

BUFFALO TALES

Newsletter of the Manitoba Chapter

The Manitoba Chapter of the American Society of Heating, Refrigerating and Air Conditioning Engineers was chartered in September 1935. It is the second oldest ASHRAE Chapter in Canada. ASHRAE Manitoba is part of ASHRAE Region XI and covers ASHRAE members in Manitoba and Northwest Ontario.



ASHRAE Supper Meeting

Thursday November 12, 2009

Victoria Inn, 1808 Wellington Avenue

Social Hour 5 PM

Supper 6 PM

Membership and Research Promotion Night

After Supper Presentation

ULC Listed Fire Insulation Wrap System

Illya Kornobis, Canadian Sales Manager for Eastern Wire + Conduit

TOPIC

Illya Kornobis will discuss the advantages of a “ULC listed Fire Insulation Wrap System” designed to rate Ventilation Air Duct 1 & 2 hr. fire protection and Grease Duct systems tested to “0” clearance to combustibles, meeting the NFPA 96 requirements. Also speak on other uses for Fire Insulation Wrap, based on Canadian code requirements.

SPEAKER

Illya Kornobis is currently the Canadian Sales Manager for Eastern Wire + Conduit, a Tyco owned Canadian manufacture that provides a number of cable protection products, including firestop products under the Quickstop and FSI Firestop Product banners.

Eastern currently holds membership with TIAC, MIA and Canadian Green Building Council (LEED) and continues to work in the betterment of firestopping overall. Nationally, Illya has been working with the engineering community at large, municipal/provincial officials and installers, providing product and installation knowledge. He feels a unique satisfaction in sharing knowledge in a diverse and growing field, with life safety as the ultimate goal.

Illya is a husband and proud father and continues to be actively involved with his Toronto Scout Troop.

Dr. Mumma’s DOAS Website

ASHRAE Distinguished Lecturer Dr Stanley Mumma was the Guest Speaker at the October ASHRAE Manitoba supper meeting. Dr. Mumma covered a lot of ground and referred to a pile of information on Dedicated Outdoor Air Systems that is available for free on the internet. If you want to follow up on his leads, go to doas.psu.edu.

President's Message - Daryl Friesen

Another year for our Chapter has begun and the first meeting of the 2009-2010 season was a resounding success. It was wonderful to see such a great turnout for the October meeting and I hope that it is an indication of things to come.

The October meeting not only gave us an opportunity to catch up with one another after our summer break, but it also gave us the opportunity to hear ASHRAE Distinguished Lecturer Stan Mumma speak about Dedicated Outdoor Air Systems (DOAS). It's certainly enlightening to hear someone who is such an expert in his field speak about DOA Systems, especially with today's push to reduce building energy costs. I trust the topic was useful to you all. There is more information on Stan's website shown on the first page. Please keep in mind that any feedback on past or future meeting topics are welcomed by myself and the Board members.



I'd also like to thank Eileen Jensen, Region XI RVC-CTTC, for visiting our Chapter last month.

The November meeting is shaping up to be another great meeting. We have another expert in his given field speaking about "ULC listed Fire Insulation Wrap Systems". This meeting is also Research Promotion AND Membership night. Sergio will be recognizing past donors as well strong-arming - I mean soliciting future donations to a very worthwhile cause. Stephen will be speaking to us about the advantages of local and national ASHRAE Memberships.

As I will do in all my messages, I ask all of you to invite some of your colleagues and associates along to the next meeting. They will no doubt find the evening very worthwhile and may even become regulars. I look forward to seeing everyone at the next meeting.

And as for the associated picture above, I'm sure you'll all agree I haven't changed a bit.....

ASHRAE Manitoba Membership

For information regarding membership in ASHRAE Manitoba click on the link on the right or visit ASHRAE Manitoba at www.ashraemanitoba.ca or contact membership chair Stephen Norsworthy: stephen.norsworthy@snclavalin.com

Coming Events

November 19, 2009 – a seminar titled Introduction to Commissioning 101 will be held in Winnipeg. Seminar is sponsored by the Canadian Mechanical Contracting Education Foundation. If the link at the right does not work, go to www.cmcef.org for details.

November 25, 2009 - CaGBC full day workshop on LEED Canada for Existing Buildings: Operations & Maintenance. For details, go to www.cagbc.org

December 10, 2009 – ASHRAE Supper Meeting, Past Presidents Night and the annual cribbage

tournament. If you or your organization has a prize to contribute, please contact Gary Bailey GBailey@hydro.mb.ca to arrange getting it onto the prize table.

2010 ASHRAE Manitoba supper meeting dates - January 13, February 11, March 11, April 15

January 23 to 27, 2010 - ASHRAE Winter Conference and AHR EXPO in Orlando. For details, visit www.ashrae.org/orlando.

April 13 and 14, 2010 – Better Buildings Conference at the Winnipeg Convention Center

April 21, 2010 noon to 3 PM – you can watch the free ASHRAE Webcast, “Right From the Start – **Commissioning for High Performing Buildings**” on your computer via the internet. It will provide the building community with tools to overcome commissioning hurdles and make the process “business as usual.” Online registration via the ASHRAE website will begin March 2, 2010. There is no fee for registration. Watch for additional information regarding registration and the program and via email, www.ashrae.org, and ASHRAE Insights. Please share this information with anyone you think would benefit from participation, whether or not they are ASHRAE members.

Carbon Monoxide Alarms Proposed for ASHRAE Residential Ventilation Standard

In a change that would bring its residential ventilation and indoor air quality standard closer in line with that of the 2009 International Residential Code, proposed addendum I to ANSI/ASHRAE Standard 62.2-2007, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings, would require carbon monoxide alarms to be installed outside of each sleeping area. Part 9 of the National Building Code of Canada already requires CO alarms to be installed in new houses with attached garages and/or combustion appliances installed.

Carbon monoxide (CO) poisoning leads to hundreds of deaths and thousands of injuries each year in homes. Such poisoning results primarily from automobiles left running in attached garages but also from portable generators, power tools and heaters, according to Steve Emmerich, chair of the Standard 62.2 Committee. A small fraction of poisonings also result from failed central heating combustion appliances. “Residents have very little ability to sense the presence of CO without detectors, unlike many other indoor polluting events,” he said.

Whether to include CO alarms as a requirement in the standard has been discussed since the standard was first proposed. Debate has focused on the unreliability and cost of alarms. But Emmerich said the committee believes the time has come to make this change, noting that it will bring the standard into closer alignment with the 2009 International Residential Code, which requires alarms if the house has combustion appliances or attached garages, and with many states that have passed laws requiring CO alarms.

“This proposed requirement goes a step further, expanding the protection to all homes, regardless of fuel type or garage configuration, reflecting the fact that many CO exposures occur due to causes completely independent of these factors,” he said. “It also requires that alarms be hard-wired with battery backup to address an increased likelihood of high CO exposure events during power outages.”

Nine other addenda, unrelated to CO, also are open for review. These include proposed addendums, which would give credits for different types of residential ventilation systems. The proposed change increases mechanical ventilation system flow rates for systems that are unbalanced or not fully ducted, unless they have a provision for mixing. Emmerich said this is a fairly significant change that has been under extensive study by the committee.

ASHRAE Position Document Outlines Commitment to Natural Refrigerants

As industry searches for alternatives that have low global-warming potential, natural refrigerants are gaining increased interest. These refrigerants offer the potential to improve the environmental performance of refrigeration systems, according to ASHRAE. In a new position document, ASHRAE outlines its support for research, assessment and strategic growth in the use of natural refrigerants such as ammonia, carbon dioxide, hydrocarbons, air and water in refrigeration systems and technologies. ASHRAE's Position Document on Natural Refrigerants can be read at www.ashrae.org/positiondocuments.

HVAC System Maintenance – A Wise Investment - Robert Bisson

Last February, ASHRAE Manitoba Chapter and Building Energy Management Manitoba (BEMM) presented the half day seminar “HVAC System Maintenance – A Wise Investment”. Even with weather forcing some out of town registrants to cancel, approximately 45 people from diverse backgrounds attended.

The seminar introduced the recently published ANSI/ASHRAE/ACCA Standard 180-2008: Standard Practice for inspection and Maintenance of Commercial Building HVAC Systems. Standard 180 establishes a minimum acceptable level of performance for HVAC System maintenance. Implementation of Standard 180 coupled with retro-commissioning of a building can save an owner thousands in wasted energy, improve indoor air quality and sustain a satisfactory level of indoor environmental quality.

The seminar presenter, Robert Baker, is President of the RGB GROUP in Ruskin, Florida, and is chair of the ASHRAE/ACCA HVAC Inspection and Maintenance Standards Project Committee (SSPC180). RGB provides advisory services on Heating Ventilation and Air-conditioning Systems (HVAC) maintenance and related indoor environmental issues to building owners, their staff and their service and product suppliers. He has over 25 years of experience in all facets of building operation and maintenance.

Buildings utilize 40% of the total energy consumed in the United States, of which 60% is allocated to HVAC systems. With the current trend towards green buildings, system maintenance will have a prominent role on maintaining the higher environmental expectations. Some of the traits of Green building design include higher initial costs, more extensive design innovation, new skills required to operate the systems, parts harder to obtain and systems less forgiving of maintenance lapses.

The purpose of Standard 180 is to establish minimum HVAC inspection and maintenance requirements in new and existing buildings in order to preserve a system's ability to achieve acceptable thermal comfort, energy efficiency and indoor air quality in commercial buildings.

Other benefits included extended equipment life but this was not considered within the scope of the standard.

The Standard identifies the building Owner as being responsible for meeting the requirements of the maintenance standard. What does the Standard require?

- establishment of a written maintenance program to preserve the condition of the HVAC system and components. Many building management systems (BMS) will facilitate the preparation of the maintenance program.
- an inventory of HVAC components to be maintained which impact building performance. This detail list should be used to establish unacceptable system condition indicators, inspection frequencies and maintenance tasks. The Standard provides tables listing tasks and frequencies for various HVAC systems and components.
- Establishment and documentation of performance objectives using design and operational criteria specific to the particular system in order to meet thermal comfort, energy efficiency and indoor air quality requirements. Unacceptable system and equipment condition indicators are measurements or observations of conditions that could lead to performance degradation or failure shall be established. Examples of condition indicators listed in the Appendix include accumulated dirt or sludge, excessive filter pressure drops and inadequate air flows.
- Preparation of inspection/maintenance task lists for the individual inventoried equipment and systems. Inspections include the condition assessment of systems and components by observation and measurement of operating parameters, which can be obtained from the building BMS. Maintenance tasks include adjustment, service or replacement of equipment and systems.
- Establishment of frequency schedules for inspection and maintenance task for the inventoried system and components. The Standard allows for increased or reduced adjustment of the recommended task frequency based on successive inspections.

Documentation of the maintenance plan is important in demonstrating compliance with the Standard. The documentation package should include at minimum an inventory with performance criteria, tasks and tracking methods plus verification records (implementation).

The Standard allows for revisions to the maintenance plan that may be required due to modification to the building, change of building function or its use, equipment or system changes or systems found incapable of achieving performance objectives.

The Standard 180 was written in code language so that it can be referenced or adopted by local code authorities. Precedence has already been set for service of systems such as fire alarm and elevators. Adopting the Standard as code may result in annual inspections with associated fees, periodic reviews of the maintenance plan, confirmation of inventory, spot checks of inventory records and physical verification of condition. Other considerations include building labels, LEED ongoing conformity (Existing Buildings) and how to deal with non-compliance.

In summary, Standard 180 will mandate regular maintenance, provide dramatic improvement in Indoor Air Quality, improved comfort and lower operating costs for the building. Building owners can utilize the Standard as a reference for establishing or improving in-house maintenance

programs. Alternatively, the Standard can provide a basis for service contracts with outside contractors.

The Standard 180 is available for purchase in either hard copy or electronic PDF format at a cost of \$31 US from the ASHRAE web site www.ashrae.org via the Publications / Bookstore links.

Why Join ASHRAE?

Have you ever heard the saying, “it’s a small world”? This certainly rings true once you join ASHRAE’s global network, ASHRAE members bring this big world of ours together through the exchange of technical information, writing of standards and through committee work and networking. When you join ASHRAE, you are making an investment in yourself. When you become active in the Society by giving your time and sharing your knowledge, you get even more out of that investment.

Become Well Read

ASHRAE members receive the following as part of their membership:

ASHRAE Handbooks – these reference manuals are the most widely cited reference for HVAC&R technology in the world. Each year one of the four volume Handbooks is updated and delivered to members to add to their library and knowledge base.

ASHRAE Journal – this monthly magazine brings current trends and information to your desk in your choice of print or digital format.

ASHRAE E-newsletters – delivered to your desk in print and digital form, these publications help you keep on top of what is going on in the Society and the industry, all over the world!

Discounts on ASHRAE publications – ASHRAE members earn 15% off publications through www.ashrae.org/bookstore. More than 300 titles are available including the ASHRAE Standards.

Become The Office Expert

Another popular saying is: “You learn something new every day.” ASHRAE members are lifelong learners. Here are some ways you can expand your knowledge base:

ASHRAE Certification – earn your certification and put the letters behind your name that show that you have the knowledge you need to succeed in the industry.

ASHRAE Learning Institute Courses – earn your PDHs online or at the ASHRAE Winter and Annual Conferences. Courses are offered all year long, giving you many opportunities to learn and grow.

Be The Person You Want To Be

Networking at ASHRAE events and volunteerism in the Society are essential to your success:

Chapter Meetings – each month, all over the world, ASHRAE chapters convene for an informational program featuring a speaker or topic that is key to professionals in the industry. Meet with your peers and share ideas!

ASHRAE Committees – Committee members get a chance to participate and lead a group toward a common goal. The skills learned and used through committee work are valuable and useful back on the job.

All of these reasons, added up, are the reason ASHRAE exists and why ASHRAE needs you. Join

ASHRAE and see why our membership is so strong and why we always have room for more professionals, just like you.

For information regarding ASHRAE membership, contact ASHRAE Manitoba Membership Chair Stephen Norsworthy: stephen.norsworthy@snclavalin.com

Manitoba Chapter: “The first 75 years!” - Dieter Bartel

2010-11 will be the Manitoba chapter's 75th, and sticking to my promise provide glimpses into our Chapter's past, I present a couple of items from the year 1949-50.....

- Bill Moss was president that year. He was a mover and shaker in the industry in western Canada after moving to Winnipeg from Nova Scotia in 1940.
- Bill built and sold a number of manufacturing companies in his career, prior to spending much of his free time later in life, curling, golfing, and enjoying his cottage at “Moss's Point” in Lake of the Woods.
- Bill and wife Jean traveled to Dallas for the annual meeting during his term
- While in Dallas, a technical tour took people through a mausoleum, claimed to be the first air conditioned facility of this type in the U.S.
- Attendance at the chapter meetings ranged between 15 and 20 members.

If you have any thoughts as to how to celebrate our chapters 75th anniversary, please drop me a line at 360-7717 or dbartel@hydro.mb.ca. I'm looking for a few good “members” to help out on our 75th committee to share in the work and the fun in pulling the years celebrations together.

By the way, for those of you who were not in attendance at the October meeting, President Daryl mentioned that the Chapter is still short one “Chapter Historian”. Please contact Daryl for more details to see if you're up to it....., I mean interested. You don't need as much history with the chapter as I have in order to have fun with the position. And, you'll get a lot of help from the Board.

ASHRAE Manitoba Chapter Officers

President	Daryl Friesen	Midwest Engineering	989-3636	daryl@midwesteng.mb.ca
President-Elect	Jesse Sandhu	SMS Engineering	775-0291	jsandhu@smseng.com
Vice-President				
Secretary	Stirling Walkes	SMS Engineering	775-0291	swalkes@smseng.com
Treasurer	Corey Nation	E.H. Price Ltd.	982-2222	coreyn@price-hvac.com
Governor	Dieter Bartel	Manitoba Hydro	477-7717	dbartel@hydro.mb.ca
Governor	Robert Bisson	Public School	945-8452	rbisson@gov.mb.ca

Committee Chairs

Chapter History

CTT	Russell Lavitt	SMS Engineering	775-0291	rlavitt@smseng.com
Honours & Awards	Dieter Bartel	Manitoba Hydro	477-7717	dbartel@hydro.mb.ca
Membership	Stephen Norsworthy	SNC-Lavalin	786-8080	stephen.norsworthy@snclavalin.com

Programs	Johann Baetsen	E.H. Price Ltd.	661-7829	johannb@price-hvac.com
Refrigeration	Farzad Hasheminia	Cimco Refrigeration	783-1178	FHasherminia@toromont.com

Research & Promo	Sergio Almeida	Trane	632-1543	salmeida@trane.com
Student Activities	Peter Gryc	SMS Engineering	775-0291	pgryc@smseng.com

Other

Accommodations	Jesse Sandhu	SMS Engineering	775-0291	jsandhu@smseng.com
Homepage Editor	Devin Evenson	Manitoba Hydro	474-3971	devenson@hydro.mb.ca
Newsletter Editor	Bert Phillips	UNIES Ltd.	633-6363	phillips@unies.mb.ca
Roster	David Stones	Wardrop Engineering	272-1331	dstones@shaw.ca
Special Events	Gary Bailley	Manitoba Hydro	360-5156	gbailley@hydro.mb.ca

ASHRAE Region XI Officers

Director & Regional Chair	Erich Binder	Erich Binder Consulting Calgary AB		erich.binder@worleyparsons.com
Assistant Regional Chair	Traci Hanegan	Coffman Engineers, Spokane WA		hanegan@coffman.com
Technology Transfer	Eileen Jensen	Bonneville Power Portland, OR		nejensen@bpa.gov
Membership Promotion	Russell Lavitt	SMS Engineering, Winnipeg MB		rlavitt@smseng.com
Student Activities	Doug LeCren	Colt Engineering, Anchorage AK		douglas.lecren@nanworleyparsons.com
Resource Promotion	Ray Sieber	Saskatchewan Research Council, Regina SK		sieber@src.sk.ca
Nominating Committee	Norm Grusnick	ECCO Manufacturing, Langley BC		ngrsnick@ecomfg.com
Nominating Committee	Kevin Marple	Benz Air Engineering Portland OR		kmarple@benzco.com
Regional Historian	Tim McGinn	Cohos Evamy Calgary AB		mcginnt@cohos-evamy.com
Treasurer	Rob Craddock	Inland Metal Manufacturing, Regina		rob@inlandmetal.ca
Web Page Editor	Kathy Habke	SAC ASHRAE Calgary, AB		chapter.administrator@sac-ashrae.com
CRC Chair, 2010	Jerry Belanger	J-Clan Services Ltd. Regina, SK		jclan@sasktel.net

ASHRAE, founded in 1894, is an international organization of 50,000 persons. Its sole objective is to advance through research, standards writing, publishing and continuing education the arts and sciences of heating, ventilation, air conditioning and refrigeration to serve the evolving needs of the public.

Statements in this publication are not expressions of the Society or of the Chapter. Articles may be reproduced without permission. Please credit the source.

Visit ASHRAE Manitoba at www.ashraemanitoba.ca.

Visit ASHRAE at www.ashrae.org.