# **BUILDING ENCLOSURE EDUCATION AND TRAINING**



## **The Mission**

Building Enclosure Consulting, LLC is devoted to education of architects, engineers, owners. contractors, and other parties interested in sciences and technology of building enclosures.

#### We pursue this goal by:

- 1) our voluntary involvement in the Building Enclosure Council, the Building Enclosure Sciences and Technology Board (BETEC), and other professional associations,
- 2) sharing the know-how in conference papers and articles published in professional magazines,
- 3) sharing the know-how by lectures, seminars, presentations, and workshops,
- 4) drafting and publishing design manuals,
- 5) publishing building science trivia,
- 6) keeping current with the new developments by attending seminars and lectures of our peers,
- 7) reading, reading, and again reading professional books, papers, and articles.

### **History**

Our leader Kaz is often accused by his peers of divulging the trade secrets. There is much to be gained by keeping them secret. However, for the sake of the common good, and the advancement of the trade, he shares the elementary aspects of the facade engineering with the construction professionals.

By the end of the 20th century, high performance facades had become so complex that facade engineering gradually began to emerge as a specialized discipline.

Traditionally, architects concentrate on intangible, programmatic, and economic criteria of buildings, as opposed to their tangible functionality. Architects are generally infamiliar with the building enclosure sciences and technology and must hire consultants in order to take care of the physical performance aspects of building design.

The historic split between guilds and the royally conferred design prerogatives formed a widening gap between the knowledge taugh to the design elites and the trade secrets. The facade know-how is seldom openly shared because of strong economic incentives; therefore, no education system exists to cover this educational gap.



Opening slide of a seminar



#### **Seminars**

Kaz gives seminars 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 the constant pursuit to better clarify the subject.

The lectures are elementary in nature but intended as a discussion as opposed to a monologue to optimally address the average professional audience.

Participants are encouraged to ask questions and explore their respective areas of interest, even at the risk of a lecture wandering off the main topic.

#### Hands-on Training (mentoring program)

A dedicated technology and QA/QC departments exist in many large design offices, making the technical development of the in-house staff an economic alternative to hiring a consultant.

Kaz becomes an in-house mentor and works shoulder in shoulder with the team for the duration of the project, researching materials, drafting details, and writing specs, sharing the know-how, so the in-house staff can learn by experience.

#### Workshops

We provide intensive half- and full- day training sessions ranging from elementary principles to specialized tasks, such as e.g. condensation risk assessment.

These workshops provide participants with the tools necessary to perform the elementary research, verification, and simulations of the building enclosure design, that could ultimately lead to dispensing of the use of building enclosure consultants on smaller projects.

#### **Testimonials**

(...) Your lecture was very informative and illustrated the kind of practical approaches to overcome typical design issues.(...)

Matilde E. Reyes, AIA, LEED-AP, Associate/ Senior Architect at C3TS

"It was quite scary. You suddenly realize how much there is to know (...)"

John Preece, AIA, LEED-AP, President at 90ten Architects



Mr. Karol Kazmierczak (Kaz) M.Sc. is the building science architect with over 20 years of experience. He speaks publicly, and writes articles and papers on the subject of building enclosures.