

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.

SMACNA contractors are also skilled professionals in:

- · Architectural sheet metal
- · Industrial sheet metal
- · Kitchen equipment

- Specialty stainless steel work
- Manufacturing and custom fabricating
- · Repair services

- Siding and decking
- · Flow testing & balancing
- · Energy management & maintenance

Well known and respected within the construction industry, SMACNA contractors provide the highest quality workmanship, professionalism, and service to their customers. They care about the life cycle of the project, not just the winning bid.

You'll find SMACNA contractors working in all areas of construction whether industrial, commercial, institutional, or residential.

SMACNA contractors developed the technical manuals and standards that today are accepted worldwide in the construction community. As leaders in their industry, they continue to adopt and apply the latest technologies to HVAC and sheet metal work. Everything from duct construction and installation to air pollution control, from energy recovery to roofing, from seismic restraint to welding... they do it all!

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.



SMACNA-Western Washington, Inc.

13810 SE Eastgate Way, Ste 445 Bellevue, WA 98005

Tel: 425-289-5010 • Fax: 425-289-5011

www.smacnaww.org



Sheet Metal www.sheetmetaljournal.com western Washington

PUBLISHER / EDITOR

Jessica Kirby
Direct: 250.816.3671
jessica.kirby@pointonemedia.com

SALES / CREATIVES

Lara Perraton 877.755.2762 ext. 1407 Iperraton@pointonemedia.com

CONTRIBUTORS

Peter Boileau Mark Breslin Natalie Bruckner Kathleen Collins Karen Forner Norm Grusnick Meredith Low

COVER PHOTOS Courtesy of SMACNA-Western Washington

PUBLISHED QUARTERLY BY

Point One Media Inc.

Sheet Metal Journal - Western Washington
P.O. Box 11, Station A Nanaimo, BC V9R 5K4
Toll-free: 877.755.2762
www.sheetmetaljournal.com

While information contained in this publication has been compiled from sources deemed to be reliable, the publisher may not be held liable for omissions or errors.

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Printed in Canada.
Postage paid at Coquitlam, BC.

Return postage guaranteed. Canada Post Canadian Publications Mail Sales Product Agreement #40719512.

To update or cancel subscriptions please call 1.877.755.2762, email circulations@pointonemedia.com, or visit www.sheetmetaljournal.com

Official Journal of Record for SMACNA-WW



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LEARNING FOR LIFE

"Education is the passport to the future, for tomorrow belongs to those who prepare for it today."

-Malcolm X

As leaders, the learning never stops. Every time we interact with a customer, an employee, or a colleague, we learn something new about business, social interactions, and ourselves. This is indirect or implicit learning, which means we aren't really *trying* to learn or actively seeking education. Rather, it is the education or learning we absorb naturally, passively even, from our environments. It is the kind of learning that helps us make better business decisions, teaches us how to treat people and, most importantly, how to show others how we want to be treated.

Explicit learning is purposeful. It occurs when we seek out education by having specific, focused, investigative meetings or conversations; by reading or researching a particular topic; or by going all out and taking professional development courses well into our careers.

They are both essential. Obviously, implicit learning is how we learn to navigate our environments, but taking an extra moment after a conversation or experience to reflect on the implicit lessons of said interaction can make us sharper, more intuitive leaders, and clearer decision-makers.

Seeking answers, practicing deliberate critical thinking, and learning the art of conflict resolution and dialogue are ways we educate ourselves on the daily, and for many of us, taking a further step toward formal education is an achievable goal once our careers are established and we have the time, energy, and finances to do so.

Going back to school has advantages nearly anyone can appreciate—wage increases, avenues into new career paths (even within the same organization), new challenges, and better confidence and self-esteem. When we move into higher education opportunities, we are committing to bettering ourselves and what we can offer our organizations, and we are setting the bar high for our employees, demonstrating that we value these benefits and are willing to take on the challenge of learning something new at a later age.

Because it can be challenging. We love our routines and our comfort zones. We feel safe and confident sitting in the same chair, making the same decisions, managing the same staff, and representing the same interests. When we invest in education, we tackle a hurdle first where we have to be vulnerable, admit there is something out there we might not know, and seek a mentor to teach us. For some that is easy and



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

for other it is agonizing, but once we tumble over that wall, we begin to see the benefits tenfold.

Maybe you didn't go to college right after high school. Now might be the perfect time to nail those goals and aspirations, with the added bonus of a more experienced and mature world view.

Maybe you have an education, but find yourself in another frame of mind or area of interest than the one you were in when you were learning, or maybe you see potential for advancement or innovation in a new direction. When you own a business, manage teams, and coordinate work in a highly competitive field (like sheet metal) there are leadership skills, intergenerational communication issues, political and economic matters, and basic business acumen skills to learn that change and grow as society changes and grows. Chances are, you'll be better off if you learn them.

Maybe you did go to college and have years of experience and love your current position, but want to forge new paths. Executive business graduate programs teach the most contemporary approaches to leadership, business strategy, and management techniques, and can help connect learners with local and international perspectives on how to be the very best in business for yourself and your organization.

Take a risk. Whether you've been a leader for five weeks or five decades, there is always something to learn and a reason to learn it. The most important thing to remember is that implicit and explicit learning work in tandem. That means if you are the kind of person who commits to deliberate lifelong learning, your skills for picking up implicit lessons—observation, curiosity, critical thinking, creativity—will also improve, which will in turn make you a more well-rounded learner, more likely to seek formal education opportunities.

Don't be afraid to seek opportunities to build your success on a strong foundation of lifelong learning—your organization and your career can only benefit.

The future belongs to you. Will you claim it?



HEAVY METAL

SUMMER EXPERIENCE

THE CONSTRUCTION INDUSTRY IS AT A CROSSROADS.

With over 40% of U.S. construction workers expected to retire in the next 5 - 10 years, the #1 issue facing contractors is recruiting new people to the trades.

At the same time, the reduction of vocational training and the emphasis on college for all high school students has minimized exposure to career opportunities in construction. **Enter the Heavy Metal Summer Experience!**

ABOUT

The brain child of construction professionals from California's Bay Area and Seattle, the Heavy Metal Summer Experience (HMSE) is a 6-week program introducing young people to trade opportunities in Mechanical construction. As a pilot program, the 2021 HMSE will produce a playbook for other contractors to follow.

HOW YOU CAN HELP

Working through Construction for Change (501(c) (3) non-profit), the HMSE team will collaborate with community & industry partners to cover all costs.

Your support will help fund:

- Tools / Tool Kits for Participants
- · Safety Personal Protective Equipment & Supplies
- Transportation
- Teacher Reimbursement

Leadership Coalition:











Through exposure to Sheet Metal, Piping & Plumbing trades, HMSE students will explore the trades and become part of a team that builds community.



Construction offers career opportunity throughout the nation. In 2020, it represented over \$1.46 trillion dollars.



Competative wages, excellent benefits, on the job training, career opportunities, and no student debt burden.



Gender pay gap in construction is one of the **lowest** of all industries, **women earn 99.1%** of their male counterparts.

LEARN MORE

about **#HMSE** and how you can get involved this summer!

Contact: HMSE@constructionforchange.org

GUEST EDITORIAL

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..."

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 without restrictions 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.



By / Meredith Low · meredithlow.com

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.

Potential silver linings...

UPCOMING SMACNA-WW MEMBERSHIP EVENTS AND OBSERVED HOLIDAYS

August 31, 2021

Baseball Night, SMAC-YA & Membership Mixer • T-Mobile Park

Monday, September 6: Labor Day

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

Thursday, November 25-26: Thanksgiving Holiday

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

Annual Holiday Gala • W Hotel, Bellevue

Thursday, December 23-24: Christmas Holiday

March 1-2, 2022

Partners in Progress Conference • Las Vegas, Nevada

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-ortwo-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 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/meredithlow-about*.



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.

CONTRACTOR MEMBERS

ACCO Engineered Systems AccuDuct Manufacturing, Inc. Air Handlers, Inc. AIRTEST Co., Inc. **Apollo Mechanical Contractors** Argo Blower & Mfg. Co., Inc. Auburn Mechanical, Inc. Ballard Sheet Metal Works, Inc. Capital Heating and Cooling, Inc. D/B Solutions, LLC **Delta Technology Corporation Distribution International** Eckstrom Industries, Inc. Emerald Aire, Inc. **ENVIROMECH** Evergreen State Heat & AC GB Systems, Inc. Gensco, Inc.

H & R Mechanical Systems, Inc. Hermanson Company, LLP Holaday-Parks, Inc. Holmberg Mechanical

Johansen Mechanical, Inc. L & M Sheet Metal Fabricators, Inc. MacDonald-Miller Facility Solutions, Inc. McKinstry Co., LLC Miller Sheet Metal, Inc. Miller's Smith & Losli Sheet Metal, Inc. Neudorfer Engineers, Inc. Olympia Sheet Metal, Inc. Pacific BIM Services Penn Air Control, Inc. Phoenix Mechanical, Inc. Pinchiff Mechanical LLC PSF Mechanical, Inc. **PSR Mechanical** Schmitt's Sheet Metal & Roofing Scott & From Co., Inc. Shinn Mechanical, Inc. Sunset Air, Inc. **Trotter & Morton Facility Services** TRS Mechanical, Inc.

AFFILIATE MEMBERS

UMC, Inc.

ACI Mechanical & HVAC Sales Ahlers Cressman & Sleight Air Reps, LLC AIREFCO, Inc. Armacell, LLC **Automated Controls DBA** Albireo Energy, LLC Barnhart Crane and Rigging (DBA Magnum) CL Ward, Inc. C.M. Hoskins Company CliftonLarsonAllen, LLP Cole Industrial, Inc. Dorse & Company, Inc. **Ductmate Industries** ECCO Manufacturing, Inc. **Edge Construction Supply Employer Solutions Law**

General Insulation Company, Inc.

Gripple, Inc. Hudson Bay Insulation Co. **ISAT Total Support** Industrial Air Systems, Inc. Johns Manville Johnson-Barrow, Inc. Mestek Machinery Milwaukee Tool Pacific Product Sales, Inc. Performance Contracting, Inc. PlanGrid/AutoDesk Star Rentals Inc. SPI. LLC **Sunbelt Controls** Sunbelt Rentals Trane Valley Mechanical Insulation York NW Factory Direct

Sheet Metal and Air Conditioning Contractors' National
Association - Western Washington Chapter
Executive Vice President: Julie Muller-Neff, Esq.
13810 SE Eastgate Way, Ste 445 Bellevue, WA 98005
Tel: 425-289-5010 • Fax: 425-289-5011 • www.smacnaww.org

SPRING WEBINAR SERIES A SUCCESS

SMACNA-Western Washington was hard at work keeping members engaged, connected, and educated this spring with the association's Spring Webinar Series.

In April, Michael McNally & Kathleen Collins presented a Legal and COVID-19 Update, covering withdrawal liability—a topic that baffles many contractors and frustrates all contractors. They discussed this technical and complex subject, providing contractors a general understanding of why they should know about withdrawal liability, how withdrawal liability impacts contractors who are buying or selling an ownership interest, and building and construction exemption.

In May, Michael McLin presented PPP Part II & Associated Business Opportunities, which discussed federal appropriations and the COVID-19 Omnibus Bill enacted in December 2020, which included a variety of legislation intended to help businesses survive the pandemic. This program also covered some potentially lucrative opportunities for businesses to inject government sponsored cash into the business and provided an overview of the bill's provisions relevant to business owners and employees.

Research, Relaunch, & Recover, a talk by Dewayne Ables, introduced how to quickly deploy leaders to uncover the changes in the marketplace, prioritize, and make progress emerging from the COVID-19 disruption. In February 2020, everything was running as expected, the economy was continuing to expand, and project volume was high—and then COVID-19 came along. Contractors learned how to decide which triggered and expanding markets to pursue and which ones to pass over, and how to better prioritize business development efforts over the next 6-12 months.

Contact the SMACNA-Western Washington office for resources from these presentations, and watch your email for a calendar of events to follow. •

WEBINAR RECORDING: MARCH MEMBERSHIP MEETING WITH ERIC ANDERTON

The March Membership Meeting with Eric Anderton on the Three Pillars of Powerful Communication introduced important

Have a project or story idea you would like to share?

Contact Sheet Metal Journal-Western Washington's editor, Jessica Kirby, at jkirby@pointonemedia.com or 250-816-3671

communication techniques and tools that contractors need to know to navigate the full scope of the construction landscape.

Eric's talk is a step-by-step leadership framework, built by a construction industry expert, that teaches leadership teams how to grow as leaders and communicators. To improve your communication you must concisely, clearly, and consistently focus on three messages: 1. Vision 2. Comfort 3. Direction

Vision: To give vision you must communicate the "why" and the "where". Why does your company exist (purpose), where is the company going (strategic plan)?

Direction: This involves the "how," "who," and "when." How the project or task is going to get done. Delegation to who is responsible to execute, and deadlines for when it will get done.

Comfort: This is the "secret sauce" of great leaders. The idea of comfort comes from the ancient Roman legions. A "comforter" was an officer who would offer his troops encouragement prior to and in the midst of a battle. He also held them accountable for their assignments and gave them recognition for their accomplishments. So, focus on three messages: "You can do it!" (Encouragement) "Did you do it?" (Accountability) "You did it!" (Recognition)

Eric Anderton has more than two decades of career and entrepreneurial business experience, alongside 25 years of public speaking, small group facilitation, and one-on-one mentoring. He is a trusted leadership advisor, executive mentor, and expert meeting facilitator to construction companies that range in annual revenue from \$5m-\$1B. Since 2004, he has helped his clients increase profitability by building clear strategic plans, developing their best people, and executing their most important priorities.

Eric's talks and workshops are packed with inspiring insights and practical tools to help you be a profitable leader, build a profitable business, and live a profitable life.

A recording of the webinar and the slide deck from the webinar is now available. Please contact the SMACNA-Western Washington office at *pbovie@smacnaww.org* for the link and password to access these resources.

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 attendees 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 at this year's event 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* Register today at *smacna.org*

PARTNERS IN PROGRESS CONFERENCE LAS VEGAS, NV | MARCH 1-2, 2022

A successful future requires labor 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 be 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!

See *pinp.org/conferences/2022pinp*. Registration opens September 8, 2021.





SMACNA-Western Washington's innovative vaccination effort demonstrates the power of what can be achieved when we work together

By / Natalie Bruckner · Photos courtesy of SMACNA-Western Washington

When Julie Muller, executive vice president at SMACNA-Western Washington (WW), was approached by two member companies to assist with helping organize COVID vaccine shots for their teams, she decided to build on that idea and spark an industry-wide initiative: Why not partner with a trusted pharmaceutical chain and multiple member companies to facilitate an industry-wide vaccination campaign where shots would be provided in a far more pleasant environment, surrounded by people they know and trust?

And so, the wheels were put in motion. Muller reached out to the drugstore chain Rite Aid to help organize the first two clinics that would be held in April with SMACNA-WW members Holaday-Parks, Inc. and Holmberg Mechanical.

"We thought that offering our members the vaccine would be a great service to our industry... we just didn't know how to do it," Muller says. "So I did some research and through the NWSMW Health Trust I was able to get in touch with Rite Aid, our primary retail prescription provider. I started working with their regional VP and told him what we wanted to accomplish."



The team at Rite Aid was just as enthused by the idea and happy to assist.

The idea was so novel, in fact, that SMACNA-WW became the only SMACNA chapter in the industry to accomplish a partnership of this kind for member vaccines. Within ten days of getting the partnership underway, Patricia Bovie, marketing specialist at SMACNA-WW, Carrie Heinrich, operations manager at SMACNA-WW, Muller, and the team at Rite Aid had locations secured and 18 vaccine clinics scheduled. Over 3.000 shots for members and their families were in the bag-including one at the Northwest Sheet Metal JATC in DuPont, which provided the venue and opened their vaccination appointments to the entire Local 66 membership and building trades partners. In fact, everyone was more than happy to host a vaccination clinic including: Holaday-Parks Inc., Hermanson Company, Holmberg Mechanical, PSF Mechanical, MacDonald-Miller Facility Solutions, Johansen Mechanical, and UMC, Inc.

However, unlike the stuffy vaccine clinics that we have come to expect, these clinics were something special. Having a deep understanding that getting vaccinated can be a rather daunting process, the SMACNA-WW team decided to put a spin on the whole thing and make it as stress-free as possible. In fact, they decided to use their skills and create a fun, community building event.

On the process side, Bovie worked hard and fast behind the scenes to ensure that each clinic had an appointment link that could be sent to the members to make the signup process simple (as opposed to trying to find out where and when the vaccine would be available and then getting put on a list). And yet it was the way the team brought a fun element into the planning that peaked interest and helped the SMACNA-WW/Rite Aid clinics gain mass traction. Heinrich planned and scheduled the event rentals, food trucks and juice bars, and fun interactive activities.

The team at SMACNA-WW decided to go all out in making this as enjoyable as possible. Walking into the clinics, the attendees were greeted by everything from a DJ and hula hoop competitions to free chicken soup, a taco truck, and even a bar—this undoubtedly helped take the edge off getting vaccinated.

"In the normal clinics, people go into to get their vaccine, they get the shot, and then have to wait 15 minutes in a room full of strangers," Heinrich says. "That can feel like a long time. We wanted our clinics to be different. We wanted to take out any anxiety people may be feeling and give them something to do... and I mean, who doesn't like to eat and drink for free?" she laughs.

Response to the clinics was very positive. Heinrich says the



"We wanted to take out any anxiety people may be feeling and give them something to do... and I mean, who doesn't like to eat and drink for free?"

--- Carrie Heinrich, operations manager at SMACNA-Western Washington



SMACNA-WW team was overwhelmed and excited that all their hard work paid off. "When Washington opened the vaccine up to the 16-plus age group, we opened up the vaccine in the clinics to SMACNA-WW members' families too," she says. Bovie adds that each clinic could handle up to 200 people, "so we were well positioned to deal with large numbers."

By mid-June, around 1,600 members had received the Pfizer COVID-19 vaccine through these SMACNA-WW/Rite Aid organized clinics. Over 3,000 total shots were administered. This is an incredibly impressive number in such a short space of time.

An additional incentive for getting the vaccine is the upcoming 2021 SMACNA Annual Convention that is being held in October in Maui, Hawaii—the state recently announced it will be dropping its testing and quarantine rules for vaccinated domestic travelers. Bonus!

Julie noted that "securing the vaccine was another big win



"I am beyond impressed with the SMACNA-WW team and participating companies for making this happen. We all worked tirelessly on this initiative within a very tight timeline: All hands were on deck, and now we are very satisfied with our results."

-Julie Muller, executive vice president at SMACNA-Western Washington



for SMACNA-WW and its members as second doses were guaranteed." This was especially important considering many states have been slow to order allotted vaccine doses, which was impacting the allocation of doses during those months.

Of course, there were those who were a little reticent about getting the vaccine, and one of those people, Heinrich admits, was herself. "Honestly, I wasn't really interested in getting it at first," she says. "But when I was helping out at the first Holaday-Parks clinic it was so relaxed and I thought, 'Well, I'm here, I might as well."

As for any adverse reactions to the vaccine, Heinrich recalls only one out of the 1,600, and that was mild. "As far as I'm aware, we only had one lady who had a reaction, and all that happened was she got a little rash on her chest," Heinrich says. "The pharmacist went to check her out while she was at the taco truck, and by the time the 15 minutes was up and she had finished eating, it had gone."

By the last week of June, most of the members who wanted the vaccine had received both their first and second doses. "It really was a team effort," Heinrich says. "We had great contractors to work with who helped pull this together and Rite Aid was amazing, too."

Muller noted, "I am beyond impressed with the SMACNA-WW team and participating companies for making this



happen. We all worked tirelessly on this initiative within a very tight timeline: All hands were on deck and now we are very satisfied with our results."

Bovie adds, "It was very rewarding, and we felt very proud of what we achieved in administering the vaccine to those members and their families."

Washington state has reached 68.2 percent of its 70 percent vaccination threshold target statewide (as of June 25). SMACNA-WW's proactive and quick actions to assist members in receiving the vaccine have not only given the industry a boost to getting back to a sense of normality, but the region, too.

And with the state now in Phase 3 and getting ready to open up, the clinics have been a teaser of what's to come: Getting back to being face-to-face with the SMACNA-WW family once again.

"The more people that are getting vaccinated, the more relaxed they are feeling," Heinrich says. "It feels like things are slowly getting back to normal."

As SMACNA-WW gets ready to host its Annual Golf Tournament at The Golf Club at Newcastle in Newcastle, Washington, on Thursday, July 29, there is without a doubt a sense of normality returning.

"It will be so great to see everyone out and about now that they are vaccinated," Bovie says.

"I think our entire membership has Zoom fatigue, myself included," Muller noted. "Getting back to in-person meetings and events is exciting and necessary to keep our members engaged and moving forward."

While we are not yet "business as usual" many can now definitely see the light, thanks in a big part to innovative vaccine efforts such as this that demonstrate the power of working together. •



By / Jessica Kirby • Photos courtesy of SMACNA-Western Washington

Recruitment, retention, mentoring. The future of the building trades depend on these principles, and connecting with and among the next generation of leadership is key to furthering the goals behind this mantra.

Connecting has changed over the years. Built on a system of master teaching the student, mentorship has evolved into a new concept, still rooted firmly in sharing knowledge and experience, but having branched out to include reciprocity and more flexible thinking. As a group experience, all participants have something to learn and something to share, and the outcome tends to be more relationship focused than ever.

Young leader committees foster this connection, bringing people together with activities, events, educational opportunities, and general fellowship, and easing the transition between generations to create the infrastructure for contemporary mentorship scenarios. Whether they are bringing new leaders together to brainstorm or connecting

generations, committees are an essential part of moving an industry forward.

SMACNA-Western Washington's Young Leaders Association (SMAC-YA) was founded in 2016 in an effort to get the next generation of "young associates" or industry leaders excited about the future of the sheet metal industry and membership in SMACNA-Western Washington. It consists of six to eight members with two co-chairs, and SMACNA-WW works to recruit a diverse committee that includes members from different backgrounds, company sizes, and types.

The committee is co-chaired by Rylan MacCay, operations manager at MacDonald-Miller, and Trenton Fluetsch, vice-president of operations at Sunset Air Inc. Both have been in the sheet metal industry for more than a decade and took on the co-chairing role to get to know people in the industry, collaborate on best practices, and encourage others to participate in SMACNA events.





"Our goal is to have an activity each quarter that reaches out to young professionals or people who may be interested in a HVAC industry career," MacCay says. "Our committee's guiding principle is to increase involvement of young professionals in SMACNA and assist with recruiting talented people into the industry."

The committee achieves this with events that reach out to high school and college-students to educate them about HVAC industry and career opportunities. Some of these showcase a "day in the life" of a sheet metal worker and others are mentoring-style networking events where young professionals meet and mingle with experienced industry members.

In previous years, SMAC-YA hosted a college jobsite/ fabrication tour, MLB game recruitment events, Happy Hours, and a holiday pub crawl. For 2021, the committee has planned a Mariners Game College Mixer on August 31. These events help build lasting business relationships that are the foundation of a thriving industry.

"This also includes recruiting and educating young talent outside of our trade," Fluetsch says. "The SMAC-YA committee is important because it brings together young leaders to grow and develop so that the next generation of senior leadership will be in the greatest position to succeed."

MacCay says the committee's work is important because it brings professionals at all career stages together and adds diversity of perspective.

"The senior members of SMACNA have a wealth of knowledge, and as these members begin to transition, it is critical this knowledge be passed on to the next generation," he says.

For individuals new to the industry and with leadership aspirations, committees like SMAC-YA can be a sounding

board for all those questions members may feel more comfortable asking their peers.

"The committee allows for great networking opportunities between yourself and other young leaders in the industry," Fluetsch says. "Being part of SMAC-YA also means you have a group of industry peers that you can ask judgementfree questions to and get a new perspective and feedback, which is invaluable."

Recruitment might be the most important aspect of young leader committees. Despite a slowing economy due to the COVID-19 pandemic, construction is still booming nationally and is predicted to grow by 3% annually over the next decade. There is also a growing need for qualified craftspeople to fill in for the current workforce nearing retirement age.

Following the initial furloughs caused by the COVID-19 pandemic, getting back to appropriate labor levels within SMACNA-WW companies certainly was a struggle, but it also afforded an important opportunity to develop awareness around labor needs into the future and how young leaders can help.

"It opened our collective eyes into understanding the need for quality labor and the importance of filling our pipeline of labor for years to come," Fluetsch says.

Employers also have much to gain from promoting and supporting young leader committees and from encouraging new recruits to become involved in SMACNA events, says Nathan Marsh, engineering manager for Holmberg Mechancial and honorary SMAC-YA Elder.

"Being part of a committee provides employees with the opportunity to work on their leadership skills and observe other emerging leaders in action," he says. "The experiences and skills gained are brought back to the employers where they can be used to improve business operations."

Serving on a committee creates opportunities for younger employees to meet, interact, and develop relationships with their peers throughout the industry. These relationships provide a platform for discussions and sharing of information about industry trends and best practices which, when applied to the business, can help to drive improvements in culture, efficiency, and quality.

"By allowing their employees to dedicate time to promoting their industry through committees, the employers benefit by having young people recruited in to join the industry who might have otherwise gone in a different career path," Marsh says. "These new recruits can help to address short-term labor shortages while also creating the next generation of high performing employees."

This summer, SMACNA-WW member Hermanson Company is offering students a unique opportunity to test the construction trades through the Heavy Metal Summer Experience 2021, a six-week fun and educational hands-on workshop.

The company is hosting ten students from Auburn School District for #HeavyMetalSummer workshops, designed to introduce underserved high school students to job opportunities in mechanical construction. Students will learn the basics of sheet metal, piping, and plumbing through twelve 2.5-hour training sessions led by construction professionals.

This pilot program, hosted at Hermanson Company's shop facilities in Kent and at Western Allied Mechanical in Menlo Park, California, is partially funded by SMACNA-Western Washington and Construction for Change.

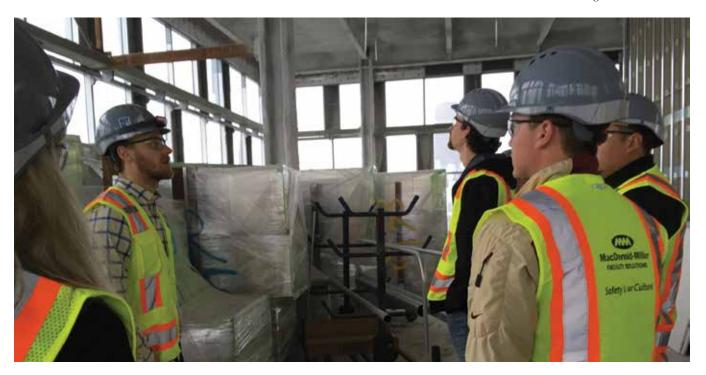
"This interactive and instructive experience is a perfect opportunity for young adults to learn about the variety of career options and numerous benefits available to them in the trades," said Rick Hermanson, CEO of Hermanson Company. "We are giving teens the chance to test equipment, build unique projects they can take home, and to learn about the trades from people who are passionate about their work and succeeding in their careers. We're proud to participate in the inaugural year of the HMSE and are excited to work alongside the students this summer."

Programs like the HMSE are another tool in the toolbelt for contractors who are working toward successful recruitment initiatives that promote awareness of career options for students not focused on the college or university track. The hope is to reach a more diverse group of potential tradespeople and to create more diversity within the building trades workforce.

Thanks to generous donations from partners and sponsors, HMSE will provide each student with work boots on their first day in #HeavyMetalSummer to wear for the entire experience and beyond, standard construction industry personal protection equipment (hard hat, vest, safety glasses, and gloves) and a full tool-kit to fill out the toolboxes they will build. The tools are theirs to take home at graduation.

"The impact SMAC-YA has had on recruitment has been immeasurable," MacCay says. "The committee has also been a helpful conduit to get younger professionals involved with SMACNA-Western Washington and SMACNA. Many of the SMAC-YA committee members have branched out to serve on other SMACNA committees, and member meeting attendance for younger people has increased as a result."

Learn more about SMAC-YA at smacnaww.org •





By / Jessica Kirby • Photos courtesy of Evergreen State Heat and Air Conditioning

Evergreen State Heat and AC was established in 1968 when three men split the company as a spin off from the residential arm of the now defunct Everett Metal Products. One of those men was Gary Davis, an eventual SMACNA president and father of Darlene Salo, Evergreen State's current general manager. Gary owned the company for 20 years before passing it on to employee Joe Pereira, who owned it for another decade. In 1998, Russ Kimball bought the company and he has owned it ever since. Today, it is a successful residential signatory shop—one of few few north of Seattle.

"My first day on the job was my first day in sheet metal," Kimball says. "I took a class called HVAC my senior year in mechanical engineering school, which taught me nothing about the job since it was about theoretical heat transfer based system design. I had no experience in the trade, unions, technology, industry, or business metrics, and I was at the complete mercy of employees (which was great) and outgoing owner (not so much)."

Over the years, the company and has grown its customer base with dedication to quality services and products. It offers

the experience needed to advise, recommend, and provide HVAC and electrical repair, installation, and maintenance services for residential homes and commercial businesses, and its customers have come to recognize and appreciate the reliability of Evergreen State's work and equipment.

Kimball may not have been around the HVAC block before buying the

company, but his success was no accident. His commitment to building the business and leveraging his team's expertise was fierce, and he came to the table a man with a plan from day one.

"All office managers read the Cliff Notes of the book *Traction*, and we began with company core values we call the Evergreen Difference," Kimball says. "These were defined over several meetings."



The benefit of belonging to SMACNA is "huge and invaluable," Kimball says, especially as a person who entered the industry with no mentorship program coming in and not having a strong relationship with the previous owner.

"Most of the feedback Evergreen State receives from

its ability to deliver straightforward, helpful customer

education and its expertise in field work."

happy customers focuses on the company's workforce

"I needed my fellow contractors as well as the educational classes that SMACNA-Western Washington brought in," Kimball says. "Even after 23 years, there is much I do not know, and can learn from others. Technology in our industry is rapidly changing, for instance, and I do not ever expect to be an expert in many aspects of the industry."

Most of the feedback Evergreen State receives from happy customers focuses on the company's workforce—its ability to deliver straightforward, helpful customer education and its expertise in field work. Again, this remarkable team didn't come together accidentally.

"Jim Collins really nailed it in *Good to Great* when he said we need to get the 'right people in the right seats'," Kimball says. "We have great reviews and very loyal service customer base by focusing on having outstanding field personnel and competent office and sales staff.

"Being union we are a long ways from being the cheapest, so our reputation is everything.'

In 2018, Evergreen State absorbed Eastside Heating & AC—a non-union residential company—and this created a bit of havoc, Kimball says, but having weathered the storm and made the right adjustments, things are settling and the company has expanded its market area to east King County.

"It is extremely rare that we compete against a fellow SMACNA contractor," Kimball says. "When we lose a job, 99% of the time the work goes to non-union, so having really solid and productive employees is essential."

Learn more about about Evergreen State Heat and AC at essmwa.com.

Transparency – No surprises, fair rates, quality work, outstanding service.

Humility – If we don't do it right, we will make it right. Promises made are promises kept.

Enduring – We support you before, during, and after installation for the life of the system.

Responsive – We quickly meet your needs by doing the basics better than anyone else.

"For both commercial and residential HVAC, we also defined a core focus and what is called 'three uniques' based on the book," Kimball says. "We separated because both market sectors wanted different value propositions, and we still need to create these for our new electrical division."

The residential division is exclusively driven by service replacement, and its commercial work is much the same, although the company recently completed a new build cannabis grow facility in the Fire Brothers area.

POST SESSION - NEW LAWS TO KNOW AND UNDERSTAND

The Legislature wrapped up its work at the end of April—a session that was unique in many ways. Due to the pandemic, the deliberations were done with a skeleton crew of legislators on the floor and the hearings were all virtual. Yet, the Democrat majority in the House and Senate got a lot done. They passed two Governor priority climate bills, several police reform bills, and spent a lot of state and federal money to mitigate pandemic impacts. This article highlights two new laws-regulation of refrigerants and changes to the state's long-term care program.



By / Kathleen Collins **SMACNA Legislative Consultant**

New HFC law

One of the new laws passed in 2021 is an expansion of regulation on hydrofluorocarbons (HFCs) used in air conditioning and refrigeration equipment. The Legislature passed a law in 2019 that requires the use of less polluting refrigerants in commercial equipment. HB 1050 expands the 2019 law to residential and small commercial air conditioning and other refrigeration units starting in 2023. The State Building Code Council will adopt rules defining what substitute products can be used. The new law also requires a safe disposal program and leak detection checks. Ecology is designing an end-of-life disposal program, and contractors can provide comments on the design of the program through Ecology's HFC end-of-life information page (see below). The new law requires equipment owners to check their equipment for leaks and to hire certified workers to make repairs. We expect Ecology will rely on the existing EPA Technician Certification (Section 608) for the proper handling and disposal of refrigerants. SMACNA contractors will want to make sure their service divisions are ready to undertake this expanded work.

State mandated long-term care insurance

This session, the Legislature amended the state's long-term care program. (The formal title of the program is the Longterm Services and Supports Trust Program.) This is a state-run program to fund and provide a long-term care benefit to workers in Washington. Long-term care includes non-medical assistance with daily living, as well as assisted living and nursing home care. The state's long-term care coverage will provide a lifetime benefit of \$36,500. The state has been working on implementing the program since it first passed in 2019. Starting January 1, 2022, the Employment Security Department (ESD) will assess a quarterly 0.58 percent payroll tax on all individuals who work in Washington state and have their wages reported on the federal W2 form. The tax will be applied to the pretax amount.

As the program was initially set up, an individual who had long-term care insurance could opt out of the state program until December 31, 2022. This year, the Legislature shortened the opt out timeframe to October 31, 2021. After that date no one will be allowed to opt out. Workers who elect to opt out cannot join the state program in the future, even if they change

jobs. The vesting provisions are complicated, but basically a worker must work in Washington for ten years to be eligible for the lifetime benefit.

Employment Security plans to use the Paid Family and Medical Leave (PFML) payroll program provisions as a template for the long-term care payroll deductions. But they won't be identical. Unlike PFML, there is no wage cap, so higher wage workers will pay more for the same benefit as lower wage workers. Another difference is the long-term payroll tax is paid entirely by the employee. One of the many areas of concern is that the care paid for by the benefit must be provided in the state of Washington. Workers who leave Washington will not be able to use the benefit even though they will have paid for it while they worked here. Also, workers close to retirement age won't qualify for the program or may only get only limited access due to the vesting requirements.

As mentioned above, there is a time limited opt-out period. However, ESD does not have the opt-out system set up yet. It will become available on October 1, 2021. The employee must be the one to ask for an opt-out. The employer cannot do that for the employee. ESD will send the worker an approval letter if the type of long-term care insurance the person has meets the state's requirements.

Starting in 2022, SMACNA contractors will have to submit quarterly payments to Employment Security Department for all their employees who are covered. Contractors will need to keep track of the employees who received an approved opt-out and not do a payroll deduction for them. It is the employee's responsibility to give the employer a copy of their approved opt-out letter from ESD.

SMACNA contractors should understand that the requirements of this program can change in the future. Besides possible legislative adjustments, the state program is governed by a council that has discretion to make changes. For example, the council can increase the payroll tax to ensure adequate funding. Individuals and employers wanting to obtain long-term care insurance to meet the October 31 opt-out deadline will want

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EEOC CLARIFIES GUIDANCE FOR LGBTQ+ PROTECTIONS

On June 15, 2021, the federal Equal Employment Opportunity Commission (EEOC) published a fact sheet about existing LGBTQ+ protections that apply to all Title VII employers. Itile VII is a federal anti-discrimination law that covers all employers across the nation—private, government, union, and employment agencies—with 15 or more employees. The fact sheet is not new policy but simply a summary of existing LGBTQ+ protections against discrimination based on sexual orientation and gender identity that were recognized in the Supreme Court's opinion last year in Bostock v. Clayton County, 590 U.S. _____, 140 S. Ct. 1731 (2020).

The LGBTQ+ protections summarized in the EEOC's fact sheet may be news to some employers in different states, but Washington employers have already been held to these standards for over a decade. The Washington Law Against Discrimination (WLAD) expressly adopted protections against sexual orientation and gender identity/expression discrimination back in 2006, and the Washington State Human Rights Commission (WSHRC) published its own guidance. Moreover, the WLAD is more inclusive than Title VII because it applies to employers in Washington—except non-profit religious organizations—with eight or more employees.

Under both laws, covered employers may not make employment-related decisions based on an employee's sexual orientation or gender identity (e.g., transgender status) or any other protected status (e.g., age, marital status, sex, pregnancy, sexual orientation, gender identity, race, creed/religion, color, national origin, military/veteran status, and disability). Employers are also prohibited from causing or allowing severe or pervasive harassment related to any protected trait. The EEOC and WSHRC guidance explains how these protections apply to three "hot button" issues:

- Dress codes: Employers must allow employees to dress in a manner consistent with their gender identity. It is unlawful to require employees to dress according to their biological sex.
- Sex-segregated bathrooms: While employers may provide sex-segregated bathrooms, they must permit employees to use the restroom that corresponds to their gender identity.
- Names and pronouns: While accidental misuse of pronouns will not amount to unlawful discrimination, intentional and repeated use of an employee's wrong name and pronouns will contribute to an unlawful hostile work environment.

Some argue the EEOC fact sheet exceeds the agency's authority in applying the Supreme Court's Bostock decision, but the fact sheet serves as a good reminder of established Washington law and protections for LGBTQ+ employees. For non-profit religious organizations to which the WLAD does not apply, however,



By / Karen Forner employersolutionslaw.com

these institutions should stay tuned to future Supreme Court decisions as it decides how Title VII's religious and ministerial exemptions will apply in future cases to non-profit employers who provide religious products and services.

While the EEOC's newest guidance has little practical impact on Washington employers, it still raises awareness and reminds employers about their legal duty to prohibit discrimination and harassment in the workplace based on any protected trait. The legal framework for these situations is relatively straightforward, but in real life, dealing with conflict between employees is tricky given our increasingly fractured culture and the potential to clash with other employment protections. Navigating these issues should be done carefully with involvement of Human Resource Professionals and often with legal advice.

- ¹ EEOC, "Protections Against Employment Discrimination Based on Sexual Orientation or Gender Identity," available at eeoc.gov/laws/guidance/ protections-against-employment-discrimination-based-sexual-orientationor-gender#_edn1
- ² WSHRC, "Guide to Sexual Orientation and Gender Identity and the Washington State Law Against Discrimination," available at hum.wa.gov/ sites/default/files/public/publications/Updated%20SO%20GI%20Guide.pdf

Since 1993, Karen Galipeau Forner has been working on labor and industries issues and employment law matters. Karen's early background includes working at the Attorney General's Office in the Labor and Industries Division where she got an inside look at construction companies and safety practices. After working as a senior attorney at a private law firm assisting employers with labor and industries cases, Karen then founded K-Solutions Law—now Employer Solutions Law—in Bellevue, Washington. Her practice has grown since 2009 into a firm comprised of ten employees aiding and advising employers statewide on matters of workers' compensation, workplace safety (WISHA/DOSH/OSHA), wage and hour, prevailing wage, and employment law issues.

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WHY ELECTRONICALLY COMMUTATED (EC) MOTORS?

Industry today consumes roughly 40 percent of the world's electricity. Two-thirds of that electricity is used to power electric motors. AC motors are the workhorses of industry, yet they are power hogs. Let's put this into perspective: there are roughly 25 million small-frame AC motors employed on fan drive units. Assuming average power consumption of approximately 150 watts and a duty cycle of 75 percent, these units consume 25 billion kWh of power each year.

This means that, given one nuclear reactor generates 850 mW annually, the average annual output from three nuclear reactors is needed to supply the power for just these small frame AC motors.

Rising energy costs and new government regulations have spawned revolutionary innovations in motor technology. Electronically commutated (EC) motors used in various fan applications-such as refrigeration, air conditioning, and building systems—consume roughly 30-40 percent less power than AC motors. So if all 25 million small-frame AC motors in our earlier example were switched to EC, this could save nearly 10 billion kWh, permitting an entire nuclear power station to shut down.

This is great news for everyone—engineers, designers, and the owners who actually pay the power bills. EC technology is the future of sustainable energy consumption in industrial and residential appliances, pumps, and HVAC applications.

You may hear EC motor technology referred to as electronically commutated motor (ECM), permanent magnet, brush-free, brushless DC, or brushless alternating current. Some of these may vary slightly in design but carry the same basic concept. Whatever you call it, EC technology is here to stay.

The new government energy rules have prompted engineers to replace or retrofit many of today's 1 HP or smaller AC motors

CONTRACTORS AND SUPPLIERS

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.

Reach out to jessica.kirby@pointonemedia.com or call 250.816.3671 to share your ideas.



By / Norm Grusnick, P.Eng., Commercial Business Development Representative, **ECCO Supply**

to EC. These include furnaces, fans compressors, and pumps. Larger 1 HP to 10 HP systems switching to EC technology have the ability to lower power bills significantly for large facilities.

How EC Motors Work

Basic DC motors rely on carbon brushes and a commutation ring to switch the current direction, and therefore the magnetic field polarity, in a rotating armature. The interaction between this internal rotor and fixed permanent magnets induces its rotation. In an EC motor, however, the mechanical commutation has been replaced by electronic circuitry. Through its brushless design, the magnetic field is already established by permanent magnets on the rotor. This allows you to supply the right amount of current to the fixed armature in the right direction at precisely the right time for accurate motor control.

The brushless EC motor has external electronics, a rotor with permanent magnets, and a stator which has a set of fixed windings. A circuit board continually switches the phases in the fixed windings to keep the motor turning. Speed is controlled by commutation electronics, so motors are not limited to synchronous speeds, and can rotate much faster than traditional AC motors. The EC motors' designs are becoming ever more cost competitive as volume increases. They use less material and low-cost ferrite magnets to achieve superior performance and higher efficiencies. Due to their flexibility, EC motors are now being used in many HVAC applications.

Speed Control Pays Off—Think of EC like driving a car

Imagine if you turned on the engine and went to 100% of the speed, then tried to control the speed of the car by using your brakes every time. That's how most commercial and industrial applications work today with AC. Sure, you can get multiple speed motors and external control devices. They require filtering systems to properly protect the motor shaft from damage, such as electrical fluting.

EC motors automatically and continuously adjust to meet current demand. Multiple speed options come standard. Speed can typically be controlled in the range of 10–100 percent.

WASHINGTON STATE 2018 COMMERCIAL ENERGY CODE REVIEW, PART 2 AND FINAL THOUGHTS

The SMACNA-Western Washington Code and Technical Committee regrouped earlier this year following a COVID-19 pause. We picked up where we left off in February 2020 to conclude our review of the 2018 Washington State Commercial Energy Code, which has now been adopted. In the committee's opinion, the following paragraphs describe the code sections of the most interest to SMACNA members and that have major revisions under this new code. Our review and commentary below are the opinion of our committee team members, who are a mix of design professionals, contractors, and code officials. Your interpretation of these code revisions, as well as the opinion of your local code authority partners, may differ, so keep this in mind as you incorporate these code changes into your projects.

The committee previously addressed 2018 code sections C102, C104, C106, C402.1, and C402.5.3. Following detailed discussion on the balance of code section changes, I will provide a summary of significant revisions to watch and plan for in your current and future projects.

Section C403.8 Fan and Fan Controls: This section has been revised (and relocated from Section 403.2 in the 2015 code) in the continuing effort to limit the use of large horsepower fan systems in most building types. The committee understands that recent and current energy codes are favoring the use of hydronic systems instead of air systems to convey heating and cooling in buildings and believe that language in this section eliminates (or nearly eliminates) large high pressure-class systems from current code compliant design and installation.

Section C403.9 Heat Rejection and Heat Recovery Equipment: This section now has added requirements for both fan speed control and variable fluid flow control for all heat rejection equipment, including condensing units and cooling towers with combined motor horsepower equal to or greater than 5 hp. The committee believes that these requirements are reasonable and in line with variable motor control requirements found in other sections of this code.

Section 406 Efficiency Measures: In the 2015 code, this section provided guidelines for a "prescriptive path" to compliance with the code. The 2018 code has added complexities to this prescriptive path, which in many cases will require some form of energy modeling to prove compliance with this code.

The 2015 code required selecting two of the eight listed "additional package efficiency options" from the prescriptive table. Each option was equally weighted and not dependent on building type. The 2018 code requires achieving six points from twelve categories in the "efficiency credits package table" and the points achieved are variable based on building type.



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

The 2018 code emphasizes the use of dedicated outdoor air systems (DOAS) with energy recovery for many types of buildings and occupancies. The use of high efficiency VAV systems is still viable but likely will be further restricted or not be allowed in future code editions unless this type of system can be shown to use equal or less energy as compared to a similarly sized hydronic system with DOAS ventilation.

Section C407 Total Building Performance: This section describes requirements to meet the code via "total building performance" based on the creation of an energy model that compares your specific project and its associated building characteristics to a code baseline model to show compliance.

The 2015 code allowed the use of C406 additional package efficiency options when using the C407 approach to help prove compliance using this path. This is no longer allowed in the 2018 code as the new code now requires that your specific project be compared to a model based on ASHRAE Standard 90.1 Appendix G "Performance Rating Method" with an additional "Carbon Emissions Factor" calculation requirement. This is the first time that the Washington State Energy code has required proof of carbon emissions reduction in addition to energy savings and is therefore a significant change in the methodology used to comply with the code via the C407 path. This new methodology also limits the ability to trade energy efficient components (e.g., more efficient mechanical systems for a less efficient envelope) for code compliance. This change does make our job as mechanical designers/contractors easier in one respect, as it puts more onus on the architect to develop a stand-alone code compliant envelope without much reliance on mechanical system efficiencies to offset things like large glazing percentages that we have typically seen in the past.

There is a third option to comply with the 2018 energy code. It is by the use of a "Target Compliance Path" methodology. Using this option, an energy use target is agreed to for a specific building project, and it is incumbent on the building's owners to prove that annual energy use is at or below the target. Proof of compliance is in the form of utility billings, and this proof must be submitted for several years after occupancy. If the

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CONTRACTOR ADVICE

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
- Other 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 www.breslin.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, behavior 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

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LEGISLATIVE UPDATES

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to act soon. The long-term care insurance industry has started imposing more restrictions on purchase of their products to prevent individuals from buying insurance and then dropping it once the opt-out is approved.

The description provided here does not address all the questions SMACNA contractors will have. This is complicated program, and Employment Security has not completed its rule-making for the 2022 start date, so there are unanswered questions. SMACNA is planning to do a program on this topic, and we will keep you informed of additional information as it becomes available.

End-of-life information: ezview.wa.gov/site/ alias 1962/37700/refrigerants_management_program.aspx •

CODE CORNER

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building fails to meet target energy goals, the building owner is liable for significant fines (or worse, even condemnation) from the jurisdiction that granted the permit. This approach is currently seen by many developers as both burdensome and too risky. Caution should be used if considering the use of this compliance path with your customer.

In summary, the 2015 is a continuation of the State of Washington's pursuit to meet their stated goal of new buildings being carbon neutral by 2030 while at the same time using 10% of the energy as compared to similar buildings in 1998 when the first energy code was established in this state. In order to push forward with these goals, the 2018 code continues to demand the construction of better envelopes, more efficient (and less) glazing in buildings, and overall tighter construction to eliminate infiltration. In addition, the new code is focusing on use of smaller energy recovery DOAS and Energy Recovery Ventilation (ERV) systems in lieu of larger fan systems with economizer cooling. And finally, the most significant change to the 2018 energy code is the move away from natural gas and electric resistance heating equipment in favor of using heatpump technology (this is already codified in the 2018 Seattle Energy Code). We can be assured that in future codes, natural gas and electric resistance energy will be no longer be allowed, and the use of heat-pumps for building heating, cooling, and domestic hot water generation will be the new baseline for the projects we build. •

CONTRACTOR ADVICE

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resources. Mortenson, the client contractor I mentioned, also purchased subscriptions to Joyable, a mental health app, for thousands of employees to use anonymously. Make sure your people have a trusted go-to person in the company. Know what is available through your union partners (see links for some great work being done now) and let your employees know.

3. Do not compromise, rationalize, or ignore any selfdestructive 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 www.breslin.biz.

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