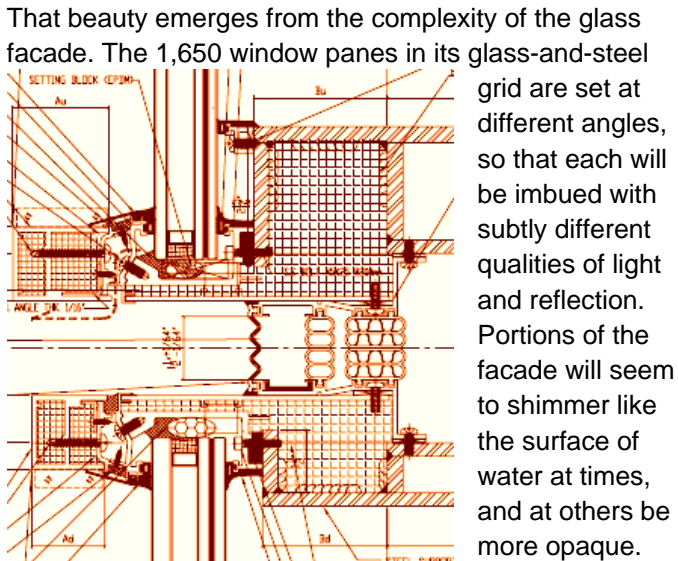


Local glass stresses at the patch fittings

Current Project: [100 11th Avenue](#), Condominium Tower in Manhattan



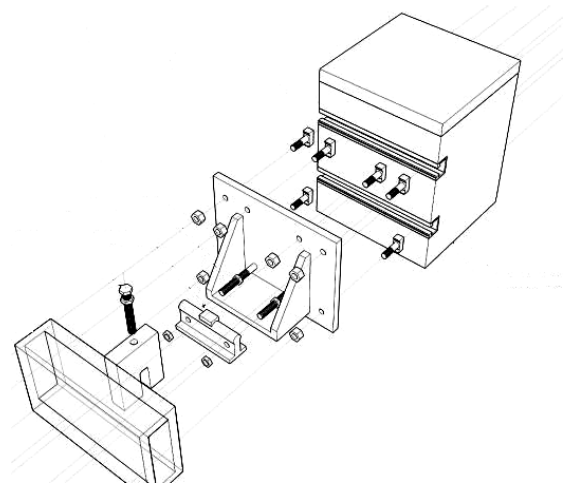
Scheduled for completion in late 2009, it will stand on 19th Street across from Frank Gehry's sparkling new IAC building, which might well have inspired [Jean Nouvel](#) to pump up the glitz factor. The full beauty of the building doesn't reveal itself until you circle around to the front, a gleaming glass-and-steel mask that wraps around its southwest corner.



grid are set at different angles, so that each will be imbued with subtly different qualities of light and reflection. Portions of the facade will seem to shimmer like the surface of water at times, and at others be more opaque.

Joint of the unitized panel system

STUTZKI was contracted for the façade engineering, steel design and detailing for the MEGA-PANELS and hanging gardens. The large pre-fabricated curtain wall units measure up to 30 ft x 12 ft and are hung from the concrete slabs with high-precision, adjustable anchor brackets.



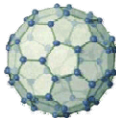
Anchor bracket for MEGA-PANEL



STUTZKI Engineering provides innovative solutions to Architects and Contractors. Our services include glazing system engineering and consulting for curtainwalls, skylights, bridges, fabric structures, and stairs. We specialize in the structural applications of glass products, cable structures, blast resistant design, and thermal analysis.

STUTZKI Engineering is an AAMA Consultant and a registered Small Business Enterprise.

For more information about STUTZKI Engineering Inc. Please call 1-414-455-4815 or visit www.stutzkiengineering.com.



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