

BOA

Building Operators Association of

Canada

Official Publication of the Building Operators Association (Calgary)



BOA Calgary Platinum
Sponsors



NEED POWER?

GENTECH FIELD SERVICES IS A TURNKEY POWER GENERATOR COMPANY SERVING CALGARY AND SURROUNDING AREAS. THE GENTECH FIELD SERVICES TEAM SPECIALIZES IN LIFE SAFETY EQUIPMENT FOR COMMERCIAL BUILDINGS AND ON CONSTRUCTION SITES. WE PROVIDE SCHEDULED AND EMERGENCY SERVICE FOR ALL COMMERCIAL DIESEL GENERATORS AND FIRE PUMPS. CONTACT US TODAY TO SCHEDULE A SERVICE OR FOR AN ESTIMATE ON A NEW OR USED GENERATOR.

OUR TURNKEY INSTALL SOLUTIONS INCLUDE:

RENTALS

PRODUCTS

ENGINEERING

SERVICE



GENTECH
FIELD SERVICES

Authorized dealer for **Taylor** & **WACKER NEUSON**

240023 Frontier Crescent
Rocky View County T1X 0W5
587 349 3500

service@gentechfieldservices.com
www.gentechfieldservices.com



The Drain Doctor

(A Division of Drainco Limited) - Since 1981

"SEWERS LOVE US"

Thank you to everyone for your continued support. We strive to exceed your needs now and into the future.

Your Drain Cleaning Specialists! Celebrating 30 Years of Quality Service to Calgary & Area



Members in "Partnerships" with C.O.R. since 1997



Alberta Construction Safety Association

STRAIGHT FORWARD PRICING • FREE ESTIMATES OVER THE PHONE

When other companies can't fix your drain problems...they call us!

- Professional Clean Service • All The Proper Equipment
- Able To Clean Any Drain Line Size • Colour Camera Video Inspection
- Sump & Septic Tank Cleaning • Grease Traps • Frozen Lines
- Parkade Drains and Sumps • Steam Flush Cleaning • Power Flushing
- Vacuum Truck Services • Lift Stations • Combination Hydrovac Services
- Confined Entry Specialists • Low Height Parkade Units
- Canadian Criminal History Check & Vulnerable Sector Search on All Employees

Talk To a Real Person

24 HOUR SERVICE

403-243-3490

www.thedraindoctor.ca



Fax: 403 243-3498 • E-mail: info@thedraindoctor.ca

What's Inside?

Executive & Committees.....3
 Important Phone Numbers.....3
 Presidents Message.....4
 Test Your Operator IQ.....6
 What should a facility manager look for in choosing a green cleaning vendor?.....7
 Kenken Puzzle.....8
 Maintenance: From Cost Center To Successful Investment11
 Dear Maintenance Men.....13
 OHS Alberta Infographic.....14
 Ammonia Refrigeration Examination.....14
 December General Meeting Minutes.....15
 BOA Calgary Sponsors.....16
 Kenken Answers.....17
 Test Your Operator IQ Answers.....17
 Agenda.....17
 Advertising Rates.....17
 Advertisers Directory.....18
 Calgary Lighting Products Scholarship..Back Cover

Cover Image by Jeff Jacobs from Pixabay

Executive & Committees

- President president@boacalgary.com
 Les Anderson (c) 403-921-0648
- Vice President vice.president@boacalgary.com
 Mark Arton (c) 403-305-7029
- Associate Vice President associate.vice.president@boacalgary.com
 Mike Gerald 403-861-9091
- Chairman chairman@boacalgary.com
 Mark Arton (c) 403-305-7029
- Treasurer treasurer@boacalgary.com
 Carrissa Speager (c) 403-969-0329
- Secretary secretary@boacalgary.com
 Monika Bhandari (c) 403-470-4169
- ~~~~~
- Education Committee education@boacalgary.com
 Shaun McLean
- Membership Committee membership@boacalgary.com
 Casey Kok (c)403-200-3767
- Promotions Committee promotions@boacalgary.com
 Mike Thompson
- Activities Committee activities@boacalgary.com
 Mike Gerald (c) 403-861-9091
- Technical Concerns technical@boacalgary.com
 Kyle D'Agostino
- Webmaster webmaster@boacalgary.com
 Casey Kok (c) 403-200-3767

BOA Canada Magazine printed & distributed by:

SURE PRINT & COPY

Important Phone Numbers

- Emergency.....911
 Alberta Boiler Association.....403-291-7070
 Alberta Labour (Emergency).....403-297-2222
 Buried Utility Locations.....1-800-242-3447
 City of Calgary (All Departments).....311
 Dangerous Goods Incidents.....1-800-272-9600
 Environmental Emergency.....1-800-222-6514
 Poison Centre.....403-670-1414
 Weather Information (24hr).....403-299-7878



John Rutherford
 * Boiler Service * Consults * Parts * Upgrades *

Quality Combustion & Controls Ltd

834. 3545 - 32 Ave NE, Calgary AB T1Y 6M6

Ph (403) 936-0065 Fx (403) 936-0061

jrutherford@Qualityco.ca Qualityco.ca



**SPROUSE
 FIRE & SAFETY**

Serving Commercial, Residential & Contractors Since 1963
Fire & Safety Equipment Specialists
Toll Free: 855.337.7776

1323 9 Avenue SE 14825 Yellowhead Trail 5329 72 Ave SE
 Calgary, AB Edmonton, AB Calgary, AB

www.SprouseFire.com info@SprouseFire.com
 100% Alberta Owned

PRESIDENTS MESSAGE



I hope this message find you and yours well and in good health

In this time in Calgary, the strength of the Building Operator as an integral part of the Operations team has never been more important than it is today. The skillset the Operator has in running and efficient building not only saves large operating dollars it as well is key in client retention. People are reluctant to change if they are satisfied. The building Operator as a part of the operations team plays an important role in the health of the facility.

I have been looking at educational materials that the Building Operator uses to increase their knowledge. First are the service providers for the support they bring to the buildings. The usage of their equipment and procedures along with safe operation procedures on the products and or equipment specific to that provider will maximize effectiveness. I realize it is a small part but compounded to all providers in the facility it becomes larger in scope. The training we receive by the providers will not only have the system running better but longer too.

Attending BOA meetings. We have at every meeting a guest speaker that delivers to those in attendance an education on their area of expertise, there is a nugget of information that everyone can take back to their place of work, knowledge is power. BOA tries to bring in speakers that we support because of knowledge in their field but we also keep the topics timely to the needs of industry. Each talk is long enough to educate short enough so as not to bore. There is as well time at the end for questions and answers.

We need to be current with technology advances in our building. Owners and customers want “smart buildings” we need to be the smart operators of those buildings.



Building Operators Association
Box 22116, Bankers Hall
Calgary, AB T2P 4J5
www.boacanada.ca

Training and formal education. BOA has been a supporter of ongoing education from the beginning. We are currently looking at courses to support learning materials that we feel support the development of our discipline our industry. We recently lost BOMI Canada who were developing the “Red Seal” initiative in Ontario. Jim Preece formerly of BOMI Canada will try to continue. I wish him luck.

I hope to see you at the meeting January 14, 2020

Warm regards, Les

CUSTOM POWER GENERATION **WESTERN CANADA'S POWER GENERATION PROFESSIONALS!**

Western Canada's **LARGEST BLUE STAR** Power Systems Distributor

- 24/7 Parts and Service Support**
- Emergency Generator Repair**
- Planned Generator Maintenance Programs**
- CSA282 Compliance Programs**
- On Site Fuel Testing and Polishing**

CALGARY – EDMONTON - VANCOUVER
24HR: 855-948-8810 / WWW.CW-PG.COM



BGE Indoor Air Quality Solutions

When clean air matters.

We deliver clean air to protect your people, places, processes, and products.



BGE Indoor Air Quality Solutions Ltd.

When clean air matters.

5711 - 103A Street NW • Edmonton, AB T6H 2J6

T: 780-436-6961 F: 780-437-1097 TF: 1-866-436-6961 • www.bgecleanair.com



DCS AGENCY LTD.

Manufacturer's Representatives for:

- Xylem / Bell & Gossett
- Watts Water Technologies / Watts Radiant
- Watts / Powers Mixing & Electronics
- American Standard Brands
- Clemmer Technologies
- Laars Boilers
- De Dietrich Boilers
- Gastite Flexible Gas Piping
- Sisco P/T Plugs
- WGI Western Gauge & Instrument
- Griswold Flow Control Valves
- Metraflex Pipe Connectors
- Rinnai

Alan Proctor Shawn Oakley Greg Smith
#13, 6130 - 4 Street S.E., Calgary, AB. T2H 2B6
Tel: (403) 253-6808 Fax: (403) 259-8331
www.dcsalesltd.com

ziO

DOORS & SECURITY

Commercial Door, Frame and Hardware Installation

On Site Door Modifications and Rework

Commercial Door Maintenance

Automatic Door Operator Installation

Access Control System Installation

Fire Door Inspections and Consulting

403.235.2380

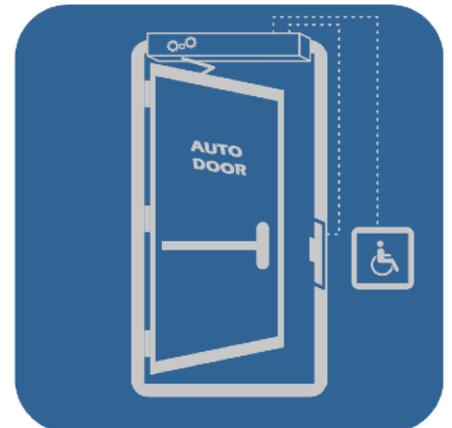
Bay 124, 2730 3rd Ave NE,
Calgary, AB T2A 2L5

Your local door guys

www.fczio.com

Does your renovation require new barrier-free building access ?

Automatic Door Operators can be installed on most typical door frames.



Test Your Operator IQ!



Are you equally adept at troubleshooting problems in the boardroom and the boiler room? As the resident facility guru, there's a lot riding on whether or not you know the difference between sounds control and a sound investment.

If you're ready for 21st century challenges, then you are ready for our monthly Operator IQ challenge...answers on page 17.

1. To prevent corrosion in the expansion tank it is sometimes filled with:

- A. nitrogen
- B. air
- C. oxygen
- D. helium
- E. hydrogen

2. To regulate the flow of hot water to a zone circuit a:

- A. flow control valve is used
- B. diverter fitting is used
- C. gate valve is used
- D. pressure reducing valve is used
- E. balancing valve is used

3. Valves in heating systems should be _____ if they do not shut off tightly:

- A. discarded
- B. heated
- C. bypassed
- D. repaired
- E. reported

4. What type of boiler would you expect to find in a hot water system, incorporating a converter?

- A. hot water boiler
- B. steam boiler
- C. forced circulation boiler
- D. reverse flow boiler
- E. once through boiler

5. A hot-water heating system is about to be started. How full of water should the expansion tank gauge glass be?

- A. empty
- B. 1/4
- C. 1/3
- D. 3/4
- E. full
- F.

What should a facility manager look for in choosing a green cleaning vendor?

Choosing a green cleaning vendor is no different than choosing any great vendor. We always begin by pre-qualifying all vendors interested in providing services. Use the available certifications and awards to facilitate identifying the few who are most capable. For example, Green Seal's standard on cleaning service providers and ISSA's Cleaning Industry Management Standard for Green Buildings are a good start.

In addition, buyer-specific issues should to be included, such as vendor financial resources, local offices, local business base, safety record, and industry and building-type experience. As a follow-up to a prequalified short list, I'd also suggest focusing on the following key issues:

- * Focus on identifying the best-available project manager, one who has great green cleaning experience in a facility like yours.
- * Next, look for those vendors who can present a comprehensive and convincing cleaning system, highlighting their green cleaning practices.
- * Look for companies that have a record of constant innovation, exploring better and best green products.
- * Finally, apply the "right price" test to the price quoted.

How would you assess the current popularity of green cleaning?

Is everyone adopting a green product model? Well, no. I see a growing green continuum that offers buyers greater product options. Keep in mind that whatever product strategy used, the

in-house or vendor provider of cleaning services must deliver remarkable results. And, they must deliver those results using any product they will get the job done.

Service providers are still using toxic (certainly not green) products where they cannot get the results needed. Also, for some, being green is not well understood; there is a kind of bandwagon effect that is drawing many into this movement on a (valid) faith that it is the right thing to do. It's no surprise that these results might be inconsistent and could create dissatisfaction with the green cleaning model.

Nonetheless, my own estimate is that green cleaning has reached its tipping point, with over 40 percent of the companies contacted using or intending to adopt a green cleaning product strategy. The logic is clear. Green cleaning is less harmful to the environment, less harmful to the workers who handle these products, and less harmful to building occupants who come in contact with these products. We've done over 340 outsourcing contracts for just about every type of property, and the requirement for green products is fundamental to any contract we manage. I don't know of any industry advisor, vendor, or supplier who is not advocating for a green product strategy.

What are some new products or approaches in the green cleaning field?

It is exciting to see the innovation that has emerged over the last dozen years or so. For example, microfiber, once a "new technology,"

Continued on page 9.....



WADE WEATHERBEE
High Rise Division Manager

5442 56 Avenue SE Telephone: 403-532-3205
Calgary, Alberta Fax: 403-532-0185
T2C 4M6 Cellular: 403-703-7888
E-mail: waderw@telus.net

*Healthy Buildings
on a Sustainable Planet*



Bay 8, 823 - 41 Avenue N.E. Phone: (403) 276-2201
Calgary, Alberta T2E 6Y3 Website: www.gasonic.com

SURE[®]

PRINT & COPY CENTRE AVENIDA

**WE
PRINT
EVERYTHING!**

SIGNS
RETRACTABLE
BANNERS
X-BANNERS
SANDWICH
BOARDS

**&
MUCH
MORE!**

DESIGN
NCR FORMS
MAGAZINES
BUSINESS CARDS
POSTCARDS
CALENDARS
LARGE FORMAT PRINT
LARGE FORMAT SCANS
BLUEPRINTS

501 - 12445 Lake Fraser Drive SE, Calgary, AB T2J 7A4
Phone: 403.254.6922 Email: sure20@surecopy.com
www.sureprintavenida.ca

KENKEN PUZZLE

How to solve the Kenken puzzle: (answer on pg. 21)

- Fill in the numbers from 1 -6 (in this case 6, because the kid is 6x6).
- Do not repeat number in any row or column.
- The numbers in each heavily outlined set of squares, called cages, must combine (in any order) to produce the target number in the top corner using the mathematical operation indicated.
- Cages with just one square should be filled in with the target number in the top corner.
- A number can be repeated within a cage as long as it is not in the same row or column.

1	10x		1-	2-	3-
3+		2÷			
20x	2÷		3÷	2÷	4
		2			6+
2÷	20x		6x		
	4	5-		3-	

CONSULTING • DESIGN • INSPECTION • TESTING SERVICES

Anton J. Vlooswyk, P.Eng.

Cel: (403) 651-1514
Tel: (403) 287-0888
Fax: (403) 287-0880
Email: anton@bee.ca



**BUILDING
ENVELOPE
ENGINEERING
INC.**

102, 4029- 8th Street S.E.
Calgary, Alberta, T2G 3A5
www.bee.ca

...continued from page 7

has become ubiquitous. Newly emerging, the introduction of water as a cleaning and sanitizing solution required a double take by many. Activeion was the first company to mass-market this technology; and it was also the first casualty. Yet, the chemical glass was cracked by them.

We've seen a number of hypochlorous acid, aqueous ozone, hydrogen peroxide water-based technologies gain market share at the expense of traditional (even some "green") chemicals. Project-based floor care has been impacted by the emergence of oscillating "square" floor machines that are also challenging rotary machines for growing market share. Steam vapor has begun to find acceptance. Spray-and-vac systems are gaining recognition as a go-to option for restroom care. Even the traditional floor pad has introduced better pads, including diamond-encrusted versions to refinish and strip hard-surface floors without harsh chemicals.

In terms of approaches, we're seeing the cleaning industry become better structured and organized. For example, there is an expansion of "day cleaning" systems, with a number of consultants ready and willing to help companies get organized. I've watched Rex Morrison gain real acceptance for his innovative Process Cleaning for Healthy Schools (PCHS) program. State- and federally-mandated performance-based cleaning contracts, along with green and least-harmful requirements, are becoming more common, and are being adopted more and more by industry buying innovators.

Gazing into the crystal ball for a moment, where do you think green cleaning is headed in the near future?

Well, the crystal ball is a bit cloudy, with some harsh residual chemicals still in the future. Yet, continued innovation in products, systems, and resources are moving us toward extreme green cleaning, and ultimately to toxic-free, less harmful products.

We'll see a number of the large chemical companies begin to move aggressively beyond today's green products to even more remarkable toxic-free products. They'll do it to protect and gain market share and they'll move from skunkworks experiments and one-off strategies into full production for extraordinary product lines that protect workers, building occupants, and our environment.

Look for the emergence of robotic cleaning, self-cleaning spray-on solutions, self-cleaning building surfaces, living walls, photocatalyzing filters, antimicrobial coating in restrooms, and the growth in the use of enzyme cleaning strategies. I also think that we will see greater automation of the buying process, through ecommerce applications. For such a mature industry, the technological advances are just beginning, and I believe that you will be amazed by what the next few years will bring.

Answers from Vince Elliott, an entrepreneur, author, speaker, and industry innovator advocating on behalf of buyers of facility services for over 40 years. He has also delivered more than 100 conference presentations and written two industry-leading books and some 300 articles, white papers, and ebooks. Reach him at velliott@ealtd.com.

Article reprinted with permission from "Maintenance Solutions" Magazine. For more information or more articles, please visit their website at: www.facilitiesnet.com/ms/

WestExcel
Automation Ltd.

Commercial Building Automation Solutions Provider
Over 30 product lines including

Honeywell

**Johnson
Controls**

BELIMO

Shawn Mclean, Calgary 403-404-3660 www.westexcel.ca

New pipes inside your old pipes.



**Cost Effective, Less Disruptive.
Simple as that.**

*Whether you're replacing a
drain stack in a skyscraper or
a piece of cracked cast under
the floor in a shopping centre,
we have it handled!*

- Vertical drain stacks behind walls
- Horizontal drains under floors
- HVAC and chiller pipes
- Pipes with multiple bends and offsets
- Pipes with branch connections
- 1 1/2 - 10 Inch diameter (custom sizes available)
- Inside any type of pipe (including cast iron, steel, asbestos concrete, PVC, ABS)
- 50+ year life expectancy

Revive
Pipe Restoration Inc.

Inside Building Specialists
403-903-4445
www.revivepipes.com

Maintenance: From Cost Center To Successful Investment

Engaged technicians can help managers revamp a department's image and drive an organization's success

Workforce engagement is a key topic for institutional and commercial facilities. More than training and incentives, the issue of engagement speaks of workers who are dedicated to the tasks they perform each day, contributing their best efforts and seeing themselves as a committed part of the organization. Whether they are overtly noticeable or quietly acting, engaged employees are important team members who can help drive the organization forward.

How does engagement work in facility management? Maintenance and engineering managers might be tempted to think of facilities technicians as fundamentally behind the scenes, people who support the organization but are not directly contributing.

In my experience, that is an all-too-common perception, unfortunately. I've lost count of the number of times I have heard some variant of, "Facilities is a cost center, not a revenue generator." The inference is that facility services somehow are less important to the organization because they do not generate revenue.

I would like to challenge the perception. Rather than a cost center, facilities is an investment in an organization's success. Without facilities services, essential business functions — revenue generating and otherwise — cannot function.

But that's the business side of things. Why would that issue matter to the facilities workforce? What does that discussion have

to do with an engaged workforce? I promise, it matters.

Images of engagement

Let's start by identifying an engaged employee. Employees who are engaged:

- See themselves as part of the larger organization. They look for ways to make things better, not just by the suggestions they provide on the way others can improve but instead through their own actions.
- Are emotionally invested. They contribute because they care. This sense of investment leads them to be concerned more with what they give and less with what they get.
- Focus on solutions. They are not content to merely identify a problem or log a situation.
- They tend to think more broadly. They consider the way problems affect others and look for ways they can help.
- Have a sense of purpose.
- Are more productive.

These people are inspiring, and we want to work with them. I believe that while each of us is unique with our own motivations and drivers, fundamentally we want the work that we do, the time that we spend, and the effort that we

Continued on the next page...

....continued from the previous page.

contribute to matter. To do that, we need to understand the things that are important. Another way to look at this dynamic is that whatever the organization is about, that is what facilities must be about.

Strategies for Engaging the Maintenance Workforce

Facility managers have a few strategies they can use to engage their departments' supervisors and front-line technicians:

The vision-mission link. Connect the vision of the organization to the mission of the facilities department. Help the facilities staff understand the way they fit in the overall picture. Facilities plays a fundamental role in helping the organization work well.

Consider this example: Without such essential responsibilities as thermal control, plumbing, lighting, and housekeeping, places of business would be much less than ideal and, in some cases, they would be dangerous. Given that in most organizations, employee salaries make up the majority of the expenses, it is not hard to understand that when employees are uncomfortable and dissatisfied with the state of the facility, they are less productive, which ultimately costs the organization. When facilities workers understands that connection, they will be better able to see that they are not just managing work orders and preventive maintenance tasks. They are facilitating organizational productivity.

The personal mission. Connect the facilities mission to the individual's daily activities. One of my favorite examples of this link came from a colleague who is a facility engineer in a research and development company. He told me the reason he worked so hard to make his buildings more efficient was that he believed the research conducted by the scientists in his buildings would help make sick people

well, so if he could be more efficient in facility operations, the resulting environment would result in more money going toward research. He saw himself and his responsibilities in facilities as an extension of the company mission. He carried this connection into his projects, and he spread it to his teams. Through his leadership and dedication, he was effective in getting his teams to perform well. They understood that they, too, were a part of something larger than a task or a project and were willing to go above and beyond.

Early expectations. Set expectations from the beginning. Employees who start their careers by understanding their place in the organization, their performance goals, and ways they can move forward in the department have a better sense of ownership of their roles. They also are more empowered to act on behalf of and in concert with the team.

Relationship matters. Create relationships — an essential building block for any successful team. The most effective leaders foster team relationships, loyalties and support. Strong teams back each other up and work toward a common purpose. Conversely, a lack of connection and poor relationships with colleagues are top reasons people leave a job.

Engaged Managers Drive Maintenance Success

Part of managers' efforts to engage their staff is to be engaged themselves. Have you ever been in conversation with someone who seems to be anywhere but with you?

Recently, I met with someone who kept checking their phone, regarding the screen contents intently to a point I wondered if the person had forgotten that I was right across the table. As irritated as I was, I fear that I have similarly offended someone. While these little moments can happen occasionally to many people, problems arise when

Continued on the next page...

....continued from the previous page.

they become part of a larger, practiced habit that ultimately leads to lack of engagement.

Here are five things managers can do right now to improve their engagement:

- Understand where you fit in the organization and what you must do to play your role most effectively.
- Focus on solutions.
- Focus on ways that you can contribute, and worry less about what you receive.
- Put away your cell phone during meetings.
- Turn off message alerts on computers and cell phones when meeting with others or when it is important to concentrate on a task.

An engaged workforce is essential to an effective, efficient facilities organization.

Fostering that environment not only contributes to better performance and productivity. It is more rewarding and inspiring to be a part of and truly demonstrates facilities as an investment in organizational success.

Laurie Gilmer is vice president and chief operating officer of Facility Engineering Associates, www.feapc.com. Gilmer is a published author who has co-authored the International Facility Management Association's (IFMA) second manual in the Sustainability How-To-Guide Series, EPA's Energy Star Portfolio Manager. She is serving a term on IFMA's Board of Directors, and she serves on the Northwest Energy Efficiency Council's Building Operator Certification program advisory committee and the National Visiting Committee of Building Efficiency for a Sustainable Tomorrow Center.

Article reprinted with permission from FacilitiesNet. For more information or more articles, please visit their website at: www.facilitiesnet.com/ms/

Dear Maintenance Men....

Dear Maintenance Men:

I am planning to install new ceramic tile into some of my building's kitchen and bathrooms. On some floors there is a raised foundation. What can I do to prevent cracks along the grout lines?
Robert

Dear Robert:

Cracks along the grout lines are always a problem in a raised foundation building. If you have bounce in your floors, first thing will be to install bracing under the floor to reinforce the foundation. Either bolting or nailing additional 2 x 6 boards to the existing floor joists or installing a beam or girder across the floor joists and adding posts for support can accomplish this. Now that your floors are firm, make sure the sub floor is securely attached to floor joists. The next steps are very important. Measure, cut and test install sheets of Hardie Back ceramic tile underlay cement boards over the sub floor. Remove the cement boards keeping them close by. Now is the most important step: using Thin Set cement, trowel cement onto the sub floor using a one half-inch notch trowel. Lay your first Hardie Back board into place and using cement board screws attached the board to the sub floor. The screws should be about six inches apart along the edge and eight inches apart in the middle of the board. Now trowel more Thin Set cement and continue installing the boards. Spread out any thin set cement that oozes out between the seams. You have now formed a strong base for your tile work. Using the Thin Set cement between the sub floor and the cement boards will fuse all the sub floor materials together and lessen the likelihood of grout cracking due to floor movement.

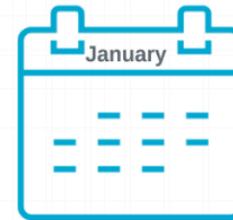
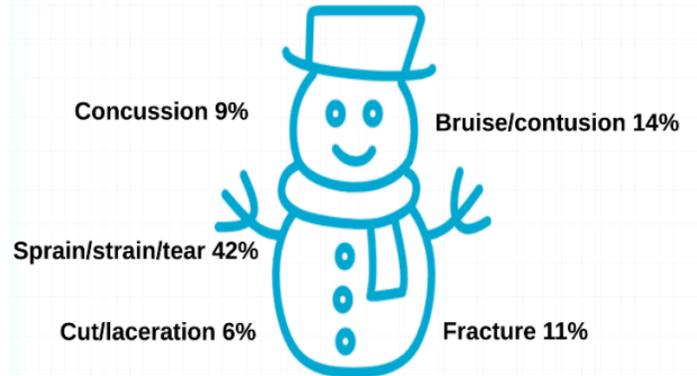
Workplace Injuries on Ice, Sleet, Snow

Top 5 Industries

1. Trucking Service - General	7%
2. Cities	6%
3. Ski Resorts/Gondolas	4%
4. School Boards	4%
5. Mobile Equipment Operation	3%

Data Source: 2014-2018 Workers' Compensation Board claims database

Top 5 Injury Types



January had the most workplace injuries from ice/sleet/snow.

Infographic reprinted with permission from OHS Alberta



AMMONIA REFRIGERATION EXAMINATION AVAILABLE

In October, ABSA began to offer the newly introduced 'Introduction to Ammonia Refrigeration' examination to interested candidates. This optional examination provides an opportunity for interested individuals to demonstrate their knowledge of ammonia refrigeration plants to the standard established by the recently released reference syllabus, AB-309: Reference Syllabus for Introduction to Ammonia Refrigeration Examination. As discussed in a previous issue of The Pressure News, it should be noted that there is no Alberta certification associated with this examination. Those interested in applying to write this examination should contact the Examination and Certification department for more information.

The above article is reprinted with permission from ABSA.

December General Meeting Minutes



Building Operators Association			
Chaired by: Mark Arton	Minutes by: Monika Bhandari	Call to order: 5:08pm	Location & Date: Danish Canadian Club, December 10, 2019

- **Introduction of Attendees**
- **Guest Speakers:**
 - **Name:** Jean Darius, KPI Staffing
Topic: "Gig Economy" A new way of working that offers flexibility through project-based work.
- **Safety Talks!**
 - The Front Line of Workplace Security
- **New Business:**
 - James Electric Gift card \$200 draw at the end of the year for those Operators attending 4 out of 9 meetings in the year
 - Bi-annual Trade Show will take place in May 12, 2020; first pick given in March to those who had a table last Trade Show; open to everyone in April

- **Networking**

See right:

Les Anderson, President of BOA Calgary with Jean Darius of KPI Staffing



REGENCY CLEANING SERVICES

Janitorial Services
Window Cleaning
Pressure Washing
Specialty Services
Carpet & Upholstery
Move In / Out Cleaning
Floor Care & Maintenance
Post Construction Cleaning

PH: 403-520-7788 | FAX: 403-663-9911

info@regencycleaning.ca
www.regencycleaning.ca



BOULDER MECHANICAL CONTRACTORS LTD

Complete Boiler Services
Air Handling Units
HVAC, Plumbing, Refrigeration
Electrical
Building Automation
Gas Detection Testing & Service
Preventative Maintenance & Emergency Service
Retrofit / Replacement
General Contracting

*Your partner in building
maintenance and service!*

Bay #6 6420 79th Ave SE Calgary, Alberta T3M 2B8
P: 403-230-5519 F: 403-230-5529 E-mail: j.harding@bouldermechanical.net



Thank you to our incredible sponsors! Your support of the Building Operators Association is invaluable!!

GOLD LEVEL SPONSORS



SILVER LEVEL SPONSORS



BRONZE LEVEL SPONSORS



BOA CALGARY OPERATOR MAGAZINE ADVERTISING RATES

1/8 page	\$200	Premium Locations	
1/4 page	\$400	1/2 page inside/outside cover	\$850
1/2 page	\$775	1/2 page outside cover	\$900
Full page	\$1000		

Deadline for ads is the 10th of each month. For any questions, please email: advertising@boacalgary.com
 Payment can now be made via Paypal at www.boacalgary.com/payment.html

JANUARY AGENDA BOA CALGARY GENERAL MEETING

- Approval of Agenda
- Approval of Minutes
- Guest Speaker
- 50/50 Draw
- Snowball
- Safety Talks
- Old Business
- Executive Reports:
 - Activities
 - Education
 - Treasurer
- Membership & Promotions
- Technical Concerns
- New Business
- Adjournment

DECEMBER GENERAL MEETING ATTENDANCE

Les Anderson	BOMA
John Rutherford	Quality Combustion
Mark Arton	Westcorp PM
Monika Bhandari	CCIS Building Operator Training Program
Mike Thompson	ADD/CPWW
Mauro	Student (SAIT)
Tim O'Donnell	Paragon Mechanical
Soroush Solook	Johnson Controls
Barb Rae	KPI Staffing
Jean Darius	KPI Staffing
Melanie Prefontaine-Darius	ASC
Braeden Davis	Student (SAIT)
Leonard Maglalang	Oxford Properties
Grace Tian	Chinese Cultural Centre

Kenken Puzzle Answer

¹ 1	^{10x} 2	5	¹⁻ 4	²⁻ 6	³⁻ 3
³⁺ 2	1	²⁺ 3	5	4	6
^{20x} 5	²⁺ 3	6	³⁺ 1	²⁺ 2	⁴ 4
4	6	² 2	3	1	⁶⁺ 5
²⁺ 6	^{20x} 5	4	^{6x} 2	3	1
3	⁴ 4	⁸⁻ 1	6	³⁻ 5	2

TEST YOUR OPERATOR IQ ANSWERS:

- 1) A 2) E 3) D 4) B 5) C

Advertisers Directory

Automation

WestExcel Automation Ltd. 403-404-3660

Boiler Services

Black & McDonald 403-235-0331

Quality Combustion & Controls 403-936-0065

Cleaning / Janitorial Services

Regency Cleaning 403-520-7788

Door Services

ZiO Doors & Security 403-235-2380

Drain Services

The Drain Doctor 403-243-3490

Revive Pipes 403-903-4445

Engineering Services

Building Envelope Engineering 403-287-0888

Filtration

BGE Service & Supply 403-243-5941

Fire Protection Services

Constant Fire Protection 403-279-7973

Sprouse First & Safety 403-265-3891

HVAC & Electrical Services

Black & McDonald 403-235-0331

Indoor Air Quality Services

Gasonic Instrument Inc, 403-276-2201

Black & McDonald 403-235-0331

Lighting Services

Calgary Lighting Products 403-258-2988

Motor Services

James Electric Moter Services 403-252-5477

Supply Services

DC Sales Corporation 403-253-6808

Alberta Certified Power Engineers Online Directory

Check to see when your power engineer certificate is due for renewal!

www.absa.ca/apecs/powerengineersearch.aspx

Next time you are looking for a product or a service provider, please consider connecting with one of our advertisers and members of the Building Operators Association of Calgary.

Support those
who support
YOU!



James Electric



Motor Services Ltd.

Professional Pump & Electric Motor Repair

35,000 Square Foot Service Center and Warehouse

In-House Machine Shop & Fabrication Departments

Fully Equipped Service Vans

Certified Hydronic Designer on Staff

Calgary's Largest Replacement Motor Inventory

Largest Stock of Pumps & Pump Parts in Western Canada

Custom Built Fans and Blowers to Meet Your Specifications

ISO & COR Certified

Consumer Choice Award 8 Years Running

All Service Technicians are Trained in Confined Space Entry

Fire Pump, Booster Pump and Sump Pit Annual Inspections Available

Energy Efficient Audits and Solutions

On Call 24 Hours, 7 Days a Week

Motors

A.O. Smith, Baldor, Century, Emerson, Franklin, Fasco, Lafert, Leeson, Marathon, WEG, Teco-Westinghouse, US Motors

Pumps

Armstrong, Albany, Barnes, Bell & Gossett, Burkes, Darling, Franklin, Goulds, Grundfos, Hydromatic, Liberty, Little Giant, Monarch, Paco, Taco, Tsurumi, Xylem

Fans & Blowers

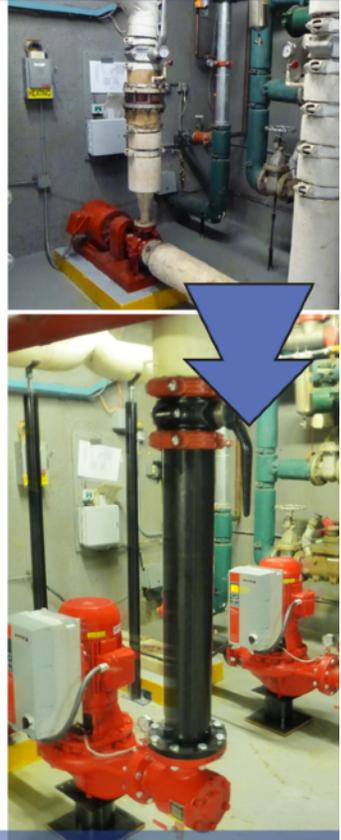
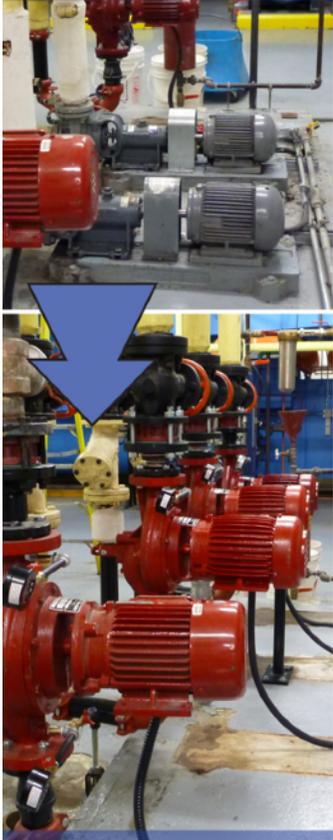
Airdex, AirKing, Broan, Dayton, Delhi, Fantech, Fasco, Greenheck, Lau, Nederman, Nutone, Schaefer, Tjernlund

Variable Frequency Drives & Motor Controls

ABB, Danfoss, Baldor/Reliance, WEG, Santerno, Teco-Westinghouse, Tornatech

Accessories

Gear Boxes, Pressure Tanks, Gauges, Bearings, Mechanical Seals, Flow Indicators, Filter Housings, Filters, Flanges, V-Belts, Float Switches, Pressure Switches, Pulleys, Sheaves, Relays, Contactors, Pressure Reducing Valves



Are your pumps leaking money?



Booster Audit

We have ability to monitor water usage and power consumption to provide the following:

- A comprehensive pre audit booster inspection
- An energy audit with an estimate of annual energy savings and potential payback.
- The "scope of work" for the installing contractor
- Start-up and commissioning on site
- Yearly maintenance inspections
- On site service 24/7/365

Grundfos BoosterpaQ

- Most efficient cascade control, application optimized software in the industry
- Single source responsibility: One manufacturer for pumps, motors, drives and control
- Plug & Play - Easy to install and commission
- Large, clear, user friendly & advanced controls interface
- Reduced floor space footprint
- Ethernet & BUS communications option
- Drinking water approvals: NSF61/372, Hygenic designed 316SS manifolds





Scholarship

5th Class Course

Calgary Lighting Products
in partnership with BOA

is offering a **50% Scholarship**
towards the 5th Class Course

For more details, please contact
president@boacalgary.com

CalgaryLightingProducts.com

Need Trained Building Operators?

'Be A Part of the First Training of Its Kind'



5th Class Power Engineering 'Building Operator' Training Program



- ▶ Our first ever program graduated nineteen 5th Class Power Engineers Building Operators
- ▶ 90% secured employment with major companies in town!

**If you are a Building Owner/
Manager and would like to:**

- know more about this training or
- be a work experience host employer or
- have recruiting advantage after completion of training

At no cost to you!

Please contact:

Monika Bhandari
Phone: 403.514.8328
Email: mbhandari@cclsab.ca
1111-11 Ave SW 5th Floor
Calgary, Alberta T2R 0G5
www.ogtp.ca

Funded By: In Partnership with:

Black & McDonald

Calgary Office
1071 26 St NE Calgary
403-235-0331

Services

- Heating, Ventilation & Air Conditioning
- Sheet Metal
- Electrical
- Building Automation Systems
- Plumbing
- Refrigeration
- Voice & Data Communications
- Instrumentation
- High Voltage
- Process Piping
- Millwright & Rigging

Capabilities

- Design/Build
- Renovation & Upgrade
- Fast-track Change-out
- Building Commissioning
- Infrared Thermography
- Facilities Management & Operation
- Planned Preventive Maintenance
- Sheet Metal Fabrication Pipe
- Complete Boiler Services
- 24-hour Emergency Service**

Facilities

- Commercial/Office
- Industrial
- Education & Institutional
- Healthcare
- Industrial
- Telecom & Data Centers
- Sports & Assembly
- Airport & Transit Stations
- Military Bases



Black & McDonald is a leader in quality service, committed to implementing innovative solutions throughout a facility's life cycle.

www.blackandmcdonald.com