United Brotherhood of Carpenters Host Demonstration
Advantages of Insulated Concrete Forms Discussed

The Middle Pennsylvania Chapter meeting was once again hosted by the United Brotherhood of Carpenters and Joiners of America at their Gallitzin facility. On this occasion, the construction topic of discussion was Insulated Concrete Forms (ICF), and the advantages professionals can enjoy by utilizing this versatile building material.

Bruce Cody presented an interesting description of not only the product, but also the many and varied situations in which this product can be successfully utilized. This system provides strength and safety with the comfort and quiet of concrete insulated walls. There are three types of ICF — Panel (Flat), the most common; Waffle (Grid), available in different thicknesses; and Post and Beam, no longer used very much.

Mr. Cody went through various scenarios that professionals may encounter when designing buildings. While discussing considerations that must be made, such as window locations, etc., he stressed that everything starts with a “good foundation”. This is the most important and must be constructed properly.

Continuing his presentation, Mr. Cody discussed what steps must be taken when installing ICF for window and door openings and procedures for accommodating a boom pump when depositing concrete into the forms. Also discussed was the proper approach when pouring concrete into a standard eight to nine foot high wall. Mr. Cody cautioned that this should not be hurried and should be done in three lifts. Tall walls, say 18 feet high, can also be completed with two lifts with proper preparation and two levels of scaffolding installed. Waterproofing is absolutely necessary because of the plastic connectors, etc., that are part of the foam forms. Dimple Drainage Systems are the best to permit the water to run directly down to the French drain system.

Also very important when using these foam systems is to consider the type of floor systems being utilized, utility service penetrations, determining which contractors will do the work and know exactly who will locate the penetrations, who will install the service, and who will be responsible.

Finally, the benefits of using the ICF system is that there is no rot or rust; environmentally responsible because it is manufactured with recycled materials; scrap is recyclable (although a property facility that will accept the scrap must be located); R-value is R40; 4-hour fire rating; less air infiltration (up to 75% reduction); uniformity of temperature; secure (high resistance to hurricanes and other high-wind events; cost competitive; meets or exceeds structural requirements; peace and quiet.

For more information, to www.concretehome.com or www.forms.com.

We’d also like to thank Tom Reilly of Reward Wall who donated the materials for our presentation.
Nearly ten years ago one of our members, Tom Columbus, had an idea: why not host a conference where chapter members could gain continuing education credits, network with peers they didn’t see very often, and talk with companies about their products. That idea has become our bi-annual Symposium, started in 1999. The 2007 Symposium was held on October 25 in Johnstown. I’d like to thank Tom for all of his hard work chairing the symposium event again this year as well as Anne McGrath for coordinating the event. The Symposium brought members of the architectural profession together from nearly every corner of our large chapter. It was a great way to wrap up this year’s calendar of events.

November will bring the Executive Committee together for the last time in 2007. One final item of business for this year will be to roll out our newly formatted newsletter for the December/January issue. The launching of our web site provided enough momentum to redesign the look of our newsletter. The newsletter committee did a great job making this happen.

As this year comes to a close and a new year comes into focus, I would like to thank all of the officers and chapter members for my opportunity to serve. I have learned much about the AIA during my time as chapter president. I think the two keys that keep our chapter moving forward are its predictability (i.e. grassroots, symposium, annual picnic, etc.) and, as a group of architects, its receptivity to new and creative ideas (i.e. program events, web site, newsletter redesign, etc.). The other major factor is the dedicated individuals who have been involved with the chapter for many years going back as far as its formation as well as the newer people who have volunteered to step up.

As Yogi Berra would say, "You can observe a lot just by watching.”

DON’T FORGET!!!
Deadline for articles for the next newsletter is January 4, 2008
BUSINESS CENTS: Occasional Comments on the Business of Design

After 15 years in our ‘new’ home it was time to upgrade our landscaping.

After several calls, four contractors agreed to visit us at the house.

All four contractors listened closely and seemed to pay attention to our planting likes and dislikes. Each made a point of making at least one observation that would make you think that he was an expert on plant material and landscape design. As the buyer I couldn’t help but remember and smile thinking about the many times that I was in their position trying to establish my credentials and ‘sell’ a prospective client.

Some contractors took notes, others didn’t, take one note. Some made measurements, others didn’t Some took pictures, others didn’t.

The quality of the response, not the price, quickly separated the contenders.

The first proposal was easy, after telling us we would have a proposal within a week, we never got one. But then this was the contractor who described perennials as those red flowers. We didn’t bother with a follow up telephone call.

The second proposal came, hand delivered with a drawing and a typed price list as promised. But one whole part of the project had been missed and rather than describe a plant by name and size it simply listed bulbs, evergreens, etc.

It took a telephone call to get a proposal from the contractor with the best site visit but then it was a lump sum phone quote. The contractor was surprised that we wanted a written proposal and then we got a hand written bid with no indication of the number, type or size of plants to be provided.

The last proposal was presented in person. The handwritten proposal was impossible to decipher [yes it was worse than my handwriting] but the personal presentation covered the names, sizes and counts of all plants and why the plant was appropriate for its environment. Most important it included our entire project scope. It was easy to select this contractor.

BUSINESS CENTS: [1] A complete proposal that meets the customer’s needs makes the difference. [2] You can’t get the work if you don’t make a proposal. Think about it.

J. Richard Fruth, AIA, Public Relations Officer
You are cordially invited to participate in PENNSYLVANIA BUILDS 2007: A Regional Design Showcase of New Buildings which will be published in the December 7, 2007 issue of the Pennsylvania Business Central.

Members of the American Institute of Architects with projects that are located within the twelve counties of the Middle Pennsylvania Chapter and that have been completed after December 2002 are invited to submit a maximum of two of those projects for publication in this special issue of the region’s voice for economic development.

The publication of this special feature in December is a joint effort of Pennsylvania Business Central and the American Institute of Architects Middle Pennsylvania Chapter and is planned to promote architectural design accomplishments in our region.

**Seeking Middle Pa. Region New Buildings**

**Pennsylvania Buildings 2007 Edition**

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**Design on the Delaware 2007 was held again this year in Philadelphia sponsored by our Philly Chapter**

The two day event is well done and includes seminars, exhibits, tours, and an opportunity for up to 10 learning credits.

The keynote speaker this year was Mr. Daniel Desmond, Deputy Secretary, Office of Energy and Technical Deployment, State of Pennsylvania. According to Mr. Desmond the rate cap for electrical energy will be removed in 2009 or 2010 which could allow an increase in electrical energy costs of 40%-70% if anything like Maryland and New Jersey.

Global warming and energy costs will affect actuarial science again according to Mr. Desmond which will affect the demands from both lending and insurance institutions. Critical design issues that emerge will be power loss, flooding, wind damage, security, fire, and the use of renewable energy.

His advice is to understand optimal form in the design of our buildings and work toward “zero energy”. “We are living in historical times”, again a quote from Mr. Desmond. The good news – we get a chance to be part of the solution.

Also, the Philly Chapter cordially invites our members to attend Design of the Delaware 2008 to be held next November.

*Frederick J. Fernsler, AIA, Fernsler Architecture, LLC*

**FOR THE GOOD OF THE ORDER**

**“TIPPING THE GREEN SCALE”**

Unlike the 70’s, green buildings are here to stay this time. Numerous studies have been conducted by the AIA and McGraw Hill concerning green building design. They all point in the same direction, people are learning this is indeed the best way to go. Green buildings not only mean environmentally friendly, but also have measurable effects on the bottom line of energy consumption and employee efficiency, which, in the eyes of all corporate boards affects the bottom line. Eventually we, as architects and engineers, will not view green building design as being different than the norm, it will become the norm, we really do not have a choice.
FORENSIC ARCHITECTURE

METHODOIST CHURCH MISSION TRIP
GREENSBORO, KS, KILLER TORNADO, May 5, 2007

The author participated in a disaster relief visit the week of October 27-November 4, 2007 to aid in the reconstruction of a small town in the grain belt.

Observations:
1. 1,900 or so buildings were wiped sheared off the face of the earth at approx. 10:10 PM in less than 4 minutes.
2. It’s the debris, including an airborne 1.5-ton pickup truck, that do the killing (11 residents were killed) and ripping.
3. Sirens warnings and basements saved lives.
4. Three masonry buildings remain intact.
5. Many formerly mature specimen trees survived the wind and debris, but none are more than 16’ tall anymore and they look sandblasted by debris. Despite the trauma there are sprigs of new growth.
6. All that is left of most home lots is a sunken hole footprint (the former basement) and some pretty pansies blooming beside the former sidewalk.
7. The “Kansas High-Rise” (Concrete Grain Elevator) 150’ high reinforced concrete honeycomb-like structure made it just fine through the tornado; Hurrah for the Kansas structural engineers and contractors who built this amazing structure!
8. We worked on the construction of a new one story wood frame community center placed on an existing concrete slab and foundation remnant.
   a. You need to sand sheetrock compound for 8 hrs. before you ought to be allowed to be a compound applicator; “Less is More”...
   b. Concrete slab mesh is on the bottom in Kansas too; all the better for slab demolition at sheared copper plumbing pipes. The slab had several shrinkage cracks as a result of the mesh placement. This must be a universal national occurrence that Architects do have the knowledge and power to cure.
   c. The new wood frame construction is not in compliance with load path uplift resistance now mandated by code. The new mudsill was powder driven fastener anchored to the slab; not the strongest type of anchorage that could have been used. The studs were not tied to the mudsill with structural framing anchorage plates.
9. The highway bridges have concrete baluster railings; a more expensive construction method, but less able to act like an inverted airplane wing in a tornado.
10. If you rent a Porta-John make sure they drive j-anchors into the ground over its skids at all four corners. The wind does blow in Kansas every day.

Respectfully Submitted.

Albert S. “Toby” Roberts, Jr. AIA CCS

The Middle Pa. Chapter AIA welcomes comments and questions regarding this and future “Forensic Architecture” articles. Please direct your thoughts to Toby at L. Robert Kimball and Associates, Ph. 814 472-7700 Ext. 342. Better yet, email Toby at tobyroberts@lrkimball.com.
**2007 Calendar**

**Nov**
- PSU Architecture & Landscape Architecture Lecture Series — See Article, This Newsletter, Page 3
- 13-14 AIA PA: Leadership Conference & Architect’s Day, Harrisburg, PA

**Nov/Dec**
- Nov 12 Exec Committee Meeting

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**Continuing Education Credits**

Remember — Brian L. Mayko, Associate AIA, is the Continuing Education Registrar for the Middle Chapter. Don’t forget to get your information to Brian to make sure that all of your credits are counted.

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**Hey!! Let’s Stay Connected**

Please remember to make sure that Dave Reasinger receives any changes and/or additions in your mailing address and contact information including email addresses. Also, please make sure that Dave receives information for new members in the Middle Chapter. Thanks!

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