

October 2003



### **Plumbing Design Class**

**Date:** Tuesday, October 28, 2003

**Time:** 5:30 - 9:00 PM - Dinner and Plumbing Design Class

**Cost:** Members ASPE, ASSE: No Charge  
Non-members: \$15.00

**Location:**

PMC Center  
14801 W. 8 Mile Rd.

**Topic:** Domestic Water Distribution, Boosters, Treatment and Sizing

**Speakers:** Chris Lieder of  
R.L. Deppmann  
Esteban Cabello of  
JRED Engineering, Inc.

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***Please confirm your attendance through the web site at [aspeemc.org](http://aspeemc.org) e-mail to***

***[jll.dirksen@akalm.com](mailto:jll.dirksen@akalm.com) or phone Jill Dirksen at 313 202-7888***

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## **PRESIDENT'S REPORT**

**Douglas W. Cryer, CSI CIPE/CPD  
President**



I guess I missed a better than average September meeting on Sanitary and Storm Water Piping Design. I have heard nothing but positive feedback. Our membership and additional attendees approached 60 people. Very good attendance, that rivals only a couple of past years meetings. Our speaker, Mr. Ron George was well prepared, as

usual, and led you through the brief whys and wherefores of the subject topic examples, with respect to capacity tables, pipe sizing criteria and Michigan Plumbing Code compliance. Another good aspect I heard was that the RSVP process of e-mailing Jill Dirksen for dinner reservations worked well. Thank you for doing your part in keeping our chapter expenses down for food preparation. Remember to e-mail Jill for the October meeting (or else, and we mean it!).

The October 28, 2003 meeting topic will be Water Distribution Systems, Boosters, Treatment and Sizing. Our presenters will be Mr. Esteban Cabello, PE, CPD, President of JRED Engineering, Inc. and Mr. Chris Lieder of R.L. Deppmann Company. Please refer to Jill's VP Technical Report for further topical information.

Included in this Newsletter are three articles that need to be read, considered and digested. I am referring to our Legislative Committee that recently attended and participated in the 2003 ICC Code Hearings. I have taken on a whole new perspective in the code making, legislative process. I don't know about most of you, but I hated Political Science and Government (it's a 70's thing) when I was in school. With that said, I want to personally thank our Code Study and Development Committee of Southeastern Michigan (CSDCSM) for caring enough about "Our Industry" to become active participants in making a difference in our Codes and Standards. Attempting to make them more concise and less ambiguous.

Read about how this Committee took 21 proposed changes, that would affect all of us, to the Code Hearings and had outstanding response and success in having made some code changes and were heard for considera-

*continued on pg 6*

# American Society of Plumbing Engineers

## Eastern Michigan Chapter

### 2003-04 Technical Classes

*Held monthly at the  
(except where noted)*

PMC of Detroit  
14801 West 8 Mile Road  
Detroit, MI 48235

September 23, 2003  
Sanitary and Storm Piping

**October 28, 2003**

***Domestic Water Distribution, Boosters,  
Treatment and Sizing***

November 18, 2003  
Commercial Laundry and Kitchen Requirements

December 16, 2003  
Domestic Hot Water Generation Design and Sizing

January 10, 2004  
First Saturday Technical Review Course (8 hours)

January 20, 2004  
Professional Plumbing Practices, Estimating  
and Test Taking Skills

Friday, February 20, 2004  
ASPE/ASHRAE Meeting at Compuware Arena for  
Snow Melting and Plumbing for the Ice Arena

March 23, 2004  
New Michigan Plumbing Code Review  
with Mr. Robert Konyndyk

April 3, 2004  
Second Saturday Technical Review Course (8 hours)

April 27, 2004 - Architectural and Structural  
Interferences, Coordination and  
Value Engineering Panel Discussion

May 25, 2004  
Open Microphone Night for Vendors and  
BBQ @ PMC Detroit

## *Thank you to our sponsors...*

A special thank you to the following manufacturers' representatives for sponsoring this month's meeting. Let them know you saw their names here.

*John Hux*

*KL McCoy*

*Alec Bien*

*Quality Water & Air*

*Chris Lieder*

*R.L. Deppmann*

*Doug Cryer and Dann Holmes*  
*Viega Inc.*

*Cindy Zatto*

*V.E. Sales*

***Mark your calendars for  
November 18 for  
Commercial Laundry  
and Kitchen Requirements***



***November***



Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

ASPE News is published 10 times per year (September through May, plus one summer issue). Yearly advertising rates are \$250.00 per ad for members and \$300.00 for non-members. Insert advertisements are \$250.00 per newsletter for one oz., \$100 for every oz. over. Help Wanted ads, fifty words or less, \$100.00 per issue. For quarter-page and half-page product ads, please contact Joe Hernandez. Checks should be made payable to ASPE E. Mich. Chapter and send check with inserts or ad to Joe Hernandez. Circulation 400-Distributed to: Engineers, Contractors, Inspectors, and other industry professionals in Michigan. For contributing articles contact Joe Hernandez, Newsletter Editor at [newslettereditor@aspeemc.org](mailto:newslettereditor@aspeemc.org).

## VP TECH REPORT

**Jill J. Dirksen**  
**VP Technical**

WOW! What a great start for the year! I hope that everyone walked away with something. Whether it be a new way of looking at a layout, meeting another ASPE member, seeing different products or understanding concepts just a little bit better. That is what our meetings are for. For you! As a member of ASPE, only you can make it what it is to be by being there!

Even though the weather is cooling, the leaves are changing and students are back in school, we still have a full year of vacation days planned with something special each month. October is no different. This month's session is not going to be something that you will want to miss. Chris Lieder from R.L. Deppmann and Esteban Cabello, who has just branched out to start on his own consulting business, have teamed up and will lead us through the domestic water system distribution design along with pitfalls that might occur and what to avoid or keep in mind before and during construction.

So, where do you start when designing a domestic water system? Well, you need to know your criteria. Many spaces are able to diversify building demand. However, when dealing with a building such as an auditorium, hotel, or other that could possibly have all of the fixtures in the entire system utilized all at the same time, it may not always be sufficient to reduce or diversify the demand of the system. In our particular building, not only is it necessary to review hours of operation for the laundry facilities and kitchen with respect to the hotel rooms, but each other as well. Other special facilities that would be located within the building need to be addressed also.

City water pressure available to the building site is another important criteria. Before a distribution system is even laid out, an individual may know that a booster system will be required. With the building loads established and a layout in place, Pressure and head losses should be reviewed. In areas where new developments are not yet in place, system pressure reducers might come in handy.

When we say we are supplying water to our building, we are supplying uncontaminated (potable) water to our building! By code, water supply must be kept away from sources of contamination. Building drains (sewers), cesspools, and septic tanks (just to name a few) are sources of contamination where a separation is required. Coordination with other services into the building cannot be overlooked.

I am looking forward to the presentation that Chris and Esteban will be giving. Both gentlemen have a wealth of

*continued on pg 9*

## Comments On the Code Hearings

**John E. Matthews, PE**

During a three-day period, the Code Study and Development Committee of Southeastern Michigan had the opportunity to hear and give testimony on 115 proposed changes to the International Plumbing Code (IPC), six proposed changes to the International Private Sewage Disposal Code, and 98 proposed changes to the International Residential Code (IRC) for a total of 219 proposed changes.

Only those members of the Code Development Committee are eligible to vote on the proposed changes. However, any registered member could challenge the decision of the Committee and, at that time, all registered members could now vote to overturn the Committee's decision. Some were successful while others failed.

A number of proposed changes dealt with domestic water temperature. An effort was made to define the tepid water temperature range for emergency shower and eyewash stations. No agreement was reached. Another issue involved the temperature of stored water. Should the temperature be 120 degrees F to reduce the chances for scalding or should the minimum be 135 degrees F to control Legionnaires Disease? No agreement again was reached.

Since their adoption into the Code, there have been numerous misapplications of ASSE's 1016 Standard for shower control valves and ASSE's 1017 Standard for temperature mixing valves. Recognizing this problem, ASSE has drafted two new Standards: 1069 and 1070. Several proponents submitted proposed changes hoping these new standards would be complete and approved by the American National Standards Institute (ANSI) before the start of the code hearings. This was not the case. As a consequence, those proponents scrambled about preparing amendments to their changes in an effort to get the basic text approved. Had they had their amendments prepared in advance of the starting of the code hearings, they might have been successful, in part at least.

Limiting the flow velocity through hot and cold-water distribution piping was the subject of two proposed changes. If accepted, the flow velocity through hot water piping would be limited to a maximum of five feet per second; cold water piping to a maximum of 8 feet per second. An opponent testified that the plumbing engineer should be able to use his expertise in deciding what velocities he wants to use. Citing as an example, 2/10 of a foot over the five-foot maximum would result in one size smaller and a cost saving to the client. The first proposed change was defeated and the second withdrawn.

*continued on pg 13*

## VP LEGISLATIVE

reported by: Ron George, CIPE/CPD

### New Bureau of Construction Codes and Fire Safety Consolidates Functions to Save Costs and Improve Efficiency

Governor Jennifer M. Granholm and the Michigan Department of Consumer & Industry Services Director David C. Hollister announced that the Office of Fire Safety has merged with the Bureau of Construction Codes to save costs, eliminate duplicative functions and improve efficiency for customers. The new bureau name is Bureau of Construction Codes and Fire Safety and the move is effective immediately.

Governor Granholm said the merger makes perfect sense since both the Office of Fire Safety and Bureau of Construction Codes oversee public buildings such as schools, colleges and universities as well as child care, adult foster care, correctional and health facilities.

"This new partnership not only eliminates duplicative functions by CIS staff at a considerable cost savings, but most importantly simplifies the process for our customers who now have one place to go to get construction plans reviewed and questions answered," Granholm said. "Reducing the size of state government and eliminating bureaucracy for our customers are among the top goals of my administration, and I commend the work CIS has done to identify places to save tax dollars and improve service."

The Bureau of Construction Codes is responsible for the administration of the Construction Code Act (Act 230), the Building Officials Registration Act (Act 54), the Mobile Home Commission Act (Act 96), electrical, mechanical and plumbing licensing laws, as well as the boiler and elevator programs. The bureau is also responsible for examination and licensing in the boiler, electrical, elevator, mechanical, and plumbing fields as well as licensing of manufactured home installers/service technicians and retailers, and investigates consumer complaints against licensees. The Office of Fire Safety oversees and manages Michigan's overall fire safety through construction plan review and fire safety inspections, training and certification of fire inspectors and the State Fire Safety Board.

Mr. Hollister said bringing the two entities together will ensure consistent regulations and uniform standards are in place as the new Bureau of Construction Codes and Fire Safety.

"The Office of Fire Safety and Bureau of Construction Codes have different sets of fire safety and building construction codes to enforce and in some instances there are

## 2003 ICC Code Hearings, Nashville Tennessee

J. Nussbaum IPP, FASSE

The Code Study and Development Committee of Southeastern Michigan had eight members attend the IPC / IRC & SDC proposed code change hearings September 9 - 11, 2003. The attendees were P. Bladdick of LPB Co., R. Ciesliga of Limbach Co., R. George, Consultant, J. Matthews PE, J. Nussbaum, Consultant of MC-Detroit, B. Pines of Oakland Plbg, B. Weidendorf, Detroit Plbg Inspector and G. Wilkinson from Local 98. Robert Konyndyk was present representing the State of Michigan.

The attendees listened to both proponents and opponents present their proposed changes to the IPC, IRPC, and Sewage Disposal Codes prior to the chairman turning the proposed changes back to the Code Committee for committee action. John Matthews was the voice for the Code Study & Development Committee of Southeastern Michigan (CSDCSM). And was well prepared as usual. This is the first time CSDCSM attendees learned a lot from attending the hearings and following the dialog of participating spokes persons. R. George was a member of the IPC Committee hearing and voted on the proposed changes. During the IRPC hearing R. George sat and participated with the attendees from CSDCSM. Joining J. Matthews with floor participation was B. Pines and R. George. John Matthews was sharp enough to catch a flaw in one of the proceedings and was recognized and complemented for his bringing it to every-one's attention. It was a Roberts Rules issue and interpretation of the ICC Rules.

During the hearings there were several code changes that were amended from the floor and several proposed code changes that were voted on that were challenged by the floor, and in some cases were overturned by a 2/3 vote of the floor. CSDCSM members, in most cases, voted as a block having an affect on the outcome of the vote. We were being closely observed by the Oklahoma and Virginia participants. We also were happy to vote with R. Konyndyk on a couple of his code challenges.

The CSDCSM submitted 21 proposed changes, of which 13 made the monograph. Five were withdrawn after our committee discussed them prior to attending the hearings. Five were denied and three were approved as submitted. Those being denied by the IPC committee dealt with what is tepid water, temperature ranges 75 degrees F or 85 degrees F to 110 degrees F (emergency eye wash and shower stations) and who should determine and enforce them, the engineer or code official. Stored water was also an issue because of legionellae, 135 degrees F (scalding) verses a temperature of 120 F degrees (legionellae).

*continued on pg. 13*

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## President's Report

*continued from pg 1*

tion and further investigation for others. I hope all of you reading this, from Presidents, Department Heads, PE's, Mechanical Engineers, Project Managers, Construction Forman, Municipal Inspectors and Manufacturers Representatives take note. This Committee, made up of some ASPE and ASSE Members, speaks for all of us in the Mechanical/Plumbing Industry.

Speaking of Code changes, the new 2003 Michigan Plumbing Code will be out for distribution in the early new year (2004). As of January 1, 2004, the new Michigan Residential and Commercial Plumbing Codes will be in effect.

I recently had the distinguished privilege of listening to Mr. Robert Konyndyk, Chief Plumbing Inspector for the State of Michigan, speak to a group of Engineers, Contractors, Hospital Maintenance personnel, Hospital Engineers and Product Representatives at the Michigan Society of Hospital Engineers Convention. His topic for this presentation was "The New Michigan Plumbing Code changes with regard to the Hospital Industry." He spent time talking about three main points: Facility/Factory Affidavits implementation for hospital facilities and large companies, Medical Gas Inspection Certification name change and Product Code Compliance. One point of interest in his one hour presentation was the fact that our "NEW" 2003 Code will not be as up to date as one might think and hope. This brings me back to our Codes Committee from Eastern Michigan and the affect they can have at hearings to bring about more thought from another mindset and third party consideration testing agencies latest data and acceptance.

Point of note: Do you think that the Medical Gas Section (Chapter 12) in the Michigan Plumbing Code needs revision? Have any of you read it or considered which code the State of Michigan has adopted for reference to the NFPA 99C?

To the room's surprise, Mr. Konyndyk informed us that the NEW 2003 Code would still reference the 1999 version of the NFPA 99C. I think this is an area where our CSDCSM group should look for a change in the wording to at least adopt the "...latest version of the NFPA 99C...". My feeling is that the State of Michigan should allow the third party testing agency of the NFPA decide what the acceptable Materials, Products and Methods of Installation should be. But I am not on the Committee so I can only suggest changes and get the minds working toward proposed change.

Speaking of change, wait until all of the mechanical engineers and specification writers get involved with the National Specification Numbering system. The previously used sections, from 15000 to 15950 will be replaced with a new num-

bering and designation. There will be New Divisions in lieu of Sections. Division 21 will be strictly dedicated to Mechanical and Plumbing, under the Facilities Services Subgroup. This will allow for greater growth potential without going in sub-group after sub-group and point number after point number. As a member of the Detroit Chapter of the Construction Specifications Institute (CSI), I have become involved with the Technical Committee and have become far more enlightened in the realm of specification writing and how the combination of knowing Codes, Designing Systems, concise Construction Documentation and Product Acceptability all play an equal role in creating a functional distinctive design. Are there any of you readers out there that would care to join me in the CSI Society? As I learn more from my CSI Affiliation, I plan on sharing the details of the new and greatly expanded version of the next generation of Master Specifications.

Keep in mind that this is not law. And nobody can make your firm change, but shouldn't we all move away from the canned, copied and pasted versions of the mid 80's specifications that most firms are still printing as their "Legal Written Documents" for projects built today, in 2003, almost 2004? I think so. I'll do a follow up column on the specification changes and how the mechanical and plumbing engineer will have many choices and sections to choose from. Only the numbers will change and many more sections will be written for special systems that generally fall outside a 15000-section number anyway. Do not despair!

Finally, please do not forget about our Technical Symposium in San Antonio, TX from October 29th to November 1st. I hope to see some of you there.

Have a scary October.

*Doug*

## VP Legislative

*continued from pg 4*

potential code conflicts as well as overlapping licensing and certification standards. By having the staff working more closely together within one bureau, these issues will be resolved more easily and quickly to better serve our clients while keeping the health, safety, and welfare of Michigan's citizens as the highest priority," Hollister added.

For more information, please visit their web site:  
[www.michigan.gov/cis](http://www.michigan.gov/cis)



## ASPE Eastern Michigan Chapter October 28, 2003 Meeting

When was the last time you had a good laugh or at least a hearty grin at an ASPE Meeting? How can you possibly mix humor with a dry subject such as a Pressure Booster Selection? If you show up for the October 28th meeting you may find out.

Esteban Cabello of JRED Engineering Inc. in conjunction with several people from R.L. Deppmann Company, the B&G people, will be handling the topic of Pressure Booster selection from a junior engineer's point of view.

Enjoy a real life example of the capacity determination, equipment selection, optimization, and communication. Don't expect a lecture and don't expect to sit on your hands and yawn. Audience participation will be required in this humorous look at a hotel pressure booster design requirement with the usual tight time restrictions. Some of you better have a calculator in your pocket or there'll be a lot of finger and toe counting going on.

*We have spared every expense for this show!*

Plan on learning how to determine the load and pressure requirements as well as computer selection and some of the decisions that need to be addressed in the process.

This road show is a one-night stand. If you fail to obtain a ticket for this show you'll have to settle for reading the reviews in the morning paper or hearing about from someone who attended.



# ASPE

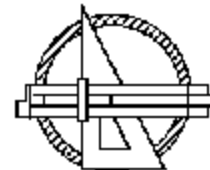
2003 Technical Symposium

UNIVERSITY

October 31-November 2, 2003

San Antonio, Texas

## Eastern Michigan



*It's your  
chapter - get involved!*



## Professor Plumber sez...

**Bill Grayzar, CPD  
VP Education**

Each month, the instructors prepare and work hard to present a well rounded and informational class. However, we understand that sometimes one evening may not be long enough to thoroughly cover a topic. Or that you may have more questions that you didn't even think of until after the class. So this year, we are planning two weekend seminars for a thorough review of all the monthly topics. The first is tentatively scheduled for Saturday, January 10, 2004 and will cover the first four classes. The second will be a combined review and preparation for the CIPE/CPD Exam. More information on these seminars will be provided as it becomes available.

The topic for the October ASPE meeting is Domestic Water Distribution, Boosters, Treatment and Sizing. In keeping with this month's topic I would like to address Flow Domestic Water Systems.

### **Flow in Domestic Water Systems:**

When water flows in a pipe, two types of flow can exist. The first type of flow is known by the names "streamline", "laminar", or viscous". For the purpose of this article we will refer to this first type of flow as "laminar". The second type of flow is known as "turbulent flow".

For design of piping systems we tend to design for turbulent flow only when very viscous liquids or extremely low velocities are encountered does the plumbing engineer deal with laminar flow.

At various viscosities and temperatures there is a certain "critical velocity" (also know as transitional flow) for every pipe size above which turbulent flow occurs, and below which laminar flow occurs. The critical velocity occurs in a range of Reynolds numbers of approximately 2000 to 4000. The Reynolds number for piping can be determined by utilizing the Reynolds Formula.

*Reynolds Formula:*  $R = DV\rho/u$

Where (**R**) is the Reynolds number and is dimensionless, (**D**) is the pipe diameter in feet (ft), (**V**) is the velocity of flow feet per second (fps), (**P**) is the density of the fluid in pounds per cubic foot (lb/ft<sup>3</sup>) and (**u**) is the absolute viscosity in pounds per foot at sea level (lbs/ft).

Diameter of pipe (**D**) first must be converted to feet before entering this value into the formula. Thus, a 6" pipe would result in a value of 0.5 ft. Remember, it is important to always convert all values to the proper units whenever utilizing any formula.

For velocity (**V**) rarely is a value of less than 4 fps utilized for water piping design. For the purpose of this article we will utilize 4 fps in our design calculations.

The density of fluid (**P**) can be found in many charts for any type of fluid. For domestic water the density (or weight) is known to be 62.4 lbs/ft<sup>3</sup>. You should remember this from last month's article.

The absolute viscosity (**u**) for water is a constant value given as 0.0005 lbs/ft.

For the accuracy required for plumbing design it can be assumed that critical velocity occurs at a Reynolds number of 2100 to 4000 for domestic water.

As an example, the type of flow in a 6" domestic water pipe flowing at 4 fps can be determined as:

$$R = (0.5 \text{ ft} \times 4 \text{ fps} \times 62.4 \text{ lbs/ft}^3) / 0.0005 \text{ lbs/ft} = 249,600$$

This number is well above the critical range of 2100 to 4000 indicating "Turbulent Flow".

In turbulent flow, the viscosity of the fluid has an insignificant effect, but the roughness of pipe has a significant effect. In laminar flow, just the opposite is true. The roughness of pipe is insignificant, but the viscosity of the fluid has a significant effect.

### **Sample Questions:**

The following are some sample questions regarding flow in piping as you might see them on the CIPE/CPD Exam:



## Professor Plumber sez...

*continued from previous page.*

Laminar flow is:

- A. Flow in a circular motion.
- B. Smooth flow parallel to the pipe wall.
- C. Violent flow with swirling motions.
- D. Flow with a Reynolds number in excess of 4000.

Turbulent flow is:

- A. Flow with a Reynolds number less than 2100.
- B. Smooth flow parallel to the pipe wall.
- C. Flow in excess of 5 feet per second.
- D. Flow with a Reynolds number in excess of 4000.

Transitional flow is:

- A. Flow with a Reynolds number of less than 2100.
- B. Smooth flow parallel to the pipe wall.
- C. Flow with a Reynolds number generally between 2100 and 4000.
- D. Flow with a Reynolds number in excess of 4000

Look for more calculations and the answers to these questions in the November ASPE newsletter.

## VP TECH REPORT

*continued from pg. 3*

information with which to work. At this time, I would like to invite all of you to come and join me at the next meeting to hear what they have to say and share with us.

Finally, I want to extend a huge THANK YOU to everyone who sent or called with an RSVP! I can't begin to tell you how much it helps. So, keep up the calls, emails, and even faxes! I would love to see the number of people at the meetings grow each time. If you plan to attend the meeting, I may be emailed at [Jill.Dirksen@akahn.com](mailto:Jill.Dirksen@akahn.com). Or, if you would rather fax me, please do so at (313) 202-7388. It does help out tremendously with the preparations for dinner. Again, if we do not have a reservation in place, there will be a small fee. This is due to the food that gets wasted when attendance is unable to be determined. We don't want to run out of food for anyone either! So, please make sure to confirm with me you will be there. Seeing everyone at the first meeting was exciting. I anticipate seeing and meeting many more this month! See all of you there!!!

# Night at the Races

**Friday, March 19, 2004**

**Northville Downs**



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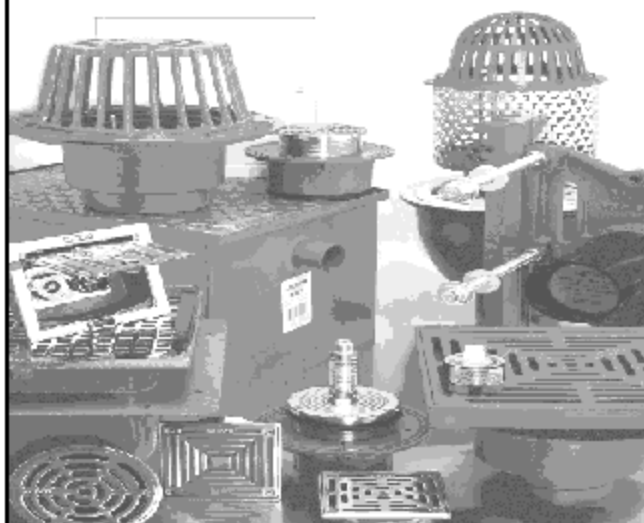
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**Lochinvar** - High efficiency water heaters, boilers, pool heaters, booster heaters & storage tanks.



## In My Opinion...

by Douglas W. Cryer, CSI CIPE/CPD

### --Engineering Alert--

*Engineering Field beware!* In a recent national television news story, a lawyer announced the filing of a class action lawsuit against the airlines and engineers who had involvement in the design and ultimate construction of the World Trade Center.

His ridiculous implication on the collapse and demise of the WTC on 9-11-01 was that the "Defendant's" were negligent in not looking into the "foreseeable" future during the schematic, design and construction phase of document preparation and also the installation/construction oversight by not conferring with the airline manufacturers to check on their "future plans" for designs of airplanes.

Certainly, the airlines had thoughts, hopes and dreams for larger planes. Look at the Super Sonic Transport and the 747. Hindsight is always 20-20.

In typical preparation of construction documents, for a building other than a nuclear facility, the architects and engineers do their respective material and equipment selections. Items such as, glass, masonry and steel are considered for their structural integrity and aesthetically pleasing appearance to the building exterior. Mechanical or plumbing items are chosen for reliability, space limitations and

function. We must now think in terms of a major catastrophe for our design considerations.

Now how many architects and/or engineers do you know of that consult the automotive, airline or military engineering departments about projects that are on their drawing boards? Probably none I would guess. If I were to call any one of the aforementioned manufacturing affiliations to request documentation for their future designs, I would be told to... These are proprietary and very secretive ideas or technologies, not to be shared with other companies or individuals outside their domain.

I thought of this analogy to the lawyer's logic. If I still drove my 1970 Maverick (with plaid seats and only a lap belt) and had an injury accident today, with a much larger SUV; then, in today's world I could sue Ford Motor Company for not providing my "Maverick" with airbags to prevent me from injury, due to not considering the "Foreseeable" future of cars and trucks becoming as large and heavy as they currently are. Making sense?

This frivolous lawsuit opens the doors for many questions about responsibility and liability for many architectural/engineering firms and their registered individuals.

If you gather nothing else from this note, please consider, contemplate and concentrate on the unseen and unknown items, not just the obvious.

## Comments On the Code Hearings

*continued from pg 3*

At the last code hearings, ASPE sought approval of the Philadelphia Single Stack System. For this year's hearings, ASPE dropped the Philadelphia from the title. They reviewed their tables, made some revisions, and, over opposition from the floor, convinced the Code Development Committee to accept their sizing methods for this combining the soil, waste and vent piping into a single stack system. The Committee did agree with them.

The question of secondary roof drainage was the subject of another change proposed by ASPE. Currently, the requirement for secondary drainage has been with a complete separate storm drainage system which discharges above grade. This was to alert "someone" that a roof sump was blocked. ASPE's proposed change was in the form of a compromise, which would allow the interior rain conductors connected to the storm drain be used for the secondary system. In order to accomplish this, the vertical conductor would be sized based upon the square footage of roof area served by both the primary and secondary roof drains. This would, in all probability, increase the pipe size 1-1/2 times. A primary conductor sized to handle 5,000 square feet would now be sized for 10,000 square feet. This proposed change was accepted. This is a start in the right direction.

The problems around secondary drainage systems are not over yet. We normally think of the debris that would block a roof drain as either leaves or paper. At what building height is blockage unlikely? There needs to be some code language to cover this.

## 2003 ICC Code Hearings, Nashville Tennessee

*continued from pg 4*

Several code changes dealing with ASSE Standards and interpretations were discussed without resolve. 1016 and 1017 remains as is, while being misapplied.

Everyone seems to be waiting for ASSE 1069 and 1070, which are waiting for ANSI approvals. Secondary roof drainage sizing and water pipe sizing and velocity were also getting a lot of attention at the hearings, along with grease interceptors. Some of these items are headed to ad hoc committees and will come back with recommendations at the next go around. The ASSE 1069 & 1070 may be approved at the challenge hearings later this year should they be ANSI approved prior to the hearing.

We again did very well overall when it came to matching up with the IPC, agreeing with them over 80 % of the time. We believe it is due to our consensus group meeting discussions prior to attending the ICC hearings.



*Code Study & Development Committee Committee representatives at the ICC Code Hearings  
Front row L to R: John Nussbaum, Paul Bladdick & Ron George  
Back row L to R: Barry Pines, Bob Ceislega & John Matthews*

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**Aero Mfg**-stainless steel sinks, **Bradley Corp.**-washfountains, emergency, patient care & security fixtures, **Central Brass**-faucets & plumbing brass, **Chronomite**-point of use water heaters, **Dwyer Kitchens**-compact kitchens, **Halsey Taylor**-electric water coolers & drinking fountains, **Leonard**-shower & water mixing valves, thermostatic & pressure balanced, **Mc Guire**-brass fittings, **Santana**-toilet & shower compartments, **Truebro**-trap & supply covers

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**Nibco**-copper & plastic fittings, plumbing valves, pressure rated valves, industrial plastic fittings & valves

**Allrich**-steel tube, oil & gas-fired boilers. Low pressure steam, hydronic and volume hot water heating systems, **Autotrol**-water purification by deionization. Capacities up to 20,000 gallons per day, **Hobby Valve Co.**-low/standard range thermostatic mixing valves 1/2" to 4", **Lawler Valve Co.**-low/standard range thermostatic hot water mixing valves, emergency shower valves, temperature and pressure balanced mixing valves 1/2" to 2", **Rappalt**-copper-fin hydronic and domestic hot water supply boilers, booster heaters & storage tanks. Sizes from 30 MBTU to 4,000 MBTU, **Rund Manufacturing**-commercial & residential gas-fired and electric hot water heaters & booster heaters, **T Haw-Pak**-cutom in-slab & underfloor heating designs & materials for radiant floor heating, snow melting and de-icing systems, **Valley**-commercial water softeners with metered & non-metered regeneration control, pre-wired and pre-plumbed multi-tank systems

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