

BOA

Building Operators Association of

Canada

Official Publication of the Building Operators Association (Calgary)

OCTOBER 2020



BOA TRADESHOW POSTPONED UNTIL MAY 2021



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 &

240023 Frontier Crescent
Rocky View County T1X 0W5
587 349 3500
service@gentechfieldservices.com
www.gentechfieldservices.com



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

What's Inside?



Executive & Committees	3
Important Phone Numbers	3
Presidents Message	4
Test Your Operator IQ	6
Waging War On Pests	7
KenKen Puzzle	9
The Doors to Reliability	10
Alberta Chief Power Engineers Conference Update	13
Kenken Answers	13
Test Your Operator IQ Answers	13
September Meeting Minutes	14
Advertising Rates	15
BOA Calgary Sponsors	15
Advertisers Directory	16

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

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
VACANT	
Promotions Committee	promotions@boacalgary.com
VACANT	
Activities Committee	Mike Gerald (c) 403-861-9091
Mike Gerald	
Technical Concerns	technical@boacalgary.com
Kyle D' Agostino	
Webmaster	webmaster@boacalgary.com (c) 403-200-3767
Mike Thompson	



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



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

President's Message



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

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

There is a lot of mixed messages out there as pertains to how we should be operating our facilities under the Covid Virus. The Building Operators Association will do our best to disseminate the messages and provide links to the ones we believe are true. We will keep those links on our website for you to read. We will focus our Webinar guest speakers on operations that will minimize risks to your customers and tenants. We must be aware of people that try to scare us with tactics that would have us believe their product is the only one that will do the job. There are a lot of unfaithful people out there that will take advantage of the uninformed. We have a group, a subcommittee that you as a member, can ask questions of and we will try to help you in making your decisions. We have it named technical@boacalgary.com I hope our committee head, Kyle D'Agostino or any other member can assist. Please remember we don't know everything but all of us together make one hell of a good Operator.

The Law still will not let us gather with a table meeting so we will continue to have webinars in place of. We will wait until the new year to see if the government will allow us our trade show. If you have any suggestions of topics you would like to hear of please, drop us a line. I'm thinking of UV lighting.

I wonder what a virtual trade show would look like, anybody ever hear of one??

Our first attempt at presenting at a Webinar was not very good but the second attempt on the following Thursday was much better. We are new at it and we can only get better. I want to thank Dennis from Honeywell and Shawn from Excel for their patience. Our next presentation will be filtration and how people are filtering their air under these trying times, living and working in a safe manner. The presenters will be from BGE indoor air quality solutions. Some people are upgrading their filters some are not, and some don't know if they should or not. There are some rumors that increasing the efficiencies will alter the performance of air delivery. Those and other questions can and will be answered at the webinar October 13th at 5PM, mountain time. I hope to see you there friends.

Les Anderson PE, RPA

JOIN US!

For our **Virtual BOA Monthly Meeting** on
Tuesday October 13, 2020 at 5pm





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
- Tekmar Control Systems
- 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
 #7, 6130 - 4 Street S.E., Calgary, AB. T2H 2B6
 Tel: (403) 253-6808 Fax: (403) 259-8331
www.dcsalesltd.com




Alberta Diesel Dialysis

Ensuring the Best fuel quality at the Most critical time



Mobile Fuel Polishing Services
 Permanent Automated Polishing Systems
 Western Canada Distributor for Refuel Systems
 403 813 9999
AlbertaDieselDialysis@gmail.com
www.AlbertaDieselDialysis.com



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.

Try our monthly Operator IQ challenge...answers on page 15

1. A safety relief valve is like a safety valve except it:

- a. does not have a blowdown ring or bottom guides
- b. must have greater blowdown
- c. may have an isolation valve placed between it and the pressure vessel
- d. must discharge directly to the atmosphere
- e. is prone to leakage

2. A stop valve is allowed between the safety valve and the boiler drum when:

- a. the stop valve is locked open
- b. there is more than one safety valve
- c. a rupture disc is placed between the stop valve and the safety valve
- d. no stop valves are allowed before or after the safety valve
- e. the stop valve is the quick opening type

3. A try lever safety valve test will:

- a. ensure the popping pressure is correct
- b. indicate that valve capacity is adequate
- c. ensure the closing pressure is correct
- d. take approximately 2 seconds
- e. ensure the valve is free to operate

4. An agency or code with which fittings must comply with is the:

- a. Health and Safety code
- b. Fittings and Boiler Parts Act
- c. Boiler Repair code
- d. Plumbing Gas Act
- e. ASME Code

5. An operator should check that a boiler safety valve will open at its set pressure by:

- a. sending for the inspector to bring his or her test gauge
- b. increasing the boiler pressure until the valve opens and noting the pressure on the pressure gauge when the valve opened
- c. putting a piece of pipe over the lifting lever and lifting the valve off its seat when the seat pressure is reached
- d. connecting the boiler to an air compressor during shut down and raising the pressure in the boiler until the set pressure is reached
- e. listening to the alarms of the set pressures



WAGING WAR ON PESTS
**Devising a strategy that combines knowledge,
technology and chemistry can defeat even the toughest invaders**

by Terry E. Walton

Pest management means considerably more than simply using pesticides and other weapons to kill insects and other small invaders. These kinds of efforts are only one part of a more comprehensive program to control the facility environment and prevent pest problems from developing and inflicting damage.

In most organizations, pest control is the responsibility of the maintenance department. In fact, various federal, state and local laws mandate that specified organizations maintain their own pest-control programs.

Facilities' pest-control efforts can be successful by focusing on a number of common small animals and birds that present the most persistent threat. These efforts include some combination of proven tactics to reduce the damage that pests can do to both buildings and landscapes.

When dealing with animal pests, perhaps a maintenance manager's best weapons are knowledge of pests' habits and movements, as well as a fair amount of persistence, patience and a good sense of humor. Unfortunately, in some cases, facilities simply may have to learn to live with the presence of pests and the problems they cause if the situation simply cannot be brought under control.

Mice and Rats

Controlling rodents is an ongoing effort. Managers and crews must have a successful strategy that includes being familiar with all physical aspects of the property. Managers must pay special attention to areas that can cause problems outside a building. These include but are not limited to:

- standing water
- creeks and streams
- dirty waste containers
- sewer drainage systems
- neighboring businesses
- excessive shrubbery.

Mice feed on stored food products and all kinds of seeds, including bird and lawn seed. Mice love dark areas, such as closets, garages, attics, crawl spaces, and any other areas where they can stay concealed and close to their food supply.

Once mice are inside of a building, workers can track them by locating their droppings where they are foraging for food. But beware: Large roach droppings can look the same as

mice droppings, so workers should be careful not to confuse the two.

The key strategy in this instance is to remove anything that could serve as a home for mice around the outside of a facility. Grounds crews should keep weeds down and grass mowed closely -under shrubs and trees. Also, they should avoid storing mulch piles in the fall because warm mulch is a perfect place for mice to spend the winter.

Rats will move into any structure. They are excellent climbers and can enter property by climbing up stucco, brick or wood siding walls.

Rats can enter a building through even the smallest point of entry, one that often is difficult to locate. Workers should pay particular attention to areas such as vent pipes, gable vents, spaces around soffits, the spaces between fascia boards, and any exhaust-pipe holes.

If rats cannot find an available opening, they often will chew their way into a building. They can be located by tracking their droppings, which often are about the size of a red or black bean.

Rodent-control methods usually consist of live traps, snap-shut traps, poisons and glue boards. Rodenticides are a common ingredient of rodent-control efforts, but one problem can occur with this type of product. The rodent can die within a wall or an inaccessible void, causing odors and a new set of challenges. Trapping often is an effective method of getting rid of these rodents.

Birds

Problem birds - pigeons, sparrows, geese, swallows, crows, ducks, woodpeckers, starlings, and blackbirds - can cause a host of problems for maintenance managers. Birds, especially pigeons, love to roost and nest in and around rooftop equipment, and foraging birds can damage buildings, equipment, landscapes and plants.

Many facilities use devices such as strips of metal spikes around rooftop equipment, building ledges, windowsills, and gutters. These devices are designed to make it impossible for any birds to land and nest on the surface. Scented repellants also are commonly used to

keep birds away from the outside surfaces of facilities. These products emit scents that cause mild changes in the physiological state of the bird, confusing the bird and causing it to avoid the area.

Often, chemicals with these scents come in easy-to-use cartridges that fit into caulk guns, which workers use to apply the gel to areas where birds land and roost.

Another type of bird repellent comes in liquid form and works well when applied to trees or anyplace birds routinely roost and nest. Workers should be aware of one caution with using these types of products - they will soak into porous materials and discolor them.

Finally, facilities have used several sound devices successfully over the years. One popular type of device emits a shrill sound that scares away birds, while another type of device uses ultrasound. This device makes no noise that is audible to people, but the series of sounds it emits distresses birds and keeps them away.

Ants

Facilities must deal with many types of ants, including small honey ants, citronella ants, carpenter ants, acrobat ants, thief ants, fire ants, house ants, odorous house ants and pharaoh ants. Each ant species requires a different strategy for control. Some ants live outside of a facility, while others more often can be found inside.

A three-step approach can help control most ant problems. This approach includes baiting key areas inside of a facility, along with spraying and baiting the outside of the facility.

No doubt the surest method of control is the bait that ants carry back to the nest. Ants find this bait and bring it back to their nests and colonies, where other members eat the bait and die. The advantage of this method over spraying is that it destroys colonies and nests. Spraying, on the other hand, usually takes care only of the ants receiving the spray and leaves those back at the colonies untouched.

Cockroaches

A new trend for controlling cockroaches is the implementation of a multi-discipline strategy that can include vacuuming, baiting and trappings. In the past, most commercial and institutional facilities have used insecticides, but this method offers limited benefits. Vacuuming for cockroaches has become the method of choice by many pest management professionals in recent years, as not even resistant cockroaches can withstand direct physical removal through vacuuming.

Flies

When it becomes necessary to get serious about fly con-

trol, managers and crews should begin their efforts by seeking out the source of the problem. Interior areas and conditions to monitor include food preparation areas, dirty trash receptacles, areas where mops and dirty rags are left on the ground, and waste containers located inside a receiving area.

Exterior areas and conditions to monitor include large waste containers, drains, excessive clutter, spills on floors and pallets, areas of high weed growth and decaying organic vegetation.

When surveying a facility, managers should determine whether existing conditions are conducive to the presence of flies. Spraying, using flypaper strips and removing or cleaning the source that draws the flies is often the best method of combat.

The challenge in pest control is to determine the best method or combination of methods that produce the best results. The successful managers will be those who can orchestrate the methods, schedules and people to meet a facilities' pest control needs - and do it safely and cost-effectively.



Article reprinted with permission.

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



CONSTANT
FIRE PROTECTION SYSTEMS LTD.

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*



**Gasonic
Instruments**
A Member of the Gasonic Group

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!

SIGN'S
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:

(Answers on page 15)

- Fill in the numbers from 1 –6
- Do not repeat the 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 in the same or column

2-		3+		2-	
2÷		108x	1-	3÷	3+
30x					
			1-		1-
24x	8x		1-		
		4-		3-	

BOA Canada Magazine printed & distributed by:

SURE PRINT & COPY

CONSULTING • DESIGN • INSPECTION • TESTING SERVICES

Anton J. Vlooswyk, P.Eng.
Cel: (403) 651-1514
Tel: (403) 287-0888
Fax: (403) 287-0880
Email: anton@beci.ca



**BUILDING
ENVELOPE
ENGINEERING
INC.**

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

The Doors to Reliability

by Thomas A. Westerkamp

Three issues and 10 steps on the road to long performance life and smooth operation for doors and door hardware.

Managers face three central issues when making door and door hardware decisions: ensuring ADA compliance, monitoring fire ratings, and handling daily wear and tear. Change is a constant when it comes to doors and hardware materials, specifications and applications. Perhaps the biggest challenge for engineering and maintenance managers is ensuring that facility doors and hardware meet the requirements of regulatory compliance.

Beyond compliance, however, lies performance. Managers in any facility can benefit from an inspection and maintenance program designed to extend reliability and performance life while optimizing demands on resources and keeping costs low.

ADA requirements

The objective of the Americans with Disabilities Act (ADA) is to provide equal access to facilities for all. It has had the positive result of prompting physical plant managers to review their facilities for accessibility, with special emphasis on the needs of those public facilities users with impaired speech, hearing or mobility.

Automatic doors that meet ANSI standards A117 and ANSI AL56. 19 can be installed in new or existing facilities. Features that enable easy access include:

- adjustable open and close speed
- adjustable time delay
- push-button activation
- a push and go option
- power-assist open feature.

Safety features for doors include:

- an operator that turns off if the door meets an obstruction
- a door that reopens if stopped during close
- a safety scan sensor mounted on the door that reduces contact with the door.

ADA and other compliance issues have challenged managers to find resources to help in monitoring compliance work. Thousands of hours of deferred maintenance have resulted as budgets often lag behind the workload, or low productivity limits the amount of work accomplished. A state-of-the art planning and scheduling system can provide relief for such problems.

Fire ratings

Fire ratings, based on the time it takes for fire to burn through the door, are regulated by law, and they affect owners' insurance costs. All doors have firing rating requirements that determine the materials and construction method used in their manufacture.

A building's construction plans will contain the design fire ratings of the original components. The physical plant manager must know these requirements so that the proper specifications are used when ordering or making new or replacement doors or hardware.

Daily wear and tear

The building use and number of users implies a certain level of daily normal wear and tear on doors and door hardware. Main entrances and exits, for example, receive a lot of daily wear and tear. The number of open and close cycles on some high-use buildings can be easily in the hundreds, if not the thousands.

Repair, adjustment and replacement for these applications will be much higher than for, say, emergency exits that are never used, except to test their operation or during an actual emergency. Frequency of maintenance will be much different in these two cases, even though the doors are very similar in construction and the tasks to maintain them are similar.

Ten steps to reliability

The following 10-step inspection and maintenance program will help to ensure optimum reliability and long performance life for doors and door hardware, along with high regulatory compliance, when it is used in conjunction with regular, periodic reviews of regulatory changes.

Step 1. Inventory all doors by type and location. If a building is fairly new, the plans and specifications documentation contain this information. If the building is older, some items may have been replaced. Documentation such as type of door, hardware, maintenance requirements, and lubrication and adjustment frequency is needed. Information for the replaced items may be harder to gather. In some cases, this can be obtained from the manufacturer of the replacement doors or hardware.

Step 2. Obtain recommended maintenance procedures. From the documentation, select the recommended preventive inspections, lubrication, adjustment and repair procedures. Also, check for the recommended frequency of service for repetitive tasks, such as inspection, lubrication and adjustment.

Step 3. Develop maintenance frequencies and tasks for doors and hardware that do not have documentation. If an item is obsolete, information may no longer be available from the manufacturer. In such cases, tasks can be determined from documentation for similar items. Estimate the frequency to begin with, and adjust it according to experience. If a lot of unscheduled repairs are required between scheduled inspections, lubrications and adjustments, the frequency of these preventive maintenance (PM) tasks probably need to be increased, assuming the PM was done right.

Step 4. Assign task frequency and time. Enter each task and the time required to perform it on an annual schedule. Distribute the tasks throughout the year by giving each task an identification number that is entered on the annual schedule calendar on each date it is to be done. For example, a quarterly door closer adjustment may be entered on the annual schedule calendar in January, April, July and October.

Step 5. Make the first pass at grouping the tasks into routes. It is a big advantage to group tasks that occur in the same building or area together so they occur at the same schedule time. This grouping can eliminate excess travel time. All of the door and hardware jobs that must be done in an area are done at the same time while the worker is in the area.

Step 6. Inspect the calendar for route improvements. The first time the jobs are scheduled, some unevenness may result. Too many jobs for the available resources may occur at some times and not enough at other times. By examining the schedule for this bunching of tasks, a planner can evaluate the distribution and improve it. At the same time, the planner can look for excess distance between tasks.

Step 7. Make a second pass at grouping tasks into routes. Redistribute the tasks for more even spacing over time to better use resources, and for better grouping by area to reduce travel time.

Step 8. Inspect the calendar for even distribution of tasks by date and location. Re-evaluate the annual schedule after the changes are made to look for more improvement opportunities. Seasonal considerations are important. Crews don't want to be working on exit doors in mid-winter if the facility is located in a cold climate, unless there is no alternative. If the routine preventive work is done right before the cold season, there is less likelihood repairs will be necessary during cold weather.

Step 9. Make initial assignment of door inspection and maintenance routes, and check compliance. The payoff begins when the scheduled tasks are assigned to maintenance people and the work is completed on schedule.

The planning function usually prepares compliance reports for management showing the number of jobs scheduled versus the number completed. Frequency of reporting is daily or weekly. Frequent compliance checks are the key to high compliance. If the compliance is only

checked monthly, it often is too late. By then, the reason for non-compliance will be too hard to establish, and corrective action will be very hard to do.

Step 10. Follow-up involves updating the system as regulations or building occupancies change. Revisions occur occasionally based on hearings to address public concerns about the regulatory impact. These hearings can result in changes to the established maintenance practices.

If building occupancy or use changes, the number of people entering and leaving will also change, affecting wear and tear on the doors and hardware. Inspection and adjustment frequencies will have to be increased to keep up with the increased traffic.



Engineered maintenance standards

In Step 6 — assign task frequency and times — the method used to apply times will affect accuracy of the backlog, which is the amount of work to be done. If estimates are used, inaccuracies creep in, due to perpetuating past delays and other problems. The best approach is to use engineered standard times and work-content comparison techniques. Key typical door jobs are planned using engineered standards. Then they are slotted into ranges of time.

Other jobs can be compared to these key typical jobs — called bench marks. If the work content is similar, the job time will be the same. Time for travel, job preparation, personal rest and minor unavoidable delay are added. With this approach, the accurate measurement of a small fraction of the jobs performed enables the planner to cover all jobs with accurate engineered times.

If the backlog is accurately known, managers can set staffing, plan jobs schedule with better chance of high schedule compliance, and crew performance management can be accomplished. This technique can be used for planning all types of maintenance work.



Article reprinted with permission from the author

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

Alberta Chief Power Engineers Education Conference ~ Cancelled



After 5 consecutive years of hosting its conference from inception the Alberta Chief Power Engineers Education Conference Committee made the difficult decision to cancel the 2020 conference due to impacts of COVID-19 and the uncertainty around being able to offer a safe conference for all participants and sponsors. This has not stopped the team from collaborating with sponsors to find a unique way to make an impact in 2020. A long-time sponsor approached the committee after the cancellation notice and suggested that a technical publication/brochure might be a way to continue the momentum and allow for sponsors and participants to work together and learn from each other.

Based on feedback from other sponsors the committee has decided to pursue this opportunity to support our sponsors and participants. All proceeds from this year's sponsorship will be donated to charity on behalf of the committee. Sponsors will be given the opportunity to donate by purchasing 1 or 2 pages of space in the publication to outline their business and services. The committee will also be adding some technical papers and other pertinent information for Chief Power Engineers.

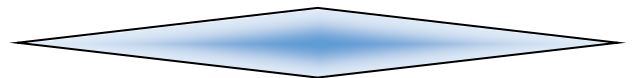
We look forward to having this publication completed and circulated in November 2020 and we hope to see everyone again in person at our conference on October 26-27, 2021 in Edmonton, Alberta.

On behalf of the committee we hope you all stay safe and healthy.

If you have any questions please contact George Mitsopoulos, Vice President – Alberta Chief Power Engineers Education Committee at george.mitsopoulos@intl.cnoccltd.com

Kenken Puzzle Answer

²⁻ 3	5	³⁺ 1	2	²⁻ 4	6
^{2÷} 2	4	^{108×} 6	¹⁻ 5	^{3÷} 3	³⁺ 1
^{30×} 5	6	3	4	1	2
1	3	2	¹⁻ 6	5	¹⁻ 4
^{24×} 6	^{8×} 1	4	¹⁻ 3	2	5
4	2	⁴⁻ 5	1	³⁻ 6	3



TEST YOUR OPERATOR IQ ANSWERS:

Answers: 1) A 2) D 3) E 4) E 5) B

EXECUTIVE MEETING MINUTES

Building Operators Association (BOA) Executive Meeting Minutes

September 1, 2020, 5:05 pm, Virtual Meeting

Executive: Casey K, Mike T, Les A, Kyle A Carrissa S, Mark A, & Monika B

- Trade Show postponed to May 2021
- Will host General Meeting on September 8, 2020 virtually at 5pm
- Email reminder will be sent out
- Guest Speaker: Dennis Aranas - Honeywell & Shawn McLean - WestExcel Automation
- Presentation: Honeywell Building Systems
- Topic : Healthy Building Initiative

Adjourned: 6:05pm



General Meeting Minutes

Chaired by: Mark Arton	Minutes by: Monika Bhandari	Call to order: 5:03pm	Webinar: September 8, 2020
---------------------------	--------------------------------	--------------------------	----------------------------

New Business:

- BOA Magazine:
 - September issue – available online
 - October issue – to be mailed out
- Monika Bhandari – Editor, to take over the Magazine responsibilities from Vicki Gibbs
- Mike Thompson - Webmaster to look after new website from Casey Kok – Casey still active within BOA
- Les Anderson - President
- Mark Arton – Vice President
- Mike Gerald – Associate Vice President
- Treasurer – Carrissa Speager
- Secretary – Monika Bhandari
- Education Committee – Shaun McLean
- Activities Committee – Mike Gerald
- Technical Concerns – Kyle D’Agostino
- Tradeshow postponed until May 2021 due to Covid-19
- Invoices to Membership to be mailed out this month; can pay through paypal on www.boacalgary.com website
- Next meeting will be virtual and will take place on October 13 at 5pm – Guest Speaker will be Mike Gerald of BGE Indoor Air Quality Solutions

Guest Speaker: Dennis Aranas - Honeywell & Shawn McLean - WestExcel Automation

Topic of Presentation: Honeywell Building Systems - Healthy Building Initiative

WestExcel Automation Ltd.

Commercial Building Automation Solutions Provider
Over 30 product lines including



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



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.



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

GOLD LEVEL SPONSORS















SILVER LEVEL SPONSORS













BRONZE LEVEL SPONSORS















Advertisers Directory

Automation WestExcel Automation Ltd.	403-404-3660
Boiler Services Black & McDonald Quality Combustion & Controls	403-235-0331 403-936-0065
Cleaning / Janitorial Services Regency Cleaning	403-520-7788
Drain Services Revive Pipes	403-903-4445
Engineering Services Building Envelope Engineering	403-287-0888
Filtration BGE Air Quality Solutions Ltd. Alberta Diesel Dialysis	403-243-5941 403-813-9999
Fire Protection Services Constant Fire Protection Sprouse First & Safety	403-279-7973 403-265-3891
HVAC & Electrical Services Black & McDonald Boulder Mechanical Contractors Ltd.	403-235-0331 403-230-5519
Indoor Air Quality Services Gasonic Instrument Inc, Black & McDonald	403-276-2201 403-235-0331
Lighting Services Calgary Lighting Products	403-258-2988
Motor Services James Electric Motor 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!

<https://www.absa.ca/directories/alberta-certified-power-engineers-directory/>



Support those that support
YOU!

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



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

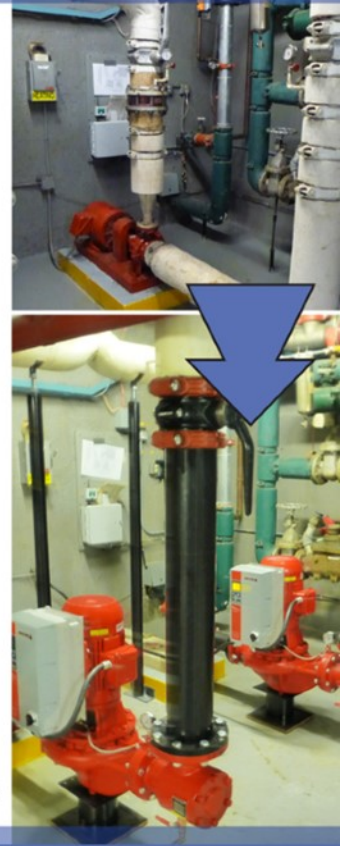
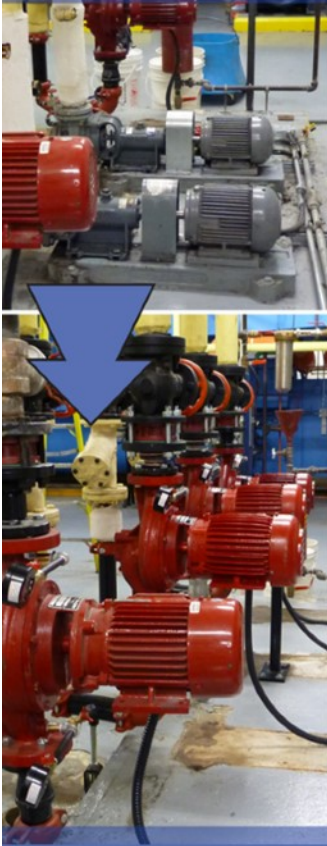
Airdex, AirKing, Broan, Dayton, Delhi, Fantech, Fasco, Greenheck, Lau, Nederman, Nutone, Schaefer, Tjernlund

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, Hygienic designed 316SS manifolds



4020 - 8 Avenue S.E, Calgary, Alberta, T2G 3A7 www.jameselectric.ca motors@jameselectric.ca



Calgary Lighting Products

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@ccisab.ca
1111-11 Ave SW 5th Floor
Calgary, Alberta T2R 0G5
www.ogtp.ca

Funder by:   In Partnership with: 



Services

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


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

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.blackandmedonald.com