



St. Louis Metro A.S.P.E. Chapter 19

# *The Gateway Estimator*

Volume 8 Issue 5

[www.stlouis-aspe.org](http://www.stlouis-aspe.org)

November 2006

## **St. Louis Metro Chapter 19 Officers & Board 2006-2007**

### **Board Meetings**

First Tuesday of the month at 5:30 p.m.

### **Officers & Directors**

Dan Davenport, McCarthy - President  
David Briegleb, H & G Sales - 2nd V.P.  
Brad Davis, Paric Corporation - Secretary  
Jim Stukenberg, GRS Construction Co. - Treasurer  
Matt Ford, Universe Corporation  
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Robert Schubert, K & S Associates, Inc.  
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Fred Waldrop, Murphy Company  
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### **Committee Chairs**

#### **Membership**

Mark Uthe 314-434-0444

#### **Education**

Chair Open

#### **Scholarship**

Bob Partl 314-739-1800

#### **Awards**

Matt Ford 314-439-2800

#### **Newsletter**

Debbie Murphy 314-368-7198

#### **Certification**

Fred Waldrop 314-997-6600

### **Important Numbers**

#### **President**

Dan Davenport 314-919-2226  
[DDavenport@McCarthy.com](mailto:DDavenport@McCarthy.com)

#### **Executive Director**

Debbie Murphy 314-368-7198  
[estimating@stlouis-aspe.org](mailto:estimating@stlouis-aspe.org)

## **From The President**



Hello All:

Autumn has arrived and it is my favorite time of the year. This year my sinuses didn't bother me at all. Instead I was fortunate enough to contract MRSA which is what the professionals call "the killer staph."

I mention this for two reasons: 1. be careful out there; and 2. I wish to thank Jim Stukenberg, Debbie Murphy, Cyndi Walker, Fred Waldrop and everyone else who picked up the slack for me while I was incapacitated.

### **Monthly Meetings**

Our September meeting was an interesting panel discussion on estimating and the minority contractors. Jim Stukenberg filled in for me at the session as the MC and did a fantastic job of moderating the panel. I truly believe that ASPE can assist the minority contracting community by providing education and training in the art of estimating.

Our October monthly meeting will include a presentation on the manpower crisis we face in the construction industry now and for the next ten to twenty years. Fred Waldrop of Murphy Company, Len Toenjes of the AGC, and RJ Morris of McCarthy Building Companies, Inc.

Our November meeting will be held on the sixteenth of November which is the third (3rd) Thursday. We have a joint meeting with NAWIC and the topic is the new 64/40 Highway project that will start soon.

**From The President - Continued on Next Page**

## From The President Continued from Page 1

### Board News

We continue to seek more members who want to be involved in our chapter and in the business of estimating. If you know of anyone who would benefit from or bring benefit to the business of estimating please contact any of the board members.

Certification is one of those benefits. If you are interested in attaining more information on certification please contact Fred Waldrop.

### Golf Tournament

The 4th Annual ASPE Chapter 19 Golf Tournament was held at Bear Creek Golf Club on Friday August 25th. We always

seem to have interesting weather for this event and this year was no different. We raised over \$4,000 for our scholarship fund. See the attached article for more details on this event. We hope that you can join us next year and we can raise even more money for scholarships.

### General Ramblings

No matter what your political leanings be sure to make your voice heard and **VOTE** on November 7th.

*Daniel R. Davenport, CPE*

*President 2006-2007*

*St. Louis ASPE Metro Chapter 19*

## Informative Web Sites

**St. Louis Chapter 19 ASPE**  
[www.stlouis-aspe.org](http://www.stlouis-aspe.org)

**National ASPE**  
[www.aspenational.org](http://www.aspenational.org)

**National ASPE Education Board**  
[www.aspeeducation.com](http://www.aspeeducation.com)

**Association for Advancement of Cost Engineering, St. Louis Section (AAACE)**  
<http://web.networkusa.net/aacestl>

**American National Standards Institute (ANSI)**  
[www.ansi.org](http://www.ansi.org)

**American Society of Civil Engineers (ASCE)**

[www.asce.org](http://www.asce.org)

**Ass. General Contractors of St. Louis (AGC)**

[www.agcstl.org](http://www.agcstl.org)

**ASA Midwest**  
[www.asamidwest.com](http://www.asamidwest.com)

**Greater St. Louis Chapter of the Construction Specifications Institute (CSI)**

[www.stlcsi.org](http://www.stlcsi.org)

**National Association of Women in Construction (NAWIC) - [www.nawic.org](http://www.nawic.org)**

**JOINT MEETING OF THE ST. LOUIS NAWIC #38  
ST. LOUIS ASPE CHAPTER 19**



**PRESENTED BY GREG HORN,**  
ST. LOUIS ASSISTANT DISTRICT  
ENGINEER FOR PROJECT DELIVERY  
MoDOT ST. LOUIS METRO DISTRICT

**Thursday, November 16, 2006**

**Maggie O'Briens**

Across from Union Station  
2000 Market Street, St. Louis, Missouri

**Social Hour - 5:00 pm Program - 6:00 pm Dinner - 6:45 pm**  
**Members: \$30 Guests: \$35**

**Reservation Deadline: Friday, November 10 2006 at 4:00 pm**  
**FAX Registration Form to Cyndi Walker at 314-781-3836**

**JOINT NAWIC/ASPE MEETING RESERVATION FORM**

**ASPE & NAWIC Members:** RSVP by faxing response. Complete and send entire sheet to: **Cyndi Walker: FAX 314-781-3836.** Bring cash or a check, *made payable* to **ASPE**, to the meeting. "No Shows" will be billed.

**Non-Members:** Send registration form with check, *made payable* to **ASPE**, to **Cyndi Walker** at Goltzman & Sabo, 3555 Scarlet Oak Blvd., St. Louis, MO 63122.




Name \_\_\_\_\_  
Email \_\_\_\_\_  
Company \_\_\_\_\_ FAX \_\_\_\_\_  
I'm bringing a Guest! (Name) \_\_\_\_\_  
Company \_\_\_\_\_ FAX \_\_\_\_\_

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*A.S.P.E.: Dedicated to the promotion of the profession and benefit of the construction industry.*



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# Meet The Member: Paul Hanson

Paul has 24 years of experience in the construction industry. He has been an estimator for lumber yards, painting & drywall contractors, developers, and commercial general contractors. He has a bachelor's degree in construction management from the University of Nebraska at Lincoln. Paul recently relocated to St. Louis from Omaha, Nebraska to work for McCarthy Building Companies, Inc.

Paul is married and has three children. His wife Deb is an administrative assistant to the head of pediatric cardiology at Children's Hospital in Omaha. Their oldest daughter Becky is a nurse in Cedar Rapids, Iowa. She has been married for three years. She and her husband, Maidul, just bought a new house. (*Hey dad, why don't you come up for a visit? By the way, bring your tools!*) Their other daughter, Kaitlin, is a senior at Iowa State University majoring in Civil Engineering. She interned last summer with Lamp Rynearson, a civil engineering firm in Omaha. She plans to intern there again this summer. Their son Jared is a senior in high school. He is a wide receiver and safety for the football team which is 5 and 2 this season.

Deb and Jared will remain in Omaha until Jared graduates from high school next spring. Deb will then move to St. Louis and Jared will share an apartment with his sister in Omaha. Paul states that this is contingent upon Jared securing a job! Jared has been accepted to Kansas State but is keeping his options open for the University of Nebraska and Iowa State.

Paul was a member of ASPE Chapter 35 for many years. He served as Chapter President, Vice President, and Secretary. Now, he has joined our Chapter 19 in St. Louis. Paul has been a Certified Professional Estimator since 1998. Please welcome Paul in person at one of the upcoming monthly meetings or events.

Paul enjoys spending time with his family, drumming, and riding his motorcycle with his wife. Recently he has seriously considered playing golf more regularly after striking several 200+ yards drives with his 25 year old 2 iron!

# September Meeting: Minority Business Enterprises

Thanks to Jim Stukenberg for emceeding the Minority Business Enterprises panel discussion at our September 28 meeting at Maggie O'Briens. Panelists included: Tim McLaughlin of Paric, Eddie Hasan of MOKAN and Jack Thomas of Lambert Airport's Disadvantaged Business Enterprise Program.

The discussion focused on how ASPE members can facilitate better communication between MBE's and general contractors through additional education and stronger estimating abilities. The discussion also touched on how participating in both local and national ASPE communities can help build relationships and share estimating knowledge.

ASPE Fellow and founding member of ASPE Chapter 19, Frank Kutilek noted that national and regional contacts are a great way to share information, exchange ideas and learn about innovative techniques.

Thanks to MOKAN President, Eddie Hasan, for promoting this meeting to MOKAN's membership. MOKAN'S mission is to assist small and/or minority contractors working in the building construction industry, or related fields with a trade, promotional and training programs in the Greater Metropolitan St. Louis Area. For additional information about MOKAN visit [www.mokanccac.org](http://www.mokanccac.org).

## On-Line Courses Offered By ASPE

Self-Paced courses may be started at any time: Textbooks are provided with your tuition. For more information visit: <http://www.aspeeducation.org>

**Introduction To Construction Estimating**, is an online course presented by ASPE. You can start this class at any time. \$410 for members, \$440 for non-members.

**Essential Construction Math**, is an online course presented by ASPE. You can start this class at any time. \$410 for members, \$440 for non-members.

# *ASPE Code of Ethics*

## *Basic Canons*

- Canon #1** Professional estimators shall perform services in areas of their discipline and competence.
- Canon #2** Professional estimators shall continue to expand their professional capabilities through continuing education programs to better enable them to serve clients, employers and the industry.
- Canon #3** Professional estimators shall conduct themselves in a manner, which will promote cooperation and good relations among members of our profession and those directly related to our profession.
- Canon #4** Professional estimators shall safeguard and keep in confidence all knowledge of the business affairs and technical procedures of an employer or client.
- Canon #5** Professional estimators shall conduct themselves with integrity as all times and not knowingly or willingly enter into agreements that violate the laws of the United States of America or of the states in which they practice. They shall establish guidelines for setting forth prices and receiving quotations that are fair and equitable to all parties.
- Canon #6** Professional estimators shall utilize their education, years of experience and acquired skills in the preparation of each estimate or assignment with full commitment to make each estimate or assignment as detailed and accurate as their talents and abilities allow.
- Canon #7** Professional estimators shall not engage in the practice of “bid peddling” as defined by this code. This is a breach of moral and ethical standards, and a member of this society shall not enter into this practice.
- Canon #8** Professional estimators and those in training to be estimators shall not enter into any agreement that may be considered acts of collusion or conspiracy (bid rigging) with the implied or express purpose of defrauding clients. Acts of this type are in direct violation of the Code of Ethics of the American Society of Professional Estimators.
- Canon #9** Professional estimators and those in training to be estimators shall not participate in acts, such as the giving or receiving of gifts, that are intended to be or may be construed as being unlawful acts of bribery.

# October Meeting: Facing the Future in Construction

by Cyndi Walker

This eye-opening presentation was presided over by R. J. Morris (Recruiting Manager for McCarthy), Fred Waldrop, FCPE (Business Development for Murphy Company) and Terry Eivens (St. Louis AGC - standing in at the last moment for Len Toenjes, a



**October Meeting Presenters: Fred Waldrop, R.J. Morris & Terry Eivens**

scheduled speaker, who had tickets to the Cardinals' World Series Game) for our October monthly meeting.

According to the US Dept. of Labor, the construction industry currently employs 5.4% of all workers - with an all-time high of 7,277,000 workers reached in 2005. The Labor Bureau expects employment in our industry to increase 11.4% over the 2004 – 2014 period – one of the top ten largest sources of employment growth in our country over the next decade.

This poses a problem as construction labor statistics indicate that 1.4 million workers either retire or leave the industry every year. If, as projected, millions of new workers are needed in the next 5 years, where will those workers for the new positions AND ALSO the replacement positions come from to meet the demand for a workforce to complete construction projects?

How will that impact how companies decide what jobs to bid? How will they be staffed?

How will that affect wages – thus bids? How will that affect the level of worker competency? How does that affect labor productivity? If experienced supervisors are retiring or leaving the industry, who will provide leadership for the workforce?

Estimators need to be

cognizant of the manpower problem looming in our industry – especially as there are several very large projects for the St. Louis area on the horizon - new buildings for area medical centers; SSM – St. Joseph Hospital, BJC Labs, St. John's Mercy, Herman Hospital, Alton Memorial, SLU, St. Louis Children's Hospital and St. Luke's; new industrial facilities for Conoco Phillips, Sigma, AmerenUE, Chrysler, Pfizer, Big River Zinc, U. S. Steel, River cement, Holcim, and Mississippi Lime; and three big new Casino projects for Pinnacle, Harrah's and Ameristar just to name a few.

Construction is the only goods-producing business sector in the United States in which employment is projected to grow substantially. We need to attract new workers into the trades, for estimating, for supervisory positions, for project management. Introduce someone to our industry. Mentor someone to allow them to succeed and thrive in our business.

# October Social Hour Sponsor: UNIVERSE Corporation Presentation

Matt Ford presented information on the capabilities and services of UNIVERSE Corporation, a fabricator/engineer and installer of cladding systems. Universe Corporation is based in St. Louis, and works locally and nationally on cladding projects.

Matt discussed the aluminum and metal composite systems using Alucobond and Alpolic material, as well as various systems Universe fabricates. In addition to the traditional aluminum substrate, the suppliers are now offering zinc, copper, titanium and stainless panels. He also mentioned an increasing use of rainscreen systems.

A relatively new rainscreen cladding product from Europe called Trespa Meteor, which is a solid wood phenolic based resin composite panel is now being fabricated by regional fabricators like Universe, with the Trespa moving away from fabrication. Trespa is looking for Universe to develop new

attachment systems for this product. Trespa has high interest as the product offers a wide variety of wood-grain as well as other unique finishes not available on metal cladding.

He also mentioned that they represent Centria metal wall systems and Kalwall insulated translucent skylight and wall systems, and have a number of projects using all the mentioned products, as well as their capabilities to erect other items such as sunscreens, walkways and other cladding products.

Matt closed by telling the audience that Universe is unique in St. Louis that they are the only architectural-promoting cladding company with self-perform labor. While they have self-perform labor, they also work closely with numerous local and national erection firms to make sure the most competitive solutions are offered for projects.

## **Attention Members: Keep ASPE Informed**

If you (or your company) have information of interest to your estimating peers, please send it to Chapter 19.

Jobs acquired, completed, promotions, awards, etc!

Send the information to Debbie Murphy at  
[estimating@stlouis-aspe.org](mailto:estimating@stlouis-aspe.org) to be included  
in the next Gateway Estimator.

# ASPE Member Companies

Ahal Contracting Co., Inc.  
Alberici Constructors Inc.  
Architectural Systems  
Bangert Computer Systems  
Biddata, L.L.C.  
C & R Mechanical Co.  
C & R Duct Fabrication  
Castle Contracting LLC  
Clayco Construction  
Commercial Document  
Solutions, Inc.  
Condaire, Inc.  
G.H. Voss Company, Inc.  
Golterman & Sabo, Inc.  
GRS Construction  
Guarantee Interiors, Inc.  
H & G Sales Inc.

Hallmark Stone  
Hart Contracting Inc.  
HOK Design Build  
Icon Mechanical  
Jacobs Civil, Inc.  
Jacobs/Sverdrup Civil, Inc.  
Jim Taylor, Inc.  
Joseph Ward Painting Co.  
K & S Associates, Inc.  
Kenneth Frye Estimator  
Lancia Brothers Woodworking  
Legacy Building Group  
McCarthy Building Companies  
McGrath & Associates, Inc.  
Michael Latas & Associates  
Millstone Bangert, Inc.  
Morrissey Construction Company

Muenks Brothers Construction  
Murphy Company  
Northstar Management Company  
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R.G. Ross Const. Co., Inc.  
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The Stovey Co.  
Volk Construction Company  
Wachter, Inc.  
Wiegmann Associates

## RELATED LOCAL NEWS

### NAWIC News

NAWIC Chapter 38 & ASPE Chapter 19 are hosting our annual joint meeting on November 16 at Maggie O'Brien's. The chapter is also hosting the Block Kids program on Thursday, November 9 at the 2006 "Can"struction competition St. Louis Mills' mall. For information about the Block Kids program contact Anne Houchin, Block Kids Chair, at 314-535-4544 or [ahouchin@ahernfire.com](mailto:ahouchin@ahernfire.com).

### AACE News & Events

The Association for the Advancement of Cost Engineering invites ASPE members to attend their meetings. For information, log onto <http://www.stlouis-aacei.org>.

### ASA-Midwest Council

The ASA-Midwest Council invites ASPE members to learn about *Current OSHA Trends, New Regulations and Partnerships* on November 15 at Syberg's on Dorsett. Social Hour: 5:30 p.m., Dinner: 6:30 p.m., Program 7:15 p.m. \$40 Per Person; First-Time Guests are Free of Charge includes buffet dinner. For reservations contact Reba Gillick at [ed@asamidwest.com](mailto:ed@asamidwest.com) or 314-214-1664.

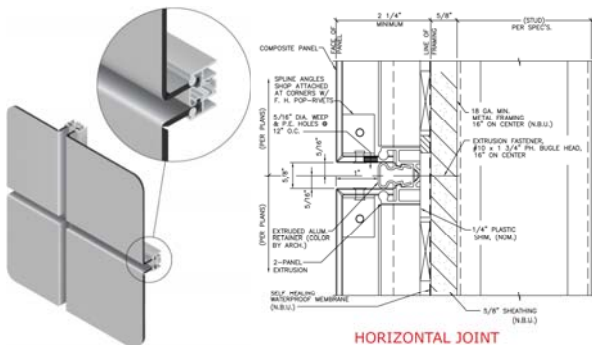
### St. Louis AGC Events

Young Constructors Happy Hour is scheduled for 5 p.m. on November 8 at the Trainwreck Saloon Westport. For information on St. Louis AGC Events visit [www.agcstl.org](http://www.agcstl.org).

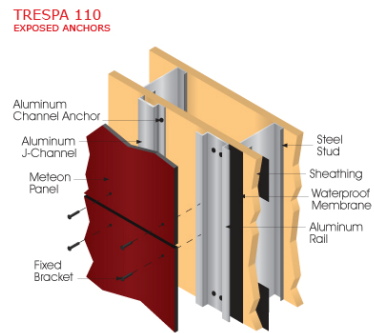
## Rainscreen Cladding Design & Outboard Insulation

Because of design aesthetics, mold concerns and increased energy efficiency, the use of rainscreen cladding systems using outboard insulation methods are becoming more prominent.

Rainscreen cladding systems specified by architects are on the increase for aluminum & metal composite systems (Alucobond, Alpolic & Formabond), single skin ribbed metal panel systems (Centria Concept Series), terra cotta, high-pressure laminates (Trespa Meteon) among others. Cladding system fabricators are seeing a dramatic move away from wall systems that are reliant on silicone joints.



**UNIVERSE 2000R “Rainscreen” details**



**Trespa Meteon open joint “rainscreen”**

Simply put, rainscreen design accepts the premise that a small amount of moisture will penetrate the cladding system and will be managed and exited before entering the building. The rainscreen cladding system relies on weeps, a ventilated cavity and a vapor permeable air/moisture barrier. Typically, less than 1% of the moisture will migrate through the air/moisture barrier into the stud cavity, and due to convection and condensation, that moisture will migrate out from the stud cavity into the wall cavity, which reduces mold potential and allows the building to breathe.

**Q** What causes mold to form in walls?

**A** In order for mold to form, air, moisture and food are required to be present (liquid water isn't necessary; most species propagate with only 40% – 60% relative humidity). Mold is attracted to certain building materials like drywall, wood and carpet; therefore, it is important to maintain drywall cavities and minimize mold food.

Appearance is one reason for rainscreen popularity, as most have defined reveal joints or open joints. Aesthetic value is only part of the reason; but another factor is that the sealants may require maintenance or need to be replaced. Rainscreen systems are not new as brick walls have used the rainscreen principles for many years.

To achieve a building design envelope that efficiently controls moisture, the following need to be addressed:

- Acknowledge that water will penetrate the exterior skin of most building materials and incorporate durable internal weather barriers, flashing and ventilation to prevent water entry to wall cavities
- Eliminate mold food from surfaces that can get wet
- Use exterior wall materials that remain stable and functional after exposure to transient moisture to avoid wetness as well as mold and mildew problems
- Choose durable moisture control materials that will provide long-term protection, as replacement is costly

– Niklas W. Vigener, P.E. Simpson Gumpertz & Heger

A new wrinkle on rainscreen systems is the use of insulation outboard of the stud cavity. Recognizing the inefficiency of locating insulation between an excellent thermal conductor such as metal studs, the Massachusetts Building code dictates that insulation should be located outboard of the stud system on all new commercial construction. The table below illustrates the actual R-value of insulation placed in the stud wall cavity.

System tests per ASTM C236					
	Nominal Framing Depth	Nominal Insulation R-Value	X	Correction Factor	= Effective R-Value
<i>R value reductions can be as high as 65%</i>	4" @ 16" o.c.	R-15		0.43	R-6.4
	4" @ 24" o.c.	R-15		0.52	R-7.8
	6" @ 16" o.c.	R-21		0.35	R-7.4
	6" @ 24" o.c.	R-21		0.43	R-9.0

The “Massachusetts Wall Design” is rapidly gaining acceptance among designers, and is starting to be used on projects here in the Midwest. This design was recently used for HeartCare Midwest in Peoria, Illinois.

In order to apply the “Massachusetts Wall Design” it is important to utilize a method of attaching the rainscreen cladding outboard of the rigid insulation board. To prevent crushing of rigid board insulation outboard of the studs, the architect designed a modified brick tie veneer anchor support by Hohmann & Barnard for an aluminum composite system. The system worked effectively, but was time consuming to install and worked with a limited thickness of insulation. The BJC Progress West project in O’Fallon, MO used a horizontal zee-girt attached to the studs to support the insulation and the air/moisture barrier, and vertical hat channels over that to support the horizontally-oriented Centria Concept Series panels.



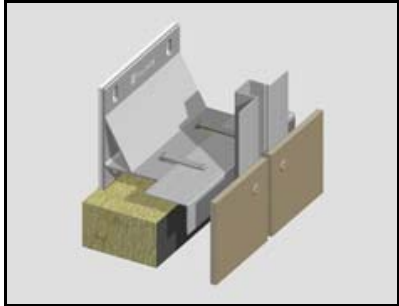
**HeartCare Midwest, Peoria, Illinois**



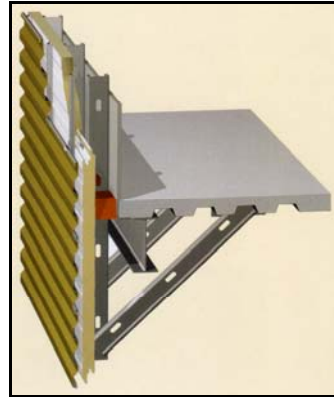
**BJC Health Care- Progress West, O’Fallon, MO**

We are the fabricator and installer on a project at North Carolina A&T University that has 3” of rigid board insulation outboard of the studs and uses a solid phenolic resin composite panel (Trespa Meteon) and aluminum composite material (Alpolic). The designer required an

adjustable system and we are using a European product from AllFace Smart Fixing which has brackets attached to studs with an adjustable angle that will support the Trespa Meteon system.



[AllFace subframe system attaches to studs with insulation outboard of sheathing](#)



[Centria "ICBP" insulated composite back-up panel with rainscreen cladding attached to face](#)

Another recent design is what Centria terms "ICBP" (insulated composite back-up panel) which uses a 2" or 3" thick insulated Versawall foam panel to be the air/moisture barrier, sheathing and the insulation system. Any type of rainscreen cladding can be installed over the foam panel. This concept can save significant time in the field allowing the installation of a weathertight foam panel and allowing the interior subcontractors to start earlier in the process.

There are some estimating issues that need consideration. With insulation outboard of the studs, the rainscreen cladding attachment fasteners cannot simply be made longer to penetrate the insulation thickness as the weight of the panel system would tend to shear them off and will usually require subframing. Based on design load requirements, subframing components may be spaced for optimal insulation use. For example, on the NC A&T project, due to design loads, the horizontal spacing of the brackets is less than 48". This impacts the insulation installer, as the stock width of 48" must be cut and used inefficiently. Another issue is the location of the air/moisture barrier; some designs show it behind the insulation, but over the framing. Others show it over the framing and insulation. Either circumstance may pose a challenge to the subcontractor installing the air/moisture barrier in order to effectively make sure it is properly installed and weathertight.

With time, some of the detailing and estimating obstacles will be refined and the benefits of the outboard insulation will become more cost-effective.

**Matt Ford**  
**UNIVERSE Corporation**  
[mattford@universecorp.com](mailto:mattford@universecorp.com)

References:

Centria ATMP (Advanced Thermal Moisture Protection) Handbook.  
Trespa Meteon.  
Hohmann & Barnard.  
Niklas W. Vigener, PE- Simpson, Gumpertz & Heger  
AllFace Smart Fixing.