FACILITY FOCUS

The Official Publication of the Alberta Educational Facilities Administrators' Association

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AEFAA

THE ALBERTA EDUCATIONAL FACILITIES ADMINISTRATORS ASSOCIATION

Magrath School for modernization making way for innovation

Community fundraises for Irma School

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Message from the AEFAA president
Tammy Parry

Hello members,

Fall and winter 2019/2020 sure has dealt us our share of obstacles to overcome. Once we all got through the hurdles of the new PC budget, we were slammed by Mother Nature yet again. Hopefully everyone made it through and spring will bring us new delights.

Thanks to all the members who came out to the fall conference in Jasper in October. It was a well-attended event. A special thank-you goes to Dallas Richards for effectively teaching us all about problem-solving and decision-making. I am sure "Shut the Duck Up" was shared all over Alberta.

As usual, Alberta Education listened to our concerns opening and objectively. Let's hope our concerns can be discussed beyond Jasper.

The past several months as president of AEFAA have been invaluable. The members I have had the pleasure of meeting and working with have been incredible. The knowledge and experience we have in our membership is amazing. Thank you for the opportunity to work on the executive as a new member, as well as spending the last months as president. I would like to thank Al Kloepper for his guidance and support, as well as the entire executive who all play their part in making the job fun and effortless. ■

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Gathering space.

Magrath School modernization making way for innovation

BY DEANNA KERR

The Town of Magrath is a thriving community just over 2,200 people, established by settlers sent by The Church of Jesus Christ of Latter-day Saints in 1899. The town is home to a variety of growing technology and agri-food businesses, which have been enhanced thanks in part to the modernization of the Magrath school completed in 2018.

The town of Magrath was approached by Alberta Education regarding a proposed modernization of the Magrath school complex in 2014. Construction began in May 2016 after a series of visioning sessions with town council and interested community members.

Originally built in 1952, the Magrath high school and elementary school merged into one large K-12 facility, with two administrations, over the course of four decades and six additions. Each addition sought to resolve isolated issues because the budgets did not allow for consideration of the building as a whole.

"The disjointed additions were inhibiting the teaching philosophy of the school," says Jesse Potrie, architect and one of the design leaders from FWBA Architects. "The school was redesigned to connect the disconnected, encourage collaborative learning and to create more enjoyable learning experiences for students, staff and, really, the entire community."

In considering many other school modernizations in southern Alberta this project was comparatively underfunded. Because the Magrath school is the heart of the community, there was a desire among the stakeholders to improve the school, making it a suitable community hub. Through a partnership, the town of Magrath and the school division contributed $2 million in addition to the provincial funding for construction.

"The new budget allowed this small town to add significant programming for families,

adult learners and community performing arts," says Dan Westwood, principal and architect with FWBA Architects. "Specifically, we added a new theatre, community library and space for adult continuing education."

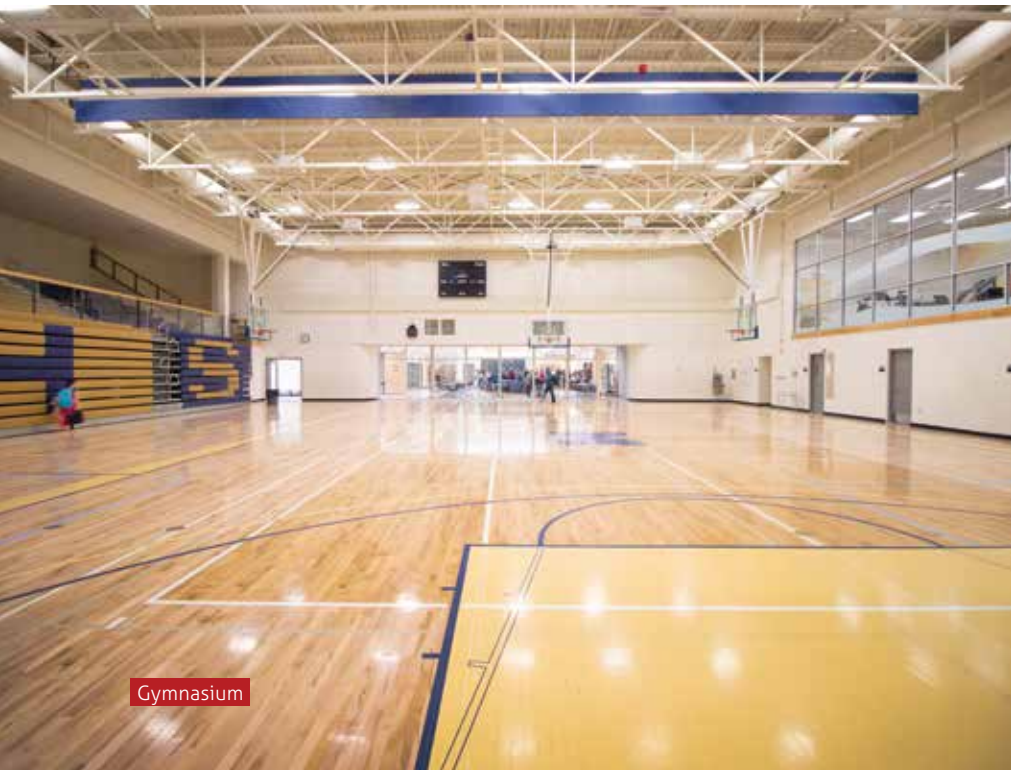
Now with a student capacity of 1,200, the main building has undergone upgrading of the mechanical and electrical systems, new interior finishes, new windows and operable walls throughout and the reorganization of classrooms and amenities. Additions to the school include a large gathering space, a 276-seat black box community theatre with state-of-the-art LED lighting, a learning commons and an innovation centre.

"The school has become a modern, 21st-century learning environment with wiring for all the technology that is needed now and into the future," Ken Sommerfeldt, former superintendent of Westwind School Division, said in a recent article on the project.

Through consultation with the community it was decided that the Magrath Public Library and the Magrath School Library would be consolidated into a new learning commons. The students and public now enjoy extended hours of operation and better access to the library resources. The learning commons also includes a new indoor playground. At approximately the size of a classroom, and with over $100,000 in play equipment, Westwood comments, "the new play area is perfect for young families, and children not yet school-aged. Now there is a place to gather outside their homes during the long winter months."

Another innovative approach was taken for the decanting of students during construction. Instead of spending three-quarters of $1 million on temporary accommodations, a permanent facility was built and now houses an innovation centre and career technology studies (CTS) classrooms. The flexible classrooms are intended for agricultural program support and community research partnerships as well as student participation and learning.

The gathering space is many students' favourite part of the modernized facility. Between the gathering space and gymnasium


Gymnasium

is a large sliding glass wall which is frequently open during events. Floor boxes and furniture allow a variety of uses. The gathering space acts as a crush space during events and is supported by a CTS kitchen. Since the modernization, the school has hosted provincial tournaments with people from all over the province commenting on how great the school looks and functions.

Potrie adds, “Coming from the area, it’s a pleasure to see young people, athletes, families and friends all enjoying this revitalized and innovative building. It’s what we strive for as designers – responding to community and distilling it into a cohesive, beautiful space.” ■

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Front of new school.

‘Wear the school out’

Irma School is not only a place of learning but also a gathering place for the community that was responsible for its existence.

BY CINDY CHAN

What happens when a small community of 518 stands united behind a cause and works together towards a common goal? The birth of a brand new school that will double as a community centre for the village.

The Government of Alberta approved the school replacement project, providing funding of over $16 million. Additional funding was secured by the hardworking and generous community of Irma, Alta., who raised $2.2 million to expand on the scope of the approved project.

According to Bob Allen, Buffalo Trail Public Schools superintendent, the old Irma School had been around since 1950. It’s had a number of additions over the years. The old school had a capacity for 450 students, whereas the new school’s capacity was built for 250 students but can expand to fit 300. Allen says enrolment has declined over the years, but it has slowly been increasing.

The new Irma School, which houses kindergarten to Grade 12 students, is a replacement school. Chris Woollard, senior partner with ONPA Architects, says the new school is built on the same site as the existing school, located just north of it. Construction began in March 2018 and wrapped up in October 2019. Students and staff moved into the facility on Nov. 4, 2019. Allen says school resumed its regularly scheduled programming in the old building until the new building was ready to be occupied.

The construction process largely depended on the weather, according to Don Morrison, senior project manager for Chandos Construction. When Morrison arrived at the site, they began with the dirt work, then the foundations.

“We battled a crazy fall and early part of winter, with the snow and rain,” Morrison recalls.

Randy Huxley, director of facilities

Picture of the school being built.

Future site.

Official ribbon cutting.

for Buffalo Trail Public Schools, says the project's process began about three years ago. After selecting ONPA Architects as the architect, the board moved on to the design process, which ended up being a collaborative process that included Huxley himself, the board, a local trustee, the school – which included the students – and members of the community.

"When we had conversations about this school, we saw this school as being part of the community. The community wasn't happy with the size of the building because they also said they needed a gathering space, so they set out to increase the size of the school," Allen says.

"We weren't at the top of the board's capital plan for a long time until this group decided it was something that needed to be done," Darren Grosky, principal of Irma School, says. "For a community of [518] to raise $2 million towards a community facility is pretty remarkable."

The first fundraiser was a dinner and dance with a silent and live auction.

"That first evening, they raised $240,000," Allen says. "To give you an idea of the evening, the first item on sale was a dozen buns and a jar of jam. It went for $980. It was absolutely crazy!"

However, that bid spoke volumes of the support and generosity of Irma. They also solicited donations from individuals from organizations within the community. They had a second fundraiser that raised $290,000 to close the gap.

To make the school resemble a community centre, they also increased the size of the gymnasium, which would have been 440 square metres. They raised enough money to increase it by 220 square metres, a size large enough to fit 600 to 700 people for a community event. They also added a stage in the new school, something that would not typically be allowed in a rebuilt school. The community raised funds for an eight-by-12-foot video wall for presentations in class and also for slideshows at non-academic events.

"They also increased the CTS foods lab because they wanted to make this space usable for the community to cook big meals that big rural communities often cook," Allen adds. "They increased the kitchen by 91 square metres, adding industrial dishwashers and industrial stoves."

Allen says the school has a joint use agreement with the community, which allows residents

ONPA plaque presentation.

New school gym with video wall.

to use the school as a community hall between the hours of 6 p.m. to 8 a.m. People can hold weddings, banquets and even funerals in the facility.

"When we set out on this project, our goal was to have this building used more than a traditional school," Allen says. "What I would like to do is wear the school out."

The library – otherwise known as the learning commons – is also going to be a place shared between students, staff and Irma residents. Since it'll be a community library instead of just for exclusive student use, the learning commons was increased by 35 square metres to accommodate a larger population.

"The community can access it during school hours," Brent Fischer, chairman of the Irma and District School Enhancement Society, says, adding overlap isn't an issue.

Irma School features 13 classrooms – one for each grade level. The elementary part of the building includes a collaborative learning space. Two of the classrooms in the elementary section are modular, which is a requirement for every new school building in Alberta.

Each classroom has a main door through which to enter, but four classrooms also feature garage doors for the capability to turn the classrooms into collaborative spaces, thus expanding the size of the classroom.

"Irma School has a solar panel component as part of the building," Allen says. "There are 290 panels attached to the school. Some are on the roof and some are on the walls."

The solar panels are interactive and educational. They are linked into a monitoring system that will

Learning commons.

Front of new school with staff and new students. Photo Credit to BTPS Staff.

provide students with information on the amount of power being generated on a daily basis. They will also have the ability to see how other students in the school division compare when it comes to power consumption.

"The way the school is oriented is that it interacts with all the surrounding community buildings and facilities. The main entrance to the school and parking lot were oriented to the north so everything could be shared with the surrounding buildings, which were the curling rink, the hockey arena, the ball diamonds," Woollard says. "The intention was to share the parking areas for peak times, such as Christmas concerts."

"I just think part of the reason why we believed we were successful in our work to get this school approved was that it was a community collaborative project," Allen says. ■

Learn, work and play at newly renovated Vincent J. Maloney Catholic Junior High School

BY CINDY CHAN

The Vincent J. Maloney Catholic Junior High School received a well-deserved modernization.

The Government of Alberta provided approval for the school's construction in fall 2015. The construction contract began on June 2, 2017, and the last phase of construction was completed on Feb. 11, 2019. Approximately $8 million went towards the modernization.

According to the project manager for the Learning Facilities Branch, Capital Projects Delivery, Alberta Infrastructure, Vincent J. Maloney Catholic Junior High School was originally built in 1985, having later received an addition in 2008. The latest modernization consisted of essential upgrades to the original 1985 portion of the school, focusing on mechanical and electrical upgrades, barrier-free access, building code upgrades and site improvements.

The modernization also included washroom upgrades, new exterior windows, a new office administration area, a new music room/Respectful Inclusive Supported Education (RISE) room, an upgraded learning commons area and gathering space.

The gymnasium received upgrades as well, with new change rooms, a new gym office, new floors, paint and acoustic treatments, as well as a physical activity room. Additionally, the Career and Technology Studies (CTS) foods lab and construction labs were completely upgraded.

The roofing was replaced on the 1985 portion of the school; that portion of the school had its fire suppression upgraded as well. In addition to the

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Learning commons.

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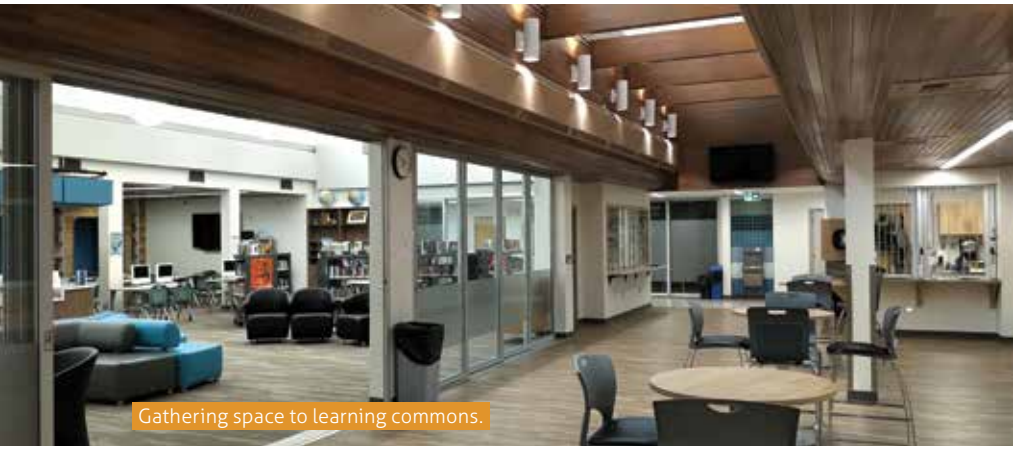
Gathering space to learning commons.


Gathering space to fitness room.

modernization work completed on the school, solar photovoltaic system installation is also expected to take place spring/summer of 2020.

The school has many brand new features, such as an open gathering space, which is located adjacent to the learning commons and the existing servery (a cooking space for serving lunches and snacks). There are also a new welcoming office/administration space; improved programming spaces for music; and CTS spaces for food, fashion, construction and fabrication. Overall, comfort and accessibility for students were improved.

The majority of the existing school is masonry construction, and the modernized portions included masonry to match. There were significant amounts of structural steel added to create larger, open spaces within the school. Several locations in the learning commons area/gathering space area utilize sliding glass partitions to provide the ability of the school to open up the spaces. The design and construction utilized sustainable materials whenever and wherever possible, improved indoor air quality with low emitting materials and increased water efficiency through replacement of water fixtures.

Although Vincent J. Maloney Catholic Junior High School is a single-story building, there are mechanical spaces in the second-story locations. The 5,517-square-metre school has a total capacity for 689 students. The modernization was 4,271 square metres. ■

St. Francis High School receives modernization

BY CINDY CHAN

Students are going to be walking into a newly renovated St. Francis High School in 2020.

Originally built in 1966, the high school then underwent a partial modernization in 1999. Over the years, the facility began showing signs of deterioration, and the technology wasn't up to date or standards in today's modern world. The most recent modernization officially began in the summer of 2017, and will wrap up in summer 2020, according to Felicia Zuniga, senior communications specialist for the Calgary Catholic School District.

The approximately $29-million modernization, approved and funded by the Alberta government, touches the entire building, ensuring the electrical, lighting, heating and fire suppression and emergency systems are brought up to current standards. There will be a strong focus on energy conservation, which will see old heating units being removed, while new windows and HVAC systems will be introduced or expanded.

"The gathering area brings students together during the day."

Part of the modernization includes a new front entrance. They moved the main entrance off Northmount Drive for better access, and also added a lit cross monument at the entrance. The cross is made out of steel installed in concrete poured in place.

From the entrance is a brand-new gathering space with high ceilings and cross-shaped lighting. The gathering area brings students together during the day. However, at lunch, the space comes to life as food is being served from the back of this area from the new culinary arts kitchen.

The culinary arts kitchen opened in early September 2019, wowing everyone who has laid eyes on it. Officially known as the Red Seal Kitchen Centre of Excellence, it will be the setting for the First-Year Apprentice Cooking Program, which will provide students the opportunity to participate in the daily operation of a commercial kitchen. Students will be accredited first-year professional hours after completing three semesters in the program and successfully writing the apprenticeship exam.

"The high school is also dedicated to reducing its carbon footprint."

The sports department features a new weight room, outfitted with new and existing equipment. The main Brown Gym was also renovated, which includes a new floor, new ceiling, new basketball hoops and new ventilation system.

There are also new administration and counselling offices, new special needs support suite, new sports medicine centre, improved testing centre area, new cosmetology area and a renovated chemistry laboratory and prep area.

Throughout the school, all hallways and many classrooms received new T-bar ceilings and new LED light fixtures. The elevator and north stairs have been relocated and a new set of stairs was installed on the west side, creating better access from the second floor into the gathering area.

The high school is also dedicated to reducing its carbon footprint. With supplemental funding from the Government of Alberta, the modernization includes solar panels, which will assist in lowering the school's energy use.

Principal Mark Berger says it has been well worth the wait.

"Students are no longer confined to our learning commons area and Orange Gym areas during the lunch hour. Now our students have the room to walk freely and mingle in our new cafeteria space and larger Brown Gym. The culture of the school has been changed in a positive light." ■

"Students are no longer confined to our learning commons area and Orange Gym areas during the lunch hour."

Kevin Kramers

Treating your roof as your greatest asset

With the existing coal-burning power generation technology being phased out, there has been a concentrated effort to develop and grow alternative power generating infrastructure within Alberta. With the abundance of sunshine and clear skies, Alberta has the highest number of sunny days in Canada. It is only logical that the power of the sun is captured to assist with our electrical demand. Governmental incentives, budding entrepreneurs and plenty of open space have helped spur a solar boom in Alberta in recent years.

As many building owners looked to take advantage of the benefits of installing photovoltaic systems on their roofs, those who install and maintain roofs have been cautious of this interest in open roof areas to be used to install these large systems.

A roof is usually not visible to the general public, does not impact the interior use of a building and is not a substantial portion of the cost of a new building, therefore the main function of the roof and the importance of proper installation and maintenance is often forgotten.

Ballasted system affecting proper drainage.

In most cases, the roof area represents the largest percentage of surface area that is exposed to the elements. The primary function of the roof assembly is to protect the interior from Alberta's harsh climate. Most will agree that between the high winds in southern Alberta, chinooks in central Alberta and the extreme cold in northern Alberta our buildings are challenging to build and maintain. The materials that we rely on to protect our investments experience tremendous stress with constant changing temperatures.

When deciding on installing a

> "The roof and the importance of proper installation and maintenance is often forgotten."

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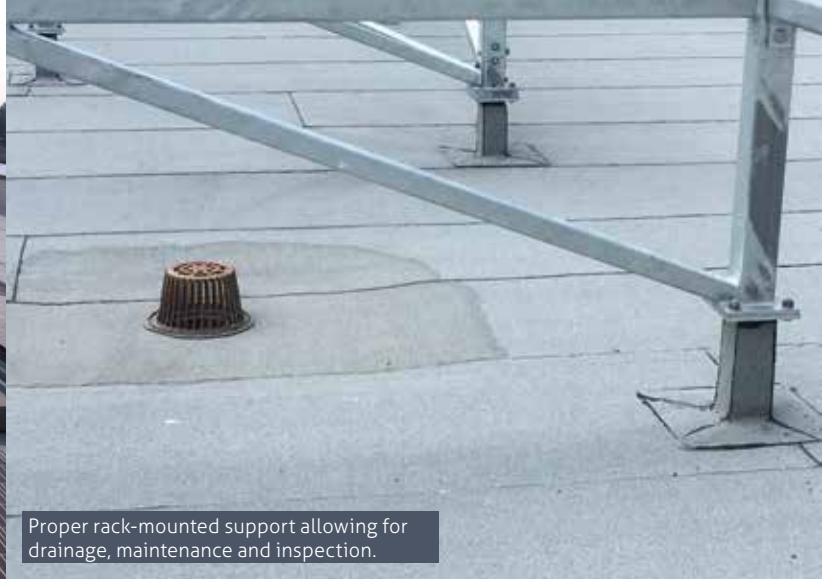
Lack of access for required maintenance.



Proper rack-mounted support allowing for drainage, maintenance and inspection.

photovoltaic roof assembly, the first question that is often asked is whether the system will rest on the roof membrane (ballasted) or be structurally supported by structural posts or sleepers (rack mounted) that have been engineered to satisfy wind, snow and equipment loads.

The Alberta Roofing Contractors Association, along with numerous other associations, will only recommend structurally supported (rack mounted) photovoltaic roof assemblies. Installing a ballasted photovoltaic system may introduce a variety of conditions that may negatively impact the durability of your roof membrane. These may include improper drainage, access to existing roof penetrations for maintenance and insufficient clearance for roof membrane inspection. By far the most important concern with installing a ballasted photovoltaic roof assembly is that the effects of roof membrane wind uplift and possible movement of the photovoltaic roof assembly have not been tested as a combined system. There is currently a national consortium working on developing a new standard that brings these two elements together. Until this standard has been finalized, the tested and calculated method of structurally supported photovoltaic systems will remain the only recommended option.

As the recommended structurally supporting (rack mounted) photovoltaic roof assemblies have a higher initial cost than installing ballasted systems, building owners are faced with decreasing the number of photovoltaic modules that can be installed. This is where one should pause to consider the long-term ramifications of choosing a system that could drastically affect one of the most important barriers protecting against exterior elements.

Consideration should also be given to the areas directly underneath the photovoltaic assembly. In the unlikely event of a leak in the waterproofing membrane, leak investigation and remediation will not be able to start until photovoltaic equipment is removed from the affected area by the photovoltaic contractor. This will add time, expense and may have a greater impact on the space below. Delaying the remediation of a leak can lead to extensive damages to the roof assembly that may not be covered under your warranty.

A possible hazard exists for untrained people who are unaware of the risks and the safety precautions that must be observed on the roof while in proximity to live electrical equipment.

Raising these concerns about photovoltaic roof assemblies has caused many to conclude that our industry does not support photovoltaics and are actively working against other contractors who want to work on the roof. Nothing could be further from the truth. Our main goal has always been to ensure the roof area and any associated equipment or uses align with roofing best practices that result in a dependable and durable asset to the building.

About

Kevin Kramers (C.E.T., R.R.O., C.T.R.) is the technical officer for the Alberta Roofing Contractors Association (ARCA) and is responsible for maintaining the ARCA Roofing Application Standards Manual, managing the ARCA Technical Committee, researching new products and applications and providing technical education for building professionals in Alberta. ■

Vitocrossal 300, CU3A – Advanced condensing technology

The Vitocrossal 300, compact, floor-standing gas-condensing boiler is the right solution for residential and light commercial applications – including high-temperature heating, cast-iron boiler replacements and multi-zone systems.

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> "The Vitocrossal 300, CU3A is the ideal choice for boiler retrofits or new construction."

Advanced condensing technology

The vertical stainless steel Inox-Crossal heat exchanger offers ideal conditions for intensive utilization of hot gases, resulting in efficiencies of up to 98 per cent. The smooth stainless steel surfaces allow the condensate created by the condensing process to simply run off downwards. This creates a permanent self-cleaning effect, ensuring high efficiency, long service life and reduced maintenance.

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Large water content is contained within the pocket design of the heat exchanger. This allows

Vitrocrossal, cutaway view.

Vitotronic 200 KW6B and system controller.

for simplified system piping with full system flow, eliminating the need for a dedicated boiler pump or primary/secondary piping and prevents sediment from collecting around the hot burner surfaces.

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AEFAA fall workshop recap

The Alberta Educational Facilities Administrators' Association held its annual fall workshop in Jasper on Oct. 15 to 17, 2019.

The workshop started off with the traditional trade show on Wednesday night. There were 20 exhibitors in attendance that offered a wide range of products and services to provide for the ever-evolving industry of facility maintenance and operations. Over 50 delegates enjoyed the opportunity to interact with the exhibitors and take advantage of the chance to network with colleagues while enjoying the food and refreshments.

On Wednesday, as part of the continuing professional development commitment to the membership, AEFAA hosted a session on problem-solving and decision-making, which was facilitated by SAIT. This session discussed techniques on how to deal with the multitude of decisions and how to solve problems, handle crises and take advantage of opportunities. In this session, they examined influences on decisions, how to apply ethics to decision-making and how to apply various techniques and processes for individual and group decision-making. They explored workplace problem-solving and learning to recognize barriers to effective decision-making and actions that support effective decisions. As usual, the members in attendance were very interactive with the presenter and posed a great deal of different scenarios that they have had to deal with. We all went away with a greater understanding of the techniques used.

The final half-day of the workshop took place on Thursday, Oct. 17. After breakfast, the 50 delegates attended a session hosted by Alberta Education on the topic of infrastructure maintenance and renewal (IMR). Alberta Education provided a presentation on IMR funding. which was followed by a Q&A session.

AEFAA would like to take this opportunity to thank the presenters of the workshop sessions and all of the delegates who attended this year's workshop.

Sincere thanks goes out to our exhibitors for helping make this event a success! ■

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Sci-Tech Engineered Chemicals: Your local Alberta cleaning products provider

The choices we make today and the products we choose to use have a lasting effect on our planet's environment. The growing need for higher-performance, environmentally friendly and cost-efficient cleaning solutions in the Western Canadian market led to Sci-Tech Engineered Chemicals' origin in 2001.

Sci-Tech was one of the first green chemical-manufacturing pioneers in Western Canada, evolving into a fully equipped Edmonton area research, design, blending and manufacturing facility supplying to the likes of Alberta Health Services, Restaurant Brands International (Tim Hortons), Edmonton Catholic Schools and The City of Edmonton.

Sci-Tech's key focus has always been the design of high-performance, environmentally friendly cleaning products. Our product offering includes 26 environmental, eight UL Ecologo Certified and 40-plus CFIA approved products for applications, ranging from LEED Certified schools and buildings to the demanding conditions of the Alberta oilsands. Sci-Tech is proud to be an industry leader in environmental chemistry development and we are constantly striving to advance the performance of our green cleaning products. Sci-Tech employs talented people focused on providing real-world solutions to our end-users rather than a one-size-fits-all approach. Not all cleaning issues are the same, so we work directly with our customers to design focused solutions, best suited to their individual cleaning needs.

As a local Alberta-based company, Sci-Tech is able offer exceptional production to delivery timing in our market area and our on-demand blending process guarantees our customers receive the freshest product possible. Our customers are using product within days of its production rather than prepackaged versions that are generally shipped out of eastern Canada or the United States and stored for months on a warehouse shelf. Being a local Alberta company also lowers our customer's carbon footprint as they are receiving locally produced goods rather than products trucked in from thousands of kilometres away. All these factors translate into a stronger product offering for our customers and much better pricing.

Sci-Tech creates value for our customers by offering cleaning solutions that are effective and cost-efficient while minimizing the environmental impact of the entire supply chain. We accomplish this by reducing the number of cleaning products required, providing highly concentrated versions and putting them in our customer's hands quicker at manufacturer direct costing. Sci-Tech Engineered Chemicals also manufactures a full lineup of made-in-Alberta, all-purpose laundry, floor care, food service, personal care, industrial and fleet cleaning products. For more information, visit our website at www.scitechinc.ca. ■

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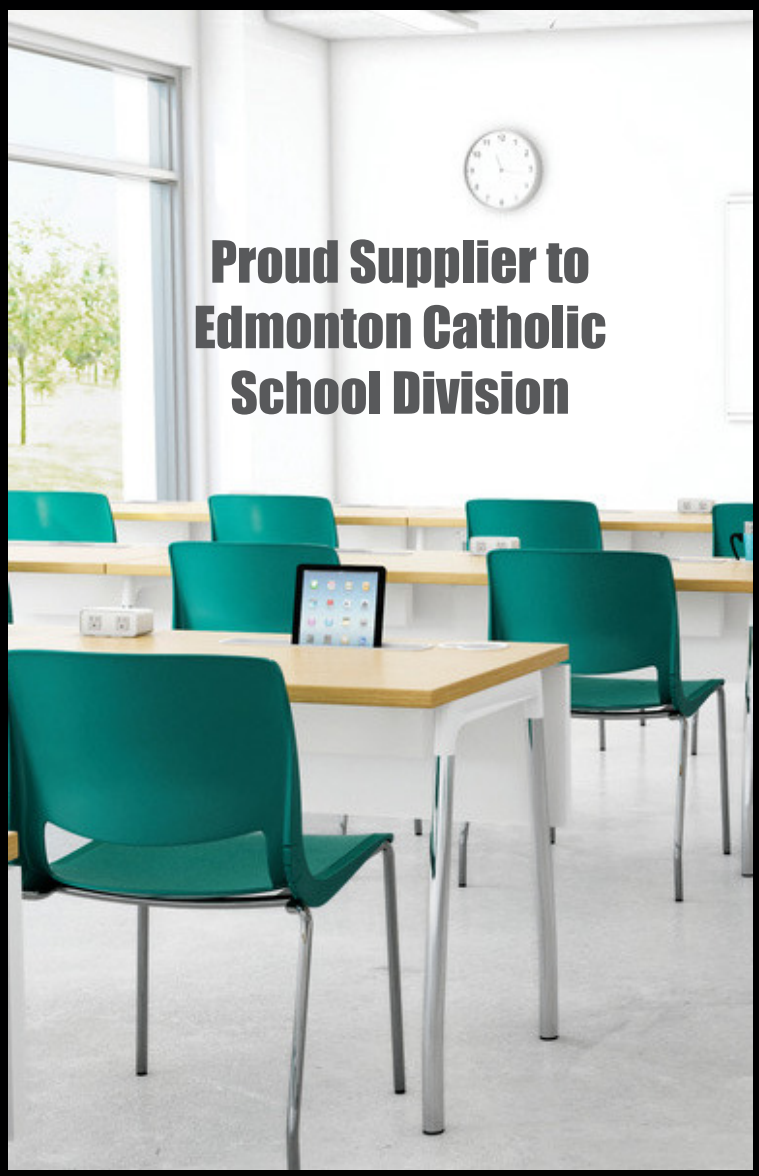

Eco Certified and LEEDS Compliant Chemical Cleaning Products:

- Schools
- Hospitals
- Building Maintenance
- Hotels
- Edmonton Catholic Schools
- Alberta Health Services
- City of Edmonton

Sci-Tech Engineered Chemicals Inc.

Ph: 780-960-1200 www.scitechinc.ca

An Alberta Company

Fire and Egress Door Assembly Inspection (FDAI) Program

Fire safety in the building environment has taken a massive leap forward with the introduction of the annual inspection of the fire-rate door assemblies by the National Fire Protection Association (NFPA) as part of its NFPA 80 standard. NFPA 80, 2013 edition, is referenced in the National Building Code of Canada (NBCC), 2015 edition, and no doubt will soon be included in the building codes of the provinces that do not use the NBCC.

What is NFPA 80?

NFPA 80 is the standard for fire doors and other opening protectives, and it outlines the requirements that fire-rated doors must meet.

Chapter 5 of NFPA 80, "Care and Maintenance", specifies that "Fire door assemblies shall be inspected and tested not less than annually, and a written record of the inspection shall be signed and kept for inspection by the AHJ (authority having jurisdiction)."

Section 5.2.3.1 of NFPA 80 states "Functional testing of fire door and window assemblies shall be performed by individuals with knowledge and understanding of the operating components of the type of door being subject to testing."

"NFPA 80 is the standard for fire doors and other opening protectives, and it outlines the requirements that fire-rated doors must meet."

Who are the key players in annual fire door assembly inspections? The authority having jurisdiction (AHJ): Fire marshals and building inspectors are typically defined as the AHJ.

Area-protected proper fire door.

They will confirm the inspections occurred by reviewing the documentation and verifying that the necessary corrective actions were taken to repair assemblies that were found to have deficiencies.

Building owners and managers: Responsible for the maintenance and care of fire-rated door assemblies rests solidly on the shoulders of the building owners. They are charged with making the necessary actions; otherwise, they will run the risk of being cited for building code violations.

Inspectors: As NFPA 80 states, inspection "shall be performed by individuals with knowledge and understanding of the operating components of the type of door being subject to testing." CFDAIs and FDAIs are seasoned

"Fire marshals and building inspectors are typically defined as the AHJ. They will confirm the inspections occurred by reviewing the documentation..."

professionals and have been trained by DHI (Door and Hardware Institute) to be completely knowledgeable about the operation of swinging fire doors.

The Door and Hardware Institute (DHI):

DHI provides the education and training necessary to ensure properly knowledgeable inspectors are available to assist AHJs and building owners in the inspection process.

What are inspectors looking for in a fire assembly?

- Damage to the door and frame;
- Security of glazing, and/or proper glazing material;
- Security, alignment and operability of the door, frame, and door hardware;
- Missing or broken parts;

  Door clearances;
- Properly operating of self closing/latching devices;
- Operation of specialty hardware such as door co-ordinators;
- Illegal field modifications to doors, frames or hardware.

Why conduct annual fire door assembly inspections?

- The requirement for annual inspections (NFPA 80, 2013 edition) may be incorporated by reference in your building and fire codes;
- Even if it is not incorporated, the AHJs in your area may require it;
- Failure to comply could lead to citation by the AHJ;
- Improperly maintained fire door assemblies may lead to property damage and, in the event of fire, loss of life and loss of property;
- Swinging fire doors are one of the most common and yet most complex methods of egress from a burning building;
- Doors that do not work as designed may prevent safe egress and not act to contain fires properly;
- Improperly operating fire doors, especially swinging doors, can affect the operation of sprinkler systems;

DHI provides the education and training necessary to ensure properly knowledgeable inspectors are available to assist AHJs and building owners in the inspection process.

- Ongoing inspection and maintenance of fire doors by skilled professionals helps reduce loss of life and property damage.

NFPA 80, 2007 (or later) edition, is not currently enforced in my area. What are the benefits to me of annual inspections?

Even if not required, annual inspections by a properly trained inspector are still a good practice. They:

- Prevent loss of life due to improperly functioning doors and door hardware;
- Prevent or contain loss of property;
- Prevent or contain damage or loss of the building;
- Help keep building insurance premiums down by reducing fire damage;
- Provide particular security and safety in universities, schools and hospitals, where casualties and damage can be greatest;
- Offer an extra level of security for residents of high-rise apartments and condominiums.

About

Richard Beebe, AHC FDAI, is branch manager at CP Distributors Edmonton, and is a certified architectural hardware consultant, and certified fire door assembly inspector. Email him at richardb@cpdist.ca for more information about the FDAI program. ■

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the ART of Building Sustainability

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Ensure a strong level of interoperability by using open protocols which have third-party listing laboratories to verify adherence to your protocol's form and function.

2 SECURE DATA

Employ a single sign on (SSO) architecture with compliance to scalable credentialing architectures and secure tunneling methodologies such as BACnet virtual private networks (B/VPN).

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