

Subject: Building Enclosure News #7
Date: Wednesday, September 13, 2006 8:54 AM
From: Richard Keleher <kel@rkeleher.com>
To: Richard Keleher kel@rkeleher.com
Conversation: Building Enclosure News #7

Hi all, Richard here ...

Tip of the Month: High-Performance “Green” Buildings and How to Get There

Integrated Design: The success of a project is a result of the collaboration between disciplines. The opportunity to optimize building system integration and design is in the early phase of the project. The team must not only physically meet together, but must understand the constraints and objectives of the other members. The team members should include the owner/client, facilities manager, architect, consulting engineers, contractor (and critical subs, if possible), energy and daylight modelers, and commissioning agent.

Commissioning: The crux of commissioning is to engage an independent commissioning agent (NOT the mechanical engineer) early in the design process and to conduct detailed tests on all the components and systems as they are installed during the construction phase.

Energy Modeling: Employ energy modeling techniques to evaluate optimal systems for the project.

Enclosure: Provide a high performance enclosure, including airtight construction, high insulation levels, and high performance glazing. Provide a low-albedo (light-colored) roof to reduce heat gain and to reduce the heat island effect. Also, as described in my Newsletter #5, one of the most forgotten elements in the design of high performance building enclosures is the harvesting and control of daylight.

Our Approach: So, I am suggesting that our approach includes the providing the following high-performance “green” building elements for the building enclosure at the early stages of design:

Schematic Design

- Study alternatives for daylighting and sun control
- Attend Design Reviews to raise the technical decision-making level relative to the building enclosure
- Submit a Best Practices report

Design Development

- Prepare a cartoon (mock-up) set for exterior details (with the Project Architect/Job Captain)
- Prepare a recommended systems report

LEED Review and Analysis

- If requested (we recommend that clients consider going to at least the silver level)

News of the Month: NEW FREE MAGAZINE! - Journal of Building Enclosure Design

The Building Enclosure Technology and Environment Council (BETEC) of The National Institute of Building Sciences (NIBS) announces the first issue of the Journal of Building Enclosure Design (JBED) – the premier publication for research and development on building enclosure systems for North America. The Journal’s editorial focus will be on the latest developments in building energy conservation, security, and improved building envelope design and performance.

The Journal of Building Enclosure Design will be produced semi-annually, in an 8 ½”x 11”, full color, high-

quality format. It will be distributed to all BETEC and other NIBS' councils' members, including a host of corporate, government, and association personnel, design and construction professionals, and researchers and academics in Canada and the United States. In addition, the journal will be sent to federal, state and provincial, and municipal government departments and agencies across North America. Essentially, the publication will reach the major decision-makers in both residential and non-residential building sectors in Canada and the United States.

BETEC will use the Journal of Building Enclosure Design in keeping with NIBS' mandate to improve public/private cooperation in research, development, and use of new technologies to improve the built environment. The journal will disseminate information about building enclosure research and development and will strive to expand the forum for consensus-driven resource allocation, coordination, evaluation, and policy formation.

To subscribe to the Journal of Building Enclosure Design (it is FREE), email your name and mailing address to jbed@nibs.org.

More on another subject next month!

--

Richard



RICHARD KELEHER ARCHITECT

460 Powder Mill Road Concord MA 01742 | www.rkeleher.com
T 978-369-4550 | M 978-944-2734 | kel@rkeleher.com

As I know you're interested in Building Envelope issues, I'm sending you my bi-monthly newsletter. I also value your privacy and if you would prefer not to receive this newsletter, please hit reply and change the subject line to "Delete from newsletter list" As always, I'd be glad to discuss your concerns and comments on these issues.