

SUMMER 2021

# Sheet Metal Journal

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British Columbia

## Contractor Profile: TIN TECH

*Also in this Issue:*

Not Sure About Mental Health? Reach Out.

Specify the Density of Thermal and Acoustic Duct Insulation

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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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## OPPORTUNITIES: A MATTER OF PERSPECTIVE

Summer has flown by, and with it opportunities, at least for some. Believe it or not, there has been a bright side to the pandemic, but realizing it has been a matter of perspective. For example, not only was construction declared essential, construction companies struggled to find people when the country hit an insanely high unemployment rate at 13.7%. Not that struggling to find work is great, but it beats there being no work at all. (Check out page 8 to read about Tin Tech, whose owner survived and thrived through Canada's last tough time: the 2009 recession.)

Even more notable, the construction industry, which has an unusually high number of people who suffer with addiction and mental health and higher than average rates of suicide, scored in the top three industries faring well in the mental health department during COVID. See page 11 for more about why that is great and to learn what else we need to do about these issues. Need resources? Flip to page 13.

Along the same lines, the pandemic is forcing people, especially those who are more reluctant to open up, to think about self-care and asking for help. Just last week, three different interview subjects of mine randomly began talking about how they'd been changing their habits to improve their mental health, as though they were talking about a sore back or a stubbed toe—no shame, all natural, all progressive. See page 13 for ways to take up the self-care torch and put some feel-good in your soul on the daily.



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

Of course, change never occurs in a vacuum. When something unexpected or unfavourable happens, we often panic, envisioning the context of that thing will remain the same and have to operate without the critical component that changed—but if you pull a can of soup out of the pyramid stack at the grocery store, the other cans don't just sit there. They fall into new places, taking on new roles to fill up the hole left, or they come crashing down, demanding that we rebuild in a stronger, more cohesive manner. That is how all change works.

In construction, costs increased for contractors, productivity wavered, there were new demands on time, access to materials, and work-life balance, but there were also changes that will make the industry more efficient, productive, and lucrative moving forward.

The need for social distancing onsite and more controlled construction environments led to a dramatic increase in our reliance on offsite construction options, like prefabrication and modularization. This presents unprecedented opportunities to reconcile an appropriate and supportive integration of technology into the labourforce.

We all know that construction is practical, in-person work, but now we know we can communicate remotely, hold meetings online, communicate more effectively, wear technology that keeps us safer, and use AI to monitor safety on site. There is no telling where this will take us in the future.

The paperless office is not a new concept but very few companies have taken the plunge. The possibilities became front and center once virtual meetings, working from home, and not sharing objects became the norm. This makes a virtual, paperless workflow seem more possible and imaginable as we move into the future.

The federal government and NRCan have been talking about the importance of building retrofits—particularly to HVAC and airflow systems—for decades, but the last two years truly moved the needle on opportunities (and necessity) for building owners to refurbish older buildings. Commercial tenants are finding that remote work is both feasible and attractive, and some companies are either downsizing or eliminating their office spaces, leaving landlords with all kinds of space in need of refurbishing. (While you are thinking about refurbishing, check out page 14 for a technical bulletin on duct insulation.)

Not only that, but building owners want to know and advertise that their systems can better protect occupants from possible

continued on page 23

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## END OF SUMMER UPDATE: SMACNA-BC

### SMACNA British Columbia Endowed Scholarship Recipients for 2021

Congratulations to Jordyn Kuelle, whose sheet metal affiliation is Austin Metal Fabricators, and to Tyler McLaren, whose sheet metal affiliation is Ridge Sheet Metal Co. Jordyn is the daughter of Mark and Alena Kuelle. Tyler is the son of Mark and Linda McLaren.

The scholarship is for a one-year term of undergraduate study paid at the rate of US\$2,000 per year. Actual disbursement cheques are issued to the address of the recipient in August and December in the amount of US\$1,000 and are made payable jointly to the educational institute and the scholarship recipient. The payments may be applied to either tuition or text materials at the discretion of the recipient.

SMACNA-BC's Endowed Scholarship is administered by the SMACNA College of Fellows and established as an educational aid for students affiliated with the SMACNA-BC chapter. It is funded through members' generous support.

Congratulations, Jordyn, and best wishes for success in your educational pursuits.

### SMACNA-BC Donates \$5,000 to Canadian Red Cross BC Wildfire Efforts

*Open letter from Canadian Red Cross.*

Dear BC Sheet Metal Association,

As dangerous wildfires sweep through British Columbia, many Canadians are in need of urgent assistance. Thousands have already been forced to evacuate and leave their homes behind. Your generous donation helps the Red Cross mobilize disaster response teams and reach impacted individuals and family with emergency help. Your support ensures that we can continue to meet the evolving circumstances of these devastating wildfires.

Thank you for your generosity and compassion. We will keep you updated as the situation unfolds.

### Donate to the British Columbia Fires Appeal

The best way Canadians can support people impacted by the fires is through a financial donation. Canadians wishing to help are encouraged to make a financial donation to the British Columbia Fires Appeal online at [redcross.ca](http://redcross.ca); by calling 1-800-418-1111; or by texting FIRES to 45678.

The Government of Canada and the Government of British Columbia will each match every dollar donated to the Canadian Red Cross 2021 BC Fires appeal between July 3 and December 31, 2021. This means that every \$1 donated will become \$2 to support those affected by the wildfires.

Donations will be used for immediate and ongoing relief efforts, long-term recovery, resiliency, and preparedness



By / Bruce Sychuk, Executive Director, SMACNA-BC

for future events in British Columbia and impacted regions, including consequential events related to the fires.

### SMACNA-BC donates \$10,000 to Langley Forest School

Due to COVID-19 restrictions at Northview Golf Club, the SMACNA-BC Board of Directors acknowledged that by not hosting the annual SMACNA-BC Golf Tournament this year, the SMACNA-BC President's choice of charity would not receive donations normally provided through the 50/50 draw, Beat the Pro, and member donations. It was agreed that SMACNA-BC donate from expenses that were budgeted for this event. I am pleased to announce that SMACNA-BC is donating \$10,000 to President Dan Taillefer's choice of charity, Langley Forest School, Langley's Environmental Stewardship Program. If any of you wish to take some of the funds that you would have spent on the golf tournament, please consider donating as well. Send an e-transfer to [learn@langleyforestschool.com](mailto:learn@langleyforestschool.com) (password: forestschool)

### Skilled Trades Certification

BC is introducing Skilled Trades Certification beginning with ten trades. This means people in those trades will have to be a certified journeyman or a registered apprentice to work in these trades.

The trades are foundational to a strong economy in BC. Skilled trades certification will help improve our trades training system to meet the labour demands of a rapidly evolving economy.

Every other province in Canada requires tradespeople to be certified. BC removed that requirement in 2003. This means there are currently thousands of trade workers across the province without formal recognition of their knowledge or skill levels.

These uncertified workers are often paid less and have less employment stability and mobility, which is particularly challenging in a labour market disruption, such as that BC is experiencing with COVID-19 recovery.

By requiring trades workers to be either a certified journeyman or a registered apprentice, skilled trades certification provides a pathway to:

- Significantly raise the skill level of BC's trades workforce.
- Ensure we have enough skilled trades workers to meet the demands of our future economy.
- Provide opportunities for more trades workers to benefit

from post-secondary training and certification that leads to better jobs, higher wages, and lifelong careers.

## Selected Trades

The BC government is introducing skilled trades certification beginning with a total of ten trades: three electrical, four mechanical, and three automotive trades. This will be done in stages following the public engagement process to determine how skilled trades certification will be implemented.

The ten trades were selected based on recommendations from a 16-member Stakeholder Advisory Working Group, representing industry associations, labour, post-secondary institutions, Indigenous Skills Trainers, and the Industry Training Authority (ITA).

Full details of this selection process and the rationale for implementing skilled trades certification can be found in the Skilled Trades Certification Business Case at [engage.gov.bc.ca/app/uploads/sites/672/2021/06/Business-Case-Skilled-Trades-Certification.pdf](https://engage.gov.bc.ca/app/uploads/sites/672/2021/06/Business-Case-Skilled-Trades-Certification.pdf)

## Mechanical trades

1. Refrigeration and Air Conditioning Mechanic
2. Gasfitter A & B
3. Steamfitter/Pipefitter
4. Sheet Metal Worker

## Electrical trades

4. Electrician (Construction)
5. Industrial Electrician
6. Powerline Technician

## Automotive trades

8. Heavy Duty Equipment Technician
9. Automotive Service Technician
10. Autobody and Collision Technician

To ensure high standards of supervision, safety, and quality training for apprentices, government will also be introducing journeyman to apprentice ratios for these ten trades. These ratios will be set based on further consultations with workers, employers, and other industry stakeholders, led by the ITA, in the months ahead.

## For Workers and Employers

Skilled trades certification means uncertified workers in selected trades will need to become certified or register as an apprentice with the ITA to be legally able to work in that trade. Once a trade officially requires certification, uncertified workers will have a year before they must register as an apprentice or challenge a certification exam to become a journeyman.

Skilled Trades Certification is not a new or replacement credential. If a worker is already a certified journeyman (including Red Seal) or a registered apprentice, nothing will change—they are already in compliance with Skilled Trades Certification.

Trades workers and employers will have an opportunity to help inform the supports needed during this transition, ensuring we have accounted for the perspective of the diverse groups that work in these trades. Following the public engagement process, there will be a one-year transition period where workers and employers will have access to a broad range of supports, services, and opportunities to help them to successfully come into compliance. This includes support from the ITA, which offers multiple pathways for apprentices to enter trades training and/or achieve certification.

## Benefits of skilled trades certification?

*Standardizing trades skills at a high level* – resulting in career growth opportunities and the skills needed to adapt to changing labour needs, while enhancing productivity for employers and BC's economy over the long term.

*Increasing opportunities for under-represented and equity-seeking groups in skilled trades careers by “leveling the employment playing field”* – providing a recognized, portable credential for those workers who currently have fewer options for career advancement without formal recognition of their skills.

*Increasing prestige of the trades* – encouraging more youth to enter the trades to replace retiring workers by improving the perception of trades occupations as being well paid and equal to other professions that require post-secondary credentialing.

## Upcoming Events

### September 23, 2021, Membership Dinner Meeting – Civic Hotel, Surrey, BC

Guest speakers are Stephanie Pritchard/Camden Consulting & Jud Martel, Sheet Metal Industry Training Centre.

Topic: Union Training and Innovation Program (UTIP)

- an overview of the UTIP project objectives as a reminder to contractors as it has been a couple of years since the initial presentation
- review activities related to UTIP project, including highlighting work with project partners (Skill Plan, Skill Ready, and PICS)
- summarize findings from the focus groups (contractors and sheet metal workers) hosted in the spring
- an invitation to join the next focus groups in early 2022
- future plans for UTIP activities (Fan Service Specialty Training and MEWP-VR simulator certification)

Jud is also coordinating a demo of the virtual reality and augmented reality welding equipment onsite, so contractors can try the equipment.

### Oct. 24-27, 2021, SMACNA Annual Convention in Maui ■

## SMACNA ANNUAL CONVENTION OCTOBER 24-27, 2021

The 2021 SMACNA Annual Convention is being held in person October 24-27, 2021 in Maui, Hawaii. This year will be different in many respects, yet we will find comfort in the high-quality networking and educational experience members have come to expect.

The preliminary guest speaker list includes the following individuals you won't want to miss:

Jake Wood is the cofounder and CEO of Team Rubicon, a nonprofit organization that recruits, trains and deploys military veterans to disaster zones around the world and within the United States. Since 2010, Team Rubicon has scaled to 100,000 volunteers and deployed teams to some of the worst catastrophes of the century.

Joan Ryan is an award-winning journalist, author, and pioneer in sports journalism as one of the first female sports columnists in the country. She has covered every major sporting event including the Super Bowl, World Series, Olympics, and championship fights.

Steve Pemberton's triumphant life story is about defying seemingly insurmountable beginnings as a child orphaned into foster care. Born to a mother who was in the middle of a losing battle with alcoholism, it was said about Steve that "this little boy doesn't have a chance in the world."

Josh Sundquist is a Paralympian and bestselling author who has shared his story at events across the world. At age nine, Josh was diagnosed with a rare form of bone cancer and given a 50 percent chance to live. He spent a year on chemotherapy treatments and his left leg was amputated. Doctors declared Josh cured of the disease at age thirteen and he took up ski racing three years later.

Almost all differences experienced this year will be a result of a higher focus on safety in accordance with hotel, local and state mandated policies. Many of the safety impacts are outlined in the FAQ found at [smacna.org/learn/events/calendar/2021-smacna-annual-convention](https://smacna.org/learn/events/calendar/2021-smacna-annual-convention). ■

### PARTNERS IN PROGRESS CONFERENCE

LAS VEGAS, NV | MARCH 1 - 2, 2022  
BUILDING THE FUTURE TOGETHER

A successful future requires labour and management to work together toward common goals. To do that, we need strong leaders who can build coalitions; who have the knowledge and skills to understand the needs and opportunities of where

the construction industry is headed in the next 5, 10, and 20 years; and who are willing to capitalize on the best practices of the industry. Above all, the future requires recruiting and retaining the best, most skilled workers into the industry. *Partners in Progress 2022* is designed around the skills and knowledge necessary to meet these needs. We look forward to seeing you in Las Vegas March 1 & 2, 2022!

#### Guest speakers

This year's guest speakers include Jim Abbott, former professional baseball player, New York Yankees. Jim Abbott was an All-American hurler at Michigan; won the Sullivan Award in 1987; was the pitcher for the Gold Medal Olympic Team in 1988; and threw a 4-0 no-hitter for the New York Yankees vs Cleveland game (September 4, 1993) all without his right hand.

Mike Abrashoff, former commander, *USS Benfold* and author of *It's Your Ship*, will speak about his experiences as a 36-year-old commander of *USS Benfold*—at the time, the most junior commanding officer in the Pacific Fleet. The immediate challenges that faced him on this under-performing Naval war ship were staggering: exceptionally low morale, high turnover and unacceptably low performance evaluations. Few thought that this ship could improve. In many ways, the *USS Benfold* was actually an extreme example of the same problems facing many organizations today.

#### Emerging Leaders

In an effort to include the next generation of leaders in the 2022 *Partners in Progress* Conference, SMACNA and SMART are giving local chapters and unions the opportunity to register two emerging leaders from their area (one labour and one management) to attend the Conference by waiving their respective registration fees.

*Partners in Progress* is an exceptional opportunity for labour and management to build on their relationship, share information, and learn new and innovative strategies to work together for a stronger industry. Contractors, chapter executives, and future leaders will all find something valuable from this program.

See [pinp.org/conferences/2022pinp](https://pinp.org/conferences/2022pinp) for a tentative schedule and watch for registration opening September 8, 2021 ■

### TALKING SMART PODCAST: I'VE GOT YOUR BACK

Tune in to the latest TALKING SMART podcast, highlighting the importance of mentorship and the "I Got Your Back" campaign.

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# TIN TECH

*Serving up professionalism and skill, Tin Tech is a small company with big ambition.*

By / Jessica Kirby • Photos courtesy of Tin Tech





Kody Kucey just wanted to build things. A lucrative career with a great life-work balance was also on the list, but it wasn't clear right away where he would find it.

He wanted to be a steel fabricator and had planned schooling at BCIT, but a neighbour who owned a small HVAC contracting business at the time offered him a job and told him if he wanted to fabricate and built things, this was the industry to join.

Kucey loved the sheet metal industry right away. The premise that the workforce is trained to build what they install—unlike electricians and plumbers, for example—was a big draw.

“You have to possess a certain amount of fabrication experience, even if you aren't a shop guy, and it is rewarding to take a flat piece of metal and make from it a square to rectangular piece of duct,” Kucey says. “I like that it is technical and physically challenging, and I love the camaraderie that surrounds the trade, speaking to the association and the union.”

At his neighbour's company, Kucey fabricated and installed components, and got to see a lot of great work in a very short time. “From there, I moved on to bigger shops, joined the union, and enjoyed the massive build up to the 2010 Olympics,” he says.

The games meant there was work everywhere, and the sharp decline that followed left space and opportunity to achieve schooling, which was exactly what Kucey did. He completed his training in record time, and set out to learn all he could from some of the industry's larger shops.

“I came up through the recession, so I got to work with some of the big players, and I have seen our local union companies grow,” Kucey says. “I got to see how things are done by the professionals and the high standards they meet in their shops. I never intended to own my own shop, but because bigger companies are becoming more automated, they are coming for my business.”

Kucey founded Tin Tech in 2017. The company is an HVAC sheet metal contractor specializing in commercial and service in the smaller job market. Recently, it has started to expand into the multi-family residential project market.

“We are not fabricators,” says company owner Kody Kucey. “We do installations and partner with local shops for fabrication. We use more than one shop, and we use them to their strengths.”

Tin Tech is currently working on an interesting project that, besides being technically interesting, brings a bit of nostalgia to Kucey's work day. Gabriola Mansion is a heritage house restoration in Vancouver's west end. When it is finished it will be a housing project complete with apartments and townhouses, but when Kucey was a child, it was his day care centre. Later,



the building was transformed into a pasta restaurant Kucey frequented.

“It is funny to see how things change,” he says. “It is a bit of a flagship project for us because of the nostalgia and because it is rewarding to be part of how our city is evolving.”

When Tin Tech started, it was focused primarily on small jobs and service work, and it has grown organically over the years. He rarely solicits new work, and his staff of eight will likely grow to 10 or 12 by the end of the year, based on upcoming projects.

That means having a solid team is essential, and service work calls for additional skills, since the workforce deals directly with the customer.





**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.

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| CC Industries Ltd.               | R.H. Jones & Son Mechanical Ltd.        |
| Cascade Metal Design Ltd.        | Ridge Sheet Metal Co.                   |
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| C.I.M.S. Limited Partnership     | Smith Sheet Metal Works Ltd.            |
| City Sheet Metal Ltd.            | 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**

- |                                 |                                  |
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| Access Metal Products Ltd.      | Manson Insulation                |
| Air System Supplies             | Maxam Metal Products             |
| AIRPLUS Industrial Corp         | Modern Tool (BC) Ltd.            |
| All Therm Services Inc.         | Nu-West Construction Products    |
| Canadian Western Bank           | Pacaire HVAC Supplies Ltd.       |
| Crossroads C&I                  | Power Suction Services           |
| 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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“You have to be attentive to what customers are asking of you, and you have to trust your education, experience, and expertise on jobs you would typically see engineered,” Kucey says. “There is a lot of retrofitting, trial and error, and troubleshooting, and we work closely with our partners—electricians, HVAC technicians, and plumbers, for instance. We have to calibrate ourselves to their needs. Every job is unique. There is no umbrella way to be successful.”

Moving ahead, Kucey’s plan is to grow to meet the needs of his workforce and to keep investing in his team for the betterment of the company and everyone who works there.

“For the first three years, I didn’t want to much from the business,” he says. “I wanted to do something every day to make sure it was successful, but I wanted to work on my own schedule and was happy as a service contractor. Fast-forward to today, and it is clear that to maintain a good group of guys and gals, you have to grow.”

When he expands the team, he will be looking to secure some young, ambitious people who share his vision and want a supportive and fun place to work.

“I think I am easy to work with, and everyone seems happy here. Happiness equals productivity, so that is the goal moving forward,” Kucey says. It’s not just about the work, but about enjoying the work, too. I try to make sure I do things for the staff so they enjoy being here. Our Christmas parties are always good, we do a fishing trip in the summer, and lots of ‘pizza parties.’”

Tin Tech became a SMACNA member in 2021 because Kucey appreciates what the association offers in terms of educational tools, networking opportunities, and access to the highest industry standards.

“I want to participate and be a part of something bigger that benefits our industry,” he says. “As long as I have been in the industry, I have worked for SMACNA contractors so I have seen the benefit the association brings and I want to be a part of that and give back to it, as well.” ■

**Wish you were here?**  
 Email [jessica.kirby@pointonemedia.com](mailto:jessica.kirby@pointonemedia.com) to be *Sheet Metal Journal's* next featured contractor. It will be the best 20 minutes and \$0 you ever spent.



# Not sure about mental health? Reach out.

By / Jessica Kirby

The tide is turning on the way Canadians think about mental health. Once the unspeakable and misunderstood, more effective and forthright communication, education, and acceptance among employers, government, and the general public has shed light on this issue, which affects one in five Canadians.

This awareness is also a sliver lining of the pandemic. The Centre for Addiction and Mental Health says 50% of Canadians reported worsening mental health since COVID began and a more recent survey said 81% of respondents reported that COVID has negatively affected their mental health. Of course, the increase isn't the silver lining—the awareness is. The positive side of this dramatic uptick in feelings of worry, anxiety, and in some cases, depression, is that it is impossible to ignore. We are all affected, directly or otherwise, by mental health concerns, whether a spouse's depression is creating a struggle in the family or the cashier at grocery world is snappy because she is anxious working with the public with an immune-compromised child at home. No matter how you look at it, the playing field has levelled when it comes to gender, age, and socioeconomic status, such that it has become abundantly clear that mental health concerns know no boundaries. But that also means no one is exempt from talking about it, which is a step in the right direction.

Individuals working in the construction industry have traditionally suffered disproportionately compared with other industries, with men taking the brunt of that affliction. Statistics Canada estimates that 33% of workers in the construction industry report poor mental health, and 64% would like their employers to do more to support mental health initiatives.

According to a study conducted by Alberta Health Services, in 2007, one-third of trades people and labourers were directly affected by declining mental health, and a study done nine years later said construction workers were more likely to report heavy drinking and negative consequences relating to illicit drug use.

In British Columbia, WorkSafeBC reports that mental health claims for illnesses diagnosed by a psychologist or psychiatrist were up 25% between 2017 and 2019. Those numbers are consistent with those reported in the construction industries in Ontario and the Maritimes.

In 2017-2018, the Ontario government conducted a study that analyzed opioid deaths by profession. Of those who were employed at the time of their deaths due to opioids, 31% worked in construction. This is consistent with statistics that say 43% of construction workers have suffered from musculoskeletal

injuries on the job, and 25% of those received opioids to deal with the pain.

Across the board, Canadian men aged 45-59 are also at the greatest risk of committing suicide, with one-third of deaths by suicide in the country being in that age group. Men have three times the rate of suicide women do, according to Statistics Canada, largely because they use more lethal means and have less interaction with the healthcare system. In the United States, the Center for Disease Control & Prevention (CDC) reports that construction has one of the highest suicide rates (49.4/100,000) across all industries, noting that more lives are lost per day from suicide than from all of OSHA's Fatal Four Hazards (falls, electrical exposure, struck-by, and caught-in/between situations) combined.

There are many reasons why mental health and addiction wrack the construction industry, including isolated worksites, limited distraction during free time, separation from family and friends, high prevalence of substance abuse, and dangerous, high-stress work. Among men, the problem compounds with perceptions that requests for help will be met with resistance or ridicule, prevalence of a "tough guy" persona (real or imagined), and anxiety about staying employed if concerns about mental health or addiction are voiced with employers.

But construction is fighting back. Associations, employers, insurance providers, and government agencies are working hard to educate workers on the importance of speaking out when mental well-being is not up to par and to employers and teams to help reduce the stigma that has for so many years kept people alone in the dark.

Although 2020 delivered an unprecedented number of mental health concerns and rates of depression, anxiety, and chronic worry (not to mention sending domestic abuse, unemployment, and divorce rates soaring), construction workers fared much better than other industries.

Employment benefits company Morneau Shepell reports that Canada's Mental Health Index—which represents the current state of mental health in comparison to a set, pre-2020 benchmark—was sitting at -10 in July of last year. According to that report, the lower the score the worse the mental health, but the highest scores in that period were observed in mining and oil and gas extraction (-6.1), real estate (-6.3), and construction (-7.2).

The intrinsic nature of construction work may have been the driver of this success. Isolation and financial loss or risk were the main reasons cited for declining mental health rates, and being declared essential may have been the saving grace for construction workers, who are generally well paid and work in teams. And even when employment rates bottomed out at 13.7%, construction workers remained in high demand.

Of course, construction may have fared well against other industries, but from a birds-eye view that is because rates in other industries plummeted and not because construction rates improved. The men and women who power our industry and build our communities still need the help and support that education and communication deliver—that means it is time to reach out.

Since it is defined by hard work, it is no surprise that Canada's construction industry is tackling the job of understanding mental health and normalizing the conversation around prevention, treatment, and recovery. Like all difficult tasks, this is a group effort and provincial and sector-specific agencies are producing and promoting resources to help. See the list below.

If you are suffering, reach out. If you know someone who is, reach out. And if you have something to offer, time to volunteer, or resources to support a cause... you know what to do. So do it today.



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## Resources

### National

- Canadian Mental Health Association | [cmha.ca](http://cmha.ca)
- Not Myself Today | [notmyselftoday.ca](http://notmyselftoday.ca)
- Need2 Suicide Education & Support | [need2.ca](http://need2.ca)
- Canadian Men's Health Foundation | [menshealthfoundation.ca](http://menshealthfoundation.ca)

### British Columbia

- BC Construction Safety Alliance | [bccsa.ca](http://bccsa.ca)
- Vancouver Regional Construction Association | [vrca.ca](http://vrca.ca)

### Alberta

- Alberta Health Services | [albertahealthservices.ca](http://albertahealthservices.ca)
- Alberta Construction Safety Association | [youracsa.ca](http://youracsa.ca)

### Saskatchewan

- Saskatchewan Construction Safety Association | [scaonline.ca/resources/mental-health](http://scaonline.ca/resources/mental-health)
- WorkSafe Saskatchewan | [worksafesask.ca](http://worksafesask.ca)

### Manitoba

- Mental Health Education Resource Centre of Manitoba | [mhrc.mb.ca](http://mhrc.mb.ca)
- Safe Work Manitoba | [safemanitoba.com](http://safemanitoba.com)

### Ontario

- Ontario CMHA | [ontario.cmha.ca](http://ontario.cmha.ca)
- Mental Health Works | [mentalhealthworks.ca](http://mentalhealthworks.ca)

### Quebec

- <https://www.csdconstruction.qc.ca/sante-mentale/>
- <https://ftqconstruction.org/general/parlez-de-votre-douleur-de-votre-tristesse-de-ce-qui-vous-stresse-ne-gardez-surtout-pas-cela-pour-vous/>

### Nova Scotia

- Construction Safety Nova Scotia | [constructionsafetyns.ca/mental-health/employees](http://constructionsafetyns.ca/mental-health/employees)
- Nova Scotia Mental Health and Addictions | [mha.nshealth.ca/en](http://mha.nshealth.ca/en)

### New Brunswick

- New Brunswick CMHA | [cmhanb.ca/programs-services/provincial-programs](http://cmhanb.ca/programs-services/provincial-programs)
- New Brunswick Construction Safety Association | [nbcsa.ca](http://nbcsa.ca)

### Newfoundland

- Newfoundland CMHA | [cmhanl.ca](http://cmhanl.ca)
- Newfoundland and Labrador Construction Safety Association | [nlcsa.com](http://nlcsa.com)

### Prince Edward Island

- Government of PEI | [princeedwardisland.ca/en/topic/strengthening-mental-health-services](http://princeedwardisland.ca/en/topic/strengthening-mental-health-services)
- Construction Association of PEI | [capei.ca](http://capei.ca)

### Yukon

- Government of Yukon | [yukon.ca/en/mental-wellness](http://yukon.ca/en/mental-wellness)
- Northern Safety Network Yukon | [yukonsafety.com](http://yukonsafety.com)

### Northwest Territories

- NWT Helpline | [hss.gov.nt.ca/en/services/nwt-help-line](http://hss.gov.nt.ca/en/services/nwt-help-line) | 800.661.0844
- Northern Safety Association | [nsa-nt.ca](http://nsa-nt.ca) ■

## Mental Health To-do List

Let's face it: life is mostly great, but some days the unicorns and rainbows need a day off. Looking for some simple activities to boost your mental well-being and feelings of positivity? While only a doctor can diagnose and treat serious mental health conditions, we can all benefit from a friendly dose of the "feel goods" and getting it is easier than you think. Here are a few simple things you can do every day to improve your general sense of happiness and satisfaction at home or at work.

- **Get plenty of sleep.** Adults should get as close to eight hours of sleep per night as they can, and for those of you who travel or party all night, never underestimate the power of an afternoon nap. Worried about feeling groggy afterward? Try an app like Sleep Cycle, which will tell you when to wake up so you feel fresh and ready to take on the next set of meetings.
- **Stop to enjoy the little things.** It might sound cheeseball, but taking a moment to enjoy the small moments in the day causes gratitude and relaxation, two of the main ingredients for a clearer mind and a happier heart. Take a walk on your lunch break, slow down and taste your food, compliment a friend or your partner, or imagine and focus on your five best qualities for ten seconds each.
- **Use a stress reliever.** Contrary to popular belief, a stiff drink is not a stress reliever. Try a stress ball, a sketch pad, a meditation app like Headspace, or keep a lacrosse ball in your desk or glove box and use it to roll out the stress knots in your shoulders.
- **Perform a random act of kindness.** There are reams of science that say acting for the betterment of others boosts our confidence, self-worth, and general sense of wonder and happiness. Want to kick it up a notch? Perform your act anonymously.
- **Exercise.** Settle down—a marathon or heavy weight lifting is not necessary. Just 30 minutes a day of walking, running, cycling, light weights, yoga, gardening, or shooting hoops in the backyard will Change. Your. Life. For real.
- **Breathe deeply.** This is fabulous because you can be hardcore and get up early to practice over tea, or you can do this throughout the day on the subway, in the car, or in a meeting when the "circle back" guy asks his fiftieth irrelevant question. In through the nose, out through the mouth, 20 times in a row. Control yourself and feel the greatness wash over you.
- **Eat well.** Donuts are so good. So are frothy cappuccinos, burgers on the go, and pie. But if you want to feel good for more than 20 minutes, it is important to eat well at least half of the time. A few simple changes that can have a measurable impact on your mental well-being are making half the contents of your plate fruit or vegetables; eating vegetarian twice a week; avoiding dessert except on weekends; packing healthy snacks the night before a day on the road; or just eating breakfast.
- **Schedule your wellness.** If you had a doctor's appointment, had to take the car in, or had play-off tickets, you would make it happen and nothing would stop you. Place the same importance on your well-being and schedule at least 30 minutes a day for doing something that truly blows your hair back. If you're not sure whether you can spare a half hour, remember that every day, the average person spends two hours checking their phone; one and a half hours in traffic; 45 minutes browsing the internet for things they are never going to buy; a half hour arguing with people who are never going to change their minds, and/or 20 minutes channel surfing before deciding to do something else entirely. You have time.

Again, nothing on this list will cure a serious medical condition, and if your concerns are serious, please seek professional help. But if you are looking to put a skip in your step and build resilience for the days when the unicorns have the day off, here is a good place to start.



# TECHNICAL BULLETIN: INSULATION SPECIFICATION

## WHY NOT TO SPECIFY THE DENSITY OF THERMAL AND ACOUSTIC DUCT INSULATION USED IN HVAC DUCTWORK

Courtesy of SMACNA National | [smacna.org](http://smacna.org)

In sheet metal ducts, insulation is often an important component of the system. Fiberglass and closed cell foam insulations are commonly used for thermal insulation to reduce heat transfer, or acoustic insulation is used to reduce noise levels.

When used to reduce heat transfer, insulation can be saving energy and/or be preventing condensation. As a noise reduction medium, it can reduce the noise levels inside ductwork caused by the fan, generated from duct or components, or caused by noise breaking into the duct system from its surroundings. When specifying insulation, the design engineers should specify the performance parameters of importance, depending on if the insulation is for thermal control, noise reduction, or both.

### Thermal Control

Insulation is applied to ductwork to increase thermal resistance, reduce energy loss, and prevent condensation or dripping from the duct. Thermal insulation is often needed because air transported through a supply duct is at a temperature different from that of the surrounding space where the duct is located. For example, the air inside the duct may be at 55°F while the temperature surrounding the duct could be between 70°F to 90°F or more in the space above the room, since ductwork most often runs through unconditioned spaces. Insulation reduces the rate of thermal loss or gain from those surroundings. The air may need extra heating or cooling to arrive at the design supply air temperature if the supply duct is uninsulated.

Insulation helps to prevent condensation and dripping from air-conditioned ducts, which very often transport air at temperatures below the external local dew point. In the absence of insulation and vapor barrier, water will condense and could cause corrosion and other damage.

### R-Value

The thermal resistance of insulation is determined by its R-value,

which is the resistance measured at a known temperature difference between the air inside the duct and air outside the duct. R-value accounts for all the heat transfer modes that take place in the air conduction systems. It depends on the insulation material, its thickness, and its density. For example, the thicker the material, the higher is its thermal resistance. However, while the thermal resistance of the insulating material is known, the overall thermal resistance between the air in the duct and the surrounding space also includes the internal and external film resistances, leading to a larger resistance than just the insulation resistance by itself.

Building codes specify the amount of insulation required for ducts in terms of resistance. For example, ASHRAE 90.1 and California Title 24 specify the minimum insulation R-value for supply and return ducts, considering both heating and cooling ducts. It could be up to an R-8.

### Thermal Conductivity: *k*

Laboratory tests are used to determine the thermal conductivity of an insulation. It basically represents how fast the heat is transferred at a given temperature difference. The R-value for just the insulation is calculated from:

$$R = \frac{t}{k}$$

where *t* is the thickness of the insulation in inches and *k* is the thermal conductivity of the insulation in units of Btu•in/(hr•ft<sup>2</sup>•°F). The relationship shows that the higher the thermal conductivity of an insulation material, the thicker it has to be to deliver the same thermal resistance.

Values of thermal conductivity are determined experimentally at a mean temperature of 75°F and typically range from 0.23 to 0.35 Btu•in/(hr•ft<sup>2</sup>•°F) in duct insulations. So for *t* = 1 inch, and *k* = 0.25

Btu•in/(hr•ft<sup>2</sup>•°F), the resistance **R** is:

$$R = (1 \text{ inch}) / (0.25 \text{ Btu} \cdot \frac{\text{in}}{\text{hr} \cdot \text{ft}^2 \cdot \text{°F}}) = 4 \frac{\text{hr} \cdot \text{ft}^2 \cdot \text{°F}}{\text{Btu}}$$

The units are normally left off for R-values and the one for this would be an **R-4**.

The resistance equation can be rewritten to calculate the thickness required for a specified thermal conductivity:

$$t = kR$$

Using the same units, if an **R-8** is required and the thermal conductivity is  $k = 0.25 \text{ Btu} \cdot \text{in} / (\text{hr} \cdot \text{ft}^2 \cdot \text{°F})$ , then

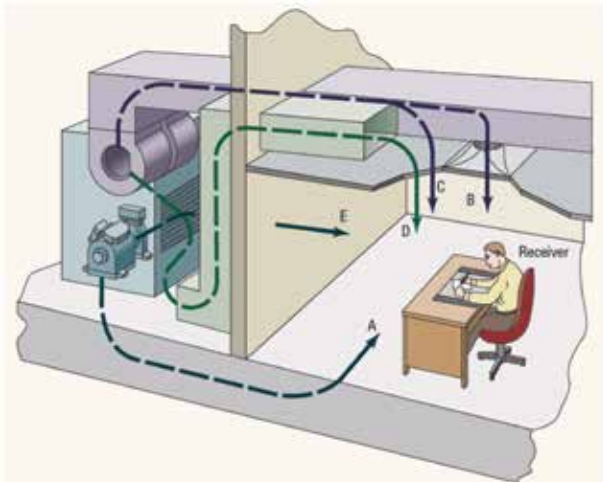
$$t = 0.25 \times 8 = 2 \text{ inches}$$

So, the density is not what should be specified to meet an R-value; the thermal conductivity should be specified. Given the thermal conductivity the manufacturer or installing contractor will need to determine thickness needed to meet the R-value.

The thermal resistance of an insulation is a function of the insulation type, its thickness, and its composition. For example, the thermal conductivity of mineral wool is higher than that of fiberglass for the same density. A typical mistake in specifications is to specify the associated density or a thickness of the insulation, rather than the R-value or the thermal conductivity,  $k$ , and the thickness. Materials may have different densities, but they may have a similar thermal performance. Specifying an R-value can give the contractor options. They may be able to use a thinner material with a low thermal conductivity or may have to use a thicker insulation thickness to meet the R-value.

### Acoustic (Noise) Control

Noise control is often the main reason to specify an insulation. Sound starts at a source that causes the air or material to also vibrate and create sound waves. Sound waves propagate in all directions. In an HVAC system sound propagates from the source (fan) to a receiver through many different paths as depicted in this figure:



Although there are many different sounds that a receiver (the human) may hear, usually the loudest sound is from the fan. Air movement through ducts also generates noise that travels down the sound path in the ductwork. The ductwork, both supply and return, is generally the main path for the sound (although, as you can see, there are other paths). Metal ducts are very good transmitters of sound. Without proper attenuation, these sounds can be unacceptable at the receiver.

Noise can be controlled at the source (use a quieter fan or sound enclosure), controlled along its path (use of insulation), or controlled at the receiver (ear plugs, masking). This paper focuses on using insulation to control noise levels.

### Insertion Loss, Noise Control in Ducts

Sound has two major characteristics: loudness, measured in decibels; and pitch, measured as frequency or cycles per second. One might choose to use duct insulation, silencers or a combination of the two to control the noise level. Each will have data on the sound attenuation (insertion loss) as a function of the frequency band where the noise is occurring. The designer should choose the method of controlling the sound as a function of its loudness and frequencies.

The designer has to determine if the chosen silencer or duct liner has the right insertion loss for the noise spectrum to reduce the sound power level to that needed at the location of the receiver. The industry has already established that density was not a major factor in measuring or determining the insertion loss of lined ductwork. Insertion loss is a function of size, insulation thickness and length. This is evidenced by the regression equations developed to calculate insertion loss of rectangular or round duct which do not include a factor for density. As shown in the *SMACNA HVAC Sound and Vibration Manual, First Edition*:

For rectangular duct, the insertion loss equation is:

$$IL = B(P/A)^C t^D L$$

Where:

the size factor is perimeter/area,  $P/A$ , 1/ft

$t$  is the thickness, inches

$L$  is the length, ft

$B$ ,  $C$  and  $D$  are regression coefficients from Table 5-4 of the *SMACNA Manual*.

For round duct, the insertion loss equation is similar:

$$IL = (A + B \times d + C \times d^2 + D \times d^3 + E \times t) \times L$$



Where:

the size factor is the diameter d, in

t is the thickness, in

L is the length, ft

A, B, C, D and E are regression coefficients from Table 5-8 of the SMACNA Manual.

Neither of these equations have a factor for density!

### What Designers Should Specify

Insulation density plays a minor role in both thermal and acoustic performances. However, density is not a performance parameter. For thermal control the designer should specify insulation properties that give them the desired result. For example, if the designer wants an R-6 value, then insulation should be specified with the thermal conductivity and thickness that will give them the R-6 value. In this case a thermal conductivity of  $k = 0.25 \text{ Btu}\cdot\text{in}/(\text{hr}\cdot\text{ft}^2\cdot\text{°F})$ , and 1.5-inch thickness will give  $R = t/k = 1.5/0.25 = R-6$ . Or if R-6 is specified, the designer can calculate the thickness that should be specified from  $t = kR = 0.25 \times 6 = 1.5 \text{ inch}$ .

For noise control in the duct systems, the designer will need to determine if using a silencer or lined duct should be used. For a silencer, the designer should specify the required insertion loss and maximum pressure drop allowed. Nothing is required for density. The installer would need to match the insertion loss against manufacturer's data on their silencers. There are often several silencers that will meet the insertion loss and pressure drop specifications.

If the designer chooses duct liner to control the noise, they will need to determine how much liner in feet is required for 1-inch or 2-inch thickness for the duct dimensions given. The density will not be a factor and the designer should just require the duct liner to give the necessary insertion loss. Any manufacturer's standard insulation should give the necessary insertion loss if the acoustics are designed correctly.

If the insulation is necessary for both thermal and noise control, the designer should specify the insulation to take care of the thermal control necessary as the insertion loss will be about the same regardless of the insulation chosen.

### Summary

From a thermal perspective, it is critical to specify thermal conductivity and thickness or R-value to determine the performance of the insulation. Specification of density or thickness alone does not lead to a minimum thermal performance.

Similarly, the acoustic performance is not determined by density or thickness alone; the performance parameter is the insertion loss.

Designer specifications should be performance-based. Leave out the density as a specified requirement. ■

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## LIFE SAFETY DAMPER MAINTENANCE AND INSPECTION

Fire and smoke dampers are a proven and effective way to protect ductwork and wall openings and shafts. Once Underwriters Laboratories (UL) created Standard 555 for fire dampers and Standard 555S for smoke dampers, the damper industry has worked closely with building code authorities to design, manufacture, and outline correct installation procedures.

Life safety dampers have evolved from black iron, single blade, gravity operated products to the actuated and dynamically operated products used today. As time progressed with it the test criteria has also become more stringent. In testing, non-actuated fire dampers are required to complete 250 full open/close cycles. Actuated dampers are required to complete 20,000 open/close cycles. Minimum airflow ratings of 2000 fpm through the fully open damper and 4 inches of static pressure across the fully closed damper have also been established to eliminate marginal products from being installed. In addition, safety factor of 400 fpm and 0.5 inches of static pressure are used during the testing. A damper with the minimum 2000 fpm and 4" static pressure rating is tested at 2400 fpm and 4.5" static pressure.

Even with stringent test requirements, the proper performance of life safety dampers in the field requires that the manufacturer's instructions be followed. UL requires that installation instructions are provided with each package and now most have this information on line, as well. Although installation requirements vary by damper manufacturer and model, the following items are generally covered in the installation instructions:

- The wall/floor framing details
- Clearance requirements between the damper and the wall/floor opening
- Duct to damper sleeve connections
- How to properly secure the damper to the wall/floor opening

As with any mechanical device, proper maintenance is necessary to ensure that dampers will operate as designed and save lives. Inspection and maintenance requirements are established by the individual manufacturers and by the National Fire Protection Association (NFPA). The most important step in making certain that a life safety damper will operate correctly is done during the commissioning process. Chapter 19 of NFPA's Standard 80 states that "after the installation of the life safety damper is completed, an operational test shall be conducted." The standard goes on to state that for combination fire and smoke dampers,



By Norm Grusnick, P.Eng.  
ECCO Supply

"the operational test shall be conducted under non-fire HVAC conditions as well as static flow conditions." The National Building Code references NFPA for proper maintenance of life safety dampers.

After the initial commissioning process, it is essential to implement a periodic maintenance program for a building's life safety dampers. Chapter 19 of NFPA 80 including fire dampers states, "Each damper shall be tested and inspected one year after installation. The test and inspection frequency shall then be every four years, except in hospitals, where the frequency shall be every six years."

Safety of our buildings and their occupants is of prime importance. The continued routine maintenance and documentation by the end user allows the systems to perform and function as designed and intended. ■

### SMART Local 280 /SMACNA-BC Partnership



Left: Jud Martell, Local Union No. 280 President.  
Right: Bernie Antchak, Northwest Sheet Metal Ltd., SMACNA-BC President.



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- B. Flaherty, Cornell University, Syracuse, N.Y.

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## THE DEADLY SECRETS

### *Mental Health & Well-Being In Construction*

For an industry so concerned with safety, it seems either ironic or pathetic that we tell people to wear their safety goggles while they might be thinking of killing themselves—and still no one is talking about mental and emotional health on the job site.

This reluctance, as organizations and individuals, to be honest with ourselves or others plays a big role in our security and happiness in life—and at work. And the tendency of most organizations and leaders to ignore these fears in the workplace has a significant impact. Now some very compelling research backs it up. Besides suicide rates construction also has higher rates of:

- Opioid and substance abuse
- Depression
- Anxiety
- Anger issues
- Related issues

And right now, after a year of COVID stressors, more than ever many are pushed to the edge. Why can't our industry step back and take an authentic look as the employee as a whole person? Why is it such a stigma for construction workers to admit they are struggling?

Fear.

- Fear of looking weak.
- Fear of being vulnerable.
- Fear of being rejected.
- Fear of being judged.
- Fear of failure, and thus of risk to our self-image and esteem.

Defeating these secrets requires people to feel safe. Safety for and with each other builds bonds that enable people to stretch, risk, and trust. They also allow people to be authentic and bring their best selves to both others and the workplace. For learning, coaching, mentoring, and healing this is essential.

Mortenson, a proactive and forward-thinking client of mine, took this on in an admirable way. They built a Toolbox Talk—a craft-focused update shared by project leaders to ensure team members have access to important information—highlighting mental health and tied it to the timing/pressures of COVID. Their field leaders reported that they have never in 20 plus years had more positive feedback from the field on something they presented. Story after story about the workers, their spouses, and their kids came spilling out. The company was blown away by the response. And more importantly, its leaders earned the respect of their people because they simply showed they cared.

In many, if not most, construction workplaces this willingness to deal with employee wellness at its roots does not exist. It is



By Mark Breslin  
CEO, brezlin.biz

not valued as it should be. What takes its place are “suck it up” expectations, employee quiet desperation or worst—everyone seeing problems but not knowing what to do or say.

Many construction leaders accept this because that is what they are most accustomed to. But those with courage and vision will put in the work to create a supportive safe and empathetic leader response. It might sound like this:

- We accept you and don't judge you.
- If you are struggling, you are not alone.
- There are resources for those of us who are challenged.
- I have walked in your shoes and know what you are facing.
- We've got your back.

For leaders it can be a challenge to prioritize emotional wellness and care. It doesn't seem to pay the bills. That is a pretty old school viewpoint. I cannot emphasize this enough; caring about people matters and pays.

In my 30 years of organizational leadership, I have seen it all. Employees with anxiety, serious health issues, crumbling marriages, depression, financial declines, substance abuse, and more. I have seen all of that in my own extended family, and I am sure you have as well. I absolutely consider it my role to create a supportive (not enabling) environment and provide resources and references to all who are in need. That is just in line with the leadership values that I believe in. Everyone is human and everyone has their own struggles.

Here are three ways to promote emotional and psychological wellness in your organization:

1. Be the best example with your own emotions, behaviour and communication. A leader that shows authenticity, vulnerability, and empathy gets loyalty and buy-in in return. Openness and trust follow allowing people to come to you. Being your best self, no matter what others think is real strength. Being open to and for others gives others the permission to do the same.
2. Communicate about resources. Talk about mental health. Do the Toolbox Talk. Consider providing additional resources. Mortenson, the client contractor I mentioned, also purchased subscriptions to Joyable, a mental health app, for thousands of employees to use anonymously.

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## SAFETY BUY-IN STARTS WITH A SINGLE THOUGHT

Business development is the focus of most companies. Getting more customers, making more sales, upselling existing clients. Companies hone and adjust their marketing messages to attract more revenues. When more clients buy from us, there is cause for celebration.

Sometimes, what's being sold is a product, sometimes a service, sometimes an idea or point-of-view. But business doesn't develop until someone buys something.

### **In order to buy, someone needs to sell.**

When you're a job seeker, you're selling yourself. Lawyers are selling to juries to keep their clients out of prison. When you go looking for a raise, you're selling your value and experience.

Even the consultants and self-proclaimed experts who try to dominate the LinkedIn discussions are trying (seemingly desperately) to sell their point-of-view. Unfortunately, cynicism, mockery, and ridicule are ineffective tools in getting others to buy-in.

However, when we try to get our employees to improve their safety performance, we are in effect, trying to get buy-in to our way of doing things. That is selling. Before someone will "buy" someone else has to "sell."

### **Internal marketing is key to safety buy-in.**

We are selling to our internal customers, our employees. This is internal marketing, and it is necessary to get buy-in to any goal, idea, or even the safety program.

Internal marketing is the best way to help employees make a powerful emotional connection to safety. Without that emotional connection, employees can undermine safety unconsciously.

In some cases, it is because they simply don't understand what it is that you want them to do, specifically. So, they end up working at cross-purposes. It may be that employees feel disengaged or even hostile toward their own company. Employees don't want to give their all to an employer who doesn't seem to value them or their contribution.

However, when employees believe in the mission and they buy-in to the plan to achieve that mission, they're more motivated to work harder and their loyalty to the company increases. Employees become more unified and inspired by a common sense of purpose and identity.

### **Create a unified vision for safety.**

An organization that doesn't understand internal marketing is going to struggle to get employees unified around a common theme based on safety. Oh, there is certainly a need to keep people informed about the company's safety strategy and direction, but very few organizations understand the need to



By Kevin Burns

convince employees of why safety is necessary to achieve the employees' own goals.

What's more, the people who are charged with internal safety communications, like the safety and HR departments, and even the front-line supervisors, don't have the marketing skills to communicate it successfully. Instead, PowerPoint slides, bar graphs and charts, and lots of talk about numbers are the tools of choice. Ineffective tools that are not designed to convince employees of the uniqueness of the company's safety strategy. The intent usually is to tell people what the company is doing, not to sell them on getting behind the idea.

There needs to be a vision for safety, a unifying idea that employees can "live" in their day-to-day activities. And when employees live that vision, they are much more likely to experience their own participation in safety in a way that's consistent with working toward the vision and goals of safety.

### **The safety mission in a single phrase.**

The first step of getting any kind of employee buy-in to the safety program is to get rid of distraction and superfluous numbers assaults. Can you boil down your safety purpose and vision to a single phrase? If you can't, then you're going to struggle with buy-in from your team.

It is imperative that every good communications strategy must revolve around a single idea. That idea needs to become the foundation of how all communication is structured.

That foundational statement needs to be seven words or less. And yes, every organization that I have taken through this exercise has successfully reduced their foundational safety statement to seven or fewer words. And they have felt more powerful and focused as a result.

It is a process that works. No more will you struggle with throwing a bunch of mixed messages out there and hoping something sticks. This is a plan to focus your safety communications on a single foundational idea. And then everything you say after will support that statement.

If you want to get employee buy-in to safety, the best way to start is with a single foundational statement. The RYT Program is where you start. ■

Learn more about the RYT Program at [kevburns.com/marketing-for-employee-buy-in](http://kevburns.com/marketing-for-employee-buy-in).

## THE OLD NORMAL ISN'T COMING BACK

*I've said it. You've said it. Sometimes wistfully, sometimes with a vague hand-wave type of gesture: "When things get back to normal..."*



By Meredith Low

And sure, that looks like it's going to apply for a lot of things. Sort of. My neighbourhood already has a ton of heartbreaking "out of business" signs up. But some restaurants will survive. We'll be able to go out for dinner at some point. That societal habit won't be extinguished entirely by this crisis.

But if you have kids, and you think (or say) "when we're back to normal", you already know, deep down, why that's not quite right. Your kids will be older when X can happen again (where X = see grandparents in person, go back to gymnastics, go to an amusement park...) They might have outgrown some of these things they miss doing. Or grown into new interests. (Or gotten tall enough to go on the really big roller coasters). My daughter has a new hamster that she wants to introduce to her friends in person. I keep thinking, hamsters don't have a very long lifespan... let's set up some FaceTime. Time feels weird these days, but it does march on nonetheless.

### The lure of the old normal

And it's the same for organizations. At the beginning of the pandemic, I was talking to a lot of folks about how governance is working in these times, and what really struck me was how many

people just assumed that they could defer serious discussions "until we can meet as normal." I know that many in the events industry that serve associations are hanging on (tenaciously, creatively, resourcefully) "until we can meet again." The urge to go back to the familiar is strong, and absolutely understandable. The current situation is untenable—so the old normal of course sounds great in comparison, for a lot of situations.

### What will be the durable changes for the future?

Inertia is a powerful thing. People, organizations, and societies can be stubbornly resistant to change, or find it terribly difficult, even when it's in our best interests. Think struggles to quit smoking; long-overdue and painfully slow equity, diversity, inclusion, and reconciliation work; woefully inadequate climate change responses given the urgency of the problem.

But lately, I'm hearing more and more people say, increasingly vehemently, that various genies will not be going tidily back into their bottles. That they think consumer and employee and employer and volunteer habits have changed in ways that will prove durable (and interesting). Just some very practical examples:

We now know we can attend a great conference virtually—and even the ones that haven't been so great have still had value and shown us where we need to evolve

We now know we can be productive working from home—there are still unanswered questions about levels of productivity, generating innovation and creative ideas, assessing performance from a distance, and so on, but we've got lived experience that will help us through those discussions

We now know we can have serious discussions and make big decisions via videoconference, if we need to

Now, will I be delighted to meet in person again? You bet. I'm an extrovert and a big believer in the notion of conspiracy—in the sense that breathing the same air as other people is a good thing. I miss some of the serendipity of a conference, of just running into someone and reconnecting, or starting a new relationship while waiting in line for the bagels. But that doesn't mean my habits and capabilities and even some preferences haven't changed, and quite possibly permanently.

Because the thing is, I know how to run generative discussions via Zoom an awful lot better than I did before, and I do not miss airports and trains and taxis.



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**Potential silver linings...**

And the situation has illuminated some opportunities. Keeping on with the examples above:

- If you previously only had a small percentage of members at your conference, now is the time to think seriously about how you're really serving them—shouldn't they expect hybrid even when you go back to in-person?
- If you had an underutilized office because of travel or because your staff just didn't work together much in person, do you need to think about your cross-silo collaboration? Or could you think about letting go of the physical office and expand your hiring pool to a broader geography? Or a mix of those? Or something else?
- If you've kept your board meetings to the full-day-or-two-or-three marathons we usually do because everyone got on a plane and so we need to maximize the time together, I can see you'd want to get back to in-person. But can you think differently about your agenda design and meeting duration in a virtual context?(And about how you train and support your board chair while you're at it?) Why should your board calendar look exactly the same?

**Making less precise predictions about the future**

Talking about "going back to normal" is in fact a very precise prediction about the future. It suggests that nothing about the pandemic will turn out to have made a significant change.

That's obviously not true. Especially not for the millions of people who are and will be grieving a loved one, coping with the long-term health effects of COVID, dealing with a business closure or a job loss, living with the effects of trauma as a first responder or health care worker or even essential worker—for all those who bore an inordinate amount of risk and pain during this whole crisis. People directly affected in these ways may hear "back to normal" as an idea that's a luxury that's completely out of reach.

But it also strikes me as a dangerous sentiment for anyone who's trying to figure out how to lead any kind of team or organization into whatever the post-pandemic world looks like. The old normal isn't coming back. It's time to think about moving forward with clear eyes. What underlying trends have been exacerbated or slowed or muffled or disappeared by the pandemic? What new opportunities have emerged? What questions does this all raise for your sector, for your organization?

What other change might be possible? Especially now? What changes can we choose?

If we can help you think about what lies ahead, and what to do about it, please get in touch at [meredithlow.com/meredith-low-about](http://meredithlow.com/meredith-low-about). ■

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## REVOKING BUILDING PERMITS AND BEING REASONABLE

When municipal bylaws change, such changes can impact the way a business will make decisions about accepting or rejecting project opportunities. The recent case of *Mullany v. Squamish-Lillooet*, 2019 BCSC 1581 considered a scenario where a bylaw was amended after an application for a building permit had been submitted.

### The Facts

The Petitioners owned a property located in the Agricultural Land Reserve in the Squamish Lillooet Regional District (“District”).

The Petitioners planned to convert their existing farm building from a horse riding arena into a medical marijuana production facility. This use was permitted under the zoning bylaws and provincial laws that applied at that time.

The Petitioners applied for a building permit on January 14, 2014.

On October 27, 2014, the District amended its zoning bylaw to prohibit medical marijuana production facilities on parcels of land less than 60 hectares in dimension.

The District issued the Petitioners building permit on December 17, 2014.

The Petitioners commenced work on the property and within the farm building. This included excavating and moving material to permit the construction of a new concrete foundation.

Construction throughout the permit term was intermittent. This was due to the Petitioners need to finalize the interconnection options for the property, propose minor changes, and obtain financing.

On July 12, 2018, the District revoked the building permit without warning to the Petitioners. The stated reason for revocation was that the District had been contacted by a realtor about the property, triggering a review concluding that the Petitioners were in contravention of the bylaws. This was only six months before the permit was set to expire.

The District provided several additional reasons for revoking the building permit, such as being in non-compliance, failure to order an inspection, and a lack of construction progress.

The Petitioners had already incurred approximately \$400,000 in consultant fees and approximately \$2,800,000 in their application to Health Canada to become a licensed producer of marijuana.

The Petitioners took the District to court after repeated refusal to extend or reissue the building permit.



By Ted Lewis and Liam Robertson, Kuhn LLP

### The Decision

The court noted that a building inspector has very little discretion to deny a building permit application that complies with the relevant bylaws.

The question becomes whether such decisions are “reasonable”.

A reasonable decision is one that demonstrates justification, transparency, and intelligibility and falls within the range of possible and acceptable outcomes. The District decision fell short of this standard, particularly regarding their decision to revoke the permit when only six months were remaining.

The District argued that the building was not “under construction” and therefore they were able to revoke the permit early. This was because of the slow progress that had been made over the permit term.

The judge found that the Petitioners had showed a “commitment to use” and that construction was “clearly underway”. The judge found that the suddenness of the election to end the permit was unreasonable.

### Lessons Learned

- Developers and businesses alike should be aware that municipal decisions may be unreasonable if an application is compliant with the bylaws and is subsequently revoked or rejected.
- Businesses, where possible, should be diligent about maintaining familiarity with current bylaws and bylaw changes that are going to be implemented. These proposed bylaw changes can impact the way businesses operate and reflect an opportunity for businesses to maintain a proactive approach. ■

*This article was written by Ted Lewis, lawyer, and Liam Robertson, articled 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).*

**EDITORIAL COMMENT**

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future health crises. They want HVAC systems that can filter out viruses, and they want floor plans that easily support social distancing. The future is rife with opportunity.

One area in which nearly every industry struggled was supply chain, but that misfortune has been the catalyst for a new view and renewed diligence around managing this aspect of construction businesses. Delays and lost work have highlighted a level of complacency around managing the supply chain, and have provoked interest in intelligence-led supply chain management that embraces direct relationships and collaboration with subcontractors.

There are other things. We have a renewed sense of what is important in the world—family, health, self-care, sustainable work—and greater awareness of wastefulness. We are appreciative of social time and travel, and we have learned to tell our nurses and doctors we appreciate them, connect with the elderly, and tip our servers. As the next year unfolds, there is no telling what other ways the cans will fall, but if there is anyone who can restack them with integrity, it is the construction industry. ■

**INDUSTRY NEWS**

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In the new Talking SMART episode, speakers focus on mentorship, mutual support in the workplace, and working pro-actively to address issues such as hazing, bullying, and discrimination. Featured guests are SMART Local 265 Business Representative Louise Medina and Local 265 member Mike Powers.

Check it out: [talkingsmart.podbean.com](http://talkingsmart.podbean.com) ■

**CONTRACTORS' ADVICE**

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Make sure your people have a trusted go-to person in the company. Know what is available through your union partners and let your employees know.

3. Do not compromise, rationalize, or ignore any self-destructive behaviours of your team. A lot of the time we (especially field leaders) see it and feel too awkward to act. A couple of times in my life, I was personally a little beat down and burnt out. And most of my team could easily see it and rallied for me for a few months. I was so incredibly grateful and came through it with more loyalty and respect for them than ever.

Do it for your people. Not because they make you money, but because it is the right thing to do and someone has to step up. When you let it go, you let down your team and yourself. This kind of safety is not about protective goggles and lift with your knees. This is about life.

What makes a healthy person, a healthy family, or a healthy child? What helps them grow and thrive as they should? Yeah. Same thing. Psychological and emotional health and wellness. Even in our rough and tumble industry it's going to be worth the time and effort. ■

Mark Breslin is an author, speaker, CEO and influencer inspiring change for workplace success across all levels of business. Mark has improved leadership, accountability, innovation, and engagement for organizations and individuals. He has spoken to more than 400,000 people and sold hundreds of thousands of copies of his books on leadership and workplace culture. See his work at [breslin.biz](http://breslin.biz).

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