Some leaks are beautiful, as they are; for the rest, call...

Family Owned and Operated for over 30 Years

The Plumbing Dr. has been honored by Washingtonian Magazine and Consumer Checkbook as one of the top-rated plumbing services in the region.

1063-B W. Broad Street • Falls Church, VA 22046
Phone: 703.525.9280 • www.theplumbingdr.com
The Virginia Plumbing and Mechanical Inspectors Association welcomes you to

The 51st Annual School of Instruction
and Joint Code Officials Training Conference with VBCOA

April 2 - 4, 2014
Richmond, Virginia

CONTENTS
Advertisers Index / 3
President’s Corner / 4
SOI/Joint Conference Schedule / 6
Code of Ethics & Missions / 8
Strategic Plan / 11
Constitution and By-Laws / 12
Resolution / 20
Past Presidents & Charter Members / 23
New Coalition / 23
Officers, Directors and Committee Chairmen / 24
Acknowledgements / 24

TECHNICAL ARTICLE
by Lee Clifton
What’s New in the 2015
International Plumbing Code / 26

Awards / 29

TECHNICAL ARTICLE
by Luis Escobar
Air Duct System Design / 30

Tabletop Exhibitors / 35
Ladies Auxiliary / 36
Associate Membership Roster / 38
Photos from 2013 / 46
It has been a distinct honor and a great privilege to serve you as President of VPMIA and I believe we have been successful once again in promoting the Association’s goals and objectives through the hard work and good deeds of our members. I would like to take this opportunity to thank the members of VPMIA who, through their selfless acts, have kept us focused on the most important goal which is to promote and protect the health, safety and welfare of all Virginia citizens.

Our continued participation in the code development process, at both the state and national level, stands out as one of the most important contributions we can make to the nation, the citizens of the Commonwealth and ultimately, to each other. Thanks to VPMIA’s longstanding scholarship program, which is bolstered by the generous support of the good folks from DHCD, we continue to remain actively involved in the code development process. However, we should always challenge ourselves to become more highly involved by volunteering to serve on those ICC committees which seek hard working and knowledgeable code enforcement professionals who are willing and able to serve.

We must also acknowledge the great work of VPMIA’s committees. Our committees are the lifeblood of this organization and although the challenges each committee may face vary from year to year, I would like to express my sincere gratitude to this year’s Advertising/Yearbook Committee, Bylaws Committee, Certification/Education/Training Committee, Joint Conference Committee, PMG Code Change Committee, and School of Instruction Committee for the many outstanding accomplishments you have achieved this year. Your hard work is the key to our organization’s continued success and VPMIA thanks you all for the outstanding efforts you have put forth on behalf of the Association.

As we look ahead to the future, I encourage all members of VPMIA, and most especially our newest members, to become more involved in the Association’s affairs. If you have not taken advantage of the many opportunities to serve on a VPMIA committee, do yourself a favor and speak with one of our committee chairs. Should you decide to offer your assistance, you will soon realize the sense of accomplishment gained by participating in the important work that will ensure the Association’s future success.

In closing, I would like to express my sincere thanks to VPMIA’s Board of Directors for your support throughout my year as president. Please know that I will always recall this time as one when I grew to understand the true meaning of teamwork and the great accomplishments which may be realized when everyone in the group is dedicated to giving of themselves to advance a common purpose. When I first became president of VPMIA last April, a year in office seemed like a very long time but now I realize just how quickly that time has passed and it has been the passage of time which has taught me to appreciate the dedicated and loyal members of VPMIA even more.

Respectfully yours,

Paul M. Rimel III, President
VPMIA
2013-2014
What’s Behind The Name?

The Only Guaranteed System

For almost 40 years, the Ductmate rectangular duct connector system has been synonymous with structural integrity, performance and reliability. This is because the Ductmate System was engineered and independently tested in accordance with SMACNA’s core functional criteria, which are the basic fundamental requirements for all structural reinforcements used in a commercial HVAC duct system. Behind the Ductmate connector system stands a comprehensive library of engineering, testing and technical information for virtually any type of commercial HVAC system imaginable. This includes proprietary Duct Construction Standards, structural reinforcement ratings and classifications, independent testing for deflection, leakage and seismic, chemical compatibility listings as well as detailed assembly and installation procedures for even the most demanding installations. In addition to the documentation Ductmate Industries has a full staff of mechanical and chemical engineers as well as technical support experts to assist engineers and contractors alike.

While Ductmate has solidified its name, system and reputation in the industry and engineering firms worldwide expect this level of compliance, some flange products are being used and installed which may have little if any of the above. Why accept any less than a guaranteed system?

Why accept any less than the Ductmate System?

Scan the code or visit http://qrs.ly/sk3v3yn for more information.
## VPMIA 51st Annual School of Instruction and Joint Conference of Virginia Code Officials with VBCOA

Holiday Inn Richmond Airport  
445 International Center Drive  
Sandston, VA 23150  
(804) 236-1111

<table>
<thead>
<tr>
<th>WEDNESDAY, APRIL 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 am - 8:15 am</td>
<td>Registration</td>
</tr>
<tr>
<td>8:30 am - 11:30 am</td>
<td>VBCOA Business Meeting @ Hilton Garden — adjacent to the Holiday Inn</td>
</tr>
</tbody>
</table>
| 8:30 am - 11:30 am | Morning Training Class TRACKS | At the Holiday Inn  
#1 2012 Plumbing Code Change (DHCD) .........................................................Dominion Room-1  
#2 2012 Mechanical/Fuel Gas Code Change (DHCD) ........................................Dominion Room-2  
#3 2011 National Electric Code Change (DHCD) ...........................................Dominion Room-3  
#4 2012 Energy Conservation Code Change (DHCD) .....................................Galanti-Harris Room |
| 11:30 am - 11:45 am | VPMIA General Membership Meeting (Part 1) | Dominion Room (1&2) |
| 11:30 am - 1:00 pm | Lunch @ Hilton Garden — adjacent to the Holiday Inn |
| 1:00 pm - 4:00 pm | Afternoon Training Class TRACKS | At the Holiday Inn  
#1 2012 ICC Swimming Pool Code (Lee Clifton, Kris Bridges) .....................Dominion Room-1  
#2 NSF International-Get the Lead Out (Chris Salazar) ...............................Dominion Room-2  
#3 Residential Lifts (Kenny Hardee, James Coberly, Carl McDilda, Dale Powers) .........................Dominion Room-3  
#4 International Firestop Council ................................................................Galanti-Harris Room |
| 5:00 pm - 6:00 pm | President’s Welcome @ Hilton Garden — adjacent to the Holiday Inn |
| 6:00 pm - 8:00 pm | Dinner @ Hilton Garden — adjacent to the Holiday Inn |

<table>
<thead>
<tr>
<th>THURSDAY, APRIL 3</th>
<th></th>
</tr>
</thead>
</table>
| 8:30 am - 11:30 am | Morning Training Class TRACKS | At the Holiday Inn  
#1 2012 Residential Building Code Change (DHCD) .....................................Dominion Room-1  
#2 2012 Commercial Building Code Change (DHCD) ....................................Dominion Room-2  
#3 2011 National Electric Code Change Training (DHCD) ..........................Dominion Room-3  
#4 2012 Plumbing Code Change Training presented by (DHCD) ....................Galanti-Harris Room |
| 11:30 am - 1:00 pm | Lunch @ Hilton Garden — adjacent to the Holiday Inn |
| 1:00 pm - 3:30 pm | Afternoon Training Class TRACKS | At the Holiday Inn  
#1 Highland Tank Company Emerging Green Water (Michael Gauthier) ..........Dominion Room-1  
#2 How Energy Codes Drive Technology in Hvac (Ryan Anderson) ..............Dominion Room-2  
#3 Generator Inspections (Haywood Kines, Casey Littlefield, John Hudgins) ....Dominion Room-3  
#4 The Structures Group-Special Inspections (Michael Matthews, Mike Galli) ..........Galanti-Harris Room |
| 6:30 pm - 10:00 pm | VPMIA Reception/Awards Banquet @ Holiday Inn |

<table>
<thead>
<tr>
<th>FRIDAY, APRIL 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 am - 9:00 am</td>
<td>Breakfast Buffet @ Hilton Garden — adjacent to the Holiday Inn</td>
</tr>
<tr>
<td>9:00 am - 11:30 am</td>
<td>VPMIA General Membership Meeting (Part 2) @ Hilton Garden</td>
</tr>
</tbody>
</table>
| 8:30 am - 11:30 am | Morning Training Class TRACKS | At the Holiday Inn  
#1 2012 Residential Building Code Change (DHCD) .....................................Dominion Room-1  
#2 2012 Commercial Building Code Change (DHCD) ....................................Dominion Room-2  
#3 2012 Mechanical/Fuel Gas Code Change (DHCD) ....................................Dominion Room-3  
#4 2012 Energy Conservation Code Change (DHCD) ....................................Galanti-Harris Room |
| 11:30 am - 1:00 pm | Lunch @ Hilton Garden — adjacent to the Holiday Inn |
| 1:00 pm - 4:00 pm | Afternoon Training Class TRACKS | At the Holiday Inn  
#1 DHCD Administrative Code Update Training .......................................Dominion Room 1, 2, 3 |
| 4:00 pm | Conference ends |
Washington Gas rebates are available for residential and commercial customers in Virginia.

The Washington Gas Energy Efficiency Program is offering substantial rebates on select natural gas products to homeowners and businesses in Virginia. Now you can enjoy all of the benefits of natural gas products while keeping some money in your pocket while you do. There are a limited number of rebates available only for a limited time—once they’re gone, they’re gone. Rebates are available for installations performed by licensed contractors through April 30, 2014.

Residential Products:
• Natural gas furnaces
• Programmable thermostats

Commercial Categories:
• Water Heating
• Space Heating
• Boiler Accessories
• Ovens and Cookers
• And more

For all of the Washington Gas Energy Efficiency Program details visit WashingtonGasRebates.com/VPMIA.
The Virginia Plumbing and Mechanical Inspectors Association

Code of Ethics

We the members of Virginia Plumbing and Mechanical Inspectors Association recognize that our work has a direct and vital impact on the quality of life for all people in the Commonwealth of Virginia, and we are dedicated to the highest standards of professionalism, integrity and competence. We therefore pledge to maintain and advance these ethical principles:

- Place the public safety and health above all other interests and recognize that the primary function of government is to service the best interests of all people.
- Consider my profession a distinct opportunity to serve society.
- Demonstrate integrity, honesty and fairness in the discharge of my duties by striving to achieve excellence in all matters of ethical conduct.
- Treat all persons courteously, equally and fairly.
- Conduct myself at all times in such a manner as to create and maintain respect for the Virginia Plumbing and Mechanical Inspectors Association and the industry it represents.
- Refuse to leverage my position to secure advantage of favor for myself, my family or my friends.
- Neither accept nor offer, any gift, favor or service that might tend to influence me in the discharge of my professional duties.
- Refrain from representing private interests in any business or technical affairs of this Association.
- Use every opportunity to improve public understanding of the Virginia Plumbing and Mechanical Inspectors Association and its important contribution to the Commonwealth of Virginia.
- Maintain loyalty to the Virginia Plumbing and Mechanical Inspectors Association, and pursue its objectives in ways that are consistent with the public interest.

VPMIA members are committed to providing code development leadership and continuous training that results in uniform application of the codes. We look for opportunities to partner with all who are impacted and strive to develop and deliver codes and standards that result in health, safety, and welfare protection for the public.

VPMIA’s Foundation

Vision Statement
VPMIA members are committed to providing code development leadership and continuous training that results in uniform application of the codes. We look for opportunities to partner with all who are impacted and strive to develop and deliver codes and standards that result in health, safety, and welfare protection for the public.

Mission
VPMIA is an association of code professionals dedicated to promotion of uniform enforcement and development of the codes throughout the Commonwealth to assure the health, safety, and welfare of its citizens and any one who may live, work, or visit the state of Virginia. The pursuit of this endeavor is achieved through close, open, and equal working relationships with design professionals, builders, contractors, material manufacturer’s and others involved in the construction industry. VPMIA supports the ICC, its goals and mission.

Strategic Plan Mission
VPMIA’s strategic plan is to advance our mission through training in order to promote better understanding of the benefits and efficiency of using model codes. The association promotes teamwork, while embracing fairness and respect to all involved parties, always maintaining open communications in every aspect to those who participate in the process.
WATERFURNACE KNOWS THAT
TRAINING MATTERS

Thanks to the 30% federal tax credit, a flood of inexperienced, questionably trained dealers are now offering geothermal. While some companies allow anyone to sell their products, WaterFurnace requires an ongoing commitment to the most extensive training and education programs in the industry. WaterFurnace only invests in dealers who are passionate about offering the finest in products and service, and are less concerned with simply being the cheapest. That's why WaterFurnace is the most recognized and respected name in residential geothermal. Or maybe it's because WaterFurnace units use the clean, renewable energy found in your backyard to provide savings up to 70% on heating, cooling and hot water. Or is it thanks to the industry's best warranty? Decide for yourself. For more information, visit waterfurnace.com to find a dealer near you or contact one of the three WaterFurnace Territory Managers covering Virginia... or be prepared to deal with a flood of your own.

YOUR LOCAL WATERFURNACE TERRITORY MANAGERS

Shelton Cartwright  
(260) 446-8280  
shelton.cartwright@waterfurnace.com  
Charlottesville, VA

Tate Rust  
(260) 442-2955  
tate.rust@waterfurnace.com  
Charlotte, NC

Bob Peck  
(260) 446-9397  
bob.peck@waterfurnace.com  
Versailles, KY

WaterFurnace.  
Smarter from the Ground Up™

visit us at waterfurnace.com

©2014 WaterFurnace is a registered trademark of WaterFurnace International, Inc.

7 Series  
The ultimate comfort & efficiency
GOAL # 1 Enhance and increase communications of VPMIA with the public (Communications)

Initiative action:
• Actively promote a positive image of code enforcement's role in the community.
• Advertisements in trade, industry, state DHCD, and community publications.
• Commitment to code development to achieve the superior level of health, safety, and welfare for our citizens.

GOAL # 2 Increase and expand education (Training –Communications)

Initiative action:
• Encourage increased participation from all interested parties who interact with any and all aspects of code enforcement.
• Increase awareness of the educational benefits of the association.
• Promote credentialing programs provided by the state DHCD.

GOAL # 3 Uphold the highest levels of professionalism (Leadership – Professionalism)

Initiative action:
• Instill and promote leadership values.
• Always display integrity.
• Adherence to code of ethics.
• Share knowledge at all levels.
• Maintain and promote certifications.
• Respect others.

GOAL # 4 Promote relationships with industry and related professional organizations (Cooperation)

Initiative action:
• Participate in the code development process.
• Encourage cooperative working relationships with construction-industry professionals.
• Become involved as active or associate members to other professional organizations such as VBCOA, ICC, IAEI, and PMPV.

• Solicit speakers and provide speakers for these organizations to enhance communication.
• Continue to actively participate in DHCD towards uniform application and development of the model building codes and standards.

GOAL # 5 Broaden and expand VPMIA Membership (Membership)

Initiative action:
• Develop information package of the organization benefits.
• Provide more member services.
• Develop a more wide spread advertisement program for membership, including associate members.

GOAL # 6 Continue leadership and participation in code development process (Leadership – Code Development)

Initiative action:
• Enhance and develop strategies for participation in International Code Council Code developmental process.
• Encourage participation on state and national committees.
• Provide financial support towards member participation in these activities.

GOAL # 7 Promote the adoption of the International Code Council family of model codes (Communications – Training)

Initiative action:
• Provide analysis and impact of benefits for industry, where necessary.
• Provide training for code enforcement officials and industry.
• Interact with DHCD to provide uniform enforcement of model codes.

GOAL # 8 Ensuring financial viability of VPMIA

Initiative action:
• Align financial resources to organizational outcomes.
• Achieve goal objectives.
• Operate within budgeted plan.
ARTICLE I — The Name, Seal, and Address of this Association

Section 1. The name shall be the Virginia Plumbing and Mechanical Inspectors Association; herein and hereafter referred to as the Association.

Section 2. The seal shall be as indicated below:

Section 3. The address shall be that of the Executive Secretary or as otherwise designated by the Board of Directors.

ARTICLE II — Objectives

Section 1. The objectives of the Association are:
   A. To participate in the formulation of Virginia Plumbing and Mechanical Code provisions.
   B. To promote uniform understanding and application of the Virginia Uniform Statewide Building Code.
   C. To promote and secure uniform inspection methods throughout the Commonwealth of Virginia.
   D. To promote closer industry unity between code officials, governing agencies and the private sector.
   E. To promote and improve the standard of professional plumbing and mechanical inspectors.
   F. To provide professional development through an annual education and training seminar which shall be known as the School of Instruction.
   G. To encourage growth of the Association by providing enhanced services to its members and by promoting strong leadership values, respect and the pursuit of common goals.

ARTICLE III — Membership

Section 1. Active membership shall be open to code officials actively engaged in plumbing and/or mechanical code enforcement. Application for membership shall be in writing and submitted to the Executive Secretary.

Section 2. Associate and student memberships shall be open to those persons interested in the design, manufacture, installation or sale of plumbing and/or mechanical systems/products.

Section 3. Retired membership shall be open to those members submitting written application for retired status to the Executive Secretary.

Section 4. Life membership may be extended only to Active and Associate members who have significantly contributed to promoting the objectives of the Association. Life members may be nominated and approved by the general membership at the third general membership meeting. Life membership shall be limited to one Active member and one Associate member per calendar year.

Section 5. Charter members are those who founded the Association.

Section 6. Honorary membership shall be open to those persons who are not members of the Association but have made a significant contribution in promoting the objectives of the Association.

Section 7. Application for associate, student and honorary membership shall be in writing, submitted to the Executive Secretary and reviewed by the Board of Directors for approval.

Section 8. All members shall conduct themselves in accordance with the Associations Code of Ethics and shall be willing to promote the objectives of the association.

ARTICLE IV — Board of Directors

Section 1. The Association shall be governed by a Board of Directors, herein and hereafter referred to as the Board, which shall consist of the elected officers, District Directors, the Director-at-Large and the Chairperson of each standing committee.

Section 2. The Board shall manage the policies, business, property and affairs of the Association.

Section 3. Officers
   A. The officers of the Association shall consist of a President, Vice President, Secretary and Treasurer. The officers shall be Active members and shall be elected and installed during the annual School of Instruction.
   B. The officers shall hold office from the close of the annual School of Instruction through the close of the annual School of Instruction of the following year. Officers shall serve no more than two consecutive terms in the same office.

Section 4. Directors
   A. A total of four active members may be elected as District Directors. The Directors shall be Active members and shall be elected and installed during the annual School of Instruction.
   B. The Directors shall hold office from the close of the annual School of Instruction through the close of the annual School of Instruction the following year.
   C. Each District shall consist of all cities, towns and counties as outlined in Appendix A.
   D. The Director-at-Large shall be the immediate Past President.
   E. Non-voting Ex-officio members on the Board of Directors shall include the President, or his or her duly appointed representative, of the Virginia Chapter of the International Association of Plumbing and Mechanical Officials, and The Virginia Fire Protection Association, and The Virginia Building Code Officials Association.

Section 5. In the event that an Officer or Director resigns, the Board shall appoint, as soon as possible, an Active member to fill the unexpired term.

Section 6. Appointments
   A. An Executive Secretary shall be appointed by the Board for a maximum term of five years or as determined by the Board. Compensation of services rendered shall be as approved by the Board.
   B. A Director of Finance shall be appointed by the Board for a maximum term of five years or as determined by the Board. Compensation of services rendered shall be as approved by the Board.

Section 7. General duties
   A. Board members shall review the draft General Membership or Board of Director meeting minutes and return
ColonialWebb, we are Your Partner specializing in Installation, Maintenance & Repair of HVAC, Refrigeration, Plumbing, and Electrical Systems.

Plumbing
Offering routine maintenance or 24-hour emergency service for any plumbing need from the simplest to the most complex.

Heating & Cooling
Offering maintenance programs ranging from preventive to full coverage to operations and maintenance; we can design a program that perfectly fits your needs.

Electrical
Our clients count on us for a full range of electrical contracting for their commercial or industrial facilities. Providing service or a full upgrade including 24-hour emergency capabilities.

YOUR PROBLEM IS OURS. HOW CAN WE HELP YOU? CALL 804-916-1400 NOW.

WWW.COLONIALWEBB.COM

Serving VA In:
Charlottesville
Hamptonburg
Newport News
Norfolk
Richmond &
Washington DC

• Commercial
• Industrial
• Hospitals
• Schools
• Government
Growing your career is what ICC Membership is all about

As your building career grows, so does the need to expand your code knowledge and job skills. Whether you’re seeking a higher level of certification or professional quality training, Membership in ICC offers the best in I-Code resources and training for growing your building career today and for the future.

- **Learn** new job skills to prepare for a higher level of responsibility within your organization
- **Improve** your code knowledge to keep pace with the latest International Codes (I-Codes)
- **Achieve** additional ICC Certifications to open the door to better job opportunities

**Plus, an affordable ICC Membership provides exclusive Member-only benefits including:**

- Free code opinions from I-Code experts
- Free I-Code book(s) to new Members
- Access to employment opportunities in the ICC Career Center
- Discounts on professional training & Certification renewal exams
- Savings of up to 25% off on code books & training materials
- Free benefits - Governmental Members: Your staff can receive free ICC benefits too
- And much more!

Join the International Code Council (ICC) and start growing your building career now! Visit our Member page at [www.iccsafe.org/membership](http://www.iccsafe.org/membership) for an application.

*Some restrictions apply. Speak with an ICC Member Services Representative for details.*
Constitution and By-Laws

Section 1. The President
A. To preside over all meetings.
B. To select all committee chairpersons except the finance and the nominating committees.
C. The President may appoint members to represent the Association on local, state or national committees, boards and similar entities when such representation is requested or provided for by regulation or statute. Appointments shall not conflict with the Association's by-laws or code of ethics.
D. To be an ex-officio member of all committees except the nominating committee.
E. To perform such other duties applicable to the office as prescribed by the parliamentary authority adopted by the Association.

Section 2. The Vice President
A. To assist the President at all meetings.
B. To preside over all meetings in the absence of the President.
C. To perform such other duties as applicable to the office as prescribed by the parliamentary authority adopted by the Association.

Section 3. The Secretary
A. To assist the presiding officer with the orders of business and to distribute correspondences to all members present.
B. Notification of meetings.
1. To send to all Board members a notice of every Board meeting at least twenty days in advance of such meeting.
   a. Ten days notice, including an agenda, shall be given for all special meetings.
2. To send all members a notice of every General Membership meeting at least thirty days in advance of such meeting.
C. The Secretary shall, electronically or by mail, send the draft Board of Director or General Membership meeting minutes to the Board of Directors for comments and revisions within seven business days after the conclusion of the meeting.
D. To maintain and have available at all meetings the official minute book.
E. To record the voting at all meetings.
F. To send letter ballots to all Board members not present at meetings for which there is no quorum.
G. To perform such other duties as applicable to the office as prescribed by the parliamentary authority adopted by the Association.

Section 4. The Treasurer
A. To accurately record and post all funds received and disbursed.
B. To pay all bills that have been approved as per the budget or by the Board.
C. To submit a quarterly report of the Association's finances to the Finance Committee.
D. To submit a report of the Association's finances at all meetings, except special meetings unless included in the special meeting agenda.
E. To maintain the financial records of the Association on a fiscal year from May 1 through April 30, unless otherwise approved by the Board.
F. To be a standing member of the Finance Committee.
G. To perform such other duties as applicable to the office as prescribed by the parliamentary authority adopted by the Association.
H. The Board of Directors has the authority to require the Treasurer be bonded as deemed necessary. If the Board of Directors determines that a bond is required, the value, timeframe and terms of the bond shall be established in a board-adopted policy. The Association shall pay the bond premium and any other costs associated with the bond.

Section 5. The District Director
A. To attend the Board and General Membership Meetings per term of office.
B. To assist in the management of the Association.
C. To report any concerns of the members within their district to the Board.

Section 6. The Executive Secretary
A. To prepare for the Board all business that has not been assigned to others.
B. To present or have presented at all meetings all reports received from committee chairpersons.
C. To recommend plans of work and conduct the general business of the Association under the direction of the Board and the General Membership.
D. To be a standing member of the School of Instruction Committee.
E. To authorize both active and/or retired membership status.
F. To maintain all membership applications.
G. To receive the letter of resignation of an Officer or Director and present it at the next Board meeting.
H. To send to each Director a current roster of all members within their respective districts no more than thirty days after the third General Membership meeting.
I. To maintain and have available at all meetings a current roster which lists only members in good standing by district affiliation.
J. To send all membership renewals by December 1 of each year.

Section 7. The Director of Finance
A. To coordinate the finances of the Association.
B. To serve as the chairperson of the Finance Committee.

ARTICLE VI — Committees

Section 1. The number of committee members, mentioned below, includes the chairperson. Standing Committee chairpersons are appointed by the President, see previously in the text, Article V, Section 1.B. Standing Committee members are selected by the committee chairperson as stated hereinafter in this Article or are established within the description of the committee. Standing Committee members that are established by the text are in addition to those members appointed and selected. Standing Committees may include, but are not limited to. The following:
A. An Advertising and Yearbook Committee, composed of
Constitution and By-Laws

five members, shall be appointed within thirty days after the third General Membership meeting. It shall be the duty of this committee to manage an advertising campaign and publish the yearbook for the Association’s School of Instruction.

B. An Auditing Committee, comprised of three members, shall be appointed within thirty days after the third General Membership meeting. It shall be the duty of this committee to audit the Treasurer’s account(s) at the close of the calendar year and report at the fourth regular Board meeting. The Treasurer shall not be a member of this committee.

C. An Awards Committee, comprised of five members, shall be appointed within thirty days after the third General Membership meeting. It shall be the duty of this committee to select and present, the awards for Outstanding Service to the Active and Associate members of the Association and the awards to the individuals that are the outstanding plumbing and mechanical apprentice of the year.

D. A By-laws Committee, comprised of five members, shall be appointed within thirty days after the third General Membership meeting. It shall be the duty of this committee to review, discuss, prepare and recommend, to the Association, any necessary changes to the Association’s By-laws in order to maintain current directives for the administration of the Association.

E. A Certification, Education, and Training Committee, comprised of five members, shall be appointed within thirty days after the third General Membership meeting. It shall be the duty of this committee to organize educational classes for the School of Instruction.

F. A Finance Committee, comprised of three members, the Treasurer and the Finance Director, shall be appointed within thirty days after the third General membership meeting. It shall be the duty of this committee to prepare a budget for the fiscal year and submit it to the Board for approval at its last scheduled meeting prior to the third General Membership meeting. The committee may submit amendments to the current budget at any regular meeting. The committee shall prepare and submit any other reports as directed by the Board.

G. A Legislative Committee composed of three members, shall be appointed within thirty days after the third General Membership meeting. It shall be the duty of this committee to attend as many Virginia General Assembly meetings as possible and to be observant of new regulations. This committee will review, discuss and report to the Board of Directors and the General Membership, any legislature or regulations that will directly or indirectly effect the Association or it’s members.

H. A Membership and Website Committee, comprised of five members, shall be appointed within thirty days after the third General Membership meeting. It shall be the duty of this committee to keep the website current and updated. The website shall be the source of Association meetings, dates, membership and advertisement applications, Association and public information and other Association information.

I. A Nominating Committee shall be comprised of the five most immediate past presidents of the Association willing to serve in this capacity. The most immediate past president on the committee shall serve as the chairperson. It shall be the duty of this committee to nominate, at the third General Membership meeting, candidates for the offices to be filled. Before the election, additional nominations from the floor shall be permitted.

J. A Plumbing, Mechanical and Fuel Gas Code Committee, composed of all Association members willing to participate, the chairperson shall be appointed within thirty days after the third General Membership meeting. It shall be the duty of this committee to review, discuss and recommend necessary changes that apply to the Commercial and Residential Plumbing, Mechanical and Fuel Gas Codes.

K. A School of Instruction Committee, comprised of the Executive Secretary, the chairperson shall be appointed within thirty days after the third General Membership meeting. It shall be the duty of this committee to plan the program for the next Annual School of Instruction.

L. A Time and Place Committee, comprised of five members, shall be appointed within thirty days after the third General Membership meeting. It shall be the duty of this committee to review the date and location of all General Membership meetings and submit a report and recommendation to the General membership for approval at least twelve months prior to such meeting.

Section 2. Duties of the Committee Chairperson

A. To submit, in writing, all committee findings and recommendations to the Executive Secretary at least ten days prior to any meeting, except special meetings, unless specified on the agenda. If the chairperson or members of the committee is in attendance at the meeting, such written report shall not be required.

B. To select all committee members not specifically provided for in other sections of these by-laws and report their names to the Executive Secretary within thirty days of their appointment.

Section 3. A Special Ad Hoc Committee shall be appointed for a specific purpose when necessary.

A. The committee shall be under the authority and direction of the Board, unless specifically provided herein.

B. The committee shall be comprised of at least five members.

C. It shall be the duty of this committee to carry out a specified task and present it to the Board.

D. The committee chairperson shall not be granted the voting privileges as a Standing Committee Chairperson.

ARTICLE VII — Voting

Section 1. Only Active, Charter and Lifetime Active members who are in good standing shall have the right to vote.

Section 2. All members shall have the right to make and second motions.

ARTICLE VIII — Meetings

Section 1. Three General Membership meetings shall be held each year. The first shall take place approximately fourteen days prior to or fourteen days after August 1. The second shall take place approximately thirty days prior to or thirty days after November 15. The third shall take place approximately fourteen days prior to or fourteen days after April 1, during the Annual School of Instruction.

Section 2. Four Board meetings shall be held each year at a time and location determined by the President. The first shall be held at least sixty days prior to the first General Membership meeting. The second shall be held at least sixty days prior to the second General Membership meeting. The third on the day of the second General Membership meeting and the fourth at least thirty days prior to the third General Membership meeting. A quorum shall consist of at least seven Board members. Action taken by less than seven Board mem-

(continued)
Commercial Plumbing and Gas Piping Company specializing in Supermarkets and Retail Construction.

Licensed in North Carolina, Virginia, and Delaware.

Phone: (919) 242-4003  Fax: (919) 242-4008
Customer Service is what we do!

We are Manufacturers' Representatives/ Distributor's for some of the finest commercial plumbing products in the Industry.

Specializing in keeping our water clean by assisting the plumbing contractor, wholesaler and engineering community with specialty items such as Green/LEED Building design, Rain and Grey water Collection, Grease Interception and "Buy American" projects.

Proud members and supporters of VPMIA for Generations
Constitution and By-Laws

bers shall be null and void unless confirmed by a letter ballot from those members who were absent.

Section 3. Special Board meetings may be called by the President. Such meetings may also be called by the Board with the written request of at least seven members. The purpose of the meeting shall be stated in the call. The location of the meeting shall be determined by the President. At least ten days notice shall be given. A quorum shall consist of at least seven Board members. Action taken by less than seven Board members shall be null and void unless confirmed by a letter ballot from those members who were absent.

ARTICLE IX — Dues

Section 1. Annual Dues
A. Active membership shall be thirty dollars per calendar year.
B. Associate membership shall be thirty-five dollars per calendar year except those who have paid for five consecutive years shall only be required to pay thirty dollars per consecutive calendar year thereafter.
C. Retired membership shall be ten dollars per calendar year.
D. Charter and Life membership shall be absorbed by the Association.

Section 2. No members shall be in good standing whose dues are not paid by March 1 of each year and shall not be maintained on the membership roster if not paid by December 31.

Section 3. Dues may only be revised at General Membership meetings.

ARTICLE X — Amendments

Section 1. The Constitution and By-Laws may be amended by two-thirds vote at any General Membership meeting, provided that the proposed amendment has been submitted in writing at a previous General Membership meeting.

ARTICLE XI — Parliamentary Authority

Section 1. The current edition of Robert’s Rules of Order Newly Revised shall be the Association’s final authority on all questions of procedure and parliamentary law not covered by the Constitution and By-Laws nor any special rules of order the Association may adopt.

APPENDIX A — Districts of The Virginia Plumbing and Mechanical Inspectors Association

District I Shall be the area, including all cities and towns that lie therein, created by the counties of Augusta, Arlington, Clark, Culpeper, Fairfax, Fauquier, Frederick, Greene, Highland, Loudoun, Madison, Orange, Page, Prince William, Rappahannock, Rockingham, Shenandoah, Spotsylvania, Stafford and Warren.

District II Shall be the area, including all cities and towns that lie therein, created by the counties of Alleghany, Amherst, Appomattox, Bath, Bedford, Bland, Botetourt, Buchanan, Campbell, Carroll, Craig, Dickenson, Floyd, Franklin, Giles, Grayson, Henry, Lee, Montgomery, Patrick, Pittsylvania, Pulaski, Roanoke, Rockbridge, Russell, Scott, Smyth, Tazewell, Washington, Wise and Wythe.


Attend ANY of the Board of Directors meetings and THREE General Membership meetings throughout the year.

Check the VPMIA website, www.vpmia.org for the most current meeting information.
Resolution of Respect for
John "Johnny" Sanderson

Whereas, Before his death on April 12th, 2013, John was a member of Virginia Plumbing and Mechanical Inspectors Association; and

Whereas, John spent his career as a plumbing contractor, a professional boat racer, was an avid fisherman, and worked 9+ years for Chesterfield County as a Commercial Building Inspector in code enforcement insuring the protection of the citizens, as well as all who visited The Commonwealth of Virginia; and

Whereas, John is survived by his wife, Terri; daughter, Taylor; stepson, Ray; siblings, Marilyn S. Farmer (Ron), Reid Sanderson (Betty), H. Lee Sanderson Jr. (Donna); mother-in-law, Beverly; sister-in-law, Michele Scheurenbrand (Jay); and several nieces and nephews; and

Whereas, The Virginia Plumbing and Mechanical Inspectors Association notes with great sadness the passing of John "Johnny" Sanderson; now, therefore, be it

Resolved, That the Officers, Board of Directors, and the entire membership of the Virginia Plumbing and Mechanical Inspectors Association join the family of John “Johnny” Sanderson in celebration of his life and do also offer their most heartfelt sympathy at the loss of this cherished family member; and

Resolved further, That the Virginia Plumbing and Mechanical Inspectors Association stands in readiness to assist the family of John “Johnny” Sanderson in any manner desired or requested; and

Resolved further, That this resolution be respectfully submitted to Terri Sanderson as a permanent memorial to the memory of John “Johnny” Sanderson.

Adopted this Sixteenth Day of April, 2013

[Signature]
Curt Campbell, Secretary
Virginia Plumbing and Mechanical Inspectors Association,
Chesterfield County Residential Inspection Supervisor
OVER 90 YEARS OF QUALITY SERVICE

Montpelier, home of James Madison
Charlottesville Transit Center
Piedmont Virginia Community College

- PLUMBING
- RADIANT HEATING
- HEATING
- DEHUMIDIFICATION SYSTEMS
- HYDRONIC PIPING
- WELDING
- MEDICAL GAS
- BACK FLOW CERTIFICATION
- SBE CERTIFIED

L.A. LACY, INC.
1809 Broadway Street
Charlottesville, VA 22902
434-296-7542
434-293-9073
www.lalacy.com

Commercial - Industrial - Schools - Hospitals
Bryant Group, Inc.
7891-B Beechcraft Avenue
Gaithersburg, MD 20879

301-670-2700  Fax 301-670-2720

Ronald D. Bryant, President
Ron.Bryant@bryantgroupinc.net

R. Bruce Colton, Vice President
Bruce.Colton@bryantgroupinc.net

Serving Delaware/D.C./Maryland/Pennsylvania/Virginia/West Virginia
VPMIA Past Presidents

CHARLES E. MANNION 1963*
PAUL C. KING 1964*
GORDON I. DAMERON 1965*
D. PAUL JACK 1966*
FRANK B. BOSMA 1967*
U. EARL ALLEN 1968*
HARRY CONTE 1969
JAMES B. JONES 1970*
L. W. FURMAN 1971
GEORGE H. WILLIAMS 1972*
W. T. DRAKE 1973*
BENJAMIN BIANCO 1974
J. L. SHIFFLETT 1975
HOMER O. DENNIS 1976
JULIAN E. MEREDITH 1977*
EDWARD T. PARSONS 1978*
EDWARD J. BALDWIN, JR. 1979
HENRY A. RODÉS 1980*
RUDOLF SCHROECK 1981*
JESSE R. HURT 1982
CHARLES DEDIAN 1983
KENNETH R. SNYDER, SR. 1984
LAWRENCE J. NUCKOLS 1985
JOHN W. THURSTON 1986*
WILLIAM F. HINES 1987

LESLEI A. COURTNEY 1988
JIMMY A. ENGLISH 1989
DOUGLAS L. STOVER 1990
ROBERT M. BROOME 1991
PAUL D. HOSTETLER 1992*
DENNIS W. MCAUGHTON 1993
JOHN S. TRENARY 1994
MICHAEL D. REDIFER 1995/1996
KATHLEEN T. DYE 1997
HASSEL DeSHAZO 1998
ROY N. McFARLAND, JR. 1999/2000
CLEATIS DYE, JR. 2001
CHARLES GERBER 2002
GUY TOMBERLIN 2003/2004
GEARY SHOWMAN 2005
MICHAEL THUOT 2006
JOHN SEAY 2007
DENNIS MARTINELLI 2008
JOHN MILLS 2009
R. WAYNE KUSHNER 2010
ROBERT ADKINS 2011
BANE COMPTON 2012
RON BLADEN 2013

*Denotes deceased

Charter Members

ACTIVE
* MR. U. EARL ALLEN
* MR. E. W. BAUGHAN
* MR. FRANK BOSMA
* MR. E. R. CARR
* MR. EUGENE COBANKS
MR. M. D. COOPER
* MR. GORDON I. DAMERON
* MR. JAMES B. JONES, JR.
* MR. PARL C. KING
* MR. CHARLES E. MANNION
* MR. JOHN B. MASON
MR. CURTIS H. NUNALLY
* MR. WILLIAM G. PRIDDY

ASSOCIATE
* MR. JOSEPH E. BAKER
* MR. T. C. BROWN
* MR. CHARLES E. WESSMAN

LADIES AUXILIARY
* MRS. RUTH BIANCO
* MRS. ANN COBANKS
* MRS. IRMA DRAKE
MRS. RUTH JACK
MRS. MARGARET KING
MRS. SONIA SCHROECK
MRS. SHIRLEY WILLIAMS
* Indicates Deceased

A new AdHoc committee

VIRGINIA TRADESMAN EDUCATION COALITION

Another example of VPMIA’s strength through leadership, education and unity

The Plumbing and Mechanical Professionals of Virginia (PMPV),
The Virginia Chapter of the International Association of Electrical Inspectors (VA-IAEI),
The Virginia Building and Code Officials Association (VBCOA),
The Virginia Fire Prevention Association (VFPA)
and the Virginia Plumbing and Mechanical Inspectors Association (VPMIA)

Working together to promote quality education opportunities for certified tradesmen in Virginia.
OFFICERS

President .............................................................. Paul Rimel
Vice President .................................................. Skip Harper
Secretary ......................................................... Curtis Campbell
Treasurer ............................................................ Richard Grace
Executive Secretary ........................................... Geary Showman

DIRECTORS

Director at Large ............................................. Ron Bladen
District 1 Director ............................................. James Anjam
District 2 Director ............................................. William Aldridge
District 3 Director ............................................. Dustin McLehaney
District 4 Director ............................................. Edwin “Chip” McErlean

COMMITTEE CHAIRS

Advertising/Yearbook ................................... John Seay
Audit/Finance .................................................. Geary Showman
Awards ............................................................ John Seay
By-laws/Parliamentarian ............................... Dustin McLehaney
Cert./Education/Training ............................... Skip Harper
Finance .......................................................... Richard Grace
Legislative ....................................................... Ronald Clements
Membership/Website ...................................... Skip Harper
Nominating ...................................................... Ron Bladen
Plumbing, Mechanical, & Fuel Gas Codes ....... Shawn Strausbaugh
School of Instruction ....................................... Ron Bladen
Time/Place ...................................................... Wayne Kushner

Ad Hoc Committee Chairs

Building Safety Month ..................................... Bill Aldridge
Joint Conference ......................................... Curtis Campbell
VBCOA Liaison ............................................. Shawn Strausbaugh
By-laws/Parliamentarian ............................... Dustin McLehaney

Acknowledgements

Thank You to those whose efforts have made this VPMIA Yearbook possible.
Jesse Hurt, Lifetime Active Member, Ron Bladen, SOI Chairman,
Don Bladen, Doyle Printing & Offset, Jane Fitzgerald, Fitzgerald Art & Design LLC,
Our Advertisers, (individually listed on p. 3), Our Exhibitors, (individually listed on p. 35)
With special thanks to our contributing authors, Lee Clifton, ICC, and Luis Escobar, ACCA

—John Seay, Chairman, VPMIA Advertising/Yearbook Committee
Navien®
The Leader in Condensing Tankless Technology

NPE Series

- 1/2” gas pipe capable up to 24’
- Field convertible gas system
- Ultra condensing efficiency .98EF
- Dual stainless steel heat exchangers
- Low NOx emissions (≤ 20ppm)
- SCH 40, 2” venting up to 60’
- Cascading capable

---

Wilo®

Stratos Giga
High Efficiency Inline Circulator

- ECM motor technology reduces energy consumption by up to 80%
- Available in glanded construction mechanical shaft seal and flanged connections
- Integrated electronic power adjustment
- Compact and space-saving design
- ‘Red Button’ technology and LED display
- Control modules available for building

---

HTP
Electric Water Heaters

<table>
<thead>
<tr>
<th>Appliance Type</th>
<th>Hybrid Heat Pump</th>
<th>Everlast Commercial</th>
<th>Everlast Residential</th>
<th>Commercial Electric</th>
<th>Marine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tank Material</td>
<td>Glass Lined w/ Anode Rods</td>
<td>316 L Stainless Steel</td>
<td>316 L Stainless Steel</td>
<td>Glass Lined w/ Anode Rods</td>
<td>316 L Stainless Steel</td>
</tr>
<tr>
<td>Heat Exchanger</td>
<td>Copper Tubed / Heating Element</td>
<td>Incoloy Stainless Steel Element</td>
<td>Incoloy Stainless Steel Element</td>
<td>Resistol Immersion Elements</td>
<td>Finned Cupronickel or Stainless Steel Element</td>
</tr>
</tbody>
</table>

---

Traveling Display Van

---

Manufacturers Representative Since 1987

Harry Eklof & Associates, Inc.
3481 Penney Drive – Landover, MD 20785 • 301-772-1768 • Fax 301-772-3319
3001 Impala Place • Richmond, VA • 804-266-0076 • Fax 804-265-0280

www.harryeklof.com • E-mail: info@harryeklof.com
What’s New in the 2015 International Plumbing Code® (PC)

The International Plumbing Code (IPC) continues to show its green as it introduces trenchless technology to the most extensive collection of building codes in the world. Pipe bursting as it is commonly referred to, involves the replacement of an old pipeline with a same or larger diameter pipe in a process that destroys the original pipe as the new one is installed. The pipe bursting tool, which is pulled through the sewer by a winch or rod, is located at an upstream opening, forces its way through existing pipe materials by fragmenting the old pipe and compressing the broken pieces into the soil as it progresses from one end to the other.

In developed countries, many post WWII utility lines are at the end of their service life, while at the same time a large percentage of the world’s population between one and two billion people have substandard sanitation and no regular source of clean drinking water.

In the United States, the topic of failing infrastructure has become a regular theme in the media. The problem is sanitary sewer overflows (SSOs), caused by inflow and infiltration, which occurs when ground water and other surface drainage enter and inundate sanitary sewer systems. These terms and what they imply are steadily gaining awareness across America and around the world.

The rehabilitation and replacement of an aging sewer infrastructure with the least amount of impact on the consumer is a good thing. This pipe replacement process utilizes HDPE (High Density Polyethylene) seamless piping which is joint-free and prevents root intrusion. A sewer camera is used to do a video inspection to insure that the pipe replacement was done correctly and that the proper grade (slope) of the pipe is obtained.
Let’s take a close look at a new code section and the new requirements. Section 717.2 will allow the replacement of building sewer pipe by pipe bursting methods to a maximum of six inches and shall be no less than the same size as the existing piping. Section 717.3 requires the existing piping sections that are to be replaced to be inspected internally by a recorded video camera survey. The survey shall include notations of the position of the cleanouts and the depth of the connections to the existing piping. Section 717.4 requires the replacement piping to be of extra high molecular weight PE3408 material and to be manufactured with a standard diameter ratio (SDR) 17 in compliance with ASTM F714. The pipe fittings to be connected to the replacement piping shall be of extra high molecular weight PE3408 material and shall be manufactured with SDR 17 in compliance with ASTM D2683. Where the existing building sewer did not previously have cleanouts, the requirements of this code will require cleanout fittings be installed. The completed replacement piping section shall be inspected internally by a recorded video camera survey and then be reviewed and approved by the code official prior to pressure testing of the replacement piping system. The test shall be in accordance with Section 312 of the IPC.

The new code requirements will give contractors and engineers the necessary tools to do the job while still being environmental friendly, and "GREEN" by reducing negative impacts to property and infrastructures. They will eliminate cost associated with the replacement of landscaping, trees, driveways, sidewalks, patios and more. The environmental benefits of Trenchless Technology will be attractive to those jurisdictions that will be adopting the 2015 International Plumbing Code. Current research shows that CO2 emissions are reduced when trenchless methods are used versus open-cut. This translates to a direct-cost benefit for cities that are facing “carbon taxation.” Yes, trenchless technology saves time, money and minimizes restoration cost. The IPC again leads the way with new innovative technology.

8” Bursting Head Preparing to Enter Ductile Iron Pipe

Lee Clifton, Director of Plumbing, Mechanical, and Fuel Gas Resources for the International Code Council (ICC) with 40 years of experience in the Plumbing, Mechanical, and Fuel Gas Industry. His career began as a second generation plumber, working for his father at Clifton Plumbing Inc. in Tampa, Florida. He retired from the City of Los Angeles in 2007 as a Principal Inspector after 21 years of service.
COUNT ON US
1,350 locations. All 50 states. 300 showrooms. 17,000 associates. 58 years in business.

At Ferguson, it’s true that our inventory is huge. And our one-stop shopping for building products is the height of convenience. But there is one thing we supply that building professionals have come to rely on again and again for over 58 years – our people. Our associates make certain you can count on Ferguson – where friendly service, expertise, and a willingness to go the extra mile are never in short supply.

PLUMBING.
FIXTURES.
APPLIANCES.
LIGHTING.

Please visit us at one of our 69 locations throughout Virginia. Visit our website for the location nearest to you.

FERGUSON.COM
Nobody expects more from us than we do®

© 2011 Ferguson Enterprises, Inc. All rights reserved.
### OUTSTANDING SERVICE

#### Gordon I. Dameron Active Award

<table>
<thead>
<tr>
<th>Years</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982-1983</td>
<td>Jesse B. Hurt</td>
</tr>
<tr>
<td>1983-1984</td>
<td>George H. Williams, Jr.</td>
</tr>
<tr>
<td>1984-1985</td>
<td>Robert M. Broome</td>
</tr>
<tr>
<td>1985-1986</td>
<td>—</td>
</tr>
<tr>
<td>1986-1987</td>
<td>Paul M. Adams</td>
</tr>
<tr>
<td>1988-1989</td>
<td>Paul Hostetler &amp;</td>
</tr>
<tr>
<td></td>
<td>Joseph Hall</td>
</tr>
<tr>
<td>1989-1990</td>
<td>Dennis W. McNaughton</td>
</tr>
<tr>
<td>1990-1991</td>
<td>Floyd Proffitt</td>
</tr>
<tr>
<td>1991-1992</td>
<td>Jeffrey Shawver</td>
</tr>
<tr>
<td>1992-1993</td>
<td>Tommy Cantrell</td>
</tr>
<tr>
<td>1993-1994</td>
<td>Hassel E. DeShazo</td>
</tr>
<tr>
<td>1994-1995</td>
<td>Doug Stover &amp;</td>
</tr>
<tr>
<td></td>
<td>Jack Rhoden</td>
</tr>
<tr>
<td>1995-1996</td>
<td>Robert D. Carroll</td>
</tr>
<tr>
<td>1997-1998</td>
<td>Kathleen T. Dye</td>
</tr>
<tr>
<td>1998-1999</td>
<td>—</td>
</tr>
<tr>
<td>2000-2001</td>
<td>William F. Hines</td>
</tr>
</tbody>
</table>

#### David L. Carr Associate Award

<table>
<thead>
<tr>
<th>Years</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981-1982</td>
<td>William E. Foley</td>
</tr>
<tr>
<td>1982-1983</td>
<td>John V. Duley</td>
</tr>
<tr>
<td>1983-1984</td>
<td>J. C. Nuckols</td>
</tr>
<tr>
<td>1984-1985</td>
<td>Lawrence R. Muse</td>
</tr>
<tr>
<td>1985-1986</td>
<td>—</td>
</tr>
<tr>
<td>1986-1987</td>
<td>David Maupin</td>
</tr>
<tr>
<td>1987-1988</td>
<td>Ronald Bryant</td>
</tr>
<tr>
<td>1988-1989</td>
<td>Robert W. Price</td>
</tr>
<tr>
<td>1989-1990</td>
<td>Fred Borden, Jr.</td>
</tr>
<tr>
<td>1990-1991</td>
<td>Billy E. Leeder</td>
</tr>
<tr>
<td>1991-1992</td>
<td>James B. Muncy</td>
</tr>
<tr>
<td>1993-1994</td>
<td>Danny &amp; Laurie Crigler</td>
</tr>
<tr>
<td>1995-1996</td>
<td>James B. Hyler</td>
</tr>
<tr>
<td>1996-1997</td>
<td>J. C. Nuckols</td>
</tr>
<tr>
<td>1997-1998</td>
<td>James S. Steinle</td>
</tr>
<tr>
<td>1998-1999</td>
<td>Thomas C. Roberts</td>
</tr>
<tr>
<td>1999-2000</td>
<td>David Johnston</td>
</tr>
<tr>
<td>2000-2001</td>
<td>David L. Maupin</td>
</tr>
<tr>
<td>2001-2002</td>
<td>Lorrie Norton</td>
</tr>
<tr>
<td>2002-2003</td>
<td>Allen Tryall</td>
</tr>
<tr>
<td>2003-2004</td>
<td>Jonathan Sargeant</td>
</tr>
<tr>
<td>2004-2005</td>
<td>—</td>
</tr>
<tr>
<td>2005-2006</td>
<td>—</td>
</tr>
<tr>
<td>2006-2007</td>
<td>—</td>
</tr>
<tr>
<td>2007-2008</td>
<td>Jay Otto</td>
</tr>
<tr>
<td>2008-2009</td>
<td>—</td>
</tr>
<tr>
<td>2009-2010</td>
<td>Richard (Dick) Maher</td>
</tr>
<tr>
<td>2010-2011</td>
<td>—</td>
</tr>
<tr>
<td>2011-2012</td>
<td>Tom Harlan</td>
</tr>
<tr>
<td>2012-2013</td>
<td>Vic Hines</td>
</tr>
</tbody>
</table>

### LIFETIME MEMBERSHIP

#### D. Paul Jack Active Award

<table>
<thead>
<tr>
<th>Years</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989-1990</td>
<td>George H. Williams, Jr.</td>
</tr>
<tr>
<td>1990-1991</td>
<td>Kenneth R. Snyder, Sr.</td>
</tr>
<tr>
<td>1991-1992</td>
<td>Jesse B. Hurt</td>
</tr>
<tr>
<td>1992-1993</td>
<td>Douglas Stover</td>
</tr>
<tr>
<td>1993-1994</td>
<td>Ernest &quot;Bud&quot; Lester</td>
</tr>
<tr>
<td>1994-1995</td>
<td>Paul Hostetler</td>
</tr>
<tr>
<td>1995-1996</td>
<td>Paul M. Adams</td>
</tr>
<tr>
<td>1996-1997</td>
<td>Michael D. Redifer</td>
</tr>
<tr>
<td>1997-1998</td>
<td>Hassel E. DeShazo</td>
</tr>
<tr>
<td>1998-1999</td>
<td>Kathleen T. Dye</td>
</tr>
<tr>
<td>1999-2000</td>
<td>—</td>
</tr>
<tr>
<td>2000-2001</td>
<td>William F. Hines</td>
</tr>
<tr>
<td>2001-2002</td>
<td>Larry Dehaven</td>
</tr>
<tr>
<td>2002-2003</td>
<td>Lawrence Nuckols</td>
</tr>
<tr>
<td>2004-2005</td>
<td>Guy Tomberlin</td>
</tr>
<tr>
<td>2005-2006</td>
<td>Stephen P. Borders</td>
</tr>
<tr>
<td>2006-2007</td>
<td>Charles Gerber</td>
</tr>
<tr>
<td>2007-2008</td>
<td>James T. Moore</td>
</tr>
<tr>
<td>2008-2009</td>
<td>Geary Showman</td>
</tr>
<tr>
<td>2009-2010</td>
<td>Dennis Martinelli</td>
</tr>
<tr>
<td>2010-2011</td>
<td>John B. Seay, Jr.</td>
</tr>
<tr>
<td>2011-2012</td>
<td>Wayne Kushner</td>
</tr>
<tr>
<td>2012-2013</td>
<td>Richard Witt</td>
</tr>
</tbody>
</table>

#### John A. Otto Associate Award

<table>
<thead>
<tr>
<th>Years</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989-1990</td>
<td>J. Richard Maher</td>
</tr>
<tr>
<td>1990-1991</td>
<td>David L. Carr</td>
</tr>
<tr>
<td>1992-1993</td>
<td>—</td>
</tr>
<tr>
<td>1993-1994</td>
<td>Billy E. Leeder</td>
</tr>
<tr>
<td>1994-1995</td>
<td>James B. Muncy</td>
</tr>
<tr>
<td>1995-1996</td>
<td>Thomas C. Roberts</td>
</tr>
<tr>
<td>1996-1997</td>
<td>Tom Kreutzer</td>
</tr>
<tr>
<td>1997-1998</td>
<td>James S. Steinle</td>
</tr>
<tr>
<td>1998-1999</td>
<td>John Otto</td>
</tr>
<tr>
<td>1999-2000</td>
<td>—</td>
</tr>
<tr>
<td>2000-2001</td>
<td>Herbert L. Joyner</td>
</tr>
</tbody>
</table>

### CODE DEVELOPMENT LEADERSHIP

#### Jack A. Proctor Sr. Active Award

<table>
<thead>
<tr>
<th>Years</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2012</td>
<td>Guy Tomberlin</td>
</tr>
<tr>
<td>2012-2013</td>
<td>Richard Grace</td>
</tr>
</tbody>
</table>

---

**NSF International**

Christopher Salazar  
Business Unit Manager  
Plumbing Programs

- **Phone:** 734-827-3815  
- **Toll Free:** 800 NSF-MARK  
- **Fax:** 734-827-6132  
- **Cell:** 805-290-0329  
- **E-mail:** chsalazar@nsf.org

789 N. Dixboro Rd.  
Ann Arbor, Michigan 48105  
www.nsf.org
The state of Virginia has referenced ANSI/ACCA 1 Manual D® (Residential Duct Systems) since its original inclusion in the 2003 state building code. It is the industry standard for properly sizing the air ducts that deliver conditioned air to the various rooms of a home. However, in my conversations with code officials around the state over the past couple of years, I have come to learn that it is not well understood. The intent of this article is to summarize the procedure contained in Manual D, and suggest ways in which you, a Virginia plan reviewer or inspector, can evaluate a design to ensure it complies with the code requirement.

THE BASICS
Duct system design can be broken down to five main steps:

- Determine the external static pressure (ESP) at the design CFM from the HVAC equipment manufacturer’s blower performance data;
- Sum up the component pressure losses (CPL) for things like the coil, air filters, and supply/return grilles;
- Subtract the total component pressure loss from the external static pressure to find the available static pressure (ASP);
- Identify the longest supply and return runs within the home to calculate the total effective length (TEL);
• Use the available static pressure and total effective length to calculate the system’s friction rate (FR). This is done with the simple equation FR = (ASP x 100) / TEL.

The designer wants the friction rate to fall within ‘the wedge’ (a friction rate between 0.06 and 0.18 inches of water column or IWC) in order to avoid inadequate fan performance. A friction rate lower than 0.06 IWC can result in larger than needed ducts, which can increase home construction and/or HVAC installation costs. A friction rate higher than 0.18 IWC will result in air speed that is too high, which means that the ducts will cause noise problems. If the friction rate is not in the wedge, the designer will need to adjust the design layout or change the components that cause pressure losses.

Final duct sizing will depend on the velocity of the air within the ducts. Manual D allows for a maximum speed of 900 feet per minute (fpm) for supply ducts, and 700 fpm for return ducts. If the design air speed exceeds these limits, the designer needs to size the ducts for the maximum speed allowable. They’ll do this by using a duct wheel which allows them to compare air volume (CFM), air velocity (fpm), friction rate (FR), and duct diameter. ACCA has a duct wheel that is easy to use (also available as a mobile app), but the designer should use whichever they feel comfortable with.

Beware of contractors that always have a friction rate of 0.10! It is usually an indicator of someone that has not taken the time to properly size the ducts, but is instead following an outdated rule-of-thumb.

RESOURCES
It is inexcusable for a professional HVAC contractor to ignore the sizing procedure in Manual D. The manual itself discusses intricacies and details that can be encountered when designing the duct system. But in order to help the designer keep everything
To ensure good fortune when choosing cast iron pipe, always look for the CISPI mark. It stands for quality cast iron made in America.
straight for a particular system design, Manual D provides a Friction Rate Worksheet (see Figure 3) on which they can log the pertinent values. ACCA urges you to require submission of this worksheet for every permit request.

To further support plan reviewers, we have also developed the Residential Plans Examiner Review Form for HVAC System Design, which we make available for free in the downloads section at [http://www.acca.org/standards/codes/system-design-review-form/](http://www.acca.org/standards/codes/system-design-review-form/). This form (see Figure 1) streamlines the process of design review by presenting the essential information from the HVAC system design (load calculation, equipment selection, duct system design) all in one place. If your jurisdiction doesn’t already require it, please check it out. We also have free Speed-Sheets available for system designers at [http://www.acca.org/standards/acca-speed-sheets/](http://www.acca.org/standards/acca-speed-sheets/).

**Friction Rate Example**

Let’s examine this radial duct system: (see Figure 2). We see that there are eight supply runs and four return runs. It shows the distance from the air handler, the type of boots, and type of fittings. It tells us the design CFM, and from manufacturer data (not shown) we know that the blower will deliver the 800 CFM at an external static pressure (ESP) of 0.36 IWC.

The first thing the designer needs to do is determine the longest supply and return runs by finding their total effective lengths. To do this, they not only measure the physical length to each supply, but also note that every fitting/takeoff/boot has an effective length associated with it that must be added to the run’s length. That’s what the 5B, 6L, 1A, etc. signify. They correspond with groups found in Appendix 3 of Manual D, which contains the associated effective lengths. After summing up the various effective lengths for each supply, the designer finds that the

![Friction Rate Chart](image)

Continued
longest run is to supply #7, and that the total effective length is 111 feet. The total effective length for the longest return path (R1 or R3, both equal length) is 110 feet. So total effective length (TEL = longest supply + longest return side) used on the Friction Rate Worksheet is 221 feet.

The design plans are to install an electronic filter (0.11 IWC of pressure loss), a supply outlet (0.03 IWC), a return (0.03 IWC), and a hand damper (0.03 IWC) gives us a total component pressure loss (CPL) of 0.20 IWC. We subtract this from the ESP to find that the available static pressure (ASP) is 0.16 IWC. Note that this 0.16 IWC would be further reduced if high-efficiency filters are used, or other components such as humidifiers, hotwater coils, zone dampers, etc. are in the air system.

Using the friction rate equation \( FR = \frac{(ASP \times 100)}{TEL} \), we calculate the friction rate as 0.07 IWC (see Figure 3). Note that this friction rate is a function of the system physical attributes, and not just an arbitrary value that many designers use for every system. Different systems would have unique friction rates that would be used for sizing the ducts with a duct wheel.
Spouses attending the SOI may join in any of the activities as our guests. Members are welcome to assist at Registration.

TENTATIVE PROGRAM

Wednesday, April 2
7:00 – 8:15 Registration
11:30 – 1:00 Lunch @ HILTON GARDEN — adjacent to the Holiday Inn
1:00 – 4:00 Craft
5:00 – 6:00 VPMIA President’s Welcome Reception
6:00 – 8:00 Dinner @ HILTON GARDEN

Thursday, April 3
10:00 Ladies Auxiliary Business meeting
12:00 – 1:00 Lunch @ HILTON GARDEN
1:00 – 3:00 Shop/tour
6:30 – 10:00 Banquet @ Holiday Inn

Friday, April 4
7:30 – 9:00 Breakfast Buffet @ HILTON GARDEN
9:00 Bingo

Be sure to stop by the Conference Registration desk for the latest news about activity plans/meeting locations.

2012-2014 Roster as of February 2014

<table>
<thead>
<tr>
<th>Cathy Harper (President)</th>
<th>Ann Cousins</th>
<th>Joyce Jackson</th>
</tr>
</thead>
<tbody>
<tr>
<td>VPMIA (Skip)</td>
<td>VPMIA (Paul)</td>
<td>VPMIA (Clarence)</td>
</tr>
<tr>
<td>571 Factory Mill Rd.</td>
<td>237 Southlake Place</td>
<td>9013 Pole Run Road</td>
</tr>
<tr>
<td>Bumpass, VA 23023</td>
<td>New Port News, VA 23602</td>
<td>Disputanta, Virginia 23842</td>
</tr>
<tr>
<td>540-556-2375 (H)</td>
<td>(757) 875-1463 (H)</td>
<td>804-966-8511</td>
</tr>
<tr>
<td>804-683-9337 (W)</td>
<td>(757) 719-7633 (C)</td>
<td><a href="mailto:jbjackson@courts.state.va.us">jbjackson@courts.state.va.us</a></td>
</tr>
<tr>
<td><a href="mailto:cathyoharper@yahoo.com">cathyoharper@yahoo.com</a></td>
<td><a href="mailto:Pamco12@verizon.net">Pamco12@verizon.net</a></td>
<td>Tammy Kushner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VPMIA (Wayne)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>June Seay (Vice President)</th>
<th>Jane Fitzgerald</th>
<th>Ethel Showman</th>
</tr>
</thead>
<tbody>
<tr>
<td>VPMIA (John)</td>
<td>VPMIA (Ron Bladen)</td>
<td>VPMIA (Geary)</td>
</tr>
<tr>
<td>280 Coles Rolling Road</td>
<td>5716 7th Street, North</td>
<td>1221 St. Luke Road</td>
</tr>
<tr>
<td>Scottsville, VA 24590</td>
<td>Arlington, VA 22205</td>
<td>Front Royal VA 22630-6836</td>
</tr>
<tr>
<td>434-286-3139</td>
<td>703-527-4210 (H)</td>
<td><a href="mailto:tkush32@comcast.net">tkush32@comcast.net</a></td>
</tr>
<tr>
<td><a href="mailto:seayit2@yahoo.com">seayit2@yahoo.com</a></td>
<td>703-527-1238 (W)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><a href="mailto:msfitz13@verizon.net">msfitz13@verizon.net</a></td>
<td>Sandy Tomberlin</td>
</tr>
</tbody>
</table>

Mary Thuot (Secretary)
VPMIA (Michael)
3197 Adam Keeling Road
Virginia Beach Va 23454
757-496-0355
mthuot2686@aol.com

Sherry D. Rimel (Treasurer)
VPMIA (Paul)
1159 New Hope Road
Staunton, VA 24401
540-688-7106 (H)
540-332-7086 (W)
nmlefs@gmail.net
sherry.rimel@wwrc.virginia.gov

Joyce Hurt
Lifetime Member
VPMIA (Jesse)
18060 James Madison Hwy.
Gordonsville, VA 22942
540-832-3767
jessehurt@ntelos.net

Teresa Hudson
VPMIA (Charles)
1010 W Atlantic St
South Hill, VA 23970
434-447-7905

Teresa.Hudson@southside.edu

Be sure to stop by the Conference Registration desk for the latest news about activity plans/meeting locations.
Superior installation methods!

- Less space
- Less labor
- Less material
- Professional appearance

Morgan Thermal Ceramics installation method

FIREMASTER™

NEW Optimized grease duct enclosure system

- Butt joints, all seams, both layers, no 3” overlaps
- Maximum 3” thickness along all surfaces of the duct
- UL listed for rectangular and round ducts
- UL listed, liquid tight, single layer FastDoor XL for duct access

Competitor installation method

Cross section of applied insulation

www.morganthermalceramics.com
VPMIA Associate Members

2013-2014

Ackerman, John
Ackerman Construction, Inc.
3251 Happy Hollow Road
Blacksburg, Va. 24060
540-320-1536
540-961-6663 FAX
happyhollowroad@yahoo.com

Akers, Joseph C.
A & S Home Repairs Inc.
85 Applewood Drive
Christiansburg, Va. 24073
540-382-4869
540-382-4869 FAX
akersplumbing@verizon.net

Allen, Marlond
L.A. Lacy, Inc.
1809 Broadway Street
Charlottesville, VA 22902
434-296-7542

Barbe, Phillip S., Jr.
Backflow Technology, LLC.
PO Box 1575
Sterling, VA 20167
703-450-5898
703-450-4108 Fax
Backflow07@aol.com

Bennett, Bill
President
The Plumbing Dr.
1063-B West Broad Street
Falls Church, VA 22046
703-525-9280
Drbill1@theplumbingdr.com

Borden, Fred W.
Fred W. Borden, Inc.
4174-A Old Stockyard Rd.
Marshall, VA 20115
703-378-8484
703-378-6359 Fax

Brown, Jeremy
NSF International
789 Dibboro Road
Ann Arbor, MI 48189
734-395-4667
brown@nsf.org

Bryant, Ronald D.
President
Bryant Group, Inc.
7891 Beechcraft Avenue
Gaithersburg, MD 20879
301-670-2700
301-670-2720 Fax
ron.bryant@bryantgroupinc.net

Burkert, Chris
Capital Inspections
P.O. Box 1321
Centreville, VA 20120
703-222-8826
cab2326@aol.com

Cartwright, Shelton
Territorial Manager-VA, WV & MD
WaterFurnace International
145 Birdwood Court
Charlottesville, VA 22903
434-296-9348
Shelton.Cartwright@waterfurnace.com

Clifton, Lee
ICC-PMG
Director of Plumbing Programs
Los Angeles District Office
5360 Workman Mill Road
Whittier, CA 90601
888-422-7233 x3287
LClifton@iccsafe.org

Colton, Richard B.
Master, Inc.
7891 Beechcraft Ave
Gaithersburg, MD 20879
301-252-3308
301-258-7368 Fax
bruce.colton@bryantgroupinc.net

Crigler, Laurie & Daniel
Life Member
L & D Associates
935 Good Hope Church Road
Aroda, VA 22709
540-948-6230
540-948-5617 Fax
lcc@ldassociatesinc.com

Diggs, David
Branch Manager
Ferguson-A Wolseley Company
505 Garrett Street
Charlottesville, VA 22902
434-971-7000
David.Diggs@ferguson.com

Edwards, Herb
Harry Eklof & Associates
3401 Pennsy Drive
Landover, MD 20785
301-772-7347

Edwards, Tim
Regional Engineer
Advanced Drainage Systems
13320 Meredith Pointe Way
Chesterfield, VA 23832
804-922-2289
804-739-2866 Fax
tim.edwards@ads-pipe.com

Escobar, Luis
Technical Services Engineer
ACCA
2800 Shirlington Road
Arlington, VA 22206
703-824-8870
Luis.Escobar@ACCA.org

Promo Factory
888-380-1309
www.yourpromoneeds.com
Anything you want with your logo!
AWARDS PADFOLIOS PLAQUES PENS DISPLAYS
BANNERS APPAREL HATS AND MUCH MORE!
Got Questions ??? SMACNA’s Got Answers

You can count on SMACNA for technical interpretations of our standards...

Visit www.smacna.org/technical and send us your technical inquiry. We’ll get back to you with an answer promptly.

SMACNA standards and manuals address all facets of the sheet metal and HVAC industry from duct construction and installation to indoor quality, from energy recovery to metal roofing systems, to welding and commissioning.

SMACNA Contractors Go by the Books They Helped Write

SMACNA Contractors have been setting HVAC industry standards for more than 70 years. It’s one thing to go by the book and try to follow the standards someone else decides for you. It’s quite different to set the standards of quality the entire industry follows.

SMACNA Contractors have used their knowledge to develop the measures of quality, excellence and professionalism to meet the needs of the HVAC industry.

- Commercial
- Institutional
- Residential
- Industrial

Sheet Metal and Air Conditioning Contractors’ National Association
4201 Lafayette Center Dr. • Chantilly, VA 20151 • www.smacna.org
Welcome to the NewAge of Epoxy Soil Pipe

APPLICATIONS
- **Medical Facilities**: Hospitals, Trauma Centers, Laboratories, Dialysis Clinics, Research Facilities
- **Enhanced DWV**: Kitchens, Bars, Soda Machines, Grease Interceptors, Waterless Urinals, High Efficiency, Casinos
- **Destructive Elements & Environments**: Maritime, Corrosive Soils, Rainwater, Boiler Rooms, Sustainable Buildings with waste volumes flowing from 20% to 50% less
- **High Occupancy Structures**: High Rises, Malls, Shopping Centers, Schools, Colleges, Universities, Arenas, Stadiums, Theatres, Convention Centers, Office Complexes
- **Assisted Living Centers**: Convalescent Homes, M/OBs

**COST**
A cost effective alternative to CPVC, acid waste, glass pipe, duriron, & stainless steel. We offer a solution to existing pipe materials, sizes & specifications.

**EPOXY COATING TESTING**
1. Salt Spray
2. Chemical
3. High temperature waste testing
4. Temperature cycling testing
5. Flame resistant

**INSTALLATION**
Standard installation practices

**PRODUCTS**
No Hub from 1-1/2" to 15" & Couplings

**SPECIFICATION & STANDARDS**
ASTM - A888
CISPI 301
ASTM 1277, 1540 & C564 - Regular & HD Couplings
EN 877 Coating Specification & Testing

For the life of the building.

12630 West Airport Blvd. • Suite 100
Sugar Land, TX 77478 • Phone: (281)565-0928
Fax: (281)565-0929 • Email: info@NewAgeCasting.com
Toll Free: 1.866.791.7055 • NewAgeCasting.com
Estrada, Fernando  
F.E.D. Plumbing  
4106 Ivanhoe Lane  
Alexandria, Va. 22310  
703-989-5942  
703-329-4814 Fax

Fish, Roylee  
Philbrick, Inc.  
4999 Portsmouth Blvd.  
Portsmouth, Va. 23701  
757-488-8367  
757-488-0915 Fax

Griffith, Randolph  
President  
Griffith Group, Ltd.  
12155 O’Bannon’s Mill Road  
Boston, VA 22713-4160  
540-547-5100  
540-547-3420  
griffithrw@msn.com

Harlan, Tom  
Manufacturer Representative  
Morgan Thermal Ceramics, Inc.  
515 White Marsh Road  
Centreville, MD 21617  
410-758-3880  
Harlan@myshorelink.com

Hibbs, Evan C.  
President  
Evan Hibbs Plumbing  
957 Chautaqua Ave  
Portsmouth, VA 23707  
757-393-7401  
757-393-7403 Fax  
evan@evanhibbs.com

Hibbs, Jody  
Executive Director  
Plumbing & Mechanical Professionals of Virginia  
PO Box 6143  
Suffolk, VA 23433  
800-947-7450  
800-947-7415 Fax  
info@pmpv.org

Hines, Vic  
Senior Field Technical Representative  
Charlotte Pipe & Foundry Co.  
3425 Manor Grove Circle  
Glenn Allen, VA 23059  
(P) 804-241-2426  
(F) 804-348-9893  
vhines@charlottepipe.com

Jaffe, Dave  
Cast Iron Soil Pipe Institute-CISPI  
1064 Delaware Avenue, NE  
Atlanta, GA 30316  
732-677-6959  
DJaffe@CISPI.org

Jinks, Scott  
J & S Plumbing  
P.O. Box 1628  
Manassas, VA 20108  
703-609-0791  
luckyjinks1@aol.com

Jones, Mark T.  
Clear Creek Water Works, LLC  
P.O. Box 6122  
Christiansburg, Va. 24068  
540-381-0768  
mark@clearcreekwaterworks.com

Junker, John  
DuctMate Industries  
210 5th Street  
Charleroi, PA 15022  
412-736-9070  
JJunker@Ductmate.com

Kelley, George  
President  
GSSN  
102 Lipizzaner Court  
Stephens City, VA 22655  
540-514-7615  
gssn-corp@hotmail.com

Knizner, Marty  
ATS Inc. LLC (President)  
7620 Penn Belt Drive  
Forestville, MD. 20747  
301-735-3001  
Fax 301-735-6829  
martyats@aol.com

Kreutzer, Tom  
Woodbridge Plumbing, Inc.  
2705 Code Way  
Woodbridge, VA 22192  
703-494-9666  
703-494-0739 FAX

Leonard, Gary E.  
President  
Leonard-Splaine Company, Inc.  
13300 Occoquan Road  
Woodbridge, VA 22191  
703-494-2855  
703-494-8305 FAX  
Leonard.gary@hotmail.com

Lindsey, James E.  
Lindsey Brothers, Inc.  
865 Newtown Road  
Virginia Beach, Va. 23462  
757-497-4633  
757-497-0924 FAX

Lindsey, Jessie R.  
Hot Water Services  
924 Albert Ave.  
Norfolk, Va. 23513  
757-237-8287

Lindsey, Joseph C.  
Joseph C. Lindsey PC  
500 E. Plume Street #301  
Norfolk, Va. 23510  
757-623-6522  
757-623-7020 FAX  
jlindseypc@aol.com

Martin, H.W. Bill  
Tidewater Plumbing, Heating, & AC  
1440 Braden Crescent  
Norfolk, Va. 23502  
757-855-6112  
bm23502@msn.com

Martin, Michael A.  
Rightway Maintenance, Inc.  
8432 Tidewater Drive  
Norfolk, Va. 23518  
757-737-6155

E&E Plumbing and Heating
Service • Remodeling • New Construction • Septic Systems  
Excavating • Electrical Repairs & Service Upgrades  
Well Pump Repair, Replacement & New Installation

"Our Service is Our Sale"

www.eandeplumbing.com  
(540) 337-1856 • (540) 943-7727 • (540) 337-9453
296 Draft Avenue Stuarts Draft, VA 24477  
VA Contractors Lic. #2705 040015A
Maupin, David  
Life Member  
W.E. Brown, Inc.  
915 Monticello Rd  
Charlottesville, VA 22902  
434-295-1177  
434-979-1394 FAX  
dave@webrown.com

May, Ricky A.  
Plumbing Specialists, Inc.  
41-B West Main Street  
Salem, Va. 24153  
540-387-2153  
540-387-3595 Fax  
plumberpilot1@aol.com

McGreal, Michael  
Firedyne Engineering, PC.  
18222 Cork Road  
Tinley Park, IL. 60477  
708-633-8140  
708-633-1569 Fax  
firedyne@comcast.net

McManus, Vincent James  
Climatemakers Ltd. of Va.  
4803 Bayshore Court  
Virginia Beach, Va. 23462  
757-739-2370  
eddievincent@msn.com

Meyer, Richard  
30 Cannon Bluff Drive  
Stafford, Va. 22554  
540-226-9606  
dick.meyer@gmaic.com

Moore, Clarence  
Project Inspector  
11936 Old Washington Hiway  
Glen Allen, Va. 23059  
804-368-7813  
moore10813@comcast.net

Moore, David (3)  
Brandt Engineering, Inc.  
2840 Polo Parkway, #200  
Midlothian, VA 23113  
804-794-6656  
dmoore@beiric.com

Mugass, Mark B.  
A-A Annandale PHC, Inc.  
7368 McWhorter Place  
Annandale, VA. 22003  
703-256-2222  
703-941-0000 Fax  
mbmugaas@yahoo.com

Muncy, James B.  
Life Member  
President, MAMS, Inc.  
7711 Mendota Drive  
Richmond, VA 23229  
804-288-5664  
804-282-1620 Fax

O’Brien, J. Vincent  
John Y. Wright Company, Inc.  
6111 Atlantic Ave.  
Virginia Beach, Va. 23451  
757-435-8101  
757-489-4918 Fax  
vincet@johnywright.com

Otto, Jay  
Life Member  
Jay Otto Enterprises, Inc.  
P.O. Box 6005  
Ashland, Va. 23005  
804-387-3001  
jayotto@ottosales.com

Payne, Fred Wayne  
Bryant Group, Inc.  
P.O. Box 244  
Flint Hill, Va. 22627  
240-299-3369  
301-670-2720 FAX  
wayne.payne@bryantgroupinc.net

Philbrick Jr, Kenneth Neil  
President  
Philbrick, Inc.  
4999 Portsmouth Blvd.  
Portsmouth, Va. 23701  
757-488-8367  
757-488-0915 FAX  
neil@philbrick-inc.com

Radford, Robert “Bob”  
VIEGA, LLC  
Annapolis, MD.

Rahmani, Bruce  
President  
Falcon HVAC, Inc.  
21625 Ashgrove Court  
Sterling, Va. 20166  
703-450-7777  
703-450-6311 Fax  
brucer@falconhvac.com

Rao, Jr., Charles T.  
Richmond Marketing, Inc.  
2535 Mechanicsville Turnpike  
Richmond, VA 23223  
804-643-7355  
804-643-7380 Fax  
rmri@ricmrk.com

Rahmani, Bruce  
President  
Falcon HVAC, Inc.  
21625 Ashgrove Court  
Sterling, Va. 20166  
703-450-7777  
703-450-6311 Fax  
brucer@falconhvac.com

Rao, Jr., Charles T.  
Richmond Marketing, Inc.  
2535 Mechanicsville Turnpike  
Richmond, VA 23223  
804-643-7355  
804-643-7380 Fax  
rmri@ricmrk.com

Quality Sales & Service  
Since 1924

Virginia Registration  
#2701005193A

SERVICE TODAY

W. E. Brown, Inc.  

Plumbing - Heating - Air Conditioning - Electrical  
915 Monticello Road • Charlottesville, VA 22902  
24 Hour Emergency Service

Dave Maupin  
(434) 951-8712  
dave@webrown.com

PH (434) 295-1177  
FAX (434) 979-1394  
1-800-W E Brown
Plumbing and HVACR Contractors: What PHCC Does for You

Exclusive Business-Building Benefits
Join PHCC today and take advantage of vast educational and training opportunities, be a part of efforts to influence legislation and regulations, participate in networking forums, and stay abreast of the latest industry news, breakthroughs, and solutions. PHCC membership is a risk-free investment in the success of your business... guaranteed to improve your bottom line!

Visit www.pmpv.org or call (800)947-7450

“...When you are dealing with a problem and you are an active PMPV member, you stand a better chance of being perceived as a concerned business owner instead of just another angry contractor.”

EVAN C. HIBBS
Evan Hibbs Plumbing
Portsmouth, Virginia

Get Connected
Sargeant, Jonathan D.
Specification Sales
The Joyce Agency
3933 Avion Park Court Suite B102B
Chantilly, VA 20151
(703) 946-5848
7038662332 Fax
JSargeant@thejoyceagency.com

Sawning, Jason L.
Philbrick, Inc.
4999 Portsmouth Blvd.
Portsmouth, Va. 23701
757-488-8367
757-488-0915 Fax
jason@philbrick-inc.com

Sennett, Rick
President
CTS
7830 Backlick Road, Suite 401
Springfield, VA 22150
571-238-4805
Rick@CTSincva.com

Sherman, Donald
Climate Makers of Va.
2805 Crusader Circle
Virginia Beach, Va. 23453
757-468-5800
757-468-5805 Fax
dsherman@cox.net

Simounet, Craig
President, Capital Mechanical, LLC
45037 Moran Drive
Dulles, VA 20166
703-443-9323
703-433-9579 Fax
csimounet@aol.com

Smith, James S.
Lifetime Member
5900 A Thurston Ave.
Virginia Beach, Va. 24355
757-464-2934
757-464-2934 FAX

Sovern, Robert J.
Atlantic Constructors, Inc.
1401 Battery Brooke Parkway
Richmond, VA 23237
804-222-3400
804-233-5970 FAX
robertsovern@atlanticconstructors.com

Stakes, Don
Discount Plumbing
3020 Arizona Avenue
Norfolk, Va. 23513
757-497-2115
757-857-6173 FAX
don@discountplumbinginc.com

Steinle, Jim
Life Member
Owner
Atomic Plumbing
1377 London Bridge Road
Virginia Beach, VA 23453
757-464-2934
757-363-8403 FAX
Jim@atomicplumbing.com

Strong, Brian A.
Strong's Inc.
918 Clifford Street
Pearisburg, Va. 24134
540-921-2545
540-921-5116 FAX
stronginc@verizon.net

Thuot, Michele
St.Claire Consulting Inc
3197 Adam Keeling Road.
Virginia Beach, Va. 23454
757-496-0355
757-496-2594 FAX
mt@sc CID code.com

Vaughn, Danny
District General Manager
SimplexGrinnell, A Tyco International Company
8555 Magellan Pkwy., Suite 1000
Richmond, VA 23227
804-727-3890
dvaughn@simplexgrinnell.com

Vojvodich, Dennis
Monument Inspection Services
3900 Westerre Pkwy Suite 300
Richmond, Va. 23233
804-727-0050
804-727-0051 FAX
dennis@monumentinspections.com

West, Charles H.
Wells 7 West, Inc
P.O. Box 129
Murphy, NC 28906
828-837-2437
828-837-3152 FAX
cwest@wellswest.com

Wines, Ali
PMPV/VAPHCC
PO Box 6
Centerville, Va. 20122
800-947-7450
800-947-7415 Fax
info@pmpv.org

Wood, Tommy
CEO
Woodbridge Plumbing, Inc
2705 Code Way
Woodbridge, VA 22192
703-494-9666
703-494-0739 FAX
twood@woodbridgeplumbing.com

Zoby, Jr., Andrew T.
A.T. Zobi Mechanical
3348 Azalea Garden Road
Norfolk, Va. 23513
757-857-3700
757-857-3800 FAX
Representing These Premier Manufacturers

COMMERCIAL

AMES COMPANY: Fire system backflow and fluid control
ETERNAL WATER HEATER: Water heaters that combine tank and tankless features to create a consistent water heating system
FEBCO: Backflow prevention devices for irrigation and water service
GRUNDFOS PUMPS: Circulator, submersible, and centrifugal pumps for commercial, industrial, and residential applications
MUELLER STEAM SPECIALTY: Strainers, check valves, butterfly valves, and specialties
RAINWATER HARVESTING: Engineered solutions for rainwater harvesting, storm water storage, and grey water distribution from Rainwater Management and Brace
SAFE-T-COVER: Aluminum and fiberglass backflow enclosures
WATTS DRAINAGE: Specification drains, interceptors, carry and other specialties by Blücher
WATTS WATER TECHNOLOGIES: Backflow prevention products, pressure regulating devices, ball and butterfly valves, plus other water system products for commercial, industrial and residential applications

FIXTURES

AQUATIC: Fiberglass and acrylic bath ware, including whirlpools and handicap accessible bathing fixtures
BEMIS/CHURCH: High quality toilet seats that meet any need for residential and commercial applications
DURAVIT: Leading supplier of sanitary ware ceramics, bathroom furniture, accessories and wellness ideas
ELKAY: Stainless steel sinks, faucets, and accessories, plus water coolers and drinking fountains for residential and commercial use
GEBERIT: Concealed installation systems for residential wall-hung toilets, as well as bath waste and overflows for bathubs
HANSGROHE: Stylish and innovative water delivery for the shower, bath and kitchen
SLOAN VALVE COMPANY: Electronic and manual flush valves, sensor faucets, and water free urinals

PWF

CHARLOTTE PIPE AND FOUNDRY: Complete system of cast iron, PVC, CPVC, ABS, Flowguard Gold, and Chem Drain acid waste. Pipe and fittings for commercial, industrial, and residential applications
DORMONT: Flexible stainless steel connectors for natural gas, liquefied propane (LP) gas, and a wide-array of other liquids and gases
HOLDRITE: Secondary piping support devices, acoustical abatement products, other engineered solutions
MISSION RUBBER: Flexible rubber couplings, gaskets, no-hub and heavyweight couplings for plumbing, waterworks and industrial
OATEY-SCS: Plumbing chemicals, cements, drains, tubular products and specialties manufactured by Oatey, Hercules, Harvey, Cherne and Dearborn
ORION: Acid waste and high purity piping systems for commercial and institutional applications
PLUMBEREX: Specialty plumbing products to include under lavatory covers and insulation
POLYSTAR: Advanced copolymer polypropylene piping system from Orion
TRACPIPE: Corrugated stainless steel gas piping for residential and commercial applications.
WATTS BRASS & TUBULAR: Finish plumbing products and fittings
WATTS PEX: Pex tubing and accessories for plumbing, cooling, and radiant heating

3933 Avion Park Court • Suite B102B • Chantilly, VA 20151 • (703) 866-3111 • fax (703) 866-2332
Visit us at www.thejoyceagency.com
ACCA developed this form to facilitate the enforcement of the Virginia Residential Code by VPMIA members. The form can be customized with your department’s logo and is available for free download at [http://www.acca.org/standards/codes/system-design-review-form/](http://www.acca.org/standards/codes/system-design-review-form/).

No reference library is complete without:

- **Manual J**, Residential Load Calculation
  (Referenced in VRC §M1401.3 Sizing)
- **Manual S**, Residential Equipment Selection
  (Referenced in VRC §M1401.3 Sizing)
- **Manual D**, Residential Duct Systems
  (Referenced in VRC §M1601.1 Duct Design)
- **Bob’s House**, Understanding the Residential HVAC Design Process

To purchase all of these essential code reference materials, call us at 1-888-290-2220 or visit [www.acca.org/store](http://www.acca.org/store).