Subject: Building Enclosure News #5
Date: Friday, March 3, 2006 12:14 AM
From: Richard Keleher <kel@rkeleher.com>
To: Richard Keleher kel@rkeleher.com
Conversation: Building Enclosure News #5

Hi all, Richard here ...

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.

Tip of the Month No. 1: Daylighting Is Important

Daylighting was one of the key elements of architecture and design for most of history. In both public and private building natural lighting was completely integrated into the understanding and making of buildings. However, the availability of artificial light, in ever more sophisticated forms, has made it too easy to avoid daylighting as a resource to light spaces. The hope is that the understanding of a daylight as a generator of form and space can be reunited back into the design process, to save energy, improve worker productivity, and to create pleasant spaces.

To do this we will need to provide the design architect with useful information about these factors early in the design process. We are only beginning to create the tools and gather the information necessary to apply the physics of light, heat, air, and moisture and the biology of deterioration to our design of building enclosures in the way that structural design employs specific rational quantitative values to allow us to predict outcomes. Only when we are able to use similar specific values in building enclosure design will we be able to design novel enclosures that are also environmentally responsible.

The first of the two presentations described below provides an overview of ways to enliven your projects with daylight by Jeff Berg and a description by yours truly of the tools that are currently available to architects to assist in the design process.

Tip of the Month No. 2: Building Science and Walls that Work

Heat, **A**ir, and **M**oisture (HAM) affect every building enclosure detail. The discipline of building science explains how the specific climate affects the way heat and moisture interact with the materials in your building enclosure.

The second of the presentations described below consists of a brief but robust review of building science by Wagdy Anis and a description of how the principles of building science can be applied to details for your projects.

As I said in my last newsletter, he bottom line is that the architect is responsible for describing how the systems of the building enclosure join together and we need to pay very close attention to this in the development of our projects. This presentation will assist greatly in that process.

News of the Month:

I will be presenting twice at NESEA's Building Energy Conference at the World Trade Center in South Boston. The link to the Registration page is: **http://www.buildingenergy.nesea.org/**. Here is the announcement on the NESEA website:

Instant Enlightenment: Daylighting Basics for the Harried Designer

Tuesday, March 7, 2:00-5:00

Enliven your spaces with windows and skylights, clerestories, and monitors while preventing glare and overheating. Learn about shading and reflector systems, both fixed and movable. Discuss a range of design tools and analysis techniques. Discover how the shape and location of an opening, the materials in the opening and the surfaces of the space affect the resulting luminous scene. See multiple examples from recent & historic buildings.

Presenters:

Jeffrey T. Berg, AIA, Berg/Howland Associates Inc.

Richard Keleher, AIA, Richard Keleher Architect

Level: Introductory

Building Enclosure: Handle Heat, Air and Moisture

Wednesday, March 8, 4:00-5:30

Get comfortable by controlling heat, air movement and moisture (HAM) in your buildings. This session will give a comprehensive overview of the physics, the details, and the current initiatives regarding commercial and institutional building enclosures. Topics will include roof and wall design principles, insulation strategies, air pressures on buildings, managing for mold, controlling with details, and available materials that contribute to durable and energy efficient enclosures.

Session Chair:

Jeffrey T. Berg, Berg/Howland Associates, Inc.

Session Speakers:

Richard Keleher, AIA, Richard Keleher Architect

Wagdy A.Y. Anis, AIA, Shepley Bulfinch Richardson and Abbott

Again, the link to the website to register: **http://www.buildingenergy.nesea.org/**

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Richard

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