	Dinner Meeting and Guest Speaker Wednesday, March 10, 2004	
Visit the ASHRAE BC HOME PAGE www.ashrae.bc.ca	Topic:	<p>Meeting #6 - HOSPITAL AIR ISSUES with Ed Chessor, P.Eng Ed Chessor, P.Eng was registered as a Professional Engineer in BC in 1970, and has been practicing in the field of Industrial Ventilation since then. His first experience was with a mechanical contractor, installing air pollution control equipment at the grain elevator on the south end of the Second Narrows Bridge. From 1973 to 1980 he was addressing air quality problems in all classes of workplace, as an Inspector with the BC Ministry of Labour. Ed was an engineering resource person at the Workers' Compensation Board of BC from 1980 to 1999, and was called to hospitals across the province to help with air quality problems.</p> <p>In 1999 he started work on a local exhaust system to control emissions of nitrous oxide from mothers to be in Labour/delivery rooms at Richmond Hospital. A study done in 2001 found that the new system reduced nurses exposures by 50% compared to the old scavenging system.</p>
MEMBERSHIP MATTERS Jason White – Chapter Membership Chairman Tel: (604) 986-1400 or e-mail: jason.white@olympicinternational.com	Place:	Italian Cultural Centre 3075 Slocan Street (at Grandview Highway), Vancouver
Time:	5:30 PM: Social Hour 6:30 PM: Dinner	
Cost:	Chapter Members - \$30 Society Members & Guests of Members - \$33 Life Members - \$27 Students - \$10	
To register contact Charlie Sabean at Tel: (604) 588-1030, Fax (604) 588-1012 or e-mail: csabean@modern-systems.com		

PRESIDENT'S MESSAGE



Our February meeting this year was at our usual meeting place. In past years we have had either special Valentines dinners or as last year a luncheon meeting. We ask the membership to let us know if a lunch meeting occasionally downtown would be something to look into for next year. The February meeting was a Forum highlighting "Business Ethics". It is a topic that is always in the news and all seem to agree that something must be done but implementation seems to be the key issue. ASHRAE has its own code of ethics by which its members should conduct themselves: As members of a Society organized and operated for the exclusive purpose of advancing the arts and sciences of heating,refrigeration,air conditioning and ventilation,the allied arts and sciences, and related human factors for the benefit of the general public,We recognize that honesty,fairness,courtesy,competence and integrity must characterize our conduct.

The Forum panel of Craig Watson, Geoff McDonell, Peter Sweeney and Rob Flipse brought forth many comments that showed that Contractors,Engineers,Inspectors and Lawyers can all agree about ethics in business but that implementing them into our workplace fairly is very difficult. Voluntary compliance should be done but as Peter Sweeney pointed out Legislation is likely needed for all to participate. Following the panel each table had 10 minutes to discuss the issues amongst themselves and a representative from each table summarized to the entire audience. This gave everyone present something to think about for our industry's future.

Hopefully we will have a summary of the statements made by the Panel in this Totem edition or on the Chapter Website.We look forward to seeing many of you at the next Dinner Meeting on March 10.

Norm Grusnick, P.Eng



Is There an Error in Your Roster Entry?

You should have now received your hard copy of the ASHRAE B.C. Chapter Roster for 2003/2004.

Please check your roster entry to determine if the information shown is correct, or if there are errors.

If you find errors, please send the corrected information to Chris Collett (ASHRAE B.C. TEGA Chair), either by e-mail to chris@collett.net or by fax to (604) 535-4216. The deadline to provide any corrected information is March 31st, 2004.

When the revised information is compiled, a list of corrected contact information will be included in an upcoming Totem, and will also be distributed as a pdf file via e-mail.

WELCOME OUR NEW MEMBERS!

Inducted in February

Name	Company	Status
Christa Groves	BC Hydro & Power Authority	Associate
Jeffrey Phillips	Ipex	Member
Matthew Salkeld	--	Member
Fredrik Mannerheim	--	Associate
Stephan Johnston	Olympic International	Associate
John Broxterman	--	Member
Martin Johansen	--	Associate

Alpha Mechanical Contracting Ltd.

Mechanical Contractor requires a Project Coordinator for our construction team.

Must be a team player and have good interpersonal skills.

Candidate will also have computer skills, knowledge of HVAC systems, plumbing and piping systems. Plumbing TQ and Provincial Gas Ticket are an asset.

Please send resume to: Alpha Mechanical Contracting Ltd.
108 - 1515 Broadway Street
Port Coquitlam, BC
V3C 6M2

Fax: 604-941-1217
Email: sue@alphamechanical.ca

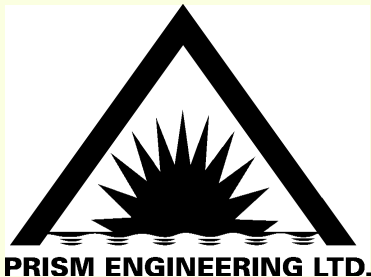


PRISM ENGINEERING LTD.

Prism Engineering Ltd. is a Vancouver-based consulting firm that has specialized in energy management since 1990. We are currently seeking resumes for the following full-time positions:

- **Energy Management Engineer**
- **Senior Mechanical Engineer**

For more details, including responsibilities and qualifications, please our website at www.prismengineering.com/employment/



KEEN ENGINEERING

Calgary, Alberta

Our office has a fulltime positions for **Design and Engineering Positions.**

We are looking for:

Junior Mechanical Technologists
Intermediate Mechanical Technologists
And **Intermediate Engineers** with 4+ years of experience & an interest in sustainable design.

The available positions require exemplary technical expertise and proven ability to work in a fast-paced environment serving a diverse clientele. You will be an integral part of a design team that is responsible for a wide range of project types. Eligible candidates must have experience in hands-on HVAC & plumbing design with a history of solid team performance, excellent communication and computer skills, and dedication to delivering quality product to clients on schedule. Previous work experience in sustainable design is desirable. P. Eng. License and LEED accreditation are both definite assets.

Pay and benefits package is competitive and will reflect candidate's background.

Send a cover letter and complete resume to:

Tim McGinn, P.Eng., Principal, Calgary Regional Office

tim.mcginn@keen.ca

1110 First Street S.W. Calgary, AB T2R 0V1

CIMCO REFRIGERATION

CIMCO Refrigeration is Canada's leader in the design and installation of industrial and recreational refrigeration systems. We maintain twenty sales and service offices across Canada and the United States, and, a manufacturing facility in Toronto. We are extensively involved with the food processing, dairy, cold storage industries, and the recreational skating industry, including NHL facilities in both Canada and the United States.

We are currently seeking resumes for the following full-time positions in our Annacis Isl. Office. Both positions require a post secondary technologist diploma in Mechanical Technology or a degree in Mechanical Engineering.

- Project Technologist, or Engineer in Training
- Junior Technical Sales Representative

If you wish to apply or have additional questions please email wborrowman@toromont.com

"I've always believed that if you put in the work, the results will come. I don't do things half-heartedly. Because I know if I do, then I can expect half-hearted results."

Michael Jordan



Advanced ASHRAE Energy Guides Will Assist LEED Designers

Designers will be better able to develop sustainable, high-performance buildings through use of advanced energy design guides currently being developed by ASHRAE. The guides also will help them in achieving LEED certification for sustainable building design.

Proposed documents providing 30 and 50 percent energy savings over ANSI/ASHRAE/IESNA Standard 90.1, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, are being developed by the Society. Future plans include the development of guidance to achieve 75 percent savings. The savings refer to reductions in energy consumption beyond that allowed by 90.1, which sets the minimum energy efficiency required by most building codes.

The savings will help designers achieve Leadership in Energy and Environmental Design (LEED) certification, offered by the U.S. Green Building Council (USGBC), with which ASHRAE has a partnership agreement.

"LEED gives 'points' for achieving different levels of energy savings over Standard 90 – the energy reduction levels are defined in their Silver, Gold and Platinum requirements," Terry Townsend, ASHRAE's representative on an ASHRAE/USGBC steering committee, said. "However, the LEED program does not tell designers how to achieve these savings – instead it is left to their discretion. With the ASHRAE guides and proposed educational programs, designers will be told what to do and how to do it."

Advanced Energy Design Guides seek to achieve 30 percent savings over Standard 90.1-1999. The guides will consist of a series of documents applying to educational facilities, food sales and service, healthcare facilities, lodging, mercantile, mixed use facilities, public assembly/religious worship facilities, residential and offices.

The first document in the 30 percent series will provide prescriptive design assistance for office buildings up to 20,000 square feet. It will be a how-to, user-friendly guide targeted for use by contractors and small design-build firms, according to Townsend. It is scheduled to be approved for publication at ASHRAE's 2004 Annual Meeting in Nashville.

The committee developing the document includes representatives from the Standard 90.1 committee, ASHRAE technical committees on systems energy utilization and building environmental impacts and sustainability, the American Institute of Architects (AIA), the Illuminating Engineering Society of North America, the New Buildings Institute, USGBC and the Department of Energy.

To help users, ASHRAE also is developing an education program targeting contractors and small building design/build firms. It would be based on the "Train-the-Trainer" program used for Standard 90.1 in which ASHRAE members are trained about use of the standard and then in turn, train code officials and other interested persons in their geographic areas.

ASHRAE's educational program will target designers, with a parallel effort by the AIA for architects and owners. The first program is planned for late 2004.

ASHRAE also is continuing work on guidance to achieve 50 percent savings. As with the 30 percent guides, this series will be developed for commercial, industrial, institutional and residential applications. The 50 percent documents should be published in two to three years. Guides for achieving 75 percent will follow.



Understanding Heating, Ventilating and Air-Conditioning 3-day course, May 5 - 7, by Engineering Change Inc.

Chateau Granville, 1100 Granville St., Vancouver, BC

The best short HVAC course? You be the judge. This course will make a noticeable difference to your understanding of HVAC.

Learn what HVAC is all about from the issues of human comfort and indoor air quality to calculating space loads and ventilation rates, an understanding of air and water using the psychrometric chart, piping and duct systems, central plant, controls and commissioning.

Who: Those who require a clear, and comfortable, understanding of the fundamentals and design calculation methods of Heating, Ventilating and Air-Conditioning, (HVAC), especially:
Engineers starting in this industry * Maintenance staff, technicians; * HVAC sales staff *Architects; * Project Mangers; Seasoned staff looking for a refresher and new ideas

Course Content: *Psychrometrics *Comfort *Insulation, vapour & air barriers *Heating & cooling loads *Comfort, ASHRAE Standard 55 *Indoor air quality (IAQ) *Ventilation *ASHRAE Standard 62 *HVAC systems: Objective oriented system choice *Airflow theory, duct sizing, air distribution *Piping system design, *Introduction to controls, including DDC, *Energy conservation

Course presenter: Robert McDowall P.Eng., ASHRAE director 1997-2000. Originally an HVAC designer, Robert has over 20 years experience as facilities director with University of Manitoba and has presented courses and seminars across Western Canada to members of over 200 organizations including: BC Buildings Corporation, Department of Defence, E.H.Price, ECCO Heating Products, Great West Life, Keen Engineering Co, Reid Crowther & Partners, Trane, University of Alberta Hospital.

Course materials provided: Summary notes & laminated psychrometric chart, both in SI & IP units.

Cost: Registered by April 23, \$600 (payment can follow), **later \$660.**

For all the information you need to decide, call **Engineering Change Inc.** Toll free 1-866-266-8967 or email Robert at mcdowall@engineeringchange.com

Name: _____ Organization or Company _____

Name: _____ Name _____

Street Address _____

City _____ Province _____ Post Code _____

Phone _____ Fax _____ e-mail _____

Registrations by April 23 at \$600, per person _____ X \$600.= _____

Registrations after April 23 at \$660, per person _____ X \$660 = _____

Multiple Simultaneous Registration Discount @ \$35 each _____ X \$ -35 = _____

Sub-Total \$ _____

add GST # 89179 3812 RT @ 7% \$ _____

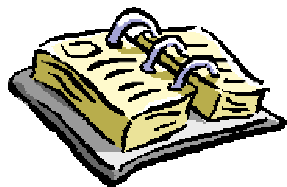
() Invoice my organization

() Cheque, payable to Engineering Change Inc. enclosed

() This confirms telephone/fax/email registration

Total fee \$ _____

Engineering Change Inc. 1600 Mathers Avenue Winnipeg Manitoba R3N 1Z6 Fax (204) 488-6752



ASHRAE-B.C. Chapter and Industry Events - 2003/2004
Dates and events are subject to change and will be updated as required.

Generally, chapter meetings are the second Wednesday - after the first Monday of the month - at the Italian Cultural Centre at 5:30 pm. Exceptions are there are no meetings in the summer June through August, and no meeting in December

Date	Event / Topic
September 10, 2003	Meeting 1 - "Is there a decent ROI on green buildings?" - Forum: Vancouver Real Estate Board, BOMA, LEED Rep. - Membership Promotion Night
October 15, 2003	Tour of the mechanical equipment at CanAgro that uses the new Co-Gen from the Delta landfill methane gases to provide heat and electricity for their tomato greenhouse operations. The CanAgro tour is in Ladner, so we will eat the Town and Country Inn in Delta. Menu is <i>The Baron Buffet</i>
November 12, 2003	Meeting 3 - "Open Protocols - LON, BACNet, & others" Pre-Dinner Workshop - Pressure Independent Valves in HVAC System Design
December	No Meeting
January 14, 2004	Meeting 4 - "What has the HVAC and R industry done for me?" - Forum: Past ASHRAE Presidents - Past President's Night and Student Night
February 11, 2004	Meeting 5 - "Ethics, Legality, Codes and Specifications" - Forum: Lawyer, Project Manager, Mechanical, Plumbing
March 10, 2004	Meeting 6 - "Hospital Air Issues – Ed Chessor, P.Eng " - Joint Meeting with CHES
April 15, 2004	Meeting 7 – Refrigeration Tour
May 12, 2004	Meeting 8 - "Residential Multi Family High Rise Energy Efficiency - ASHRAE Standards" - Research Night
June 08, 2004	ASHRAE Annual Golf Tournament at Swan-E-Set Golf Club See website 2004 ASHRAE Annual Golf Tournament
June	No meeting
July	No meeting

Advertising on the ASHRAE-BC Website

The "Manual for Chapter Operations" allows our chapter to accept "business card" type advertising on the Website. We can include links to company web sites and charge fees for those links. Some conditions apply.

"ISLAND 2004" Trade Show

Vancouver Island Chapter
 Date: April 22, 2004
 Place: Harbour Towers Hotel & Suites, Victoria
 Committee Chair: Mark Watson

"I can accept failure, but I can't accept not trying."
Michael Jordan

"Half the game is 90% mental."
Yogi Berra