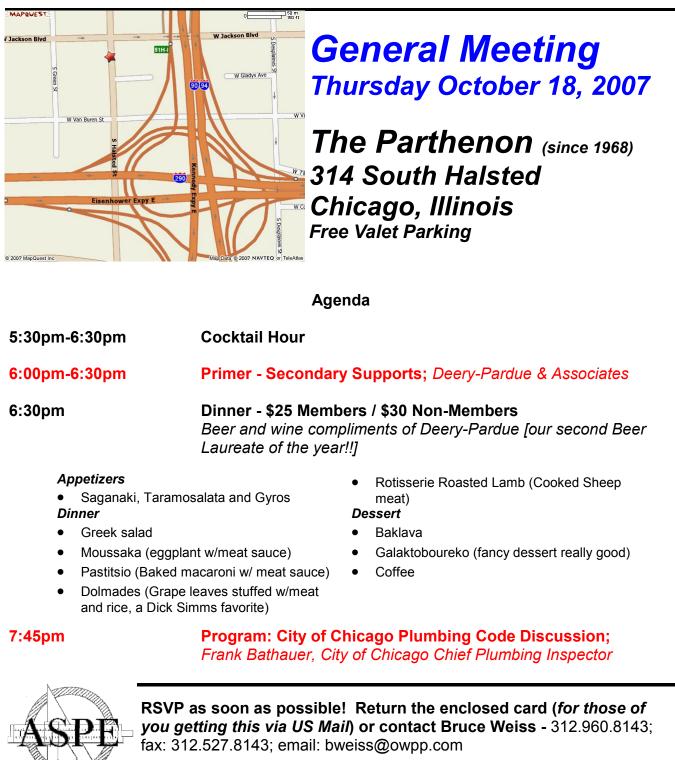
# Chicago ASPENEWS



Chicago Regional Chapter of the American Society of Plumbing Engineers Vol. 39, No. 3 October, 2007



Local Chapters are not authorized to speak for the Society

# PRESIDENT'S MESSAGE



#### WE'RE BACK!

Thanks to you, the September meeting was a huge success, and started our season off with a bang! Good technical sessions, good food, good company! Don't miss another meeting! Our October meeting is at The Parthenon in Greek Town (NOT the one in Greece). Look for more information in this newsletter. Don't forget to get your RSVP's to Bruce Weiss bweiss@owpp.com ASAP! You can win a FREE dinner, just as

Dave Wick did in September. We will have Frank Bathauer, the Chief Plumbing Inspector for the City of Chicago, as our guest speaker! Mr. Bathauer is a very busy man with many demands of his time; so, we are EXTREMELY lucky, thanks to Dan Fagan, to have him join us. We will be taking questions from the audience, and we will let Frank decide which will be answered, and in what order. This will allow us to focus on what he determines to be the most useful information that he can share with us, and therefore maximize the value of this truly rare event. YOU DON'T WANT TO MISS THIS OPPORTUNITY! Mark your calendars now!

### ASPE TECHNICAL SYMPOSIUM, ATLANTA, GEORGIA, November 2-4

**It's still not too late to register!!** As everyone knows, the ASPE Technical Symposium is this November in Atlanta, Georgia. You can find registration information on the ASPE website www.aspe.org. You can also find the latest information about the symposium, here: http://www.aspe.org/new/Conv\_Symp/2007/ASPE2007TechTympBroch.pdf

#### ASPE CHICAGO'S SYMPOSIUM TRIP WINNERS

We are proud to announce that the Chapter is giving 4 FREE trips to the Symposium! This includes airfare, symposium registration, and 3 nights of hotel! The winners are:

- 1. Phill Kroll of Metro Design
- 2. Angel Medina of Facility Group
- 3. Ben Rubach of Primera
- 4. Mark Mannarelli of Environmental Systems Design

#### **CONGRATULATIONS!**

REMEMBER, winners, you need to write an article after you return from the Symposium telling our Chapter about your experience, or sharing some of the technical expertise that you learned at the Symposium. Thanks to all who submitted letters for this drawing.

The legendary Joe Ficek will be presenting the famous Chicago Chapter CPD Exam Review Program at the Symposium. You can also view this program locally, for free (if enough of you express interest)! Thanks to Joe Ficek and Jason McDonald for putting this thing together. If you are planning to take the CPD exam [November 16 or 17] (and you should!), this is absolutely essential material for your success! Dan Fagan will also be presenting a Technical Symposium seminar on High Rise Systems!

**THERE MAY STILL BE SOME SPONSORSHIP OPPORTUNITIES** for our affiliates for this event. Forms and details are online and included here, too. This is a chance to be more involved in ASPE. There are also MANY more tangible benefits to sponsors. Check the ASPE web site for more info: http://www.aspe.org/new/index.php

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WEBSITE http://www.aspe.org/Chicago ("C" is required)

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# PRESIDENT'S MESSAGE (cont'd)

**Membership** – We're STILL the best! We are STILL the number one Chapter! Again, please make sure that you are using the current applications, when you invite a new member to join our crew. They can be found here: http://www.aspe.org/new/About\_ASPE/aspe-membership.php

**2007-2008 ASPE Chicago** - We have plenty of good things planned for this year. Check out Bruce's preliminary schedule within this newsletter. Please take a look and **REMEMBER**, some of it is still "**TENTATIVE**" and subject to change. Do you have a program you want to see? Do you want to present? Do you have a good meeting location in mind? Please let us know. Contact our **VP Tech, Bruce Weiss (bweiss@owpp.com)** with any questions, comments or ideas for our technical presentations for the upcoming year. AND you may want to thank him for his efforts to bring you the best programs possible.

**Are you LEED Certified?** – LEED Certification is becoming more and more important in our plumbing world. While only a limited number of credits are directly related to plumbing, there is a vital need for more LEED-AP plumbing engineers and designers. We should all strive to earn our LEED Certification just as we should all work to become CPD's and PE's. This is YOUR organization. Show it some respect by helping to make it the best that it can be.

**Are you involved in ASPE?** – ASPE is an organization that consists of people like you. If you want more out of it, consider putting more into it. Would you like to serve on a committee? Or become a convention delegate? Maybe run for office? Or just help out with an event? Even finding new members is a great way for you improve our professional society. Let us know how you would like to become more involved. We will help you find a way.

Thanks for your support! See you October 18 at the Parthenon!

## David DeBord, President

# **OCTOBER MEETING**

Secondary supports - what does that mean to you? Garters for your socks? A good waistband for your underwear? I assure you it does have something to do with plumbing and our friends at Deery-Pardue & Associates will be telling us about HoldRite and the extensive line of secondary supports they manufacture during the primer of the upcoming meeting. Also, Deery-Pardue has graciously offered to become the October meeting Adult Beverage Laureate (beer and wine for free). So come early and grab a drink in find out what secondary supports really are and how to specify them on your next job for the benefit of the owner.



Chicago is unique in that it is one of only a handful of cities that possesses its own plumbing code. Even in a state that does not use a standard plumbing code, we are affected by a city that in many ways sets itself apart; however, as plumbing engineers, the City of Chicago Plumbing Code and its special qualities affects us almost every day.

We are lucky to have Mr. Frank Bathauer, Chief Plumbing Inspector for the City of Chicago, as our esteemed guest. Frank will provide a brief explanation and clarification on many of the portions of the code. He will also talk about how the code is evolving and adapting as materials and installation methods change throughout our industry. There will be a brief question and answer period following the initial presentation. For this presentation we ask that questions be submitted in writing either at or before the meeting to the Vice President Technical, Bruce Weiss. This is being done to facilitate the meeting and get a response for all appropriate questions.

In closing I would like to encourage anyone with the means or company support to attend the upcoming Technical Symposium at the beginning of November in Atlanta.

#### Bruce Weiss, Vice President Technical

# SEPTEMBER MEETING RECAP

The primer was presented by Mike Vandenbergh of Daugherty Sales who did an excellent job of presenting an overview of pump controls and control panels. He also provided an overview of NEMA ratings as related to control panels and brought along quite an assembly of samples to help with his explanations.

The main program was presented by our Web Master and fire pump guru Jim Moynihan of Chicago Technical Sales. His presentation on the basic electronics of fire pump controllers was very educational; the overview of the basic starting methods of fire pumps and their relative cost comparisons was very informative. The crowds' captivation was a good reflection of the quality presentation he provided.

The Chicago Chapter thanks both presenters for the time and effort in bringing quality.

## Bruce Weiss, Vice President Technical

# SEPTEMBER 2007 MEETING ATTENDANCE = 60 PEOPLE

The following list of individuals attended the September 2007 meeting of the ASPE Chicago Chapter. In accordance with ASPE Society policy, these individuals are entitled to 0.75 RU's towards the required 24 RU's needed every two years to maintain CPD registration. Meeting attendance is also recognized by the Illinois Department of Professional Regulation to count as 1 PDH towards the required 30 PDH's needed every two years to renew Professional Engineering licenses.

Sean Allard Julius Ballanco Rick Butler Jeremy Cantor Mike Castellano Mike Cusack Ray Cruz Ken Cutler Mike Cwanek Natalia Dankanich Robert Daugherty Dave DeBord Jamie Diamond James Dipping Tony DiVito Vince England Jerry Fields Bryan Fonseca Paul Gangloff Albert Gehrke Gabriel Gomez Harry Gupta Brian Hank Herb Hymen Bob Jackson E.J. Kedzie Neil Kowalski Frank Langer Wingyin Lau Lindsey Lehman

Peter Wu Mark Loth Jim Majerowicz Brian Makenas Mark Mannarelli Ed Martinez Jason McDonald Jim Moynihan Tony Navarro Steve Norbut Jennifer Ogawa George Pagach Kerbie Reader Kelly Ryan Frank Sanchez Jodie Sherven Dick Simms George Sobyra Ted Sohn Jeff St. Onge Mark Stickney George Swietczak Bob Turk Mike Vandenbergh Don Ware Harold Weil Bruce Weiss Dave Wick Mel Withrow Dave Wolniak

This printing constitutes our record of who was in attendance. We apologize for any misspelling of names and ask that for future sign-ins please print legibly. Thank You!

# A MESSAGE FROM THE ADMINISTRATIVE SECRETARY



It is great to see you all again! Welcome back to another year of ASPE. We made it through the first meeting of the year. The best way to stay in touch with new developments in the industry is to attend our meetings. We planned a great selection of meetings for this year. So, make sure you take advantage of them and keep the 3rd Thursday of each month open on your calendars. Congratulations to those members who showed interest in attending the 2007 ASPE Technical Symposium in Atlanta and won free trips to the Symposium. The lucky winners are: Phill Kroll at Metro Design, Mark Mannarelli at ESD, Angel Medina at Facility Group and Ben Rubach at Primera Chicago. This is an

excellent opportunity to participate in the numerous classes that ASPE has to offer. Good luck in your future career goals. And I will see you all at Parthenon October 18, 2007.

# Natalia Dankanich, Administrative Secretary

## DON'T MISS THE ASPE TECHNICAL SYMPOSIUM!

**Atlanta GA November 2-4, 2007 -** I have been to these before and believe me; they are definitely worth your time and effort! They are a lot different from the conventions because all focus is put toward the educational aspect.

There are noteworthy speakers and many excellent technical sessions:

- Plumbing 101
- Green Building Systems
- Special Systems/ Emerging Technologies
- Advanced Plumbing Technologies
- Fire Protection
- Medical Gases

You can download the brochure here: <u>http://www.aspe.org/new/Conv\_Symp/2007/ASPE2007TechTympBroch.pdf</u>

Remember there are several ways to register. If you do nothing else this year, GET TO THIS EVENT! And register online NOW at <u>http://www.aspe.org/new/Conv\_Symp/conv-symp.php</u>! \*\* If you go to that website you will notice that Chicago Chapter is a Platinum Level Sponsor. So, let's pack the house!

ASPE Society will sponsor a CPD Review Course. The course is available to any paid registrant of the Symposium, we had this class in Chicago in the past, it is a great review class, don't miss it. The class is scheduled for Saturday, November 3, 2007, 9:00am-5:30pm, and the instructor is our dear Ex-President Joe Ficek from Grumman/Butkus Associates.

Also, don't miss out on our local opportunity to meet Frank Bathauer, City of Chicago Chief Plumbing Inspector on October 18th. This guy is the "guru" and on the most wanted list (of speakers); so, don't miss this great opportunity to learn and talk to him.

Finally, I would like to thank ASPE Chicago Chapter for their support to Team IBD Kids (Refer to my previous article).

## Frank Sanchez, Vice President Legislative

## **MEMBERSHIP REPORT**

Well here we go again, another ASPE year. It was great to see several new faces at the September meeting. Let's keep up the great attendance! Speaking of new faces, here is a list of new members who joined up with our Chapter since our last meeting in May:

Thomas Babcock Bradley Bates Chris Frauens Mark Karnatz Elena Liokwmovich Charles Loth Danayan Lyaskov Steven Montgomery Ryne Obenauf George Pagach Sean Rains Brett Scharpenter Robert Sershon Qing Zhang Michael Fong Scott Brykalski

Man, what a list!! If we do 1/3 of this every month we will be well over 400 in no time. Again, any existing member who had influence in getting our new members on board.....a big THANK YOU!!

Any membership issues you run across please contact me so I can help you.

Sorry, I have to say it: GO CUBS GO GO CUBS GO

Hey Chicago, what do you say, Chicago ASPE is the biggest today!

Rick Butler, Vice President Membership



# 37TH ANNUAL ASPE CHICAGO CHAPTER PRODUCT SHOW



Mark your calendars!

## Thursday, April 17th, 2008 WHITE EAGLE RESTAURANT 6839 Milwaukee Avenue, Niles, Illinois

ASPE WANTS YOUR FEEDBACK FOR THE 2008 PRODUCT SHOW Keep your eyes open for the full page **COLOR** ad on the next Plumbing Systems & Design Magazine!

We had an outstanding show last year, excellent attendance and the best products in the industry. Also, we moved things around a little, for instance, we located the ASPE control

tower to the center. We are <u>always</u> open to suggestions.

- Do you have any comments or suggestions on how to improve this show and increase traffic?
- Did you like your neighbor at our last show?
- Would you like to be part of the Product Show committee? Please note that the first meeting will occur on the first week of December 2007. (Time and date TBD)

So far, I received very interesting ideas that I will consider. Some suggested providing a bus from downtown or from the plumber's union in order to increase foot traffic. Also, some people mentioned they will prefer to have a show every two years instead of on an annual basis, while maintaining our seminars and state approved CEUs year after year. This will obviously have a big financial impact on the chapter and we will have to study its feasibility.

Do you want to hear more about these ideas? Well, just take some time and drop me an email or give me a call, ASPE wants to HEAR what you have to say!

## Frank Sanchez, Vice President Legislative/ Product Show Chairman

# CORRESPONDING STUFF

## Society of Fire Protection Engineers (SFPE) (www.chicagosfpe.org)

- ⇒ 2007 Firestop Symposium A Chicago Perspective; From Specification to Inspection Tuesday October 9, 2007; The University Club of Chicago, 76 East Monroe Street, Chicago, IL 7:30am Continental Breakfast; Registration and Exhibition 8:30am–5pm Lectures, Presentations and Exhibits Who should attend: Architects, Engineers, Contracting Professionals, Inspectors, Specifiers, Building Owners/Managers and Authorities Having Jurisdiction
- ⇒ 2007 Illinois Fire Safety Alliance Fire Prevention Week Luncheon

Thursday October 11, 2007; White Eagle Banquets, 6839 North Milwaukee, Niles, IL 11:00 A.M. Social Hour – 12:00 P.M. Lunch \*\*Tickets are \$35 and \$45 after October 1st: go to www.chicagosfpe.org. Upcoming Ev

\*\*Tickets are \$35 and \$45 after October 1st; go to www.chicagosfpe.org, Upcoming Events for complete reservation form.

## <u>CSI Chicago</u>

 $\Rightarrow$  9th Annual Chicago Architecture Conference and Product Show

- Tuesday, October 23, 2007; Drury Lane Conference Center; Oakbrook Terrace, IL
  - All day event with keynote address, seminar sessions, product show (90 + Exhibitors)
  - 15 Different Continuing Education Seminars
  - Professionals Can Earn up to 6 CLU's in Health, Safety and Welfare
  - Seminar Tracks in Building Envelope, Design, Legal/Business, Sustainability and Technical
  - Keynote Address: ""Green Buildings and the Bottom Line The 'New Reality' of Green Building" with Robert Cassidy, Editor of Building Design Construction

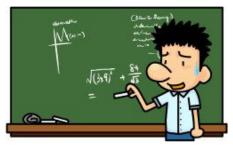
Jerry Fields, Corresponding Secretary

# PLUMBING BASICS: HOW MUCH ENERGY DOES IT TAKE TO HEAT WATER?

All of the equations that we use for water heater calculations, are based on the principle of Conservation of Energy. That means that energy is transferred from one medium to another. For instance: from a heating element, to the water in a water heater.

So, how much energy does it take?

- 1 KW will provide 4.1 gallons of hot water per hour (GPH), at a 100 degree temperature rise [4.1 GPH/1 gal-100°F = 410]
- 1 watt is approximately 3.41 BTU/h
- So, 1KW = 3,410 BTUH (approximately)
- 1000 BTU/h is approximately 293 W
- 1 BTUH will heat 1 POUND of water, 1 degree Fahrenheit



Here are some comparisons for a few different  $\Delta T^{\circ}F$  (also referred to as "delta T's), and the GPH that can be acquired for each KW of input.

GPH	PE	R KW C	AL	CULATOR	
factor "x"	/	ΔT°F	=	GPH per KW	
410	/	30	=	13.66666667	1
factor "x"	/	ΔT°F	=	GPH per KW	
410	/	80	=	5.125	•
factor "x"	/	ΔT°F	=	GPH per KW	9
410	/	100	=	4.1	

As you can see, the delta T is extremely important. You can put these numbers into a spreadsheet, and calculate for any delta T. Sometimes it is beneficial to compare calculations at different delta T's to explore the design parameters that you need for a given application.

Here is a useful comparison for gas water heaters:

If we know the information in the "blue" boxes, we can calculate the "yellow" boxes:

BTU input	=	GPH	x	DELTA T	x	8.33 LB/GAL OF WATER
mpat	_	••••		IERMAL EFF		
98,000	=	100	Х	100	Х	8.33
				0.85		
87,684	=	100	Х	100	Х	8.33
				0.95		
70,147	=	100	Х	80	Х	8.33
				0.95		

This can be worked from the other side too:

<b>BTU/HR</b>	Х	EFFIC.	1	(DELTA T)	Χ	8.33	=	(GPH)
100,000	Х	0.85	1	100	Χ	8.33	=	102.0408163
<b>BTU/HR</b>	Х	EFFIC.	1	(DELTA T)	Χ	8.33	=	(GPH)
90,000	Х	0.95	1	100	Χ	8.33	=	102.6410564
<b>BTU/HR</b>	Χ	EFFIC.	1	(DELTA T)	Χ	8.33	=	(GPH)
98000	Х	0.95	Ι	80	Χ	8.33	=	139.7058824

We can see that efficiency also has a great affect on our output. I hope that this is helpful for someone out there.

#### David DeBord, President

\*\*The preceding is the first of what we hope are many articles that share some of the technical and design side of what we do as Plumbing Engineers. We welcome your comments regarding this new addition and we also welcome your own articles!! So, if there is something you think other Chicago Chapter members might find useful, please share that with us. Just contact Newsletter Editor Jason McDonald at jsm@grummanbutkus.com.

DATE	PRIMER	TECHNICAL	LOCATION
September 20	Plumbing Pump Controllers; <i>Mike</i> <i>Vandenbergh, Daugherty</i> Sales	Fire Pump Controllers; <i>Jim</i> Moynihan, Chicago Technical Sales/ Firetrol	LaVilla 3638 N Pulaski Chicago
October 18	Secondary Supports; Deery-Pardue & Associates	Chicago Plumbing Code; Frank Bathauer, Chicago Chief Plumbing Inspector	The Parthenon 314 S Halsted Chicago
November 15	Pipe Joining Methods for Medical Gas Systems	Plumbing Design for Labs; <i>Russo Sal</i> es	LaVilla 3638 N Pulaski Chicago
December 20	Boos Special	The Parthenon 314 S Halsted Chicago	
January 17	General Interceptors; Luczak Sales/ Jay R. Smith	Grease Separators; Deery- Pardue/ Rockford Separators	Rosewood [tentative]
February 21	Pipe Insulation; <i>Tom</i> Ronan, Added Sales/ IMCOA	PEX Design and Standards; Harold Miller, Miller Sales/ Zurn	TBD
March 20	LEED Calculations; <i>Sloan</i> <i>Valve</i>	Grey Water and Water Recycling; <i>Metropolitan</i> Industries	LaVilla 3638 N Pulaski Chicago
April 17	Technical Seminars	39th Annual ASPE Chicago Product Show	White Eagle 6839 Milwaukee Ave Niles
May 15	Elections	Cast Iron Pipe and Standards; Alan Thomas, CISPI	The Parthenon 314 S Halsted Chicago
June 20	Annual ASPE	Chicago Golf Outing	Hilldale Golf Club 1625 Ardwick Drive Hoffman Estates