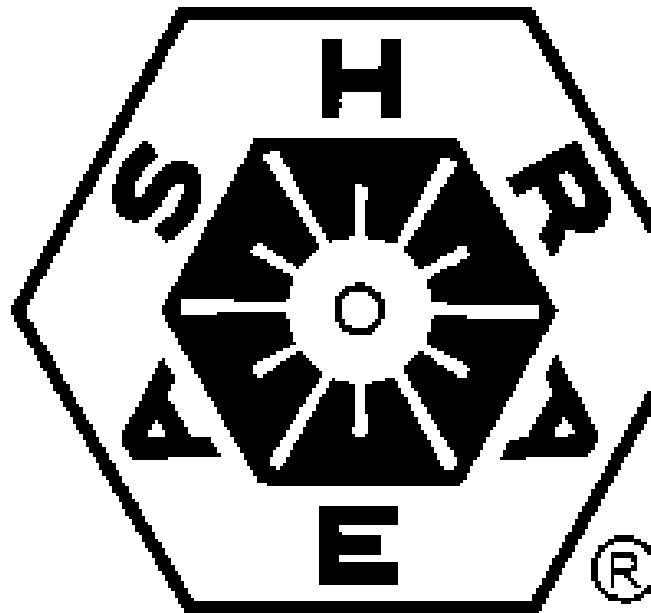


# ASHRAE Bluegrass Chapter Directory



**Affiliated Company Directory**  
**Membership Directory**

January 2009

## Foreword

This Directory of Bluegrass ASHRAE members and companies was prepared by the Bluegrass Chapter of ASHRAE to foster better communications between all segments of the local industry.

THE DIRECTORY IS NOT ADVERTISEMENT NOR CONSTITUTES ANY ENDORSEMENT OF ANY PRODUCT OR COMPANY BY ASHRAE. The information herein was furnished by listing firms and is edited to give as much conformity to basic information as possible. The Chapter cannot be responsible for errors or inaccuracies that might occur.

A committee consisting of ASHRAE members prepared this directory.

Firms not listed that would like to be included in future issues should contact one of the Chapter Officers or Committee Chairs listed in the proceeding pages.

## Acknowledgements

Thanks and appreciation to the ASHRAE Central Florida Chapter for the inspiration and template of this directory. A special thanks to Mr. Wade Conlan of the Central Florida Chapter for his guidance and to Mr. Harold Sherrard of the ASHRAE Bluegrass Chapter for originally showing me the Central Florida Chapter directory.



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## The Objectives of ASHRAE

The objective of the Society is to advance the arts and science of Heating, Refrigerating, Air-Conditioning and Ventilating and the allied arts and sciences, for the benefit of the general public by:

1. Stimulating technological progress for the good of mankind.
2. Maintaining a high professional standing among its members.
3. Encouraging the continuing education and professional advancement of its members.
4. Providing educational opportunities through its publication, research, seminars, chapter scholarships and national, chapter and regional meetings.
5. Conducting a program of basic and applied research through grants-in-aid to colleges and laboratories.
6. Developing codes and standards and by co-operating with other organizations in development of standards.
7. Encouraging fellowship among engineers and industry leaders.

For more information about the ASHRAE Society and the Bluegrass Chapter, contact:

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## The Advantages of Membership

1. You are kept informed of new developments of technical and professional interest.
2. You regularly receive as a part of the services available to you for payment of dues...
  - a. ASHRAE Journal; the Society's monthly publication and the most authoritative periodical on research, design, development, engineering and news in our fields; plus...
  - b. ASHRAE Handbook & Products Directory; a three volume series constituting a complete reference of current data in Heating, Refrigeration, Air Conditioning and Ventilating. Each year a member receives a new volume on Applications, Equipment or Systems. The cycle continues every three years.
  - c. Plus...ASHRAE Handbook of Fundamentals; invaluable to the Society members, to the industry and to the students and teachers as a basic reference in theory, terminology and general engineering data.
  - d. You may purchase at a nominal cost, all other ASHRAE Publications such as TRANSACTIONS, our annual compilation of technical papers and discussions presented at national meeting of the Society; ENGINEERING STANDARDS RESEARCH REPORTS, SYMPOSIUM BULLETINS, RE-PRINTS OF TECHNICAL PAPERS.
3. Provided you meet the particular requirements, you are eligible for membership on any of the Society's administrative or general committees or on the 60 technical committees and nine task groups which direct ASHRAE Research and Technical activities.
4. You have access to and may borrow from the Engineering Society's Library, the world's largest engineering library.
5. Most important of all, you have the opportunity to help yourself, your industry and your profession by expanding your own knowledge and helping to support the valuable work of ASHRAE.



## 2008 – 2009 Region VII Leadership

### **DRC**

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### **RVC Membership**

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### **Nominating Member**

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### **RECC/Webmaster**

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### **Historian Chair**

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### **Programs Chair**

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## 2008 – 2009 Bluegrass Chapter Leadership

### **Officers**

#### **President**

Mr. Chris Tyler, LEED AP  
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#### **President-Elect/Chapter Operations**

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#### **Vice President/Programs**

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#### **Secretary**

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#### **Treasurer**

Mr. Kevin Davies  
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### **Board of Governors**

Mr. Tom Erpenbeck, P.E.  
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### **Committee Chairs**

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**Committee Chairs, cont'.**

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**Student Activities**

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**Webmaster**

Mr. Bob Coleman

Ph: 859-277-2766

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## Letter from the Chapter President

*The Bluegrass Chapter of ASHRAE is pleased to offer the 2008-2009 ASHRAE Bluegrass Chapter Directory. This booklet is a very informative piece of literature, which includes a listing of the Bluegrass Chapter members and some other pertinent information. We hope you find it useful.*

*The Directory has been compiled by our hardworking Roster Directory Chairperson, Bruce Bradway. Thank you very much Bruce for all of your work.*

*Thanks also to all of our Bluegrass ASHRAE Committee Chairs and Officers. They are all working very hard for your Bluegrass Chapter. But as always, please let us know how we can better serve you, the chapter members. I hope to see everybody at our upcoming local meetings. Come on out and support your Bluegrass Chapter of ASHRAE.*

**Chris Tyler, LEED AP**  
**ASHRAE Bluegrass Chapter President**



## **Bluegrass ASHRAE Chapter Meeting Dates** *2008 – 2009 Program Year*

<b><u>Date</u></b>	<b><u>Meeting Topic</u></b>
October 17 <sup>th</sup>	Asset Allocation
November 21 <sup>st</sup>	UK Solar Decathlon; Dr. Colliver & UK Solar Decathlon Team
December 2 <sup>nd</sup>	ASHRAE/ASME Christmas Party @ Equestrian Woods Country Club
January 16 <sup>th</sup>	State High Performance Building Update by Bill Slone, Commonwealth Finance & Administration Cabinet
February 20 <sup>th</sup>	DDC in High Performance Buildings
March 20 <sup>th</sup>	Heat Reclaim from Chilled Water Systems – Applications for Heat Reclaim Chillers
April 17 <sup>th</sup>	TBD, ASHRAE DL
May 15 <sup>th</sup>	Technical Seminar

Meeting times and dates may change as the year progresses. Check the monthly newsletter for updates or visit our web site for the latest schedule.

**Bluegrass ASHRAE Web Site**  
*<http://bluegrass.ashraeregion7.org>*



## ASHRAE Bluegrass Chapter Past Presidents

President	Year
Bill Bradford	1977-78
Nolan Harrison	1978-79
Tom Shrout	1979-80
Dale Crabtree	1980-81
Bob Cope	1981-82
John Zachem	1982-83
Glen Perkins	1983-84
Bob Kaiser	1984-85
Bill Brewer	1985-86
Don Colliver	1986-87
Don MacClellan	1987-88
Terence McLorg	1988-89
Ed Boss	1989-90
Joe Gronefeld	1990-91
Bill Murphy	1991-92
Maurice Hendrick	1992-93
Kimra H. Cole	1993-94
Daniel Lebo	1994-95
Donald Thompson	1995-96
Glenn Bussell	1996-97
Art Hallstrom	1997-98
Tom Wilson	1998-99
Angela Penn	1999-20
Anthony Wright	2000-01
Mark Saunier	2001-02
John Newman	2002-03
Douglas Cage	2003-04
Rick Larson	2004-05
Ganeson Kandasamy	2005-06
Dennis Nierman	2006-07
Tom Erpenbeck	2007-08
Chris Tyler	2008-09



## Bluegrass Chapter Membership

*Alphabetical by Last Name*

Name				Company
Mr	Douglas	Adams		Mason & Hanger Group, Inc.
Mr	Stanley	Aebersold	Jr	Webb Companies
Mr	John	Anderson		JSA Engineers
Mr	Joshua	Anderson		University of Kentucky
Dr	Richard	Aynsley		Big Ass Fans
Mr	Christopher	Beaudreau		Mason & Hanger Group, Inc.
Mr	David	Berchowitz		Global Cooling Mfg
Mr	Rory	Beville		Gray Construction
Mr	Larry	Bironas		Bironas, Inc.
Mr	David	Boggs		Pickering Associates
Mr	Samuel	Bowling		Dougherty Company, Inc.
Mr	Bruce	Bradway		Trane Commercial Systems
Mr	Matthew	Branham		Paladin, Inc.
Mr	Daniel	Bransom		Staggs & Fisher Consulting Engineers
Mr	William	Brewer		GRW Engineers, Inc.
Mr	Blake	Broadfoot		
Mr	Brian	Brockman		Trane Commercial Systems
Mr	David	Brown	PE	Ohio University Facilities Mgmt
Mr	Eric	Brown		
Mr	Richard	Burks		Paladin, Inc.
Mr	Michael	Bush		East Kentucky Power
Mr	James	Bush		University of Kentucky
Mr	Douglas	Cage		Adams Frazier Anderson Engineers
Mr	Jeffrey	Campbell		Cardinal Point, Inc.
Mr	Omer	Carter		Staggs & Fisher Consulting Engineers
Mr	Gregory	Carter		Staggs & Fisher Consulting Engineers
Mr	Stephen	Carter		University of Kentucky
Mr	Brandon	Cecil		
Mr	Christopher	Chapman		Lexmark International
Mr	Tim	Chinn		Ebco, Inc
Mr	James	Clark		Rock Branch Mechanical
Mr	Thomas	Coker		Cumberland Gap Tunnel Authority
Mr	Robert	Coleman		Trane Commercial Systems
Dr	Donald	Colliver		University of Kentucky
Mr	Christian	Congleton		
Mr	Will	Conn		Facility Commissioning Group
Mr	Thomas	Connolly		Connolly Consulting Engineers



Mr	Steven	Cook		ZMM, Inc.
Mr	David	Cotton		CMTA Consulting Engineers, Inc.
Mr	Corey	Cousino		Johnson Controls
Mr	James	Crabtree		
Mr	Donny	Crayne		CMTA Consulting Engineers, Inc.
Ms	Catherine	Crowley		Mason & Hanger Group, Inc.
Mr	James	Crutcher		
Mr	Javier	Cruz		Trane Commercial Systems
Mr	Kevin	Davies		Trane Commercial Systems
Mr	Robert	Doeffinger	Jr	ZMM, Inc
Mr	William	Duvall	Jr	Keeneland Association, Inc
Mr	Michael	Eidson		Total Comfort Corp
Mr	Daniel	Ellars		
Mr	Matthew	Ellis		Technical Horizons
Mr	Thomas	Erpenbeck		Thermal Equipment Sales, Inc
Mr	Mark	Estep		ME Consulting Engineers, Inc
Mr	Charles	Farley		Lockwood Greene
Mr	David	Farrar		
Mr	Brandon	Felton		
Ms	Lisa	Flara		CMW, Inc.
Mr	A.	Foster		Staggs & Fisher Consulting Engineers
Mr	Andrew	Fowler		
Mr	Aaron	Frank		University of Kentucky
Mr	Christopher	Freeman		Messer Construction
Mr	Samuel	Garcia		
Dr	Richard	Gates		University of Kentucky
Miss	Stephanie	Gerakos		CMTA Consulting Engineers, Inc.
Mr	Barry	Gibson		ETA Engineering Consultants
Mr	Robert	Goodpaster		University of Kentucky
Mr	Douglas	Graham		Graham Heating & A/C
Mr	Chris	Grimes		
Mr	Brian	Hafendorfer	PE	Trane Commercial Systems
Mr	Arthur	Hallstrom		Trane Commercial Systems
Mr	David	Harold		Huntington Alloys
Mr	C.	Harris		Harris Brothers Roofing & Sheet Metal
Mr	Nolan	Harrison		Mason & Hanger Group, Inc.
Mr	Gordon	Harvey		
Mr	Jeff	Hendren		University of Kentucky
Mr	Byr	Hensley		Eastern Well & Pump
Mr	David	Hilliard		
Mr	George	Holderby		Holderby Engineering, Inc.



Mr	Paul	Honeycutt		Honeycutt Mechanical Contractors
Mr	E.	Horton	Jr	
Mr	J.	Horvay		J. Benjamin Horvay
Mr	Jeffrey	Hosek		Heapy Engineering
Mr	Anthony	Hurst		
Mr	Richard	Jenkins	II	Dow Chemical Co
Mr	Ganeson	Kandasamy		Trane Commercial Systems
Mr	Christopher	Keath		Staggs & Fisher Consulting Engineers
Mr	Charles	Kern		Johns Manville
Mr	James	Kerns		
Ms.	Carrie	Kelty		CMTA Consulting Engineers, Inc.
Mr	Nadeem	Khan		Advanced Facility Design LLC
	Jason	Kroggel		
Mr	John	La Barbara		Johnson Controls
Mr	William	Lampkin		American Warming & Ventilating
Mr	Rick	Larson		Coilmaster Corp.
Mr	Drew	Latimer		University of Kentucky
Mr	Brad	Leach		GRW Engineers, Inc.
Mr	Arnold	Lemay		Frankfort Regional Medical Center
Mr	Earl	Lewis	II	Skuttle IAQ Products
Mr	Jason	Lewis		Tri-State Roofing & Sheet Metal
Miss	Peng	Li		
	Matthew	Longacre		
Mr	James	Magee		Facility Commissioning Group
Mr	W.	Martin		University Of Kentucky
Mr	John	Mason		Staggs & Fisher Consulting Engineers
Mr	Robert	Matthews		
Mr	Charles	McBrayer		Clingenpeel/McBrayer & Assoc.
Mr	Edward	McClure		University of Kentucky Medical Center
Mr	Tom	McDermott		
Mr	Richard	McDonald		Stuart-Mcmunn Co.
Mr	Michael	McDonald		University of Kentucky
Mr	Thomas	McKean		Koch Air LLC
Mr	Dustin	Meredith	PE	Trane Commercial Systems
Mrs	Hailey	Mick		
Mr	Brian	Miller		Miller Engineering, Inc.
Mr	James	Mitchell		InnerSpace, Inc.
Mr	Ronnie	Moffitt		Trane Commercial Systems
Mr	Michael	Moll		University of Kentucky
Mr	Joseph	Moore		Honeycutt Mechanical Contractors
Mr	Nicholas	Morgan		CMW, Inc.



Mr	Terry	Morgan		Tri State Roofing & Sheet Metal
Mr	Jason	Morosko		Stirling Technology
Mr	Benjamin	Murphy		LoVo Systems, Inc.
Dr	William	Murphy		University of Kentucky
Mr	John	Newman		Clotfelter Samokar PSC
Mr	Dennis	Nierman		Thermal Equipment Sales, Inc.
Mr	Dan	Nolte		Casto Technical Services
Dr	Joey	Norikane		
Mr	Paul	Odell		Utron
Mr	John	O'Leary		
Mr	Richard	O'Neil		Dane Sheet Metal, Inc.
Mr	Marshall	Osborne		Independent Contract Services
Mr	Brad	Pabian		
Mr	William	Pabian		St Joseph Health Care
Mr	Grant	Page		CMTA Consulting Engineers
Ms	Angela	Penn		Trane Commercial Systems
Mr	Jonathan	Phillips		Johnson Controls
Mr	William	Phipps		
Mr	Mike	Pickens		School Building Authority of WV
Mr	Michael	Potts		General Mills Pillsbury
Mr	John	Prince		Bell Engineering
Mr	Michael	Quigley		Thermal Equipment Sales, Inc.
Mr	Jerry	Redmond		Redmond Refrigeration
Mr	David	Richardson		
Mr	Philip	Roark		A&H Balance Co., Inc.
Mr	Hal	Rogers		InnerSpace, Inc.
Mr	Thomas	Roser		Frantz, Inc.
Ms	Glogerley	Sales		University of Kentucky
Mr	Scott	Sanders		David Darnold Company
Mr	Tyson	Sargent		Big Ass Fans
Mrs	Cory	Sharrard		
Mr	Harold	Sherrard	PE	Trane Commercial Systems
Mr	Thomas	Shrout	Jr	Shrout-Tate-Wilson Consulting Engineers
Ms	Madelaine	Shultz		WV Department of Education
Mr	Charles	Smith		Big Ass Fans
Mr	Jeremy	Smith		CMTA Consulting Engineers, Inc.
Mr	James	Smith		Dougherty Company, Inc
Mr	Nelson	Smith		Air Systems Sheet Metal Company
Mr	Richard	Standish		Clingenpeel/McBrayer & Associates
Dr	Paul	Steranka	Jr	WV University Institute of Technology



Mr	Joseph	Stewart		
Mr	David	Strader		CDI Engineering
	John	Summersett		University of Kentucky Physical Plant
Mr	Terry	Sutherland		Thybar Corp.
Mr	John	Thompson		
Mr	Billy	Thompson		Thompson Engineering Co.
Mr	Christian	Thorup		Thorup Consulting Company
Mr	Harry	Traynor		
Mr	Christopher	Tyler	LEED AP	Thermal Equipments Sales, Inc.
Prof	Israel	Urieli		Mechanical Eng Department
Mr	Frederic	Walker		Pickering Associates
Mr	Mark	Watts		
Mr	Don	Wells		Trane Commercial Systems
Mr	Nelson	Wesley		Trane Commercial Systems
Mr	Beau	West		GRW Engineers, Inc.
Mr	James	Whitley		Century Aluminum Of West Virginia, Inc.
	Ralph	Whitley		Technical Horizons
	Eric	Wilson		
Mr	Thomas	Wilson	Jr	Adams Frazier Anderson Engineers
Mr	W.	Wilson		E-Tech Consultants
Mr	Eric	Wolfe		University of Kentucky
Mr	Leonard	Wright		Ferguson Brothers, Inc.
Mr	Matthew	Wuerth		Peterson & Associates, Inc
Mr	Vernon	Yates		Facility Commissioning Group
Mr	Kwon	Yong-Rak		Global Cooling Mfg. Co.
Mr	Steven	Young		Ivey Mechanical Co LLC
Mr	Ted	Zachwieja		ZDS Designing & Consulting Services



## Bluegrass Chapter Membership

*By Alphabetical Company Name*

Name				Company
Mr	Philip	Roark		A&H Balance Co., Inc.
Mr	Thomas	Wilson	Jr	Adams Frazier Anderson, Inc.
Mr	Douglas	Cage		Adams Frazier Anderson, Inc.
Mr	Nadeem	Khan		Advanced Facility Design LLC
Mr	Nelson	Smith		Air Systems Sheet Metal Company
Mr	William	Lampkin		American Warming & Ventilating
Mr	John	Prince		Bell Engineering
Dr	Richard	Aynsley		Big Ass Fans
Mr	Tyson	Sargent		Big Ass Fans
Mr	Charles	Smith		Big Ass Fans
Mr	Larry	Bironas		Bironas, Inc.
Mr	Jeffrey	Campbell		Cardinal Point, Inc.
Mr	Dan	Nolte		Casto Technical Services
Mr	David	Strader		CDI Engineering
Mr	James	Whitley		Century Aluminum Of West Virginia, Inc.
Mr	Richard	Standish		Clingenpeel/McBrayer & Assoc.
Mr	Charles	McBrayer		Clingenpeel/McBrayer & Assoc.
Mr	John	Newman		Clotfelter Samokar PSC
Mr	David	Cotton		CMTA Consulting Engineers, Inc.
Mr	Donnie	Crayne		CMTA Consulting Engineers, Inc.
Mr	Grant	Page		CMTA Consulting Engineers, Inc.
Mr	Jeremy	Smith		CMTA Consulting Engineers, Inc.
Ms.	Carrie	Kelty		CMTA Consulting Engineers, Inc.
Miss	Stephanie	Gerakos		CMTA Consulting Engineers, Inc.
Ms	Lisa	Flara		CMW, Inc.
Mr	Nicholas	Morgan		CMW, Inc.
Mr	Rick	Larson		Coilmaster Corp.
Mr	Thomas	Connolly		Connolly Consulting Engineers
Mr	Thomas	Coker		Cumberland Gap Tunnel Authority
Mr	Richard	O'Neil		Dane Sheet Metal, Inc.
Mr	Scott	Sanders		David Darnold Company
Mr	Samuel	Bowling		Dougherty Company, Inc.
Mr	James	Smith		Dougherty Company, Inc.
Mr	Richard	Jenkins	II	Dow Chemical Co
Mr	Michael	Bush		East Kentucky Power
Mr	Byr	Hensley		Eastern Well & Pump
Mr	Tim	Chinn		Ebco, Inc.
Mr	Barry	Gibson		ETA Engineering Consultants
Mr	W.	Wilson		E-Tech Consultants



Mr	Will	Conn		Facility Commissioning Group
Mr	James	Magee		Facility Commissioning Group
Mr	Vernon	Yates		Facility Commissioning Group
Mr	Leonard	Wright		Ferguson Brothers, Inc.
Mr	Arnold	Lemay		Frankfort Regional Medical Center
Mr	Thomas	Roser		Frantz, Inc.
Mr	Michael	Potts		General Mills Pillsbury
Mr	David	Berchowitz		Global Cooling Mfg. Co.
Mr	Kwon	Yong-Rak		Global Cooling Mfg. Co.
Mr	Douglas	Graham		Graham Heating & A/C
Mr	Rory	Beville		Gray Construction
Mr	William	Brewer		GRW Engineers, Inc.
Mr	Brad	Leach		GRW Engineers, Inc.
Mr	Beau	West		GRW Engineers, Inc.
Mr	C.	Harris		Harris Brothers Roofing & Sheet Metal
Mr	Jeffrey	Hosek		Heapy Engineering
Mr	George	Holderby		Holderby Engineering, Inc.
Mr	Paul	Honeycutt		Honeycutt Mechanical Contractors
Mr	Joseph	Moore		Honeycutt Mechanical Contractors
Mr	David	Harold		Huntington Alloys
Mr	Marshall	Osborne		Independent Contract Services
Mr	James	Mitchell		InnerSpace, Inc.
Mr	Hal	Rogers		InnerSpace, Inc.
Mr	Steven	Young		Ivey Mechanical Co. LLC
Mr	J.	Horvay		J Benjamin Horvay
Mr	Charles	Kern		Johns Manville
Mr	Corey	Cousino		Johnson Controls
Mr	John	La Barbara		Johnson Controls
Mr	Jonathan	Phillips		Johnson Controls
Mr	John	Anderson		JSA Engineers
Mr	William	Duvall	Jr	Keeneland Association Inc
Mr	Thomas	McKean		Koch Air LLC
Mr	Christopher	Chapman		Lexmark International
Mr	Charles	Farley		Lockwood Greene
Mr	Benjamin	Murphy		LoVo Systems, Inc.
Ms	Catherine	Crowley		Mason & Hanger Group, Inc.
Mr	Christopher	Beaudreau		Mason & Hanger Group, Inc.
Mr	Nolan	Harrison		Mason & Hanger Group, Inc.
Mr	Douglas	Adams		Mason & Hanger Group, Inc.
Mr	Mark	Estep		ME Consulting Engineers, Inc.
Prof	Israel	Urieli		Mechanical Eng Department
Mr	Christopher	Freeman		Messer Construction
Mr	Brian	Miller		Miller Engineering, Inc.
Mr	David	Brown	PE	Ohio University Facilities Mgmt.
Mr	Matthew	Branham		Paladin, Inc.



Mr	Richard	Burks		Paladin, Inc.
Mr	Matthew	Wuerth		Peterson & Associates, Inc
Mr	David	Boggs		Pickering Associates
Mr	Frederic	Walker		Pickering Associates
Mr	Jerry	Redmond		Redmond Refrigeration
Mr	James	Clark		Rock Branch Mechanical
Mr	Mike	Pickens		School Building Authority of WV
Mr	Thomas	Shrout	Jr	Shrout-Tate-Wilson Consulting Engineers
Mr	Earl	Lewis	II	Skuttle IAQ Products
Mr	William	Pabian		St Joseph Health Care
Mr	Gregory	Carter		Staggs & Fisher Consulting Engineers
Mr	Daniel	Bransom		Staggs & Fisher Consulting Engineers
Mr	Omer	Carter		Staggs & Fisher Consulting Engineers
Mr	A.	Foster		Staggs & Fisher Consulting Engineers
Mr	John	Mason		Staggs & Fisher Consulting Engineers
Mr	Christopher	Keath		Staggs & Fisher Consulting Engineers
Mr	Jason	Morosko		Stirling Technology
Mr	Richard	McDonald		Stuart-Memunn Co.
Mr	Matthew	Ellis		Technical Horizons
	Ralph	Whitley		Technical Horizons
Mr	Christopher	Tyler	LEED AP	Thermal Equipment Sales, Inc.
Mr	Michael	Quigley		Thermal Equipment Sales, Inc.
Mr	Thomas	Erpenbeck		Thermal Equipment Sales, Inc.
Mr	Dennis	Nierman		Thermal Equipment Sales, Inc.
Mr	Billy	Thompson		Thompson Engineering Co.
Mr	Christian	Thorup		Thorup Consulting Company
Mr	Terry	Sutherland		Thybar Corp.
Mr	Michael	Eidson		Total Comfort Corp.
Mr	Kevin	Davies		Trane Commercial Systems
Mr	Brian	Hafendorfer	PE	Trane Commercial Systems
Mr	Arthur	Hallstrom		Trane Commercial Systems
Mr	Dustin	Meredith	PE	Trane Commercial Systems
Mr	Ronnie	Moffitt		Trane Commercial Systems
Mr	Harold	Sherrard	PE	Trane Commercial Systems
Mr	Don	Wells		Trane Commercial Systems
Mr	Javier	Cruz		Trane Commercial Systems
Mr	Nelson	Wesley		Trane Commercial Systems
Mr	Bruce	Bradway		Trane Commercial Systems
Mr	Ganeson	Kandasamy		Trane Commercial Systems
Ms	Angela	Penn		Trane Commercial Systems
Mr	Brian	Brockman		Trane Commercial Systems
Mr	Terry	Morgan		Tri State Roofing & Sheet Metal
Mr	Jason	Lewis		Tri-State Roofing & Sheet Metal



Mr	W.	Martin		University of Kentucky
Mr	Joshua	Anderson		University of Kentucky
Mr	James	Bush		University of Kentucky
Mr	Stephen	Carter		University of Kentucky
Dr	Donald	Colliver		University of Kentucky
Mr	Aaron	Frank		University of Kentucky
Dr	Richard	Gates		University of Kentucky
Mr	Robert	Goodpaster		University of Kentucky
Mr	Jeff	Hendren		University of Kentucky
Mr	Drew	Latimer		University of Kentucky
Mr	Michael	McDonald		University of Kentucky
Mr	Michael	Moll		University of Kentucky
Dr	William	Murphy		University of Kentucky
Ms	Glogerley	Sales		University of Kentucky
Mr	Eric	Wolfe		University of Kentucky
Mr	Edward	McClure		University of Kentucky Medical Center
	John	Summersett		University of Kentucky Physical Plant
Mr	Paul	Odell		Utron
Mr	Stanley	Aebersold	Jr	Webb Companies
Ms	Madelaine	Shultz		WV Department of Education
Dr	Paul	Steranka	Jr	WV University Institute of Technology
Mr	Ted	Zachwieja		ZDS Designing & Consulting Services
Mr	Robert	Doeffinger	Jr	ZMM, Inc.
Mr	Steven	Cook		ZMM, Inc.



## Bluegrass Chapter Company Membership

Company Name	Address		City, State, Zip			Phone	Fax
A&H Balance Co Inc	PO Box 21768		Lexington	KY	40522	(859)272-6992	(852)272-6733
Adams Frazier Anderson Inc	4050 Whitemark Ct		Lexington	KY	40516-9621	(859)255-4437	(859)231-5024
Advanced Facility Design LLC	201 Leslie Place		Scott Depot	WV	25560	(304)545-9873	
AFA Engineers	801 Corporate Dr		Lexington	KY	40503-5401	(859)223-3999	(859)223-9419
Air Systems Sheet Metal Company	PO Box 399		Hurricane	WV	25526-0399	(304)562-0383	(304)562-5281
American Warming & Vent	27855 State Route 7		Marietta	OH	45750-9060		(740)373-6666
Bell Engineering	354 Waller Ave		Lexington	KY	40504	(859)278-5412	(859)278-2911
Big Ass Fans	2425 Merchant St		Lexington	KY	40511-2601	(859)233-1271	(859)233-0139
Bironas Inc	800 N English Station Rd		Louisville	KY	40223-4728	(502)245-5560	(502)245-6036
Cardinal Point Inc	2925 Edinburgh Dr		Lexington	KY	40517	(859)621-6888	(859)223-1657
Casto Technical Services	540 Broad St		Charleston	WV	25301-1217	(304)346-0549	
CDI Engineering	1734 Huber Rd		Charleston	WV	25314-2230	(304)746-3590	
Century Aluminum Of West Virginia Inc	PO Box 98		Ravenswood	WV	26164-0098	(304)273-6866	(304)273-6486
Clingenpeel/McBrayer & Assoc	PO Box 874		St. Albans	WV	25177	(304)722-3602	(304)722-3603
Clingenpeel/McBrayer & Assoc.	824 Cross Lanes Dr		Charleston	WV	25313-1338	(304)757-0073	
Clotfelter Samokar PSC	228 E Reynolds Rd		Lexington	KY	40517	(859)273-3700	(859)271-6605
CMTA Consulting Engineers Inc.	2365 Harrodsburg Rd Ste B400		Lexington	KY	40504-3384	(859)253-0892	(859)231-8357
CMW, Inc.	400 E Vine Street Suite 400		Lexington	KY	40507	(859)254-6623	(859)259-1877
Coilmaster Corp.	PO Box 910041		Lexington	KY	40591-0041	(859)321-0351	
Connolly Consulting Engineers	257 Regency Circle	Ste A	Lexington	KY	40503-2347	(859)402-0221	(859)240-0561
Cumberland Gap Tunnel Authority	PO Box 1425		Middlesboro	KY	40965-3225	(606)248-0996	(606)248-4363
Dane Sheet Metal, Inc.	2712 Outer Loop		Louisville	KY	40219-3544	(502)968-3641	
David Darnold Company	515 3rd Ave		South Charleston	WV	25303	(304)744-8479	(304)744-8491
Dougherty Company, Inc.	PO Box 1828		Charleston	WV	25327-1828	(304)343-1358	(304)925-4280
Dougherty Company, Inc	600 50th St SE		Charleston	WV	25304-2026	(304)925-6664	(304)925-6664
Dow Chemical Co.	3200 Kanawha Tpk	BL2000, Rm 4404	South Charleston	WV	25303-0361	(304)747-4490	(304)747-5275
East Kentucky Power	PO Box 707		Winchester	KY	40392	(859)744-4812	
Eastern Well & Pump	PO Box 1156		Harlan	KY	40831-1156	(606)573-3069	(606)573-3108
Ebco, Inc	109 Dennis Dr		Lexington	KY	40503	(859)278-7203	(859)278-7204
ETA Engineering Consultants	5802 Brown Lane		Catlettsburg	KY	41129-9650	(606)739-6805	(606)739-4659
E-Tech Consultants	261 S Hanover Ave		Lexington	KY	40502-1809	(859)268-0146	(859)254-4200
Facility Commissioning Group	109 Springdale Dr St e 7		Nicholasville	KY	40356	(859)278-5552	(859)278-6501
Ferguson Brothers, Inc.	PO Box 9127		Huntington	WV	25704-0127	(614)377-9566	(304)522-8373
Frankfort Regional Medical Center	299 Kings Daughters Dr		Frankfort	KY	40601-6514	(502)226-7770	(502)226-7880
Frantz Inc	852 Floyd Dr		Lexington	KY	40505-3616	(859)233-1335	(859)233-3627
General Mills Pillsbury	2403 S Pennsylvania Ave		Wellston	OH	45692-9503	(740)286-9224	(740)384-6986
Global Cooling Mfg. Co.	11 Woodside Drive		Athens	OH	45701-1312	(740)592-2655	(740)592-2695
Graham Heating & A/C	202 W Winchester Ave		Middlesboro	KY	40965-1312	(606)248-8341	(606)248-5274



Gray Construction	10 Quality St		Lexington	KY	40507-1443	(859)281-9230	(859)514-0497
GRW Engineers, Inc.	1016 Celia Lane		Lexington	KY	40504-2254	(606)278-4060	
GRW Engineers, Inc.	801 Corporate Dr		Lexington	KY	40503	(859)223-3999	(859)223-9419
Harris Brothers Roofing & Sheet Metal	1518 Hansford St		Charleston	WV	25311-1917	(304)343-5566	(304)343-5568
Heapy Engineering	2099 E State St Ste B		Athens	OH	45701-2141	(740)767-3053	(614)457-4021
Holderby Engineering Inc	51 Grandview Dr		Saint Albans	WV	25177-6010	(304)722-6560	
Honeycutt Mechanical Contractors	1421 Delaware Ave		Lexington	KY	40505-4009	(859)255-5537	(859)255-5539
Huntington Alloys	5388 Newcomb Creek Rd		Huntington	WV	25704-9710	(304)526-5593	(304)526-3953
Independent Contract Services	3877 Lee Adams Lane		Lexington	KY	40514-1077	(859)296-9278	(859)296-2531
InnerSpace, Inc.	1165 Brock McVey Dr		Lexington	KY	40509-4116	(859)266-5300	(859)215-5388
Ivey Mechanical Co LLC	1063 Manchester St		Lexington	KY	40508-2421	(859)254-8878	(859)231-9224
J Benjamin Horvay	3051 Rio Dosa Dr	Apt 256	Lexington	KY	40509	(859)335-5007	(859)335-0906
Johns Manville	18905 State Route 676		Marietta	OH	45750	(740)869-2955	(740)896-2959
Johnson Controls	515 W Main St	Apt 403	Lexington	KY	40507	(859)576-1975	(859)278-4577
Johnson Controls	5230 Glow Dr		Cross Lanes	WV	25313	(304)776-4620	(304)755-0765
Johnson Controls	1515 Mercer Rd		Lexington	KY	40511	(859)288-2629	(859)288-2618
JSA Engineers	2191 Bethlehem Rd		Paris	KY	40361-9052	(859)987-3487	(859)987-5169
Keeneland Association, Inc.	104 Bird Whistle Lane		Nicholasville	KY	40356-9747	(859)321-5099	(859)288-4329
Koch Air	4025 Palomar Blvd		Lexington	KY	40513-1311	(859)255-9665	(859)231-6105
Koch Air	257 Richardson Pl		Lexington	KY	40509-4500	(859)684-7798	(816)467-9043
Lexmark International	740 New Circle Rd	508701/001-1	Lexington	KY	40550	(859)232-2295	(859)232-4279
Lockwood Greene	107 Merryhill St		Marietta	OH	45750	(740)376-0405	
LoVo Systems, Inc.	1241 Hawkins Cummins Rd		Paris	KY	40361-9703	(859)338-3325	
Mason & Hanger Group, Inc.	300 W Vine St Ste 1300		Lexington	KY	40507-1814	(859)252-9980	(859)389-8870
Mason & Hanger	1400 Delaney Woods		Nicholasville	KY	40356-8738	(859)223-5226	(859)389-8870
ME Consulting Engineers, Inc.	1009 Sandhill Dr		Saint Albans	WV	25177-3940	(304)389-1077	(866)393-8957
Mechanical Eng Department	1 Hillcrest Drive		Athens	OH	45701	(740)594-3731	(740)593-0476
Messer Construction	854 W Main St		Lexington	KY	40508-2043	(859)231-8199	(859)259-0391
Miller Engineering Inc	429 Laurel Run Rd		Carmichaels	PA	15320-2543	(724)966-9794	(724)966-5655
Ohio University Facilities Mgmt	Building 19 Suite 220 The Ridges		Athens	OH	45701	(740)593-0095	(740)593-4081
Paladin Inc	604 Bizzell Dr		Lexington	KY	40510-1003	(859)252-3047	(859)252-0420
Peterson & Associates, Inc	10116 Ledbury Way		Louisville	KY	40223	(602)244-9330	
Pickering Associates	11283 Emerson Ave		Parkersburg	WV	26104-8572	(304)464-5305	(304)464-4428
Pickering Associates	3983 Teays Valley Rd Ste 203		Hurricane	WV	25526-8864	(304)757-9847	(304)757-8987
Redmond Refrigeration	PO Box 1109		Middlesboro	KY	40965-2909	(606)248-4393	
Rock Branch Mechanical	132 Harris Dr		Poca	WV	25159-9648	(304)755-0373	(304)755-5270
School Building Authority of WV	172 Oak St		Dunbar	WV	25004	(304)558-2541	(304)558-2539
Shrout -Tate-Wilson Cons Engrs	1960 Hart Rd		Lexington	KY	40502-2441	(859)277-8177	(859)277-8372
Skuttle IAQ Products	101 Margaret St.		Marietta	OH	45750-9052	(740)373-9169	(740)373-9565
St Joseph Health Care	1150 Athenia Dr		Lexington	KY	40504-3006	(859)313-1236	
Staggs & Fisher Consulting Engineers	3264 Loch Ness Dr		Lexington	KY	40517-1239	(606)271-3246	(606)271-3613
Staggs & Fisher Consulting Engineers	3865 Aria Lane		Lexington	KY	40514-1161	(606)223-1224	(606)271-3613



Stirling Technology	178 Mill St		Athens	OH	45701-2627	(740)594-7492	(740)592-1499
Stuart -McMunn Co	137 N 6th St		Clarksburg	WV	26301-2665	(304)623-6666	(304)623-4646
Technical Horizons	501 Darby Creek Ste 32		Lexington	KY	40509	(859)263-5983	
Technical Horizons	829 Burkewood Dr		Lexington	KY	40509-4132	(859)263-7986	(859)263-9145
Thermal Equipment Sales, Inc.	680 Bizzell Dr		Lexington	KY	40510-1003	(859)255-9665	(859)231-6105
Thompson Engineering Co	PO Box 5043		Lexington	KY	40555-5043	(606)255-6893	(606)233-3430
Thorup Consulting Company	1324 Hunter Dr		Lancaster	KY	40444-7670	(859)548-3810	(859)548-3810
Total Comfort Corp	1105 Kim Kent Dr		Richmond	KY	40475	(606)624-0903	(606)623-4039
Trane Commercial Systems	1515 Mercer Rd		Lexington	KY	40511-1091	(859)259-2500	(859)259-2595
Trane Commercial Systems	3449 W Edgebrook Dr		Lexington	KY	40515-1312	(859)259-2544	(859)259-2518
Trane Commercial Systems	500 Grove Lane		Lexington	KY	40517-2005	(859)421-5611	(859)288-2709
Trane Commercial Systems	833 Eagles Lane		Lexington	KY	40509	(859)543-9385	(859)288-2618
Trane Commercial Systems	576 Hunters Green Ct		Lexington	KY	40509	(859)288-2750	
Tri State Roofing & Sheet Metal	PO Box 1231		Charleston	WV	25324-1231	(304)755-8135	(304)755-5275
Tri-State Roofing & Sheet Metal	Tri-State Roofing & Sheet Metal	PO Box 188	Davisville	WV	26142	(304)485-6593	(304)485-2841
University of Kentucky Medical Center	Physical Plant Div	103 Kelly Bldg	Lexington	KY	40536-0075	(859)323-5792	
University of Kentucky Physical Plant	211 Peterson Service Building		Lexington	KY	40506	(859)257-9377	(859)323-1034
Utron	196 Riverbend Blvd		Saint Albans	WV	25177-3552	(304)724-2029	(304)442-8444
Webb Companies	250 W Main St Ste 3000		Lexington	KY	40507-1722	(859)281-5633	(859)281-5687
WV Department of Education	1900 Kanawha Blvd E Rm 6		Charleston	WV	25305-0001	(304)558-2711	(304)558-8867
WV University Institute of Technology	Mechanical Engineering Department		Montgomery	WV	25136	(304)442-3388	(304)442-3164
Z M M Inc	222 Lee St W		Charleston	WV	25302-2225	(304)342-0159	(304)345-8144
ZDS Design & Consulting Services	1072 Crestmont Rd		Hurricane	WV	25526-7406	(304)562-4456	(304)755-0076
ZDS Designing & Consulting Services	132 Shawnee East		Winfield	WV	25213-9709	(304)755-0075	(304)755-0076
ZMM Inc	222 Lee St W		Charleston	WV	25302-2225	(304)342-0159	(304)345-8144



# Useful Equations

## Air

$$Q \text{ sensible (Btu/Hr)} = \text{CFM} \times 1.08 \times \Delta T \text{ (temp } ^\circ\text{F)}$$

where,  $1.08 = 0.075 \text{ lb/ft}^3 \times 0.24 \text{ BTU/lb} \times 60 \text{ min/hr}$

$$Q \text{ total (Btu/Hr)} = \text{CFM} \times 4.5 \times \Delta H \text{ (enthalpy)}$$

where,  $4.5 = 0.075 \text{ lb/ft}^3 \times 60 \text{ min/hr}$

$$Q \text{ latent (Btu/Hr)} = \text{CFM} \times 0.68 \times \Delta W \text{ (grains)}$$

where,  $0.68 = 1060 \text{ btu/lb} / 7000 \text{ grain/lb} / 13.33 \text{ ft}^3/\text{lb} \times 60 \text{ min/hr}$

$$\text{MAT} = (\% \text{ OA} \times \text{OAT}) + (\% \text{ RA} \times \text{RAT})$$

where, MAT – mixed air temp  
RAT – return air temp  
OAT – outside air temp  
OA – CFM outside air  
RA – CFM return air

## Air Handling Unit

$$\text{CFM}_a = \text{CFM}_b \times (\text{RPM}_a/\text{RPM}_b)$$

$$\text{SP}_a = \text{SP}_b \times (\text{RPM}_a/\text{RPM}_b)^2$$

$$\text{BHP}_a = \text{BHP}_b \times (\text{RPM}_a/\text{RPM}_b)^3$$

$$\text{BHP} = (\text{CFM} \times \text{SP(in wg)}) / (6356 \times \text{eff})$$

$$\text{BHP} = (\text{RLA} - (0.5 \times \text{NLA})) / (\text{FLA} - (0.5 \times \text{NLA})) \times \text{HP (nameplate)}$$

where, LA – no load amps  
RLA – run load amps  
FLA – full load amps

$$\text{T}_{\text{LDB}} = \text{T}_{\text{EDB}} - (\text{SHC} / (1.08 \times \text{CFM}))$$

where,  $\text{T}_{\text{LDB}}$  = temp leaving coil  
 $\text{T}_{\text{EDB}}$  = temp entering coil  
SHC – sensible cooling capacity MBH

$$h_L = h_E - (\text{THC} / (4.5 \times \text{CFM}))$$

where,  $h_L$  – enthalpy leaving  
 $h_E$  – enthalpy entering  
THC – total cooling capacity MBH

## Pump

$$\text{BHP} = (\text{GPM} \times \text{TDH}) / (3962 \times \text{eff})$$

$$\text{GPM}_a = \text{GPM}_b \times (\text{RPM}_a/\text{RPM}_b)$$

$$\text{HEAD}_a = \text{HEAD}_b \times (\text{RPM}_a/\text{RPM}_b)^2$$

$$\text{BHP}_a = \text{BHP}_b \times (\text{RPM}_a/\text{RPM}_b)^3$$



# Business Cards



**THERMAL EQUIPMENT SALES, INC.**  
Manufacturer's Representatives  
Air Handling & Air Conditioning Equipment  
Commercial & Industrial 24hr. Service

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