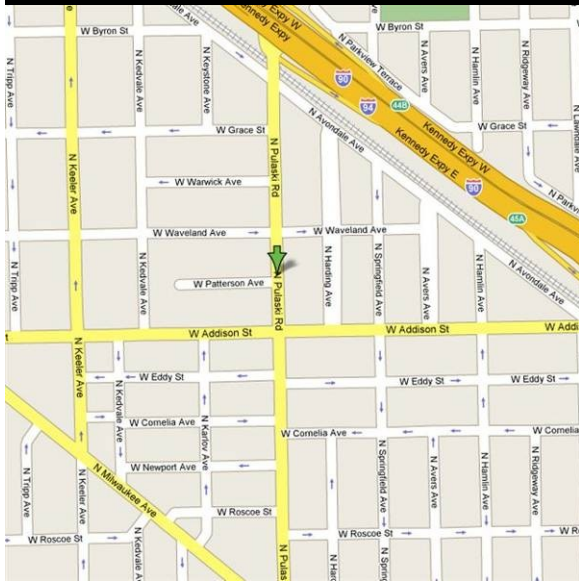


Chicago ASPENEWS



Chicago Chapter of the American Society of Plumbing Engineers
Vol. 39, No. 8
March, 2008



General Meeting Thursday March 20, 2008

LaVilla
3638 North Pulaski
Chicago, Illinois
Plenty of Free Parking



AGENDA

- 5:30pm-6:30pm** Cocktail Hour; *Beer Laureate Repco Associates (free beer and wine)*
- 6:00pm-6:30pm** *Primer - LEED Calculations; Sloan Valve Company and Repco*
- 6:30pm** Dinner - \$25 Members / \$30 Non-Members

MENU

Appetizer

- Focaccia
- Irish soda bread

Dinner

- House salad with dressing
- **Corned beef and cabbage**
- Chicken Vesuvio

- Cream potatoes

Dessert

- Make your own ice cream sundae

Beverages

- Pop, coffee, wine and beer (maybe even of the green variety!)

7:45pm

Technical Program - Grey Water Recycling and Rain Water Recovery; Metropolitan Industries

RSVP as soon as possible to Bruce Weiss, VP Technical!

- Return the enclosed card for those of you getting this via US Mail
- Call 312.960.8143
- Fax 312.527.8143
- Email bweiss@owpp.com



Local Chapters are not authorized to speak for the Society



PRESIDENT'S MESSAGE

**Have you noticed the technical articles tucked away toward the last pages of the ASPENews? We have run several of them and hope that you are reading and enjoying them. If you have any comments, please email me at ddebord@esdesign.com. There are other things of interest hidden in our pages such as Bruce Weiss's articles on interesting plumbing history tidbits, etc.*

The Groundhog Went Down Hard!

By the time you read this, it will be March, and on the cusp of the Vernal Equinox. Winter is heading back to Canada where it belongs. The weather for our February meeting was reasonably comfortable, but a few of us were UNDER the weather! I trust that everyone is feeling better by now.

We had 45 RSVP's and 69 participants! That's a *little* better than last month. Keep those emails coming folks! **Please RSVP: bweiss@owpp.com**

I heard that the February speakers were quite interesting. PEX is an intriguing material. Obviously it is working for Closed Loop Radiant Systems. It may not be used much for "plumbing" now, at least not in Chicago, but it looks like something that should be "in the engineer's toolbox" for special circumstances. It may also have a place in solar systems, like in a heat dump loop, for instance. I know that some of the information and notices that we include in our ASPENews may be repeated a few times. This usually pertains to important subjects, such as conventions, seminars, and other important news. We don't want you to miss out on anything!

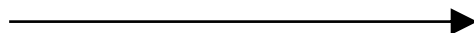
Special thanks to our VP Technical, Bruce Weiss, for filling in as Master of Ceremonies at the February meeting. I was sick as a dog and showed up only for the Board of Directors Meeting. Then I went home and back to bed. Also thanks to our VP Legislative, Frank Sanchez for filling in as Treasurer. Mark Mannarelli was recovering from rotator cuff surgery! That accounting is hard work! Frank ALSO filled in for our Administrative Secretary, Natalia, because she was stuck at work, buried in deadlines! Frank is also the Product Show Chairman so he had his hands full. Good Job Everybody!

Join us in March for an unofficial St. Patty's Day dinner of corned beef and cabbage! *All licensed leprechauns get a special deal. You must show your official license and pass a secret test! Interesting that it is a GREEN topic, so close to a GREEN Holiday! Hmmm.... Coincidence? This should be one of our best meetings of the year!*

Make sure that you don't miss any upcoming meetings. There are only 2 "regular" meetings left this year: March and May. **April is the Product Show.**

Don't forget that the **Product Show** is coming soon. If you are an exhibitor, be sure to get your paperwork and checks in ASAP **OR YOU MAY BE A SPECTATOR!** If you *are* a spectator, not that there is anything **WRONG** with that, mark your calendar and be there for the seminars and the show. There's dinner too, as you know. Frank Sanchez is the Product Show Chairman this year, so contact him if you have any questions or comments. Watch for announcements of the Product Show later in this newsletter.

(continued on page 3)



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WEBSITE

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

PRESIDENT'S MESSAGE (continued)

CPD REcertification

For many of us, our CPD Certifications expire on April 30, 2008. Please submit your CPD renewal applications by May 1, 2008.

Check the link for more info: <http://www.aspe.org/new/CPD/CPDReCertificationPackage.pdf>. If you have any questions, feel free to contact Stacey Kidd at SKidd@aspe.org

New PEDH (Data Books) are out!

PEDH Volume 3 should be in your hands and PEDH Volume 4 should be coming soon! You've got mail!

Water for People is a charity that we found that needs our help. We will, at least temporarily, give the 50/50 Raffle proceeds to them. For more information check this out:

<http://www.awwa.org/About/Content.cfm?ItemNumber=29231&navItemNumber=1639>

Thanks for your support! See you March 20 at LaVilla in Chicago!

David DeBord, President

2008 ASPE NATIONAL CONVENTION

Have you ever been to an ASPE Convention? It is a mind-expanding experience for sure. Your Chicago Chapter will need delegates to attend the meetings and to vote on various bylaw amendments, etc. Not to mention, this includes a gigantic product show, door prizes of laptops and vehicles, and seminars of the highest caliber. There is work to be done, but there will be some fun too, and lots of networking and learning opportunities.



If you would like to be considered as part of the entourage, please send us a note as to why you would like to be considered a candidate for a delegate position. Send that to our Administrative Secretary, Natalia Dankanich, nkd@grummanbutkus.com.

We will vote on the candidates at our May ASPE meeting. Delegates will attend the convention for free. Stay tuned for more details.

Special Offer for New Members

If you sign up to be an ASPE Member in the next few weeks, you will be eligible to receive the brand-new *Plumbing Engineering Design Handbook, Volume 3: Special Plumbing Systems*. As an added bonus, you also will receive *PEDH Volume 2* (2005 edition). Reference promo code **08PEDH** on your [new member application](#) to receive this special offer. (**Offer is good while supplies last.**)

Next CPD Exam Will Be Held in April

The Certified in Plumbing Design examination will be administered on Friday or Saturday, April 18 or 19, 2008, depending on available sites. The exam is an online proctored exam with approximately 200 possible testing sites throughout the U.S. and Canada. The testing fee for the examination is \$375 for ASPE members, \$300 for ASPE members with PE, and \$625 for nonmembers or \$550 for nonmembers with PE. Download the [CPD Bulletin](#) for more information.

FREE CPD REVIEW CLASS (for ASPE Members)

Joe Ficek, of Grumman/Butkus Associates, and also a Past ASPE President, will teach his *famous* CPD Review Class - Saturday April 5 at Grumman/Butkus Associates office in Evanston. If you are planning to take the exam, **THIS CLASS WILL HELP A LOT! RSVP NOW!!**

If you plan to attend, PLEASE contact Jason McDonald JSM@grummanbutkus.com ASAP! If we do not get enough responses, we will cancel the class!

David DeBord, President



WHAT HAPPENED AT THE FEBRUARY MEETING?

If you were there you can skip ahead or validate my recap of the meeting; however, if you were not I will provide you with the Cliff's Notes version so you can act like you were there and impress your co-workers with your avid participation in ASPE.

To begin with I want to wish our President best wishes on getting over the flu. Like the trooper he is he came to the ASPE Board of Directors meeting but had to leave before the meeting started. Good thing ASPE has a plan for such emergencies; so, yours truly the VP Tech had to step in. Speaking of extra duty Frank Sanchez also did Treasurer duty - thanks Frank for doing the old job and signing everyone in and collecting the cash.

We had a very informative primer on pipe insulation and the main presentation on PEX was also very good. I want to start out by thanking Tom Ronan of Added Sales and Harold Miller of Miller Sales for supplying extremely knowledgeable factory representatives to present these two products. In fact not only did they present a very informed speaker they each brought a small supporting army with great visual aids and literature. If either of these topics is of interest to you contact the Affiliates for further information or to set up a visit.

For the first time at LaVilla we tried a pizza appetizer and from the speed in which it was wiped out I pronounce it a success and think we may be seeing it again. I also found out LaVilla has fantastic fried chicken.

We are getting very good attendance lately at our meetings and I couldn't be happier about it. In fact our reservation count made it to about 60% this time. If you show up for a meeting and are going to hang out at the bar or go have a smoke or whatever, can you please check in first and grab a chair then disappear? This will help us judge how many people will actually be there because when 10 people come in right at the start of the meal it's very difficult for us to get an extra table set up.

WHAT TO EXPECT IN MARCH

March is going to be our LEED month at ASPE. For the primer, Repco will be providing a representative from Sloan Valve to demonstrate how LEED points are calculated using the USGBC standards. The main event will feature a system that Metropolitan Industries is presently using for rain water recovery and grey water recycling.

I want to thank Metropolitan in advance for sharing their technology in the newer frontiers LEED is presenting to the plumbing industry. This should be a very interesting presentation as there are not many systems available to the plumbing engineer as of yet. I expect this to be a popular program so **please RSVP early**.

In honor of the Irish and that glorious St. Patrick we are having corned beef and cabbage. We may have green beer, we may not - it's a LaVilla surprise. Speaking of beer, big thanks to Repco for being our Beer Laureate for the evening!

Bruce Weiss, Vice President Technical



AFFILIATE ACTION

Fellow Affiliates:

The Product Show is coming fast. Please send in your booth reservation forms ASAP to ensure your space. If you have not received one, contact me and I will see that you get

one - 847-910-8873, dsimms@deery-pardue.com.

Richard Simms, Affiliate Liaison

CPD REVIEW CLASS

**Saturday April 5, 2008
9am-4pm**

Grumman/Butkus Associates
820 Davis Street, Suite 300
Evanston, IL 60201

Instructed by: *Joe Ficek, G/BA & ASPE Chicago
Past President*

Cost: **FREE to ASPE members!!**

RSVP TODAY! Contact Jason McDonald,
jsm@grummanbutkus.com or 847/328.3555 x204.



MEMBERSHIP NEWS

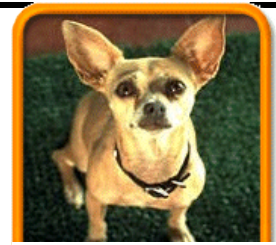
We are going to have to get a bigger bus!! More and More New Members!!!

Please join me in welcoming the newest of the new members of Chicago ASPE:

George Acala- The Plumbing Company
Kelli Airado- Luczak Sales, Inc.
Alison Conwell – Student
Joe Hainut- W-T engineering
Barry Janovsky- Globe Union
Neil Kowalski – Mechanical Room, Inc.

Don Netzel – The Plumbing Company
Joe Pedigo – Culligan
Jeanne Reid – Globe Union
Branden Taylor – Primera Engineers
Jon Tranzese – W-T Engineering

Keep 'Em Coming!!!!



I theenk we need a beeger bus!

Newsflash: New member wins 50/50 pot\$\$

Who says new members do not win anything. Three months into this person's membership, he won the 50/50 raffle good for over \$100 bucks!

Need to relax? Try this:

- ◇ Think about something that makes you feel good.
- ◇ Relax your shoulders. Close your mouth. Inhale slowly and as deeply as you can. Keep your shoulders relaxed.
- ◇ Hold your breath while you count to four.
- ◇ Exhale slowly, letting out all of the air from your lungs.
- ◇ Slowly repeat these steps five times.
- ◇ Finally, tell your Friends and Associates to join ASPE!

Rick Butler, Vice President Membership

FEBRUARY 2008 MEETING ATTENDANCE

The following list of individuals attended the February 2008 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 De-

Gazcu Bacher	Jerry Fields	Mark Loth	Frank Sanchez
Rick Butler	Jason Geller	Mark Luczak	Kieth Seier
Sergio Cano	Gabriel Gomez	Harold Luier	Dick Simms
Mike Castellano	George Gonzalez	Nevo Martelli	George Sobyra
Jeff Cochran	John Grabbartz	Frank Mazzaresse	Chris Sopiartz
Manuel Cordero	Jason Herber	Shawn McAuliffe	Brandon Taylor
Dan Courtney	Bert Herdmer	Jack Miller	Bob Turk
Ray Cruz	Tom Higgins	Harold Miller	Nick Turney
Mike Cusack	Herb Hymen	Tony Navarro	Mike Vandenberg
Ken Cutler	Bob Jackson	Bob Nolan	Bruce Weiss
Ralph Dantino	Barry Jankovski	Ryan Obenauf	Rick Whitaker
Fransico Dehoyes	Don Johnson	Ryan Ohm	Michael Whiteside
Jamie Diamond	E.J. Kedzie	George Pagach	Mel Withrow
Jill Dirksen	Terry LeBeau	Joel Pedigo	Min-Hwan Yang
Tony DiVito	David Lehman	Bob Pikula	
Jim Fenny	Ed Lichner	Larry Raddatz	
Joe Ficek	Steve Lipsey	Kerbie Reader	

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!



**PRODUCT SHOW
UPDATE !**

Happy Saint Patrick's Day to all of you! Celebrate with moderation and if you go overboard, please call me!

We had our third Product Show meeting in Evanston on February 28 and I am proud to announce that the Show is almost ready! Our seminars are ready and the booths are selling fast!



EXHIBITORS - Please remember to send me your application and check ASAP! In your mailing, I included a copy of last year's booth layout so that you can select a location. All final arrangements will take place on Booth Selection night in April - see the end of this article.

ADVERTISING! We need your help!

Please use the attached 2008 Product Show Flyer and help us distribute it. Place it at your workplace, supply houses and other local shows.

Mark your calendars for
37th ANNUAL ASPE PRODUCT SHOW
Thursday, April 17, 2008
WHITE EAGLE RESTAURANT
6839 Milwaukee Avenue, Niles, IL

SEMINARS

ROOM 1 - Green Seminars, LEED related topics.

Green (LEED) Fixtures * Solar Water Heating * Rainwater Reuse * Codes and Green Building Design

ROOM 2 - State of Illinois Approved CEUs, seminars based on the Illinois State Plumbing Code

Sewage and Sump Pump/Storm Water Systems * Alternate Venting * Thermostatic Mixing Valves * High Efficiency Water Heaters

ROOM 3 - Special Systems, Medical Gas and Fire Protection

Alternate Methods for Maintaining Hot Water Temperature * Medical Gas Systems * Fire Protection (Dry Pipe Systems) * VFD's on Swimming Pool Applications

PRIZES!

Product Show Attendance Raffle Ticket

As usual, we have great prizes and giveaways. They are free - just fill one out (and only ONE) Product Show Raffle Ticket and drop it off at the main entrance.

Last year we had excellent prizes that included:

*Two 15" Laptops * Digital Camera * iPods * Five \$100 envelopes, and we are talking CA\$H!!*

50/50 RAFFLE

The pot is usually quite large; so, make sure you get tickets!

*** Even though we greatly appreciate the gesture, we will not allow any of the prizes to be given back to the Chicago Chapter. Simply put, if you don't want to keep them, that is your problem! Give them away to your church or favorite charity.*



NEW!! NEW!! FOR 2008

Seminar Attendees Raffle, a \$300 value!

The more seminars you attend the more chances you will have to win the great prize.

I would like to thank the people who participated in our third meeting,

- ◇ Jamie Diamond & Peter Wu, Lehman Design
- ◇ Harold Miller, Miller Sales
- ◇ George Pagach, RC Sales
- ◇ Dick Simms, Deery-Pardue
- ◇ David Debord & Lyndsay Whitfield, ESD
- ◇ Jason McDonald, Grumman/Butkus Associates

Frank Sanchez, Product Show Chairman

BOOTH SELECTION NIGHT
Friday April 4; 6:30pm
Luczak Sales; 1128 Tower Road;
Schaumburg, IL; (847) 781-5100
www.luczak.com
Some of our Affiliates have already indicated where they would like to display - Booth Selection Night is where they can lock in their spot(s)!
RSVP ASAP to: fxs@grummanbutkus.com or 847 328.3555 x251

37th Annual ASPE Chicago Product Show

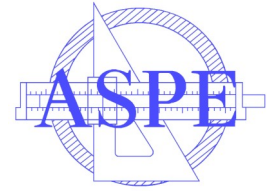


Thursday April 17, 2008

White Eagle Restaurant

6839 Milwaukee Avenue; Niles, IL

847 647.0660



Lots of door prizes!
Grand prize drawing at 8:30pm!

Winners must be present to win.

Polish smorgasbord dinner available for \$25!

PRODUCT SHOW
OVER 90 EXHIBITS
HUNDREDS OF PRODUCTS

Show times
3:30pm - 8:30pm

Free admission tickets available online at
www.aspe.org/Chicago

Come see the finest local show in the industry featuring products from the plumbing, fire protection and medical gas industries!



EDUCATION

12 hours of seminars
(4 hours in each of 3 rooms)
11:30am - 4:15pm

ALL SEMINARS ARE FREE!!

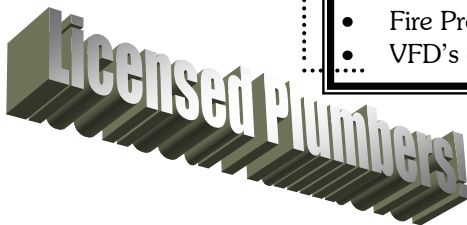
Inspectors and Plumbers - Your last chance to get CEU's before this year's deadline!

SEMINAR TOPICS WILL INCLUDE:

- Sewage and Sump Pump/Storm Water Systems
- Alternate Venting
- Thermostatic Mixing Valves
- High Efficiency Water Heaters
- Green (LEED) Fixtures
- Solar Water Heating
- Rainwater Reuse
- Codes and Green Building Design
- Alternate Methods for Maintaining Hot Water Temperature
- Medical Gas Systems
- Fire Protection (Dry Pipe Systems)
- ... VFD's on Swimming Pool Applications

FOUR HOURS APPROVED BY STATE of ILLINOIS!

ALL HOURS ARE ASPE APPROVED!



NEW FOR 2008!!
SEMINAR ATTENDEE RAFFLE!!

The more seminars you attend, the more tickets you get. One prize valued at over \$300!

For more information, contact Frank Sanchez at 847 328.3555 or fxs@grummanbutkus.com



CORRESPONDING STUFF

ASHRAE, www.illinoisashrae.org

ASHRAE plans satellite broadcast on Integrated Building Design (FREE)

April 16, 2008; 1-4 pm EDT

Integrated Building Design: *Bringing the Pieces Together to Unleash the Power of Teamwork*. The ASHRAE program focuses on whole-building integrated design.

“The broadcast explains what you and other members of the building team must do to advance high-performance buildings with improved design, construction and operations processes,” said Bill Williams, chair of the event. “Buildings that meet the needs of occupants and truly achieve sustainability objectives can only be created if the building community shares its knowledge and experiences.” For more information, visit: www.ashrae.org/education/

ASHRAE offers free downloads of guides

ASHRAE is currently offering free downloads of the electronic versions of the Advanced Energy Design Guides (AEDG). Currently available are: *AEDG for Small Office Buildings*; *AEDG for Small Retail Buildings*; *AEDG for K-12 School Buildings*. Additional versions are being developed for publication. Visit www.ashrae.org/freedaedg

SFPE, www.chicagosfpe.org

6TH ANNUAL IFPA-SFPE Fire Protection Product Show

Tuesday, March 18, 2008, 4pm-8pm

White Eagle Banquets and Restaurant; 6839 N. Milwaukee Ave., Niles, IL 847-647-0660

Admission is Free; Cafeteria style dinner - \$30

One of the largest exhibitions of products, services and related industrial components of the fire protection industry in Chicagoland. Earn Professional Development Hours at two 50 minute classes.

CHICAGO CHAPTER'S FAMOUS ANNUAL CORNED BEEF AND CABBAGE DINNER

Thursday, April 3, 2008, 5pm-9:30pm

Berwyn VFW Hall 1529 S. Harlem Ave., Berwyn, IL

Dinner tickets \$35 by March 21: send name, company, address, phone # and check

to Forum Studio, attn Anne Guglielmo, 1 Trans Am Plaza Drive, #400, Oakbrook Terrace, IL 60181

ASSE, www.asse-plumbing.org

The ASSE Newsletter has gone Electronic!

ASSE members now have the option to receive the ASSE Newsletter in PDF format via e-mail. This will enable them to get the Newsletter to members in a timelier, cost-effective manner. If you would like to receive the ASSE Newsletter via email, please let them know by e-mailing your request to elaine@asse-plumbing.org or megan@asse-plumbing.org.

CSI, www.csichicago.com

CSI Chapter Program - “Urban Stormwater Design for Sustainable Systems”

March 25, 2008 ; 5pm Registration; 5:30pm Dinner; 6:30pm Presentation

The Union League Club – Crystal Room; 65 W. Jackson, Chicago, IL 60604

Cost: Members Free. Non- Members \$40; Continuing Education: 1.0 AIA/CES

- Discuss land and water resource impacts associated with contemporary urban, suburban, and rural agricultural land use practices including adverse effects on flooding, aquifer depletion, water quality degradation, habitat and bio-diversity loss, climate change, and even global warming.
 - Explore scientific and philosophical foundation for the promotion of sustainable planning, design, development, and long term systems management practices in built and natural environments.
 - Review a variety of infiltration-based sustainable water management “green infrastructure” practices including green roof technologies, porous pavements, bio-retention systems, rainwater harvesting and reuse, and the integration of native landscapes.
 - Present case studies that illustrate how to apply these sustainable development practices through integrated design.
-

As always, let me know if there are any organizations you would like to hear from - jerry@luczak.com.

Jerry Fields, Corresponding Secretary



"I should've been a plumber."
- Albert Einstein

AS I KNOW IT - VELOCITIES IN WATER SUPPLY PIPING

We need to consider velocities of the fluids flowing through our piping, when we are sizing the pipe. Seems a little obvious I guess, but maybe we take it for granted. We are all aware of the interactive relationships between flow, velocity and friction; but, I think that we might forget sometimes the magnitude of changes in these parameters and the affects that they have on our piping. I am including below a page from the soon-to-be-released *ASPE Tables Book*. This table shows the aforementioned variables in a table format. The table below is for 3/4" copper piping only. The three types of copper piping normally associated with domestic water systems, "M", "L", and "K", are listed.

Let's look at an example:

I usually consider 5 FPS to be the speed limit for domestic cold water in copper piping. Look at the table below. Type "K" piping at 5.15 FPS, flows 7 GPM, with a pressure drop of 6.04 pounds per 100 feet. First of all, take note that engineers typically design to 3-5 PSI/100 FT drop. If your system was designed for 3 PSI/100 FT and the actual PSI drop is higher than that, your pump, and other components, may be undersized. As I like to say, thank God that we use data that is inherently oversized. Otherwise we would be in trouble because "some" of us tend to undersize based on this same data! What we might do in this case, is upsize the pipe to 1". Also impor-

tant to note is that type "K" has a significantly smaller interior diameter compared to type "M", because of the thicker pipe wall of type "K". Make sure you are comparing "apples to apples". The *Tables Book* can make this pretty easy to demonstrate by looking at the charts.

Flow Rate, Velocity, and Friction Loss (Water): U.S./English

Flow Rate, Velocity, and Friction Loss (Water) Material: 3/4" Copper Tubing, ASTM B88

Outside Diameter = 0.875"		Coefficient of Friction = 0.021					
WT = Wall Thickness (in.) • ID = Inside Diameter (in.)		Type M		Type L		Type K	
		WT = 0.032	ID = 0.811	WT = 0.045	ID = 0.785	WT = 0.065	ID = 0.745
Flow Rate (gpm)	Velocity (ft/sec)	Pressure Loss (psi/100')	Velocity (ft/sec)	Pressure Loss (psi/100')	Velocity (ft/sec)	Pressure Loss (psi/100')	
1.00	0.62	0.0807	0.66	0.0949	0.74	0.1233	
2.00	1.24	0.3226	1.33	0.3797	1.47	0.4932	
3.00	1.86	0.7259	1.99	0.8543	2.21	1.1096	
4.00	2.48	1.2904	2.65	1.5187	2.94	1.9727	
5.00	3.11	2.0163	3.31	2.3730	3.68	3.0823	
6.00	3.73	2.9034	3.98	3.4172	4.42	4.4385	
7.00	4.35	3.9519	4.64	4.6512	5.15	6.0413	
8.00	4.97	5.1617	5.30	6.0750	5.89	7.8907	
9.00	5.59	6.5327	5.97	7.6887	6.62	9.9866	
10.00	6.21	8.0651	6.63	9.4922	7.36	12.3292	
11.00	6.83	9.7588	7.29	11.4855	8.10	14.9183	
12.00	7.45	11.6138	7.95	13.6687	8.83	17.7540	
13.00	8.07	13.6300	8.62	16.0418	9.57	20.8363	
14.00	8.70	15.8076	9.28	18.6047	10.30	24.1651	
15.00	9.32	18.1465	9.94	21.3574	11.04	27.7406	
16.00	9.94	20.6467	10.61	24.3000	11.78	31.5626	
17.00	10.56	23.3082	11.27	27.4324	12.51	35.6312	
18.00	11.18	26.1310	11.93	30.7547	13.25	39.9465	
19.00	11.80	29.1150	12.60	34.2668	13.98	44.5082	
20.00	12.42	32.2604	13.26	37.9687	14.72	49.3166	
21.00	13.04	35.5671	13.92	41.8605	15.46	54.3716	
22.00	13.66	39.0351	14.58	45.9422	16.19	59.6731	
23.00	14.28	42.6644	15.25	50.2137	16.93	65.2212	
24.00	14.91	46.4550	15.91	54.6750	17.66	71.0159	
25.00	15.53	50.4069	16.57	59.3262	18.40	77.0572	
26.00	16.15	54.5201	17.24	64.1672	19.14	83.3451	
27.00	16.77	58.7946	17.90	69.1980	19.87	89.8795	
28.00	17.39	63.2305	18.56	74.4187	20.61	96.6605	
29.00	18.01	67.8276	19.22	79.8293	21.34	103.6882	
30.00	18.63	72.5860	19.89	85.4297	22.08	110.9624	
31.00	19.25	77.5057	20.55	91.2199	22.82	118.4831	
32.00	19.87	82.5867	21.21	97.2000	23.55	126.2505	
33.00	20.50	87.8290	21.88	103.3699	24.29	134.2645	

Let's look at what happens at 8 FPS. Our flow goes up to 11 GPM, but our PSI loss goes up to 14.9 PSI. The numbers are looking a little more substantial at this point. Smaller pipe sizes are more susceptible to the adverse affects of velocity than larger pipes are. Larger pipes can have a more laminar flow on the outer portion of the flow channel (at the pipe wall). This tends to "smooth things out" and provide some protection for the pipe wall.

This is only one example of how we can find value in the new *Tables Book*. You could even use the *Tables Book* as a "Table Book"! Didn't Cosmo Kramer do something like that? **Watch for the ASPE Tables Book, to be available soon!**



MORAL OF THIS STORY:

Be aware of the flow characteristics of the piping systems that we are designing.

Refer to *ASPE Data Books* and the new *PEDH* series for additional information. Remember that your project may vary and needs to be engineered relative to its unique requirements. This is just one example and may not be the correct application for your project.

David DeBord, President

2007-2008 ASPE Chicago Chapter Meeting Schedule

DATE	PRIMER	TECHNICAL	LOCATION
September 20	Plumbing Pump Controllers; <i>Mike Vandenberg, Daugherty Sales</i>	Fire Pump Controllers; <i>Jim Moynihan, Chicago Technical Sales/ Firetrol</i>	<i>LaVilla 3638 N. Pulaski Chicago</i>
October 18	Secondary Supports; <i>Deery-Pardue & Associates</i>	Chicago Plumbing Code; <i>Frank Bathauer, Chicago Chief Plumbing Inspector</i>	<i>The Parthenon 314 S Halsted Chicago</i>
November 15	Pipe Joining Methods for Mechanical Piping; <i>Jim Ness and Company</i>	Plumbing Design for Labs; <i>Mike Straughn, Water Saver Faucet Co. and Mick Bradford, Russo Sales</i>	<i>LaVilla 3638 N. Pulaski Chicago</i>
December 13	Booster Night; <i>Special Entertainment</i>		<i>The Parthenon 314 S Halsted Chicago</i>
January 17	General Interceptors; <i>Luczak Sales</i>	Grease Separators; <i>Bryce Russell, Rockford Separators/ Deery-Pardue</i>	<i>Stonewood Ale House 601 Mall Drive Schaumburg</i>
February 21	Pipe Insulation; <i>Jim Shannon, K-Flex Isolante, Bob Nolen, IMCOA and Tom Ronan, Added Sales</i>	PEX Design and Standards; <i>Frank Mazzarese, Zum and Harold Miller, Miller Sales</i>	<i>LaVilla 3638 N. Pulaski Chicago</i>
March 20	LEED Calculations; Sloan Valve and Repco	Grey Water and Water Recycling; Metropolitan Industries	<i>LaVilla 3638 N Pulaski Chicago</i>
April 17	Technical Seminars	37th Annual ASPE Chicago Product Show	<i>White Eagle 6839 Milwaukee Ave Niles</i>
May 15	Elections	Cast Iron Pipe and Standards; Alan Thomas, CISPI	<i>The Parthenon 314 S Halsted Chicago</i>
June 20	Annual ASPE Chicago Golf Outing		<i>Hilldale Golf Club 1625 Ardwick Drive Hoffman Estates</i>
July 12		ASPE Ride to the Rock	 <i>Chicagoland to Starved Rock</i>