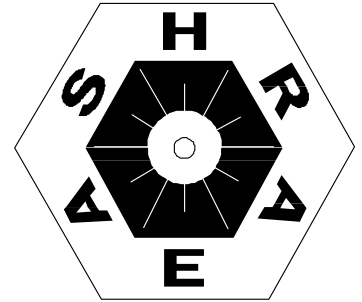
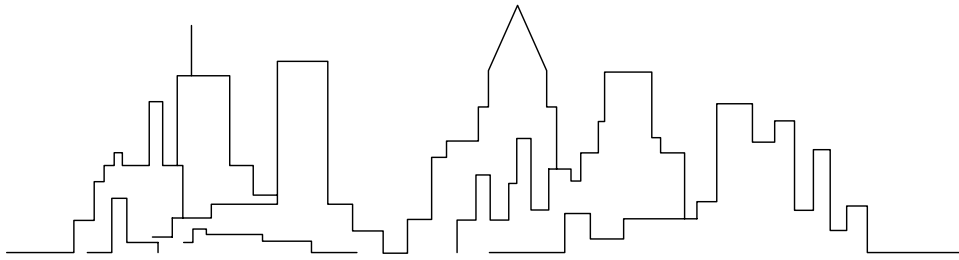


The EXCHANGER



Minnesota Chapter

www.mnashrae.org

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.

McNamara Sales, 850 Cromwell Avenue, Saint Paul, MN 55114

VOLUME 12 NO. 3

PUBLISHED 8 TIMES ANNUALLY

| OFFICERS | | PHONE | FAX | EMAIL |
|-------------------------|-----------------|--------------|--------------|-----------------------------|
| PRESIDENT: | Gary Grenzer | 763-525-3231 | 763-525-3289 | ggrenzer@atsr.com |
| PRESIDENT-ELECT: | Tom McNamara | 651-645-4681 | 651-645-4682 | tmcnamara@mcnamarasales.com |
| SECRETARY: | Richard Hermans | 612-335-5858 | 612-335-5888 | rhermans@mncee.org |
| TREASURER: | Paul Quirin | 952-401-1323 | 952-474-3928 | quirinpe@teamtsp.com |
| PAST PRESIDENT: | Craig Johnson | 651-771-2222 | 651-778-3911 | cjohnson@atkinsbenham.com |

BOARD OF GOVERNORS

| | | | |
|----------------|--------------|--------------|----------------------------------|
| Brian Shablow | 612-819-3483 | 651-748-9370 | bshablow@hallbergengineering.com |
| Curt Ratajczak | 612-588-0823 | 612-588-6459 | curtr@gorgen.com |
| Bob Linder | 651-254-6881 | 651-771-0878 | rjlinder@kfi-eng.co |
| Craig Johnson | 651-771-2222 | 651-778-3911 | cjohnson@atkinsbenham.com |

COMMITTEES

CHAIRS

| | | | | |
|---------------------------------------|---------------------|--------------|--------------|----------------------------------|
| COMMUNICATION | Dan Jaeger | 612-819-3483 | 763-315-6101 | dan.jaeger@exelon-services.com |
| CRC ACTION | Tom McNamara | 651-645-4681 | 651-645-4682 | tmcnamara@mcnamarasales.com |
| EDUCATION SEMINAR | Jim Douglas | 952-938-1588 | 952-938-1480 | jimd@twgi.com |
| EXCHANGER | Betsy Reed | 651-639-9606 | 651-639-9618 | betsy-reed@attbi.com |
| GOLF | Jim Burns | 651-686-8580 | 651-686-8588 | jburns@bjmulcahy.com |
| HISTORIAN | Brent Verbridge | 763-425-7226 | 763-425-7336 | brentv@uhlcompany.com |
| HOUSE (co-chairs) | Jason Kelly | 763-746-2090 | 763-746-3633 | jason.kelly@h-v-solutions.com |
| | Matt Brecht | 763-746-2090 | 763-746-3633 | matt.brecht@h-v-solutions.com |
| LIFE SAFETY | Curt Ratajczak | 612-588-0823 | 612-588-6459 | curtr@gorgen.com |
| MEMBERSHIP | Gene Sieve | 952-703-5705 | 952-854-3769 | gsieve@owensco.com |
| NORTHERN LIGHTS SECTION P.A.C. | Dan Lenertz | 701-282-9500 | 701-282-2329 | dani@thermairsalhes.com |
| PRODUCT DIRECTORY | Craig Johnson | 651-771-2222 | 651-778-3911 | cjohnson@atkinsbenham.com |
| PROGRAM | Kevin Herrema | 651-481-8000 | 651-481-8621 | kevinh@svl.com |
| PUBLICITY | Gary Fischbach | 612-588-0823 | 612-588-6459 | garyf@gorgen.com |
| RECEPTION | Ron Klick | 612-588-0823 | 612-588-6459 | ronk@gorgen.com |
| REFRIGERATION | Craig Johnson | 651-771-2222 | 651-778-3911 | cjohnson@atkinsbenham.com |
| RESEARCH PROMOTION | Brian Shablow | 651-748-4354 | 651-748-9370 | bshablow@hallbergengineering.com |
| ROCHESTER SECTION | Bob Linder | 651-254-6881 | 651-771-0878 | rjlinder@kfi-eng.com |
| ROSTER | Dave Thiel | 507-281-8016 | 507-281-8688 | |
| SCHOLARSHIP | Gary Grenzer | 612-525-3231 | 612-525-3289 | ggrenzer@atsr.com |
| STUDENT ACT. | Craig Johnson | 651-771-2222 | 651-778-3911 | cjohnson@atkinsbenham.com |
| SUSTAINABLE DESIGN | George Rothenberger | 612-752-8735 | 612-338-4840 | grothenberger@setterleach.com |
| | Jim Keller | 651-639-9606 | 651-639-9618 | jkeller@gausman.com |
| | Brian Shablow | 651-748-4354 | 651-748-9370 | bshablow@hallbergengineering.com |
| TEGA (co-chairs) | Ted Tio | 612-359-4634 | 612-338-4840 | ttio@setterleach.com |
| | Tim May | 952-918-8072 | 952-918-8080 | tmay@minnair.com |
| WEBMASTER | Al Tillmann | 612-761-5422 | 612-761-3321 | allen.tillmann@target.com |

REGIONAL OFFICERS

| | | | | |
|---------------------------------------|---------------|--------------|--------------|------------------------|
| Regional Treasurer | Richard Harju | 763-784-9522 | 763-780-8474 | harju@mail.ashrae.org |
| Nominating Committee Alternate | John Rieke | 651-771-2222 | 651-778-3911 | jriek@atkinsbenham.com |
| Regional Historian | Bill Murray | 763-784-7490 | 763-786-8571 | murraysbp@att.net |

President's Corner

Submitted by Gary Grenzer, President

I would like to thank the Life Safety seminar committee chaired by Curt Rataczak for a well run seminar. The topics were Mold Remediation, Ultraviolet Germ Irradiation in air Handling Systems, New UL Fire Smoke Dampers, Revisions to the Mechanical Code and Low Flow Fume Hood Design. PDH points are available at each of the Chapter seminars.

The next meeting will be a noon meeting on December 10. The topic will be Kitchen Hood Ventilation.

Minneapolis was the host city for two ASHRAE Professional Development Seminars in early November. An Integrated approach to Building Commissioning, and Designing HVAC Systems to Control Noise and Vibration. These were well presented seminars.

We have collected over 170 email addresses of members who have opted to receive the Exchanger in electronic form rather than by mail. This enables the chapter to save printing and mailing costs, while allowing earlier delivery (as much as two weeks) of the Exchanger. If you are interested in receiving the exchanger by E-mail, send an e-mail to our communications chair, Dan Jaeger at dan.jaeger@excelonservices.com

The Chapter web site is www.mnashrae.org. The Exchanger can be down loaded from the web site.

The Minnesota Chapter will be donating a set of ASHRAE standards to the Walter Library at the U of M for use by students and ASHRAE members at large. This will take place during National Engineers Week on February 16th, 2003.

Minnesota Chapter Meeting Minutes

Submitted by Rick Hermans, Secretary

The November meeting was held in conjunction with the Annual Life Safety Seminar. The Seminar had good attendance due to an excellent line-up of speakers. Michael Adair of Veit Environmental, Inc. gave a presentation on duct cleaning and mold abatement with many pictures demonstrating both. Gene Dougette of Ultraviolet Devices, Inc. gave an informative talk about ultraviolet germicidal irradiation devices as applied in the HVAC industry. Mark Belke shared the latest information on new UL Standards for Fire, Smoke and Combination dampers for ductwork. Finally, Tim Manz, of the Minnesota Building Codes and Standards Division and a chapter member serving on the TEGA committee, presented the proposed Minnesota Amendments to the International Mechanical Code. The Minnesota Chapter has had a part in preparing the state amendments including the justification for adopting Standard 62.1 and applying the latest ASHRAE research on kitchen exhaust duct air velocity. The research responsible for this significant change in the codes was performed at the University of Minnesota.

President Gary Grenzer called the business meeting to order at 12:40 pm. Gary called on George Rothenberger, student activities committee chairman who reported a new ASHRAE program to recognize young engineers. George asked for nominations of an engineer with from 2 to 5 years of experience. Winners of the Young Engineer award will be honored in prominent publications.

Gary next called on Rick Hermans to report on Board actions regarding the University of Minnesota Mechanical Engineering department. Rick announced the Board has voted to approve expenditure to donate one

complete set of ASHRAE Standards to the Engineering Library at the University and to provide a continuing subscription service each year to keep the standards up-to-date. These standards would be available as a reference to the public.

Membership committee chairman Gene Sieve announced any new member or member upgrades will receive a ten dollar certificate towards membership renewal or ASHRAE merchandise.

Gary asked for chapter members who would like the Exchanger sent by e-mail to send their address to him. Gary can be e-mailed at ggrenzer@atsr.com.

Program committee chairman Gary Fischbach introduced our lunch speaker Dr. Robert K. Haugen from Kewaunee Scientific. Dr. Haugen spoke on Low Constant Volume Chemical Fume Hood design. The Doctor described the new design techniques that allow a six foot chemical fume hood to maintain safe capture and containment with total exhaust air volumes down to 350 cfm.

Adjourned at 1:40 pm.

MN Chapter ASHRAE/ASPE 2003 Reference Directory

*Submitted by Kevin Herrema,
Product Directory Chair*

It is time for the 2003 version of the ASHRAE product directory. Approximately 7,500 copies of the Reference Directory are to be distributed to Architects, Engineers, Contractors, and Owners. As you know, we have revamped the directory to a new user-friendly format, for which we have had great response. This year will be no different.

Besides the distribution to all current local ASHRAE members, you the Advertiser carry out the additional distribution of the Directory. Each advertiser receives 25 FREE COPIES

of the Directory to distribute as you see best. Additional copies are available at \$2.00 each. An idea is to place your calling card or apply a label, which states "Compliments of Your Company" in distributed copies.

To place an AD in this upcoming edition we will need you to fill out the attached forms with your company information. It should state your Company Name, Address, City, State, Zip Code, Phone and Fax Numbers, and Support Staff. The cost this year for the Directory will be as follows: \$150.00 for your name and address, etc. and \$5.00 for each line under "Manufacturer - Product Description."

If you advertised in the 2002 directory, thank you for your support. A copy of the directory will be mailed to you for modifications should you wish to advertise again in 2003, continuing your support of our local ASHRAE chapter. Use of this form is not required for previous advertisers; simply return the provided copy of the directory with your changes.

If you should have any questions, please do not hesitate to contact me at 651-481-8000 or Brian Shablow at 651-297-1595.

You may fax back the information to me at 651-481-8621, email at kevinh@svl.com, or send it in the mail to our address:
Schwab Vollhaber Lubratt, Inc
4600 Churchill Street
Shoreview, MN 55126

PLEASE DO NOT SEND PAYMENT AT THIS TIME, AS YOU WILL BE SENT AN INVOICE ALONG WITH A PROOF COPY AT A LATER DATE.

DEADLINE FOR ALL ADVERTISERS IS DECEMBER 15, 2002.

In January, proof copies will be mailed to each advertiser for approval and payment will be required at that time. We print in February and distribute in March. We are looking

forward to another successful product directory. Thanks for your support.

2003 Technology Awards – Application Deadline Approaching

Submitted by Ted Tio, TEGA Committee Co-Chair

The Minnesota Chapter Technology Awards are given for projects in seven building categories and are intended to recognize Minnesota Chapter ASHRAE members for their commitment to innovative and energy-efficient design.

The technology award application form is enclosed in this issue of *The Exchanger* or can be found on the Chapter website at www.ashrae.org/standcom/tekawradapp.pdf.

Entering your project is easy! Simply submit the one-page application form with a schematic diagram and a narrative of two pages or less. The applicant must be a current member of ASHRAE who had a significant role in the design or development of the project. The system must be built and operating. It is recommended that entrants confirm that the owner is willing to have the project entered.

Evaluation of the entries is based on energy efficiency, indoor air quality, innovation, operation and maintenance, cost-effectiveness, environmental impact and quality of presentation. **The best Award entry as judged by the Minnesota Chapter TEGA Committee will receive a \$100.00 cash prize.** For additional information about the judging criteria and how to organize and present your award application, go to www.ashrae.org/standcom/judgcrit.html.

The deadline for application submittals is February 7, 2003. Award winners will be announced at the Chapter meeting in March. The first place award winners and the building owners will receive plaques and the projects will be publicized in *The Exchanger*.

Entries should be sent to MN Chapter ASHRAE Technology Awards, Attention: Ted Tio, c/o Setter Leach & Lindstrom, 1100 Peavey Building, 730 Second Ave. South, Minneapolis, MN 55402.

Need to Contact Society?

AMERICAN SOCIETY OF HEATING,
REFRIGERATING AND AIR-CONDITIONING
ENGINEERS, INC.

ASHRAE International Headquarters
1791 Tullie Circle, N.E.
Atlanta, GA 30329

Telephone: 404/636-8400

1-800-5-ASHRAE

FAX: 404/321-5478

Home Page: <http://www.ashrae.org>

Betsy Reed, Editor
Gausman & Moore
700 Rosedale Towers
1700 West Highway 36
Roseville, Mn 55113
Phone: 651-604-3125
Fax: 651-639-9618
Betsy-Reed@attbi.com

Publication deadline for the January Exchanger; December 13. All articles and submissions must be in electronic format and should be emailed to the Editor

**Minnesota Chapter
2002-2003
Meeting & Event Calendar**

- **October 8, 2002(Tuesday) Dinner**
Meeting Sub-topic: None
TOUR: ADC
- **November 12, 2002 (Tuesday)**
Seminar/Lunch
Meeting Sub-topic: Membership
Health & Life Safety Seminar
- **December 10, 2002 (Tuesday) Lunch**
Meeting Sub-topic: Research &
Promotion
New Kitchen Exhaust Requirements
- **January 14, 2003 (Tuesday) Dinner**
Meeting Sub-topic: Student Night
Motors, VFD's & Bearing Wear
- **February 11, 2003 (Tuesday)**
Seminar/Lunch
Meeting Sub-topic: History
Refrigeration Seminar
- **March 11, 2003 (Tuesday) Dinner**
Meeting Sub-topic: Membership
Legal Issues Regarding Mold
- **April 8, 2003 (Tuesday)**
Seminar/Lunch
Meeting Sub-topic: Research & Promotion
Education Seminar
- **May 13, 2003 (Tuesday) Lunch**
Meeting Sub-topic: Installation of
Officers/Past Presidents Day
Reliant Energy Day
- **June, 2003**
Golf Outing

Rochester Section

Coming Soon!

ASPE Meeting Schedule

*Submitted by Renae Torborg, ASPE
Newsletter Co-Editor*

- **September 18, 2002**
Fire Protection – History and Product
Improvements
- **October 16, 2002**
Commercial Clothes Washing
- **November 20, 2002**
Valves
- **December 18, 2002**
History of Plumbing
- **January 15, 2003**
Fuel Oil Systems
- **February 19, 2003**
Roof Drain Systems
- **March 19, 2003**
Green Building Design – Waterless
Urinals
- **April 16, 2003**
Compressed Air System Piping
- **May 21, 2003**
Elections & Awards; MN Plumbing Code
Comparison

**SUPPORT ASHRAE RESEARCH:
PLACE YOUR BUSINESS CARD IN
THE PROFESSIONAL
DIRECTORY!!**

Quiet Cloth



Quality Air


Fabric Duct Systems, Inc.

3530 East 28th Street
Minneapolis, MN 55406

Phone: 612.721.2401
FAX: 612.721.0143
E-mail: bwarner@qsox.com
Website: www.qsox.com

Bill Warner, P.E.
General Manager

**SYSTEMS MANAGEMENT & BALANCING
OF MINNESOTA, INC.**



WALT KALEN T.B.E.
PRESIDENT

199 Coon Rapids Blvd.
Suite 111
Coon Rapids, MN 55433

763-717-1965
Fax 763-717-1997
E-mail: smbofmn@aol.com



**ERICKSON
INDUSTRIES, INC.**

Design, Sales & Manufacturing of Insulated Enclosures
for Environmental, Warehouse and Food Processing Applications

Representing: MSS Clean Room Technology, Inc.
Environmental Specialties, Inc.

P.O. BOX 237
RIVER FALLS, WI 54022
www.erickson-industries.com

Phone (715) 426-9700
(800) 729-9941
Fax (715) 426-9701
e-mail: sales@erickson-industries.com

**HEATING & VENTILATING
SOLUTIONS**

Nick Brecht
Sales Engineer

Office: 763.746.2090
Toll Free: 866.746.2090
Cell: 612.578.6112
Fax: 763.746.3633
Email: nick.brecht@h-v-solutions.com
Website: www.h-v-solutions.com

2240 Edgewood Avenue South, Suite 101 - St. Louis Park, MN 55426

Space Available

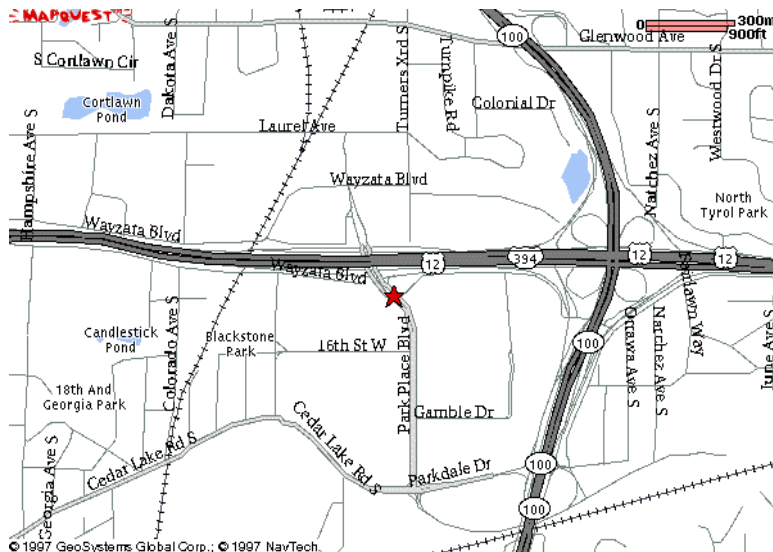
MINNESOTA CHAPTER



AMERICAN SOCIETY OF HEATING, REFRIGERATING
AND AIR-CONDITIONING ENGINEERS, INC.

Meeting Notice – Tuesday, December 10th (Lunch Meeting) Meeting Sub-Topic: *Research and Promotion*

New Standards for Kitchen Exhaust **John Clark, P.E. HGA**



Location:

Doubletree Park Place Hotel

Minneapolis

1500 Park Place Blvd.

Minneapolis, MN 55416

(763) 542-8600

Fax: (763) 542-8068

Time: 12:00 – 12:15 pm Social Hour

12:15 – 12:45 pm Lunch and
Business Meeting

12:45-1:30 pm Presentation

1:30 pm Adjourn

Program: New Standards for Kitchen Exhaust

Cost: The cost of the lunch and program is **\$25.00** (students **\$15.00**) when reserved in advance. Without an advance reservation, the cost is \$28.00.

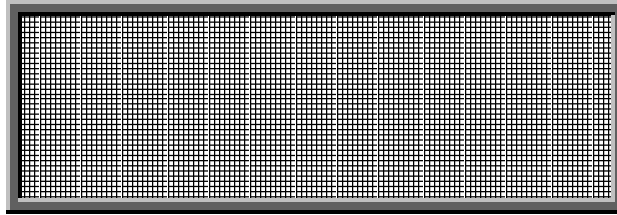
Reservations: Call Jason Kelly at 763-746-2090 or email jason.kelly@h-v-solutions.com by *Thursday, Dec 5th* Make checks payable to MN Chapter of ASHRAE. **If you choose to mail your check in advance**, please send it to Jason Kelly, Heating and Ventilating Solutions, 2240 Edgewood Ave So. Suite 101, St. Louis Park, MN 55426

Parking: Free parking available at the hotel.

Directions: See the map above, or call the hotel at 763-542-8600 for directions.

AMERICAN SOCIETY OF HEATING,
REFRIGERATING AND AIR-CONDITIONING
ENGINEERS, INC.
McNAMARA SALES
850 CROMWELL AVENUE
SAINT PAUL, MN 55114

NON PROFIT ORGANIZATION
U.S. POSTAGE PAID
PERMIT #369
MINNEAPOLIS, MN 55401



Society and/or Chapter dues Paid?

First **Yes/No** on Mailing Label = Society Dues

Second **Yes/No** on Mailing Label = Chapter Dues

INSIDE: Next Chapter Meeting December 10, 2002
Insert: Reference Directory Submittal Form
Insert: TEGA Award Application

Professional Directory can be found inside.....

Nick Brecht, Heating & Ventilating Solutions
Erickson Industries, Inc.

Walt Kalen, Systems Management & Balancing of Minnesota, Inc.
Bill Warner, Fabric Duct Systems, Inc.