

# VPMIA

VIRGINIA PLUMBING & MECHANICAL INSPECTORS ASSOCIATION

## 46<sup>th</sup> Annual School of Instruction

April 1 – 3, 2009 • Winchester, VA

STRENGTH THROUGH LEADERSHIP, EDUCATION AND UNITY

HANDLEY LIBRARY



**COLONIALWEBB** CONTRACTORS®

***We Are Building  
A Great Contracting  
Company...***



*John Paul Jones Arena*



*Virginia Beach Town Center*



*Richmond Federal Courthouse*



*Richmond International Airport*



*VCU School of Engineering*

*ColonialWebb Contractors is a full-service mechanical contracting firm performing preconstruction and design-build services, BIM coordination, in-house prefabrication, installation, hands-on commissioning, preventive maintenance programs, and repair service.*

*We provide engineered HVAC, plumbing, electrical, and industrial refrigeration systems. Projects include office buildings, shopping malls, schools, hospitality, pharmaceutical labs, hospitals, data centers, retirement communities, correctional facilities and manufacturing plants.*

2820 Ackley Avenue  
Richmond, VA 23228  
804-916-1400

3302 Croft Street  
Norfolk, VA 23513  
757-855-3006

811 Pleasant Valley Road  
Harrisonburg, VA 22801  
540-442-6175

8509 Phoenix Drive  
Manassas, VA 20110  
703-396-4920

740C Blue Crab Road  
Newport News, VA 23606  
757-873-2263

6450-E Merriman Road  
Roanoke, VA 24018  
540-989-5699



Repairs - Remodeling  
Commercial New Construction  
Backflow Installations, Repairs & Certification



2006  
Prince William  
Regional Chamber  
of Commerce  
"Large Business  
of the Year"

Local

**703-494-9666**

Toll-Free

**1-800-FIX-MY-LEAK**  
**(1-800-349-6953)**

*Quality Service Since 1973*

Members of BBB, PHCC and PMPV

2705 Code Way • Woodbridge, VA 22192 • [www.woodbridgeplumbing.com](http://www.woodbridgeplumbing.com)

Willie Johnson, President • Thomas Wood, CEO

Over 80 Years of Quality Service

# Lacy Mechanical, Inc.

Certified MBE

Commercial • Industrial • Schools • Hospitals



**Plumbing**

**Radiant Heating**

**Heating**

**Dehumidification  
Systems**

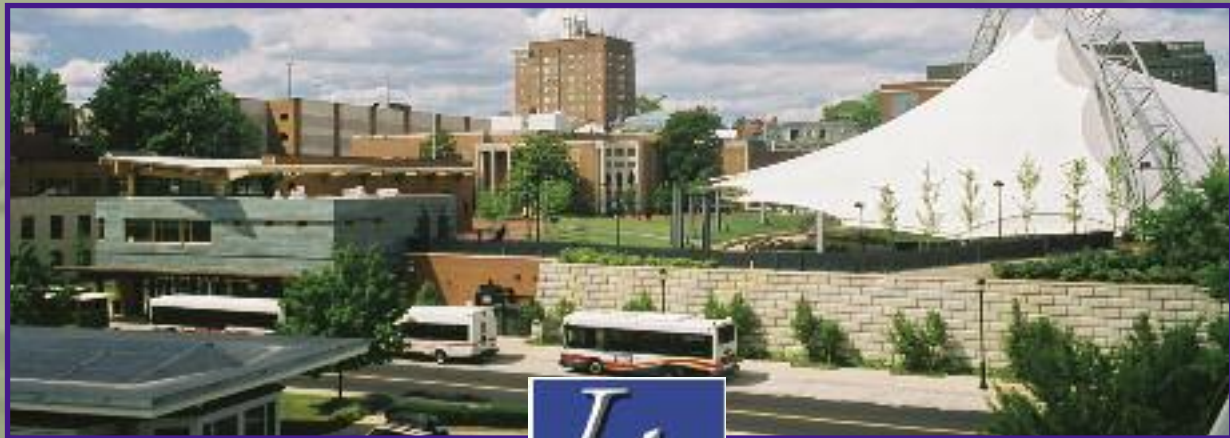
**Air Conditioning**

**Hydronic Piping**

**Welding**

**Medical Gas**

**Back Flow  
Certification**



**L.A. Lacy, Inc.**

a subsidiary of **Lacy Mechanical, Inc**

## Welcome to the 46th

VPMIA SOI. For members, new and old, Active and Associates, I implore all to peruse the entire contents of this Yearbook. We have initiated new By-Laws and they are contained within. Take the time to read about our History, Constitution, Code of Ethics/Mission, and Strategic Plan while you're at it.

We are fortunate to have two technical articles again this year. Both the International Code Council and the Air Conditioning Contractors of America have contributed through authors Bob Guenther, and Wes Davis, respectively. Bob's article addresses inquiries about Section 404.1, of the Fuel Gas Code and Wes is giving us a primer on the ACCA

Manual S, the guide to HVAC equipment selection. The latter is a new addition to the ICC 2009 Code. Thank you Bob and Wes.



Ron Bladen  
Editor

Index to Advertisers	5
President's Corner	6
<b>2009 School of Instruction Program</b>	<b>7</b>
Exhibitors	7
Dedication	8
Code of Ethics/Mission	9
Charter Members	9
Resolutions	10
Awards Roster	11
Past Presidents	11
Acknowledgements	11
Constitution & By-Laws	12
2008-9 Associate Membership Roster	16

---

### **The new HVAC equipment sizing code: What you need to know.** 18

*By Wes Davis*

### **Gas Piping and the 2006 IFGC** 23

*By Bob Guenther*

---

Officers, Directors and Committee Chairmen	31
Strategic Plan	31
2008-9 Membership Roster	32
2008-9 Ladies Auxiliary Roster	45
History	46
New Member Application	48

Cover photo credit:  
Winchester-Frederick County Convention & Visitors Bureau

VPMIA gratefully acknowledges the support of its advertisers, listed below:

Colonial Webb Contractors	IFC
Woodbridge Plumbing	3
L.A. Lacy, Inc.	4
Cast Iron Soil Pipe Institute	17
Masters, Inc.	21
Fitzgerald Art & Design	21
New Shelter Construction	25

ICC	26-7
CTS, Inc.	28
VPMIA	29
Pacific Heating and Cooling	30
W.E. Brown, Inc.	33
E&E Plumbing and Heating	37
Leonard-Splaine Heating and Cooling	39

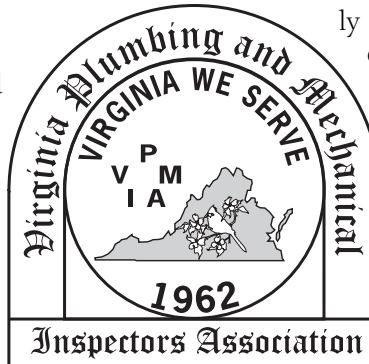
Beck Cohen	40
L&D Associates, Inc.	44
The Plumbing Dr	49
Harry Eklof Associates, Inc.	50
PMPV	IBC
ACCA	BC



**I**t has been my privilege and honor to serve as your president this past year. I want to thank the VPMIA members for giving me this opportunity. This has been a very rewarding experience I will never forget. I believe that in the year past we have continued to move forward and have maintained the very high standards of this organization.

This has been a busy year. We have had members teaching classes in several different arenas. Among those were our annual School of Instruction. During our school of instruction we offered training to contractors that counted as continuing education towards maintaining their respective certifications. This is the first time in my recollection that this has been offered. This same training also allowed our inspector members who maintain master or journeyman status to obtain their continuing education hours. Approximately 100 people benefited from this service. This year DHCD accredited VPMIA so that all of our training counts towards the continuing education for inspectors as required by USBC/DHCD.

We were fortunate to have a VPMIA representative serve as the ICC Region VII Chair. Our participation in this venue has proven beneficial as we cooperate with surrounding states to make code changes and create training that will allow us to better serve our industry through uniformity in a regional concept. We also participated in a joint conference with VBCOA. A representative from IAIEI attended this conference and we made progress toward further interaction with that organization. VPMIA's continued leadership in code development and its' commitment to working with sister organizations, will allow us to meet our most important charge – protecting the health, safety and welfare of the citizens of the Commonwealth of Virginia.



This organization will face, in my opinion, some very trying times in the next 2-3 years due to the dire economic straits that have engulfed our state and nation. It is incumbent upon each and every one of us to be innovative and resourceful in continuing our mission as set forth in our VPMIA guidelines. We must constantly remind those in authority that continuing education is important and very necessary even in times of economic downturn. It has been my experience that training and continuing education is one of the first items to be cut by administrators. We at VPMIA can continue as we have in the past to assist our members with scholarships and other incentives to allow them to participate. We also need to encourage new people to step up and assume leadership roles in this wonderful organization.

If we seek an eclectic group of participants assembled from all corners of the commonwealth, the individuals and our organization will be the stronger for this action.

In closing, it has been a great pleasure and a wonderful learning experience to serve as VPMIA President. I want to take this opportunity to thank the officers, district directors, and members who have assisted me in every instant with dispatch and aplomb. I promised when I accepted this honor that I would do my dead level best to maintain the high standards that had been established. In my heart I believe we have done that. May we all continue to work together to ensure the future of VPMIA.

A handwritten signature in black ink, appearing to read "John W. Mills".

**John W. Mills**  
VPMIA President  
2008-2009

<p><b>Save the Date: Friday, July 31, 2009</b></p>	A black and white landscape photograph showing a large building, likely the Graves Mountain Lodge, nestled in a wooded area with mountains in the background.	<p><b>Summer School of Instruction Graves Mountain Lodge</b></p>
--	---	--



# VPMIA 2009 School of Instruction

Hampton Inn • 1204 Berryville Avenue • Winchester, VA • 540-678-4000

## Wednesday, April 1

---

7:00	-	8:30 a.m.	<b>REGISTRATION</b>
8:30	-	10:00 a.m.	RAINWATER HARVESTING TECHNOLOGY
10:00	-	10:30 a.m.	<b>BREAK</b>
10:30	-	12:00 p.m.	NFPA 58 & IFGC 2006
12:00	-	1:00 p.m.	<b>LUNCH</b>
1:00	-	2:30 p.m.	CLASS RESUMES
2:30	-	3:00 p.m.	<b>BREAK</b>
3:00	-	4:30 p.m.	3M FIRE PROTECTION PRODUCTS
5:00	-	6:00 p.m.	PRESIDENT'S WELCOME
6:00	-	7:30 p.m.	SOUTHERN BARBECUE

## Thursday, April 2

---

8:30	-	10:00 a.m.	RESIDENTIAL SPRINKLER SYSTEMS per 2009 IRC
10:00	-	10:30 a.m.	<b>BREAK</b>
10:30	-	12:00 p.m.	TANKLESS WATER HEATERS / IPC
12:00	-	12:15 p.m.	VPMIA GENERAL MEMBERSHIP MEETING - <b>PART 1</b>
12:00	-	1:00 p.m.	<b>LUNCH</b>
1:00	-	2:30 p.m.	INTERNATIONAL MECHANICAL CODE 2006 VENTILATION AIR REQUIREMENTS Amended per VUSBC
2:30	-	3:00 p.m.	<b>BREAK</b>
3:00	-	4:30 p.m.	CLASS RESUMES
6:00	-	10:00 p.m.	<b>BANQUET—AWARDS</b>

## Friday, April 3

---

8:00	-	9:00 a.m.	<b>BREAKFAST BUFFET</b>
9:00	-	12:00 p.m.	GENERAL MEMBERSHIP MEETING - <b>PART 2</b>

Be sure to visit our **TABLETOP PRODUCTS SHOW**

**CAST IRON SOIL PIPE INSTITUTE**

**OTTO SALES**

**CHARLOTTE PIPE AND FOUNDRY COMPANY**

**UNIFRAX, LLC**

*VPMIA offers its gratitude to these Tabletop Exhibitors for their active participation.*



## Larry H. Dehaven

Larry H. Dehaven's dedication to the Plumbing and Mechanical trade spans forty years as a Master Plumber and Code Enforcement Officer. His service to the VPMIA includes Past District II Director and has served on several Plumbing and Mechanical code change committees. He received the D Paul Jack Award in 2001/02 and is currently a Life Time Member with the VPMIA Association. Larry will be retiring from his Senior Plumbing & Mechanical Inspector/Design Review Specialist position with the Frederick County Building Inspections Department on April 1, 2009. His devotion and hard work are good examples of why VPMIA and the Plumbing and Mechanical Inspector profession are a success today.



## Virginia Plumbing & Mechanical Inspectors Association

### Foundation's 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.

### 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.

#### 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

## CHARTER MEMBERS





**RESOLUTION**

**March 12, 2009**

**WHEREAS;** John Michael Clift, 47 years old, of King George County passed away Wednesday, March 11, 2009,

**WHEREAS;** John Michael Clift was a long time Active Member of the Virginia Plumbing and Mechanical Inspectors Association and the Virginia Building Code Officials Association. John attended and assisted annual Schools of Instruction and many other activities where his many contributions were noted and appreciated,

**WHEREAS;** John Michael Clift served as Building Official for the County of King George,

**WHEREAS;** John Michael Clift was a member of Fletcher's Chapel United Methodist Church and, as everyone knows, was always willing to give a helping hand at any task, and also was an avid hunter and woodworker,

**WHEREAS;** John Michael Clift served as Treasurer, Secretary and Vice President for the Virginia Plumbing and Mechanical Inspectors Association and had been nominated to serve as President for the year 2009,

**WHEREAS;** The Virginia Plumbing and Mechanical Inspectors Association notes with great sadness the passing of John Michael Clift, now, therefore, be it

**RESOLVED;** That the Virginia Plumbing and Mechanical Inspectors Association extends heartfelt sympathy to the family of John Michael Clift and

**RESOLVED;** That the Virginia Plumbing and Mechanical Inspectors Association stands in readiness to assist the family of our friend, John Michael Clift, in any aspect possible in helping his family through this difficult time of death and bereavement.

Most sincerely,

JOHN W. MILLS  
President

**RESOLUTION**

**March 17, 2009**

**WHEREAS;** That Paul David Hostetler passed away Sunday, March 15, 2009. He was born August 20, 1931.

**WHEREAS;** That Paul Hostetler served his beloved country as a member of the United States Navy for twenty years where he served on several Submarines, a Radar Picket Destroyer, and was assigned to Submarine Division and Squadron Commanders Staffs in Key West, Florida and Norfolk, Virginia;

**WHEREAS;** That upon retirement from the U.S. Navy, Paul Hostetler became involved in the construction field in North Dakota and Virginia. He later founded his own General Contracting business;

**WHEREAS;** That due to an injury, Paul was forced to give up his contracting business, however, Albemarle County was offered, and he accepted, a position as Plumbing Inspector. Paul then proceeded to become certified in nearly every discipline offered by the Code Industry;

**WHEREAS;** That Paul Hostetler retired from Albemarle County as the Chief Commercial Fire Protection Systems, Hazardous Material Storage Systems, and Mechanical Systems Inspector;

**WHEREAS;** That Paul Hostetler was then employed as Building Official for the Town of Scottsville, Virginia, until final retirement,

**WHEREAS;** That Paul Hostetler is a Lifetime Member of VPMIA having served in all chairs, except Secretary, of the Board of Directors, plus the position of Executive Secretary and Chair or member of many committees;

**WHEREAS;** That Paul Hostetler is the recipient of the most prestigious D. Paul Jack and Gordon I. Dameron Awards issues by VPMIA. He is also a retired member of the James Madison Building and Code Officials Association (Region IV, Virginia Building and Code Officials Association) and a member of the International Code Council, plus many military and ship's reunion associations, be it

**RESOLVED;** That the Officers, Board of Directors, and the entire Membership the Virginia Plumbing and Mechanical Inspectors Association stands in readiness to assist the Hostetler family in any aspect possible through this difficult time,

**RESOLVED;** That this Resolution be published in the Virginia Plumbing and Mechanical Inspectors Association Yearbook as a permanent memorial to the memory of Paul David Hostetler.

Most sincerely,

JOHN W. MILLS  
President

## OUTSTANDING SERVICE

### Gordon I. Dameron Active Award

1981-1982	Kenneth R. Synder, Jr.
1982-1983	Jesse R. Hurt
1983-1984	George H. Williams, Jr.
1984-1985	Robert M. Broome
1986-1987	Paul M. Adams
1988-1989	Paul Hostetler Joseph Hall
1989-1990	Dennis W. McNaughton
1990-1991	Floyd Proffitt
1991-1992	Jeffrey Shawver
1992-1993	Tommy Cantrell
1993-1994	Hassel E. DeShazo
1994-1995	Doug Stover Jack Rhoden
1995-1996	Robert D. Carroll
1996-1997	Roy N. McFarland, Jr.
1997-1998	Kathleen T. Dye
1998-1999	_____
1999-2000	Michael D. Thuot
2000-2001	Guy Tomberlin
2001-2002	John B. Seay, Jr.
2002-2003	Dennis Martinelli
2003-2004	Geary Showman
2004-2005	James T. Moore
2005-2006	Wayne Kushner
2006-2007	James Anjam
2007-2008	Richard Witt

### David L. Carr Associate Award

1981-1982	William E. Foley
1982-1983	John V. Duley
1983-1984	J. C. Nuckols
1984-1985	Lawrence R. Muse
1986-1987	David Maupin
1987-1988	Ronald Bryant
1988-1989	Robert W. Price
1989-1990	Fred Borden, Jr.
1990-1991	Billy E. Leeder
1992-1993	James B. Muncy
1993-1994	John Otto
1994-1995	Danny & Laurie Crigler
1995-1996	James B. Hylar
1996-1997	J. C. Nuckols
1997-1998	James S. Steinle
1998-1999	Thomas C. Roberts
1999-2000	David Johnston
2000-2001	David L. Maupin
2001-2002	Lorrie Norton
2002-2003	Allen Tryall
2003-2004	Jonathan Sargeant
2004-2005	_____
2005-2006	_____
2006-2007	_____
2007-2008	Jay Otto

## LIFETIME MEMBERSHIP

### D. Paul Jack Active Award

1988-1989	Edward J. Baldwin, Jr.
1989-1990	George H. Williams, Jr.
1990-1991	Kenneth R. Snyder, Jr.
1991-1992	Jesse R. Hurt
1992-1993	Douglas Stover
1993-1994	Ernest "Bud" Lester
1994-1995	Paul Hostetler
1995-1996	Paul M. Adams
1996-1997	Michael D. Redifer
1997-1998	Hassel E. DeShazo
1998-1999	Kathleen T. Dye
1999-2000	_____
2000-2001	William F. Hines
2001-2002	Larry Dehaven
2002-2003	Lawrence Nuckols
2003-2004	Roy McFarland, Jr.
2004-2005	Guy Tomberlin
2005-2006	Stephen P. Borders
2006-2007	Charles Gerber
2007-2008	James T. Moore

### John A. Otto Associate Award

1988-1989	Cecil F. Hardee, Sr.
1989-1990	J. Richard Maher
1990-1991	David L. Carr
1991-1992	Robert W. Price
1992-1993	_____
1993-1994	Billy E. Leeder
1994-1995	James B. Muncy
1995-1996	Thomas C. Roberts
1996-1997	Tom Kreuzer
1997-1998	James S. Steinle
1998-1999	John Otto
1999-2000	_____
2000-2001	Herbert L. Joyner
2001-2002	Laurie/Danny Crigler
2002-2003	Dave Johnson
2003-2004	_____
2004-2005	_____
2005-2006	_____
2006-2007	David Maupin
2007-2008	_____

## 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
LESLIE A. COURTNEY	1988
JIMMY A. ENGLISH	1989
DOUGLAS L. STOVER	1990
ROBERT M. BROOME	1991
PAUL D. HOSTETLER	1992
DENNIS W. McNAUGHTON	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

\*Denotes deceased

—From Ron Bladen, Chairman—  
VPMIA Advertising/Yearbook Committee

### Thank You VPMIA Yearbook Contributors

John Mills  
President, VPMIA

Jane Fitzgerald  
Fitzgerald Art & Design LLC

John Seay  
Past President, VPMIA

Don Bladen  
VMW Printing

Geary Showman  
Executive Secretary, VPMIA

Our Advertisers  
Individually listed on page 5

**with special thanks to**

Jay Peters and Bob Guenther, International Code Council, and  
Wes Davis, Air Conditioning Contractors of America

**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 membership shall be open to those persons interested in the design, manufacture, installation or sale of plumbing and/or mechanical systems and who are willing to promote the objectives of the Association. Application for membership shall be in writing, submitted to the Executive Secretary and reviewed by the Board of Directors for approval.

**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. Nominations for Honorary membership shall be in writing, submitted to the Executive Secretary by any member and reviewed by the Board of Directors for approval.

**Section 7.** All members shall conduct themselves in accordance with the Associations Code of Ethics.

**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 Electrical Inspectors, The Virginia Fire Prevention 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.



## **ARTICLE V — Duties of the Officers, Directors, Executive Secretary and Finance Director**

### **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. To accurately record all business transacted at all meetings.
- 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. Shall be bonded for at least fifty thousand dollars. The bond premium shall be paid by the Association.
- 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 send all membership renewals by December 1 of each year.
- F. To maintain the financial records of the Association on a fiscal year from May 1 through April 30, unless otherwise approved by the Board.
- G. To be a standing member of the Finance Committee.
- H. To perform such other duties as applicable to the office as prescribed by the parliamentary authority adopted by the Association.

### **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.

### **Section 7.** The Director of Finance

- A. To coordinate the finances of the Association.
- B. To serve as the chairperson of the Finance Committee.

*(continued next page)*

# VIRGINIA PLUMBING AND MECHANICAL INSPECTORS ASSOCIATION CONSTITUTION AND BY-LAWS (continued)

## 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 Committee, composed of 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 Member-ship 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 members 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 town 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.

**District III** Shall be the area, including all cities and towns that lie therein, created by the counties of Albemarle, Amelia, Brunswick, Buckingham, Caroline, Charlotte, Chesterfield, Cumberland, Dinwiddie, Fluvanna, Goochland, Greensville, Halifax, Hanover, Henrico, King George, Louisa, Lunenburg, Mecklenburg, Nelson, Nottoway, Powhatan, Prince Edward, Prince George, Surry and Sussex.

**District IV** Shall be the area, including all cities and towns that lie therein, created by the counties of Accomack, Charles City, Essex, Gloucester, Isle of Wight, James City, King and Queen, King William, Lancaster, Mathews, Middlesex, New Kent, Northampton, Northumberland, Richmond, Southampton, Suffolk, Westmoreland and York.

Alexander, Scott  
Beck Cohen, Inc.  
215 Avon Street  
Charlottesville, VA 2902  
434-296-0129  
434-295-3439 FAX  
scott@beckcohen.com

Allen, Marlond R.  
COO  
LA Lacy, Inc.  
900 Harns Street  
Charlottesville, VA 22903  
434-296-7542  
434-293-9073 FAX  
marlond@lalacy.com

Anderson, Kenneth  
Virginia Beach City Public Schools  
29525 N. Landing Rd  
Virginia Beach, VA 23456  
757-427-5300  
757-427-5558 FAX  
keanders@vbcps.k12.va.us

Archer, Bradford  
Construction Management &  
Administration  
1734 Seibe Drive  
Roanoke, VA 24012  
540-344-7939  
540-344-3657 FAX

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

Bess, Robert M.  
Plumbers/Steamfitters Local #1  
701 Stockton Street  
Richmond, VA 23224  
804-231-4232  
804-231-4235 FAX

Borden, Fred W.  
Fred W. Borden, Inc.  
4174-A Old Stockyard Rd.  
Marshall, VA 20115  
703-378-8484  
703-378-6359 FAX  
fwbordenplumbing@aol.com

Buckner, William W.  
Greenbeck Enterprises  
608 Van Fossen Street  
Winchester, VA 22601  
540-662-7638  
540-662-1773 FAX  
bbuckner@visuallink.com

Brown, Jeremy  
Codes & Regulatory Manager  
789 N. Dixboro Rd.  
Ann Arbor, MI 48105  
734-769-5796  
737-827-7129 FAX  
brown@nsg.org

Bryant, Ronald D.  
Master's, Inc.  
7891 Beechcraft Avenue  
Gaithersburg, MD 20879  
301-670-2701  
301-258-7368 FAX  
ron.bryant@resservices.com

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

Cole, Stanton R.  
Purchasing/Fleet Manager  
Southern-Air, Inc.  
2655 Lakeside Drive  
Lynchburg, VA 24502  
434-385-1261  
434-385-7515 FAX  
Ronnie.Cole@southern-air.com

Colton, Richard B.  
Master, Inc.  
7891 Beechcraft Ave  
Gaithersburg, MD 20879  
301-252-3308  
301-258-7368 FAX  
bruce.colton@mastersco.com

Crigler, Laurie & Daniel  
L & D Associates  
P.O. Box 418  
Aroda, VA 22709  
540-948-6230  
540-948-5617 FAX  
lcc@ldassociatesinc.com

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

Finney, Jeffrey Dean  
Nationwide Custom Homes  
P.O. Box 5511  
Martinsville, VA 24115  
540-632-7100  
540-632-1181 FAX  
jfinney@nationwidecustomhomes.com

Given, Alan  
Parish Services  
7865 Coppermine Drive  
Manassas, VA 20109  
703-330-5748  
703-330-0599 FAX  
alange@parishservices.com

**Hardee, Sr., Cecil F.**  
Life Member  
203 Bayswater Ct.  
New Bern, NC 28562

Harris, Gregory M.  
Cropp Metcalfe  
150 Baker Street  
Manassas, VA 20111  
703-698-8855  
703-698-4207 FAX  
gharris@croppmetcalfe.com

Hibbs, Evan C.  
Evan C. Hibb, Inc.  
957 Chautauqua Ave  
Portsmouth, VA 23707  
757-393-7401  
757-393-7403 FAX  
even@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

Jinks, Scott  
J & S Plumbing  
P.O. Box 1628  
Manassas, VA 20108  
703-721-5095  
royallflush0108@yahoo.com

Johnston, David  
5111 Lavery Court  
Fairfax, VA 22032  
703-503-0644

Kalish, Susan  
National Fireplace Institute  
1901 N. Moore St. Ste 600  
Arlington, VA 22209  
703-524-8030  
703-522-0548 FAX  
kalish@hpba.org

Kellogg, Stephen  
Water Solution Account Executive  
4987 Cleveland Street, #106  
Virginia Beach, VA 23462  
757-490-9110  
757-490-9001 FAX  
dryit@waterdamagessolutions.biz

Kidd, Jerry  
Beck Cohen Inc  
215 Avon Street  
Charlottesville, VA 22902  
434-296-0129  
434-295-3439 FAX  
beckcohen@yahoo.com

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



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

**Maher, J. Richard**  
Life Member  
307 Cadmus Circle  
Gordonsville, VA 22942  
703-832-5313

**Maupin, David**  
Life Member  
W.E. Brown, Inc.  
915 Monticello Rd  
Charlottesville, VA 22902  
434-295-1177  
434-979-1394 FAX  
dave@webrown.com

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

Peed, Gary  
President, Peed Plumbing Inc.  
11721 Pump Station Way  
Manassas, VA 20109  
571-229-1234  
garypeed@peedplbg.com

Perry, Steve  
CFS Service Corporation  
3228 Duke Street  
Alexandria, VA 22314  
703-757-6505  
703-751-6171 FAX  
sperry@cfsservice.net

Pittenger, Robert E.  
Beach Services  
9553 First View St.  
Norfolk, VA 23503  
757-480-7260  
bchplmbserve@att.net

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

Sargeant, Jonathan D.  
National Accounts Manager  
Jay R. Smith Manufacturing Co.  
4024 St. Elmo Avenue  
Chattanooga, TN 37409  
423-883-3137  
423-207-4840 FAX  
Jon.Sargeant@jrsmith.com

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

Smith, Sr., Oscar  
Oscar W. Smith Mechanical  
2612 Jackson Drive  
Salem, VA 24153  
540-389-8041  
540-387-4590 FAX

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

Stilwell, P. Wayne  
President  
P.W. Stilwell Plumbing/Htg  
13482 Still Well Lane  
Brandy Station, VA 22714  
540-825-0025  
540-825-0650 FAX

Strickler, Jasper  
Post Office Box 728  
Stuarts Draft, VA 24477  
540-942-5207  
strickler@yahoo.com

Tamres, Joseph  
Hartford Steam Boiler, Insp  
2563 James Madison Cr  
Herndon, VA 20171  
703-713-3467  
703-713-3467 FAX  
joseph\_tamres@hsb.com

Tryall, Allen  
Beck Cohen, Inc  
215 Avon Street  
Charlottesville, VA 22902  
434-296-0129  
434-295-3439 FAX

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

Wiggins, John R. (P.E.)  
Underwriters Laboratory  
12 Laboratory Dr  
RTP, NC 27709  
919-549-1502  
919-547-6454 FAX  
johnr.wiggins@us.ul.com

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



**Michael E. Steele, LEED®AP**  
Director of Technical Services

**CAST IRON SOIL PIPE INSTITUTE**

5959 Shallowford Rd., Ste. 419  
Chattanooga, TN 37421  
**OFFICE:** (423) 892-0137 **FAX:** (423) 892-0817  
**WEB:** www.cisp.org **EM:** msteele@cisi.org  
**CELL:** (423) 400-0784

*The Mark of Quality  
and Permanence*

# The new HVAC equipment sizing code: *What you need to know*

For many years some professional HVAC businesses and code officials have believed that residential HVAC equipment selection was performed following guidance in ACCA Manual J. After all, that was the code requirement in the International Residential Code M1401.3, “size equipment per ACCA Manual J...” right? **WRONG!!**

*Manual J* is only used to calculate the heating and cooling loads. The current, nationally-recognized *Manual J8* guides HVAC system designers to use ACCA *Manual S, Residential Equipment Selection*, to select equipment that is the right size (see section 10-4).

## Why use *Manual S*

There are three good reasons to use *Manual S*: it is the nationally-recognized standard, it prevents problems associated with equipment over and under sizing, and it’s a requirement in the 2009 International Residential Code (IRC).

*Manual S, Residential Equipment Selection*, is the ANSI-recognized, national standard providing clear instruction for interpreting and applying original equipment manufacturers’ (OEM) expanded performance data. *Manual S* instructs designers how to select equipment which meets the application requirements (heating, sensible cooling, and latent cooling) at the design conditions that were used for calculating the loads.

*Manual S* also sets equipment sizing limits, as summarized in **Table 1**. These sizing limits ensure equipment capacities will keep customers comfortable while preventing the problems associated with equipment over and under sizing which include: health issues associated with excessive humidity, callbacks from comfort complaints, higher building costs (larger equipment is more expensive, more materials are needed, and more labor is used to install it), larger energy consumption, and greater wear and tear on the equipment <sup>1</sup>.

Finally, *Manual S* is a code requirement. A modification adopted in the 2009 IRC clarifies an existing requirement for sizing HVAC equipment (change is underlined).

“Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies.”

**Table 1: Manual S: Equipment Selection Sizing**

MANUAL S EQUIPMENT SIZING LIMITATIONS		
Equipment	Sizing Limits	Reference
Furnaces	100% - 140% of total heating load	Section 2-2
Boilers	100% - 140% of total heating load	Section 2-2
Air conditioners	115% of total cooling load*	Section 3-4
Heat pumps	115% <sup>1</sup> -125% <sup>2</sup> of total cooling load*	Section 4-4
Supplemental heat (heat pumps)		
• Electric	Based on equipment balance point	Section 4-8
• Dual fuel	100% - 140% of total heating load	Section 6-8
Emergency heat (heat pumps)	Based on local codes	Section 4-9
MANUAL S EQUIPMENT SIZING LIMITATIONS		
Mode of Operation	Requirement	Reference
• Heating	Temperature rise requirement	Section 2-6
• Cooling	Airflow associated with the selected equipment’s capacity	Section 2-2

<sup>1</sup> Heat pumps in a **cooling** dominant climate are allowed to be 115% of the cooling load.  
<sup>2</sup> Heat pumps in a **heating** dominant climate are allowed to be 125% of the cooling load.  
<sup>\*</sup> The size of the cooling equipment must be based on the same temperature and humidity conditions that were used to calculate the **Manual J** loads.

## How to Apply *Manual S* Heating Example (Part I)

*Manual J* heating load calculations produce values, in Btu/h, for selecting the heating equipment. This heating example will select a furnace for a home that has a heating requirement of 56,000 Btu/h. The furnace needed must have the capacity to deliver 56,000 Btu/h in order to maintain 70°F in the home when the outdoor temperature dips to the outdoor design temperature (refer to Section 3-6 and Table 1A of *Manual J8*).

Based on the home’s load and the sizing limitations from **Table 1**, the furnace must produce more than 56,000 Btu/h, but less than 78,400 Btu/h. The home’s heating capacity requirement is 56,000 Btu/h and the furnace can have a capacity no larger than 140% of the heating load (140% x 56,000 = 78,400 Btu/h).

Using the manufacturer’s product data in **Table 2**, the XYZ model FR 80-036 or FR80-024 has the output capacity of 64,000 Btu/h,

which is enough to meet the requirement. The FR 60-036 has too little capacity (48,000 Btu/h, 86% of the load), and the FR 125-036 has too much output capacity (100,000 Btu/h, 178% of the load), selecting either the FR 60-036 or the 125-036 would cause comfort complaints, and in the case of the 125-036, would lead to a more expensive system.

If you are installing this furnace at elevations above 2,500 feet there are additional requirements that must be considered, see *Manual S* for more information.

## Cooling Example

Load calculations produce cooling capacity requirements for selecting the HVAC equipment. For this cooling example, we will select an air conditioner for a home with the following *Manual J* cooling loads:

Sensible Cooling	22,000 Btu/h
Latent Cooling	8,000 Btu/h
Total Cooling	30,000 Btu/h

**Table 2: XYZ Furnace Company Performance Data**

Unit Size	General Data — XYZ FURNACE COMPANY — Efficiency					
	FR60-024	FR60-036	FR80-024	FR80-036	FR125-036	FR125-048
Output capacity					<b>OUTPUT CAPACITY</b>	<b>INPUT CAPACITY</b>
• Upflow	48,000	48,000	64,000	64,000	100,000	100,000
• Horizontal	48,000	48,000	64,000	64,000	100,000	100,000
Input Btu/h	60,000	60,000	80,000	80,000	125,000	125,000
Temp rise range	30-60	15-45	45-75	35-65	40-70	30-60

# An Introduction to ACCA Manual S

By Wes Davis, Manager of Technical Services, ACCA

## Sensible and Latent Loads

When considering the cooling load, there are two parts - the sensible and latent load.

The sensible load is the heat that is measured by a thermometer or a thermostat. It is heat that you consciously feel. It is the heat you associate with a desert or a dry heat.

Latent load is the heat associated with airborne moisture (produces relative humidity as measured by a hygrometer or humidistat). During the cooling process, moisture is extracted from indoor air.

High latent heat or high relative humidity feels humid, clammy, or steamy. An example is a home that shows a cool temperature on the thermostat but, because of high humidity, still feels uncomfortable. When you walk into this home your initial impression is that it is cool, but then as your body adjusts to the room temperature, you begin to feel sticky, clammy, and uncomfortable. You may even feel warm again. This is why two homes that have the same reading on a thermometer or thermostat can feel very different.

*Manual S* has four steps for selecting cooling equipment:

- ◆ Set the design parameters
- ◆ Estimate the target airflow
- ◆ Search for equipment candidates
- ◆ Evaluate and select the acceptable candidates (more than one candidate may be offered to the customer)

## Step 1. Design Parameters

There are many design parameters to consider. Some of these parameters were decided during the system design procedure: Equipment type, location, fuel, etc. However, the design parameters considered now come from the load calculations, Manual S, and the OEM performance data.

Two of the design parameters listed in **Table 3** relate to the design conditions used to calculate the cooling load. Unlike heating equipment, the cooling equipment capacity

varies with the outdoor conditions. The outdoor and indoor design conditions that were used to calculate the cooling load must be used when selecting the equipment. In this case, the indoor conditions were a 63°F wet bulb temperature (this is equivalent to 75°F dry bulb, 50%Rh), and an outdoor design temperature of 95°F.

Another design parameter is the sizing limit *Manual S* sets for air conditioners. Based on the home's load and sizing limitations from **Table 1**, an air conditioner must meet the total cooling load requirement (30,000 Btu/h), but can have no more than 34,500 Btu/h (115% x 30,000 = 34,500). Therefore, the air conditioner we need must produce more than 30,000 Btu/h, but less than 34,500 Btu/h.

## Step 2. Estimate the Target Airflow

Target airflow for the cooling system must be estimated. *Manual S* provides instructions<sup>2</sup> to use the home's sensible heat ratio (SHR) to calculate the target airflow. This target airflow narrows the search for equipment candidates. The home's SHR also indicates whether the air conditioner will need exceptional moisture removal (humid climates) or extra temperature control (hot and dry climates). This airflow rate is only a target; the actual airflow will be based on the OEM expanded performance data. Based on the SHR of the home, our target airflow is 952 CFM.

## Determining Target Airflow

Target airflow is based on the home's SHR. The SHR is the ratio of the sensible load to the total load (SHR = Sensible Load / Total Load). This home's SHR is 73% (SHR = 22,000 / 30,000 = 73.3%). The recommended temperature drop across the cooling coil, based on this SHR, is 21°F. The formula to determine the target CFM from this temperature difference is  $CFM = SBtu/h^3 \div (\Delta T \times 1.1 \times ACF)$ . The target CFM for this air conditioner is 952 CFM.

$$CFM = 22,000 \div (21^\circ F \times 1.1 \times 1.0) = 952CFM$$

Where:

$\Delta T$  = Temperature difference in the air between the inlet and outlet of the furnace or cooling coil

SBtu/h = Home's sensible capacity requirement for the cooling system

CFM = Cubic feet per minute; volume of air moved through the furnace by the blower assembly

1.1 = A physical air constant (derived from the laws of physics)

ACF = Altitude Correction Factor; 1.0 applies to sea level.

The cooling design parameters for the sample house are show in **Table 3**.

## Step 3. Search for Equipment Candidates

The HVAC designer should always select a MATCHED system, a system that is rated by AHRI or certified by the OEM to deliver the specified capacity under the design conditions. Diligent HVAC system designers should examine different product lines and equipment styles when searching for equipment candidates. In addition to package and split systems, there are other low capacity heating and cooling systems which will serve small loads (e.g., ductless mini-split systems, radiant panels, and packaged terminal air conditioners).

## OEM Performance Data vs. AHRI Data

AHRI produces the standards for rating various heating and cooling equipment. Manufacturers are responsible for testing and certifying the performance of their heating and cooling equipment to these standards. After equipment is tested in accordance with the appropriate standard, the OEM data is published in AHRI product directories ([www.ahrinet.org](http://www.ahrinet.org)). However, the certification and efficiency data that appears in the product directories should not be used to select the heating and cooling equipment. The test conditions AHRI uses simulate a very small geographic area in the US which restricts the use of this data. Hence, OEM expanded performance data should be used to select the properly sized equipment, and AHRI directories should only be used to compare relative equipment efficiency ratings.

Different OEMs will present their performance data in various formats. However,

(continued)

Indoor conditions	Temperature	75°F
	Relative humidity	50%Rh
	Indoor wetbulb (at 75°F and 50% Rh)	63°F
Outdoor conditions		95°F
	Total cooling capacity requirement	30,000 Btu/h
	Sensible cooling capacity requirement	22,000 Btu/h
	Latent cooling capacity requirement	8,000 Btu/h
	Estimated (target) airflow	952 CFM

each format will generally include the same basic information: required airflow through the coil, entering air wet-bulb temperature<sup>4</sup>, outdoor temperature, and the equipment's cooling capacities (usually total and sensible capacities). Based on a cooling requirement of 30,000 Btu/h, is a 2.5 ton system the proper unit to select?

The 2.5 ton system (**Table 4**) does not have enough total cooling capacity at a 95°F outdoor temperature and entering wet bulb temperature of 63°F. Therefore, choosing this air conditioner would fail to keep the customer comfortable during hot summer afternoons. In a home with a cooling load of 30,000 Btu/h, a 2.5 ton unit seems like the natural choice. However, after examining the OEM expanded performance data (with reference to the design parameters), it is apparent that this 2.5 ton system would be a poor choice.

Given the stated design parameters, the 3.0 ton system (**Table 5**) is actually a better fit. It has enough total cooling capacity (31,510 Btu/h) without exceeding the 115% limit (34,500 Btu/h). The system's sensible cooling capacity (23,000 Btu/h) also meets the sensible cooling load (22,000 Btu/h). The latent capacity (8,510 Btu/h) of this system (total – sensible = latent) is sufficient to provide proper dehumidification for the example home (latent load 8,000 Btu/h).

The other design element gleaned from **Table 5** is the volume of air, in cubic feet per minute<sup>5</sup> (CFM) that must flow over the indoor air conditioner coil<sup>6</sup> to achieve the required cooling capacities. The airflow for this air conditioner, 1,050 CFM, is different than the target airflow, 952 CFM. Is this difference a problem? No. The goal is to find an air conditioner with the right capacity. The process to determine target airflow provided insight to the sensible and latent cooling capacity relationships that needed to be considered. 1,050 CFM will be subsequently used in the *Manual D* (Residential Duct Systems) duct sizing calculations<sup>7</sup>.

Manufacturers of furnaces, fan coils, and other equipment with blower assemblies create blower performance charts for the different models they produce. These charts provide the data needed to determine how much airflow a blower assembly produces at a given fan speed when pushing air against a certain amount of external static pressure (ESP). Based on the fan speed and the amount of resistance that is external to the unit<sup>8</sup>, the chart provides the volume of air the blower assembly can move<sup>9</sup>. The XYZ furnace manu-

<b>Table 4: XYZ Model AC030 Performance Data</b>											
<b>XYZ AIR CONDITIONERS – DETAILED COOLING CAPACITIES</b> Model AC-30 with coil AC-030 (2.5 ton)											
<b>Evaporator air</b>		<b>Condenser entering air temp – DB (F)</b>									
CFM	EWB (F)	75		85		95		105		115	
		Capacity		Capacity		Capacity		Capacity		Capacity	
		Total	Sensible	Total	Sensible	Total	Sensible	Total	Sensible	Total	Sensible
875	72	34,610	18,190	33,100	17,620	29,830	16,390	28,040	15,730	26,500	15,170
	67	31,400	22,240	30,000	21,650	28,520	21,040	26,960	20,390	25,300	19,720
	63	28,620	26,290	27,350	25,680	26,020	25,040	24,640	24,340	23,340	23,340
	57	27,840	27,840	26,820	26,820	25,740	25,740	24,580	24,580	23,340	23,340
1,000	72	35,250	19,090	33,680	18,500	32,030	17,890	30,280	15,730	28,430	16,590
	67	31,990	23,660	30,530	23,060	29,000	22,440	27,380	21,790	25,670	21,110
	63	29,300	28,220	28,020	26,560	26,770	26,770	25,540	25,540	24,220	24,220
	57	29,020	29,020	27,930	27,930	26,780	26,780	25,540	25,540	24,230	24,230
1,125	72	35,720	19,920	34,110	19,330	32,410	18,710	30,610	18,070	28,700	17,390
	67	32,430	25,010	30,930	24,410	29,360	23,780	27,700	23,120	25,960	22,420
	63	29,970	29,970	28,850	28,850	27,630	27,630	26,340	26,340	24,950	24,950
	57	30,000	30,000	28,850	28,850	27,640	27,640	26,340	26,340	24,950	24,950

<b>Table 5: XYZ Model AC036 Performance Data</b>											
<b>XYZ AIR CONDITIONERS – DETAILED COOLING CAPACITIES</b> Model AC-36 with coil AC-030 (3.0 ton)											
<b>Evaporator air</b>		<b>Condenser entering air temp – DB (F)</b>									
CFM	EWB (F)	75		85		95		105		115	
		Capacity		Capacity		Capacity		Capacity		Capacity	
		Total	Sensible	Total	Sensible	Total	Sensible	Total	Sensible	Total	Sensible
1,050	72	41,680	21,820	39,850	21,110	37,920	20,380	35,900	19,620	33,700	18,810
	67	37,930	24,680	36,260	23,950	34,460	21,200	32,570	24,420	30,540	23,590
	63	34,660	29,520	33,120	28,780	31,510	23,000	29,840	29,160	28,150	28,150
	57	33,650	31,650	32,400	30,400	31,090	27,090	29,680	29,680	28,160	28,160
1,200	72	42,390	20,820	40,490	20,110	38,490	21,360	36,390	29,590	34,130	19,770
	67	38,650	26,290	36,870	25,560	35,000	26,790	33,949	26,010	30,950	25,170
	63	35,450	31,740	33,890	30,950	32,300	32,080	30,790	30,790	29,180	29,180
	57	35,020	33,020	33,690	31,690	32,290	32,290	30,800	30,800	29,190	29,190
1,350	72	42,910	21,750	40,960	21,030	38,890	22,280	36,750	21,510	34,420	20,680
	67	39,150	27,820	37,320	27,080	35,410	28,320	33,410	27,530	31,270	26,680
	63	36,200	33,760	34,750	32,750	33,270	33,270	31,700	31,700	30,010	30,010
	57	36,160	34,160	34,760	32,760	33,270	33,270	31,710	31,710	30,010	30,010

<b>Table 6: Fan Performance Data</b>										
<b>XYZ COMPANY FR 80 FURNACE BLOWER DATA — Air Delivery — CFM (with filter)</b>										
Unit size	Return air entry	Fan speed	External static pressure (inches water column)							
			0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
FR80-024	1 side	High	1100	1065	1005	945	900	805	730	610
	or	Med-low	890	865	810	765	705	620	540	475
	bottom	Low	745	710	670	625	565	505	425	360
FR80-036	1 side	High	1745	1705	1660	1615	1570	1500	1425	1355
	or	Med-high	1500	1470	1445	1410	1375	1330	1280	1210
	bottom	Med-low	1340	1315	1300	1270	1235	1220	1140	1095
		Low	1195	1175	1165	1130	1100	1070	1030	975
FR80-048	1 side	High	2250	2175	2090	2020	1930	1855	1760	1670
	or	Med-high	2050	1950	1900	1840	1790	1710	1640	1545
	bottom	Med-low	1725	1690	1660	1630	1575	1520	1460	1370
		Low	1490	1480	1460	1440	1380	1340	1295	1230

Airflow shown is for bottom only return-air supply with factory supplied 1-in. washable filter (0.05 IWC).

facturer produced a blower performance chart (Table 6) for the FR 80-036. The furnace delivers 1,050 CFM on low fan speed with an ESP of 0.65 IWC. (1,070 CFM at .60 IWC – interpolated to 1,050 CFM at 0.65).

Using the known specifications and experience this fan should have enough capacity to accommodate the air conditioner coil, a good filter, and the resistance from a “typical” duct system. Given the fan performance of 1,050 CFM @ 0.65 IWC External Static Pressure:

Add 0.19 IWC for the air conditioner coil (per XYZ Co. specs)

Add 0.21 IWC for the pleated filter (at 1,200 CFM per filter specs)

Add 0.25 IWC for the duct system (approximate value based on experience)

Total 0.65 External static pressure

#### Step 4. Evaluate and Select the Acceptable Candidates

These two cooling equipment candidates were evaluated throughout the example. However, an HVAC designer would use this step to evaluate the HVAC system that best met their customer’s different energy efficiency, IAQ, price points, or other needs. The evaluation of the candidates may look like Table 7.

### How to Apply Manual S:

#### Heating Example (Part II)

The cooling system has been selected and the proposed design airflow is 1,050 CFM, this airflow must also meet the furnace’s requirements before it can be used for the *Manual D* duct design<sup>10</sup>. The XYZ model FR80-036 furnace has an OEM design temperature rise range of 35°F - 65°F (Table 2). The air temperature rise through the furnace depends on the airflow through the heat exchanger. If 1,050 CFM causes the temperature rise to fall outside the desired range then: the equipment may cycle off on safety limits, the furnace could suffer damage, or other unsafe conditions may be created.

#### Problems Associated With Incorrect Airflow

Slow Air (too much temperature rise): Slow moving air may allow the heat exchanger to become too hot, which may damage (warp or crack) the metal heat exchanger. Fast Air (too little temperature rise): Excessive airflow rate; air moving too quickly may cause condensation in the metal heat exchanger (this produces an acid that can harm or penetrate the heat exchanger).

**Table 7: Cooling Equipment Comparison**

	Criteria	Equipment Candidates	
		AC-30 (w/ Coil 030 and Furnace FR 80-36)	AC-36 (w/Coil 036 and Furnace FR 80-036)
Total cooling capacity	30,000 Bth/h	26,770 Bth/h	31,510 Bth/h
Sensible cooling capacity	22,000 Bth/h	26,770 Bth/h	23,000 Bth/h
Latent cooling capacity	8,000 Bth/h	0 Bth/h	8,510 Bth/h
Estimated (target) airflow	952	1,000 CFM	1,050 CFM
At the following design conditions: Indoor: Wet bulb temperature 63°F (Temperature 75° F, Rh 50%) Outdoor temperature: 95°F			

Fortunately, an airflow of 1,050 CFM equates to an acceptable furnace temperature rise of about 55°F:

$$\Delta T = \frac{\text{Btu/h}^{11}}{\text{CFM} \times 1.1 \times \text{ACF}}$$

$$55.4^\circ\text{F} = \frac{64,000}{(1,050 \times 1.1 \times 1.0)}$$

Where:

$\Delta T$  = Temperature difference in the air between the inlet and outlet of the furnace or cooling coil

Btu/h = Thermal output capacity of the furnace

CFM = Cubic feet per minute; volume of air moved through the furnace by the blower assembly

1.1 = Conversion factor for pounds of air into cubic feet of air

ACF = Altitude Correction Factor; 1.0 applies to sea level.

#### Conclusion

Equipment selection is a vital step in the HVAC system design process. As “first preventers”, code officials carry the responsibility to enforce the code, and to prevent harm to future and current occupants. Proper HVAC equipment selection is one of the many ways that code officials protect occupant health and safety.

This simple example was quickly reviewed. You will find that *Manual S* has much more instruction, examples, and useful information. ■

#### End Notes

- Over sized equipment satisfies the control’s set point faster, this leads to more starts and stops. Equipment start-up creates extreme stress on mechanical components.
- Manual S* Section 3-10, page 3-4, Step 2 provides detailed instructions to determine the target airflow used in the equipment selection process.
- In this case we use the homes sensible cooling requirement in the formula instead of the total cooling capacity.
- This measurement considers the air’s temperature and moisture content.
- Air volume is measured in Cubic Feet per Minute (CFM). CFM is the amount of air in cubes (one foot by one foot by one foot) which move through a duct in one minute.
- The XYZ model AC-36 must have 1,050 CFM over indoor air conditioner coil in order to deliver the specified cooling capacity, if the airflow value changes the equipment capacity changes as well.
- Also a code requirement - IRC Section 1601.1.
- External static pressure (ESP) is the pressure produced by ducts and accessories external to the rated blower assembly. The OEM provided pressure chart will define accessories that were included (e.g. a filter) and other pertinent information. Ensure you understand all of the items which affect the blower assembly’s performance.
- For more information see ACCA *Manual D*, section 3.
- 1,050 CFM at 0.65 IWC is information needed to determine the friction rate for duct sizing.
- In this case we use the furnace’s actual capacity in the formula instead of the *Manual J* heat loss. The actual furnace output capacity of 64,000 Btu/h is used, not the 56,000 Btu/h design capacity from the load calculation.

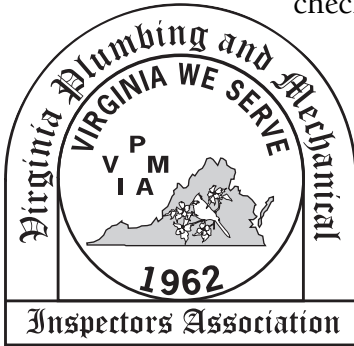
#### About the Author:

Wes Davis is the Manager of Technical Services for the Air Conditioning Contractors of America (ACCA). He develops HVAC-oriented technical documents, delivers educational presentations, provides technical support to ACCA members, and serves on several HVAC-industry technical committees. He wrote Bob’s House, coordinated the development of the Quality Maintenance Standard and the Quality Installation Verification Protocols. Davis was a licensed HVAC contractor who holds several NATE certifications.

**YOU** can participate in VPMIA throughout the year.

Attend Board of Directors Meetings (4 meetings) and General Membership meetings (3 meetings) throughout the year, check for the most

current times and location information on the VPMIA website at [www.vpmia.org](http://www.vpmia.org)



**FITZGERALD  
ART & DESIGN LLC**

[www.fitzart-d.com](http://www.fitzart-d.com)

Jane E. Fitzgerald

703-527-1238

VPMIA thanks

**MASTERS, Inc**

for its support of the  
**2009 VPMIA Annual  
School of Instruction  
Yearbook**

Bruce Colton  
Masters Inc.  
301 252 3308



# Gas Piping

and the 2006 IFGC

by

**Bob Guenther**

Director of Mechanical Programs, ICC-PMG

**A**s a result of the changes that occurred to the *2009 International Fuel Gas Code*, there have been several inquiries from ICC members about the intent of Section 404.1. This article is intended to help clarify and answer some of the common questions that are being asked.

Section 404.1 in the *2006 IFGC*, reads as follows:

“Piping shall not be installed in or through a circulating air duct, clothes chute, chimney or gas vent, ventilating duct, dumbwaiter or elevator shaft. Piping installed downstream of the point of delivery shall not extend through any townhouse unit other than the unit served by such piping.”

The *2009 IFGC* has been changed to read:

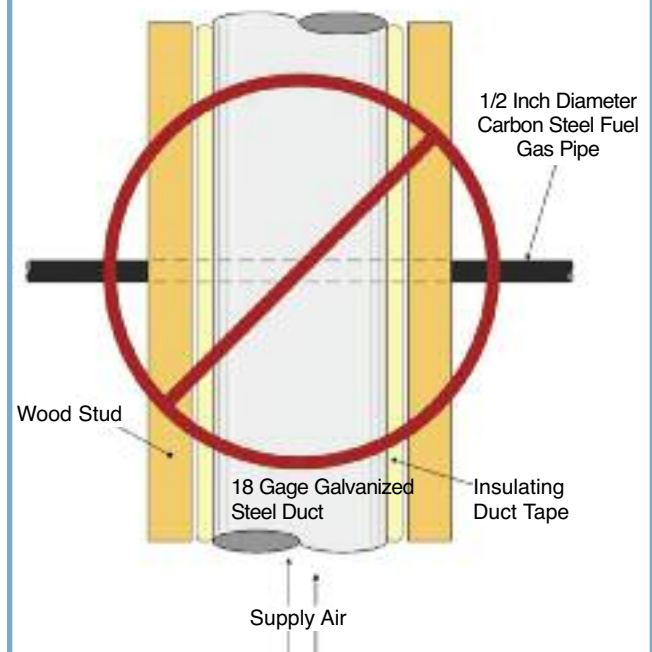
“Piping shall not be installed in or through a ducted supply, return or exhaust or a clothes chute, chimney or gas vent, dumbwaiter or elevator shaft. Piping installed down of the point of delivery shall not extend through any townhouse unit other than the unit served by such piping”.

To fully understand the intent of Section 404.1 in the IFGC, it might be a good idea to visit the definitions in Chapter 2 of the International Mechanical Code. Chapter 2 in the IMC defines a duct as a tube or conduit utilized for conveying air. Note that the *2009 IFGC* states that gas piping shall not be installed through a ducted supply, return or exhaust. It does not mention or prohibit gas piping from being installed in or through a plenum. A plenum is defined in the IMC as an enclosed portion of the building structure, other than an occupied space being conditioned, that is designed to allow movement and thereby serve as a part of an air distribution system.

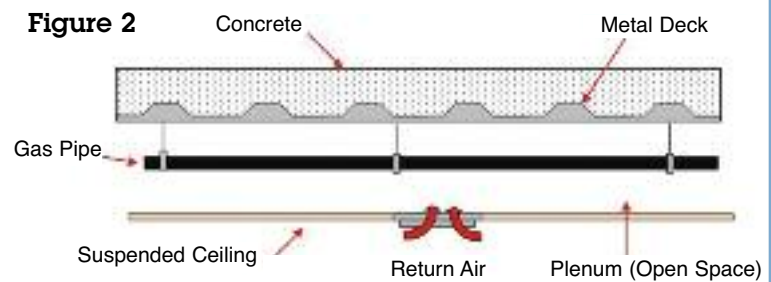
The intent of Section 404.1 is to not allow gas piping to be installed in or through a duct. This is

shown in Figure 1. I think that most inspectors and contractors understood from the 2006 and previous codes that this could not be done and was a violation

**Figure 1**  
Section 404.1 Prohibited Locations



**Figure 2**



of the code. The confusion usually occurs when gas piping is installed in a return air plenum as shown in Figure 2. This usually occurs in multistory office buildings where the space between a lowered T-bar

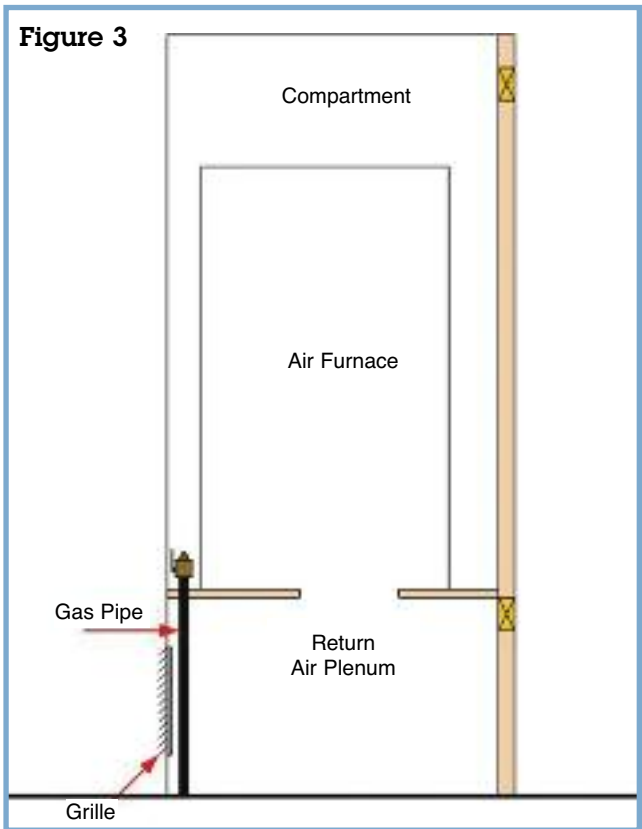
ceiling and the floor or roof is used as a return air plenum.

Another area of clarification in Section 404.1 is shown in Figure 3. This type of installation is usually found in residential construction but it can also be found in commercial buildings. In this type of installation, an upflow forced air furnace is installed in a closet on a raised floor and the space between the furnace floor and the building floor is used as a return air plenum. In this type of an installation, gas piping is allowed in the return air plenum.

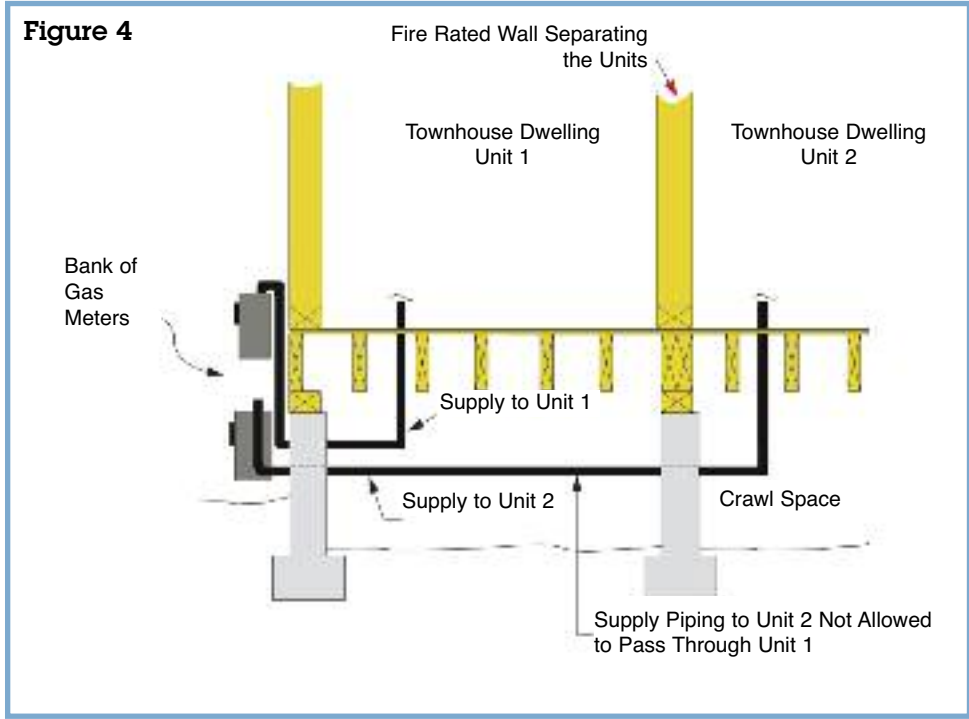
The last part of Section 404.1 was added to the 2006 IFGC and references piping in townhouses. The intention of this requirement is to not allow gas piping from the meter to extend through a townhouse not served by the gas piping from that particular meter. Figure 4 shows what the code is prohibiting. When this occurs, the gas piping is usually located in an above grade under floor location as shown. It has been interpreted that the same restriction would apply if the gas piping was installed on the roof of a townhouse building.

It should be noted that this requirement does not include apartments or condominiums. It is only intended for townhouses.

Hopefully this article will clear up any questions that you may have had about Section 404.1 in the IFGC. ■



For more information on this and other inquiries, visit [www.iccsafe.org/pmg](http://www.iccsafe.org/pmg) or email ICC at [pmgresourcecenter@iccsafe.org](mailto:pmgresourcecenter@iccsafe.org).



**About the Author:**  
 Bob Guenther, Senior Technical Staff for the International Code Council, provides technical assistance to its members on the Mechanical, Fuel Gas and Plumbing Codes. In addition, Bob develops and reviews technical publications and presents mechanical and fuel gas code seminars throughout the country. Prior to ICC, Bob was the Mechanical Official for Long Beach, California where he worked for 24 years and was a Mechanical Inspector for the City of Los Angeles for five years. Bob has taught many seminars throughout the country including the mechanical code in community colleges in Southern California. Bob has served on the IMC and UMC code change committees and was on the committee that formed the original IMC.



**Ready for a quality home?**



**New Shelter Construction, Inc.**

**3714 Mountain Road**

**Haymarket, VA 20169**

**703-754-7196**

**Contact Jeff Heflin, Owner**

**Custom Framed Homes • Log Homes • Additions**

**Full line of doors and windows, specializing in Andersen.**



# Available Now!

**2009 INTERNATIONAL CODES®** — *Safer, easier to use*

## WHAT'S NEW IN THE 2009 I-CODES®?

### A: 2009 INTERNATIONAL PLUMBING CODE®

Key changes include:

- Field-installed shower liners must be leak tested.
- Building occupant loads must be split into male and female numbers before plumbing fixture ratios are applied.
- Frost-proof yard hydrants with below-grade waste valves are prohibited unless upstream backflow protection is provided and the hydrant is permanently identified with "do not drink" signage.
- Now includes IPSDC®!

SOFT COVER #3200S09 | LIST \$71 | ICC MEMBER \$53

LOOSE LEAF #3200L09 | LIST \$82.50 | ICC MEMBER \$61.75



A

### B: 2009 INTERNATIONAL RESIDENTIAL CODE® FOR ONE- AND TWO-FAMILY DWELLINGS

Key changes include:

- Automatic sprinklers are required in townhouses beginning in 2009, and one- and two-family dwellings beginning in 2011.
- Plumbing provisions now offer a new, more affordable alternative multi-purpose plumbing system for fire sprinklers in residential buildings.
- Updated standard for construction in high wind regions based upon new standard ICC 600, which replaces standard SSTD 10.

SOFT COVER #3100S09 | LIST \$88 | ICC MEMBER \$66

LOOSE LEAF #3100L09 | LIST \$103.75 | ICC MEMBER \$78



B

RECEIVE **FREE** UPDATES, EXCERPTS OF CODE REFERENCES, TECHNICAL ARTICLES AND MORE WHEN YOU REGISTER YOUR NEW CODE BOOKS.

**GET YOURS TODAY!** [www.iccsafe.org/2009icodes](http://www.iccsafe.org/2009icodes)

**C: 2009 INTERNATIONAL MECHANICAL CODE<sup>®</sup>**

*Key changes include:*

- Revised outdoor air ventilation requirements improve indoor air quality performance of systems and allow for reductions in outdoor air required.
- Maximum length of a clothes dryer duct increased to 35 feet.
- Locking access caps on outdoor refrigerant systems now required.

**SOFT COVER** #3300S09 | LIST \$68 | **ICC MEMBER \$51**

**LOOSE LEAF** #3300L09 | LIST \$78.50 | **ICC MEMBER \$58.75**



C

**D: 2009 INTERNATIONAL FUEL GAS CODE<sup>®</sup>**

*Key changes include:*

- Bonding requirements are added to reduce the chance of damage to the piping from lightning-induced electrical energy.
- Section 505.11 revised to avoid issues created by appliance/hood interlock arrangements that shut off gas supply to appliances equipped with standing pilot ignition systems.
- Vents that penetrate an exterior wall must be permanently sealed around the penetration to prevent the entry of combustion products into a building.

**SOFT COVER** #3600S09 | LIST \$68 | **ICC MEMBER \$51**

**LOOSE LEAF** #3600L09 | LIST \$78.50 | **ICC MEMBER \$58.75**



D

**E: 2009 INTERNATIONAL ENERGY CONSERVATION CODE<sup>™</sup>**

*Key changes include:*

- More stringency throughout the Energy Code.
- Emphasis on energy savings requirements and higher R values in different regions.
- More restrictive window and door U-Factor and SHGC values in warm climate zones.

**SOFT COVER** #3800S09 | LIST \$34 | **ICC MEMBER \$25.50**



E



*Never problems — only solutions*



- ✓ Manual-J Calcs
- ✓ Plumbing, Gas, Electrical Riser Diagrams
- ✓ Electrical Load Calcs
- ✓ MEP Design and Drawings
- ✓ Wind Bracing Design
- ✓ Permit Expediting



**CTS, Inc.**

**Construction Trade Services, Inc.**

7405 Alban Station Court, Suite A-107

Springfield, VA 22150

(703) 455-5520 **o**

(703) 455-5530 **f**

(571) 238-4805 **c** [got2fishordie@yahoo.com](mailto:got2fishordie@yahoo.com)

**More than 45 years dedication to  
the code enforcement community.**

**2005 ICC Merit Award Recipient  
for the Chapter of the Year Contest.**

**Connect with VPMIA today.**



*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.*

**Virginia Plumbing and Mechanical Inspectors Association**  
**[www.vpmia.org](http://www.vpmia.org)**

V P M I A

EXPRESSES APPRECIATION TO



Pacific

Heating & Cooling LLC

9441 Center Point Ln, Manassas, VA 20110 [pacific.heating@yahoo.com](mailto:pacific.heating@yahoo.com) Phone: (703)330-6664

**FOR ITS SUPPORT OF THE  
2009 VPMIA ANNUAL  
SCHOOL OF INSTRUCTION**

————— Plumbing, Heating, and Air-Conditioning —————



**2008 VPMIA Board of Directors**

<i>President</i>	<b>John W. Mills</b>
<i>Vice President</i>	<b>John Michael Clift</b>
<i>Secretary</i>	<b>Robert Adkins</b>
<i>Treasurer</i>	<b>Wayne Kushner</b>
<i>Executive Secretary</i>	<b>Geary Showman</b>

**2008 Directors**

DIRECTOR AT LARGE	Dennis Martinelli
DISTRICT 1 DIRECTOR	Ronald Bladen
DISTRICT 2 DIRECTOR	Bane Compton
DISTRICT 3 DIRECTOR	Stanley Gegory
DISTRICT 4 DIRECTOR	David Harr

**2008 Committee Chairmanships**

Advertising/Yearbook	Ron Bladen
Audit	Geary Showman
Awards	John Seay
By-Laws / Parliamentary	Guy Tomberlin
Cert / Education / Training	Wayne Kushner
Finance	Geary Showman
Fuel Gas/Mechanical Code	Richard Grace
Legislative	Rick Witt
Membership / Website	James Anjam
Nominating	Dennis Martinelli
Plumbing Code	James Anjam
Residential Code	James Anjam
Resolutions	Paul Hostetler
School of Instruction	Wayne Kushner
Time and Place	Dennis Martinelli

**STRATEGIC PLAN**

**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, VCCCA, IAEL, 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.

# 2008-2009 ACTIVE MEMBER ROSTER

Updated as of March 2009

## A

### Adams, Paul M.

Life Member  
Post Office Box 1134  
Grandy, NC 27939  
252-453-6164  
Netmit@aol.com

### Addie, Sonia (1)

Plumbing Code Inspector  
Arlington County  
2100 Clarendon Blvd, Suite 800  
Arlington, VA 22201  
703-228-3866  
703-228-7406 FAX  
saddie@arlingtonva.us

### Adkins, Robert (1)

Construction Inspector  
Prince William County  
5 County Complex Court  
Prince William, VA 22192  
703-792-6950  
703-580-1578 FAX  
radkins@pwcgov.org

### Aldridge, William "Bill" (2)

Combination Inspector  
Town of Christiansburg  
100 East Main Street  
Christiansburg, VA 24073-3029  
540-382-6120 Ext 186  
540-381-7238 FAX  
baldrige@christiansburg.org

### Allen, Michael L. (2)

Code Enforcement Office  
City of Emporia  
P.O. Box 511  
Emporia, VA 23847  
434-634-6315  
434-634-0003 FAX  
mike.allen@ci.emporia.va.us

### Altizer, Charles (3)

Virginia State Fire Marshall, DHCD  
501 N. Second Street  
Richmond, VA 23219  
804-371-7154  
804-371-7092 FAX  
charles.altizer@dhcd.virginia.gov

### Alves, Kenneth (4)

Building Codes Inspector  
City of Newport News  
2400 Washington Avenue  
Newport News, VA 23607  
757-926-8865  
757-926-8311 FAX  
kalves@nngov.com

### Amiri, Shahriar (1)

Chief Building Official  
Arlington County  
2100 Clarendon Blvd, Suite 804  
Arlington, VA 22201  
703-228-3848  
703-228-7046 FAX  
samiri@arlingtonva.us

### Anderson, Jeffrey H. (3)

Residential Combination Inspector  
Chesterfield County  
PO Box 40  
Chesterfield, VA 23832  
804-814-7005  
804-778-7512 FAX  
andersonj@chesterfield.gov

### Anjam, James (1)

Construction Codes Tech Specialist  
Arlington County  
2100 Clarendon Blvd, Suite 800  
Arlington, VA 22201  
703-228-3875  
703-228-7046 FAX  
janjam@arlingtonva.us

### Antonowics, Ricky (1)

Master Combination Inspector  
Fairfax County  
12055 Government Center Pkwy  
Fairfax, VA 22035  
703-324-1711  
703-324-3901 FAX  
rantonowics@fairfaxcounty.gov

## B

### Baker, Johnnie (1)

Plumbing Plans Reviewer  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-771-5756  
703-737-8546 FAX  
jbaker@loudoun.gov

### Baldwin, Edward J. (1)

Life Member  
City Of Harrisonburg  
409 S. Main Street  
Harrisonburg, VA 22801  
540-432-7700  
540-432-7777 FAX  
judb@ci.harrisonburg.va.us

### Ballard, Jr., William H. (1)

Cross Connection/Plumbing Inspector  
Arlington County  
2100 Clarendon Blvd, Suite 800  
Arlington, VA 22201  
703-228-3853  
703-228-7046 FAX  
W.Ballard@arlingtonva.us

### Bartel, Tracy J. (3)

Plumbing & Mechanical Inspector  
Henrico County  
PO Box 27032  
Richmond, VA 23273  
804-501-4231  
804-501-4984 FAX

### Bartell, Richard (3)

Chief Building Official  
Hanover County  
PO Box 470  
Hanover, VA 23069  
804-537-6039  
804-537-6247 FAX  
rabartell@co.hanover.va.us

### Bates, Wayne (3)

Commercial Inspector  
Albemarle County  
401 McIntire Road, #211  
Charlottesville, VA 22906  
434-296-532  
434-972-4126 FAX  
wbates@albemarle.org

### Beahm, David (1)

Building Official  
Warren County  
220 N. Commerce Avenue, #400  
Front Royal, VA 22630  
540-636-9973  
540-636-4698 FAX  
dbeahm@warrencountyva.net

### Beavon, Jr., Jesse D. (1)

Facilities Construction & Maintenance  
Manager  
Spotsylvania County  
PO Box 116  
Spotsylvania, VA 22553  
540-582-755  
540-582-6304 FAX  
jbeavon@spotsylvania.va.us

### Beck, JR., Louis, (3)

Combination Inspector  
Goochland County  
PO Box 119  
Goochland, VA 23063  
804-556-5815 Ext 6209  
804-556-5651 FAX  
lbeck@co.goochland.va.us

### Becker, David (1)

Engineer, Fairfax County  
12035 Government Ctr Pkwy, Suite 424  
Fairfax, VA 22035  
703-324-2849  
David.Becker@fairfaxcounty.gov

### Berkley, Arthur E. (4)

Director of Inspections  
Isle Of Wight County  
PO Box 80  
Isle Of Wight, VA 23314  
757-365-6216  
757-357-0771 FAX  
aberkley@isleofwightus.net

### Bladen, Ron (1)

Code Specialist II  
Fairfax County  
12055 Gov Center Pkwy, Suite 326  
Fairfax, VA 22035  
703-324-1651  
703-324-1614 FAX  
ronald.bladen@fairfaxcounty.gov  
Ductman2008@verizon.net



**Bold Type** indicates "Life Member" status

**NOTE:** District Number in ( )

Boomer, Jr., Bernard (4)  
Combination Inspector  
City of Newport News  
2400 Washington Avenue  
Newport News, VA 23607  
757-926-8773  
757-926-8311 FAX

**Borders, Stephen P. (1)**  
Life Member  
Building Official  
Greene County  
PO Box 358  
Stanardsville, VA 22973  
434-985-5204  
434-985-1459 FAX  
sborder@gcva.us

Boylan, Daniel (1)  
Mechanical Inspector  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-771-5031  
703-737-8546 FAX

Branner, Tommy (1)  
Building Codes Inspector  
City of Harrisonburg  
409 South Main Street  
Harrisonburg, VA 22802  
540-432-7700  
540-432-7777 FAX  
tommyb@ci.harrisonburg.va.us

Brock, Larry (3)  
Senior Construction Inspector, DHCD  
501 North Second Street  
Richmond, VA 23219  
804-786-1157  
804-371-7092 FAX  
Larry.Brock@dhcd.virginia.gov

Brooking, Michael (3)  
Building Inspector  
Goochland County  
PO Box 119  
Goochland, VA 23063  
804-556-5651  
mbrooking@co.goochland.va.us

Brown, Mike (1)  
Master Inspector  
Fairfax County  
12055 Government Center Pkwy  
Fairfax, VA 22035  
703-324-1679  
703-324-1846 FAX  
Michael.Brown2@fairfaxcounty.gov

Brunkow, Paul (7)  
Building Official  
Westmoreland County  
PO Box 1000  
Montross, VA 22520  
804-493-0120  
804-496-0604 FAX  
buildings@westmoreland-county.org

Quality Sales & Service  
Since 1924

Virginia Registration  
#2701005193A



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

Bryan, Jerry (3)  
Mechanical Inspector  
City of Richmond  
900 E. Broad Street, #110  
Richmond, VA 23219  
804-646-6983  
804-646-6948 FAX  
bryanjw@ci.richmond.va

Bryant, Clyde (4)  
Senior Code Specialist  
City of Norfolk  
400 Granby Street  
Norfolk, VA 23510-1914  
757-664-6536  
757-664-6841 FAX  
clyde.bryant@norfolk.gov

Bryant, Sam (4)  
Senior Code Specialist  
City of Norfolk  
400 Granby St.  
Norfolk, VA 23510-1914  
757-664-6551  
757-664-6841 FAX  
Sammy.bryant@norfolk.gov

**C**

Caleb, Sulzen (3)  
Building Inspector  
Louisa County  
PO Box 160  
Louisa, VA 23093  
540-967-3430  
540-967-3486 FAX  
csulzen@louisa.org

Campbell, Curtis W. (3)  
Combination Inspector, Chesterfield  
County  
PO Box 40  
Chesterfield, VA 23832  
804-814-7003  
804-778-7512 FAX  
campbellcw@chesterfield.gov

Catan-Rose, Paula (1)  
Mechanical/Elevator Inspector  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-737-8744  
703-737-8546 FAX

Christian, Carl (4)  
Plumbing Inspector Supervisor  
City of Virginia Beach  
2405 Courthouse Drive  
Virginia Beach, VA 23456  
757-427-4211  
757-426-5777 FAX

Clayborn, Steven (1)  
Supervising Combination Inspector  
Fairfax County  
12055 Government Center Pkwy,  
Suite 634  
Fairfax, VA 22035  
703-324-1971  
703-324-1846 FAX  
sjc36chevy@aol.com

Clements, Darin (3)  
Plumbing/Mechanical Inspector  
City of Charlottesville  
PO Box 911  
Charlottesville, VA 22902  
434-970-3317  
434-970-3359 FAX  
clementd@charlottesville.org

Clements, Ronald M. (3)  
Commercial Plans Reviewer  
Chesterfield County  
9800 Government Center Pkwy  
Chesterfield, VA 23832  
804-751-4163  
804-717-6080 FAX  
clementsro@chesterfield.org

— Active Roster Continued —

Clift, John Michael (3)  
Building Official  
King George County  
10459 Courthouse Rd #104  
King George, VA 22485  
540-775-8557  
540-775-3139 FAX  
mclift@co.kinggeorge.state.va.us

Compton, Bane F. (2)  
Deputy Building Commissioner  
City of Roanoke  
215 Church Avenue, Room 170  
Roanoke, VA 24011  
540-853-1139  
540-853-1594 FAX  
bane.compton@roanokeva.gov

Cooper, John L. (1)  
Combination Inspector  
Fairfax County  
12055 Government Ctr Pkwy  
Fairfax, VA 22035  
703-989-3173  
540-338-2442 FAX  
Jcooper460@aol.com

Cooper, Kevin (3)  
Government Inspector  
Alutiiq International, LLC.  
2055 Boulders Road  
Charlottesville, VA 22911  
434-951-4737

Cousins, Paul (4)  
Mechanical Plan Examiner  
City of Hampton  
22 Lincoln Street  
Hampton, VA 23669  
757-727-6676  
757-727-6557 FAX  
pcousins@hampton.gov

Craddock, Ron (3)  
Government Inspector  
Alutiiq International, LLC.  
2055 Boulders Road  
Charlottesville, VA 22911  
434-951-4737  
ron.craddock@us.army.mil

Cubbage, Gary Lee (1)  
Mechanical Inspector  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-771-5684  
703-737-8546 FAX  
Gary.Cubbage@loudoun.gov

---

D

Davis, Stephen (1)  
Deputy Building Official  
Rockingham County  
PO Box 1252  
Harrisonburg, VA 22803  
540-564-3057  
540-564-2922 FAX

Decatur, Thomas (1)  
Plumbing Plans Reviewer  
Arlington County  
2100 Clarendon Blvd, Suite 804  
Arlington, VA 22201  
703-228-3856  
703-228-7046 FAX

Deel, Gary (2)  
Building Official  
Dickenson County  
PO Box 773  
Clintwood, VA 24228  
276-926-1673  
276-926-6227 FAX  
gary.deel@bid.dcwin.org

**DeHaven, Larry H. (1)**  
Life Member  
Frederick County  
107 North Kent Street  
Winchester, VA 22601  
540-665-5656  
540-678-0682 FAX

Dellenger, Michael (1)  
Plan Review/Building Codes  
City Of Harrisonburg  
409 S. Main Street  
Harrisonburg, VA 22801  
540-432-7700  
540-432-7777 FAX  
miked@ci.harrisonburg.va.us

DeMaree, Donald (1)  
Construction Inspector  
City of Alexandria  
301 King Street  
Alexandria, VA 22314  
703-838-4360  
703-838-3880 FAX  
Donald.Demaree@alexandriava.gov

DeMaury, Andrew (2)  
Building Official  
Montgomery County  
PO Box 2506  
Christiansburg, VA 24068  
540-382-5750  
540-381-6880 FAX

Derrer, Terry (1)  
Combination Inspector  
Rockingham County  
PO Box 1252  
Harrisonburg, VA 22803  
540-564-3040  
540-564-2922 FAX

**DeShazo, Hassell (2)**  
Life Member  
6783 Mitchell Rd  
Ridgeway, VA 24148  
276-956-2499

Dolan, Michael (2)  
Building Official  
City of Covington  
333 W. Locust Street  
Covington, VA 24426  
540-965-6356  
540-965-6307 FAX  
mdolan@covington.va.us

Duckworth, William N. (4)  
Combination Inspector  
City of Portsmouth  
801 Crawford Street  
Portsmouth, VA 23704  
757-393-8531  
757-393-5108 FAX  
duckworthw@portsmouthva.gov

Duffy, Dave (3)  
Building Official  
Goochland County  
PO Box 119  
Goochland, VA 23063  
804-556-5351  
804-556-5651 FAX  
dduffy@co.goochland.va.us

Dupler, William (3)  
Building Official  
Chesterfield County  
PO Box 40  
Chesterfield, VA 23832  
804-748-1611  
804-751-4713 FAX  
duplerd@co.chesterfield.va.us

Duvall, William J. (3)  
Plumbing/Mechanical Inspector  
Hanover County  
PO Box 470  
Hanover, VA 23069  
804-365-6138  
804-365-6465 FAX  
wjduvall@co.hanover.va.us

**Dye, Kathleen T.**  
Life Member  
Retired  
8728 Sugarwood Lane  
Manassas, VA 20110-3847  
703-368-5714

Dyer, Lorenzo (3)  
State Building Code  
Senior Engineer, DHCD  
501 N. Second Street  
Richmond, VA 23219  
804-371-7160  
804-371-7092 FAX  
lorenzo.dyer@dhcd.virginia.gov

---

E

Elder, Gregory (3)  
Building Inspector  
King George County  
10459 Courthouse Road, #104  
King George, VA 22485  
540-775-3061  
540-775-3139 FAX  
gelder@co.kinggeorge.state.va.us

Ely II, George (3)  
Mechanical Inspector  
City of Richmond  
900 East Broad Street, #110  
Richmond, VA 23219  
804-646-6984  
804-646-6948 FAX

— Active Roster Continued —

English, Jimmy (2)  
Building & Code Official  
City Of Bedford  
PO Box Drawer 807  
Bedford, VA 24523  
540-587-6021  
540-875-7533 FAX  
jenglish@ci.bedford.va.us

Eppard, Bonne L. (1)  
Building Inspector,  
Greene County  
PO Box 358  
Stanardsville, VA 22973  
434-985-5204  
434-985-1459 FAX  
beppard@gcva.gov

Estep, Brian (3)  
Building Inspector  
Prince George County  
PO Box 68  
Prince George, VA 23875  
804-722-8643  
804-722-0702 FAX  
bestep@princegeorgeva.org

Eubank, Paula (4)  
Assoc. Director of TASC0  
DHCD  
501 North Second Street  
Richmond, VA 23219  
804-371-7172  
804-371-7092 FAX  
paula.eubank@dhcd.virginia.gov

F

Farrow, Ray (4)  
Mechanical Inspector  
City of Norfolk  
400 Granby St.  
Norfolk, VA 23510-1914  
757-664-6559  
757-664-6897 FAX  
raymond.farrow@norfolk.gov

Fauber, David (4)  
Building Inspector  
Town of Cape Charles  
2 Plum Street  
Cape Charles, VA 23310  
757-331-2176  
757-331-4820 FAX

Fields, Thomas (1)  
Plumbing Inspector  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-771-5759  
703-737-8546 FAX  
trfjr2@shentel.net

Finkelstein, Michael S. (4)  
Senior Code Inspector  
James City County  
PO Box 8784  
Williamsburg, VA 23187  
757-253-6641  
757-259-4038 FAX  
mfinkelstein@james-city.va.us

Fix, Fred (2)  
Building Official  
City of Buena Vista  
2039 Sycamore Ave  
Buena Vista, VA 24416  
540-261-8635  
540-261-2142 FAX  
inspector@buenavistava.com

Fletcher, Walter (1)  
Plumbing/Mechanical/Gas Inspector  
City of Winchester  
15 N. Cameron Street, #410  
Winchester, VA 22601  
540-667-1815  
540-722-3618 FAX  
fletcherwr@ci.winchester.va.us

Forrest, David (4)  
Combination Inspector  
City of Newport  
2400 Washington Avenue  
Newport News, VA 23607  
757-926-8864  
757-926-8311 FAX  
dforrest@nngov.com

Fortner, Richard S. (4)  
Senior Codes Specialist/Mechanical  
City of Norfolk  
400 Granby Street  
Norfolk, VA 23510-1914  
757-664-6547  
757-664-6897 FAX  
richard.fortner@norfolk.gov

Foster, Rodney (3)  
Building Official  
Town of Colonial Beach  
18 N. Irving Avenue  
Colonial Beach, VA 22443  
804-224-7214  
804-224-7185 FAX  
cbbuild@3n.net

Frazier, Edwarren (1)  
Building Inspector,  
Madison County  
PO Box 1206  
Madison, VA 22727  
540-948-6102  
540-948-3843 FAX  
cmcuts1@yahoo.com

Frivetti, Don (3)  
Inspector  
City of Richmond  
900 East Broad Street, #110  
Richmond, VA 23219  
804-646-6981  
804-646-6948 FAX

Fulcher, Charles (2)  
Plumbing/Cross-Connection Inspector  
City of Danville  
PO Box 3300  
Danville, VA 24540  
434-799-5263 Ext 232  
434-797-8919 FAX  
fulchcw@ci.danville.va.us

G

Gerber, Charles E. (3)  
Life Member  
Plumbing/Mechanical Supervisor  
County of Henrico  
PO Box 27032  
Bldg. Insp. Department  
Richmond, VA 23273  
804-501-4369  
804-501-4984 FAX  
ger02@co.henrico.va.us

Gilbert, William (3)  
Commercial Inspections Chief  
Albemarle County  
401 McIntire Rd, #211  
Charlottesville, VA 22902  
434-296-5831  
434-972-4126 FAX  
w.gilbert@albemarlecounty.org

Gill, Bernie (1)  
Construction Codes IV  
Arlington County  
2100 Clarendon Blvd, Suite 804  
Arlington, VA 22201  
703-228-3873  
703-228-7046 FAX  
bgill@arlingtonva.us

Gillispie, Gary L. (1)  
Plumbing Inspector  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-737-8298  
703-737-8546

Glascok, Earnest (1)  
Combination Inspector  
Prince William County  
5 County Complex Court  
Prince William, VA 22192  
703-792-7102  
703-580-1578 FAX  
eglascock@pwcgov.org

Grabowski, Francis A. (4)  
Code Inspector  
City of Virginia Beach  
2505 Courthouse Drive  
Virginia Beach, VA 23456  
757-385-4211  
757-385-5777 FAX

Grace, Richard E. (1)  
Engineer III, Plan Review Division  
Fairfax County  
12055 Government Center Pkwy,  
Suite 316  
Fairfax, VA 22035  
703-324-1687  
703-314-1614 FAX  
richard.grace@fairfaxcounty.gov

Gray, Dale (1)  
Inspections  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-777-0555  
703-737-8546 FAX

— Active Roster Continued —

Gray, Daniel (4)  
Combination Inspector  
City of Portsmouth  
801 Crawford Street  
Portsmouth, VA 23704  
757-393-8531  
757-393-5108 FAX  
grayd@portsmouth.gov

Gray, Gilbert W. (1)  
Senior Building Inspector  
Orange County  
128 West Main Street  
Orange, VA 22960  
540-672-4574  
540-672-0164 FAX  
gwgray@orangecountyva.gov

Gregory, Jr., Stanley "Joe" (3)  
Combination Inspector  
Chesterfield County  
P.O. Box 40  
Chesterfield, VA 23832  
804-814-6979  
804-778-7512 FAX  
gregorys@chesterfield.gov

Grigsby, Ricky (1)  
Inspector, Town of Warrenton  
18 Court Street  
Warrenton, VA 20186  
540-34-2405  
540-349-2414 FAX  
rgrigsly@warrentonva.gov

Grimmell, Mark (1)  
Plumbing & Gas Field Supervisor  
Loudoun County  
PO Box 7000  
1 Harrison Street, S.E.  
Leesburg, VA 20177-7000  
703-771-5765  
703-737-8546 FAX  
Mark.Grimmell@loudoun.gov

Grivetti, Don (4)  
Plumbing Inspector  
City of Richmond  
900 East Broad Street, #110  
Richmond, VA 23219  
804-646-6636  
grivettidc@ci.richmond.va.us

---

H

Haga, Jamie (2)  
Building Inspector  
Grayson County  
PO Box 217  
Independence, VA 24348  
276-773-2322  
276-773-3673 FAX  
gobi2@adelphia.net

Hainer, Cheri (4)  
Building Code Administrator  
City of Virginia Beach  
2405 Courthouse Drive  
Virginia Beach, VA 23456  
757-385-4211  
757-385-5777 FAX  
chainer@vb.gov.com

Hale, Jr., Robert (1)  
Building Official  
Town of Warrenton  
18 Court Street  
Warrenton, VA 20188  
540-347-2405  
540-347-2414 FAX  
rhale@warrentonva.gov

Hardee, Cecil F. Jr. (1)  
Section Supervisor  
Fairfax County Park Authority  
12055 Government Center Pkwy  
Fairfax, VA 22035  
703-324-8434  
703-324-3987 FAX  
cecil.hardee@fairfaxcounty.gov

Harper, Skip (3)  
Building Inspector  
Louisa County  
PO Box 160  
Louisa, VA 23093  
540-967-3430  
540-967-3486 FAX  
sharper@louisa.org

Harris, David R. (4)  
Senior Building Codes Inspector  
City of Newport News  
2400 Washington Avenue  
Newport News, VA 23607  
757-926-8866  
757-926-8311 FAX  
dharris@nngov.com

Harsh, Anthony (1)  
Plumbing & Gas Inspector  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-777-0575  
703-737-8546 FAX  
Andy.Harsh@loudoun.gov

Haskett, James (4)  
Senior Code Specialist  
City of Norfolk  
400 Granby St.  
Norfolk, VA 23510-1914  
757-664-6553  
757-664-6897 FAX  
jim.hasket@norfolk.gov

Hatcher, Sr., Ricky Lee (4)  
Plumbing/Mechanical Inspector  
City of Hampton  
22 Lincoln Street  
Hampton, VA 23669  
757-727-6287  
757-727-6557 FAX  
rhatcher@hampton.gov

Heddings, Joseph (2)  
Building Official  
Campbell County  
PO Box 100  
Rustburg, VA 24588  
434-332-9608  
434-332-9693 FAX  
jlheddings@co.campbell.va.us

Hemphill, James (1)  
Construction Inspector  
City of Alexandria  
301 King Street  
Alexandria, VA 22314  
703-838-4644  
703-549-4589 FAX  
james.hemphill@alexandria.va.gov

Herron, Rick (3)  
Building Inspector  
King George County  
10459 Courthouse Road, #104  
King George, VA 22485  
540-775-7111  
540-775-3139 FAX  
rherron@co.kinggeorge.state.va.us

Hewitt, William (4)  
Combination Inspector  
City of Portsmouth  
801 Crawford Street  
Portsmouth, VA 23704  
757-393-8531  
757-393-5108 FAX  
hewitt@portsmouthva.gov

**Hines, William F. (1)**  
Life Member  
4086 Stanberry Avenue  
Marshall, VA 20115  
540-364-2934  
william.hines@fauquier.county.gov

Hodge, Vernon (4)  
Technical Services Manager  
DHCD  
501 North Second Street  
Richmond, VA 23219  
804-371-7174  
804-371-7092 FAX  
vernon.hodge@dhcd.virginia.gov

Hodges, Jeffrey (4)  
Building & Zoning Official  
Essex County Tappahannock  
PO Box 549  
Tappahannock, VA 22450  
804-443-4951  
804-443-4157 FAX  
jeffhodges@hotmail.com

**Hostetler, Paul D. (3)**  
Life Member  
Retired  
518 Pebble Hill Court  
Charlottesville, VA 22901  
434-964-1183  
paulhostetler@peoplepc.com

Hudson, Brad (3)  
Building Technical Assistant  
King George County  
10459 Courthouse Road, #104  
King George, VA 22485  
540-775-8554  
540-775-3139 FAX  
bhudson@co.kinggeorge.state.va.us

Hudson, Charles (3)  
Building Code Official  
Town of South Hill  
211 South Mecklenburg Avenue  
South Hill, VA 23970  
434-447-5041  
434-447-5064 FAX  
chudson@southhillva.org

Humrich, Rex R. (4)  
Plumbing Inspector  
City of Virginia Beach  
2405 Courthouse Drive  
Virginia Beach, VA 23456  
757-385-8066

Hunter, Robert Joseph (4)  
Cross Connection Specialist  
City of Norfolk  
400 Granby Street  
City of Norfolk, VA 23510  
757-664-6832  
757-664-6841 FAX  
robert.hunter@norfolk.gov

**Hurt, Jesse R. (3)**  
Life Member  
18060 James Madison Highway  
Gordonsville, VA 22942  
540-832-3767

Hutto, J. Ralph (3)  
Plumbing Inspector  
City of Richmond  
900 East Broad Street, #110  
Richmond, VA 23224  
804-737-3907  
804-646-6948 FAX

J

Johnson, Michael (4)  
Mechanical Inspector  
City of Newport News  
2400 Washington Avenue  
Newport News, VA 23607  
757-926-8860  
757-926-8311 FAX  
mrjohnson@nngov.com

Jones, Frank D. (4)  
Mechanical Inspector  
City of Virginia Beach  
2405 Courthouse Drive  
Virginia Beach, VA 23456  
757-427-8065  
757-426-5777 FAX

K

Kesner, Marty (1)  
Plumbing Inspector  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-737-8297



## 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

Kidd, David (2)  
Building Code Engineer  
Virginia Tech  
1240 Smith Creek Road  
Christiansburg, VA 24073  
540-231-9578  
540-231-5590 FAX  
dmkidd@vt.edu

Kipps, Kenneth (1)  
Plumbing Inspector  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-737-8019  
703-737-8546 FAX

Koll, Paul (4)  
Building Official  
Gloucester County  
PO Box 604  
Gloucester, VA 23061  
804-693-2744  
804-693-4664 FAX  
pkoll@gloucesterva.info

Kurtz, Dennis (1)  
Plan Review  
Culpeper County  
302 N. Main Street  
Culpeper, VA 22701  
540-727-3405  
540-727-3461 FAX  
dkurtz@culpepercounty.gov

Kushner, Wayne (1)  
Commercial Combination Inspector  
Fairfax County  
12055 Government Center Pkwy  
Fairfax, VA 22035  
703-324-1755  
703-324-1846 FAX  
wayne.kushner@fairfaxcounty.gov

Lam, Boyd W. (1)  
Building Official  
Rockingham County  
20 E. Gay Street  
Harrisonburg, VA 22802  
540-564-3030  
540-564-2922 FAX

Laney, Ricky F. (1)  
Residential Inspector  
Spotsylvania County  
PO Box 220  
Spotsylvania, VA 22553  
540-507-7242  
540-507-7281 FAX  
rlaney@spotsylvania.va.us

Lapprade, Mike (2)  
Plumbing/Cross Connection  
Danville  
PO Box 330  
Danville, VA 24540  
434-799-5263  
434-797-8919 FAX  
laprajm@ci.danville.va.us

Latuche, Sr., Randall (3)  
Plumbing Inspections  
City of Richmond  
900 East Broad Street, #110  
Richmond, VA 23219  
804-646-3988  
804-646-6948 FAX  
latuchera@ci.richmond.va.us

Lawrence, Jr., Billy J. (4)  
Mechanical Inspector  
City of Newport News  
2400 Washington Avenue  
Newport News, VA 23607  
757-926-8106  
757-926-8311 FAX  
blawrence@nngov.com

L

— Active Roster Continued —

Lawrie, Joyce (4)  
Plumbing & Mechanical Inspector  
James City County  
PO Box 8784  
Williamsburg, VA 23187  
757-259-6853  
757-259-4038 FAX  
joycel@james-city.va.us

Leatherby, Eric (3)  
Safety Engineer, DHCD  
501 N. Second Street  
Richmond, VA 23219  
804-371-7165  
804-371-7092 FAX  
eric.leatherby@dhcd.virginia.gov

Lee, Jason (1)  
Construction Code Inspector  
Arlington County  
2100 Clarendon Blvd, Suite 804  
Arlington, VA 22201  
703-228-3850  
703-228-7046 FAX  
jlee3@arlingtonva.us

Lester, Darius (3)  
Building Official,  
Fluvanna County  
PO Box 540  
Palmyra, VA 22963  
434-591-1935  
434-591-1911 FAX  
dlester@co.fluvanna.va.us

**Lester, Ernest L. "Bud" (1)**  
Life Member  
Retired  
612 West Holly Avenue  
Sterling, VA 20164  
703-430-7898

Lewis, Michael G. (1)  
Construction Code Supervisor  
Arlington County  
2100 Clarendon Blvd, Suite 804  
Arlington, VA 22201  
703-228-3868  
703-228-7046 FAX

**Liggan, Joseph R. (4)**  
Life Member (Retired)  
PO Box 34  
Walkerton, VA 23177  
804-769-2755  
JLi421509@aol.com

Lilly, Wayne (1)  
Building Official  
City of Harrisonburg  
409 South Main Street  
Harrisonburg, VA 22801  
540-432-7700  
540-432-7777 FAX  
wayne@ci.harrisonburg.va.us

Lindstrom, Paul (4)  
Mechanical Inspector  
City of Newport News  
2400 Washington Avenue  
Newport News, VA 23607  
757-926-6925  
757-926-8311 FAX  
plindstrom@nngv.com

Lipscomb, J. Lee (3)  
Plumbing Plans/Senior Engineer  
Chesterfield County  
PO Box 40  
Chesterfield, VA 23832  
804-748-1309  
804-778-7512 FAX  
LipscombL@chesterfield.gov

Littlefield, Casey (3)  
Building Inspector  
Louisa County  
PO Box 160  
Louisa, VA 23093  
540-967-3430  
540-967-3486 FAX  
clittlefield@louisa.org

Lockhart, Bobby (1)  
Plumbing Inspector/Plan Review  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-771-5065  
703-737-8546 FAX

Lockhart, Scott (1)  
Plumbing & Gas Supervisor  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-771-5768  
703-737-8546 FAX

Lockhart, William (1)  
Plumbing Inspector,  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-771-5768  
703-737-8546 FAX

Lucas, James (4)  
Plumbing Inspector  
City of Richmond  
900 East Broad Street, #110  
Richmond, VA 23219  
804-646-680  
804-646-6948 FAX  
lucasjn@ci.richmond.va.us

Lucy, Herb (3)  
Plumbing/Mechanical Inspector  
Hanover County  
PO Box 470  
Hanover, VA 23069  
804-730-6062

Lynch, Paul (1)  
Director, Residential Inspections Division  
Fairfax County  
12055 Government Center Pkwy  
Fairfax, VA 22035  
703-324-1972  
703-324-3901 FAX  
plynch@fairfaxcounty.gov

M

Makely, James A. (1)  
Combination Inspector  
Fairfax County  
12055 Government Center Pkwy  
Fairfax, VA 22035  
703-324-1707  
703-324-3901 FAX  
james.makeley@fairfaxcounty.gov

Marcum, George (1)  
Combination Inspector  
Prince William County  
5 County Complex Court  
Prince William, VA 22192  
703-792-4608  
703-580-1578 FAX  
gmarcum@pwccgov.org

Marple, Tom (1)  
Plumbing/Mechanical Inspector  
Frederick County  
7 North Kent Street  
Winchester, VA 22601  
540-665-5656  
540-678-0682 FAX

Marsh, JR., Robert E. (1)  
Plumbing Inspector  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-771-5956  
703-771-8546 FAX

Martin, Christopher (1)  
Plumbing Inspector  
Arlington County  
2100 Clarendon Boulevard  
Arlington, VA 22201  
703-228-3854  
703-228-7046 FAX  
cmmartin@arlingtonva.us

Martinelli, Dennis (1)  
Supervising Combination Inspector  
Fairfax County  
12055 Government Center Pkwy  
Fairfax, VA 22035  
703-324-1637  
703-324-1846 FAX  
dennis.martinelli@fairfaxcounty.gov

Massie, Stan (2)  
Building Official  
Town of Wytheville  
P.O. Box 533  
Wytheville, VA 24382  
276-223-3339  
276-223-3315 FAX  
stanm@wytheville.org

Matkins, Janet (3)  
Building Inspector  
Louisa County  
PO Box 160  
Louisa, VA 23093  
540-967-3430  
540-967-3486 FAX  
jmatkins@louisa.org

Mayhew, Darrell (3)  
Plumbing-Mechanical Inspector  
Hanover County  
PO Box 470  
Hanover, VA 23069  
804-798-5842

McErlean, Edwin "Chip" A. (4)  
Chief Inspector  
City of Hampton  
Codes Compliance Office  
22 Lincoln Street  
Hampton, VA 23669  
757-727-6268  
757-727-6557 FAX  
cmcerlean@hampton.gov

— Active Roster Continued —

**McFarland, Jr., Roy N. (2)**  
Life Member  
Cross Connection/Program Coordinator  
Roanoke County  
215 Church Avenue, Room 170  
Roanoke, VA 24011-1592  
540-853-1132  
540-853-1594 FAX  
roy.mcfarland@co.roanokeva.us

**McLehane, Dustin (3)**  
Inspector, Chesterfield County  
PO Box 40  
Chesterfield, VA 23832  
804-317-6420  
804-778-7512 FAX  
mclehane@dchesterfield.gov

**McMahan, Alan (4)**  
Building Code Supervisor, DHCD  
501 N. Second Street  
Richmond, VA 23219  
804-371-1157  
804-371-7092 FAX  
alan.mcmahan@dhcd.virginia.gov

**McMahan, Anthony (4)**  
Plumbing/Mechanical Inspector  
Gloucester County  
PO Box 604  
Gloucester, VA 23061  
804-693-2744  
804-693-7037 FAX  
amcmahan@gloucesterva.info

**McNaughton, Dennis (1)**  
Engineer III, Fairfax County  
12055 Government Center Pkwy,  
Suite 316  
Fairfax, VA 22035  
703-324-1643  
703-324-1614 FAX  
dennis.mcnaughton@fairfaxcounty.gov

**McWhirt, Scott (1)**  
Combination Residential Inspector  
Spotsylvania County  
10304 Spotsylvania Avenue  
Fredricksburg, VA 22408  
540-507-7245  
540-507-7281 FAX  
smcwhirt@spotsylvania.va.us

**Meadows, Chris (1)**  
Plumbing Inspector  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-737-8547  
703-737-8546 FAX

**Mentzer, Delbert (1)**  
Mechanical Inspector  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-737-8736  
703-737-8546 FAX

**Mercer, Roger (1)**  
Inspector  
Town of Warrenton  
18 Court Street  
Warrenton, VA 20186  
540-347-2405  
540-349-2414 FAX  
bmercerc@warrentonva.gov

**Metheny, Wayne (4)**  
Plumbing & Mechanical Inspector  
James City County  
PO Box 8784  
Williamsburg, VA 23187  
757-253-6626  
757-259-4038 FAX  
wmetheny@james-city.va.us

**Milbourne, Jerry (1)**  
Mechanical Inspector  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-737-8718  
703-771-8546 FAX

**Milbourne, Michael (1)**  
Mechanical Inspector, Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-737-8742  
703-737-8546 FAX

**Mills, John W. (2)**  
Building Official, Giles County  
315 North Main Street  
Pearisburg, VA 24134  
540-921-2527  
540-921-1846 FAX  
hsnidow@gilescounty.org

**Mimms, Donald (3)**  
Plumbing/Mechanical Inspector  
Chesterfield County  
PO Box 40  
Chesterfield, VA 23832  
804-814-6999  
804-778-7512 FAX  
mimmsd@co.chesterfield.va.us

**Moore, James T. (1)**  
Life Member  
Supervising Combination Inspector  
Fairfax County  
12055 Government Center Pkwy  
Fairfax, VA 22035  
703-324-1704  
703-324-1846 FAX  
james.moore@fairfaxcounty.gov

**More, Allen (4)**  
Mechanical Inspector  
City of Virginia Beach  
2405 Courthouse Drive  
Virginia Beach, VA 23456  
757-427-8065  
757-426-5777 FAX

**Over 50 Years of Trusted Service**

 **LEONARD-SPLAINE Heating & Cooling**

**Quality Equipment ~ Expert Installation ~ Prompt Service**

**FEATURING**

 **TRANE**



Quiet, Durable and Energy Efficient with Aerodynamic Air Flow

- Residential and Commercial Service
- Accredited Technicians
- Radio Dispatched Trucks
- Prompt Fuel Oil Deliveries
- Emergency Service
- Worry-Free Service Plans
- Duct Work
- Service on All Makes



**STATE LICENSED • BONDED • INSURED**

Call Us For Your Heating Oil Needs ... Prompt Delivery, Affordable Rates

**703-494-2855**

Call Us for Fast, Friendly Service & a Free Estimate

[www.leonardsplaine.com](http://www.leonardsplaine.com)

**Serving The Communities Of Burke, Clifton, Fairfax Station, Lorton And Southern Springfield**

— Active Roster Continued —

Morgan, Michael (4)  
Senior Code Specialist  
City of Norfolk  
400 Granby Street  
Norfolk, VA 23510-1914  
757-664-6733  
757-664-6841 FAX  
michael.morgan@norfolk.gov

Morris, Sharon (4)  
Certification Manager DHCD  
501 North Second Street  
Richmond, VA 23219  
804-371-7185  
804-371-7092 FAX  
sharon.finan@dhcd.virginia.gov

Moss, James (2)  
Building Official  
Grayson County  
PO Box 217  
Independence, VA 24348  
276-773-2322  
276-773-3673 FAX  
bring@valink.com

Motley, Ralph (4)  
Plumbing/Mechanical Inspector  
York County  
103 Service Drive  
Yorktown, VA 23692  
757-890-3522  
757-890-3549 FAX  
ralph.motley@yorkcounty.gov

Murphy, Patrick (4)  
Chief Electrical/Plumbing Inspector  
Code Administrator  
City of Richmond  
900 East Broad Street, #110  
Richmond, VA 23219-6505  
804-646-6962  
804-646-6948 FAX  
murphyj@ci.richmond.va.us

Murray, Ray E. (1)  
Code Enforcement Office  
City of Waynesboro  
250 South Wayne Avenue  
Waynesboro, VA 22980  
540-942-6628  
540-942-6770 FAX  
murrayre@ci.waynesboro.va.us

Murrell, Bernie (4)  
Building Official  
City of Colonial Heights  
201 James Avenue  
Colonial Heights, VA 23832  
804-520-9298  
804-524-8755 FAX  
murellb@colonial-heights.com

Myers, Kenneth D. (1)  
Senior Building Inspector  
Stafford County  
1300 Court House Rd.  
Stafford, VA 22555  
540-658-4661  
540-727-3461 FAX  
KMyers@co.stafford.va.us

Nickell, Michael (1)  
Building Official  
County of Augusta  
PO Box 590  
Verona, VA 24482-0590  
540-245-5717  
540-245-5721 FAX  
bi@co.augusta.va.us

Norman, William L. (4)  
Plumbing Inspector I  
City of Newport News  
2400 Washington Avenue  
Newport News, VA 23607  
757-926-7474  
757-926-8311 FAX  
wnorman@nngov.com

N

Negley, Valrae (1)  
Building/Fire Official  
Spotsylvania County  
10304 Spotsylvania Avenue  
Fredericksburg, VA 22408  
540-507-7232

Nelson, Richard (1)  
Building Official  
City of Winchester  
15 N. Cameron Street, #410  
Winchester, VA 22601  
540-667-1815  
540-722-3618 FAX  
nelson@ci.winchester.va.us

Newsome, Warren (3)  
Plumbing/Mechanical Inspector  
Hanover County  
PO Box 470  
Hanover, VA 23069  
804-730-6040  
804-537-6465 FAX

Nicely, Brandon (2)  
Building Official  
Botetourt County  
1 West Main Street, Box 2  
Fincastle, VA 24090  
540-473-8248  
540-473-8304 FAX  
bnicely@botetourt.net

Nick, Daniel (1)  
Mechanical Inspector  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-737-8985  
703-737-8546 FAX

O

O'Connor, Ricky (1)  
Cross Connection  
Prince William County  
5 County Complex Court  
Prince William, VA 22192  
703-792-6956  
rconnor@pwcgov.org

Olszewski, Thomas (3)  
Combination Residential  
Building Inspector  
Chesterfield County  
PO Box 40  
Chesterfield, VA 23838  
804-381-8682  
804-778-7512 FAX  
olszewskit@chesterfield.gov

O'Neal, Arthur (4)  
Plumbing Inspector  
City of Virginia Beach  
2405 Courthouse Drive  
Virginia Beach, VA 23456  
757-385-4211  
757-385-5777 FAX

Orr, Bob (1)  
Senior Building Inspector  
Culpeper County  
302 N. Main Street  
Culpeper, VA 22701  
540-727-3405  
540-727-3461 FAX  
borr@culpepercounty.gov

Owens, Ricky (4)  
Plumbing Inspector  
City of Richmond  
900 East Broad Street, #110  
Richmond, VA 23219  
804-646-6979  
804-646-6948 FAX  
owensra@ci.richmond.va.us

P

Payne, Donald Lee (1)  
Plumbing Inspector,  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-737-8855  
703-737-8546 FAX

**BECK  
COHEN**  
Plumbing / Air Conditioning / Heating / Electrical  
(434) 296-0129 Fax (434) 295-3439  
215 Avon Street, Charlottesville, VA 22902



— Active Roster Continued —

Pearce, Randy (3)  
 Building Official  
 City of Emporia  
 PO Box 511  
 Emporia, VA 23847  
 434-634-6315  
 434-634-0003 FAX  
 rpearce@ci.emporia.va.us

Perrella, Gary (1)  
 Plumbing Inspector  
 Loudoun County  
 PO Box 7000 MSC 60B  
 Leesburg, VA 20177-7000  
 703-737-8299  
 703-737-8546 FAX

Perry, Kevin W. (1)  
 Commercial Inspector  
 Spotsylvania County  
 10304 Spotsylvania Ave, Suite 400  
 Fredricksburg, VA 22408  
 540-507-7244  
 540-710-7119 FAX  
 KPerry@spotsylvania.va.us

Phelps, Richard (2)  
 Mechanical Inspector  
 City of Danville  
 PO Box 3300  
 Danville, VA 24540  
 434-799-5263  
 434-799-8919 FAX  
 phelpr@ci.danville.va.us

Phipps, Leonard (4)  
 Mechanical Inspector  
 City of Chesapeake  
 PO Box 15225  
 Chesapeake, VA 23322  
 757-382-6018  
 757-382-8448 FAX

Pope, Walter H. (4)  
 Plumbing Inspector I  
 City of Virginia Beach  
 2405 Courthouse Drive  
 Virginia Beach, VA 23456  
 757-385-4011  
 757-385-5777 FAX  
 muzl-loader@cox.net

Poston, Paul (1)  
 Building Inspector II  
 Frederick County  
 107 N. Kent Street  
 Winchester, VA 22601  
 540-665-5656

Prisco, Phil (4)  
 Building Inspector  
 City of Newport News  
 2400 Washington Avenue  
 Newport News, VA 23607  
 757-926-8864  
 757-926-8311 FAX  
 pprisco@nngov.com

Proctor, Jack (4)  
 Honorary Member, DHCD  
 501 N. Second Street  
 Richmond, VA 23219  
 804-371-7184  
 804-371-7092 FAX

Puffinberger, Jr., E. F. "Mike" (1)  
 Inspector  
 Frederick County  
 107 North Kent Street  
 Winchester, VA 22601  
 540-665-5656  
 540-678-0682 FAX

Pylant, Ray (1)  
 Building Official  
 Fairfax County  
 12055 Government Center Pkwy  
 Fairfax, VA 22035  
 703-324-1910  
 703-324-1846 FAX  
 ray.pylant@fairfaxcounty.gov

**R**

**Redifer, Michael D.** (4)  
 Life Member  
 Building Official  
 City of Newport News  
 2400 Washington Avenue  
 Newport News, VA 23607  
 757-926-8865  
 757-926-8311 FAX  
 mredifer@nngov.com

Reed, Gregory (1)  
 Plumbing Inspector  
 Loudoun County  
 PO Box 7000 MSC 60B  
 Leesburg, VA 20177-7000  
 571-258-3144  
 703-737-8546 FAX

Revels, Gregory (4)  
 Building Official  
 Henrico County  
 PO Box 27032  
 Richmond, VA 23273  
 804-501-4374  
 804-501-4984 FAX  
 rev04@co.henrico.va.us

Rexrode, Charles (1)  
 Building Codes Inspector  
 City of Harrisonburg  
 409 South Main Street  
 Harrisonburg, VA 22802  
 540-432-7700  
 540-432-7777 FAX  
 duker@ci.harrisburgva.gov

Rigney, Jerry (2)  
 Director of Inspections  
 City of Danville  
 PO Box 3300  
 Danville, VA 24540  
 804-799-5263  
 804-797-8919 FAX  
 rignejd@ci.danville.va.us

Rimel, III, Paul (1)  
 Code Inspector II  
 City of Staunton  
 116 West Beverly Street  
 Staunton, VA 24401  
 540-332-3862  
 540-332-3807 FAX  
 rimelpm@ci.staunton.va.us

Rinker, Jr., Larry G. (1)  
 Mechanical Inspector  
 Loudoun County  
 PO Box 7000 MSC 60B  
 Leesburg, VA 20177-7000  
 703-771-5503  
 703-737-8546 FAX

Roberts, Michale (2)  
 Building Inspector  
 Grayson County  
 PO Box 217  
 Independence, VA 24348  
 276-773-2322  
 276-773-3673 FAX

Robinson, JR., William T. (4)  
 Cross Connection Specialist  
 City of Norfolk  
 400 Granby Street  
 Norfolk, VA 23510  
 757-664-6819  
 757-664-6841 FAX  
 William.robinson@norfolk.gov

Rogers, Emory (4)  
 Director, DHCD  
 501 N. Second Street  
 Richmond, VA 23219  
 804-371-7151  
 804-371-7092 FAX

Roop, Chad (1)  
 Combination Inspector  
 Prince William County  
 1 County Complex Court  
 Prince William, VA 22192  
 703-792-7162  
 croop@pwcgov.org

Ross, John (2)  
 Technical Assistant  
 Giles County  
 315 N. Main Street  
 Pearisburg, VA 24134  
 540-921-2527  
 540-921-1846 FAX  
 jross@gilescounty.org

Rubino, Donna (1)  
 Plan Reviewer  
 Prince William County  
 5 County Complex Court  
 Prince William, VA 22192  
 703-792-4459  
 703-792-7054 FAX  
 drubino@pwcgov.org

**S**

Sanchez, Al (1)  
 Engineer Technician III  
 Fairfax County  
 12055 Government Center Pkwy  
 Fairfax, VA 22035  
 703-324-1681  
 703-324-1614 FAX  
 al.sanchez@fairfaxcounty.gov

— Active Roster Continued —

Sanderson, John (3)  
Plumbing/Mechanical Inspector  
Chesterfield County  
PO Box 40  
Chesterfield, VA 23832  
804-317-6418  
804-778-7512 FAX  
sandersonj@chesterfield.gov

Sargent, William D. (1)  
Chief Plumbing Inspector  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-771-5685  
703-737-8546 FAX  
m-40419@aol.com

Schnetzler, Erich (2)  
Code Official  
Rockbridge County  
150 South Main Street  
Lexington, VA 24450  
540-463-9361  
540-463-5981 FAX  
erich\_schnetzler@co.rockbridge.va.us

Schwind, William M. (1)  
Building Official  
Orange County  
128 Main Street  
Orange, VA 22942  
540-672-4574  
540-672-0164 FAX  
ocinspector@orangecova.com

Scofield, Matt (4)  
Mechanical Inspector  
City of Virginia Beach  
2405 Courthouse Drive  
Virginia Beach, VA 23456  
757-427-8065  
757-427-5777 FAX  
gscofield@vb.gov.com

Seay, Jr., John B. (3)  
Commercial Plumbing Inspector  
Albemarle County  
401 McIntire Rd, #211  
Charlottesville, VA 22902  
434-296-5832 Ext 3237  
434-972-4126 FAX  
434-566-2572 CELL  
jseay@albemarle.org

Severson, James A. (3)  
Plumbing/Mechanical Inspector  
City of Petersburg  
106 West Tabb Street  
Petersburg, VA 23803  
804-733-2409  
804-863-2780 FAX

Shapiro, Steven (4)  
Chief Building Official  
City of Hampton  
22 Lincoln Street  
Hampton, VA 23669  
757-727-6246  
757-727-6557 FAX  
sschapiro@hampton.gov

Sheppard, Steven (4)  
Senior Code Specialist, City of Norfolk  
400 Granby Street  
Norfolk, VA 23503  
757-664-6548  
757-664-6897 FAX  
steve.sheppard@norfolk.gov

Showman, Geary (1)  
Building Code Official  
Shenandoah County  
600 N. Main Street, Suite 107  
Woodstock, VA 22664  
540-459-6185  
540-459-6193 FAX  
gshowman@shenandoahcountyva.us

Shuler, Scott A. (4)  
Plumbing & Mechanical Inspector  
James City County  
PO Box 8784  
Williamsburg, VA 23187  
757-259-4160  
757-259-4038 FAX  
sshuler@james-city.va.us

Silveus, Steven (1)  
Plumbing Inspector,  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-771-5497  
703-737-8546 FAX

Smith, Charles (1)  
Plumbing Inspector,  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-737-8986  
703-737-8546 FAX

Smith, Douglas (4)  
Code Official  
Town of Cape Charles  
2 Plum Street  
Cape Charles, VA 23310  
757-331-3259 Ext 16  
757-331-4820 FAX  
codeofficial@capecharles.org

Smith, Ken (1)  
Master Combination Inspector  
Fairfax County  
12055 Government Center Pkwy  
Fairfax, VA 22035  
703-324-1703  
703-324-1846 FAX  
kenneth.smith@fairfaxcounty.gov

Smith, Wes (1)  
Building Official  
Madison County  
PO Box 1206  
Madison, VA 22727  
540-948-6102  
540-948-3939 FAX  
wsmith@madisonco.virginia.gov

Snider, Jason D. (2)  
Building Inspector  
County of Rockbridge  
150 S. Main Street  
Lexington, VA 24450  
540-463-9361  
540-463-5981 FAX  
jason\_snider@co.rockbridge.va.us

**Snyder, Sr., Kenneth R.** (2)  
Life Member  
41 Fairmont Drive  
Staunton, VA 24401  
540-885-2971  
kenandbarbva@aol.com

Snyder, Paul (3)  
Building Official  
Louisa County  
PO Box 160  
Louisa, VA 23093  
540-967-3430  
540-967-3458 FAX  
psnyder@louisa.org

Soady, Scott A. (4)  
Plumbing Inspector  
City of Virginia Beach  
2405 Courthouse Drive  
Virginia Beach, VA 23456  
757-385-8066  
757-385-5777 FAX  
ssoady@vb.gov.com

Spence, Brown (1)  
Chief Mechanical Inspector  
Loudoun County  
PO Box 7000 MSC 60B  
Leesburg, VA 20177-7000  
703-771-5059  
703-737-8546 FAX  
bspence@loudoun.gov

Stanley, Dennis (2)  
Assistant Building Official  
City of Salem  
PO Box 869  
Salem, VA 24153  
540-375-3036  
540-375-4042 FAX  
dstanley@ci.salem.va.us

Starling, Clance (4)  
Building Inspector  
City of Virginia Beach  
2405 Courthouse Drive  
Virginia Beach, VA 23456  
757-385-4211  
757-385-5777 FAX  
Clance01@msn.com

Stephen, Darryl (4)  
Senior Mechanical Inspector  
City of Norfolk  
400 Granby Street  
City of Norfolk, VA 23510  
757-664-6562  
757-664-6841 FAX  
Darryl.stephen@norfolk.gov

Stevens, Eric C. (1)  
Plumbing Inspector  
Prince William County  
1 County Complex Court  
Prince William, VA 22192  
703-792-6969  
703-580-1578 FAX  
estevens@pwcgov.org

— Active Roster Continued —

Stevens, Michael (1)  
Plumbing Plans Reviewer  
Prince William County  
1 County Complex Court  
Prince William, VA 22192  
703-792-5284  
mstevens@pwcgov.org

Stewart, Danny L. (4)  
Plumbing Inspector  
City of Virginia Beach  
2405 Courthouse Drive  
Virginia Beach, VA 23456  
757-385-8066  
757-385-5777 FAX

Stickel, Donald (2)  
Building Official  
Pittsylvania County  
53 North Main Street  
Chatham, VA 24531  
434-432-7755  
434-432-7919 FAX  
d.stickel@pittgov.org

**Stover, Douglas L.** (1)  
Life Member  
Rockingham County (Ret.)  
PO Box 1252  
Harrisonburg, VA 22801  
540-564-3030  
540-434-7163 FAX

Strausbaugh, Shan (1)  
Plans Examiner  
Arlington County  
2100 Clarendon Blvd, Suite 804  
Arlington, VA 22201  
703-228-3842  
703-228-3777 FAX  
sstrausbaugh@arlingtonva.us

Street, John (4)  
Combination Inspector  
City of Williamsburg  
401 Lafayette Street  
Williamsburg, VA 23105  
757-220-6136  
757-259-3798 FAX  
jstreet@williamsburg.gov

Strong, William J. (1)  
Inspector, County of Orange  
PO Box 111  
Orange, VA 22960  
540-672-4574  
54-672-0164 FAX  
bstrong@orangecountyva.org

Stubanus, Gregory (1)  
Code Enforcement  
City of Waynesboro  
250 S. Wayne Avenue, Rm #208  
Waynesboro, VA 22980  
540-942-6628  
540-942-6770 FAX  
stubanusgc@ci.waynesboro.va.us

Stump, Gary (1)  
Building Inspector II,  
Town of Herndon  
PO Box 427  
Herndon, VA 20172  
703-435-685  
703-318-8492 FAX  
Gary.stump@herndon-va.gov

Sulzer, Caleb (3)  
Building Inspector  
Louisa County  
PO Box 160  
Louisa, VA 23093  
540-967-3430  
540-967-3486 FAX  
csulzer@louisa.org

Sutton, Chuck (4)  
Inspector Coordinator  
City of Virginia Beach  
2405 Courthouse Drive  
Virginia Beach, VA 23456  
757-385-4211  
757-385-5777 FAX  
cwsutton@vbgov.com

Swartzel, Michael (1)  
Inspector, Augusta County  
PO Box 590  
Verona, VA 24482  
540-245-5717  
540-245-5721 FAX  
bi@co.augusta.va.us

---

T

Terry, Benjamin P. (1)  
Building Inspector  
City of Harrisonburg  
409 South Main Street  
Harrisonburg, VA 22801  
540-432-7700  
540-432-7777 FAX

Thrash, Mark Gregory (3)  
Residential Combination Inspector  
Chesterfield County  
PO Box 40  
Chesterfield, VA 23832  
804-814-6984  
thrash@chesterfield.gov

Thuot, Michael (4)  
Retired  
3197 Adam Keeling Road  
Virginia Beach, VA 23452  
540-349-8748  
mthout@aol.com

Tillman, L. Del (4)  
Sr. Plumbing/Mechanical Inspector  
City of Hampton  
22 Lincoln Street  
Hampton, VA 23669  
757-727-6790  
757-727-6557 FAX

Tobin, Sr., Cordell S. (1)  
Construction Plans Examiner  
Arlington County  
2100 Clarendon Blvd, Suite 800  
Arlington, VA 22201  
703-228-3874  
703-228-7046 FAX  
ctobin@co.arlington.va.us

**Tomberlin, Guy** (1)  
Life Member  
Chief Plumbing Inspector  
Fairfax County  
12055 Government Center Pkwy  
Fairfax, VA 22035  
703-324-1611  
703-324-1846 FAX  
guy.tomberlin@fairfaxcounty.gov

Toney, Chris (1)  
Combination Inspector  
Spotsylvania County  
10304 Spotsylvania Avenue  
Fredericksburg, VA 22408  
540-507-7238  
mtoney@spotsylvania.va.us

Trenary, John S. (1)  
Building Official, Frederick County  
107 North Kent Street  
Winchester, VA 22601  
540-665-5656  
540-678-0682 FAX  
jtrenary@co.frederick.va.us

Truslow, Paul (3)  
Codes Inspector, Nelson County  
PO Box 336  
Lovingson, VA 22949  
434-263-7080  
434-263-7086 FAX  
ptruslow@nelsoncounty.org

---

V

Vannoy, Johnny (1)  
Combination Inspector  
Fairfax County  
12055 Government Center Pkwy, Suite 634  
Fairfax, VA 22035  
703-475-0615  
703-324-3901 FAX  
johnny.vannoy@fairfaxcounty.gov

---

W

Walker, Thomas (4)  
Plumbing Inspector  
City of Richmond  
900 East Broad Street, #110  
Richmond, VA 23219-6505  
804-780-6962  
804-785-6948 FAX

Wallace, Clinton (4)  
Assistant Director, DHCD  
501 North Second Street  
Richmond, VA 23219  
804-371-7160  
804-371-7092 FAX  
Clinton.wallace@dhcd.virginia.gov

— Active Roster Continued —

Walters, John E. (1)  
 Combination Inspector  
 Prince William County  
 5 County Complex Court  
 Prince William, VA 22192  
 703-792-7126  
 703-580-1578 FAX  
 jwalters@pwcgov.org

Ward, Allen (4)  
 Building Official  
 Matthews County  
 PO Box 839  
 Matthews, VA 23109  
 804-725-7171  
 804-725-0560 FAX

Ward, Danny Roy (1)  
 Building Inspector  
 Madison County  
 PO Box 1206  
 Madison, VA 22727  
 540-948-6102  
 540-948-3939 FAX  
 dward@madisonco.virginia.gov


Watts, Marion (2)  
 Building Official  
 Town of Abingdon  
 PO Box 789  
 Abingdon, VA 24212  
 276-628-6611  
 276-628-9986 FAX  
 mdwatts@abingdon.com

Werres, Joseph (3)  
 Inspector/Project Manager  
 Albemarle County  
 401 McIntire Rd, #211  
 Charlottesville, VA 22902  
 434-296-5816  
 434-293-0294 FAX

Westfall, Bobby (1)  
 Plumbing Inspector  
 Loudoun County  
 PO Box 7000, MSC 60B  
 Leesburg, VA 20177-7000  
 703-737-8646  
 703-737-8546 FAX

White, Barry (3)  
 Combination Inspector  
 Chesterfield County  
 PO Box 40  
 Chesterfield, VA 23832  
 804-748-1210  
 804-778-7512 FAX  
 whiteb@chesterfield.gov

Williams, Michael A. (1)  
 Plans Examiner  
 City of Harrisonburg  
 409 South Main Street  
 Harrisonburg, VA 22802  
 540-432-7700  
 540-432-7777 FAX  
 mikew@harrisonburgva.gov



**Laurie/Daniel Crigler**  
**(540) 948-6230 Fax (540) 948-5617**

**Plumbing • Hydronic Heating**  
**Consulting • Project Management**  
**Class "A" License #069344**

**P.O. Box 418**  
**Aroda, Virginia 22709**

Wills, Andrew (3)  
 Building Inspector  
 Fluvanna County  
 PO Box 540  
 Palmyra, VA 22963  
 434-591-1935  
 434-591-1911 FAX  
 awills@co.fluvanna.va.us

Wilson, Brian (4)  
 Cross Connection Specialist  
 City of Norfolk  
 400 Granby Street  
 Norfolk, VA 23510  
 757-664-6840  
 757-664-6841 FAX  
 brian.wilson@norfolk.gov

Wilson, Kenny (2)  
 Combination Inspector  
 Rockbridge County  
 150 South Main Street  
 Lexington, VA 24450  
 540-463-9361  
 540-463-5981 FAX  
 kenny\_wilson@rockbridge.va.us

Windon, James  
 Chief Plumbing Inspector  
 Harford County  
 220 South Main Street  
 Belair, MD 21014  
 410-638-3215  
 410-879-8203 FAX  
 plumbing@co.ha.md.us

Witt, Richard (3)  
 Assistant Building Official  
 Chesterfield County  
 PO Box 40  
 Chesterfield, VA 23832  
 804-751-4161  
 804-757-4713 FAX  
 witt@chesterfield.gov

Wood, Murphy (2)  
 Building Inspector  
 City of Salem  
 PO Box 869  
 Salem, VA 24153  
 540-375-3036  
 540-375-4042 FAX  
 mwood@salemva.gov

Woolard, Wayne (4)  
 Plumbing/Mechanical Inspector  
 City of Hampton  
 22 Lincoln Street  
 Hampton, VA 23669  
 757-727-6286  
 757-727-6557 FAX  
 wwoolard@hampton.gov

Woolford, Eric (1)  
 Building Inspector  
 Greene County  
 PO Box 358  
 Stanardsville, VA 22973  
 434-985-5204  
 434-985-1459 FAX  
 ewoolford@gcva.us

---

Y

Yeager, William C. (2)  
 Building Official  
 Montgomery County  
 755 Roanoke Street, Suite 1D  
 Christiansburg, VA 24073  
 540-382-5750  
 540-381-6880 FAX  
 yeagerwc@montgomerycountyva.gov

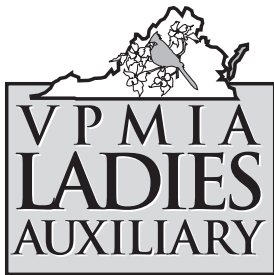
Yoder, Leon (4)  
 Plans Reviewer  
 City of Norfolk  
 400 Granby Street  
 Norfolk, VA 23510  
 757-664-6815  
 757-664-6841 FAX  
 Leon.Yoder@norfolk.gov

Yun, Sunguk (1)  
 Critical Structures  
 Fairfax County  
 12055 Government Center Pkwy  
 Fairfax, VA 22035  
 703-324-1051  
 sunguk.yun@fairfaxcounty.gov

---

Z

Ziegler, Joseph (1)  
 Residential Combination/Commercial  
 Inspector  
 Spotsylvania County  
 10304 Spotsylvania Avenue, Ste. 400  
 Fredericksburg, VA 22408  
 540-507-7249  
 540-710-7119 FAX  
 jziegler@spotsylvania.va.us



*OPEN TO ALL SPOUSES ATTENDING THIS CONFERENCE*

*Become an Auxiliary member. Annual Dues \$10 — payable at registration*

**Membership Roster** (March 2009)

Jane Fitzgerald (President)  
VPMIA (Ron Bladen)  
5716 North 7th Street  
Arlington, VA 22205  
703-527-4210 (H)  
703-527-1238 (W)  
msfitz13@verizon.net

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

June Seay (Secretary/Treasurer)  
VPMIA (John)  
280 Coles Rolling Road  
Scottsville, VA 24590  
434-286-3139  
jws5z@virginia.edu  
seayit2@yahoo.com

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

Sherry D. Rimel  
VPMIA (Paul)  
1159 New Hope Road  
Staunton, VA 24401  
540-248-6627 (H)  
540-332-7086 (W)  
rimelsd@comcast.net

Ethel Showman  
(Past President)  
VPMIA (Geary)  
1221 St. Luke Road  
Woodstock, VA 22664  
540-459-2789  
eshowman@shentel.net

Sandy Tomberlin  
VPMIA (Guy)  
1358 Ebenezer Road  
Bluemont, VA 20135  
540-554-2765 (H)  
703-324-1817 (W)  
sandytomberlin@wildblue.net

**2009 Program Schedule**

**Wednesday, April 1**

7:00 – 8:30 a.m.	REGISTRATION (Ladies Auxiliary)	Lobby
11:00 – Noon.	Helicopter Tour of Winchester*	Meet in Lobby
12:00 – 1:00 p.m.	Lunch with the Men	Banquet Room
Afternoon	Open	
5:00 – 6:00 p.m.	PRESIDENT'S WELCOME	Banquet Room
6:00 – 7:30 p.m.	Bar B Q Dinner	Banquet Room

**Thursday, April 2**

7:30 – 9:00 a.m.	REGISTRATION	Lobby
11:30 – 1:30 p.m.	LUNCHEON and BUSINESS MEETING	Meet in Lobby Local Restaurant
1:30 – 4:30 p.m.	SHOPPING	
6:00 – 10:00 p.m.	BANQUET, AWARDS, INSTALLATION OF OFFICERS	Banquet Room

**Friday, April 3**

8:00 – 9:00 a.m.	BREAKFAST BUFFET	TBD
9:00 – 11:30 a.m.	BINGO	Hospitality Room

The VPMIA Ladies Auxiliary is an ancillary group to VPMIA. Its purpose is to act as an assistant and a support to the Association's endeavors to provide code development leadership and continuous training that results in uniform application of the codes.

This group is also about having fun along the way.

Join us in Winchester. We will conduct our annual luncheon/business meeting and get to know each other better during some scheduled events: exploring items of local interest and a friendly game of Bingo. These informal activities are scheduled to take place while the VPMIA meetings and School of Instruction are in session—leaving time to socialize with the full VPMIA group during lunches and dinners.

\* "April Fools"

# A small group...

of Virginia plumbing inspectors met in 1959 following a seminar at VPIA in Blacksburg. The group discussed the possibility of forming a statewide association for the purpose of dissemination of information touching on new methods, materials and testing procedures used in the plumbing and heating profession.

Following the three-day seminar the inspectors returned to their respective jobs. Being dedicated to their profession, these men contacted individual members of the Virginia State Master Plumbers Association meeting. Cards were mailed asking the inspectors if they were interested in forming such an association.

The first meeting of the group, which would be called The Virginia Plumbing Inspectors Association, took place April 14, 1962 at the Hotel John Marshall in Richmond. Attending were fourteen plumbing inspectors and three associate members. (These names are published as Charter Members.) The first order of business for the group was to name a temporary chairman, Mr. Mannion, followed by nomination and election of officers.

Officers elected were: President, Charles E. Mannion, Richmond; Vice President, Paul C. King, County of Fairfax; Secretary, John B. Mason, Richmond; Treasurer, James B. Jones, Jr., Martinsville; and Sgt. At Arms, E. R. Carr, Winchester. Board of Directors named included: U.E. Allen, Jr., Portsmouth; Frank B. Bosman, County of Arlington; and Gordon Dameron, Danville.

A committee consisting of inspectors King, Chairman, Carr and Cooper was appointed and instructed to draw up the proposed by-laws for the association. A general discussion followed covering the aims and purposes of the organization. A date was set for the next meeting and the group adjourned its meeting to join the Master Plumbers Association, which was in session at this time.

## By-Laws Adopted

VPIA met November 3, 1962 at 1014 East Broad Street, Richmond. The By-Laws Committee presented its report, which was duly adopted. Article II of those by-laws set forth the purpose of the organization:

- A. Cooperate in the formulation of Virginia Plumbing Code Standards.
- B. Promote uniform understanding and application of all city, town and county plumbing codes.

- C. Secure and promote uniform administrative ordinances and inspection methods.
- D. Promote closer cooperation between inspectors, inspection departments, health departments, plumbing contractors and the public.
- E. Promote and improve the standards of the profession of plumbing inspectors.
- F. To institute and maintain a central organization to properly test new materials and methods to be used in this Commonwealth.

## School of Instruction

The Association embarked on a program when Paul C. King served as proxy which has proven to be well accepted by those men serving in all phases of the plumbing industry. Known as "School of Instruction and Conference," the program owes its success to D. Paul Jack, Hampton. Through his efforts, almost single-handedly, Mr. Jack managed to obtain speakers from Texas, across the south, and as far west as Wisconsin. The first annual School of Instruction and Conference was held in Hampton on April 17 and 18, 1964 and was a huge success. Each succeeding year has found the meeting generating more interest in the plumbing profession.

Inspectors have found that the annual school and conference has given us the opportunity to carry out some of the aims of VPIA, namely: "the dissemination of new methods and materials" on a state-wide basis. Our speakers are not only considered experts in their fields but they also present facts which help to generate enthusiasm among those association members interested in promoting the plumbing profession.

## Executive Secretary

In 1969 the Board of Directors appointed an Executive Secretary with the responsibilities to direct the school for Qualified Plumbing Inspectors and to publish a newsletter for the purpose of keeping inspectors abreast with the workings of the association and other related items of interest that inspectors in Virginia and the southeastern states should be concerned with. Thus far the newsletter has accomplished its purpose and its present circulation includes eighteen states.

We are proud to be members of VPIA. The knowledge we have gained during the past years has made it possible for us to be cognizant that the plumbing profession is

ORIGINAL HISTORY BY PAUL C. KING.

indeed one of the leading 'trades' in the building industry.

## History Up-Date

In 1986, the Board of Directors instructed the committee on by-laws to up-date and revise the by-laws to meet and comply with the present day regulations. President John W. Thurston appointed Edward J. Baldwin, Jr., Chairman and D. Paul Jack as part of a two-member committee to study and propose the needed changes.

\*\*\*

On April 1988, at the Twenty-Fifth Annual School of Instruction as the yearly conference had now come to be known, after two years of study and consideration by the committee and board of directors, the amended by-laws were approved and adopted by the voting membership of the Virginia Plumbing Inspectors Association.

On July 21, 1990, at the Association's summer meeting, the voting membership of the Virginia Plumbing Inspectors Association voted unanimously to change the name of the Association to the Virginia Plumbing and Mechanical Inspectors Association. The change was felt necessary because of the number of jurisdictions within the Commonwealth of Virginia having separate mechanical inspection divisions whose inspectors were seeking educational opportunity. It was the feeling of the membership that this Association could provide that opportunity of educational instruction.

In-as-much as there were some other concerns regarding the by-laws, the Committee on By-Laws, consisting of Edward J. Baldwin, Jr., Chairman, Kenneth R. Snyder, Sr. and D. Paul Jack, Vice Chairmen, William F. Hines, Dennis W. McNaughton, Thomas C. Roberts and Paul M. Adams, Executive Secretary, was directed by President Robert M. Broome to study and submit amendments to the by-laws reflecting the name change and other necessary changes needed to include the mechanical personnel. Through the course of the study, an executive board, four regional directors positions and specific duties of the presidential appointed chairpersons were incorporated. The amended by-laws were approved by the committee on September 6, 1990 by the board of directors on October 6, 1990 and by the general membership in December 1, 1990.

After a period of working under the

executive board, which consisted of the elected officers and the four regional directors, the board of directors instructed the Committee on By-Laws to once again review and recommend any needed changes deemed necessary. This resulted in more changes being proposed, the most significant being a change in the fundamental membership and voting rules. The system used since the beginning of the Association was that of jurisdictional membership with a limit of one vote per jurisdiction. The proposed amendments included a change to individual membership with one vote per active member (associate members must remain without a vote in order to protect chapter membership in building officials and code administrations international).

The progress of these amendments, of the proposals and counter proposals, spanned the terms of three presidents and three by-laws committees. The first action of the general membership, which resulted in a change, was made on March 26, 1994 at the conclusion of the Thirty-First Annual School of Instruction. That change eliminated the executive board and dictated meeting schedules. Action was taken on June 25, 1994 which clarified the responsibilities of various officers and both board and presidential appointments. The action which resulted in the current by-laws was taken at the winter meeting on December 3, 1994.

During the course of the by-laws change process, another transition for our Association was under way. In the spirit of promoting closer cooperation between inspectors, inspection departments and plumbing contractors, the membership decided to hold the Twenty-Eighth Annual School of Instruction in Norfolk. The dates were April 11, 12, and 13, 1991 and this coincided with the annual meeting of The Virginia Cross Connection Control Association, The Virginia Association of Plumbing, Heating and Cooling Contractors, and the Richmond Chapter of The American Society of Plumbing Engineers. Although the various associations involved held their own separate educational and business meetings, the trade exposition, where new products and materials could be analyzed and evaluated in a "hands-on" manner, was a central focal point. This cooperation has proven to be a successful format and continues with most

of the same organizations being involved.

The Virginia Plumbing and Mechanical Inspectors Association was founded for the purpose of education and communication. As further evidence of this commitment, the annual summer meeting was expanded, beginning in 1994, to include a day of technical training. With the consolidation of BOCA, ICBO and SBCCI into the International Code Council and subsequent adoption of the International Codes in Virginia, the potential for growth has expanded and we have taken up the challenge. We continue to be a leader in the support of education and code development. In 2002 we received the BOCA Chapter of the Year Award for excelling in educational opportunities, membership and participation in BOCA activities. In 2004, we received the Directors Award from the Virginia Department of Housing and Community Development in recognition of our members' participation in the development and delivery of plumbing and mechanical code educational modules for the Virginia Building Code Academy as well as conducting statewide training in plumbing, mechanical and fuel gas code requirements and service on the Building Code Academy Advisory Committee. In 2005 the Association was honored to accept a Chapter Merit Award from the International Code Council.

Closer ties with our partners in code development and administration both within Virginia and throughout the country have developed. VPMA, along with the Virginia Building and Code Officials Association and the Virginia Fire Prevention Association came together in October of 2005 for the first ever joint conference. The educational seminar lasted for four days with dual tracks offering a wide variety of training from Legal Aspects of Code Enforcement to Hydrogen Refueling Station installations. We have strengthened our Association by focusing on our responsibilities and purpose. Our foundation now consists of a vision, a mission and a strategic plan to further our goals. Thus we go onward, not knowing what challenges are to be faced tomorrow, but confident that through our dedication to learning today, we will be prepared.

#### **Making History**

*The VPMA, VBCOA, VFPA Joint Conference*  
On October 21, 2005 the Virginia Plumbing and Mechanical Inspectors Association

together with the Virginia Building Officials Association and the Virginia Fire Prevention Association held the first ever Joint Code Conference in Hampton, Virginia at Hampton's brand new Conference Center. The conference was a four day event that offered training in all areas of code enforcement. The Conference gave the participants an opportunity to network with each other, develop code knowledge, and earn valued continuing education credits towards certification maintenance. The training, which included everything from Legal Aspects of Code Enforcement to Kitchen Exhaust Installations, was the center piece of the conference utilizing top trainers from around the country.

ICC CEO, James Lee Witt, former FEMA Director and ICC President Henry L. Green were on hand to install Officers and speak to the members. They spoke about the International Code Council Foundation that is helping the Gulf Region Code Officials that were devastated by the hurricanes last summer, get back on their feet. They also spoke regarding ICC's efforts to provide uniform codes for users nationwide. Mr. Witt is spearheading an effort called HEROS. It helps wounded war veterans retrofit their homes for handicapped accessibility as they return from war with devastating handicaps.

A table-top show, with manufacturers of building materials, computer systems and organizations such as ICC and UL were on hand to discuss their products and services. Several of the table-top vendors also taught classes in their specialized areas. The ICC delivered a whole day class on the legal aspects of code enforcement which generated many questions from the class participants.

The social events were a big hit and well attended. On Saturday evening participants were treated to a buffet dinner and casino night at the Air and Space Museum, in Hampton. Everyone had a great time at the casino night and enjoyed the flight simulators. The next morning you had your choice of a golf outing or a fishing trip on the Chesapeake Bay. Although there weren't any hole in ones and very few fish were caught, everyone had a good time and took advantage of the opportunity to network.

Plans are being made for another joint conference in the future so be prepared to find yourself among the finest code enforcement officials in the state when we do it again. ■

# Membership Application Form

**I, the undersigned,** hereby make application for membership, and if accepted, I agree to abide by the Constitution and By-laws of the Association, perform all requested duties and support the Association to the best of my abilities. I understand the membership fee shall cover the period from January 1<sup>st</sup> to December 31<sup>st</sup>, any payment received during the year shall cover only the remainder of the year.

Name \_\_\_\_\_

Title \_\_\_\_\_

Jurisdiction or Firm \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone No. \_\_\_\_\_ Fax \_\_\_\_\_

E-Mail Address \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

ACTIVE MEMBERSHIP FEE: \$30.00  
Active members must be employed by a government agency.

{ } Please check this block if you are a designated ICC voter, representing your municipality or jurisdiction.

ASSOCIATE MEMBERSHIP FEE: \$35.00  
Associate members shall consist of persons interested in assisting the Association in promoting the safety, health and welfare of the public. Associate members must be approved, for membership in the Association, by the Board of Directors.

Make checks payable to: Virginia Plumbing and Mechanical Inspectors Association (VPMIA)

**Please Mail To:**

Geary Showman, BCO  
VPMIA Executive Secretary  
600 N. Main Street  
Woodstock, VA 22664-3551



**VPMIA USE ONLY**

Date: \_\_\_\_\_

Check Number: \_\_\_\_\_

Amount(\$): \_\_\_\_\_



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

**the plumbing dr**



Fully licensed, bonded and insured — 24 hour emergency service

*Complete Plumbing Repairs  
Remodeling, Sewer & Drain Cleaning*

*Family Owned and Operated for over 25 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](http://www.theplumbingdr.com)



# FUJITSU



Federal Tax Credit  
up to \$1,500 per  
household!

## Halcyon Mini-Split Ductless Systems

Did you know that Fujitsu offers...

**F.A.S.T.** Fujitsu Authorized Service Training to educate contractors in proper installation, service, and troubleshooting of Fujitsu systems. *Earn up to 8 NATE CEU credits.*

And... we have

- Over 45 years of air conditioning manufacturing experience, 35 years in ductless split systems
- The largest number of **Energy Star® models - 8 Systems in 2009**
- North America's **Most Efficient** Mini-Split! - **26 SEER**
- 100% of our model line up uses **environmentally friendly R410A refrigerant**
- Select distribution with only the highest caliber wholesalers



Comfort for your home or business

<sup>°</sup>7-CREATOR  
**KDnavien**

## Tankless Water Heaters

Ultra Condensing Efficiency - Eco-Friendly Technology



Federal Tax Credit  
up to \$1,500 per  
household!

- **98% Efficient** - Lowest Annual Operating Cost
- Endless Supply of Hot Water
- Stainless Steel Heat Exchanger
- **PVC Vented, 1 thru 6 units common vent**
- **Built-In Circ Pump with Mini Buffer Tank** ("A" Model)
- Minimum Flow Required **.1 gpm**. ("A" Model)
- **NO Cold-Water Sandwich** like most of our competitors
- **15-Year Warranty** - the **BEST** in the industry



Represented by...



**Harry Eklof & Associates, Inc.**

3401 Penny Drive • Landover, MD 20785 • 800-556-7556 • 301-772-1700 • Fax 301-772-0319

3001 Impala Place • Richmond, VA • 23228 • 804-266-0079 • Fax 804-266-0280

[www.harryeklof.com](http://www.harryeklof.com) E-mail: [info@harryeklof.com](mailto:info@harryeklof.com)



**DO YOU KNOW**

**Green**

*Plan to attend the*  
**2009 PMPV/NAPHCC/CVA ACCA  
Green Conference and Expo**

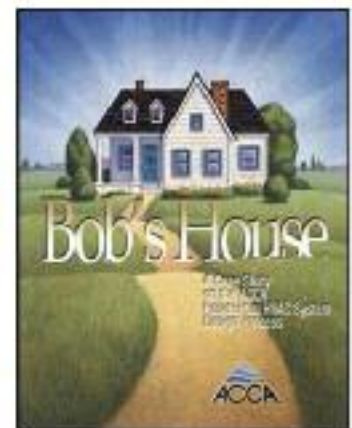
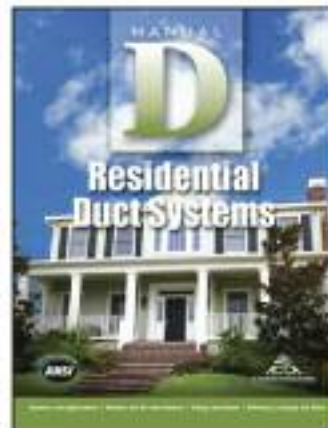
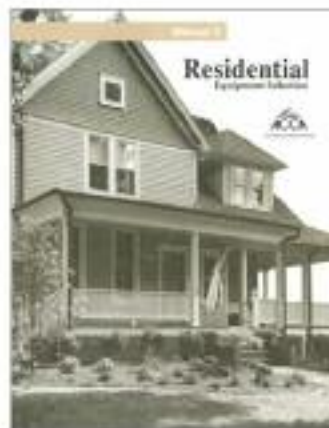
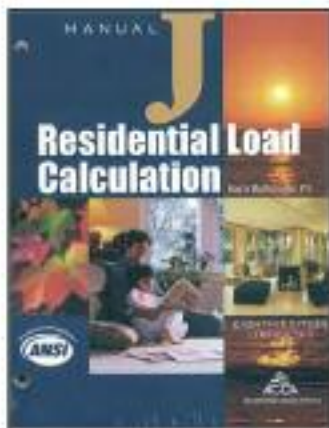
**Thursday, April 23, 2009 9:00 am – 6:00 pm**  
**Fredericksburg Expo and Conference Center**  
*[www.pmpv.org](http://www.pmpv.org) or [www.accacva.org](http://www.accacva.org) for details*

# YOUR HVAC RESOURCE CENTER

The image shows a form titled "Residential Plans Examiner's HVAC Review Form for HVAC System Design (Load, Equipment, Ducts)". It includes sections for "Project Information", "HVAC LOAD CALCULATION (see section 2)", "HVAC EQUIPMENT", and "HVAC DUCT DISTRIBUTION SYSTEM DESIGN (see section 3)". A large yellow starburst with the text "NEW 2009" is overlaid on the form. The ACCA logo is visible in the top corners.

## Residential Plans Examiner's HVAC Review Form

This form was developed to support an AHJ that desires to enforce the required HVAC system design process (see IRC M1401.3 and M1601.1). The form consolidates key information so you can provide an independent, simple, and quick evaluation of objective aspects in the HVAC system's design. To download a **free** copy, visit [www.acca.org/codes](http://www.acca.org/codes). The form can be customized with your logos, contact, and other information for your internal use.



You can purchase these essential code reference materials (ACCA Manual J, S, & D) for your library at [www.acca.org/store](http://www.acca.org/store). Also look at *Bob's House*, written for code officials, this is the illustrated guide through the residential HVAC design process.



FOR SUPPORT AND OTHER  
BENEFITS OF ACCA MEMBERSHIP,  
VISIT [WWW.ACCA.ORG](http://WWW.ACCA.ORG)