

SPRING 2021

# Sheet Metal Journal

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Western Washington



## Women in Construction Week



*Also in this issue:*

**JACT Pre-apprenticeship Program**

**Emerald Aire**



WESTERN WASHINGTON  
Official Journal of  
Record for SMACNA-WW

# OUR CONTRACTORS SET THE STANDARDS FOR THE INDUSTRY



SMACNA-Western Washington is a trade association and a Local Chapter of the Sheet Metal & Air Conditioning Contractors National Association (SMACNA), which is located in Chantilly, Virginia.

SMACNA Contractors are heating, ventilating, air conditioning (HVAC), and sheet metal experts. They are your assurance of quality in the fabrication and installation of ductwork and air handling systems.

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## STATEMENT OF PURPOSE

The ultimate goal of SMACNA-Western Washington, Inc. is to achieve and maintain the following principles and programs for the sheet metal industry:

1. To establish advertising, publicity, and promotional activities that advise the public of the nature, extent, and availability of services performed by the industry.
2. To promote educational programs to formulate high quality standards of sheet metal construction.
3. To aid in the formulation of uniform sheet metal specifications and improvement of state and municipal codes.
4. To expose fraudulent or misleading advertising or representations intended to deceive the public.
5. To encourage and promote trade practices that will eliminate unfair competition or exploitation of the sheet metal industry.
6. To encourage and promote the establishment of a uniform pattern of payments by customers during the progress of jobs to avoid inequitable payment delays and economic penalties.
7. To provide a forum for the discussion of the common interests and problems of labor and industry, and to encourage and promote harmonious relations between labor and industry.
8. To encourage any proper activity that will increase the efficiency of the industry and its ability to serve the public.



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## SMACNA-WESTERN WASHINGTON CELEBRATES WOMEN IN CONSTRUCTION WEEK MARCH 8-12

The focus of Women in Construction (WIC) Week is highlighting women as a visible component of the construction industry, raising awareness of the opportunities available for women in the construction industry, and emphasizing the growing role of women in the industry. The theme for WIC Week 2021 was “Diversity, Equity, and Inclusion in Construction,” which focused on constructive, meaningful, and collaborative ways to develop DE&I in the construction industry.

Events ran daily from March 8 to 13, kicking off with SMACNA-Western Washington’s annual sponsorship of the Virtual Allstate Hot Chocolate 15k/5k Running Race. Participants were encouraged to experience America’s sweetest race wherever they chose this year, as the event went virtual. Runners and walkers were encouraged to get out in their own locales, traverse their chosen distance, then log in to their EnMotive accounts to upload their results, download a finisher’s certificate, check their ranking, and upload photos. Proceeds went to help St. Jude Children’s Research Hospital, the official race charity of the Allstate Hot Chocolate 15k/5k.

The Rosie’s Closet Kickoff opened up WIC, welcoming donations of good reliable, gently used work wear—like work boots, jeans, rain gear, long-sleeved shirts, and hard hats—to this SMACNA-WW initiative that aims to help women who are new to the trades or starting over in their careers.

Drop-off locations included ANEW, AOP’s Kent Training Center, PSF, Hermanson, SMACNA, Holaday-Parks, Local 66 Union Halls, and ACCO, and donations are welcome on an on-going basis. Contact SMACNA-WW for details.

Companies are encouraged to collect donations in their own Rosie’s Closet by contacting SMACNA-WW for printed materials that can be attached to a donation bin at the office.

Members may also show support for this important cause through purchasing items off the Rosie’s Closet Amazon Wishlist: <https://amzn.to/3oSPzO1>

Tuesday, March 9 introduced the DTG Construction Debris Tour with WM, presented by National Association of Women in Construction (NAWIC). Have you ever wondered what happens to construction debris coming off the site? DTG and WM gave participants a virtual facility tour to show what happens to materials, explained their partnership, and also gave practical tips for how we can be more sustainable in our everyday lives. Registration included a reusable cutlery kit and \$5 gift card to Mercurys Coffee.



By / Julie A. Muller, Esq.  
Executive Vice-President, SMACNA-Western Washington

Moving on to Wednesday, Author Tricia Kagerer—in collaboration with NAWIC—presented her book, *The B Words*, which follows the trajectory of women’s life and career, identifying key B words that can propel women forward creating the life they want on their own terms, or identify grenades that can blow women off course due to outdated, limiting beliefs and biases that still permeate the workplace culture of today.

Kagerer, a construction risk manager, wife, and mom, held a lively virtual meet-and-greet in which she shared her experiences and advice on defining our own version of success and balance. Read more about *The B Words* or watch a video trailer on the book at [triciakagerer.com/preorder](http://triciakagerer.com/preorder).

An important highlight of SMACNA-WW’s WIC Week was the Virtual Ascent Summit, which brought national and local leaders together to tackle the conversation of diversity and women in construction. Featured speakers included Angie Simon, SMACNA National President, and Joe Sellers, SMART International President, and the Diversity, Equity and Inclusion Panel was hosted by Henry Nutt, Southland Industries; BJ Giri, Holaday-Parks, Inc.; and Tauhira Ali, National Electrical Contractors Association. The conversation was an important look at how to promote and support diversity, equity, and inclusion in the construction industry.

What better way to close WIC than the Stretch into Spring virtual event presented by Holmberg Mechanical? Too often, our busy schedules leave us overwhelmed, exhausted, and burned out, but a quick meditation session can be the pick-me-up needed to take on the rest of the day feeling calm, confident and centered. Stretch into Spring was exactly that—a live session presented over the lunch hour by Barbara Badolati of Be Meditation, a woman-owned Bellevue business. Its aim was to help participants focus and the relax their minds.

Throughout WIC, SMACNA-WW encouraged participants to enter its annual WIC Social Media Photo Contest by posting photos that inspire and support the theme “Diversity, Equity,

continued on page 23

## COMMITTEE SPOTLIGHT: LEE PYFROM, CHAIRPERSON RISK MANAGEMENT COMMITTEE

SMACNA-Western Washington's Risk Management Committee has a clear and important objective: improving the safety of all the sheet metal workers in Washington State, and even nationally, by developing policies and training.

The committee's chairperson, Lee Pyfrom, Director of Safety for SMACNA-Western Washington member MacDonald-Miller Facility Solutions, says this is one of the reasons he is passionate about his work on the committee.

"The first reason I became involved with the committee is that I love the mission of trying to make the industry as a whole better and safer," he says. "That is great for everyone. The other reason is that I respect the trade. My grandfather was a sheet metal worker in Chicago. The people on the committee are well-respected safety professionals. It is really nice working with a group of people where we can all collaborate to make the industry better and safer."

The committee has implemented a number of important initiatives, including a yearly Safety and Technology conference, which is well attended and includes exhibitors, such as safety suppliers and tool companies. The highlight is presentations and panels on a variety of safety topics.

"Those topics could be a panel discussion on how to implement a safety plan or a having an attorney speak about the pitfalls and ways to protect a company and ensure compliance with regulations," Pyfrom says. "It could be an ergonomics topic, fall protection, or any number of safety related topics."

The Safety and Technology Conference is usually held in the spring, but has been postponed until September 2021 because of COVID restrictions. Its main event this year will be a panel discussion about risk management and safety culture best practices post-COVID.

Another initiative Pyfrom is proud of is the committee's development of a safety-related video series covering Asbestos and Lead Awareness, Fall Protection Safety, and Ladder Safety.

"We made these training programs into videos and sent them to the union companies for free," Pyfrom says. "This helps ensure smaller companies who may not necessarily have dedicated safety staff are able to train their employees effectively."

Pyfrom wants to encourage the membership to share with the committee ideas about any topic they would like researched or discussed for the purpose of training or education in the future.

"It would be great to get their feedback," he says. "I think it is also important that the membership know that the work



we all do carries risk, but nothing is more important than all employees going home safely at the end of every day. Nothing is important enough to risk their health and safety."

Pyfrom has been with MacDonald-Miller Facility Solutions and on the committee for seven years, but he has been a safety professional for 17 years, including seven with the Washington State Division of Occupational Safety and Health.

He says that over the course of his career, the most important change in safety has been a shift in the culture of compliance and care.

"The most impact has been the crew buy-in to safety and the foreman's ability and courage to lead and intervene and make sure employees work safely," Pyfrom says. "I think a couple of things have changed that. People are truly understanding that companies want them to work safe first, as opposed to back in the day when the safety person might give direction but then leadership would tell employees otherwise."

Because construction is inherently dangerous, any employee can practice safe work habits all day every day for 30 years and then let their guard down for 30 seconds and something terrible could happen.

"That is why there is no need to get defensive about safety," Pyfrom says. "If something is happening on the job site that isn't safe, we just need to review it, figure out how to fix it, and move on."

Safety professionals can develop policies and push safety training, but success is a team effort.

"At the end of the day, the employees have to come to the training with an open mind and willingness to implement those practices," Pyfrom says. "Leadership needs the courage to follow-up and the skills to present the material in a way that encourages buy-in." ■

## CELEBRATING EQUITY

Around the time we were celebrating International Women’s Day (March 8), my ten-year-old daughter came home from school and asked if she could teach me the difference between “equality” and “equity”.

“Of course,” I agreed. Her heroes are Rosa Parks, Abby Wambach, Amelia Earhart, P!NK, and RuPaul. That means that even in grade five, she knows how to be a badass and look good doing it, so I knew anything she had to say about International Women’s Day was going to be great.

“Equality,” she explained, “is when everyone gets the same thing. Equity is when everyone gets what they need.”

She used the example of a three people—an adult, a teenager, and a small child—peering over a tall fence to watch a baseball game. They all have a block to stand on that will make them tall enough to see the game. This is equality. However, the adult can see the game just fine without a block so doesn’t need his. The teenager needs his block to see, and the small child has a block but still can’t see because one block is not enough. When the adult has no block, the teenager has one block, and the small child has two blocks: that is equity.

We look at days of notice like International Women’s Day and Women in Construction Week and we intrinsically understand that gender equity is not yet a thing. Yes, we have come a long way from burning our bras and taking to the streets, and the issues are different. Overt, abusive discrimination is rare now (thank goodness) but inclusive workplace culture, pay equality, and mentorship are still the Holy Grails women seek in male-dominated workplaces and industries. They are the blocks they need that the fellas already have.

Culturally speaking, we have passed a tipping point where it is a very small segment of people in construction who would actively harass a woman in construction just because she is a woman. We are in a holding pattern in which women who are “like one of the guys” are the most likely to fit in on



By / Jessica Kirby  
Editor, *Sheet Metal Journal - Western Washington*

construction jobs sites, and hopefully, with enough support, women who are “like themselves” will one day see the same success. Yes, women are still underrepresented in construction but some women don’t want that kind of job and never will, so equality isn’t the point. The point is access. The point is equity.

Times, they are a changin’.

The sheet metal industry has been generous with its blocks. Women in Construction Week, women’s groups, women’s committees, mentorship programs, educational programs aimed at women in leadership, accessible technical training, and most importantly, a strong, unified effort to change workplace culture has made sheet metal one segment in construction that has seen growth in the number of women in the trade.

But there is still work to be done. Real progress will happen when we aren’t talking about women in construction anymore. We will know equity when we are just talking about people in construction, the construction workforce, the hard-working, focused, intelligent, strong men and women who build our cities and keep us housed. In the meantime, the initiatives keep going strong, the groups keep building, mentors keep stepping forward, and one day we will all watch that baseball game together. ■

### UPCOMING SMACNA-WW MEMBERSHIP EVENTS

**April 20, 2021**

Legal & Covid-19 Update, Michael McNally and Kathleen Collins  
Virtual via Zoom

**May 13, 2021**

PPP Part II and Associated Business Opportunities, Michael McLin  
Virtual via Zoom

**June 16, 2021**

Research, Relaunch, and Recover, DeWayne Ables  
Virtual via Zoom

**July 29, 2021 \*\*\* NEW DATE AND LOCATION \*\*\***

Annual Golf Tournament • The Golf Club at Newcastle

**August 26, 2021**

Mariners Game, SMACYA & Membership Mixer • T-Mobile Park

**September 16, 2021**

Xtreme Xperience Event • Pacific Raceways, Kent

**October 24-27, 2021**

SMACNA National Convention • Maui, Hawaii

**November 16, 2021**

Labor-Management Industry Night, Kevin Brown • SeaTac Hilton

**December 3, 2021 \*\*\* NEW LOCATION \*\*\***

Annual Holiday Gala • W Hotel, Bellevue

SMACNA-Western Washington Presents

# SPRING

## WEBINAR SERIES

NAVIGATING THE COVID-19 CRISIS TOGETHER

### LEGAL & COVID-19 UPDATE

BY: MICHAEL MCNALLY & KATHLEEN COLLINS

Withdrawal liability is a topic that baffles many contractors and frustrates all contractors. It is technical and complex, but contractors can benefit from a general understanding.

Why should a contractor know about withdrawal liability?

**Buying and Selling:** If you are looking at buying, acquiring an ownership interest, or selling, it is important to how withdrawal liability impacts you.

**Building and Construction Industry Exemption:** Many contractors are under the impression that because they are in the building and construction industry, unless they decide to become non-union they would never have exposure to withdrawal liability because of the building and construction industry exemption.

**Future:** While the NW Sheet Metal Pension is very well-funded and managed, employers also contribute to the Sheet Metal Workers, which is in Endangered status.

#### Learning Objectives:

- Contractor understanding of withdrawal liability
- Buying and selling liability
- Building and construction industry exemption
- Future liability of pensions
- EEOC guidance for COVID-19 vaccine and the workplace

Tuesday, April 20 at 10:30 am

APRIL 20



### PPP PART II AND ASSOCIATED BUSINESS OPPORTUNITIES

BY: MICHAEL MCLIN

The federal appropriations and COVID-19 Omnibus Bill enacted in December 2020 included a variety of legislation intended to help businesses survive the pandemic. This program will explore the new legislation and some potentially lucrative opportunities for businesses to inject government sponsored cash into the business. The program will provide an overview of the bill's provisions relevant to business owners and your employees. Participants will explore the employee retention tax credit—a very lucrative opportunity for many contractors. They will also evaluate additional stimulus, including extended unemployment insurance and direct stimulus payments.

#### Learning Objectives:

- Explore FFCRA extensions on payroll tax credits and deferrals
- Understand changes to the PPP program part 1 and the opening of part 2 for additional funding
- Understand changed to the EIDL grant program

Thursday, May 13 at 10:30 am

MAY 13

### RESEARCH, RELAUNCH, AND RECOVER

BY: DEWAYNE ABLES

How to quickly deploy your leaders to uncover the changes in your marketplace, prioritize, and make progress emerging from the COVID-19 disruption.

February 2020: Everything is running as expected, the economy is continuing to expand, your project volume is high... planning and deploying teams was relatively simple. Then, our industry and company leaders we're given yet another significant challenge: COVID-19.

Unlike other market and social disruptions, COVID-19 has significantly changed the trajectory of markets that were expanding and has triggered others to emerge.

Which ones do you pursue? Which ones do you stop pursuing? What do you need to know to better prioritize your business development efforts the next 6-12 months?

#### Learning Objectives:

- Assess how client needs have changed
- Understand how projects will likely change
- How to prioritize clients, opportunities, and markets
- Innovate solutions to better serve your partnerships

Wednesday, June 16 at 10:30 am

JUNE 16

### SMACNA-WESTERN WASHINGTON'S 58TH ANNUAL CRAB FEED GOES TAKE OUT

We didn't want to disappoint our loyal annual crab feed lovers, so this February, 5, 2021, we took our annual feast to two drive-thru locations—Hermanson Company and SeaStar Restaurant—where members could swing by for their pre-purchased Crab Coolers.

Each Crab Cooler (up to ten per company) contained 3 lb of crab, 1 lb of potato salad, 1 lb coleslaw, 1 lb baked beans, 3 crawlers of local beer, and dessert cookies, hand-decorated with crabs and the SMACNA-WW logo. After picking up their Crab Coolers, members were invited to join SMACNA online for a Zoom Virtual Crab Feed celebration, complete with Under the Seas costume contest, prizes, and much more crabble fun.

The turnout this year was fabulous, and congratulations to those who won prizes for Under-the-Sea Trivia and Best Costume. The following members won a Chewie gift card for their Cutest Pet submission: Ned Gebert, McKinstry Company; Dwight Nelson, NW Sheet Metal Org. Trust; Michael DeFrancisco, Pinchiff Mechanical; and Andy Gail, Sunbelt Controls.

We look forward to next year when we can (hopefully) get back together in person. ▪



Photos courtesy of SMACNA-Western Washington







### SMACNA-WW 2021 OBSERVED HOLIDAYS



Monday, May 31: Memorial Day

Monday, July 5: Independence Day

Monday, September 6: Labor Day

Thursday, November 25-26: Thanksgiving Holiday

Thursday, December 23-24: Christmas Holiday

# Women in Construction Spotlights

SMACNA-Western Washington was proud to support its women in construction during #SMACNAWIC2021. Each day of Women in Construction Week, SMACNA-WW featured some of its female members. Check out the spotlights below.

© Can Stock Photo / Rigucco



**Allison Adams**  
Local 66 Journeyperson  
Hermanson Company

I decided to get into the trades after some home remodeling. I went through the pre-apprenticeship program ANEW and started in the sheet metal apprenticeship in 2007. I'm now a building trades journey-level sheet metal worker with Local 66 and work at Hermanson Company.



I specialize in robot assisted layout, a.k.a. Trimble. I've helped develop the curriculum for a certification program and teach this robot assisted layout at Local 66. I am also a mentor for the union's women's committee.

I have multiple welding certifications and keep them current to be a most valuable employee. In my time off, I enjoy painting, bicycling, and playing with my kids and dogs. I'm very proud to have such a valuable career that my husband can stay home and raise our three kids.

My advice for people new to the construction industry is to be the most valuable employee you can be. Find your niche—something not everyone else can do. Show up early, be friendly, work hard, and make sure you stretch.



**Sondra Camis**  
Engineering Manager  
ACCO Engineered Systems

When I graduated from college, I had no idea what HVAC was. It was by chance that I was connected to a small design/build mechanical contractor looking for a design engineer, and thought I might as well give it a shot. Right away, I knew it suited me, and now I can't imagine doing anything else. I stayed with that company for nine years until they were acquired by ACCO in 2014, where I now work as an engineering manager.



Over the past 16 years in this industry, I have been continuously challenged and pushed out of my comfort zone. More than once I've questioned if I was on the right track, if I really belonged where I was, and if it was all worth it. The answer is yes! The reward and personal growth that has resulted from those challenges has helped shape me into who I am today.

My advice to anyone who wants to join the field: Find a company where you feel supported. Everyone's career path looks different, and a company who recognizes that will provide you with opportunities to shape that path for yourself.

**Alexis Houle**  
BIM Support Manager  
Holmberg Mechanical

I started in the construction industry as a BIM support specialist shortly after finishing my bachelor's degree. I stumbled into the field when I struggled to find a job in the aerospace industry. After my first few months, I realized I loved the fast-paced and always changing atmosphere. I have been lucky to call Holmberg home throughout my time in construction, transitioning to the BIM support manager role in late 2019. Being in a management position has allowed me to combine my passions for strategy, problem solving, and team development. I am looking forward to continuing my career and seeing how the industry evolves here in the Seattle area.



For anyone who may be interested in the construction industry, I would say that while things may be stressful at times, it's a great industry and getting to see a finished project makes everything worth it. With the evolving nature of construction, especially in regard to construction methods and technology, the industry has many career options to explore.

**Christi Petrie**  
Operations Manager, MEP Service  
Holaday-Parks, Inc.

I started at Holaday-Parks on November 1, 1999. I worked at Boeing for three years before being laid off, then applied as an administrator with the Holaday-Parks service department and got the job. I handled answering the phones, taking service calls, and billing. After five years, I was promoted to supervisor, overseeing four employees. After ten years, I was promoted to office manager running a staff of eight employees. After 15 years, I was promoted to operations manager overseeing all office and field personnel, and I currently hold this position.



My advice for those looking to get into this field is to just work hard and always keep pushing yourself to do more and do better. Be open to change.

**Gina Burnham**  
Senior Estimator  
Miller Sheet Metal

I started my career in Las Vegas in the early 80s helping a small family-owned business clean up around the shop. I became fascinated by the things you can create with something I'd never heard of—sheet metal. I decided to join the apprenticeship program and figure out what this was all about. At that time, it was pretty much



*“ For anyone who may be interested in the construction industry, I would say that while things may be stressful at times, it's a great industry and getting to see a finished project makes everything worth it. ”*

frowned upon for women to get into the trades, but that didn't stop me.

After graduating I went on to join one of the largest HVAC contractors in the West. With the help of continuing education, in a few short years I went from journeyman to estimator to project manager, and became one of the main contacts for our many large casino projects. It was always a whirlwind of excitement and learning.

With the market crash of 2008, my husband and I decided it was a good time to move to Washington, where we always wanted to live. Estimating at Miller Sheet Metal has given me the opportunity to be back in a family-type atmosphere where everyone works hard and works as a team, and the learning never stops.

**Hannah Goobin**  
Lead Trimble Operator  
PSF Mechanical

I have been with PSF Mechanical since 2017. In 2018, I became the lead Trimble operator. Two years ago, I stepped into this role with little Trimble experience and quickly became the company's expert and trainer.



Production leadership all see Hannah as a “Rockstar,” a hard worker and dedicated to job excellence. When I needed a job after being a stay-at-home mom, a family friend shared the benefits of working in the trades. I went to the Local 66 union hall and was accepted into the apprenticeship program in the spring of 2014. By the summer of that year, I was on my first job site at Microsoft.

My most memorable job site was the Old VA Hospital on Beacon Hill, and my favorite tool is a pair of lineman pliers gifted to me during my second year by a journeyman who was retiring. My most memorable construction experience was when a foreman and I installed all the HVAC on a project, and years later when I was parking at this building, I saw everything we had installed. Often, being an HVAC journeyman, I don't have the opportunity to see the duct, fans, etc. we install once the job is complete. ▪



# Head Start

*Western Washington Sheet Metal JATC's pre-apprenticeship program provides high school students with basic skills training, insight into the sheet metal trade, and hands-on, practical experience in "a day in the life" of a sheet metal worker.*

By / Jessica Kirby • Photos courtesy of Kimber Jackson & Sam Wade



Jeff Reinhardt, Executive Administrator for the Western Washington Sheet Metal JATC, says the need for a pre-apprenticeship program at the training center was identified through the JATC's recruitment outreach efforts in high schools.

"Career and Technical Education (CTE) and shop teachers were discussing ongoing efforts to prepare high school kids for jobs, and together we realized there is a need to go straight to work instead of going to college first," he said. "After the success of our SMART Heroes program for veterans, we thought we could mimic that model for high school students. We used part of the SMART Heroes curriculum to create a six-week pre-apprenticeship program."

To be eligible, any high school or vocational training program can nominate up to two students per year. They can be juniors or seniors, but they have to be nominated by a CTE instructor or guidance counsellor.

"Typically, I do some coaching with the CTE instructors to tell them it doesn't have to be the person with the top score," Reinhardt says. "It should be the person most likely to succeed in an apprenticeship."

That kind of suitability relies on certain characteristics, like commitment, work ethic, and long-term goals.

"We want the instructors to talk to students and find out their future wants, needs, desires, and passions for life," Reinhardt says. "So far, we have had really good luck."

"In fact, going into this year, one school who has made recommendations in the program's first and second years abstained for the first time. I asked why and they said they just didn't feel they had any students they could put their name or brand on. So, it is clear the schools are really taking ownership of the process and making sure they recommend the right candidates."

The pre-apprenticeship programs run once a year in the summer time at their DuPont and Everett training centers. Classes run Monday through Thursday, 6 a.m. to 2:30 p.m., for six weeks. There is no cost to participate, and participants are not paid. Each class can take up to 15 students per session, and at the end of it, the top five from each training center receive direct entry to the apprenticeship program, bypassing the application process.

"It turns into a bit of a competition for them," Reinhardt says. "The other ten can still go through the application process, and having taken the pre-apprenticeship program gives them an advantage when we are considering their applications."

Students learn safety training, including OSHA certification, basic terminology, and tool use, and if they are over 18 they complete lift training.

"A lot of it is the instructors coaching participants on what a day in the life out of high school and on the job site is like," Reinhardt says. "Obviously, there are the hard skills, as well, and at the end they are definitely more prepared for a first-year apprenticeship than a typical applicant."



The class of 2020 was much like the years previous, since construction was declared essential work throughout COVID, which meant the JATC was training essential workers.

“We were back open for school in May last year,” Reinhardt says. “We do the pre-apprenticeship program once the main classes are done, so we had fewer people in the building anyway and maintained social distancing and typical protocols.”

While the Western Washington Sheet Metal JATC’s apprenticeship program doesn’t currently have a shortage of applicants, the pre-apprenticeship program has begun to solve a larger industry issue—getting the word out to high school students that the trades are an attractive alternative to four-year college programs.

“Through this program, we are showing high school students that there are opportunities in the apprenticeship world,” Reinhardt says. “They don’t have to go to four years of college and accumulate four years of debt. Our students go back to their friends and families and show them they are walking out of high school, starting a job and an apprenticeship, and potentially making \$50,000 a year. Who doesn’t want to be a part of that?”

After three years operating, the program continues to garner positive feedback from industry, the instructors, and graduates.

“We have ongoing word of mouth support from contractors on the JATC committee,” Reinhardt says. “The apprentices who have gone through the program have been able to stay employed, and employers love them and think they are solid apprentices. It is encouraging for us and makes us feel it is a viable program.”

When he first approached the instructors with the idea to do a pre-apprenticeship program, they were unsure. “They wondered what I was trying to do, bringing a bunch of high school kids in here,” Reinhardt says. “But after we finished with the first cohort, the instructors said it was such a cool program that they wanted to make sure we would do it again.”

Kimber Jackson participated in that first cohort. She was selected because she demonstrated she was reliable, both for quality and consistency in any projects or assignments the class required.

“My teachers believed that that work ethic would carry over to an actual workplace environment,” Jackson says. “The qualities I think would be the most beneficial in this program would be reliability and a willingness to learn.”

Jackson says she enjoyed the program, even though the first week was a bit rough waking up so early on her summer break. “Once we started working in the shop and we were learning hands on, it became a lot more fun,” she says.

The program was instrumental in preparing her for the apprenticeship program because it provided a general understanding of the trade and its requirements, and most importantly, it provided first-hand experience of what a normal workday could entail. “And,” she says, “it also helped me get a foot in the door to actually getting into the apprenticeship program.”

Jackson is currently employed full-time in Bellevue. Her main goal at the moment is to complete her five-year apprenticeship program and learn everything she can.

“After that, I am sure I will have a better understanding of the many aspects of the trade, and I will be able to choose my route from there,” she says.

She says anyone looking for insight into a career in sheet metal and who wants a practical, hands-on sample of a day in the life should strive to complete a pre-apprenticeship program.

“I do strongly recommend joining a pre-apprenticeship if a person is interested in the trades,” she says. “It isn’t for everyone. The wake-ups are rough and some days are pretty slow, but overall it is an incredible opportunity and a great chance to learn a useful, practical skillset—and the trade pays really well!”

For Sam Wade, graduate from the 2019 pre-apprenticeship course, it was his immense interest in the trades and his ability to do well in both the school atmosphere as well as the shop that got his shop teacher’s attention. “Some qualities that I feel made me a good choice are being dependable, dedicated, motivated,

*“I do strongly recommend joining a pre-apprenticeship if a person is interested in the trades,” she says. “It isn’t for everyone...overall it is an incredible opportunity and a great chance to learn a useful, practical skillset—and the trade pays really well!”*

ambitious, and, most importantly, having the willingness to learn,” Wade says.

The decision to attend was one he will never regret. “It was an amazing program, and I found myself looking forward to being there whenever I wasn’t,” Wade says, noting the six weeks were a “crash course” in everything from hand layout and OSHA 10 to drafting, shop fab, and welding.

“This absolutely helped prepare me for the apprenticeship,” Wade says. “Coming in as a completely green first-year apprentice, they don’t expect much. It was extremely helpful to be able to show that I had some of the basic knowledge of the trade. I feel it helped me not only gain more respect but opened them up to letting me try some of the more advanced projects.”

Wade feels fortunate to have stayed employed throughout the tough COVID-19 months, and he is currently working on the

Fife Elementary job for Northwest Mountain Air.

“My goals in the future are high,” he says. “I’m trying to stay focused on completing the apprenticeship without being late on anymore work reports, which is currently my biggest struggle. However, my true goals are to journey out and eventually become a foreman. Perhaps one day I’ll become an owner of my very own shop.”

Like Jackson, Wade highly recommends the pre-apprenticeship program and the sheet metal trade in general to other young people. “Don’t hesitate,” he offers. “The idea of committing yourself to a trade program for years can sound very intimidating, but I can speak firsthand that it can be unbelievably beneficial.

“So, my advice would be that if you’re hesitant in joining an apprenticeship program, jump in with both feet. You can only get something out of it if you first put something into it.” ■

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# HOBSON PLACE

By / Robin Brunet

**Emerald Aire tackles a two-phase housing project for the homeless, and takes a collaborative role in the design-assist process.**

Embracing a different construction delivery method than one is accustomed to can be daunting, but if executed well it can also result in substantial benefits—and that is the case for Emerald Aire as it continues to help bring the Downtown Emergency Service Center’s (DESC) Hobson Place facility in Seattle to completion.

DESC works to end the homelessness of vulnerable people, particularly those living with serious mental illnesses, substance use disorders, and/or chronic health conditions. Its intention with Hobson Place is to provide its clients with 177 studio units in two buildings, one of which would contain a full-scale health care clinic.

The first phase of the project was built on the north portion of the parcel, creating 85 affordable studio apartments with supportive services and indoor/outdoor community spaces (these homes opened in October of 2020). The second phase includes the integrated physical and behavioral healthcare clinic and 92 units of affordable housing. It began construction in May 2020 and will be completed later this year.

Although Auburn-based Emerald Aire is well versed in the design build process, construction of Hobson Place was undertaken using the design-assist delivery model, and Emerald’s head coach, David Happe, says of this process, “Although we’ve done design build projects with DESC and very much enjoy that method, design assist was understandable for Hobson as the project was seeking Passive House certification for the second phase south building.”

According to the Passive House Institute, a Passive House allows for space heating and cooling related energy savings of up to 90 percent compared with typical building stock and over 75 percent compared to average new builds. Passive Houses use less than 1.5 cubic metres of gas to heat one square meter of living space for a year, substantially less than common low-energy buildings. Ventilation systems supply constant fresh air, making for superior air quality without unpleasant draughts; and heat recovery units allow for the heat contained in the exhaust air to be re-used.

From an HVAC perspective, the challenges of Hobson Place included designing for a special type of resident. “A bathroom fan drawing in air via trickle vents is the standard way people receive air in their living spaces, but in this case DESC wants to achieve a high ventilation rate with no mechanical equipment in the suites,” Happe says. “Therefore, energy recovery ventilators were placed on the roof of both buildings—five on the north building, three on the south—with shafts routed into each suite.”

This system was augmented with a heat capture system that tempered incoming air to save energy along with achieving a high ventilation rate, Happe says. It was also determined that each apartment would be slightly negatively pressurized, in order to minimize odor and contamination migration.

Variable refrigerant flow (VRF) technology was employed in both buildings. “The first floor of the north building has a standard VRF component, and the project uses a robust VRF



SMACNA members perform work in industrial, commercial, institutional, and residential markets. They specialize in heating, ventilation and air conditioning, architectural sheet metal, industrial sheet metal, kitchen equipment, specialty stainless steel work, manufacturing, siding and decking, testing and balancing, service, and energy management and maintenance.

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system to heat and cool the first three floors of the south building, which contains a health care clinic and offices,” Happe says.

With design-assist, all of this was fleshed out shortly after the project’s inception in 2019. But the delivery method also allowed Emerald Aire to provide an additional crucial service. “By being involved in the preconstruction phase, we were able to give feedback to engineers, price out options, and assess the overall constructability of the project,” Happe explains. “The ideal outcome of design assist is for everything to be implemented as planned, and we achieved this partly by modeling all of the buildings’ elements with BIM.”

Design assist’s success is heavily dependent on complete buy-in from all key players and trades, and in this regard Happe notes that they were fortunate to have already developed a good relationship on past projects with Hobson’s engineer and builders: Rushing and Walsh Construction Co., respectively. “So this particular project wound up being more collaborative than most, and everyone benefitted,” Happe says.

As for DESC, “Its people always know exactly what they want and don’t want, and that also worked in our favour,” he adds.

Emerald Aire, which was launched in 1985 as an HVAC service, maintenance, refrigeration, and gas piping specialist, prides itself on effectively communicating critical information during all projects from conception to completion. Many of its team members have up to 25 years of HVAC/R experience, and another factor that works in the company’s favour, especially with regards to Hobson Place, is its association with SMACNA-Western Washington.

“Hobson Place requires a level of sophistication and thoughtfulness in preparation that demands a skilled team from the preconstruction efforts down the boots on the ground,” Happe explains. “Since we are part of SMACNA-Western Washington and signatory to NW Sheet Metal Local 66, we’re able to throw a lot at our guys and gals, and they perform unflinchingly.”

About the only unexpected element of Hobson Place’s development was the pandemic. “The lockdowns happened during the rough-in phase of the north building, but we were an essential service and had a good safety plan already in place, so adjusting to include COVID protocols was relatively straightforward,” Happe says.

As Hobson Place comes closer to completion, Happe takes time to summarize what the project means to his company. “We regard all our work as special, and all have their challenges, but Hobson Place is very satisfying to us because it provides homes to the most vulnerable of Seattle’s population,” he says. “Hopefully many other such facilities will follow.” ■



## FROM THE PRESIDENT: WHY DIVERSITY, EQUITY, AND INCLUSION MATTER

We as businesspeople should care greatly about DE&I, not only because it is moral and ethical to treat people fairly and equitably, but also because it makes good business sense to create a strong DE&I culture. Creating an inclusive work environment increases productivity and invites innovation while reducing the risk of accidents. It also attracts top talent to our trade.

The construction industry has experienced some shocking incidences of racism that have pushed all of us to look toward a more diverse workforce. However, diversity without inclusion will not work. We have to educate our contractors, employees, and unions that inclusiveness is key to retaining a diverse workforce. Simply put, inclusion is something that does not happen on its own—we need to make sure everyone feels they are part of the team. When employees feel included and their ideas and feedback are appreciated, they will feel invested in the cause and more inclined to contribute.

In a highly competitive industry like ours, it is imperative that we take the lead for all the trades by being the most inclusive, whether it is in the office, in the shop, or on the job site. In addition to our reputation, embracing DE&I has many benefits that can help your business' bottom line.

According to a 2020 McKinsey study, companies in the top 25 percent for gender diversity are 21% more likely to have financial returns above national industry means, while companies in the top 25 percent for racial and ethnic diversity are 33 percent more likely to have financial returns above national industry medians.

Deloitte reports that when employees think their company is committed to diversity and they feel included, there is an 83 percent uplift in their ability to innovate. Innovation leads to better results. And results drive company performance and profit.

Our trade faces significant recruitment challenges over the next decade with more than 35 percent of our workforce aging out. If we can accept and embrace diversity and inclusion in our workforce, we will have an untapped resource to help fill this gap in the future.

SMACNA's Board of Directors and the SMART's General Executive Council have seen the good, the bad, and the ugly, and we all agree that recruiting and retaining a diverse and inclusive workforce with the skills to meet our needs now and in the future is our only path forward. Therefore, we developed this joint statement affirming our common interests and goals:

*SMACNA and SMART recognize that diversity strengthens our workforce, benefits our communities, and makes the unionized*



By / Angie Simon, SMACNA President

*sheet metal industry stronger and more competitive by reflecting the communities where we operate and the people we serve. To affirm our commitment to diversity and inclusion, we have agreed to develop, with the help of experts, a coordinated strategic plan with long-term and short-term objectives which will be evaluated and adjusted as necessary. Our unified goal is to shift the mindset of management, labor leaders, and our respective memberships to recruit, welcome, and retain the most competent and skilled workforce available while embracing differences in age, ability, ethnicity, sex, gender identity, national origin, language, marital status, political affiliation, race, religion, sexual orientation, and other characteristics that make individuals unique. SMACNA and SMART are strongly committed to take the necessary steps to achieve our goal of a diverse industry with no tolerance of bullying, harassment, or discrimination. We will provide regular updates on our progress on the strategic plan and on our continued work to promote our shared values of diversity, inclusion, and equity.*

In 2021, SMACNA will work to help members understand what DE&I means for our industry through the development of programs and opportunities to engage and learn about the positive impact DE&I programs can have on our businesses. Together with SMART, we will make a difference in our industry and set an example for all trades in the construction universe. ■

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## 2021 LEGISLATURE IN THE HOME STRETCH

By the time you read this, the Legislature will be coming down the home stretch to the end of a most unusual legislative session. The session was for the most part conducted virtually because of the pandemic. Only a handful of members were allowed on the floor to debate issues and all the others participated via Zoom. Most legislative staff worked remotely. All testimony for hearings was provided virtually. For the first time the public could sign-in on bills using the internet, which sometimes resulting in a couple thousand individuals weighing in on controversial bills. Overall, the virtual session resulted in less collaboration between legislators but more participation from the public.

### Budgets and Taxes

Despite the early pandemic related revenue losses, key parts of the economy rebounded in 2021 to close the gap. In fact, the March revenue forecast brought state revenues back to what was expected, with six billion more in revenue for the coming budget cycle than the last one. Federal COVID relief funds arrived in three batches, most recently in March. The Legislature has spent some of the federal money on much needed unemployment insurance relief, rental assistance, and childcare support. The \$4 billion the state received in March does not have to be spent until 2023, giving time to target other areas that will need help.

The operating budgets that will be passed by the Democrat controlled House and Senate are expected to be the largest general fund budgets in the state's history. Yet despite no shortage of money, the Democrats are planning on passing a capital gains tax. This tax would impose a 7% tax on capital gains over \$250,000. Presented as an "excise tax," should it pass, the capital gains tax will be subject to a legal challenge on the basis that it is not an excise tax, but rather an income tax. Washington's Supreme Court has said in previous rulings that imposing an income tax in Washington state would require a constitutional amendment. There are some who would like to see if the current Supreme Court would agree with this prior interpretation and some who fear such a ruling would open the door to broader taxation.

The transportation budgets have suffered pandemic-related losses that have not recovered. This, coupled with the strong desire for new transportation projects, has fuelled discussions about new transportation taxes. Unlike most years when a gas tax and assorted fee increases were the main funding sources, this year the Legislature will possibly also consider a price on carbon emissions. Some of that revenue would be dedicated to transportation. Governor Inslee's cap and trade proposal is the most likely carbon funding proposal that could get across the finish line by the end of session.



By / Kathleen Collins  
SMACNA Legislative Consultant

### Pandemic Assistance

The Legislature has already passed legislation aimed at reducing the impact of the pandemic on construction and other impacted businesses. HB 1095 relieved taxpayers from paying taxes on government assistance they received to address the impact of the pandemic emergency. This includes all taxes that would be otherwise be owed, such as B&O and sales tax. SB 5061 provided unemployment insurance relief to businesses impacted by the pandemic by not charging employers' experience rating for their employees' unemployment benefits from March 28, 2020 to May 30, 2020. The bill also capped tax rates over a five-year period, easing the timing for repayments into the trust fund.

We expect there may be more unemployment relief from the state. One possible bill would provide financial relief to employers whose rates have increased sharply because of layoffs. The state will most likely use federal funds to refill some of the unemployment trust fund that has been depleted due to the pandemic. To help workers who have been laid off, the Legislature is also likely to pass a bill that expands the family and medical leave program to make it easier to qualify. One version applies the changes only to the pandemic period. The other would make some of the changes more permanent.

### Construction Bills

This article will be published near the end of the legislative session and there are a lot of issues and bills that are not resolved yet at this writing. However, it does look like some construction-related bills will pass. They are:

- HB 1050 – regulating refrigerants used in air conditioners and refrigeration units
- HB 1391 – clarifying the timing for bid listing for mechanical, electrical, and plumbing
- SB 5024 – easing restrictions on the construction of smaller condominiums
- SB 5032 – reauthorizing and improving alternative public works contracting procedures

We will provide more details on these and other bills that pass at the end of session. ■

## TELEWORK: MUST EMPLOYERS ALLOW TELEWORK FROM NOW ON?

A months-long experiment with telework began with the COVID-19 pandemic, and about half of employed adults currently work from home. Employers hoping to resume in-person operations as soon as they can safely transition back to the office may wonder if they are required to continue telework for employees asking for a reasonable accommodation.

Thanks to new guidance from the EEOC published in September 2020 (see D.15-D.16), employers can rest assured that temporary accommodations made in response to COVID-19 do not automatically entitle employees to their requested accommodation. However, as with all reasonable accommodation inquiries, employers must engage in an interactive process with each employee on an individual basis.

If an employee comes to you and says they have a disability and asks to telework as an accommodation, your initial response will depend on the obviousness of the employee's need and the disability-related limitation that necessitates an accommodation. In most situations, you should enlist the employee in getting information from their health care provider to verify the employee's medical condition and work limitations. Attach a current job description to the form that lists the essential job functions for the employee. Consider asking the health care provider specific questions about the effectiveness of a remote arrangement, possible alternatives, and how long the telework accommodation would need to last.

An accurate, up-to-date job description is vital in assessing whether telecommuting is a reasonable accommodation for an individual employee. In updating a job description, clearly communicate the essential functions for the job and be careful not to add new requirements that were not already part of the employee's job. (For example, do not add new operational duties like performing worksite inspections that require the employee to be on-site or it will likely be viewed as retaliation.) If physical presence at the worksite is essential, however, make sure it is listed on the job description and be prepared to justify why.

- Does the employee need to be onsite for adequate supervision?
- Does the position require face-to-face interaction to coordinate work?
- Does the employee need to be available to interact unscheduled and in-person with outside colleagues, clients, or customers?
- Does the position require immediate access to documents, information, or equipment only available in the workplace?
- Must the position secure confidential and proprietary information in a specific way?



By / Sarah Capelli

Understandably, employers overlooked some of these functions in response to COVID-19, but the EEOC specifically noted that temporarily excusing an essential job function (like physical presence) in these circumstances does not require the employer to continue doing so. Take note of what did not work during your COVID-19 response. What tasks fell by the wayside that need to be restored and why? Updating the job description best informs employees about their essential job functions going forward.

Importantly, even after the employee verifies their medical condition and identifies their work limitations, the employer may select any effective reasonable accommodation and does not need to grant the accommodation the employee prefers. What is effective will depend on individual circumstances, but possible alternatives to telework include offering an alternative business location (for employers with multiple sites), flexing the employee's schedule to an earlier or later start time, offering a compressed workweek, allowing the employee to split their time between the worksite and home, etc.

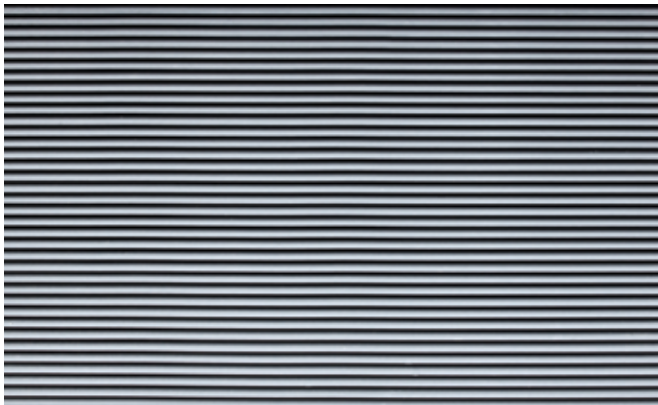
The telework experiment prompted by COVID-19 did significantly alter one aspect of the reasonable accommodation analysis. In the past, employers often argued that telework arrangements were an undue hardship that legally excused them from granting an employee's request. Not too long ago, employees often did not have enough broadband at home to support online operations and working from home required expensive equipment. With new technology that facilitates online meetings and more efficient, less costly office equipment, employers will have greater difficulty establishing the accommodation required significant difficulty or expense.

In a post-pandemic world, employers who return to in-person business operations do not need to automatically grant individual requests from disabled employees to telework but instead should carefully consider each request. The employer begins this process with the traditional interactive process and need not fear that temporary operational practices have locked employers into a long-term business model they did not intend. ■

# LOUVER DESIGN FOR PREVENTION OF AIRBORNE DISEASE TRANSMISSION

Even the most robust HVAC system cannot control all airflows and completely prevent dissemination of an infectious aerosol or disease transmission by droplets or aerosols. An HVAC systems's impact will depend on source location, strength of source, distribution of the released aerosol, air distribution, and filtration. Furthermore, there are multiple modes and circumstances under which disease transmission occurs. Thus, strategies for prevention and risk mitigation require that all stakeholders collaborate in the design process.

With the arrival of the COVID-19 pandemic, building managers and HVAC designers have been challenged with providing a comfortable indoor environment that is as safe as possible for the occupants. A recently published document from ASHRAE offers several strategies for the design and operation of HVAC systems that may reduce infectious aerosol transmission. Among the strategies identified, increasing outside air ventilation and running HVAC systems longer are suggestions for outdoor air dilution and replacement.



By / Norm Grusnick  
P.Eng., ECCO Supply

For systems that use in take louvers, increased airflow and longer operation cycles could increase water penetration through existing louvers causing building damage and indoor air quality issues. Retrofitting with more efficient louvers might be a consideration. For new systems, proper louver selection is vital in designing an effective HVAC system.

Wind-Driven Rain Resistant Louvers provide superior rain protection making them the best choice for new system designs and retrofits. AMCA 500-L Wind-Driven Rain Class A rated louvers allow only a few ounces of water penetration in an hour vs. several gallons through a traditional drainable louver in storm conditions.

Wind-Driven Rain Resistant Louvers are available in horizontal and vertical blade models. Horizontal models can often be sized comparably to traditional louvers for a given airflow with similar pressure drop and high rain rejection effectiveness. Vertical blade models that provide the best rain resistance usually handle the highest air volumes through a given size. For the most demanding applications, AMCA-550 compliant models are available providing 99% rain rejection.

Providing constant airflow and outside air circulation, while keeping water out of a building reduces damage and limits mold and dampness. Both of these are proven to be negative contributors to indoor air quality. Referencing ASHRAE *Position Document on Infectious Aerosols*, additional moisture in the air system can propagate infection. Specifying louvers made by manufacturers that subscribe to AMCA Certified Ratings is highly recommended for all louver applications. ■

*References:*  
ASHRAE *Position Document on Infectious Aerosols*  
AMCA 511 *Certified Ratings Program*

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SMJ-WW is on the lookout for interesting HVAC, architectural sheet metal, testing & balancing, and industrial / specialty news and feature topics. If you have a great idea, notice an industry issue that needs addressing, or want to weigh in on a technical subject, we would love to hear from you.

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## INDOOR AIR QUALITY, MORE IMPORTANT NOW THAN EVER BEFORE

In our role as designers and installers of ventilation and temperature control systems for all types of buildings, we are expected to be the leaders in providing systems that maintain high levels of indoor air quality. Our customers depend on us to guide them on serious financial decisions to select the best approach to guaranteeing not only comfort but also an indoor environment that provides safe, clean ventilation. We are the experts in this field, and this article hopefully will provide some background and insight into what our industry is capable of given today's challenges.

Attempts to control indoor temperatures began in ancient Rome, where wealthy citizens took advantage of their remarkable aqueduct water distribution system to circulate cool water through the walls of their homes. This idea ended with the collapse of the Roman Empire and left us with little more than human powered fans to “keep us cool and ventilated” until the industrial revolution.

In late 19th century America, engineers had the money and the ambition to pick up where the Romans left off. An example of their early efforts occurred in the summer of 1881. President James Garfield was attempting to recover from an assassin's wound and got a respite from Washington, D.C.'s oppressive summer heat thanks to a system involving air blown through cotton sheets soaked in ice water. Garfield's comfort required enormous energy consumption, since ice-making was a new industry at the time. His caretakers reportedly went through half a million pounds of ice in the two months before his ultimate death.

With very few exceptions, most large buildings at the turn of the 20th century were naturally ventilated using the “stack effect”. This technique involves introducing outside air into a building at ground level and allowing it to migrate up the building, picking up interior heat and gaining temperature to increase its buoyancy and therefore rise. This warm air then exits either through roof openings for large assembly spaces (churches, lecture halls) or up through tall building elevator shafts into office building corridors, through transom windows above private office doors, and out the exterior windows. This method of ventilating tall buildings like the Smith Tower in Seattle proved very effective, as the air velocity traveling through these buildings on hot days necessitated the use of paperweights by building occupants in order to keep documents from flying off desks!

Natural ventilation was “state-of-the-art” when the Spanish flu, also known as the 1918 influenza pandemic, began its spread around the world. Lasting from February 1918 to April 1920, it infected 500 million people—about a third of the world's



By / Peter Boileau  
Chairperson, SMACNA-Western Washington Technical Committee

population at the time—in four successive waves. The death toll is typically estimated to have been somewhere between 20 million and 50 million, although estimates range from a conservative 17 million to a possible high of 100 million, making it one of the deadliest pandemics in human history. In the United States, about 28% of the population of 105 million became infected, and 500,000 to 850,000 (0.48 to 0.81% of the population) died.

Since that pandemic, humankind has developed the building comfort and ventilation systems we routinely install today. Although we have made great progress in improving the indoor environment, we are still faced with challenges, including how to keep our buildings safe for occupancy during the current pandemic and how to deal with the increasing problem of wildfire smoke.

The use of ultra-violet (UV) lights to kill viruses is a technology that has been in our industry for a long time. It has become extremely popular in the last year as we build and retrofit critical buildings (typically hospitals, labs, and EMR support facilities) with this technology. Fortunately, the COVID-19 virus is larger than many similar highly infectious viruses and is easily trapped in HEPA rated filters. Studies indicate that as COVID-19 typically travels within airborne water particles (increasing its size), filters with a MERV rating of at least 13 have proven effective. As MERV-13 filters can be easily installed in most medium to large central HVAC systems, this should be the recommended approach in all buildings with this type of system installed. Small, distributed HVAC systems may be more challenging to add MERV-13 filtration to as small systems typically do not have the static pressure/fan horsepower to accommodate the larger pressure drop required by this enhanced filtration.

Once virus particles are trapped in HVAC filter systems, they can be easily killed by the use of UV lights located upstream of these filter banks, facing downstream, and shining on the filters. Thought should also be given to having another set of lights facing upstream and shining on cooling coils, as these potentially wet coils can collect live viruses they can remain

continued on page 23

# COVID BACKWARDS, 2021 FORWARD

COVID spelled backward is DIVOC.

So, how DIVOC is 2021 going to be different?

Well, the answer, among many, is leadership. If there is ever a test of our country, our industry, our companies, our families, and ourselves—it is our test of leadership. And there are three reasons why:

1. Our people are worn out, stressed and uncertain.
2. Asking them to “do more” is not a great option.
3. They need something but would not know how to ask for it.

The question is, what do we use as the foundation for this leadership, and what can we take with us, beyond dumpster-fire memories, into this new year of 2021 and beyond?

What they want to see most of all is that you care about them. That you are putting people first. A lot of times, this is an organizational throw-away line that substitutes for authentic action. In our industry, it looks more like this: Pay people good money. Say nice things to them from time to time (or not so much) and give them more shit to shovel. It is safe to say that many people wore out their shovels in 2020. A level of fatigue has set in that is easily recognizable. Alcohol sales being up



By / Mark Breslin

32% might be some indicator here, but I guess coping comes in a lot of forms.

The truth is that what really jumped out at me is the power of authentic caring by leaders. Maybe that was because of our national state of mind, which is a cross between agitated and anxious. That said, it is the leaders who are exhibiting care, calmness and compassion that seem to stand out.

I will admit, during 2020, I personally found these attributes in short supply more than once. As the pressure stayed on all year, I found myself lacking empathy at times. Lacking patience. Lacking understanding. Worn thin. Not thinking about the feelings of others, challenges, and fears. I imagined myself in other people’s shoes, but I did a poor job of it. I guess I failed in my leadership when I acted as though everyone were like me.

What I learned was that the moment that I showed human concern, I got the best results. Where my commitment and empathy faded and I ended up empowering others to lead, they did so better than me. I will not forget these lessons. And these are not temporary lessons – they are vital ones even for someone who has held the CEO label for a long, long time.

How do we do it? By stopping long enough to display enough care so they can feel it too. By shifting priorities and perspective. By moving beyond driving for results. By recognizing that the grind does have limits. To instead lend the kind words and actions that compensate for the uncertainty and stresses our people continue to endure. To lead with empathy and care.

The key for all of us leaders as we go forward into 2021 is never to lose focus on what is most important in our leadership role: it is the people first, and they need and deserve the sincere care and empathy that comes with us being the best version of ourselves. ■

*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 [www.breslin.biz](http://www.breslin.biz)*



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**SMACNA-WW UPDATE** continued from page 4

and Inclusion in Construction” to Facebook, Instagram, and LinkedIn with the hashtag #smacnawic2021. Follow SMACNA-WW’s WIC efforts now and in the future using this hashtag.

As always, we are proud to support the women of SMACNA-Western Washington during #SMACNAWIC2021 (see page 10 of this issue) , and we thank our generous sponsors and members for their support. We look forward to next year’s event! ■

**CODE CORNER** continued from page 21

alive. Systems that have both sets of UV lights ensure not only clean air into the building, but also safe access for maintenance personnel who need to change filters and service internal parts of air handling units.

Also entering the market recently are special-purpose recirculating filtration units. These are typically portable, floor-mounted units similar to the Titus THRC HEPA room air cleaner, or above-ceiling permanently installed fan-filter units similar to similar to the Titus FFDER fan filter diffuser units that have been typically used in clean-room applications, but which are now being specified and installed in all types of COVID critical spaces not served by central systems.


Another benefit of installing enhanced filtrations systems in buildings of all types is their ability to reduce or eliminate wildfire smoke from building interiors. Population pressure on forest lands, coupled with changing weather patterns due to climate change and possibly current forestry practices, appears to be causing the frequency, scale, and duration of wildfire smoke covering the west coast of the United States and Canada to increase. Weeks and potentially months of lingering wildfire

smoke has become a serious health hazard in this region, and as we are responsible for the systems that provide ventilation and indoor air quality, we need to provide solutions to this challenge, as well.

Fortunately, buildings that are equipped with at least MERV-13 rated filters can eliminate most smoke particles and floating ash from the airstream. These filters should be changed before wildfire season in June and, of course, after fire season ends in the fall. Consideration should also be given to mid-season filter changes, depending on the severity of wildfires in a given area. Fine smoke particles may not even be trapped by HEPA filtration, so for critical areas occupied by sensitive occupants, consideration should be given to the installation of electro-static precipitant filtration for these areas, as this technology will eliminate virtually all fine smoke particles from any airstream, if properly applied.

Before the start of this year’s wildfire season, we should all reach out to our property management and facilities operations customers and review and discuss possible upgrades to their buildings so we can make them aware of the solutions available and potentially get our customers’ buildings ready and fully operational with filtration enhancements to provide clean and safe ventilation systems as we re-occupy these buildings post COVID-19 and prior to this year’s wildfire season.

We would like to note that the thoughts expressed above are the opinions of the author with input from the SMANCA-Western Washington ICC Code Committee/Tech Committee. The committee has reassembled for 2021 and will be continuing its updates and interpretations of the new 2018 Washington State Energy Code in future newsletter editions. Stay tuned! ■



**Do you have an article idea you'd like to share?**  
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 with suggestions for a future issue of *Sheet Metal Journal - Western Washington*

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