

FALL 2020

Sheet Metal Journal

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Western Washington



SMART Hero Grads

Climate Pledge Arena

Generations: Why We're Not so Different

Parents Support Skilled Trades Career

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SMACNA
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.

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.



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Courtesy of Climate Pledge Arena



13

FEATURES

Fall 2020

8

SMART Hero Grads Look to a Bright Future

Seven new graduates from the SMART Heroes program out of the Western Washington training center are prepared for a future in sheet metal.

10

Climate Pledge Arena

Hermanson's work on the Climate Pledge Arena was monumental in scope and logistics, and contributed to a game-changing world's first zero carbon arena.

13

Generations: Why We're Not so Different

There's no doubt each generation is different from the last. So, why are we blaming it all on Millennials?

15

Parents Support Skilled Trades Career

A recent survey says 90% of parents would support their child pursuing a career in trades. All they need is some good information and a little push to explore all the options.

DEPARTMENTS

4	SMACNA-WW Update	19	Legislative Update
6	Editorial Comment	20	It's the Law
6	SMACNA Events	21	Engineer's Desk
7	Industry News	22	Code Corner
17	Feature Focus	23	Advertiser Index
18	Contractor's 101		

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SURVIVING GROUNDHOG DAY

In these times of restriction, social distance, and separation, the day-to-day can seem monotonous. Although I am sure most are staying positive and reaching out to others in business and in their personal lives, there is a sense of sameness about these times. We have our small bubbles, our reduced staffing, our modified social and business interaction schedule. It is almost like the 1993 Bill Murray film *Groundhog Day* in which our hero wakes up to the same exact day over and over again. Lucky for us, things aren't as extreme, but there is no doubt our physical, emotional, and social health dramatically improves with variety and connection with others. With that in mind, I'd like to suggest some solid strategies for surviving Groundhog Day and making the most of every opportunity we have.

Because of social distancing and capacity restrictions on venues, things like meetings, lunches, and Happy Hour are out of the question, but that doesn't mean we can't connect. Consider meeting friends or colleagues for a picnic at an open park or at a place like Burgermaster, where visitors can pull up, roll down the windows, and eat in the car while chatting between vehicles.

For others, the gym, spin class, running group, or other fitness community is on hold for the moment, and that can be double trouble since being sedentary affects both physical and mental wellness. Luckily, so many fitness programs have pivoted to offer pre-recorded or live group and individual fitness classes, including weight training, yoga, pilates, and kickboxing. Look around for local fitness facilities that have taken their offerings online. If you're feeling like the separation is taking away your zen, think about online meditation instruction—again, start by searching local listings to help support a Seattle area business.

Of course, we are all Zoom-ing and connecting online, and though this keeps business running smoothly it can lead to a little online fatigue. If the idea of going online for leisure time after a day of staring at a screen seems like just a little too much, remember that heading outside for a walk, hopping on a bike, or curling up with a book are tried and tested ways to rebalance and reset when things feel drab.

Although we have also had our share of battling repetition, your team at SMACNA-WW has been dedicated to its most important work—helping its members stay informed, educated, and connected during COVID-19. Over the summer, we held a Summer Webinar Series, which covered the PPP loan forgiveness process, quantifying the pandemic's impact on productivity, leading and managing a remote workforce, improving cashflow, and pull planning for contractors. Over the Fall months we have promoted the SMACNA National's



By / Julie A. Muller-Neff, Esq.
Executive Vice-President, SMACNA-WW

Edge Conference, which was the virtual manifestation of the Annual National Conference. This Virtual Education Forum was our industry's premier digital event offering attendees the opportunity to learn, network, and interact with service providers and suppliers. Watch the next issue for highlights from this event.

We are currently working on a Winter Webinar Series that will be announced in the next couple of months. Like the summer series, the winter webinars will feature some of the industry's most skilled speakers covering topics that are timely and relevant. Watch your email for an announcement coming soon.

Carrie Heinrich, our operations manager, has been hard at work on our newest initiative—the SMACNA-Western Washington Supply Closet, which opened October 15. The Supply Closet is stocked with PPE, sanitizing, and cleaning products SMACNA-WW members need to keep their offices and job sites running smoothly and safely. These materials are now on offer, free of charge, in advance of flu season. Members are invited to go online and shop the closet with a limited number of items per member. Please email Carrie directly at cheinrich@smacnaww.org.

As a result of two committee meetings—the Women's Committee and the Safety Committee—the association has developed an Education Initiative, which lists learning and childcare resources for members participating in online learning in the fall while balancing work in the construction industry. We invite members to peruse these resources, available on the SMACNA-WW website under the Resources tab, and reach out if there are any other resources you would like to see included.

Even though the days may seem to blend together, know we are thinking of you all and of ways to best support you during this time. We know we can't see you in person, but we are committed to keeping you updated and informed through these resources and initiatives. If you have any questions or comments, we are just a phone call or an email away. ■



Save the Date!

SMACNA-Western Washington

WHO-BILATION

on December 4th!

ALL WW WHOS ARE INVITED,
THE SMALL AND THE TALL,
TO JOIN OUR DECEMBER 4TH WEBCAST
MERRIMENT AND GAMES FOR US ALL!

WE'LL SEND YOU WHISKY, WINE, AND WAGYU
FOR THIS VIRTUAL FEAST!
SO MARK YOUR CALENDAR TODAY
TO FEAST! FEAST! FEAST ON ROAST BEAST!



Cost per person: 2 hosted couples per company. Additional couples are \$350 per couple. Up to 5 couples per company.

Date: Friday, December 4th

Time: 6:00-7:15 pm

Location: Whoville Webcast (via Zoom)

Registration: Online registration opens in November. Save the date!

Other: Whoville and Christmas attire encouraged, prize for best costume.

ABOVE ALL ELSE, BE KIND

Pandemics are no small deal. The world has changed forever, and the events of the past seven months will resonate with us from this day forward. Our children’s children will participate in habits and ways of life that will have resulted from COVID-19 in 2020, but by then they may not know the reason for those habits and ways of life. They will just be.

While we process and understand what is happening in our communities, how we are responding, and what the way forward looks like, we talk about many, many things. We talk about the economy, the workforce, capital budgets, and the state of the industry. We talk about health care, testing, diagnoses, and vaccination. We talk about masks, hand sanitizer, social distancing, and quarantine. We talk about fear, anxiety, false information, speculation, and exaggeration. We talk to understand and when we understand we change and adapt. Such is the human condition.

But we seldom talk about a simple principle that is making a huge dent in the effects of COVID-19, not the physical illness effects, but the byproducts of a phenomenon that generates fear and anxiety around performing normal, every day functions. The principle is kindness.

I don’t mean hippy-flippy flowers in your hair kind of kindness (although that is okay, too) but general, every day reaching out, welcoming, doing for others courtesy and care. I am talking about checking in on each other, running errands for the elderly neighbour or immune-compromised relative. I mean a nod or hello to someone passed on a walk down the street and taking a moment to say, “How is your day?” to the person ringing up your groceries.



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

These actions, par for the course in 2019, are stretched thin. People are afraid to talk to strangers, hesitant to help someone who has dropped their glasses, keen to avoid unnecessary eye contact. Although it is natural and expected to take space and keep our bubbles small, that undercurrent of everyday kindness between strangers is but a trickle in some places, and whether we acknowledge or realize it, we feel it.

An act of kindness, given or received; a moment of attention, no matter how brief; an encouraging nod, with a warm smile behind it, create a surge of dopamine in the brain that helps us feel good. When we feel good, we do good and our physical health improves.

I’m not saying, of course, that kindness can cure a pandemic. I am just saying that when chaos ensues and it is not easy to be kind, that is the best time to make the effort. As we head into flu season, keep in mind anxiety is up and that means these actions are more important than ever. Be curious instead of angry. Have empathy instead of frustration. And in situations where it is unclear how to react, above all else, be kind. ▪

UPCOMING SMACNA NATIONAL EVENTS

Oct 28, 2020

Scheduling and Planning Best Practices

Nov 05, 2020

Residential Contractors Forum - Leadership & Company Culture: Putting Your Culture into Action

Nov 10, 2020

Construction Claims Involving the Federal Government

Nov 12, 2020

Architectural Contractors Forum - Copper, Brass, Bronze and Related Alloys in Architectural Metals Applications

Nov 18, 2020

Industrial Contractors Forum - Dust Collection and Combustible Dust Projects and Work Opportunities

Dec 06 - 08 , 2020

2020 December Council of Chapter Representatives • Scottsdale, AZ

Dec 07, 2020

SMACN-IFUS Contributors’ Annual Meeting / SMACNA Annual Business Meeting • Scottsdale, AZ

Dec 10, 2020

The Federal Bidder Protest Process

Dec 16, 2020

Integrated Project Delivery (IPD) for HVAC and Mechanical Contractors

Jan 31 - Feb 03, 2021

2021 Chapter Executive Institute • Maui, HI

Feb 21 - 25, 2021

2021 Business Management University • Tempe, AZ

Visit <https://www.smacna.org/events-education> to learn more and to register for these and other events for 2020 and 2021. ▪

COVID SUPPLY CLOSET NOW OPEN

SMACNA-WW is pleased to announce its COVID-19 Supply Closet is officially open to accept orders from members.

The Supply Closet has the following items available:

- Hand sanitizing wipes
- Disinfecting wipes
- Disinfecting spray
- Hand sanitizer
- Face masks
- Limited supply of restroom and cleaning supplies

SMACNA-WW has compiled this supply stock for members free of charge. The Association asks that each company select up to a total quantity of five items while supplies last. SMACNA-WW will do its best to fulfill requests for those needing additional or specific items.

Items will be delivered to companies via UPS or drop off. Happy ordering and welcome to the supply closet! ▪

WASHINGTON STATE TOPS CONSTRUCTION ACTIVITY

Data and analysis company GlobalData released research data in September that reports Washington state has the highest value of construction projects in the executive stage, a continuance of consecutive growth the region has experienced over the past eight years.

In a report titled “Project Insight – Construction in Key US States (2020 Update),” which focuses on construction output, construction employment, overall size of the economy, population, and construction project pipeline in 10 key American states, names Washington’s ten largest projects and indicates that nine of those were in the execution stage as of August.

Those noted include Hanford Tank Waste Treatment and Immobilization Plant (value US\$17B), Washington Union Station Upgrade (value US\$7B), and Spring District Mixed-Use Development (value US\$2.3B).

“With the emergence of the COVID-19 pandemic this year and lockdown restrictions imposed by local authorities to slow the spread of the virus, construction activity in the Washington

Do you have an article idea you'd like to share? Great!

Please reach out to our editor, Jessica Kirby, to table your suggestions for a future issue of *Sheet Metal Journal - Western Washington*

**Contact Jessica at:
250.816.3671 or email jkirby@pointonemedia.com**

state, along with many other major states in the US, is expected to decelerate further in 2020,” said Dariana Tani, economist at GlobalData, in a news release.

“While record-low mortgage rates and the sizeable shift in remote work are currently boosting demand for new homes, factors such as high unemployment rates, low housing supply, and the still widespread rise in new COVID-19 cases across the country, are expected to continue to undermine business and consumer confidence and keep a large segment of potential buyers on the side-lines,” she adds.

Learn more at www.globaldata.com ▪

SMACNA LAUNCHES SYSTEM AIR LEAKAGE TESTING STANDARD

SMACNA has officially launched the First Edition, *System Air Leakage Testing Standard*. This must-own publication will be an immediately welcome addition to SMACNA members’ resource libraries.

SMACNA member firms and chapters are each entitled to one free* copy of this new standard. An email went out from SMACNA National to chapter executives and member primary contacts (owners, presidents, CEOs) with a promo code that can be used to order either one PDF download or one hard copy book. Please refer to that email for information on how to get your free* copy of this standard.

Since 1965, SMACNA has included a procedure for leakage testing of ductwork (*HVAC Duct Construction Standard & HVAC Air Duct Leakage Manual*). This process, like many others developed by SMACNA, has evolved over time based on research and feedback from the industry, resulting in changes to both the pass/fail criteria and the application of testing.

The culmination of that feedback and research is this standard. *SMACNA’s System Air Leakage Test Standard* goes beyond the duct and includes procedures for any item included in a forced air system. This standard addresses leakage testing of any portion of, and up to, the entire forced air system.

The pass/fail criteria are based on sound research specific to testing conditions, and distributes the responsibility of system performance equitably. The testing process is reliable, practical, and based is on decades of experience.

*This free copy is limited to either one PDF download or one hard copy book. Hard copy book orders will be subject to a shipping fee.

Visit www.smacna.org for more information. ▪



SMART Hero Grads Look to a **Bright** Future

Eighteenth class prepared seven US Army members for apprenticeship

By / Jessica Kirby • Photos courtesy of Western Washington Training Center

Seven members of the United States military graduated as the 18th class of the SMART Heroes program this August at the Western Washington Sheet Metal training center in DuPont, Washington.

The graduates represent the ranks of the Army and include Sfc. Darrell Cortez, Spc. Anthony Gomes, Spc. Samuel Hammon, Spc. Jason Jones, Spc. Erik Palin, Spc. Paul Pazar, and Sgt. John Talbert.

Spc. Samuel Hammon says the number one reason he was attracted to the sheet metal industry was what the program offered.

“I actually wasn’t interested in the sheet metal industry itself,” he says. “I wanted to learn more about the trades, and I figured this would be a good addition to my resume. I quickly realized that there is much much more to the sheet metal industry than I or any of my friends knew about.”

Hammon loves a good challenge, and learning real world math, metal work, and the logistics and challenges of the job on a physical level was extremely rewarding.

“I enjoyed the challenges of drafting and then making paper drawings come to life in the shop, all the while trying to do it

faster and better than my coworkers,” he says. “The program was much more complex than I expected, and we are just scratching the surface.”

Moving forward, he intends to explore all the skills that will make him more of an asset to the companies he will work for, starting with trucking and welding certificates. “I want to be the guy they can call on to get the job done professionally,” he says. “I didn’t realize the multitude of benefits this program offers, particularly to transitioning soldiers. I feel indebted to the union, owners, and the army for making it all possible.”

In order to graduate, participants completed a seven-week course to earn the equivalent of their first-year sheet metal apprentice training (224 hours). Upon discharge from service, these graduates may choose to enter any of the 148 SMART apprenticeship programs in the United States and be provided direct entry and advanced placement as a second-year sheet metal apprentice, including a high probability of obtaining second-year apprentice wages and benefits.

Steve Swanson graduated from the previous SMART Heroes class and has been in the workforce for six months. In the Army he was an x-ray technician, a job he describes as “unappealing” because he “pushed buttons and wore pyjamas all day”.

“One day, I realized I had zero skills regarding construction,” Swanson says. “I couldn’t read a tape measure, use a drill, or anything like that. My father was a boilermaker and always knew how to construct, fix, weld, and maintain anything. I realized how useless I felt, and I saw SMART Heroes as an awesome way to learn real skills, work with my hands, and become as skilled as my father.”

At school, the instructors were patient and willing to help, especially for those with no experience. “The knowledge they pulled from the top of their heads during the lessons was impressive,” Swanson says. “It gave us a brief but good intro to what we were getting into, especially since most of us were leaving the service within months.”

Although he admits it has been a steep learning curve, he has enjoyed every second. He went from working in a concrete and lead basement to seeing the entire Puget Sound from the top of the airport for the past six months, all the while getting paid.

More than anything, Swanson looks forward to being able to provide for his growing family with a high standard of living. “This early in my life that is a great feeling,” he says. “The pay and benefits are far beyond what I ever saw myself being able to earn. I intend to remain in Local 66 and work in Western Washington for the foreseeable future.”

Darrell Cortez, also a previous graduate from SMART Heroes, says his journey was similar in that the SMART Heroes program was not initially his first choice. He was originally looking at a welding program, but that program would have required he relocate out of the area. “My children are in the Lacey area, and that is the primary reason for me to be here,” he says. “I started looking at other options, and Gary Olson, the career skills program manager I was working with, offered up SMART Heroes as a good option.”

Cortez did his research and decided to pursue the program. He liked that the sheet metal industry offered several areas of expertise, but his initial draw was welding. “After taking the program, I actually think that welding is not my primary desire, but simply the ability to work with my hands to create things,” he says.

He delved in and found many aspect of the program he enjoyed, such as math, layout, and fabrication.

“I have always been a bit of a math junkie, and so the amount of math that we needed to do was a lot of fun for me,” he says. “Seeing all of the math and layout come together was a lot of fun for me.”

If he could change anything he would have made the program two or three weeks longer and received more experience in each discipline. “A one day exposure is really not quite enough to make an informed decision,” he says. “It would be a little easier to have one-day of classroom explanation, and the second day of practical experience.”

Cortez hasn’t yet started his apprenticeship, and for the immediate future intends to only explore the building trades aspect.

“I am looking forward to spending some time in learning mode before I look at any kind of opportunity to do more,” he says. “I have spent the majority of the last 20 years in some type of leadership position, and I am truly looking forward to being a follower and learner for a little while.”

His goals include gaining more education opportunities and further developing his marketable skillset. “I would like to get to a point where I have some knowledge in a lot of different areas, and can show the potential to delve into any area and excel,” he says.

Launched in August 2017, the SMART Heroes program was established together with SMACNA in collaboration with SMART Local 66, SMACNA Western Washington, Western Washington Sheet Metal training center, and Helmets to Hardhats.

SMART Heroes provides free sheet metal industry training to enlisted US military men and women who plan to enter the civilian life within the year, thereby assisting in a successful transition into the civilian workforce.

For additional information on SMART Heroes, visit smart-heroes.org or call the International Training Institute at 703-739-7200. ■



CLIMATE PLEDGE ARENA



Project: The Climate Pledge Arena
Location: Seattle Center Campus, Seattle, WA
Size: 800,000 square feet
Private capital investment: \$1 billion
Architecture and design – Rockwell Group
Populous – Design Partner
Project Manager – ICON
Construction Partner MA – Mortenson
Engineer – ME Engineering
Mechanical Contractor – Hermanson



By / Jessica Kirby • Photos courtesy of Climate Pledge Arena • climatepledgearena.com

Climate Pledge Arena in Seattle, WA, is a game-changing, world's first that will set the bar for facilities construction into the future. Constructed through a partnership between Amazon, Oak View Group, and the City of Seattle, the project's vision is to reimagine and redevelop an arena constructed under an historic landmarked roof originally built for the 1962 Seattle World's Fair. The 740,000

square foot multi-purpose project will be the world's first International Living Future Institute certified zero carbon arena. It doubles the size of the original facility, and implements an holistic environmental strategy that addresses everything from zero single use plastic to the complete absence of fossil fuel consumption in the arena for daily use.



When complete, it will seat 17,100 for NHL and concert events and 18,100 for NBA events.

SMACNA-Western Washington member Hermanson is the mechanical contractor on the project, and is in the process of completing the plumbing, fitting, and sheet metal, a monumental scope that began with and was affected by the arena being completely gutted except for the roof.

“The roofline is an iconic part of the building and an historical landmark, so the architect developed a way to save it,” says Scott Sinclair, project manager at Hermanson and lead on the project.

Construction crews erected temporary roof supports before demolishing the walls and excavating down 70 feet, which reduces embodied energy use typical of new construction. The footprint was expanded horizontally before new structural supports were in place and new decking poured.

Part of the Climate Pledge is converting all facility mechanical systems, gas combustion engines, heating, dehumidification, and cooking to electric. Hermanson has installed water-cooled chillers, boilers, and 25 air handlers.

The air handlers are positioned in two 10,000-square-foot mechanical rooms into which the temporary steel for the roof has been placed. As a result, multiple 3-foot in diameter columns with cross bracing and a major chevron structure for the roof are located right where the mechanical rooms are located.



“The removal of the temporary steel is what releases us to start our work, and they can’t release the old steel until the new steel—which needs the concrete—is ready,” Sinclair says. “It really compresses the timeframe. We have a very small window before the bleachers go in and we no longer have access to the equipment. The timing and logistics are incredibly detailed and challenging.”

Another outstanding element is the sheer volume of sheet metal required on this project.

“We will have installed approximately 1 million pounds of sheet metal and 200,000 linear feet of pipe once the project is complete,” Sinclair says.

The arena space is essentially one wide open space with considerable height and span, and it contains 66-inch round exposed ducting suspended 180 feet in the air. Without a flat surface to rig from, the logistics of installation are challenging.



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	Holmberg Mechanical
AccuDuct Manufacturing, Inc.	Johansen Mechanical, Inc.
Air Handlers, Inc.	L & M Sheet Metal Fabricators, Inc.
AIRTEST Co., Inc.	MacDonald-Miller Facility Solutions, Inc.
Apollo Mechanical Contractors	McKinstry Co., LLC
Argo Blower & Mfg. Co., Inc.	Miller Sheet Metal, Inc.
Auburn Mechanical, Inc.	Miller's Smith & Losli Sheet Metal, Inc.
Ballard Sheet Metal Works, Inc.	Neudorfer Engineers, Inc.
Capital Heating and Cooling, Inc.	Olympia Sheet Metal, Inc.
D/B Solutions, LLC	Pacific BIM Services
Delta Technology Corporation	Phoenix Mechanical, Inc.
Distribution International	Pinchiff Mechanical LLC
Eckstrom Industries, Inc.	PSF Mechanical, Inc.
Emerald Aire, Inc.	PSR Mechanical
ENVIROMECH	Schmitt's Sheet Metal & Roofing
Evergreen State Heat & AC	Scott & From Co., Inc.
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H & R Mechanical Systems, Inc.	Trotter & Morton Facility Services
Hermanson Company, LLP	TRS Mechanical, Inc.
Holiday-Parks, Inc.	UMC, Inc.

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CL Ward, Inc.	Milwaukee Tool
C.M. Hoskins Company	Pacific Product Sales, Inc.
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Dorse & Company, Inc.	Star Rentals Inc.
Ductmate Industries	SPI, LLC
ECCO Manufacturing, Inc.	Sunbelt Controls
Edge Construction Supply	Sunbelt Rentals
Employer Solutions Law	Trane
	York NW Factory Direct

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"We have a great team and general contractor. Last year, everyone said 'impossible'. Today, we are making it look easy. That is what makes this process manageable, and we are really excited to be a part of it."

—Scott Sinclair, project manager at Hermanson

"It is pretty tricky ductwork," Sinclair says. "The configuration isn't flat and level. The diffusers have to be rotated in varying angles and it is suspended in the air while we are doing that."

"We will use a cable system to lift the ductwork into place where it will be secured," Sinclair says. "We'll have a crew member up there to complete the work. It is a two- or three-step process for each piece."

Another thing making it a challenging build is its configuration as a six-level structure that is divided into quadrants. "It isn't constructed level by level but quadrant by quadrant," Sinclair says. "That means we are working on multiple areas and floors simultaneously. It makes planning materials and crews for three trades a little difficult. We have a great team and general contractor. Last year, everyone said 'impossible'. Today, we are making it look easy. That is what makes this process manageable, and we are really excited to be a part of it."

Climate Pledge Arena will meet its ambitious environmental goals with additional measures, such as a fully integrated transportation plan that includes subsidized public transportation, electric vehicle charging stations, and investment in the Seattle Center Monorail and by operating all events at zero carbon and purchase offsets including those for transportation. Solar Panels on the Alaska Airlines Atrium and 1st Ave Garage combine with off-site supplementary renewable energy for 100% renewable energy power.

For more information about Hermanson Company, visit hermanson.com/

Learn more about Climate Pledge Arena visit climatepledgearena.com/ ▪



Generations: Why We Aren't So Different

By / Brent Darnell • Reprinted with permission from *Partners in Progress* magazine, June 2020 issue • www.pinp.org

Simon Sinek blew up the internet with his rant on YouTube Millennials called, *Millennials in the Workplace* (see youtube.com/watch?v=hER0Qp6QJNU). I can't tell you how much I disagree with most of what he said. And since most of the Baby Boomer audience at the recent CURT National Conference probably agrees with him, I wanted to set the record straight. I'll take his points one at a time and discuss them.

He said that everything that is wrong with Millennials can be summed up in four distinct areas:

AREA 1: Poor Parenting: Sinek claims that the parents ruined this generation through entitlement where everyone gets a trophy. I have questioned many Millennials about this and most seem confused. Many of those I talked to did not receive the many trophies that are continually referenced by Baby Boomers. Do you know any Generation X folks and Baby Boomers with poor parents? Why are we targeting Millennials? Baby Boomers claim that Millennials are lazy, but many of the Millennials that I know work incredibly long hours—it's just not during the traditional work hours. They are constantly working! Some

examples of “lazy” Millennials from *Inc. Magazine's* Top 20 Most Influential Millennials: Mark Zuckerberg, the founder of Facebook and multi-billionaire; David Karp, creator of Tumblr; Ben Silbermann and Evan Sharp, creators of Pinterest; Jessica Alba, founder of The Honest Company valued at over \$1 billion; Mike Krieger and Kevin Systrom, founders of Instagram; and Brian Chesky, founder of Airbnb.

AREA 2: Tech: Sinek says Millennials are addicted to social media. Do you know any Baby Boomers or Generation X folks who are addicted to social media? How often do you check Facebook each day? Why is this a Millennial issue? I agree that there should be periods where you remove devices from your world for periods throughout your day. We recommend this to everyone, not just Millennials.

AREA 3: Impatience: Sinek claims that this instant gratification world translates into Millennials expecting instant career mobility and instant intimate relationships and joy in their life and work. Isn't this true for our society and not just Millennials? This “chases shiny objects” emotional profile (high flexibility/



low impulse control) shows up in some of the participants in our programs, and it isn't just Millennials. There is an upside to this profile. These folks are constantly looking for more possibilities and different ways to do things. Why do we always focus on the negative? Have you heard of Stanford's marshmallow test? Five-year-old children were given a marshmallow and were told that if they could wait 10 minutes and not eat the marshmallow, they would get two marshmallows. When the Millennials were tested they did better than any other generation. Hmmm. Maybe they're not so impatient.

AREA 4: Environmental: Sinek says that corporations don't care about these young people and don't give them the resources (training in social skills) to find joy and fulfillment in their work and their relationships. It's the company's responsibility. That's the only thing that Sinek said that I agree with. I do believe that most companies care about their people. The key is to provide these resources and create organizations and projects that are relationship driven and collaborative.

Look at the following quote and try to guess who said it and when it was said:

"Our (sons' time) was worse than our (grandsons'). We their sons are more worthless than they: so in our turn we shall give the world a progeny yet more corrupt."

The answer? Horace, *Book III of Odes*, circa 20 BC

This is nothing new. This issue has been going on for millennia! This is not a generational issue. This is a

"We have to get to know our employees and co-workers regardless of their age, accentuate their strengths, and help them with their development needs. Why don't we talk about the positive stereotypes about Millennials?"

communication/people issue. We have to get to know our employees and co-workers regardless of their age, accentuate their strengths, and help them with their development needs. Why don't we talk about the positive stereotypes about Millennials? They are incredibly smart, socially conscious, they get things very quickly, they can solve problems and figure out incredibly difficult issues in a short period of time. They work smarter, not harder. They are great with technology.

My advice to Millennials? Get off the phone, tablet, and computer every once in a while and seek out some human interaction and face-to-face discussion. This will help you in your life and career. (By the way, this will help everyone!)

My advice to the Baby Boomers? Quit complaining about Millennials. Get to know them and create a work environment that exploits their strengths. Don't worry about their time on their phones or Facebook. Be clear on what you want from them and give them autonomy and purpose. ■



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Over 90% of Parents Support Trades Career

High school students and parents report high interest in skilled trade education and career opportunities but reveal more information is needed to inform their decision

By / StrataTech Education Group • www.stratatech.com

When it comes to making post-graduation decisions, the most common reason high school students do not consider attending a trade school is not knowing about the options available, according to a recent survey commissioned by StrataTech Education Group, a student-first company that offers schools with technical career education programs. StrataTech conducted the survey to explore the attitudes and beliefs about trade schools and skilled trade careers among young Americans and their parents.

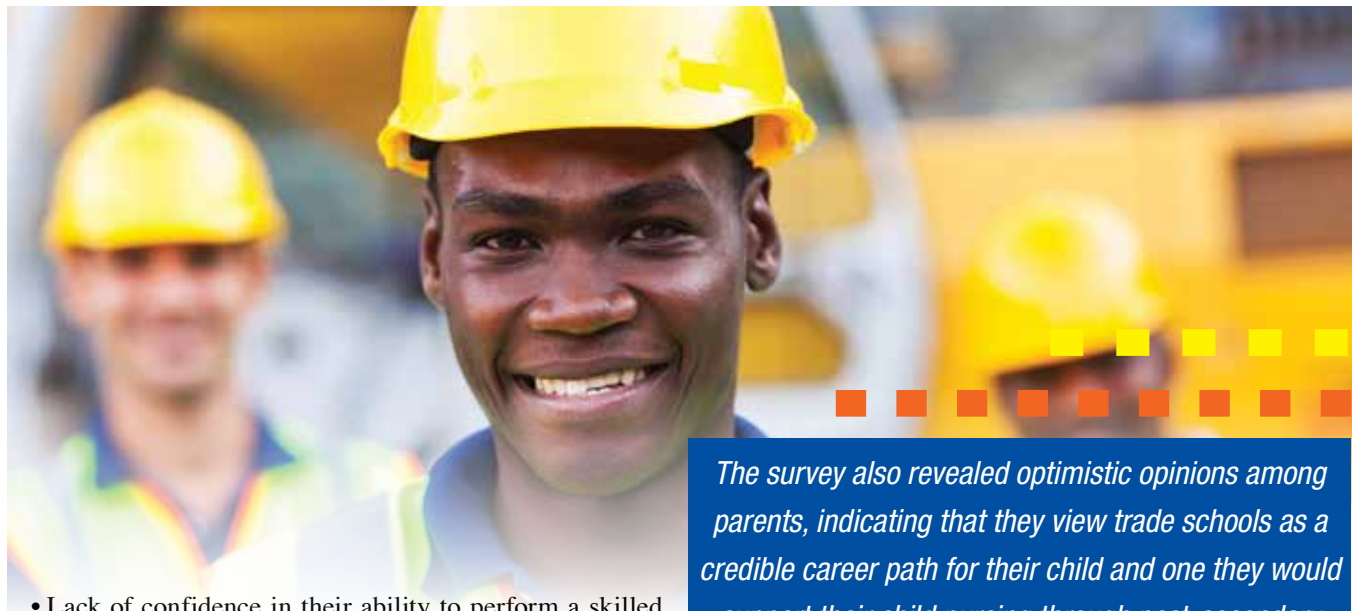
“For decades, students and parents have believed a four-year degree is necessary to succeed in life, but we believe differently,” said Mary Kelly, president and CEO of StrataTech Education Group. “When it comes to secondary education, there isn’t a one-size-fits-all approach for all graduates. We’re optimistic this research shows perceptions are shifting and there are opportunities to strengthen pathways to skilled trade opportunities.”

The survey included 2,000 respondents, half of which are current high school students and half of which are parents to current high schoolers. Major takeaways included:

Today’s students and parents are interested in trade school education, but more information is needed.

Parents and students most commonly reported their high schools promote four-year universities (73%) and two-year college programs (45%) as post-secondary education options. While 70% indicated their high school currently offers classes that align to the trades, only 32% reported their high school promotes trade school education as a potential path following graduation. While slightly over half of the students (51%) shared they have considered attending a trade school, several cited several barriers to making that decision, including:

- Not knowing about the options available (33%)
- Expense (31%)



- Lack of confidence in their ability to perform a skilled trade (26%)
- Pressure from the community to attend a four-year university (23%)

Today's parents would support their child's decision to pursue a skilled trades career

The survey also revealed optimistic opinions among parents, indicating that they view trade schools as a credible career path for their child and one they would support their child pursuing through post-secondary education.

- More than 9 in 10 (93%) said they would support their child's choice to pursue a career in skilled trades
- 62% said they would emotionally support their child's choice
- 57% indicated they would offer major financial support to fund a majority of the education with 47% reporting they would offer limited financial support, such as letting their child continue living at home while pursuing a skilled trades certification

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The survey also revealed optimistic opinions among parents, indicating that they view trade schools as a credible career path for their child and one they would support their child pursuing through post-secondary education.

Today's students turn to personal research followed by parents/family members to help inform their pathway

The survey also aimed to uncover student opinions about the sources they believe are most important to informing their decisions about their next steps following high school graduation. Personal research ranked as the highest (28%) followed by parents/family members (23%) as the most important sources. For personal research, students largely reported turning to online sources (59%) and social media (43%).

Trade schools and for-profit schools are viewed just as credible as traditional college

The majority of parents and students largely agreed a four-year bachelor's degree is required to secure a good job (70%) and offers a good return on investment (75%). Similarly, most respondents also shared for profit (82% parents/73% students) and trade or vocational schools (82% parents/73% students) are just as credible as traditional college.

Quality of life ranks as the most important variable for selecting a career

When asked to select attributes that are important to them in a career, most respondents selected stability (69%) and quality of life (69%). Although when asked about what is most important, quality of life outperformed stability (26% vs. 20%).

For more information about StrataTech Education Group, please visit www.stratatech.com. ■

Methodology: The survey was fielded using the Qualtrics Insight Platform with the panel sourced from Lucid. Respondents included 1,000 high school students and 1,000 parents to high school student across the United States. This article was reprinted with permission from StrataTech Education Group.

FASTEST STAYS AHEAD OF THE CURVE IN SOFTWARE TECHNOLOGY

Since 1995, FastEST has provided contractors with fast, accurate, and effective software to streamline the estimating process. Manual counting and takeoffs are now easily done right on your computer screen with quick and easy highlighting of piping and ductwork. An integrated database of material costs and labor hours allows you to scratch the extra step of taking off your final quantity counts and transposing them to a separate pricing/labor sheet. In FastDUCT and FastPIPE, it's as simple as a click of the Recalculate button, and in a few seconds, you have a full quantified material cost and labor hour total for any given bid. Then, send it to the final spreadsheet to quickly add any other costs, and tack on the necessary markup on the estimate. It's as simple as that.

As Microsoft continues to develop new operating systems, FastEST, Inc. continues to stay ahead of the curve, testing and adapting to new versions of Windows within the FastDUCT and FastPIPE programs.

As graphic technology advances, in ways like the release of UHD and 4K monitors, FastEST makes sure that its intuitive on-screen takeoff remains adaptable to these new, cutting-edge displays.

The FastEST program database has always been a proprietary, in-house format developed over two decades ago. It is not SQL-based, which results in much-improved performance compared to other competing estimating products. As contractor companies continue to move towards networked and cloud-based environments, FastEST's fast and easy catalogue format yields excellent performance over these shared environments.

As always, one of FastEST's most beneficial tools is the ability to directly import digital project plans right into the program for fast and easy on-screen takeoffs. FastEST continues to fine-tune and improve on all of the on-screen related takeoff tools,



including the ability to import a wide variety of file formats (PDF, .tif, .jpg, and .bmp, among others), easily revised plan replacement, plan overlay for comparisons, and much more.

To find out more about FastEST and how its products have helped thousands of HVAC and mechanical contractors improve their estimating process, visit the website at fastest-inc.com. Watch videos of FastEST's latest and greatest program versions in action. Contact FastEST at 800-828-7108, or by email at mike@fastest-inc.com. ■

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THE REWARDS OF NOT BEING AN INSECURE JERK

I did not become a CEO by being emotionally healthy and well adjusted. I did not become a public speaker and talk to 400,000 people because I was interested in them as individuals. I did not embrace the idea of empowering others with fear of failure chasing me like a junkyard dog. I did not understand that success and happiness are not the same, no matter what shows up on my title or W-2.

Leaders are made a lot of ways, and not always because we were shaped by a happy, sunshine filled, ride-a-pony upbringing. More often than not, it is just the opposite. The fuel that drives leaders often times has its genesis in our early development. Our beliefs about ourselves are well founded way before anyone gives us a shot at career advancement. I think a lot of leaders reading this know this to be true for themselves. My story is certainly the case. My self beliefs were steeped in a youth of turbulence, instability, and trouble. I am frankly the last guy who should have made it this far.

Without really knowing it I started my leadership with an emotional platform of fear and insecurity that I mistook for confidence. Ultimately, it got filed under the need to prove myself over and over and over again. That resulted in me being a very driven, aggressive, and effective leader, as well as a grade A, insecure jerk.

But through leadership trial and error (mostly error), I was able to evolve and grow, and it is this I want to share with you: The rewards of leaving that fear and ego all behind as a leader, as an influencer, as a family member, and as a person.

After all the striving, proving, and grinding you just might find that happiness and success are not the same thing. As a leader, it is not about the money, title, power, or validation. They are nice rewards no doubt, but as a leader, it's more about each person that we can influence in a positive way in this life. And we, as leaders, truly have this obligation and opportunity.

A lot of us become top leaders because we are compelled. Our fire burns red hot. Our need is to succeed and overcome. Driven by what? The raw fear of failure. The hole we are trying to fill. The respect we didn't get. The self image we are constructing to feel real. Often we are carry forward our baggage to simply prove ourselves over and over and over without resolution. We grind and push and are willing to die on the hill to show we are worthy in the eyes of others. No one else makes us worthy. No external validation makes us real or human. Service and love of self and others is the ticket. It's not about us. It's about the people we love and lead, care about, and influence.

After abandoning my endless idiotic quest for validation, I have tried above all, to make it about anyone else but me. But my old habits and the ego die hard. It takes a lot of work. So as a



By /Mark Breslin

leader I have to be less “the man” and more accepting of myself as a flawed but battle scarred human with the lessons I have paid for on deposit. I have to be careful I don't slip backwards. I simply hope to see with more clarity each day.

If you are willing to be the authentic person that you really are, you will reap rewards far beyond the validation, proving, and other stuff that substitutes for real impact. What this takes is three things. First, you have to do the work on yourself and solicit the painful feedback and advice that crushes your ego and builds your authentic self. Next, you have to decide what's important and act on it. Sounds simple? If so, why don't more people do it? Yeah, how many people you know are really truly emotionally healthy and secure? How many have marriages you want? How many people have a level of health and well being that make you think, “Oh, yeah! I want that, too!” How many people get their priorities right without epic failure as their teacher? And the third and final step: you have to understand that this life is short and valuable and you better do something remarkable before it passes you by. Hey, just want to make a ton of money and play golf? Good for you. Stop reading now.

I know I am annoying some of you. There's nothing worse than a reformed smoker or someone who gives you advice you didn't ask for. But in writing this I am not proud of who I was and why I was that way. The advice given is simply so you don't travel my path or pay the price like I have.

Remember your success is not always your friend. Your amazing skills and tendencies may also be your greatest burden. Sometimes we have to risk giving up the approaches and behaviors that “made” us successful to get to a different way to influence and care about others. With that comes fear of change and failure. But it all starts – for me and for every leader reading this today – with the realization that it is not about us. It is about them. And when you see it, believe it, and act on it, you will share in the greatest reward leadership has to offer: to touch the lives of many and change you for the better. ■

continued on page 23

2021 SESSION BRINGS UNCERTAINTY FOR ISSUES AND PROCESS

The two words sum up 2020 thus far—unprecedented and unpredictable. The 2021 legislative session looks like it will also be unpredictable for both the issues and process. The major task for the Legislature in the 2021 session is to prepare new two-year general fund and transportation budgets. They will be doing so on a continuing economic roller coaster.

When the 2020 session came to a close in March, the Legislature was just beginning to address the pandemic. In the closing hours they appropriated \$200 million for COVID expenses. That amount now pales in contrast to needs of businesses, citizens and, of course, the local and state governments. By April, the state's revenues started dropping dramatically as the pandemic curtailed economic activity across Washington.

The scope of the problem

The forecast last spring projected a \$9 billion shortfall—\$4 billion for the second year of the current biennium and a \$5 billion shortfall for the next two-year state budget. The news improved some this fall because federal stimulus payments drove more consumer spending and some sectors of the economy were able to re-open. Construction activity has improved but is still below pre-pandemic levels.

What does the future look like? The September forecast projected more revenue but was still down about \$4 billion for the rest of this biennium and next. The state forecasters emphasized that the economic situation is volatile with the two big unknowns—future pandemic impacts and Boeing's business activity. The state has about \$3 billion in reserves, and legislators and the Governor are hoping for more federal assistance. Over half of the \$2 billion in federal COVID aid received in March has been spent so far.

Are we looking at more taxes?

Probably or at least attempts to raise taxes. The Democrats control both houses and the Governor's Office. Many of the Democrat legislators have declared that new taxes will be necessary because they do not think they should cut that much out of the budget to make up for the deficit. Republicans say this is not the time to impose more burdens on businesses and that the emphasis should be on budget cuts, in particular newly authorized spending. State agencies have submitted possible cuts to their budgets, but many have also asked for money for new programs.

What kind of taxes have been suggested? The two most frequently mentioned ones are a state capital gains tax and a state-wide or Puget Sound area-only employment tax on high wage earners. Seattle recently adopted a high wage earner tax



By / Kathleen Collins
SMACNA Legislative Consultant

for employees who work in Seattle or live in Seattle. Hopefully a state-imposed employment tax would not be in addition to Seattle's tax. SMACNA has opposed the capital gains tax and the high wage employee tax.

The other tax that is in play is some kind of tax on carbon emissions. This would be either a straight tax on carbon emissions from petroleum use and other fossil fuel uses or a cap and trade system. The cap and trade system would generate money for the state through the sale of carbon allowances but does not provide immediate relief because it would take time to put it in place. It is worth noting that the voters have rejected a carbon tax twice at the ballot. But unlike previous years when carbon revenue bills were attempted, more interest groups are willing to consider such a tax if it is imposed on transportation and used for transportation purposes. SMACNA contractors would see increased costs for gasoline from a carbon type tax.

Other issues potentially in play

Unprecedented unemployment has eroded the state's unemployment compensation fund. This fund is entirely paid by employer taxes. The formula for the rate is generally—the higher a business' use, the higher the tax rate. In addition, there are two safety net taxes, a social tax and a solvency tax. These are triggered when the fund needs to be stabilized. The state should have enough money left in the state fund to avoid insolvency in 2020, but it will need to replenish the fund. Under the current formula this will mean higher tax rates for all employers. One estimate is as much as a 500% increase for many. The Legislature might consider adjusting the current formula or adding money to the fund to alleviate the large increases. A new infusion of federal money could be used to lessen the impact on businesses. This is an issue SMACNA will watch closely as the changes would impact construction.

The Construction Project Advisory Review Board (CPARB) is a board comprised of construction companies, public owners, and labor. They were set up to review GC/CM and design build projects and have evolved into a policy review committee for both legislative and administrative construction proposals.

continued on page 23

UNEMPLOYMENT PREMIUMS EXPECTED TO RISE FOR EMPLOYERS IN 2021

What Can Employers do to Minimize Premiums?

Our state's Unemployment Insurance Trust Fund has been almost cut in half in the last six months, falling from \$4.7 billion in March to \$2.4 billion on August 22. After paying unemployment benefits to so many laid-off workers and getting hit by nearly \$650,000,000 in fraudulent claims, the forecast is grim.

To cover our state's unemployment benefits, premiums on employers could rise to an average of \$936 per worker. Previously, the 2020 expected figure was \$317, one-third of the new projection. Employers who have had more layoffs could see an even higher per-employee increase.

With the growth of unemployment and the expectation of it continuing to increase, premiums are projected to triple by 2022 and employers are searching for ways to limit their costs.

What can employers do to control costs? Employers should consider contesting claims that may be ineligible or fraudulent. A few examples are an employee who quit, was fired for disqualifying misconduct, or refused a valid offer to return to work. Employers should know that each awarded claim can affect their unemployment insurance premiums for four years, and focusing on fighting improper claims would limit some of those costs.

While an employee quitting usually makes the employee ineligible for benefits, the Employment Security Department outlines how employees can be eligible for benefits if they quit for "good cause" reasons as follows:

- You quit to take another job.
- You became sick or disabled, or a member of your family became sick, disabled, or died, and it was necessary for you to quit work.
- You moved to be with your spouse or domestic partner whose job is outside your labor market area.
- You needed to protect yourself or immediate family members from domestic violence or stalking.
- Your employer reduced your usual pay or hours of work by 25 percent or more.
- Your employer changed the location of your job so your commute is longer or harder.
- You told your employer about a safety problem at work, and your employer did not fix the problem quickly.
- You told your employer about an illegal activity at work, and your employer did not stop the activity quickly.
- Your employer changed your usual work, and the work now goes against your religious or moral beliefs.
- You entered approved apprenticeship training.
- You started approved training under the *Trade Act*.



By / Karen Forner
Founder and Partner
Employer Solutions Law

- You worked full-time and part-time jobs at the same time, and you quit the part-time job—and then were later laid off from the full-time job.

The Employment Security Department outlines when employees are likely eligible for benefits for being laid off as follows:

- Generally, we treat your job loss as a lay-off if your employer is not replacing you, and you'll qualify for unemployment benefits if you meet all of the eligibility criteria.
- If your employer is replacing you, we generally will treat you as being fired.

Examples of lay-offs

- Your employer has no work available
- Your assignment ended
- Your employer went out of business
- Your position was eliminated
- You're required to participate in temporary classroom apprenticeship training
- You're a seasonal employee and the season ended
- Your employer temporarily shut down for reasons such as weather, materials delay, natural disaster, or temporary maintenance closure
- The Employment Security Department outlines when employees are likely eligible or not eligible for benefits for being fired as follows.

Firing

If you were fired through no fault of your own, for example, because you did not have the skills to do the job, you may be eligible for unemployment benefits. If the Employment Security Department decides you were fired or suspended for misconduct or gross misconduct, you will not qualify for unemployment benefits.

continued on page 23

HEALTHY VENTILATION RATES TO COMBAT COVID-19

Transmission of respiratory infections through the air is classified as direct contact or airborne. In 2003 with the SARS-CoV-2, it was never established how long the virus remained infectious in the air. Because viruses generally have a minimum dose at which they cause infection, health risk is related to concentration in the air and duration of exposure.

As the novel COVID-19 continues its global spread, the importance of ensuring healthy indoor air quality is paramount to helping lower the curve of infections. Studies have demonstrated that higher ventilation rates have a direct impact on lowering the spread of microbials in workplaces and other occupied spaces. ASHRAE Standard 62.1, *Ventilation for Acceptable Indoor Air Quality*, specifies minimum ventilation rates and other measures for new and existing buildings.

Demand control ventilation (DCV), which adjusts outside ventilation air based on the number of occupants and the ventilation demand for those occupants create, is seen as a convenient solution to satisfy ASHRAE 62.1. However, this type of control is often left to the end user with few guidelines to calculate correct ventilation rate. This may create levels that are ineffective.

The benefit of higher levels of outside air intake is that it will help slow the rate of microbial growth, including viruses such as COVID-19. Outdoor air intake is one of the most difficult air measurements to take properly. System designs are typically 500 feet per minute for 100% outside air. However, end users typically want to reduce as low as 10% to save costs. At the

lower rate the velocity of 50 FPM is very difficult to measure accurately.

When CO₂ levels are being measured in the return air as opposed to in an area near people breathing level, it will show a lower CO₂ indication than what occupants are breathing. Outside air CO₂ levels continue to rise in North America, and measuring these as well as indoor levels is critical in maintaining PPM calculations. When only indoor levels are used for differential calculations based on an assumed outdoor level, the effect is less outside air is being introduced to the space. Building owners and facility managers should review their operating sequence to safeguard occupant health and safety. For example, if a building has a target CO₂ setpoint of 1100 PPM or more above background, consider reducing so to facilitate introduction of more outside air.

Building operators should regularly check outside air intakes, outside air dampers, and filters to be sure they are free of obstructions. These efforts may increase energy costs to the conditioned spaces, but it is the most socially responsible way to keep schools and businesses free from the spread of unwanted viruses, including COVID-19.▪



By / Norm Grusnick, P.Eng

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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.

We also need great pictures – current and historical – of people working in all aspects of the sheet metal industry. If you have something to share, please email it to our editor, Jessica Kirby, with a caption about what is going on in the photo.

Questions about how else to get involved in a future issue of *Sheet Metal Journal*? Reach out to jessica.kirby@pointonemedia.com or 250.816.3671 and get the scoop.

WASHINGTON STATE ENERGY CODE 2018

All areas of Washington state, including major cities, are currently using versions of the 2015 Washington State Energy Code (WSEC). It was anticipated that the new version of the code (2018 WSEC) would be incorporated into our jurisdictions this year (usually July for the state code, followed by amended versions for the City of Seattle and some other areas) but with the COVID-19 pandemic all new code updates are on hold (current target date is February 1, 2021).

Both the previous and the current 2015 WSEC and associated local codes are based on improving energy efficiency of buildings with each code update. This has been done by requiring lighting systems, building envelopes (more insulation/better glass), and mechanical systems to be more efficient. The basis of code compliance is measured by Energy Use Intensity or EUI. This measuring system compares the total predicted energy use of a new project to a code “baseline” building. Compliance has and will continue to be measured via either a “prescriptive” compliance path or a “total building performance” path (via computer simulation).

The 2018 code will continue to allow both paths to compliance, with the significant increase in Extra Efficiency Credits (from 2 to 6) if using the prescriptive compliance path, and a major shift in the total building performance path to change the primary performance metric to carbon emissions instead of energy consumption. This change to the 2018 WSEC and subsequent codes will not only continue to require more energy efficient building systems, but also will focus on greenhouse gas reduction to comply with code. This is a new approach that will impact both what types of energy are allowed (e.g. gas versus electric) and how these energy types must be used depending on building type and design.

The incorporation of greenhouse gas reduction into our codes



By / Peter Boileau

Chairperson, SMACNA-Western Washington Technical Committee

comes from the work done by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), a national volunteer organization, which, for many years, has provided national standards for development of state and local energy codes. A key part of ASHRAE’s work in energy reduction is the philosophy that it is critical to de-couple economic growth from greenhouse gas emissions. In the past, ASHRAE has promoted the change to alternate refrigerants to reduce these emissions, and now the organization is providing guidelines on which types of energy provide the lowest emissions and how to use energy more effectively to reduce greenhouse gasses.

The 2018 WSEC will incorporate this code requirement in a couple of different ways. It will be looking at the carbon footprint of the electric utility serving the project site to determine if electricity or gas is the preferred fuel source. Those utilities that generate the majority of their electricity via burning gas or coal may have a much larger carbon footprint to produce and deliver electric power than a building that uses natural gas. In most buildings the use of heat pump technology rather than either gas combustion or electric resistance heat will be encouraged (and likely eventually required) in most new buildings starting with the 2018 code. The details of how this will be implemented will be further explored in future columns when our technical and code committee meets again next year. Stay tuned! ▪

Reference sites:

- Washington State Building Code Council:
<https://www.sbcc.wa.gov/news/2018-code-effective-date-extended-february-1-2021>
- Energy Code Overview from Seattle Department of Construction and Inspections:
[http://www.seattle.gov/sdci/codes/codes-we-enforce-\(a-z\)/energy-code](http://www.seattle.gov/sdci/codes/codes-we-enforce-(a-z)/energy-code)
- ASHRAE Position Document on Energy Efficiency in Buildings
https://www.ashrae.org/file%20library/about/position%20documents/pd_energyefficiencyinbuildings_2020.pdf
- First Printing of the WSEC – Commercial 2018:
https://www.sbcc.wa.gov/sites/default/files/2020-02/2018%20WSEC_C%20Final%20Package.pdf

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Have a story idea or project to share? Drop our editor, Jessica Kirby, a line at 250.816.3671 or jkirby@pointonemedia.com.

LEGISLATIVE UPDATES

continued from page 19

CPARB is due to expire and needs to be reauthorized. The reauthorization bill will include several other agreed upon changes to the construction statutes.

How will session be conducted?

The House and Senate are planning to change the way they do business during the 2021 session to protect the members and staff as well as the public from COVID exposure. At this point in time, the House is planning on doing most of its business virtually. The Senate is still discussing options but is leaning in that direction, as well.

It is almost certain that committee hearings will be conducted virtually. All legislative buildings will be off limits to the public, including lobbyists, so in-person meetings will have to take place outside or off campus. The legislators who have to come from a distance or have poor internet access are likely to come to Olympia and operate from their offices. Others will work from their homes or businesses. It is unclear how floor activity will occur, but the House is looking at a virtual model for voting on bills as well.

SMACNA will be sending out updates on legislative issues. We may need you to respond individually to your legislator on a specific issue. Hopefully the economy stabilizes and the Legislature makes wise decisions on both issues and budgets. ■

IT'S THE LAW

continued from page 20

Misconduct examples include:

- Deliberate or wanton disregard for your employer or a fellow employee, such as:
 - Insubordination
 - Repeated inexcusable tardiness following warnings
 - Dishonesty related to employment
 - Repeated and inexcusable absences
 - Violating the law or deliberate acts that provoke violence or illegal actions, or violating a collective bargaining agreement

- Violating a company rule
- Deliberately violating or disregarding standards of behavior that your employer has a right to expect.
- Carelessness or negligence that causes, or will likely cause, serious bodily harm to your employer or fellow employees.
- Carelessness or negligence that is so bad or happens so often that it shows an intentional or substantial disregard for your employer.

Gross misconduct examples

- A criminal act in connection with your work for which you have been convicted in a criminal court or have admitted committing.
- Conduct connected with your work that demonstrates a flagrant and wanton disregard for your employer or a fellow employee.

If employers are going to challenge workers' compensation claims, they should be well prepared with witnesses and documents to make the case for denial of benefits with the very first written response to the Employment Security Department and any subsequent hearing. Employers should consider legal advice and/or representation in challenging questionable claims. ■

Erin joined Employer Solutions Law in January of 2018 as an Associate Attorney. She brings with her a wide breadth of experience in commercial litigation, business law, and bankruptcy law. Because of her experience working in and with family owned businesses and closely held businesses, she understands the need to ensure that any recommended course of action must be both a good business decision as well as a sound legal strategy.

CONTRACTORS 101

continued from page 18

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 published several books on leadership and workplace culture. His new micro-learning video series, "The Professional Construction Leader", is revolutionizing construction foreman training as well as field operations, performance, and profitability. For more information on Mark go to www.breslin.biz

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