

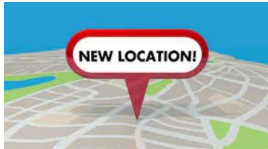


BOA

Building Operators Association of

Canada

Official Publication of the Building Operators Association (Calgary)
May 2026



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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

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Front Cover

BBA Photography



President's Message

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



I would like to introduce the newest member of the BOA Executive, Victor Grant.

Victor has many years experience in the operations field. He has worked as a contractor, a consultant, a blogger, a manager and most importantly a Building Operator. Victor will add a new flavor to the association. Welcome Victor!!

The Building Operators Association is now preparing for a fall trade show. I'm sure it will be an afternoon of great information and fellowship. I return to Canada at the beginning of June and will put my back into organizing and assisting the Executive to set up for this.

We are still working well with BOMA Calgary, our representative is, CJ Curtis, General Manager with Quadreal Properties. We

have been offered a corporate membership to the Building Operators Association and supported by BOMA Calgary. But more important than just being a member, is to have some of the Building Operators and their associates attend the monthly guest speaker event. There are always great speakers delivering good useful information. For example, Shane of Pure Electrical Solutions will be speaking on transient Voltage Surge Suppressors. Today's electrical equipment is fast, very sensitive and susceptible to any spikes.

Please, here is my invitation to you. Hope to see you May 12 at 5PM.

Smiles))

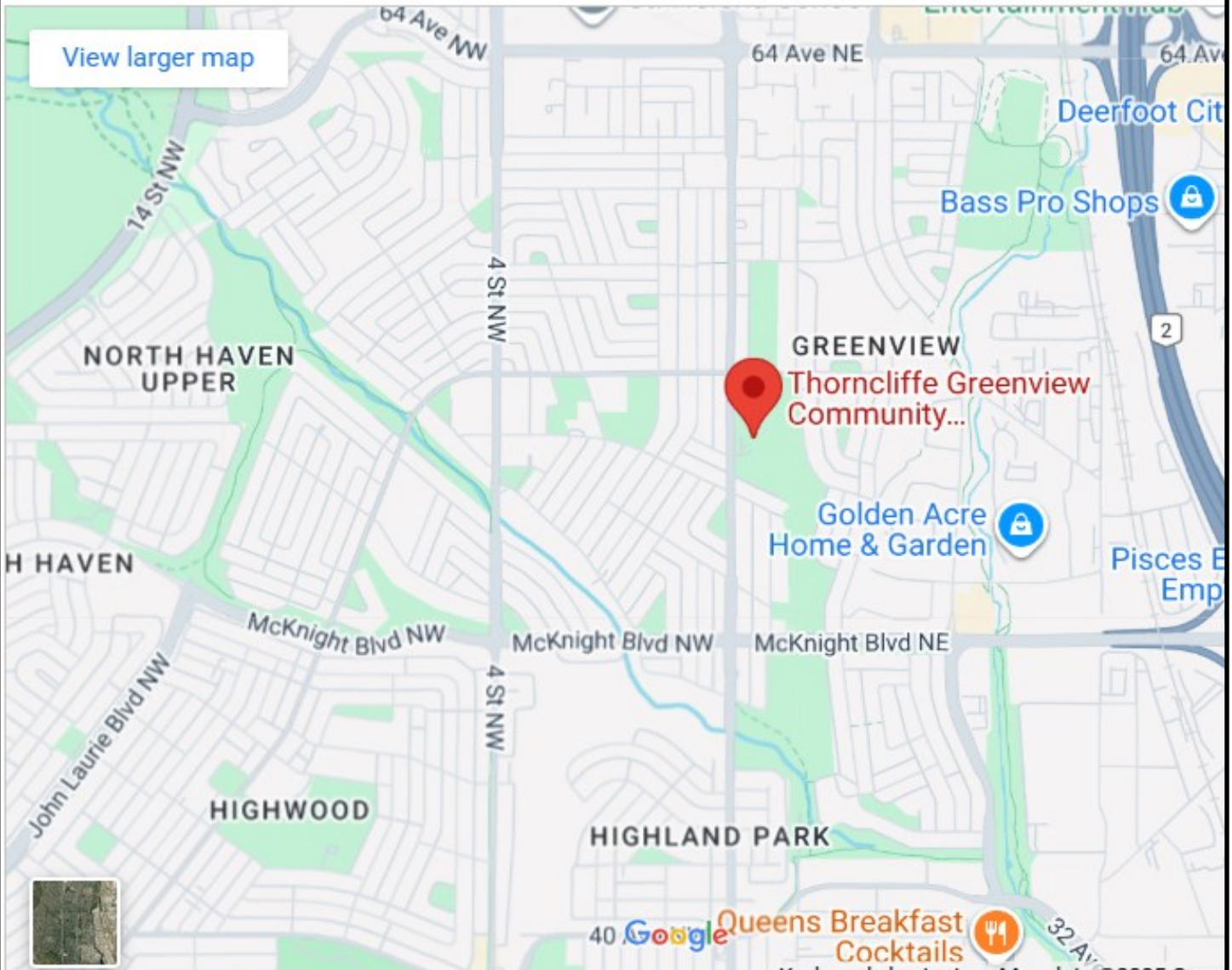
Les Anderson
BOA Calgary President



**Join us at our Monthly Meeting on
Tuesday May 12th, 2026**

at our new location:

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**Meeting starts at 5pm to 7pm
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May
1



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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 33

- 1. A factor that has a large impact on the outcome of a worker's post accident recovery is his:**
 - a) a) pre-accident safety record
 - b) b) life style off the job
 - c) c) support received from the immediate family
 - d) d) attitude before and after the accident
 - e) e) current financial situation

- 2. Alberta Workers' Compensation Board records indicate that the approximate average number of workplace fatalities occurring in the province may be about:**
 - a) 2 per week
 - b) 2 per month
 - c) 290 per year
 - d) 2000 per decade
 - e) 50 per year

- 3. An annual report containing injury information is filed by the:**
 - a) AEPEA (Alberta Environment Protection & Enhancement Act)
 - b) AOHSA (Alberta Occupational Health & Safety Act)
 - c) OHSM (Occupational Health & Safety Magazine)
 - d) ADL (Alberta Department of Labor)
 - e) AWCB (Alberta Workers Compensation Board)

- 4. An employer must ensure the health and safety of his workers**
 - a) before their probationary period expires
 - b) only during times of production
 - c) except during company off-site activities
 - d) as per the group life insurance policy
 - e) reasonably and practicably

- 5. During an injury related investigation by an Occupational Health and Safety officer, work being done at the site may be suspended:**
 - a) indefinitely
 - b) until the officer arrives at the scene
 - c) for a maximum of 48 hours
 - d) long enough to attend to the victim
 - e) until any serious safety hazards are corrected

The Road To Safety



Safe workplaces don't just happen. Reaching that goal requires managers to plan, act and follow up

The work of maintenance and engineering departments is fraught with potential dangers. From inspecting boilers and troubleshooting power distribution systems to inspecting roofs and using power tools, workers face safety hazards daily.

An effective employee safety and health program is a decisive factor in reducing work-related injuries and illnesses. For a safety program to be effective, it must address all workplace-related hazards.

Regulations govern many hazards employers must identify. But whether

regulations govern hazards or not, maintenance and engineering managers and their staffs must identify and address existing and potential hazards, including those occurring from changes in workplace conditions and practices. Departments must identify and control job-site hazards for a safety and health program to succeed.

Effective safety and health programs — those that keep employee injury rates exceptionally low — typically have common characteristics. These characteristics include organized and systematic methods for assigning appropriate responsibilities to all managers, supervisors and employees, such as continually identifying, inspecting and controlling existing and potential workplace hazards.

The benefits of controlling workplace hazards,

however, go far beyond lowering worker injury rates. They also include improved worker morale, higher productivity rates, and an improved bottom line for the organization due to reduced worker compensation rates, as well as other direct and indirect costs.

An engineering and maintenance staff's duties have a great deal of influence on the success of workplace safety programs because their daily duties are among the most hazardous activities that take place in facilities.



Setting goals and direction

Everyone is responsible for safety, but effective safety programs require recognition and support from top management. Maintenance managers should not despair if upper management at a facility offers little or no support. With a little research and salesmanship, managers can easily translate the benefits of safety to top management into dollars and cents.

The commitment of top management, along with employee participation, provides the synergy necessary for an effective program. Top management not only provides needed resources but also is

a motivating force for organizing and controlling program effectiveness. Involved and committed top management recognizes employee safety as a core value of the organization.

Employee involvement provides a commitment to safety and health protection for themselves and other workers. Maintenance and engineering duties require that both groups understand the importance of maintaining a commitment to safety.

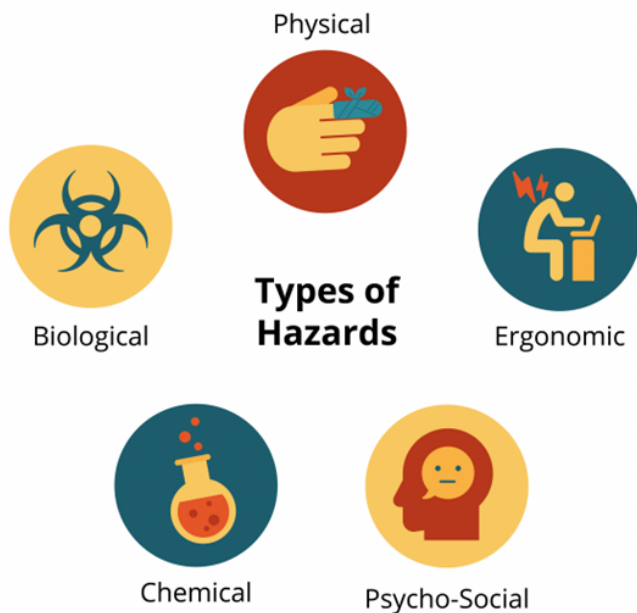
To make safety a priority, managers will have to develop clearly stated work-site policies on safety and health for engineering and maintenance staffs. Also, a policy statement will communicate the value of safety to the organization.

Managers also should establish goals and objectives for implementation. Since an effective program requires the commitment of employees and managers, all personnel in the organization must participate in its development, planning and operations.

Assigning safety responsibilities also should involve all staff. A clear statement of how these responsibilities relate to organizational goals and objectives is essential because employees won't perform if they don't know what is expected of them.

Maintenance and engineering departments also will need the necessary authority and resources so they can assign responsibilities. With authority comes accountability, however. It is crucial to track performance by the organization and individual departments

toward compliance and correct non-compliance.



Identifying hazards

The form of a safety and health program's elements and implementation actions varies at each organization, based on its size and the nature of hazards and potential hazards the program addresses.

One element that will surely fall in the lap of engineering and maintenance departments is hazard identification, prevention and control related to maintenance tasks. In general, hazard prevention and control are triggered by a determination that a hazard or potential hazard exists in the workplace. But identifying hazards and potential hazards in the workplace requires an active engineering and maintenance staff.

Ongoing examinations of work processes and working conditions must be thorough because many hazards can be difficult to recognize, and recognizing hazards that could result from new or changed work

practices or conditions requires special observation and thought.

In fact, identifying existing and foreseeable hazards might require outside expertise, but a systematic and thorough approach involving both managers and workers can uncover most hazards.

One particular area of safety responsibility for maintenance and engineering departments relates to preventive maintenance. Besides helping departments head off potential equipment problems, preventive maintenance is essential in revealing potential hazards and preventing breakdowns that could create safety hazards.

Another essential task for maintenance departments involves analyzing planned and new facilities, processes, materials and equipment for hazards. Departments should perform these analyses routinely to uncover previously unidentified hazards. The successful involvement of employees in hazard prevention and control requires that they understand the threat a hazard poses and ways they can protect themselves and others.

Personnel who perform comprehensive baseline and specific-hazard audits might require greater expertise than those doing routine inspections. Technicians who perform regular assessments, audits and inspections should have enough experience and competence to recognize hazards and identify the actions to resolve them.

Involving employees in efforts to identify and control hazards gives them valuable insights into the process. In many instances, workers

understand specific hazards better than managers and supervisors, and they know the resources that are necessary to correct and control them.



Designing inspections

The assessments, audits and inspections that departments use must fit the goals and objectives of their organizations' safety and health programs, so managers must be thorough when developing and implementing them.

Managers first must know where to look for safety hazards. If reducing worker injuries is a goal, using accident and workers compensation statistics might determine where to focus resources. If regulatory compliance is a goal, findings from a mock inspection by the Occupational Safety and Health Administration or a review of common citations to a particular facility type might provide guidance.

Assessments, audits and inspections can be general, specific or somewhere in between. For instance, periodic inspections could start with a facility-wide or

department-wide general approach, and alternating inspections and audits could focus more specifically on operations.

Examples of more focused approaches include evaluations of electrical, fire safety or machine guarding in specific areas, such as offices, production areas, warehouses or maintenance shops. Reviewing recent injuries, accidents or near-miss instances will identify hot spots that might require more focused attention.

Other considerations in designing hazard assessments, audits and safety inspections include who will conduct them, the time and expertise necessary, experience and additional training required, how often they will be performed, when they will be performed, and whether they will be announced or unannounced.



Getting results

Identifying unsafe work practices and hazardous conditions only has value to an organization if it uses that information to develop and implement corrective measures. To maintain the credibility of a safety program, managers need to address the identified practices with prompt follow-up.

But following up on recommendations should not end at the actual unsafe act or condition.

Engineering and maintenance managers need to ask, “How or why did this event occur?” Correcting work practices and providing training will help prevent a reoccurrence.

If managers fail to follow up on employee recommendations in a timely manner, however, the whole system is likely to lose credibility.

Measuring performance

How can a maintenance department prove that resources used to improve safety are working? Managers must address two questions: Are injuries, accidents and near misses reduced? Are workers’ compensation and insurance rates lower? To show that safety pays, managers can highlight answers to these questions for everyone in the organization.

For programs to succeed, managers first must get support and direction from upper management. Once this support is in place, managers can develop the scope of the safety program and implement the necessary assessments, audits and inspections.

Once a program identifies hazardous and unsafe conditions, managers must take timely action to address the problems to ensure the program’s credibility.

Safety Pays: A Case Study

General safety inspections, accidents, and near misses can help identify the need for more focused inspections. Consider this example:

A large laboratory performing general safety inspections uncovered electrical cords from equipment hanging over work areas, presenting tripping and snagging hazards. A more thorough inspection revealed several incidents of employees tripping on cords while carrying chemicals resulting in spills.

The company held in-services to make employees aware of the hazards of dangling electrical cords. A follow-up inspection found that employees had secured long electrical cords by pinching them in draws.

This new action caused the cords to fray, exposing bare wires in areas where flammable liquids were used on a regular basis. A follow-up focus inspection identified the new hazard that was promptly corrected.

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Key steps in the KPI process



Welcome to BOA's Newest Member: Victor Grant

It is an honour to join Calgary's Building Operators Association Executive as Vice President. Having worked in Building Operations and Maintenance for the last 10 years, or 15 if you count the overtime, which we all know adds up, I have lived the daily challenges professionals in our industry face.

My career has steadily progressed from Maintenance Technician to Building Operator, then to Operations Supervisor, and currently to Operations Manager. While my specialization lies in retail strip centres, enclosed shopping centres, and professional centres, I also have experience managing small office buildings, industrial, and warehouse assets.

In this role, I am committed to fostering a culture of education and progress. I firmly believe two mantras will get a person very far in this industry:

Nothing well done is insignificant.

Make at least one thing better in every single place you go.

If a technician, operator, supervisor, or manager keeps those two ideas in mind, amazing things happen. I look forward to collaborating with our partners and supporters to ensure the BOAC continues to thrive and serve our community effectively.

When I'm not overseeing assets or helping out on the tools, you can find me officiating AA, AAA, and Junior Hockey in the winter and heading out camping during the summer.

I look forward to seeing you soon!



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368.338.7378

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The Invisible Resident: Why Legionella Management is the True Test of a Facility Manager's Leadership

[Juan Carlos LaGuardia Merchán](#)



Let's be honest. When you walk through a sleek, high-performing building, you're usually looking at the finish of the lobby, the responsiveness of the HVAC system, or the efficiency of the lighting. But as seasoned Facility Managers, we know the real pulse of a building lies where no one looks in the dark, damp corners of the pipework and the mist of the cooling towers.

As we transition from low-capacity operations or seasonal shutdowns, we face a silent but formidable opponent. ***Legionella***.

If you've been in this game as long as I have, you know that a building is a living organism. When it's active, it breathes and flows. But when water sits still whether in a mothballed wing of an office or a cooling tower that hasn't seen full load in months

stagnation sets in. And in our world, stagnation is the precursor to crisis.

The Biology of the "Dead Leg"

We often talk about "dead legs" in plumbing as a technical fault, but I prefer to think of them as a failure of oversight. When water stops moving, it warms up. It reaches that "sweet spot" between 20°C and 45°C where ***Legionella bacteria*** don't just survive; they throw a party.

But the bacteria aren't the only issue. It's the biofilm that stubborn, slimy layer of microorganisms that clings to the inside of pipes. Think of it like plaque on teeth, but much harder to scrub away. Biofilms protect bacteria from standard doses of chlorine, acting like a fortress. If you simply "turn the taps on" without a strategy, you're not just moving water; you're potentially aerosolising a biological hazard.

British Standards and Global Responsibility

Operating in the UK, we are guided by the HSE's ACoP L8 and HSG274. In Spain, you'll be looking at the Real Decreto. Regardless of the acronym, the spirit of the law is the same: the "Responsible Person" must take ownership.

I've led teams through dozens of plant reactivations, and if there's one thing I've learned, it's that shortcuts are an illusion. You might save a few pounds on a cheaper chemical analysis today, but the cost of an outbreak both in human terms and reputational damage is immeasurable. Before the heat of summer truly bites, we must be surgical. We need deep cleans that actually reach the headers of the towers, and we need biocides that are tested against the specific chemistry of our local water supply.

Leading the Multidisciplinary Charge

Managing *Legionella* isn't just a job for the water treatment contractor. It's a leadership challenge. As a Facility Manager, you are the conductor of an orchestra. You have the mechanical engineers checking the drift eliminators, the chemists measuring ppm levels, and the BMS technicians monitoring flow rates.

Your job is to ensure they aren't working in silos. I've seen cases where the maintenance team thought the water treatment was "handled," while the water treatment guys assumed the pumps were being cycled manually. They weren't. Communication is the best biocide we have.

The "Pre-Heat" Checklist: A Call to Action

Before the thermometers hit 25°C, your strategy should be in full swing.

- **The Physical Clean:** Don't just dose it; scrub it. Remove the scale where bacteria hide.
- **The Chemical Shock:** A rigorous disinfection of the entire system, not just the tank.
- **The Sampling:** Legionella testing is a snapshot in time. Make sure your samples are taken from "sentinel points the furthest

taps and the most at-risk areas.

- **The Logbook:** If it isn't written down, it didn't happen. In the eyes of a British inspector, an empty logbook is a confession of negligence.

The Human Element

At the end of the day, we do this for the people inside the building. Whether it's a young professional in a London high-rise or a patient in a hospital, they trust us to keep the invisible threats at bay. There is a certain quiet pride in knowing that your cooling towers are pristine, your pipework is flushed, and your team is vigilant.

Facility Management is often a thankless task when things go right, and a headline-maker when things go wrong. Let's make sure we stay out of the headlines for the right reasons.

Safety isn't a summer project; it's a year-round commitment to excellence. As we gear up for the warmer months, let's ensure our water systems are as professional and high performing as the teams we led.



Article reprinted with permission

IMPORT UPDATE: LOCKBOX PROGRAM



Honeywell has discontinued the TRACcess (Supra) lockbox product line along with all support and services. Because this change comes directly from the manufacturer, any Supra lockbox lids currently installed on business premises will need to be replaced or retrofitted to remain compliant with the National Fire Code.

To maintain secure emergency access and code compliance, all existing Supra lockbox lids must be retrofitted with the approved Knox Lift-Off Retro Lid before **December 31, 2026**. Orders should be placed through the Knox website before **October 30, 2026**, and installations must be completed by CFD. Non-compliance fees will apply after the deadline.

We've also implemented several cost-saving measures for businesses, including removing third-party lockbox inspection requirements, waiving key-add fees during retrofit, and eliminating the need for locksmith/provider contracts.

If you're able to distribute the notice below to your members, it would be extremely helpful in ensuring building operators are aware of these requirements and timelines.

If anyone has questions or needs clarification, they can visit calgary.ca/lockboxes or contact lockbox@calgary.ca.

Best regards,

Michael Garner

Fire Inspections Coordinator

Calgary Fire Department

Preserving the Past, Operating the Future: Smart Maintenance for Historic Buildings

Juan Carlos LaGuardia Merchán

Historic buildings are more than just structures; they are cultural landmarks that tell the story of our past. However, maintaining and operating these buildings effectively requires a balance between preservation and modernisation.

As a facility manager, I have witnessed firsthand the challenges of keeping these structures functional while respecting their heritage.

The key to success lies in integrating traditional maintenance practices with modern technologies. This ensures not only the longevity of these buildings but also their compliance with contemporary operational standards, improving safety, energy efficiency, and overall sustainability.

The Challenges of Maintaining Historic Buildings

Historic buildings often feature ageing materials, outdated systems, and structural vulnerabilities that make their maintenance more complex than that of modern buildings. Some of the key challenges include:

- **Structural integrity:** Many historic buildings were constructed using materials and techniques that differ significantly from modern construction standards. Over time, issues such as dampness, foundation settlement, and timber decay can threaten their stability.
- **Energy efficiency:** Older buildings were not designed with modern energy standards in mind. Many lack proper insulation, use inefficient heating systems, and have



outdated electrical wiring, leading to higher energy consumption.

- **Compliance with regulations:** Historic buildings are often subject to strict conservation laws, limiting the extent of modifications that can be made. This requires careful planning to ensure upgrades do not compromise their historical value.
- **Maintenance costs:** Due to the need for specialised materials and skilled craftsmanship, maintaining a historic building can be significantly more expensive than maintaining a modern one.

Best Practices for Maintaining Historic Buildings

1. Conducting a Comprehensive Building Assessment

Before undertaking any maintenance or restoration work, a thorough building survey is essential. This includes structural assessments, moisture detection, and thermal imaging to identify hidden issues such as leaks, insulation gaps, or foundation weaknesses.

I recently heard of a 19th-century public building where moisture ingress was causing severe damage to the internal walls. By using non-invasive diagnostic tools, we identified the source of the problem and implemented a targeted solution without disturbing the original masonry.

2. Preventive Maintenance: A Proactive Approach

Reactive maintenance in historic buildings often leads to extensive and costly repairs. Instead, a preventive maintenance plan ensures regular inspections and early

detection of potential issues. Key areas to monitor include:

- Roof and guttering systems to prevent water damage
- Structural elements such as beams and load-bearing walls
- Heating, ventilation, and electrical systems
- Facades and external finishes to avoid deterioration

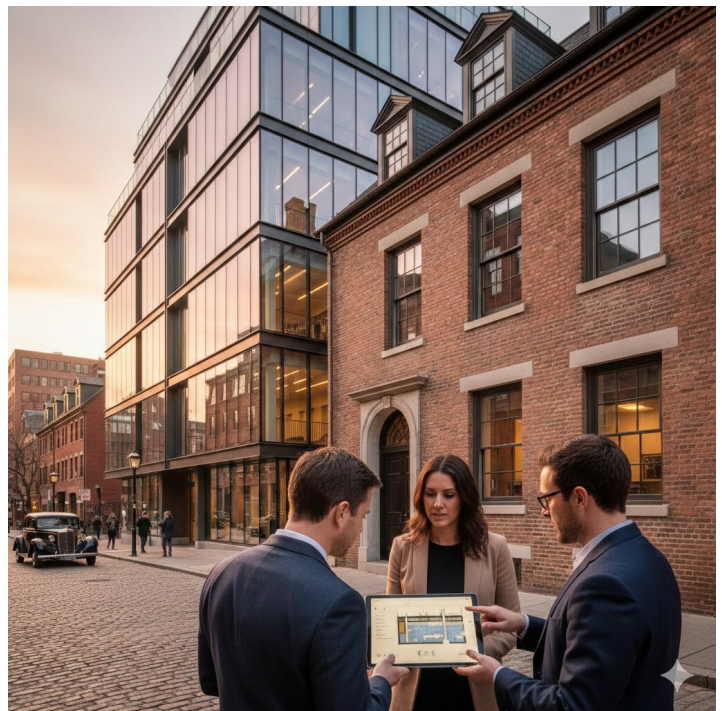
Scheduling routine inspections and minor repairs can significantly extend the lifespan of these buildings and reduce overall maintenance costs.

3. Integrating Modern Technologies Without Compromising Authenticity

One of the biggest challenges in historic building maintenance is modernising essential systems while maintaining their historic character.

Fortunately, advancements in technology provide solutions that allow for discreet yet effective integration:

- **Smart climate control systems** can be adapted to older buildings to regulate



temperature and humidity without invasive installation.

- **Wireless IoT sensors** can monitor structural movement, moisture levels, and air quality in

Using the wrong materials can cause irreversible damage to historic buildings. Cement, for instance, can trap moisture in old brickwork, leading to accelerated



real-time, allowing for data-driven maintenance decisions.

- **LED lighting retrofits** offer energy efficiency while preserving the aesthetic of traditional fixtures.

In a recent project, we replaced an outdated heating system in a listed building with an energy-efficient underfloor heating system that was installed beneath the original stone flooring, maintaining both functionality and aesthetics.

4. Using Compatible Materials and Conservation Techniques

deterioration. Instead, using traditional lime-based mortars and breathable paints ensures the building remains structurally sound while allowing it to “breathe.”

A notable example was a Georgian townhouse restoration where modern waterproof coatings had been applied to external walls, leading to trapped moisture and severe plaster damage. By carefully removing these coatings and restoring the original lime plaster, we allowed the building to dry out naturally, preventing further decay.

5. Digital Facility Management and Asset Monitoring

Implementing a **Computerised Maintenance Management System (CMMS)** tailored for historic buildings allows facility managers to:

- Track maintenance schedules and inspections
- Store detailed records of restoration works
- Optimise energy use and operational efficiency
- Manage compliance with conservation laws

I introduced a digital monitoring system in a heritage-listed property, enabling remote tracking of temperature fluctuations, dampness levels, and structural stability. This proactive approach reduced emergency repair costs and improved long-term planning.

6. Enhancing Energy Efficiency While Maintaining Heritage Value

Improving energy efficiency in historic buildings is a challenge, but strategic upgrades can make a significant difference without compromising authenticity. Key strategies include:

- **Secondary glazing** to enhance thermal performance while preserving original windows
- **Discreet solar panel integration** on rooftops or hidden areas
- **Energy-efficient boiler systems** that work with existing pipework

Sustainable insulation materials like sheep's wool or wood fibre boards

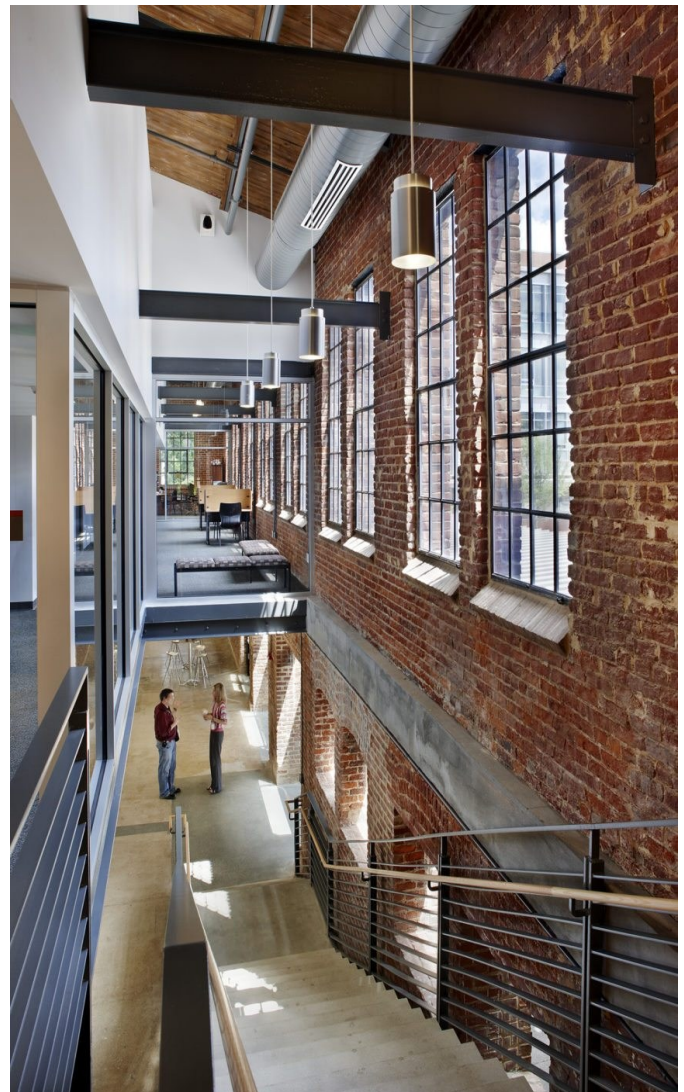
In one of my projects, we installed secondary glazing on a heritage-listed office building, reducing heat loss by 50% while maintaining the original sash window appearance.

The Role of Facility Managers in Historic Building Conservation

Facility managers play a crucial role in balancing preservation with operational efficiency. By integrating preventive maintenance, modern technologies, and sustainable solutions, we can ensure that historic buildings remain functional, safe, and financially viable.

From my experience, a successful approach to historic building maintenance is built on three pillars: **knowledge, adaptability, and respect for heritage**. We must embrace technology while upholding the craftsmanship that defines these structures.

Article reprinted with permission



Let's Talk Building Ops: Past, Present & Future Building Operator

[Paolo Cordovado](#)

Things are changing fast in this industry.

Faster than most people probably realize.

You can walk into two buildings today same size, same systems on paper and the way they're operated could be completely different depending on the operator.

Let's break it down: past, present, and where this is all heading.

The Past Operator

The past operator was hands-on. Like really hands-on.

You didn't just call someone, you tried to

fix it first.

Whether it was mechanical, plumbing, or electrical (to a certain extent lol), operators had a strong Building Ops 101 knowledge. You knew how systems worked, what they sounded like, how they reacted, and most importantly when something wasn't right.

You learned your building through:

- Daily rounds
- Listening to equipment
- Feeling temps and pressures

Trial and error

If something broke, the first thought wasn't "replace it" it was "what's wrong with it?" "All



hands on deck to repair.”

Saying the past operators were more hands on comes with the flip side, Liability! One word changed so much in our industry. While I agree with some items, I still feel there is a lot of items that operators can complete if they are trained properly.

There was also a deeper connection to the building. Almost like it was your own but more importantly they were connected to their buildings through their senses. My dad told me early on in my career “walk into your mechanical room and just listen” I know operators that can tell you what the problem is while they’re standing outside of the mechanical room. You listen, you feel, you look deeper, slowly overtime you will build that connection with each piece of equipment.

Not saying everything was perfect... but the knowledge was there and that knowledge saved a lot of money.

The Present Operator

This is where things get interesting.

Operators today are in the middle of a technology shift. Although technology has been rapidly changing for a while in the industry. it’s not just the AAA offices switching to better technology, it’s everyone and everywhere.

BAS systems are smarter, analytics are everywhere, alarms are constant, and dashboards are doing a lot of the talking.

But here’s the thing you still need that Building Ops 101 knowledge.

You can’t rely on a screen to tell you everything. I feel like the classic example that is used is a Valve position. BAS shows it 100% open but the tenants are complaining they don’t feel cooling. Some operators go the east route and say it shows 100% open but have you been to the valve? Have you seen it modulating?

You still need to understand:

- What the system is doing
- Why it’s doing it

And if it even makes sense

Right now, the best operators are the ones who can do both:

Understand the system physically and navigate the technology controlling it

You’re not just turning wrenches anymore you’re reading data, interpreting trends, and making decisions based on both, while still trying to look into the future.

It’s a bit of both worlds right now.

And honestly, it’s not easy.

The Future Building Operator

Here’s where things flip a bit.

The future operator will need to be technology first, and that’s a big shift.

You’re going to be:

- Monitoring systems remotely
- Diagnosing issues through data
- Managing software, sensors, and integrations
- Proactively catching issues before they even happen

Sounds great... but there's a catch.

A lot of this is moving toward:

- Replace over repair
- technology vs on site conditions

Call a vendor over troubleshoot

Why? Because the deep system knowledge isn't always there anymore, that's where things get a little backwards. We're heading into a space where operators might, know the software better than the equipment, see the alarm before understanding the cause, replace parts before fully diagnosing the issue.

Where Do We Go From Here

This isn't about saying one is better than the other. It's about finding the balance.

The best operators moving forward will be the ones who, still understand Building Ops

101, still do their rounds, still listen to their equipment but also embrace the technology and use it properly. Technology should support your knowledge, not replace it. Because at the end of the day, when systems go down you can't troubleshoot a building with a dashboard alone.

The role of a building operator isn't getting easier, it's getting more layered.

Past operators built the foundation.

Present operators are bridging the gap.

Future operators will redefine the role completely.

The question is — which one are you preparing to be?

Stay curious. Stay hands-on. And don't lose the basics.

BUILDING OPS 101

THE BASICS NEVER CHANGE.

- KNOW YOUR SYSTEMS.**
Understand how everything works.
- LISTEN. LOOK. FEEL.**
Your building talks to you.
- TROUBLESHOOT.**
Diagnose before you replace.
- MAINTAIN.**
Little today, saves big tomorrow.

**STRONG FOUNDATIONS.
STRONGER BUILDINGS.**

THE FUTURE OPERATOR:

TECHNOLOGY FIRST. PEOPLE ALWAYS.

- MONITOR ANYWHERE**
- ANALYZE TRENDS**
- CATCH ISSUES EARLY**
- AUTOMATE SMARTER**
- PROTECT WHAT MATTERS**

ADAPT. EVOLVE. LEAD.
THE BUILDINGS OF TOMORROW NEED OPERATORS OF TODAY.

Making the Link: Mold, Maintenance and IAQ



“Nothing will change until people get sick from lack of maintenance. Mold, allergies from water leaks, poor air circulation, etc.”

These comments came in an online discussion of deferred maintenance, and the writer’s logic is hard to rebut, given tight budgets and the traditional “out of sight, out of mind” approach most facility executives take toward maintenance.

The writer might not have known it, but something might be about to change on the link between maintenance, mold and indoor air quality.

The evidence grows

A pair of studies to be published in the journal *Indoor Air* have quantified the public health risks and economic consequences in

the United States from building dampness and mold.

“Our analysis does not prove that dampness and mold cause these health effects,” says the author of the first study. “However, the consistent and relatively strong associations of dampness with adverse health effects strongly suggest causation by dampness-related (pollutant) exposures.”

The second study uses results of the first paper, plus additional data on dampness prevalence, to estimate that 21 percent of current asthma cases in the United States are attributable to dampness and mold exposure.

The paper also summarizes the evidence of adverse health effects from dampness and

mold in offices and schools, and it suggests that exposure to dampness and mold in those settings appear to have similar health impacts on those exposed.

The authors of the two papers suggest that “a significant community response” is warranted, given the size of the population affected and the large economic costs.

They recommend a series of measures to address the problem that will sound familiar to any manager who has ever faced the issue:

- better moisture control during the building’s design
- moisture control practices during construction
- improved preventive maintenance of existing buildings to include a comprehensive moisture-control program, including control of water intrusions from outside, plumbing leaks, condensation and humidity control, and other causes of moisture accumulation

or mold growth.

What lies ahead

The author of the opening comments on deferred maintenance goes on to say: “Money talks, and the savings of deferred maintenance are easy to calculate, compared to the lost productivity from poor facilities and sick-building syndrome. Until (executives) feel it in the pocketbook, maintenance will be deferred.”

My guess is that these two papers, along with previous studies of the link between facility conditions and healthy indoor environments, are pushing this issue toward its tipping point, which is located in top executives’ pocketbooks. The shift in thinking could give managers more of the resources they need to address the issue effectively.

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How Air-Cooled Chillers Work - HVAC Cooling Explained

Air-cooled chillers are one of the most widely used cooling solutions in commercial and industrial HVAC systems. They remove heat from water and reject it directly to the atmosphere using ambient air — eliminating the need for cooling towers.

Working Principle of an Air-Cooled Chiller:

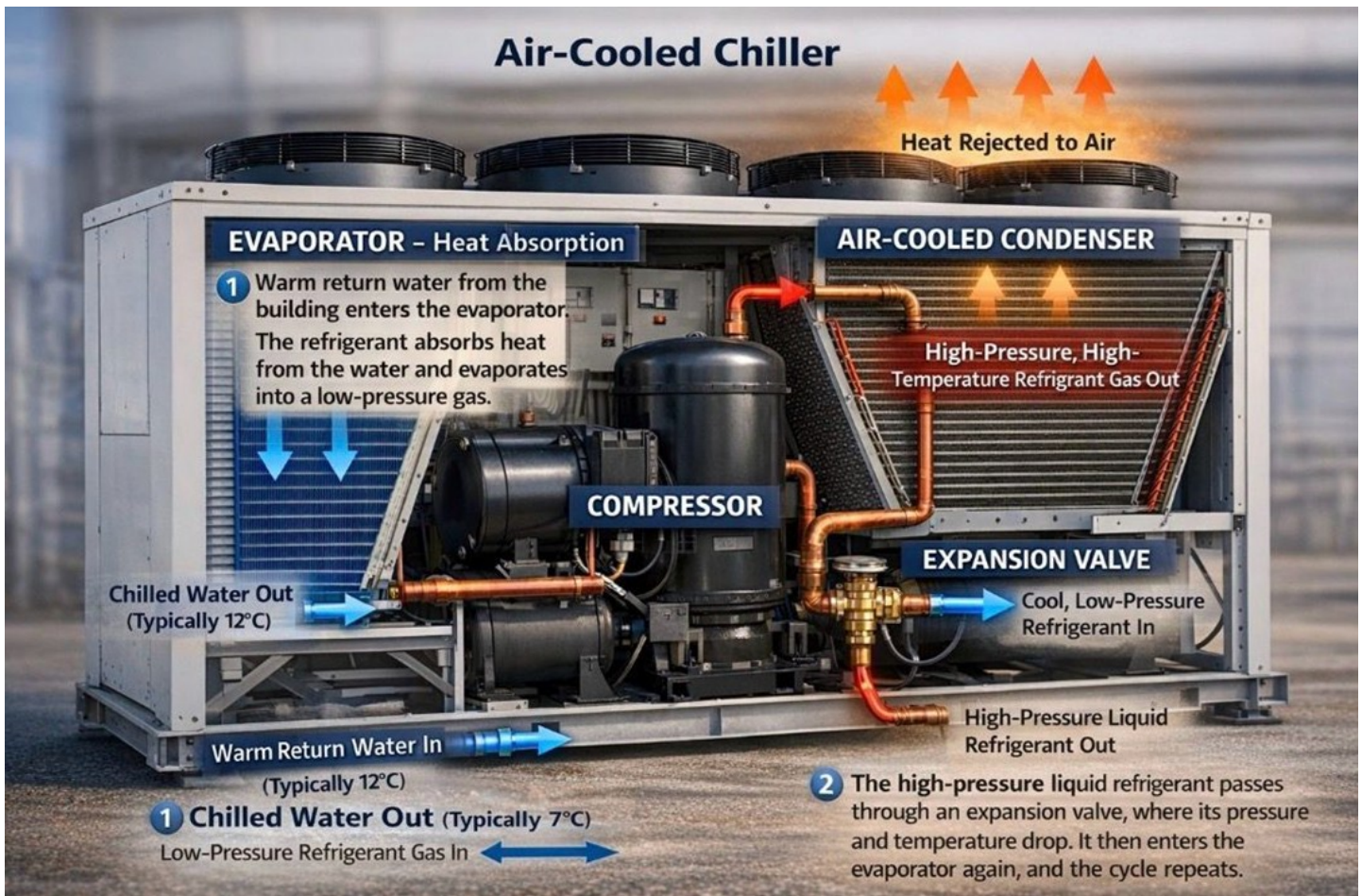
An air-cooled chiller operates based on the vapor compression refrigeration cycle, which includes four main components:

1. Evaporator – Heat Absorption

Warm return chilled water from the building enters the evaporator. Inside the evaporator, refrigerant absorbs heat from the water and evaporates into a low-pressure gas. This process cools the water (typically to 7°C), which is then circulated back to AHUs or FCUs for space cooling.

2. Compressor – Pressure Increase

The low-pressure refrigerant gas enters the compressor, where its pressure and temperature increase significantly. This prepares the refrigerant for heat rejection



in the condenser.

3. Air-Cooled Condenser – Heat Rejection

The high-temperature refrigerant flows through the condenser coils. Fans blow ambient air across the condenser, removing heat from the refrigerant. As heat is rejected to the air, the refrigerant condenses into a high-pressure liquid.

4. Expansion Valve – Pressure Drop

The liquid refrigerant passes through the expansion valve, where its pressure and temperature drop suddenly. It then enters the evaporator again, and the cycle repeats.

Key Advantages of Air-Cooled Chillers:

- No cooling tower required
- Lower installation complexity
- Reduced maintenance cost
- Ideal for areas with limited water supply
- Suitable for commercial buildings, factories, and offices

Typical Applications:

Office buildings, shopping malls, hospitals, factories, data centers, and industrial cooling processes.

Air-cooled chillers provide efficient, reliable, and cost-effective cooling, especially where water availability and maintenance simplicity are important considerations.

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KenKen Puzzle

How to solve the KenKen puzzle:

(Answers on page 33)

- 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 is in the same row or column

9		3				4		
		1	5	6		7		9
	6			9	8	2		5
2	8			4			7	6
			2		9	5	8	
4	7			3	6			
	4			5	7	6		3
6	3					9		1
5		2	6	1				

Happy Victoria Day!



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The course will be held online only using Zoom.

The fee for enrollment will cover the cost of the 150 hour course, textbooks, and BOMA certificate upon completion

please note this does not include the ABSA exam

The total cost including GST is \$2,199.75

Questions? Email Lloyd Suchet at lloyd.suchet@boma.ca for more details.

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JOIN US:

TUESDAY MAY 12, 2026 AT 5PM FOR OUR MONTHLY MEETING

TITLE: Transient Voltage Surge Suppressor
(TVSS)

PRESENTER: Shane Mussel
Pure Electrical Solutions Inc.

LOCATION:
Thorncliffe Greenview Community
Association & Recreation Centre Boardroom
5600 Centre St N, Calgary, AB T2K 0T3

TOPIC:
Shane will explain how TVSS is used to protect sensitive electric and electronic equipment in buildings

BIO:
Shane started in the electrical trade in 1980 with Riverton Electric, worked for several companies and received his journeymen ticket in 1984. In 1986, he moved to Banff and worked for Henry's Electric.
He moved back to Calgary in 2001 and worked for Concept Electric, first as a service electrician then as a Service Manager, now he is with Pure Electrical Solutions and has been a service manager for 22 years.



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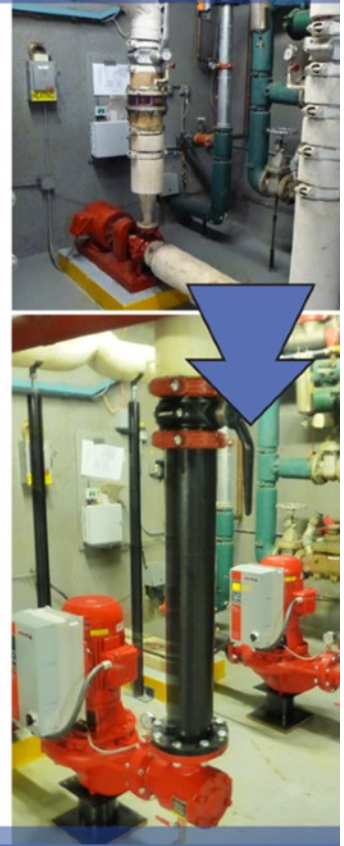
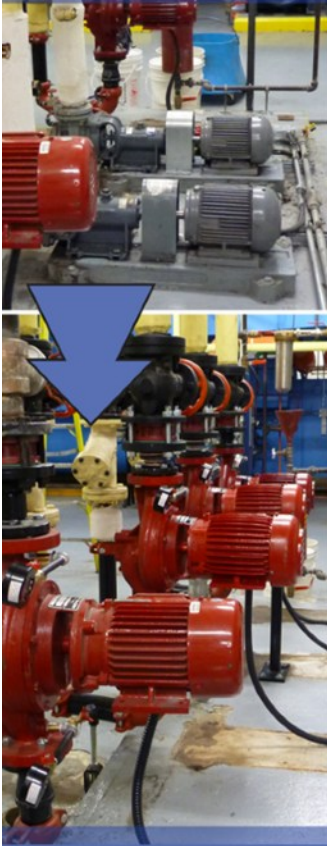
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