

SPRING 2022

Sheet Metal Journal

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British Columbia

MEALS ON WHEELS A SMACNA & SMART COLLABORATION

Also in this Issue:

SMACNA-BC 2022 CONVENTION

BRUCE SYCHUK RETIRES

CONTRACTOR PROFILE: KD ENGINEERING

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Official Journal of
Record for SMACNA-BC



PROMOTING GROWTH AND STABILITY IN OUR INDUSTRY

Formed in 1969, the British Columbia Sheet Metal Association (SMACNA-BC) was the first international chapter of the Sheet Metal & Air-conditioning Contractors National Association (SMACNA). Founded in 1934, SMACNA traces its history to the National Association of Sheet Metal Contractors established in 1910, and has 2,300 members worldwide.

SMACNA-BC is a member-driven association representing unionized sheet metal contractors in the Mainland of BC, and suppliers to our industry. It promotes the growth and stability of the members and industry.

OUR MANDATE

- To improve the financial stability and business conditions of the sheet metal industry, and to develop and promote methods to improve managerial proficiency
- To improve quality, efficiency and productivity of this industry, and to implement high standards of work
- To establish and maintain high ethical standards of conduct between members of the Association, and between members and owners, architects, engineers, other contractors, and the public
- To promote harmony in labour relations
- To study and help in the development and enforcement of governmental codes and regulations, and such legislation as may be necessary for the best interest of the public and the sheet metal industry
- To exchange technical, professional, and educational information with other contractor associations in the sheet metal industry and its allied trades in Canada and other countries
- To affiliate as a Chapter with the Sheet Metal & Air-conditioning Contractors National Association, Inc.

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THE SMACNA ADVANTAGE

Moving into summer time, the construction industry is looking healthy, but the labour market is not. The labour shortage that took off during the pandemic is far from over, says Statistics Canada, which reports 915,500 unfilled positions in the fourth quarter of 2021. That's up by 63 per cent compared to 2020. Jobs are also staying vacant for longer, with almost half of vacancies remaining unfilled for 60 days—only 36 per cent of job openings stayed vacant for that long two years ago.

An aging population and a reduction in immigration because of the pandemic have fuelled and already dire situation economists have been talking about for years, and now experts say employers are simply going to have to lower their expectations if they want to keep busy.

In fact, a survey conducted in November and December of 2021 reported that of 510 Canadian decision makers, one in four have hired someone they normally wouldn't have due to a shortage in workers. The list of top ten industries to report exponential increases in job vacancies places construction in second place, just a sliver behind social service workers with a 158.4% increase in job openings despite wages having risen 14.5% over the past two years.

Although SMACNA contractors are experiencing the repercussions of this unprecedented time in history just like everybody else, the ability to offer excellent wages, room for growth, expert pay to learn training, and long term security offer an advantage other industries don't have. The ITA's decision to bring back mandatory trades (including sheet metal worker) will certainly help steer potential workers in the right direction, and don't forget about the well-established network BC's signatory community has at its fingertips for training, job sharing, and recruitment initiatives.

This issue of *Sheet Metal Journal* profiles the excellence SMACNA contractors and suppliers achieved in partnership with Local 280 when they teamed up to build a new kitchen for Langly Meals on Wheels. It may not have been the largest job, but it took a lot of heart. Read all about it on page 8.



By / Jessica Kirby, Editor, *Sheet Metal Journal*

More than 200 SMACNA members and their guests gathered in Kelowna for the 53rd Annual Convention, making it the highest attended SMACNA-BC Convention in history. Highlights included the wine tour, fun night, and dancing with the Paquettes—but don't take my word for it. Check out page 12 for some great photos and circle May 4-7, 2023, on your calendar today for next year's event.

After 24 years of service, SMACNA-BC Executive Director Bruce Sychuk is trading in his desk wear for more durable golf shoes. Find out on page 16 what his friends and colleagues across North America think about his retirement, effective August 31, 2022.

Our profile this month is on KD Engineering—a copamy that broke ground in TAB and continues an important legacy today. As TAB expertise and training become more mainstream, the folks at KD Engineering are excited for the opportunities presented by a strong, new workforce. Learn more on page 20.

I want to offer a big thanks to Bruce Sychuk for the guidance throughout the years. Sheet Metal Journal turns 15 this year, and it was my introduction to the sheet metal industry. Without Bruce there to answer my dumb questions, fill me in on union nuances, and teach me the importance of relationship building, I might still be slinging beer at the local pub (which is much less fun than drinking beer with sheet metal workers). We look forward to working with Jeremy Hallman as we move forward—watch for a profile in the Summer issue—and, as always, I welcome your feedback, ideas, and suggestions. ■

OCCUPATIONS WITH LARGEST TWO-YEAR INCREASES IN JOB VACANCIES FOURTH QUARTER OF 2021

OCCUPATION	AVG \$/HR	VACANCY INCREASE	INC \$/HR	OCCUPATION	AVG \$/HR	VACANCY INCREASE	INC \$/HR
Food counter attendants, kitchen helpers and related support occupations	\$14.90	119.4%	7.6%	Construction trades helpers and labourers	\$22.05	158.4%	14.5%
Retail salespersons	\$15.45	48.9%	9.6%	Nurse aides, orderlies and patient service associates	\$20.10	81.3%	9.5%
Food and beverage servers	\$13.85	144.9%	7.4%	Light duty cleaners	\$17.30	140.8%	9.5%
Registered nurses and registered psychiatric nurses	\$32.55	117.1%	3.5%	Store shelf stockers, clerks and order fillers	\$14.40	86.5%	4.0%
Cooks	\$16.80	88.8%	8.0%	Social and community service workers	\$20.55	159.8%	1.7%

Table: Highest 10 Markets - Source: Statistics Canada

CBC News

“THE FINAL COUNTDOWN” (EUROPE, 1986)

As in previous years reports, I wish to share with you a recap of the SMACNA-BC activities and services rendered over the past year and a brief look into to what is planned for the remainder of 2022.

Over the past two years, most of my time was consumed first by trying not to catch COVID-19. I had the masks, singing “Happy Birthday” when I washed my hands 14 times a day, Bonnie Henry reports, skipping haircuts, and then there was what I think was worse than avoiding COVID-19—the Zoom, Teams, Google Meet, and Go to Meet learning curves. No more video conferencing, please!

Everything in the SMACNA-BC office was as per usual except for social gatherings and events like our golf tournament, Christmas party, Young Executive’s meetings, dinner meetings, and supervisory and business management programs. All the fun stuff. However, we did still have our regular Board of Directors and Joint Conference Board meetings, along with a host of the dreaded video conferencing meetings.

Some good things came out of not being permitted to host our usual social events, most importantly being that SMACNA-BC had extra cash in the coffers as we were unable to spend dollars on events per the budget. After some discussion at the board level, it was noted that it is SMACNA-BC’s norm to have some sort of fundraising event for selected charities, and because our events were cancelled, these charities were affected. I am pleased to report that over the past two years, SMACNA-BC has donated over \$76,000 to Canadian Red Cross Wildfires, Cloverdale Minor Hockey, the Langley Forest School, Helping Families in Need, Prostate Cancer Foundation BC, and most recently, a jointly-funded project with Local 280, Langley Meals on Wheels (see page 8).

Membership

The Board of Directors approved applications for two new Associate Members: Johns Manville, represented by Jack Litton, and EMCO HVAC, represented by Sam Lee. Welcome to the SMACNA-BC family.

SMACNA-BC Associate Members, if you have some ideas that you think would expose your company and products to the SMACNA-BC contractors and the industry, please do not hesitate to contact any Board Member or myself, or bring it to the Young Executive’s group because in all probability, we can make it happen.

As a reminder to all the SMACNA-BC contractor members, please use Associate members’ services as recognition and support for your association.



By / Bruce Sychuk

New contractor members include Tin Tech Incorporated, Apex Pneumatics Ltd., and most recently, Northern Sheet Metal Ltd.

Two contractor memberships were terminated last year—All Valley Sheet Metal and City Sheet Metal Ltd.

Board of Directors Meetings

Some topics discussed at recent Board meetings included hosting a Contractors-only Round Table discussion to establish a snapshot of where we are and what we are all going through right now; how we are handling the current safety procedures; and how we are responding to WorkSafeBC regulations, the new five-day sick pay legislation, escalated labour and material costs and, most importantly, the availability of materials and labour. Are we consistent with pricing and communicating change orders and company cellphone policies? The examples I have identified are only icebreakers to get the discussion going.

The Contractors-only Round Table is scheduled for Thursday, June 16 at the Civic Hotel in Surrey, BC.

Speaking of negotiations, yes, we received notice to bargain in January 2022 from Local 280, and yes, we were in total agreement to get these negotiations underway in a timely fashion—and we did. Might I add that it did take several lengthy face-to-face meetings to accomplish the task at hand. To compound the difficulty of negotiations, both parties had to factor in anomalies arising from these very crazy times we are living in, such as dealing with five-day sick pay legislation, rising interest rates, rising costs of living, COVID-19, the war in Ukraine, and everything else going on throughout the world. However, both parties sat down like the professionals we are and dealt with representing our respective memberships.

Let me be clear: Nobody on either negotiating committee walked away from the meetings high fiving each other after we finally reached a tentative agreement. Neither party was happy with the final result, but both parties deemed the outcome was fair.

Mark your Calendars

- SMACNA National Convention, September 11–14, in Colorado Springs, Colorado. As usual, attendees can expect



British Columbia Sheet Metal Association (SMACNA-BC)

Providing products and information related to the Sheet Metal Industry, including technical manuals and guidelines.

The unmatched technical and managerial expertise of SMACNA-BC Contractors is enhanced by the talent and skills of the workforce they employ. SMACNA-BC Contractors employ only Red Seal Certified Sheet Metal Journeymen and Registered Apprentices.

CONTRACTOR MEMBERS

- | | |
|----------------------------------|---|
| Admiral Roofing Ltd. | KD Engineering Co. |
| Alliance Metal Fabricators Ltd. | Modern Niagara Vancouver Inc. |
| Allied Blower & Sheet Metal Ltd. | M&T Air Conditioning Ltd. |
| Ames Metal Fabricators 82 Ltd. | Northwest Sheet Metal Ltd. |
| Apex Pneumatics Ltd | Novagreen |
| Apollo Sheet Metal Ltd. | Pacific Rim Industrial Insulation Ltd. |
| Austin Metal Fabricators L.P. | Piedmont Sheet Metal (1997) Ltd. |
| Boston Sheet Metal Ltd. | Quest Metal Works Ltd. |
| Bry-Mac Mechanical Ltd. | R.H. Jones & Son Mechanical Ltd. |
| CC Industries (2021) Ltd. | Ridge Sheet Metal Co. |
| Cascade Metal Design Ltd. | Samson Metals Ltd. |
| Century Plumbing & Heating Ltd. | Smith Sheet Metal Works Ltd. |
| C.I.M.S. Limited Partnership | Spectrum Sheet Metal Ltd. |
| Crosstown Metal Industries Ltd. | Summit Sheet Metal Ltd. |
| Downtown Custom Metal Works Ltd. | Tin Tech Incorporated |
| Duncan's Ltd. | Tri-Metal Fabricators |
| ECCO Supply | VETS Sheet Metal Ltd. |
| Equity Plumbing & Heating Ltd. | Viaduct Sheet Metal Ltd. |
| Harbourview Sheet Metal Ltd. | Western Mechanical Services (1977) Ltd. |
| Horizon Cladding Ltd. | York Sheet Metal Ltd. |
| Horizon Metal Systems Inc. | |

ASSOCIATE MEMBERS

- | | |
|---------------------------------|----------------------------------|
| Aarc West HVAC Solutions Inc. | Intercon Insurance Services Ltd. |
| Access Metal Products Ltd. | Johns Manville |
| Air System Supplies | Manson Insulation |
| AIRPLUS Industrial Corp | Maxam Metal Products |
| All Therm Services Inc. | Modern Tool (BC) Ltd. |
| Canadian Western Bank | Nu-West Construction Products |
| Crossroads C&I | Pacaire HVAC Supplies Ltd. |
| EH Price Vancouver | Progressive Air Products Ltd. |
| EMCO (HVAC Division) | Raven Hydronic Supply Ltd. |
| Engineered Air | Samuel, Son & Co., Ltd. |
| Envirotech Air Inc. | SPI – Burnaby Insulation |
| Flo-Matrix Air Ventilation | Wm. P. Somerville 1996 Ltd. |
| HVAC Systems and Solutions Ltd. | |

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great business programs and, most importantly, networking with other members.

- SMACNA-BC Golf Tournament, September 16 at Northview GC.
- Next year's SMACNA-BC convention, May 4 to May 7, 2023, Delta Hotels by Marriott Victoria Ocean Pointe Resort in Victoria, BC

And I already have my calendar booked for this one: THE FINAL COUNTDOWN. At the time of writing this, there are less than 100 days left until my last day of employment with SMACNA-BC on August 31, 2022. Over the next couple of months, Jeremy Hallman of Apollo Sheet Metal will step into this role, and I can't think of a more suitable candidate—as long as he commits to working on his golf game, he will have no trouble filling my shoes. Please take the time to congratulate Jeremy when you see him and as he transitions into the SMACNA-BC office over the summer.

In closing, I would like to thank every one of you for your continued support over my last 24 years at SMACNA-BC. I am proud to say that the face of SMACNA-BC has changed for the better over the years, and it is with intense anticipation I wait to see what changes the future will bring to this first-class organization.

My personal thanks to the Board of Directors and the members of SMACNA-BC for giving me the opportunity to work for, and with, such a positive organization.

Elections

The British Columbia Sheet Metal Association (SMACNA-BC) is pleased to announce its Board of Directors and Officers for fiscal 2022-23, elected at the Annual General Meeting, held Saturday, April 30, 2022, at the Delta Hotels by Marriott Grand Okanagan Resort, Kelowna, BC.

- Phil McDonald, Summit Sheet Metal Ltd., President
- Mark Kuelle, Austin Metal Fabricators LP, President-Elect
- Mark McLaren, Ridge Sheet Metal Co., Vice-President
- Dan Taillefer, Viaduct Sheet Metal Ltd., Immediate Past President/Treasurer/Secretary
- Angelo Paris, Apollo Sheet Metal Ltd., Director
- Al Benning, Ames Metal Fabricators 82 Ltd., Director – Re-elected
- Dan Mauro, Spectrum Sheet Metal Ltd., Director
- Bernie Antchak, Northwest Sheet Metal Ltd., Director – Re-elected
- Aaron Smith, Smith Sheet Metal Works Ltd., Director / SMACNA, Inc. Director
- Brad Popoff, Equity Plumbing & Heating Ltd., Northern BC Regional Chair
- Bruce Sychuk, Executive Director

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SMACNA, MCAA, AND NECA RELEASE A JOINT TOOL AND EQUIPMENT RENTAL GUIDE

SMACNA, the Mechanical Contractors Association of America (MCAA), and the National Electrical Contractors Association (NECA) released their joint publication, the *Tool and Equipment Rental Guide*. The publication is available through each association and is a robust guide to equipment recovery costs for mechanical, electrical, line, and other construction contractors.

While all three organizations have in the past published versions of the *Tool and Equipment Rental Guide* this joint edition is a new effort. The nearly 200-page guidebook offers insights on contractor-owned equipment to ensure industry professionals have the most updated costs to inform internal estimating, project proposals for new and potential customers, and cost accounting efforts.

“Having reliable and comprehensive tool pricing data enables our contractors to provide their clients with accurate and reliable bids,” says Aaron Hilger, CEO of SMACNA. “This multi-trade research supports our members, and provides signatory contractors with the information they need to provide the highest standards of quality and service in the construction industry.”

Construction tools and equipment are an essential part of any contractor’s business and can represent a significant investment. In addition to the large initial investment and the provision for eventual replacement, expenditures must be made for maintenance and repair, storage and handling, insurance, taxes, and interest. The comprehensive coverage of tools and equipment lends itself useful to a wide range of contractors who can benefit from transparent pricing. This year’s guide includes an expanded and enhanced rates selection experience. New equipment has been added and updated list prices across multiple industries are available for equipment, such as aerial lifts, air compressors, air tools, compactors, conduits and other raceway tools, connection and splicing tools, cranes, and much more.

The *Tool and Equipment Rental Guide* is now available for members to access and/or download. In addition to the PDF, members of all three associations can access the guide via an enhanced web portal on each association’s respective website. For more information, visit smacna.org. ■

CANADIAN JOB GAINS STALL AS UNEMPLOYMENT RATE HITS NEW LOW

Canada’s labor market stalled even as the jobless rate fell to a new record low, hampered by a dearth of new workers.

According to Statistics Canada, the economy added 15,300 jobs in April, fewer than half the 40,000 gain anticipated by economists. The small increase ended a surge that saw Canada create about 410,000 jobs over the previous two months.


The unemployment rate fell to 5.2% in April—its lowest since 1976—as the economy failed to produce any new growth in the labour force.

With employment already well above pre-pandemic levels, economists and policymakers have been anticipating a slowdown in job creation as the nation struggles to find new workers, amid elevated demand from employers.

The imbalance between demand and supply of jobs is a primary reason why the Bank of Canada is tightening monetary policy. Canada’s economy has added almost 1 million jobs over the past year, with employment nearly half a million above February 2020 levels.

“This is an indication that we’re reaching a fairly mature stage

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Langley
Meals *on*
Wheels

A SMACNA & SMART Collaboration

Northwest Sheet Metal, ECCO Supply, SMACNA-BC, and Local 280 worked together to make a new kitchen at Meals on Wheels a dream come true for those who need it most.

By / Jessica Kirby • Photos courtesy of Meals on Wheels

In September 2021, Langley Meals on Wheels approached the Sheet Metal Workers Training Centre (SMWTC) hoping to secure a donation of three stainless steel prep tables for the organization's new facility.

Jeff Lind, business representative at Local 280, says the Local saw this as a great opportunity for SMACNA and the Local to promote the sheet metal trade while doing some good. "Among the many community partners, Langley Meals on Wheels has a strong relationship with school district 35 and Encompass," he says. "Through trade discovery programs and job fairs within

the school district, we are hoping to find the next generation of sheet metal workers as they graduate high school."

SMACNA-BC and Local 280 met and decided to co-fund part of the project while reaching out to its members for help. Northwest Sheet Metal, ECCO Supply, Western Mechanical Services, and Air Systems Supply pitched in time and resources to make the project a success. Other SMACNA partners involved in this project include Boston Sheet Metal, Quest Metal Works, Piedmont Sheetmetal, Cascadia Metals, and 12 individual volunteers.

“Our labour partners recognize the importance of this kind of work, and everyone is on the same page when it comes to giving back to the community because we are all susceptible... This is a great way we can give back to the community.”

—Bernie Antchak, Northwest Sheet Metal

Total donations were split, with SMACNA-BC and Local 280 members agreeing to match up to \$25,000, and ECCO Supply donating the equipment for the facility with a total cost of \$20,000.

“Northwest Sheet Metal really rose to the occasion,” Lind says. There are not enough words to express the gratitude we have and the difference they have made in the community and our industry.”

“Jeff at Local 280 really pushed this project, and we were happy to do it,” says Bernie Antchak, principal, Northwest Sheet Metal. “He was the driving force. We brought it in front of the SMACNA board, and after a discussion, we went ahead with it.”

Northwest Sheet Metal installed the kitchen ventilation, including the exhaust and make-up air. Their work included hanging the units and fans, donated by ECCO, and grills donated by Air Systems Supply at cost.

“We did the whole job at cost and donated some labour and one of the kitchen hoods, which we manufactured in-house,” Antchak says. “They had a newer one and a second one that needed replacing, so we just whipped one up for them. At the end of the day, the team at Meals on Wheels were just ecstatic.”

The job was straight forward, using galvanized and stainless steel along with father-son team Hans & John Akerbakk and Curtis Callard supervising the installation.

“We used stainless steel instead of black iron because it looks better and doesn’t rust,” Antchak says. “The hood we manufactured will have a laser cut Meals on Wheels sign on the front of it.”

ECCO Supply provided a new CaptiveAire system make-up air unit and new kitchen exhaust fan, the value of which was approximately \$20,000.

The make-up air unit will make up, or replace, the air that is being removed by the new kitchen exhaust fan. “This combination of equipment will improve the indoor air quality, creating a safer and more pleasant atmosphere for the volunteers while they work in the kitchen,” says Cheriena Taylor, customer relations, commercial sales for ECCO Supply.

It was Lind who initially contacted ECCO Supply for help with the project.



“We felt that this was a good fit to partner up with the union, SMACNA, and our customers to give back to our community,” Taylor says. “The contribution that Meals on Wheels provides truly makes a difference to those living alone and on limited incomes. Nutritious meals delivered and the friendly social interaction that is provided along with a well-being check-in on delivery days make this a project that ECCO was proud to be a part of.”

SMART Local 280 / SMACNA-BC Partnership



Left: Jud Martell, Local Union No. 280 President.
Right: Phil McDonald, Summit Sheet Metal Ltd., SMACNA-BC President.



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Kyle Nelson, senior testing and balancing technician with Western Mechanical Services, says his company completed test and balance services on the project.

“Western Mechanical has always tried to give back to the communities we work and live in,” he says. “Usually, we make monetary donations or collect items for those in need. Rarely do we get a chance to assist the community in donating our services, so when given the opportunity, it seemed like the right thing to do.”

Every project is interesting and challenging in its own way, and this one was no different, Nelson says. “Technology and equipment are always changing, and even when working on what appears to be a simple system can often require quick on-site research and the ability to quickly adapt to the situation. Luckily, due to our size and company history, we have a wealth of knowledge and experience at our disposal, which allows all our technicians the ability to work quickly through any issues they may encounter.”

Langley Meals on Wheels was SMART Army Local 280’s first project, and certainly won’t be its last, Lind says. “SMACNA has always been an industry leader and over the years has done amazing charity work,” he says. “I look forward to every opportunity to work alongside SMACNA for future community projects and charities.”

SMART ARMY is a new concept in Canada, and Local 280 is hosting the first program of its kind north of the border. Its

mandate is to help build a better community for members and future members. “SMART Army Canada is just beginning, and I am proud to say that Local 280 and SMACNA-BC have set the bar for other locals across North America,” Lind says.

Crucial to that success is a strong, on-going partnership with SMACNA-BC. “That partnership is key to the growth of our trade,” Lind says. “It has never been stronger. This partnership allows us to create an industry that is competitive while being leaders in the industry and now the community.”

Nelson agrees. “Strong labour-management partnerships are extremely important on every project regardless of the size,” he says. “They provide comfort in the form of standardization of skills, construction guidelines, and quality of work that is critical to the timely completion of every project undertaken.”

“Our labour partners recognize the importance of this kind of work, and everyone is on the same page when it comes to giving back to the community because we are all susceptible,” Antchak says. “Everyone knows someone who uses or has needed some kind of government assistance at one time or another. This is a great way we can give back to the community.”

At the end of the day, he adds, the community is a collective responsibility, and with inflation and other factors, it is getting difficult for more and more people. “You have to know where you came from,” Antchak says. “I came from a poor family growing up, and I am quite fortunate to be where I am today. So for me, it is a no-brainer to give back and feed kids.”

This isn’t the first time Northwest has donated time and materials to charity—the team also installed all the ventilation systems at the Honour House in New Westminster—a house for war vets and fallen first responders in 2012. It also donated money to the food bank at Christmas. “We do our fair share and as much as we can to help,” Antchak says.

ECCO is another company that routinely gives back to communities by supporting local charities. Throughout the year, it partners with its vendors, customers, and organizations to support these endeavours as they have been an important part of the company’s culture and values.

For example, ECCO contributed ductwork to the SMWTC in Port Kells, Surrey. “We have also donated tools to the training center as prizes for the various competitions they run so the students can start off their careers with professional, high quality tools,” Taylor says.

“Partnering up with a respected organization like SMACNA, providing quality product from one of our valued vendors, CaptiveAire, and having that equipment safely installed by one of our trusted customers, Northwest Sheet Metal, was paramount in our support of this project. It shows unity and strength through Local 280 and our customers that support the communities that we live and work in.”

Learn more about Langley Meals on Wheels | Imow.ca ■

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2022

SMACNA-BC Convention

BC contractors' most anticipated event makes a triumphant return to in-person gatherings with record attendance

By / Jessica Kirby • Photos by Dean Kalyan





There's never been any question about whether SMACNA-BC knows how to put on a great event. From Christmas parties and dinner meetings to golf and the much-anticipated annual convention, these events are classy, well-organized, and memory makers of the highest calibre.

The 2022 convention at the Delta-Marriot Grand Okangan Resport in Kelowna was no exception.

Opening night kicked off with a reception complete with tasty treats, excellent swag, and a chance to connect with old friends. Day two was jam packed with events. Some participants competed to have the best party bus on various wine tours, and others took to the streets on e-bikes and ended their adventure with wine tastings. Families enjoyed fun and excitement at Scandia Fun Centre and Myra Canyon Adventure Park and, of course, SMACNA-BC members and guests teed off at Harvest Golf Club for a beautiful day in the sun.

The evening's Backyard BBQ themed reception was beautifully decorated and featured teams competing to unthaw frozen shirts, stay standing in Jenga, and battle it out in musical chairs. Even the kids took turns ferociously competing for candy from one of several piniatas. Music BINGO and canned melodies topped off a great and playful evening.

Several ambitious participants rose early on Sunday for the annual fun run, sponsored by Air Systems Supplies. Participants enjoyed a soggy but refreshing trot along the waterfront and received wine, gift cards, speakers, and other fabulous prizes.

Following this was SMACNA's one and only item of business: the AGM. Here, the board of directors welcomed Phil McDonald from Summit Sheet Metal as he received the presidency torch from outgoing president, Dan Talliefer of Viaduct Sheet Metal.

Afterward, Jeff Link, SMACNA Chapter Liaison, provided a SMACNA Inc. update.

The president's reception and ball completed a fabulous weekend. The decor was stunning—a more sophisticated but still playful take on the backyard picnic theme—and attendees enjoyed a delicious dinner, then danced the night away to music from the 80s, 90s, and 2000s.

At the end of a much-anticipated and well-deserved weekend of social rejuvenation, more than 200 participants went home reminded that SMACNA-BC always delivers. Thanks to Michelle, Bruce, and Rocky for their hard work in making this yet another weekend to remember. Thanks to Dean Keylan for the fabulous photos.

Save the date for SMACNA-BC's 54th AGM & Convention May 4–7, 2023 at the Delta Ocean Pointe Resort in Victoria. ■





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Bruce Sychuk Retires

Friends and co-workers reflect on their favourite memories with Bruce Sychuk over his 24-year career as executive director of SMACNA-BC

By / Jessica Kirby • Photos by Dean Kalyan



Bruce Sychuk began his apprenticeship as a production worker in 1976 for Coast Metal Products. That company also had a sheet metal shop called Tacey Sheet Metal, and Sychuk found their work more interesting than production work.

“They told me to go get an apprenticeship, and so I did,” he says. “And I stayed with Tacey throughout that time.” At the end of his fourth year, several employees were laid off, including Sychuk, who went on to a brief stint at BC Ventilation and seven years at United Metal Fabricators. From there, he went to work at JK Campbell and Associates to build the BC pavillions at Expo. When that job was complete, he worked six months at Alliance before settling into 12 years at Apollo Sheet Metal.



“I loved sheet metal because I was 17 in grade eleven and a half and needed a good job,” Sychuk says. “A family friend was managing Coast Metal Fabrication and encouraged me. I liked the trade, and I like challenges.”

He found plenty of those working on-site at some of the province’s most prestigious jobs, since discovering early on that shop work was too mundane and repetitive. He became a foreman on Children’s Grace Hospital and oversaw a team of 60. United did a lot of industrial and HVAC work, which took Sychuk on a long job at YVR in the old international terminal.

“It was just good work,” he says. “It was dirty work, too. Industrial was really where you learned how to do your rigging and crane operation and you don’t have to lift anything.”

Sychuk has likely worked on every pulp mill in BC and every cold facility, not to mention Neptune on North Shore, Vancouver Terminals in Coquitlam, Skookumchuck to the coal mines, and on the Island in Westmin Mines, Elk Falls Mill, and Crofton Mill. Let’s not forget several shopping malls, airports, GM Place, the Vancouver Library, and countless hospitals.

Several years into an illustrious career, Sychuk was approached by a board member from SMACNA-BC about taking on the executive directorship. “I think they felt that I could look after things for the betterment of the industry,” he says. “I believe they saw in me honesty, integrity, and an in-your-face directness. There are no flowers with me, no beating around the bush.”

The move to the SMACNA-BC office in 1998 was a good one and, in his own words, a job he could “get old at, that was not out in the weather bashing tin.”

There were challenges to overcome; for example, public speaking. “The only speaking experience I had was in site meetings, so the worst experience in my whole life was when I had to do a

technical fire/damper duct inspection program for the engineers at UBC in a lecture theatre,” Sychuk says. “I had to wrangle my way through PowerPoint, and I had minimal computer skills. I tell you, it was two weeks of gut wrenching and not sleeping, but I got through the presentation and generated an hour and a half of Q&A. I found out at that point that as long as I know what I am talking about, I can talk forever.”

His most important accomplishment was establishing transparency and communication among the membership and between the association and Local 280. “Our labour relations are second to none,” he says. “It had no teeth when I started, but now we communicate. We are not afraid of each other and we are respectful of each other. It has been a pleasure and honour to represent the industry as it has progressed. SMACNA-BC was easy to work for because it is a first-class, top of the list organization. Nothing SMACNA does is second class.”

Another important achievement was bringing communication to the membership through *Sheet Metal Journal*—what used to be a 300-person mailout is now a glossy, professional magazine with 2,200 on its subscription list.

“One thing I know is that I am not afraid to change,” Sychuk says. “I really like to be progressive. That is why, when I saw the other magazines out there, I realized something like that would be a great fit for our association.”

He also brought new ideas and suggestions to the board of directors to stimulate conversation among them. “In most associations, you can go into a board meeting and see items moved, seconded, carried—it gets boring,” Sychuk says. “At SMACNA-BC, we talked about things that caused real conversation and that challenged people. Otherwise it would have just been crickets all the time.”

Deciding to retire was a simple: “I’m tired,” Sychuk says. “I have worked since I was nine years old delivering the *Star Weekly* and mowing lawns. If I wanted anything, I had to buy it myself. That meant riding up the hill at 4:30 am to get the papers.”

Sychuk’s retirement goals are also simple: To get the price of his golf membership down to 140 rounds and to spend time with his family.

“We proved for two years that we can live together,” he says. “I want to rest for a bit, then tinker around. We might drive across Canada and the United States. I am also looking forward to just not doing anything.”

Sychuk has done plenty of travelling over 24 years with SMACNA-BC and has met some of the greatest people there are—this camaraderie will be what he misses most.

“Also, the leadership we have had in the boards of directors and



in the membership—they are all generous and genuinely like to have a good time. Together, we got SMACNA-BC on the map.”

Sychuk will work with incoming executive director Jeremy Hallman of Apollo Sheet Metal over July and August. As he prepares to leave his desk at the helm for the last time on August 31, the feeling is bitter sweet and his message is a familiar one:

“I’ll miss the people—they are all true professionals, and it has been good. I hope they remember to get their prices up and avoid the race to the bottom. Profit is not a dirty word!”

Phil McDonald, 2022-23 president of SMACNA-BC, says Sychuk has spent most of his life in the sheet metal industry and it was along this journey that the two of them met.

“Instantly, Bruce made a huge impact on me and the paths I took to where I am today,” McDonald says. “Through advice or casual conversation, he has been one of my mentors and able to relate to me without judgement. He is one of a few people that can walk into a room of perfect strangers and walk out with people knowing that they just met Bruce from SMACNA-BC.”

Sychuk’s care for SMACNA and the Local—and the people involved in both—is evident and something McDonald says makes his tenure stand out. “He has given SMACNA-BC more than anyone could ask of him, and I am so happy that he is retiring at a point where he can enjoy a lot of precious time with his wife, Rocky, who has supported him and us.”

McDonald says he has many, many memories with “Papa Spruce” but one of his favourites is when he drove to the SMACNA-BC AGM and realized he’d forgotten his suit, which he needed for the board photos afterward.

“Bruce asked Jud Martell if I could borrow his suit jacket, which I felt would not fit,” McDonald says. “Graciously, Jud lent it to me. It fit perfect, and I was able to save face, thanks to Bruce and his quick actions.”

Dan Talliefer, outgoing 2021-22 SMACNA-BC president, also

Bruce Sychuk Retires

has 100 Bruce stories to share, but of course only a few are retirement-tribute appropriate.

“Bruce’s passion for the industry is equally matched by his love of golf,” Talliefer says.

Fortunately for Bruce, in his position as Executive Director of SMACNA-BC, many industry events revolve around a golf course. Whether it was a local SMACNA-BC function or a national association event, golf clubs were typically towed along with luggage and laptops.

“Bruce was always able to coordinate such events, give speeches, attend breakfast, lunch, and dinner meetings, and somehow never miss a tee time,” Talliefer says. “I wish him well in retirement and fully expect he will celebrate many joyous days with Rocky and continue to work on lowering his handicap.”

Bernie Antchak, principal with Northwest Sheet Metal, has been on the SMACNA-BC board for several years and has, over the time, had many laughs with Sychuk.

“One memory that never seems to fade away is one we had in Hawaii back in my very early days as a board member,” he says. “I met up with Dan Mauro and Bruce by the pool early afternoon and asked Bruce for some advice on a speech for chapter night that evening. We started having drinks at the pool and continued talks about the speech and other topics. Well, hours later we were still by the pool and many, many drinks later, the chapter dinner was only an hour out. I went to my room to change then headed off to chapter night. Feeling zero pain, Bruce introduces me and asks for me to perform a speech. Well, the rest is history...”

He also recalls going to Boston with Bruce and Rocky for a councillors meeting and catching a few Red Sox games.

“We shared some great times there,” Antchak says. “We’ll definitely miss Rocky, too. She is an absolutely beautiful person.”

“Bruce was always kind to me and my family,” he adds. “He represented SMACNA-BC with a passion and will be missed. I have nothing but respect for Bruce and what he did for our industry.”

Sychuk’s legacy doesn’t stop at the border. After a quarter century of international travel, he was bound to make lasting connections in the United States, several of whom were keen to share their favourite memories.

“I was privileged to meet Bruce Sychuk very early in his career as chapter executive for SMACNA-BC,” says Deb Wyandt, chapter executive for Capital District SMACNA and Florida SMACNA, and previous executive director of labor relations for SMACNA National. Wyandt has attended many SMACNA-BC



conventions and is always keen to present on labour relations success and challenges across SMACNA chapters and to share updates on her fabulous farm life.

“I was impressed with the knowledge Bruce brought to his new job because of the hands-on experience he established working in the sheet metal trade,” she says.

Having so many wonderful memories of Bruce and Rocky, Wyandt had trouble choosing her favourite to share. She settled on the time Bruce and Rocky took her to visit the Capilano Suspension Bridge, which is among the longest and highest pedestrian suspension/swinging bridges in the world.

“Bruce was gracious enough to walk across the bridge with me, even though I’m certain he had done that many times before,” Wyandt says. “On our return trip over the bridge as we approached the middle of the bridge, Bruce asked me if I thought we could make the bridge swing. That was all it took for he and I to start rocking back and forth to succeed in getting the 137 meter (450 ft.) long bridge swinging, much to the horror of the other tourists on the bridge. It seemed like a really good idea at the time.”

Next came the announcement over the loudspeaker demanding that the man and woman in the center of the bridge immediately depart the bridge and cease swinging it.

“As Bruce and I did our walk of shame across the remainder of the bridge, Bruce muttered, ‘It is probably a good thing we didn’t go to school together.’ I agree with Bruce that had we gone to school together, we would have been a terrible influence on each other. We would not have graduated, but we would have had a lot of fun and good stories.”

On a more serious note, Wyandt says, Bruce became one of the finest chapter executives in all of SMACNA. He worked hard with his Local 280 counterparts to develop one of the most



successful labour-management partnerships in the industry, and no one has done a better job of engaging members and their families in SMACNA.

“The industry meetings won’t be nearly as fun after Bruce retires,” Wyandt says. “Bruce and Rocky will be dearly missed by their legion of SMACNA friends all throughout North America. I wish them the best in their next adventures.”

Randy Novak, Novak Heating Air Duct Cleaning, agrees that Sychuk is unforgettable. “His smile, his attitude and demeanor,” he says. “He brings a special energy that is contagious. He also has a knack for being a good listener and problem solver. Our industry needs more Bruces!

“I enjoyed spending time around Bruce in his working career, and I look forward to seeing him in his retirement career. I’m not going to wish him luck, as he doesn’t need any—he has earned a happy, healthy retirement! Thank you very much for all that you do.”

John Franco, director, meetings and convention for SMACNA National, says he has known Sychuk for 20 years and remembers clearly the first time he attended a SMACNA meeting as a planner.

“When the meeting concluded, Bruce pulled me aside and said, ‘I think you are going to be around for a long time as long as you stay out of trouble,’” Franco recalls. “His words meant so much to me, and since then, we have become great friends. I consider Bruce a mentor and dear friend who will be missed by the whole SMACNA organization. I wish Bruce and Rocky well in their next chapter of life!”

Tony Adolfs, executive vice president of SMACNA Greater Chicago, says he would be lying if he said he was happy when Bruce informed him he would be retiring later this year.

“Let me make it clear,” Adolfs says. “I’m extremely delighted and excited for Bruce and Rocky as they embark on the new phase of their lives. Bruce has been a stalwart supporter of our industry since joining the SMACNA ranks in the late 1990s,

and he deserves the fruits of his labour. However, I’m personally saddened to hear Bruce is retiring, because he has become one of my dearest friends.”

Over the years, Adolfs and Sychuk have spent countless hours in committee and task force meetings, fought tooth and nail over a vast number of dinner tabs, tried to solve the industry’s and world’s problems as staff shuffled them out of hotel lounges at closing time, and played an immeasurable number of spectacular rounds of golf together.”

“During that time, he has become my mentor, confidant, cheerleader, swing coach, and counsellor,” Adolfs says.

The pair has some great memories together, including the time Sychuk purchased “Sox” tickets prior to his arrival to a meeting they were attending in Boston.

“Knowing that the Red Sox were not in town at the time of our meeting, I had to explain to him that he had tickets for the Chicago White Sox, 1,000 miles away,” Adolfs says.

There was also a time when Sychuk and Adolfs set out to play one of their favorite golf courses, Coyote Moon Golf Club in Truckee, California.

“It was early in the golf season and upon our arrival we were told that the course’s liquor license would not go into effect for a few more days and that they would not be able to sell us alcohol,” Adolfs says. “Bruce’s face went from sheer panic to utter joy when it was further explained that since we could not actually purchase alcohol, beer would be available at no cost throughout our round. I can’t think of anything that would have made this Canadian happier.”

“Bruce and Rocky, thank you for the memories and thank you for all that you have done for the sheet metal industry. You will certainly be missed. And Bruce, there will always be a spot in my foursome for you.” ■





KD Engineering Co.



By Natalie Bruckner • Photos by KD Engineering

Today, the value that independent Testing, Adjusting & Balancing (TAB) services bring to our industry is well documented and understood. However, back in 1967, when Peter Kingsland and Alexander Douglas established KD Engineering Co., the idea was just being explored. It wasn't until many years later that TAB certification standards would be set in place for the HVAC industry.

But Kingsland “K” and Douglas “D,” being the visionaries they were, saw early on the need for TAB services for the future success of the building mechanical and HVAC systems industry. They decided to take it upon themselves to be at the forefront of the movement and raise the industry's bar.

“As engineers working in the mechanical design sector of the industry, they recognized the importance of TAB, and so they moved out west with their young families and started one of the first TAB agencies in British Columbia,” says Arno Tatto, president and general manager, who has been at KD Engineering

now for more than 40 years. “Their philosophy was to build accountable, professional relationships with building owners, consultants, and contractors alike.”

In the 55 years that KD Engineering has been in business, it's team has witnessed some big changes in the industry, and the business has weathered many economic storms. Yet it has continued to grow in size and reputation.

“Our ability as a company to evolve with the changes in the industry with the use of technology and by offering enhanced services has been key to our success,” Tatto says. “As an example, back in the early days we branched into compiling mechanical operating and maintenance manuals and started our commissioning division in 1979.”

But it's more than that. KD Engineering understands that they are in the business of people, and that in order to succeed you need to take care of your team first—this principle has

“We have been highly successful in recruiting many candidates over the years from various institutions and walks of life who have also become strong members of TEAMKD.”

—Arno Tatto, KD Engineering

helped them with their recruitment efforts in this labour-force market shortage and with their retention. “The employees at KD Engineering come first!” Tatto says. “This is and will always be our primary focus. I believe that with that policy, and with the support of our dedicated employees, we will be able to adjust to whatever comes our way.”

It’s a philosophy that has been at the core of the company since day one. Tatto says that the previous owner always treated him as part of the family, and this taught him a lot about how to treat employees with the respect that they deserve.

“I always have their back, like family,” Tatto says. “As part of that we are committed to providing excellent, long-term careers for our employees. TEAMKD is our brand. It is made up of junior through to senior individuals with engineering, technologist, and technician backgrounds encompassing well over 400 years of combined experience within the building industry.”

Interestingly, the core of TEAMKD are graduates of British Columbia Institute of Technology (BCIT), including Tatto, who explains that, over several decades, BCIT has been a consistent source in producing solid candidates that are industry-ready to learn and train within the company’s field of work.

“We have been highly successful in recruiting many candidates over the years from various institutions and walks of life who have also become strong members of TEAMKD,” he says. “We are always open to anyone who is willing to put in the effort and learn the skills needed to succeed at KD Engineering.”

This vast range and depth of skill has meant that KD Engineering has been involved in working on thousands of high-rise residential, commercial, institutional, and industrial projects in every corner of BC and the Yukon. They have also partnered up on many projects where they have been able to provide all their in-house services, which include LEED Commissioning Authority Services, mechanical commissioning agent services, TAB services, and also to compile the O&M manuals.

They are also first choice when it comes to complex projects and those that are making a real difference in our communities. Take the Teck Acute Care Centre at BC Children’s Hospital for example—a project that was ten years in the making and for which KD Engineering was tasked with providing mechanical balancing and commissioning services. The eight-storey facility is home to an expanded emergency department, state-of-the-

art operating rooms, advanced diagnostic imaging facilities, a pediatric intensive care unit, an entire floor dedicated to oncology, as well as medical and surgical inpatient units with all private patient rooms.

Then there’s the Joseph & Rosalie Segal Family Health Centre, an eight-storey mental health and substance use facility on the Vancouver General Hospital campus that represents a major advance for mental health and substance use care in British Columbia. KD Engineering provided similarly comprehensive services on this project.

More recent notable projects include Parq Vancouver Casino Resort, Emily Carr University, SFU Sustainable Energy and Environmental Engineering (SE3P), and 745 Thurlow Street. Looking ahead, KD Engineering has some fascinating projects coming up and Tatto says they are looking forward to their future involvement with the Royal Columbian Hospital redevelopment Phase 2 and the Burnaby Hospital redevelopment project.

More than half a century after it first opened its doors, KD Engineering is more committed than ever to forge long-term relationships built on trust—whether that’s internally, with clients and fellow industry folk, or labour-management. “I have always maintained an open-door policy to encourage open and honest dialogue,” Tatto says. “It’s essential to our future success and the success of the industry as a whole.” ■



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4 FACTORS DELAYING DIGITAL TRANSFORMATION IN CONSTRUCTION

While digital transformation offers the promise of greater efficiencies and productivity, adoption has been especially challenging for the construction industry.

Digital transformation is on the radar for the majority of construction companies. Today, 71% of construction companies say digital transformation is a priority, according to the March 2022 Digital Transformation in Construction Survey conducted by the National Association of Women in Construction (NAWIC) and Safe Site Check In.

While digital transformation offers the promise of greater efficiencies and productivity, adoption has been especially challenging for the construction industry. Yet in an October 2021 survey of construction professionals conducted by Dodge Construction Network, only 15% have implemented a digital transformation strategy. What’s the disconnect?

One explanation is the complexity of the ecosystem—owners, designers, builders, and insurers, all have to participate in digital, voluntarily or not. A second is that fast moving projects generally get priority over IT infrastructure projects. And a third explanation is the cultural divide between the building trades and knowledge workers.

Today, we’ll focus on a simple truth about digital transformation—it’s not a project. It doesn’t have a defined beginning and end, much less a fixed budget. Instead, it’s a journey that requires on-going investment. This is contrary to the way construction works in that building projects start and end while digital transformation is ongoing.

Building Buildings vs. Building Software

When you build a building, you begin with the structure’s

blueprints, scope the project, estimate ROI, estimate supplies and staffing needs, fund, build, inspect, repair defects, handoff to the project owner, and then move on. Ideally, the team achieves a profit above its overhead burden and is duly rewarded.

With digital transformation, you look at organizational processes (the blueprints), scope a promising opportunity for efficiency and ROI, estimate supplies (technology) and labor, then build. You negotiate the punch list with your internal customers—departments like finance or HR, and project operations—before deciding whether to put the new digital process into broad use. The sequence repeats itself and adoption may be spread out over time. The failure to budget for the iterative nature of digital transformation programs is why, too often, contractors give up before they realize any ROI.

Today’s construction workers are ready for digital transformation. In fact, 95% say new technologies designed for the construction industry make them more productive, according to the NAWIC survey. While every contractor will have their own path to digital transformation, the framework for success comes down to the following:

1. Identifying Agile Leaders

Privately, many construction executives acknowledge that a generational transition to a younger generation is necessary to fully effect digital. But perhaps this is overstated: Construction’s complex ecosystem of owners, designers, builders, financiers, and professional services makes business process measurement difficult for smart managers of any age, even if they can bridge the gap between HQ and projects.

Assembling a transformation team with personal characteristics such as knowledge of cross business functions, personal



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you need to establish KPIs so you can measure progress over multiple iterations.

For example, to accurately measure the return on a project management platform, establish a benchmark at the beginning of the process, six months after implementation, and then after one year. The one-year evaluation should come before the annual contract renewal. The factors to consider are how quickly staff learn the platform, the estimated cost it takes for employees to get up and running, and the cost to maintain the platform, including IT staff or consultants. How much value it provides in helping support strategic and tactical decisions that impact the profitability of the company and each project is also a consideration.

communication skills, curiosity about technology, and a willingness to take risks is more important.

2. Finding the Biggest Bang for the Buck

To accurately see the big picture and be able to dig into the details requires integrating technologies that are used in the office and in the field. Field data is a critical missing part of many digital strategies, which reduces the ability to improve day-to-day operations across the entire firm.

Forward-looking firms are realizing the benefits of sharing field data, such as who is or was on a job site, what they did there, and the status of each job based on pictures and automatically uploaded daily reports. And they're integrating this information with their project management platforms. Integration eliminates duplicate or conflicting information while reducing admin at HQ.

3. Identifying the Right Technology

When identifying the right technology, the criteria should go beyond low cost and high ROI. It should be simple to master, make jobs easier, and allow the data it captures to connect to other sources of information that are being used throughout the company. Any new technology investment should complement existing technology investments such as Procore and Autodesk to create a comprehensive and realistic picture of how each project is driving profitability.

Integration costs can run high if the right questions aren't asked before the purchase of technology. Without micromanaging, consider establishing or revising tech procurement policies to ensure new technology doesn't emerge without approval. This will make sure the digital transformation runs more smoothly. It also helps to avoid unnecessary integration sticker shock and the costly and risky impact of shadow IT caused by inconsistent project data, data voids, and malicious downloads.

4. Setting Realistic Expectations

Every executive wants to know how soon their investment in digital transformation will pay off. Since it's an iterative process,

Project iterations that automate a process lend themselves to milestones. For example, replacing a paper-based process with digital technology—such projects lend themselves to something closer to fixed price/fixed schedule. But automation data will be critical to downstream consumers of the data—the iteration that will follow every automation project.

Digital transformation is underway in the construction industry. The companies that embrace it with a strategic view that recognizes the iterative process, and that establish guidelines and ROI metrics stand to gain the most from the effort. ■

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VAV DIFFUSERS AND DUCT DESIGN STRATEGIES

New digital VAV diffusers with enhanced features are helping to fuel the growth of these systems. They are often now considered as an alternative to conventional VAV for smaller office renovation projects. While VAV diffusers operate in a similar manner to conventional VAV, a different ductwork design approach may be needed. VAV diffuser systems are pressure dependent, so the static pressure in ductwork has a direct impact on performance. VAV diffusers control the space temperature by regulating the airflow to the space with an integral air damper located behind the diffuser face.

The ductwork design can have a significant impact on the performance of a VAV diffuser system. Low pressure ductwork layouts designed with low loss fittings, 1.5 centreline elbows, and smooth tapered transitions can be sized to avoid sudden drops in system pressure and will perform better. Conventional VAV system ductwork is typically sized using the equal friction method, which as its name implies, is sized for an equal pressure loss (per linear foot) along its entire length. This method, however, may not be suitable for VAV diffusers, particularly for long ductwork runs with several bends as the static pressure will be significantly higher at the start of the run compared to the end, potentially causing noise issues at the first diffusers on the runout. Sizing the ductwork using the static regain method



By Norm Grusnick
Territory Manager, Gripple

solves these issues as this method produces a duct system with a more or less uniform static pressure along its entire length, setting up good conditions for the VAV diffusers to operate.

An issue with the static regain method is that it's a more complicated and time consuming procedure compared to the equal friction method, which is very straightforward when done using "ductulator" tools.

To help with static regain sizing there are many software tools, available from various sources, that can calculate the duct static pressure at any point along the ductwork run—so which method should be applied and when.

To begin with, there is no reason to size the main duct run using the static regain method, unless the engineer is trying to design a highly energy efficient duct system. The runouts to the floors should be fitted with pressure control dampers so static regain sizing may only be necessary from this point out to the zones. Duct runs with just a few elbows and transitions can usually be sized using equal friction without many issues, as long as the static pressure differential between the first and last VAV diffuser is no more than about 0.2 in water gauge. To put this into context, ductwork is typically designed in 0.08 to 0.1 inch w.g per 100 ft. so over 200 ft of ductwork would be needed to reach this differential limit. In contrast, a 10 inch, 90 degree elbow will have the same pressure drop as 70 feet of ductwork.

So, ductwork length isn't the limiting factor. It is the number of elbows and fittings and their quality that determine whether a duct system that is sized using the equal friction method will successfully work with VAV diffusers. To summarize, if ductwork runs are relatively straightforward, equal friction sizing should give good results with VAV diffusers. For more complex duct systems, consider sizing the ductwork with static regain software tools. ■



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WALK ON: THE INADVERTENT EFFECT OF A MUTUAL TERMINATION

It is not uncommon to encounter a dispute in a cost-plus project over the escalating cost of work. When a dispute arises, how a contractor handles the termination of the construction contract (be it written or verbal) can be vital in determining what types of damages can be successfully claim.

In the recent case of *Highridge Homes Ltd. v de Boer*, 2021 BCSC 1112, the court examined the formation, performance, and termination of a contract for the construction of a new home and, specifically, the effect a mutual termination had on a contractor's claim for their loss of profit.

The Facts

In this case, two homeowners (together, the "Owners") retained Highridge Homes Ltd. ("Highridge") to build a custom home at the Predator Ridge Golf Course development in Vernon, British Columbia. The parties utilized a written cost-plus construction contract, varied slightly from Highridge's standard form contract (the "Agreement").

Shortly after entering into the Agreement, Highridge commenced work and began invoicing the Owners. However, a dispute quickly arose over the initial excavation, which cost the Owners more than expected.

A meeting was held to discuss costs and invoicing. To quote Mr. Justice Wilson, "[w]ords were exchanged, voices were raised, tempers flared, doors were slammed, and the relationship ended."

However brief and heated that meeting was, it culminated in discussions around an "exit strategy" to the contractual relationship. This was confirmed by a subsequent email and letter from the Owner's lawyer.

Highridge later commenced an action against the Owners seeking amounts in its unpaid invoices, plus damages for lost profit (i.e. management fees it would have made over the remaining duration of the Agreement) which Highridge says it would have earned but for the Owner's wrongful termination of the Agreement.

The Owners counterclaimed against Highridge, claiming that Highridge terminated the Agreement and, as a result, the Owners are entitled to additional expenses they had to pay their replacement contractor to complete the home.

The Decision

The court held that the parties agreed to a mutual termination. While Highridge was entitled to claim some of its costs in its unpaid invoices, Highridge was not able to claim for lost profit as it agreed to terminate the relationship. Similarly,



By Matthew T. Potomak
and Liam Robertson,
Kuhn LLP

the Owners were not able to claim for additional expenses pertaining to their replacement contractor as they, too, agreed to terminate the relationship with Highridge.

In assessing Highridge's claim for lost profit and the Owner's claim for additional expenses, the court had to canvass both Highridge's allegation and the Owner's allegation that the other breached the Agreement. In doing so, the court examined in detail the evidence on the meeting, particularly with reference to discussions around an "exit strategy".

Because the parties agreed to end the Agreement, Highridge was neither required nor permitted to undertake any further work on behalf of the Owners. For their part, the Owners were free to complete their home as they saw fit.

Highridge was not able to claim for loss of profit arising from the remainder of the work because it was a party to the decision to bring the arrangement to an end. Similarly, the Owners were not able to pass on the extra expenses they incurred as a result of having to hire a new builder.

Lessons Learned

- A contractor's conduct in handling the termination of a contractual relationship can be critical in its ability to claim for damages such as loss of profit.
- It is helpful to have a detailed construction contract on how costs of the work will be monitored and, in the event of a dispute arises, how the parties might terminate the relationship.
- When a dispute arises, it is prudent to contact a lawyer as early as possible to help understand your legal rights and obligations, assist in navigating communications and help protect your access to potential legal remedies. ■

This article was written by Matthew Potomak, lawyer, and Liam Robertson, articulated student, who practise in construction law with the law firm of Kuhn LLP. This article is only intended as a guide and cannot cover every situation. It is important to get legal advice for specific situations. If you have any questions or comments about this case or other construction law matters, please contact us at 604.864.8877 (Abbotsford) or 604.684.8668 (Vancouver).

SMACNA-BC UPDATE

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The membership and Board of Directors would like to congratulate Bernie Antchak, Northwest Sheet Metal Ltd., and Al Benning, Ames Metal Fabricators 82 Ltd., on being re-elected to the SMACNA-BC Board of Directors; Justyn Atherley, Boston Sheet Metal Ltd., on being elected to the SMART Local Union No. 280 / SMACNA-BC Joint Conference Board; and Mark Miller, Spectrum Sheet Metal Ltd., on being elected to the Sheet Metal Industry Training Board.

The Board of Directors would also like to acknowledge Kevin Taylor for his service and dedication while performing his duties as a Sheet Metal Industry Training Board Trustee, and as an alternate on the Joint Conference Board. The board wishes Kevin all the best in his future endeavors.

SMACNA-BC, in recognition of dedicated service to the BC Sheet Metal Association and the sheet metal industry, elected one new SMACNA-BC Life Member: Jim Kaptiza, formerly of Summit Sheet Metal Ltd. Jim served for numerous years, dating back to 1994, as a Trustee on the Sheet Metal Industry Training Board. ■

INDUSTRY NEWS

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in the economic cycle,” Josh Nye, a senior economist at Royal Bank of Canada, told BNN Bloomberg television. “It’s just going to be difficult to generate job gains on the scale that we’ve been used to in the past year or so.” ■

**INFRASTRUCTURE CONSTRUCTION
IN NORTH AMERICA**

New figures from GlobalData shed light on the state of infrastructure construction projects around the world.

New figures released by GlobalData show that the infrastructure construction project pipeline in North America is healthier than that of any other region.

North America has a score of 1.31 in GlobalData’s March 2022 Construction Project Momentum Index, which provides an assessment of the health of the construction project pipeline at all stages of development from announcement through to completion.

Every construction project in GlobalData’s database is assigned a score of between 5 and -5 based on its current progress, a score which is continually updated over time. These are then weighted by the value of each project in order to come to overall scores for countries, regions, and sectors.

Also performing well are North-East Asia (0.84) and Middle East and North Africa (0.75).

Meanwhile, North America has made the most significant recovery from the pandemic. The region’s score on GlobalData’s Construction Project Momentum index has, when it comes to infrastructure projects, gone from an average of 0.54 at the height of the pandemic (March–December 2020) to 1.31 in March 2022.

The Construction Project Momentum Index

GlobalData’s Construction Project Momentum Index is based on analysis of thousands of individual construction projects around the world.

Each project is continually monitored for updates, with updates indicating progress increasing the project’s score while updates indicating delays or cancellations reduce the score. The score always sits between 5, the best possible score, and -5, the worst.

The scores for individual projects are then weighted based on their significance in order to create combined indices for each region or sector.

Events that can reduce a project’s score include the project being cancelled or put on hold, delays, the rejection of applications or tender bids, or the reducing of the project’s scope.

Events that can increase a project’s score on the index, by contrast, include the completion or commencement of construction, the awarding of major contracts, or the approval of applications. ■

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