BUILDING ENCLOSURE DESIGN AND CONSULTING SERVICES

www.karol.us/design.htm TECHNICAL DESIGN OF A DOUBLE CURVED CURTAIN WALL

Architectural Design Assistance and Development

Building Enclosure Consulting, LLC specializes in cutting-edge high-rise and high-end structures, where the principles of science apply more spectacularly than in the low-rise development. Due to the European façade engineering experience and architectural engineering education, we offer unique design services, assisting designers in pushing the edge as opposed to emphasizing limitations.

Our team is led by Kaz who worked with facades of over 400 buildings located on two continents, in miscellaneous climates. He contributed his expertise to many innovative cladding projects, including unusual combinations of materials and systems, double curvatures, smart double skins, intelligent shading, and whole-glazing facades.

Bridging Gaps

We bridge the traditional gaps among the mechanical, structural, and architectural disciplines, and between the design and construction. We provide a 360 degrees technical design, covering all aspects of facade design: structural, mechanical, hygrothermal, etc. We bring an organized, holistic approach to the building enclosure design because our expertise covers many facets of building enclosure design, controlling: wind, air, moisture, heat, light, sound, impact, cost, wildlife, fire, smoke, aging, and access.

Technical Design

The most unique scope of services is reserved for those architects who dare to cross the boundaries and require custom detailing to capture the architectural intent in technological details of assemblies unavailable off-the-shelf. We provide both custom specifications and sets of technical details that bridge the traditional gap between the architectural documentation and the shop drawings. Consequentially, the costs of the delegated design and the construction administration effort are reduced, and the construction runs smoother. Documentation is provided in either the traditional or parametric software (BIM) for easy incorporation and streamlining into the production process.

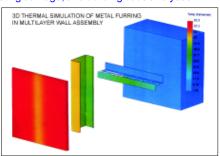


Construction Administration Assistance

We review submittals, analyses substitutions, responds to requests for information (RFIs), collect data in the field, conduct field observations, perform quality tests, review submittals, and monitor construction in progress.

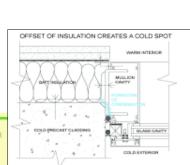
Forensic Services

We also contribute our knowledge and experience to solve disputes among parties of construction process and serves as an expert witness. As a forensic expert, Kaz investigated high-profile cases in the South East region of the U.S., providing assistance in evaluation of property damage. He is skilled in cause-and-origin investigations, like-kind repair analyses and estimates, separation of the pre-existing damage, and building code analyses.



Thermal, Moisture, Optical, and Structural Analyses and Simulations

The increasing performance requirements shift the scientific studies to the earlier stages of design. We perform virtual wind tunnel studies and hygrothermal calculations before the building shape crystallizes, giving architects a comprehensive data to make conscientious choices among available alternatives and increased versatility in terms of both tweaking the performance and fine-tuning the design to its budget to achieve the desired expression.



www.karol.us / lectures.htm

Peer Review and Quality Control

We review the third-party documentation as a part of due diligence and risk management, concentrating on those high-risk items that are typically seen overlooked by designers. We review documentation for constructability, compliance with applicable codes and standards, and the current level of building science knowledge. Comments are thoroughly explained for the benefit of the readers.

Education Provider

Kaz shares his skills, knowledge, and experience by conducting lectures and drafting technical articles and design manuals on the subject of building enclosures. The lectures are continually developed and updated as the author remains active in the field and adds new stories or replace the old ones in constant pursuit to better clarify the subject.

BUILDING ENCLOSURE CONSULTING, LLC provides design, consulting, simulation, inspection, research, testing, and investigation services of building facades. We specialize in high rise buildings. We have offices in Miami (305) 600 0516, New York City (646) 400 0080, and Gdynia, Poland. www.FACADE-DOCTOR.com INFO@B-E-C.INFO

