BOoster NighT  
Thursday December 13, 2007

The Parthenon  *(since 1968)*
314 South Halsted
Chicago, Illinois
Free Valet Parking

Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>5:30pm-6:30pm</td>
<td>Cocktail Hour</td>
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<tr>
<td>6:30pm</td>
<td>Dinner - $20 Members AND Non-Members</td>
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<td></td>
<td><em>Beer, wine and cocktails (well drinks only) compliments of ASPE</em></td>
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<td></td>
<td><em>Chicago’s Affiliate Boosters - THANKS!!</em></td>
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Entertainment Throughout the Evening
- Greek music
- Free raffle for a single door prize (value exceeds $400)

Appetizer Buffet
- Mini cheese pies
- Mini spinach pies
- Baby meatballs
- Fried calamari

On the Table
- Bread and Taramosalata
- Athenian salad
- Rotisserie roasted suckling pig
- Rotisserie lamb
- Rice pilaf
- Roasted potatoes
- Pasticcio (Greek lasagna)

Dessert
- Tiramisu and coffee

8:30pm  
Special Entertainment - Authentic Middle Eastern Belly Dancer

RSVP as soon as possible!
⇒ Return the enclosed card *(for those of you getting this via US Mail)*,
⇒ Call Bruce Weiss at 312.960.8143,
⇒ Fax Bruce Weiss at 312.527.8143, or
⇒ Email Bruce Weiss at bweiss@owpp.com

Local Chapters are not authorized to speak for the Society
PRESIDENT'S MESSAGE

My fellow Americans, ASPE is back on track and we will have a fantastic year!

This Symposium was the greatest that we have ever had. 548 lucky attendees! Four of them won new laptop computers. Chicago 2005 had the previous record with 368 attendees. Watch out for info regarding the 2008 Convention. They will be giving away a car and lots of other stuff. It will also have a HUGE Product Show about the size of the Chicago Auto Show! Well, maybe half that size? It will have lots of seminars, too. After the huge success that we saw in Atlanta, I would not be surprised to see a maximum attendee number established. I’m just speculating here, but don’t take any chances. Register as soon as it becomes available, probably in about 6 months.

Did you attend GreenBuild in November at McCormick Place? As you would imagine, a lot of the featured products were out of our realm, but some were perfectly timely for us. These included rainwater recovery amongst other plumbing related items and of course several plumbing fixture manufacturers were showing their latest wares.

Technical Symposium Report

Now I know what they mean by “Hotlanta”! They don’t have any water. I didn’t see a single cloud in the sky from my arrival on Thursday until finally at the airport on Sunday. But seriously, I did not see much of Atlanta. I was busy with ASPE stuff. But lots of other people took advantage of the fruits of Atlanta. Speaking of fruit, I did not see a single peach! What’s with that?

An interesting observation of interest to Affiliates: because of the limited number of displays at the “table top” portion of the event, some products that we don’t normally see were right in the face of a somewhat captive audience. I understand that local reps may not have the means and/or inspiration to participate; but, it was truly an advantage to being there. Maybe your national people will want to think about this for 2009. That’s all I’m sayin’.

And from a more personal perspective, I really enjoyed visiting with the people that I have met over the years who I only get to visit with at these national events. I think that this sentiment is shared by all who attended. We always make new friends and business contacts, too.

We are internationally famous for being the best! Keep up the good work! We had at least one visitor from Australia! Phillip Giuseppe Bruno lives in Australia and he is a member of the Chicago Chapter! If he could make it to Atlanta from halfway around the world, we should be able to get there from Chicago. Let’s make the 2008 Convention in Long Beach the BIGGEST ever!

Dosia (Dorothy Thrasher) says HI! She is still in Phoenix (as the President of the Chapter), but she was at the Symposium and still a Chicago Member in her heart!

We are entitled to many benefits that come with ASPE membership. We have our general meetings which are great networking opportunities and technically informative as well as being social events. And we get CEU's for attending. We also have informative publications like PS&D Magazine, four volumes of PEDH manuals (formerly known as Data Books) and others. But maybe some of our most underutilized benefits are the national events. The Technical Symposia and (continued on page 3)
PRESIDENT'S MESSAGE (cont'd)

National Conventions alternate every other year. They provide all of the features of our monthly meetings and more, but in a concentrated form.

Chicago Rocked the Kasbah!
Four Chicago members gave presentations at the Symposium. All four of our Chicago presenters got rave reviews! They were Julius Ballanco, Dan Fagan, Joe Ficek, and Terry LeBeau. Great job guys! This stuff really pumps me up!

ASPE Chicago was presented with 3 awards. We picked up an award for Jason: “Award of Merit”, one for Rick: “Conspicuous Membership Growth”, and one “Certificate for Appreciation”, for Symposium Sponsorship. Great job guys!

ASPE Chicago’s November Meeting was no Turkey!
Were you there? Medical gas is a big part of plumbing work. It’s nice to have informed experts visit us and to share such knowledge. It was a “gas”! (pun intended) And of course, faucets and emergency fixtures are part of almost every project.

The food was fantastic! I especially loved the chicken. Really tasty and tender. See Bruce’s article for a full report on the meeting. HEY! Send in those RSVP’s! How is Bruce supposed to know that 77 people are coming if he only gets 30 RSVP’s? We’re lucky that LaVilla can handle the overflow. Remember our disaster at Pescatore last year? 100 people with 45 RSVP’s did not work so well. This time it worked, but please help us to plan properly. AND…..don’t forget to thank Bruce for making these meetings work!

Our 50/50 raffle went to the Leukemia Research Foundation again. December’s raffle will go to Toys for Tots. ALSO REMEMBER TO BRING A TOY OF SOME KIND! Not to play with, but to donate to Toys for Tots! Thanks for your support!

Did you catch the November issue of PS&D?
It includes an article about Solar Energy. It’s a preview of Chapter 10 of PEDH Volume 3, Solar Water Heating. Despite the fact that I wrote it, it appears to have come out okay, or so I am told. At least it may help to start thinking about this largely untapped resource. The time has come! Let the sun shine in! Nous sommes du soleil! (We are sun!)

Booster Night!
Calling all sponsors! Calling all sponsors! Have you signed up yet? Don’t miss out on this! It promises to be our best yet! See the details elsewhere within this newsletter and contact Dick Simms ASAP at dsimms@deery-purdue.com. This is one of your best opportunities to show your support.

Check Rick Butler’s article for more info on reduced ASPE Membership dues IF you sign up and pay at Booster Night! 50% OFF! It’s like a “Blue Light Special”! And thank Rick for coming up with that idea!

David DeBord, President

TOYS FOR TOTS

This year will mark our third year donating to Toys for Tots. As it is the holiday season, we hope you will all participate. In brief, Toys for Tots (www.toysfortots.org) is a program under the watchful eye of the US Marine Corps Reserve. The program is intended to provide new toys at the holidays for less fortunate children across America. 13% of children in the United States (31% in Chicago—that is more than 200,000 kids) live in poverty. Through Toys for Tots, we are each able to provide a positive impact on these children.

We ask that each of you brings at least one new toy to Booster Night. We will then take the collected toys to the US Marines and they will sort them for distribution to community groups such as churches, shelters, schools and the like. Toys should be new and unwrapped (the reason for no wrapping is so the Marines can sort them by age and gender.) We each have the ability to make a child smile this holiday season. Thank you all in advance for your support of Toys for Tots! If you want more information on the TFT program, please feel free to contact Jason McDonald (jsm@grummanbutkus.com).
NOVEMBER MEETING RECAP - MOVIES MAKE FOR INTERESTING CIRCUMSTANCES

First off I want to thank our November meeting Beer Laureates—Mick Bradford of Russo Sales and Mike Straughn of Water Saver Faucets Co. Second I want to thank Nevo Martelli for donating his winnings in the 50/50 Raffle back to the Leukemia Research Foundation.

Now onto the official report:

They say you need to say everything important in the first few sentences because that’s all anyone ever reads, so here goes. For the last two months we have had good attendance and also a very high percentage of people remaining after dinner for the presentation. It was suggested at LaVilla we try Pizza as a meal? Let me know what you think about this (Bweiss@owpp.com) Pizza—Yes or No? Thin or thick? What do you like on it (all anchovies will be on the side)?

For everyone who came to the November meeting, thank you and thanks for being so patient. I want to lead off thanking the approximately 30 people who gave me reservations; but, I really want to thank the 77 people who attended. I got a little nervous that there would not be a seat for everyone; but, I was confident that LaVilla could feed everyone. With the movie filming and the restaurant having to “rearrange” itself, the room was definitely cozy. In plumbing “speak” it was 800 drainage fixture units in a 4” house drain. If we can get this type of attendance for two meetings in a row (82 at the October meeting) I don’t care what we need to deal with.

Jim Ness presented his compression joints for joining medical gas and other mechanical piping systems. Jim did not get very much attention for his primer either due to the room layout and the heavy socializing going on. As the person who invited him, after seeing his exciting product I felt we should be able to give him an audience better than three or four people. Dick Simms suffered a similar fate during the October meeting. I mention this to get some feedback to increase the primer attendance and make it worth the presenters’ time and effort or if we should eliminate the primer altogether.

The main presentation on laboratory design was presented by Mike Straughn of Water Saver and Mick Bradford (PowerPoint operator extraordinaire) of Russo Sales. Mike reviewed the main considerations that plumbing engineers should concern themselves with from lab faucets, gas outlets and safety fixtures. Mike tailored his presentation because of our later start but was still able to provide an ample amount of information.

Bruce Weiss, Vice President Technical

WHAT’S COMING UP

A Lamb, a pig and a belly dancer walk into a Greek restaurant…. For $20 you can find out what happens.

On December 13th the Chicago Chapter will be meeting at The Parthenon (in Greek Town) for our holiday Booster Night extravaganza. Dick Simms and myself have not only set up a great beginning to a joke but also the makings of a Booster Night to be remembered. A full night of Greek music, Greek food and a parading of a whole roasted lamb and pig. Twenty dollars gets you all the beer, wine and any well drinks plus the meal. During dessert sit back and watch the belly dancer. If all that can’t keep you there, then stay for the free raffle—a single prize valued at over $400.

Please bring an unwrapped toy for a child and remember that the 50/50 raffle money also goes to Toys for Tots.

January Meeting in Schaumburg

A quick heads up that our January meeting will be in Schaumburg at Stonewood Ale House, just south of Woodfield Mall. It is getting very difficult to find a suburban location to accommodate our members in the ‘burbs. This is a new venue and the room is snug (but not as snug as the last meeting); so, your RSVP’s are very important along with your feedback on the location and food. We are also always on the lookout for new meeting locations; so, please give us your suggestions.

Bruce Weiss, Vice President Technical
MEMBERSHIP REPORT

Important announcement:

BOOSTER NIGHT MEMBERSHIP PROMO- “Target 400 members”

In order to make this years “BOOSTER” night the best ever; the Board has decided to offer a 50% reduction in dues for new members who join the chapter on Booster night. This is a one time offer. Membership renewals do not apply. Applications will be available at the meeting or they can be downloaded @ aspe.com under “join ASPE” - http://www.aspe.org/new/About_ASPE/ASPE_Membership/2007-2008MembershipApp.pdf. If you bring the application filled out, it will speed up the process.

If you know anyone who was interested in joining, but was on the fence due to monetary reasons please get this announcement to them!

**Members, don’t forget if you bring the new member to the meeting your dinner is compliments of the chapter!

Any questions in regard to this contact me @ 847-489-3167.

Finally, the directory is in its final proof and will be released within weeks. A big “Thank You” to Jason McDonald, for being the Proofmaster.

Rick Butler, V/P Membership

AFFILIATES CORNER - BOOSTER NIGHT 2007

Dear fellow Affiliates,
It is that time of year again for the ASPE Chicago Chapter’s Holiday party (aka Booster Night). If you have not received your request to contribute toward this event, please contact me. Thanks to the following Affiliates who have already responded (as of press time):

- RC Sales
- Bornquist
- Metropolitan Industries
- Cast Iron Soil Pipe Institute
- Russo Sales
- Kast Marketing
- Froet Industries
- Deery-Pardue
- J&J Sales
- Engineered Marketing Concepts
- Riddile
- Daugherty Sales
- Copper Development
- Symmons Industries
- T. Matera
- Repco
- Tramco

In order to receive sponsorship recognition, your check should be received no later than December 8th.

ASPE Chicago supports those who support the Chapter. Thank You!!

Richard Simms, Affiliate Liaison

RIDE TO THE ROCK 2008

Mark your calendars --- next year’s Ride to the Rock event benefiting the Leukemia Research Foundation is scheduled for Saturday, July 12, 2008. The first Committee Meeting will be Tuesday, January 22, 2008. If you want to be on the Committee, feel free to email at asperoad-rally@aol.com.
Symposium Trifecta

The 2007 ASPE Technical Symposium or as I think of it as my TRIFECTA of symposiums. This symposium marked a milestone for me my third technical symposium (San Antonio, Chicago and Atlanta). You will hear many times over that this was the best attended technical symposium in the history of ASPE, even better than the 2005 symposium on Chicago. It may have had better attendance but all of us in Chicago know attendance is not everything. After a few symposiums and conventions you get to know a few folks and it’s nice as always to get reacquainted. Our friends the Texans were there, and in fact they brought ten people. Everything in Texas is done big.

The Atlanta symposium gave the Chicago chapter a chance to shine in a big way. Four of the presenters were from the Chicago chapter; Dan Fagan (High Rises Systems), Terry LeBeau (Swimming Pool Design), Julius Ballanco (Residential Sprinkler Systems) and Joe Ficek (CPD Examination Review). This coupled with the Platinum sponsorship. Credit goes to Dave our president for pursuing that one. He has worked hard to make our chapter have a significant presence. The Chicago chapter was able to send six people to the symposium. Being able to offer members extra education (CEU’s) and the national ASPE experience is what we are all about. From what I saw, everyone who attended enjoyed the experience and I look forward to them participating in more ASPE activities in the near future.

The seminars I attended were all first rate, and the ones I attended were packed. One disadvantage to the most well attended symposium is that all the presentation rooms were full. Two of the seminars that I attended that stood out among the rest were medical gas systems and syphonic roof drainage. The speakers were exceptional. Dan Fagan had over a hundred people attend his seminar and Joe Ficek had 54 for the CPD review.

The Chicago and Atlanta Symposia had one thing in common; the airport. From the symposium hotel there was a clear view of the airport which just like Chicago, is nowhere near any outpost of civilization. ASPE national must like airports is about all I can surmise. The chapter sponsored it traditional nice dinner for anyone from Chicago, this time we allowed a special guest, Dorothy Thrasher, formerly of the Chicago chapter now residing in Phoenix. I will say there was a fantastic crab shack and bar within walking distance of the hotel, which is why we drove, and everyone could spend their last evening in drunken camaraderie.

Symposiums are marketed primarily as a way to further ones knowledge and education. To me that is secondary to meeting people from all over the country, and even getting to really know people in my own chapter better. One final item of note, when a bartender gives you a choice of a regular glass of beer or a big one, I found it’s best to ask just what big is, airplanes and hangovers don’t mix.

Bruce Weiss, VP Technical (and OWP/P)

My Experience

I didn’t know what to expect from my first national ASPE event. The Chicago Chapter has big and hospitable shoes to fill! To my pleasant surprise I found members from all the national chapters to be welcoming and social, and I made a lot of new friends. I got a chance to ease into the environment on Thursday night. I saw a lot of old faces among the many manufacturers’ representatives who were at the event. With so many great technical seminars featured throughout the weekend it was a challenge to choose which ones to attend. Several seminars of immediate interest to me based on current projects were Dan Fagan’s high rise seminar, some medical gas training and, of course, the CPD exam prep course. I came back with a mountain of technical handouts, a few new books, and a bad case of jet lag. Next time I go to a Technical Symposium I will be sure to fly direct! Thanks to all of you at Chicago ASPE for this opportunity!

Ben Rubach, Primera

ASPE Chicago Chapter,

I attended the Technical Symposium held in Atlanta this year. The experience was very informative, educational, and inspirational. It also gave me the opportunity to network and collaborate about the industry with other ASPE members throughout the country. I’ll be attempting to attend the National Convention held in Long Beach, CA next year.

One final but never least item that I should mention is that the Chicago Chapter simply ROCKS!!!

Angel Medina, The Facility Group
TALES FROM THE 2007 ASPE TECHNICAL SYMPOSIUM

Chicago ASPE Chapter,

I had the privilege to accompany several individuals from the Chicago Chapter to the city of Atlanta, Georgia for the 2007 ASPE Technical Symposium. The experience I had was being able to meet new members and reacquaint with members I met last year at the 2006 Convention in Tampa, Florida.

I attended several seminars and (2) excellent seminars which featured two of Chicago’s foremost members, Dan Fagan from OWP/P on HIGH RISE DESIGN and Joe Ficek from Grumman/Butkus Associates on the upcoming ASPE CPD EXAM REVIEW.

In brief, Dan spoke on three high rise projects that are currently under construction in Chicago. The class was very informative and had the attention of all who attended. Dan, I didn’t know that you talked so well in front of such a large crowd!!!!!! Great job and great presentation.

Joe spoke on the main areas of how to prepare you for the exam with his tips and tricks. The material was structured to provide an overall preparedness in test taking for all the individuals who attended. Again, Joe I didn’t know that you talked so well in front of such a large crowd either!!!!! Great job and great presentation.

I would also like to say we met an old member (Dorothy Thrasher alias Dosia) now residing in Arizona who sends her regards to all and told me to get a recipe from Hal Miller on his GLUG!

Thanks, again to the Atlanta chapter for making this the largest Symposium to date. As the words and wisdom from a higher being (Lau) “Remember: Chicago ASPE Chapter RISES above the rest!!!!!! AND ALWAYS WILL!!!!!”

Mark G. Mannarelli, Treasurer (and ESD)

2007 ASPE Technical Symposium

This November I was lucky enough to attend the best ASPE Symposium ever. The Symposium was well organized, well attended, ran smoothly and was quite interesting. The seminars available covered many useful topics and hot button issues for plumbing engineers. Some seminars I attended covered a variety of topics including high rise building systems, siphonic roof drainage, vivarium design (animal housing… I originally had no idea what it was either.) There was also a wide selection of Green Building classes, our new hot button issue with all the water shortages and conservation concerns. The water conservation topics were especially relevant because Georgia is currently in a drought.

I also had the chance to catch up with a few ASPE members I know from other Chapters and people who are ASPE supporters who we normally only see every couple years. Some of whom were even once part of our Chicago Chapter… Dorothy.

Overall it was a great learning experience and a chance to converse and even argue a little with the other engineers in our field. I recommend every member try to attend an ASPE Symposium or Convention if you get the opportunity.

Phill Kroll, Metro Design

The Technical Symposium was very helpful for me. The lecturers were well prepared and had very good visual aids. I was impressed by Fagan's "High-Rise Systems" and Rattenbury's "Siphonic Roof Drain Design" presentations. If I had the necessary software, I could implement "The Siphonic Roof Drain Design" in my projects. This could reduce the cost of the piping material for the system significantly.

Val Kurdaliev, Environmental Systems Design
ASPE CHICAGO DIRECTORY

As was mentioned in Rick Butler’s article, the Chicago Chapter Directory is VERY close to being issued. It should be out before the next newsletter. So, we are gonna try to prepare you now. The directory will be in four parts:

- ASPE Chicago Member Directory
- ASPE Chicago Manufacturers and Reps Directory
- ASPE Chicago Products Directory
- ASPE Chicago Manufacturers and Reps Index (a short reference list of those included in the Mfr & Rep Directory)

Current ASPE Chicago Members ONLY will receive the Member Directory – it is a benefit of being a Chapter Member. The other three sections will be available online at www.aspe.org/Chicago.

Now, as ASPE Chicago's membership roster is constantly changing, there may be some things printed that you think are wrong – company, address, phone, etc. If that happens…. Heck, WHEN that happens, please simply send an email to Rick Butler (rick@luczak.com) and he will make sure to get the database updated.

For our Affiliates out there – there are three sections of the directory devoted to you. Similar to our other members, the represented lines, personnel, etc for our Affiliates often change. And as with the members, please just send an email to Rick Butler. If you would prefer to not send it to another Affiliate (like Rick), feel free to send it to me at jsm@grummanbutkus.com. Either way, we will make sure you are taken care of. The plan is to update the online versions of the directory quarterly. Don’t quote me on that!

We hope this helps and hope you are pleased with the Directory. Happy Holidays to all of you!

Jason McDonald, Newsletter Editor
37th ANNUAL ASPE CHICAGO CHAPTER PRODUCT SHOW KICKOFF MEETING

Mark your Calendars!

Date: Monday December 17, 2007
Location: La Villa Restaurant Pizzeria & Banquets
3632 N Pulaski Rd
(between Patterson Ave & Waveland Ave)
Chicago, IL 60641
(773) 283-7980; www.lavillabanquets.com

Last year’s Product Show was one of the best we ever had. We had great exhibitors, awesome seminars and higher attendance than previous years.

As in previous years, the product show date and location will be:

Thursday, April 17th, 2008
WHITE EAGLE RESTAURANT
6839 Milwaukee Avenue, Niles, Illinois
Phone: (847) 647.0660

Make your voice heard!

Please note, that this meeting is open to ALL our members, especially our Affiliate members— at the end, this is YOUR show!

Also, if you would like become more involved with your Chapter activities, this is a great way to start! Attend the meetings and volunteer at the show, ASPE Chicago Wants You! Take advantage of this opportunity and provide us with feedback and suggestions.

During the kick-off meeting, we will establish the basic framework of the show and review a draft of technical seminars. Meeting agendas will be provided.

Product Show Seminars

If you are interested in presenting a technical seminar at the show, please come by and bring an outline. We will definitely consider all submissions.

Please RSVP to my address below. Food and beverage will be provided.

Thank you,
Frank Sanchez, CPD
Product Show Chairman
Grumman/Butkus Associates
820 Davis St., Suite 300
Evanston, IL  60201
847.328.3555  Ext: 251
fxs@grummanbutkus.com

OOPS - CORRECTIONS TO BE MADE

Every month we print the attendees from each meeting and it is my responsibility to gather all the names and forward them to the newsletter editor for publication. This is the one place where you can read your name in print and get your CEU credit validated. On occasion, we miss someone…..

- Nevo Martelli- September meeting (by the way Nevo has had almost perfect attendance the last few years)
- Joe Ficek and Dick Simms- October meeting

If I do leave you off the list, please contact me so I can make it right and you can get the credit you deserve.

Bruce Weiss, Vice President Technical
37th Annual ASPE Chicago Chapter Product Show

Thursday, April 17th, 2008
WHITE EAGLE RESTAURANT
6839 Milwaukee Avenue, Niles, Illinois
Phone: (847) 647.0660

Show Hours:
3:30 PM – 8:30 PM

Technical Seminars:
11:30 PM – 4:30 PM
Free CEU’s Offered
Including 4 hours of IL State CEU’s

Previous years included:
• Domestic Booster Pumps
• High-efficiency Water Heaters
• Thermostatic mixing valves
• Medical Gas Systems
• LEED for Plumbing Engineers
• And much more!!!

Buffet Dinner Available (Optional)
5:30 PM – 7:00 PM - $25.00

ATTENTION!!
CPD’S, PE’S & AIA’S
GET YOUR FREE CEU’S & 4 HORUS OF IL STATE APPROVED CEU’S
AT THE FINEST LOCAL SHOW IN THE INDUSTRY!

Over 90 Exhibits with more than 500 Products displayed!
Free Door Prizes and Giveaways!
Product Show and All Seminars are FREE

However, you must register at the show in order to get CEU’s.
For additional information, contact Frank Sanchez at (847) 328.3555 Ext. 251, or e-mail to fxs@grummanbutkus.com
TECHNICAL CORNER

We are specifying more high-efficiency equipment these days, as well we should. But are they always more efficient as a system? Let’s look at condensing-type water heaters as an example.

If we are required (some controversy here) to specify a minimum efficiency of 84% for gas-fired boilers, we can save 14% of our energy costs when we specify 98% efficient units - theoretically. One problem in quantifying these savings lies in the fact that efficiencies vary with several factors including incoming water temperature and return temperature. These factors apply to all types of heaters and we know that all of the numbers are subject to these variables; so, it might be reasonable to assume that we are still 14% more efficient. But in some cases, we can be making it worse for high-efficiency boilers.

One way that we may be working against ourselves is that we need to make sure that we modify our "old" piping methods. We designed the piping of "conventional" water heaters and boilers to prevent the flue gases from condensing since these gases could destroy the heater and/or the flue. If the gases condense in the unit itself, we might see deterioration of the jacket, or the controls, etc. If it condenses in the flue, it can make holes. Even small pinholes can be deadly. The living spaces of our buildings are generally under negative pressure while the flue is under a positive pressure. This can suck flue gases through these holes and into the living spaces. Carbon monoxide is one of these gases - odorless and colorless, it can kill.

There are many ways to configure our piping within hot water systems. On the right is one example of a SIMPLIFIED typical piping diagram for non-condensing units. Note that all of these diagrams are devoid of all valves, etc., for clarification.

Note that the water going into the units comes from the tank and it has been tempered by both the hot water from the units and the hot water return system. This helps to protect the units from thermal shock by raising the incoming water temperature. It also helps to keep our flue gases hot enough to prevent condensation in the flue.

Over-sizing is another thing that could lead to condensation damage. The whole idea is to keep the gases hot; but, if the units are not “loaded”, they may not be able to maintain a high enough temperature. Even decreasing the output temperature of the heater to 120F instead of 140F can damage the heater.

This is not the same for condensing-type units. We want to capture as much of the heat from the flue gases as possible. We want condensing-type units to condense. That is how we get the efficiency out of them. We need to extract as much heat energy out of the “fire” and into our water as we can. This is where our efficiency comes from. It’s a combination of the design of the units and the way we pipe them. Greater ΔT’s lead to greater potential efficiency because we are getting more heat energy out from the same amount of energy in. We don’t have to worry about condensation because these units are designed to withstand this environment. We do need to provide neutralizing basins for the condensate waste, however.

Here is a SIMPLIFIED diagram illustrating how we might pipe a condensing system. Note that it is different from the previous diagram. It is actually simpler. Cold water goes into the heater and hot goes to the tank. Hot water return also goes to the tank in this case. This maximizes our ΔT’s at the heat exchanger.

Remember that we may have issues with contractors because they don’t understand that we are trying to do something different. They may think we made a mistake; so, we need to make sure that they know why we did this and why it is important. It is essential that we call this to their attention on the drawings and that we monitor the submittals and installation to ensure that our design is followed. If we pipe a condensing type unit as we did a non-condensing unit, we will only get non-condensing efficiencies from the system. The units can cost as much as twice the conventional price. The system may last longer; but, we are not getting the results that we were seeking.

We shouldn’t be specifying expensive equipment that doesn’t provide a benefit to the client, even if it “looks good on paper”. A more detailed article is scheduled to appear in PS&D soon. Keep your eyes open.

David DeBord, President
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<tr>
<th>DATE</th>
<th>PRIMER</th>
<th>TECHNICAL</th>
<th>LOCATION</th>
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<tbody>
<tr>
<td>September 20</td>
<td>Plumbing Pump Controllers; Mike Vandenbergh, Daugherty Sales</td>
<td>Fire Pump Controllers; Jim Moynihan, Chicago Technical Sales/ Firetrol</td>
<td>LaVilla 3638 N Pulaski Chicago</td>
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<tr>
<td>October 18</td>
<td>Secondary Supports; Deery-Pardue &amp; Associates</td>
<td>Chicago Plumbing Code; Frank Bathauer, Chicago Chief Plumbing Inspector</td>
<td>The Parthenon 314 S Halsted Chicago</td>
</tr>
<tr>
<td>November 15</td>
<td>Pipe Joining Methods for Mechanical Piping; Jim Ness and Company</td>
<td>Plumbing Design for Labs; Mike Straughn, WaterSaver Faucet Co. and Mick Bradford, Russo Sales</td>
<td>LaVilla 3638 N Pulaski Chicago</td>
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<tr>
<td>December 13</td>
<td><strong>Change of date!!!</strong> Booster Night; Special Entertainment</td>
<td></td>
<td>The Parthenon 314 S Halsted Chicago</td>
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<tr>
<td>January 17</td>
<td>General Interceptors; Luczak Sales/ Jay R. Smith</td>
<td>Grease Separators; Deery-Pardue/ Rockford Separators</td>
<td>Stonewood Ale House 601 Mall Drive Schaumburg</td>
</tr>
<tr>
<td>February 21</td>
<td>Pipe Insulation; Tom Ronan, Added Sales/ IMCOA</td>
<td>PEX Design and Standards; Harold Miller, Miller Sales/ Zurn</td>
<td>LaVilla (TENTATIVE)</td>
</tr>
<tr>
<td>March 20</td>
<td>LEED Calculations; Sloan Valve</td>
<td>Grey Water and Water Recycling; Metropolitan Industries</td>
<td>LaVilla 3638 N Pulaski Chicago</td>
</tr>
<tr>
<td>April 17</td>
<td>Technical Seminars</td>
<td>39th Annual ASPE Chicago Product Show</td>
<td>White Eagle 6839 Milwaukee Ave Niles</td>
</tr>
<tr>
<td>May 15</td>
<td>Elections</td>
<td>Cast Iron Pipe and Standards; Alan Thomas, CISPI</td>
<td>The Parthenon 314 S Halsted Chicago</td>
</tr>
<tr>
<td>June 20</td>
<td>Annual ASPE Chicago Golf Outing</td>
<td></td>
<td>Hilldale Golf Club 1625 Ardwick Drive Hoffman Estates</td>
</tr>
<tr>
<td>July 12</td>
<td>ASPE Ride to the Rock</td>
<td></td>
<td>Chicagoland to Starved Rock</td>
</tr>
</tbody>
</table>