

SPRING 2019

Sheet Metal

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Western Washington

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PLATINUM**

CONFINED SPACES IN CONSTRUCTION

**SMACNA'S TECHNICAL RESOURCES
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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
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- 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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WOMEN IN CONSTRUCTION: EFFORTS PAY OFF

The construction industry in the United States is alive and well with a growing female workforce—apprentices, craftspersons, project managers, estimators, and executives are all positions held by women in this burgeoning sector of American employment. Women in construction are finding more opportunities, increased mentorship, and more attractive benefits to entering the field, and the momentum is staggering.

There are so many reasons for the shift. For one thing, the United States is experiencing a growing labor shortage that is impacting and will continue to impact the entire country for years to come. Currently, women in construction only make up three percent of the overall workforce in America, including hands-on field work (carpentry, electrical, sheet metal installers) and office and management positions like estimation and forepersons. But here's the thing: if we woke up tomorrow and twice as many women were working in construction, the industry's labor shortage would be more or less eradicated, according to data from the US Department of Labor.

Women are discovering the immense benefit to working in this industry, creating a level of job satisfaction that brings an enormous contribution to any job site. Earn-while-you-learn apprenticeship models mean women can provide for their families while still being with their families. Several women in the field report that starting early and finishing early mean they can enjoy a fulfilling career and still pick their kids up from school at the end of the day. The field is accessible: whether applicants have a high school or a post-secondary education, they are welcome to apply and most likely have an excellent chance of entering some component of construction.

The U.S. Bureau of Labor Statistics says the average annual salary for construction employees in California, for example, is \$58,010, and construction managers in Washington State can make nearly double that, according to the same source. The best news for women is the lower pay gap—where women make about \$0.80 on every dollar men make in other professions, women make 93.5 cents to the dollar in construction.

So, why the low numbers? With all these benefits, why do women in construction only account for three percent of the American workforce? For one thing, history—construction has traditionally been a male-dominated field and the status quo is hard to change—note I said “hard” and not “impossible”. Mentorship—one of the most often stated reasons for women leaving or not entering the construction field is lack of mentorship or being the only woman on the jobsite. But times are changing. Women are making up more of the workforce, women's groups are popping up in Locals and associations, and women's conferences and networking events are popping up all over the place.



By / Jessica Kirby, Editor

It will take time, but like all things, with hard work and enthusiasm will prevail and it won't be long before there will be nothing left to talk about. Women in construction will be a common occurrence and no one will find it progressive or magical to see a women on a jobsite—it will just be the way things are. In the meantime, the support and education provided through initiatives like SMACNA-WW's Women in Construction (WIC) Week initiative are driving progress and bringing women closer to their goals in construction. Check out page 5 for more details. ▀

Statistics: Women in Construction

Women in the U.S. earn on average 81.1 percent of what men make. The gender pay gap is much narrower in the construction industry. In construction, women earn on average 95.7 percent of what men make.

Women now make up 9.1 percent of the construction industry in the United States. The following is a breakdown of women by occupation sector in the construction industry:

Sales & Office 423,000 (45%)
 Professional & Management 293,000 (31%)
 Natural Resources, Construction & Maintenance 196,000 (21%)
 Service Occupations 14,000 (1.5%)
 Production, Transportation & Material Moving 13,000 (1.4%)

2016 General Construction Statistics

Total Workers in Construction: 10,328,000
 Men in Construction: 9,389,000
 Women in Construction: 939,000

Source: Bureau of Labor Statistics — Current Population Survey at <http://stats.bls.gov>.

SMACNA WOMEN IN CONSTRUCTION (WIC) WEEK

SMACNA-Western Washington hosted the first annual SMACNA Women in Construction (WIC) Week March 4-9 in partnership with member companies. A committee of representatives planned the week, with a different event on each day.

The focus of WIC Week is to highlight women as a visible component of the construction industry, to raise awareness of the opportunities available for women in the construction industry, and to emphasize the growing role of women in the industry—all under the theme, “Be the Power in Your Success”.

An exciting week of events unfolded with excellent participation numbers and several sold-out days. On day one, we kicked off WIC Week with an official launch and donations to Rosie's Closet hosted by Local 66's Women's Committee. The Committee collected donated tools, gear, and workwear from participating members and companies in an effort to fill “Rosie's Closet” for women who are new to the trade.

On day two, PSF Mechanical hosted a Women in Hard Hats Breakfast at the Museum of Flight, sponsored by SMACNA-WW. Angie Simon, President of Western Allied Mechanical and President-Elect of SMACNA National, delivered a keynote address on women breaking boundaries. This event was filled with great entertainment, including the opportunity to network with amazing women in our industry.

SMACNA-WW in partnership with the Local 66 Women's Committee visited the ANEW Training Centre and hosted an industry launch to mark day three of WIC Week. ANEW stands for Apprenticeship and Nontraditional Employment



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

Opportunities for Women. This respected organization offers one of the oldest pre-apprenticeship programs and assists with employment navigation and financial support for individuals who desire a family wage career in construction.

The fourth day of WIC Week celebrated with Women of Hermanson Networking Event at LeMay America's Car Museum. Participants came together to show support for gender diversity in the construction trades and celebrate International Women's Day, while enjoying delicious treats, beverages, networking opportunities, and friendly competition.

On the final day, SMACNA-WW hosted a Social Media Photo Contest #SMACNAWIC2019 to celebrate WIC Week's success and get the word out about this great initiative. The association was on the lookout for photos that inspire, create, and support the idea: Being the Power in Your Success, and announced winners at the end of the week. Through this initiative, SMACNA-WW received over 10,000 hits on our social media sites

We are looking forward to planning a bigger initiative for 2020. •

UPCOMING SMACNA-WW EVENTS

May 29

Safety and Tech Conference
Seatac Marriott

May 31

Evening at the Mariners Game”
T-Mobile Park

June 12

Foreman Training with Kevin Dougherty (full day)
Seatac Marriott

August 20

Women's Alliance Luncheon with Sylvie di Giusto
Hyatt Regency Lake Washington, Renton

September 18

Teatro ZinZanni event
Woodinville

August 2

Annual Golf Tournament
Washington National Golf Club, Auburn

October 20-23

2019 SMACNA National Convention
Austin, TX

November 12

Membership Meeting with Anirban Basu
Seatac Marriott

December 6

2019 Holiday Gala
Seattle Waterfront Marriott

RICK HERMANSON **BOARD OF DIRECTORS TRUSTEE,** **SMACNA-WW BOARD OF DIRECTORS**

By / Jessica Kirby

Although today he is the president of one of the region's most successful and well-respected mechanical construction, engineering, and service companies, Rick Hermanson didn't set out to be a business owner. For Rick, it all began with a simple love of building.

Hermanson has been actively involved in SMACNA-WW board of directors since 1998, serving in a variety of leadership positions including Labor Management, Budget & Finance Committee, Legislative and Political Action, and Board of Trustees. He is also an MCA member and was on the SMACNA JATC Committee for 14 years from 1998–2001. Giving of his time throughout his career, he was previously involved with SMACNA's first Seismic Bracing Standard committee, and served as president of SMACNA-Western Washington during the 2010–2011 term.



Jerry and Rick Hermanson, photo courtesy of Hermanson Company.

Hermanson Company began as a sheet metal contracting business started by Rick's dad, Jerry Hermanson. Today, it is a full-service mechanical contracting company with project experience in healthcare, life sciences, office building, data centers, high-rise residential, and industrial projects in the Puget Sound area. Most importantly, it has been a family legacy through which Rick Hermanson found his life's work.

Counting the years he swept floors as a young teenager at the shops where his father worked, Hermanson has an impressive 51 years in the sheet metal industry. He began his apprenticeship at the age of 19 and started out at the shipyards as a sheet metal worker at that time.

"I've always loved building things and working with my hands," he says of his attraction to and longevity in the industry. "That said, I've stayed in the industry because I've had the opportunity to help build Hermanson Company."



Rick Hermanson, photo courtesy of Hermanson Company.

In 1979 his father started the company, and when he was in his mid-20s Rick Hermanson worked there as a foreman. When he was 32-years old, he asked his father if he could start to learn the business side of the company, and his father agreed.

"He started me in project management," Hermanson says. "I worked for a salesperson, managing his jobs, and I worked my way up through most jobs in the company. It seemed like by the time I got comfortable in one area of the business, my father would move me to another."

Hermanson went from project management to estimating, engineering, managing larger projects, marketing, and business development.

"I think I was 45 when they made me president of the company, and two years later I asked my dad if I could buy the company. A group of partners and I did that in 2000."



Growing the company from a sheet metal contracting business to a mechanical contractor was an exciting challenge. Today, Hermanson Company provides full mechanical construction services to some of the most recognizable companies in the area—from aerospace to tech—as well as to public works and commercial development.

Technology, especially as a way to bring value to clients, has always been an area of business development that has interested Hermanson—in the mid-90s he and then-colleague Bill Nolan built a project knowledge internet tool that amalgamated the work and communications between contractors, designers, owners, and all other stakeholders on a job.

“We called it the Product Knowledge Center and it was very simple, but ground-breaking at the time,” Hermanson says. Nolan built and further developed the software and created a new company—Buildingi—that now serves Fortune 500 companies around the world.

“Technology really does bring value to clients when you have fast-paced projects and need to get everyone communicating,” Hermanson says. “Today, we apply an ever-expanding roster of technological tools to make our business more efficient and to create new ways to collaborate with our design and construction partners. It’s exciting.” As a part of the SMACNA board, Hermanson says he believes in the value the association brings to the industry with training, grooming, and embracing the workforce and leadership. “It goes back to bringing value to the client,” he says. “It is always about the client.”

As far as his own mission, Hermanson hopes to bring to the board a passionate and knowledgeable voice that consistently has the best interests of everybody in the sheet metal industry top of mind. His best advice for words to live by are simple: enjoy what you do. It makes everything fun. ■



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 | Holiday-Parks, Inc. |
| Air Handlers, Inc. | Holmberg Mechanical |
| AIRTEST Co., Inc. | Johansen Mechanical, Inc. |
| Apollo Mechanical Contractors | L & M Sheet Metal Fabricators Inc. |
| Argo Blower & Mfg. Co., Inc. | MacDonald-Miller Facility Solutions Inc. |
| Auburn Mechanical, Inc. | McKinstry Co., LLC |
| Ballard Sheet Metal Works, Inc. | Miller Sheet Metal, Inc. |
| Capital Sheet Metal Inc. dba
Capital Heating and Cooling | Miller's Smith & Losli Sheet Metal, Inc. |
| D/B Solutions, LLC | Neudorfer Engineers, Inc. |
| Delta Technology Corporation | Olympia Sheet Metal, Inc. |
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| Eckstrom Industries, Inc. | Pinchiff Mechanical LLC |
| Emerald Aire, Inc. | PSF Mechanical, Inc. |
| ENVIROMECH | PSR Mechanical |
| Evergreen State Heat & AC | Schmitt's Sheet Metal & Roofing |
| GB Systems, Inc. | Scott & From Co., Inc. |
| Gensco, Inc. | Shinn Mechanical, Inc. |
| H & R Mechanical Systems, Inc. | Sunset Air, Inc. |
| Hermanson Company, LLP | Temp Control Mechanical Services Corp. |
| | University Mechanical Contractors, Inc. |

AFFILIATE MEMBERS

- | | |
|----------------------------------|-------------------------------|
| ACI Mechanical & HVAC Sales | Hudson Bay Insulation Co. |
| Ahlers Cressman & Sleight. | ISAT Seismic Bracing |
| Air Reps LLC | Industrial Air Systems, Inc. |
| AIREFCO, Inc. | Johns Manville |
| Armaceil LLC | Johnson-Barrow, Inc. |
| Automated Controls | K-Solutions Law |
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SMACNA-WESTERN WASHINGTON 56TH ANNUAL CRAB FEED

SMACNA-Western Washington has done it again! More than 350 SMACNA-WW members and their guests gathered at Ocean Shores Convention Center in Ocean Shores, WA in February to celebrate the association's 56th annual crab feed membership event.

Members and guest enjoyed fun evening with the entertaining photo booth as well as friendly battles at ping pong, cornhole, beer pong, and dancing.

A hungry crowd enjoyed mouthwatering crab, consuming over 700 lbs. of the succulent deliciousness, in addition to the beer and wine while enjoying the performance from the returning **Ready or Not** band.

We appreciate the great showing of support with guests wearing their enthusiastic pirate and mermaid costumes. This year's costume contest winners were Andy Gail and his wife Erin with Sunbelt Controls and Shelly Hughes with Emerald Aire, Inc. Congratulations to them!

Mark your calendars for next year's Crab Feed at Ocean Shores, February 7, 2020. You will not want to miss it! ▪



SMACNA NATIONAL SAFETY SURVEY

It is that time of year again to take the opportunity and submit your 2019 SMACNA National Safety Survey. The online survey for SMACNA's 2019 Safety Excellence Awards Program is revamped and easier to use. Simply log on to SMACNA National's website at smacna.org/safety/survey to complete your survey.

Each year, SMACNA conducts this annual Safety Excellence Awards Program (SSEAP) to recognize members for their outstanding safety performance while collecting vital safety and health data. Many SMACNA members have benefited from this valuable program by winning safety awards or using the safety data to improve their safety and health cultures.

Your input is critical to the success of the program. Most information needed can be found in your company's 2018 injury and illness records. Submitting your survey is quick, easy, and confidential. Entries must be submitted by May 10. ■

SMACNA ANNOUNCES LAUNCH OF PODCAST SERIES, "LET'S TALK SHOP"

SMACNA National has announced the launch of a new podcast series, "Let's Talk Shop." The series highlights conversations with sheet metal contractors and executives on topics and trends related to their business, and is hosted by Angie Simon, president of Western Allied Mechanical in Menlo Park, California and president-elect of SMACNA National.

"As the show's host, I've been given this unique and exciting opportunity to share meaningful conversations with, not only my peers in SMACNA, but with the industry at large," said Simon. "Showcasing the professionalism, skills, and knowledge of SMACNA members is an important cornerstone of SMACNA's strategic plan, and I'm happy to do my part in making that happen."

"My favorite thing about podcasts is that the format allows for conversations to flow and cover a wide range of topics based on real world experiences. I think that resonates with listeners," added Simon.

"We know our members value the information they receive from SMACNA through a variety of different channels, from our website and social media platforms to our monthly magazine SMACNews, e-mail newsletters, and numerous technical resources," said Jeff Henriksen, SMACNA's executive director of communications and marketing. "The podcast is yet another engaging way for SMACNA to provide value to, communicate with, and educate our members on important industry topics and trends. In today's fast-paced world, it is also particularly convenient for members to listen from their

laptops or mobile devices on the go, whether on a break at a job site or during their commute."

The first episode of "Let's Talk Shop," available for streaming now, features a fascinating discussion on prefabrication with Joseph Lansdell, president of Poynter Sheet Metal in Greenwood, Ind. Upcoming episodes include conversations about peer groups, integrated project delivery and BIM, multi-trade contractors, design-build and lean practices, among many others. To listen, please visit SMACNA.org or soundcloud.com/smacna to stream and download episodes. ■

VETERANS GRADUATE FROM SMART HEROES PROGRAM

Nine current members of the United States military and six recent veterans graduated as the ninth class of the SMART Heroes program February 25 at the Western Washington Sheet Metal training center in DuPont, Washington.

The graduates represent the ranks of the Air Force and Army and include Senior Airman Jason Brown, Air Force; Spc. Dallas Carr, Army; Staff Sgt. Denmark Concepcion, Army; Sgt. Francisco Crisostomo, Army; Spc. Todd East, Army; Spc. Jesse Foutz, Army; Staff Sgt. Philip Hamel, Army; Spc. Aarek Jamison, Army; Airman 1st Class Neil Linton, Air Force; Sgt. 1st Class Doug Meyers, Army; Sgt. G. Nathan Miller, Army; Spc. Daniel Moore, Army; Staff Sgt. Eduardo Proctor, Army; Spc. Roy Rosemond, Army; and Sgt. Alec Souza, Army.

In order to graduate, veterans 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 150-plus 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.

Local dignitaries in attendance included Mike Court, Mayor of the City of Dupont; William Noland, Joint Base Lewis-McChord; and Suzi Levine, commissioner for Washington State. Also in attendance was James Page, administrator of the International Training Institute (ITI), which together with the International Association of Sheet Metal, Air, Rail and Transportation Workers (SMART) and the Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) created the program in collaboration with SMART Local 66, SMACNA Western Washington, Western Washington Sheet Metal training center, and Helmets to Hardhats.

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RAISING the Bar

Western Washington JATC Achieves Platinum Accreditation through the ITI

By / Robin Brunet

Photos courtesy of Western Washington JATC (above) and the International Training Institute (ITI) (below)

The Western Washington Sheet Metal Joint Apprenticeship Training Committee (JATC) recently earned platinum accreditation from the Sheet Metal International Training Institute (ITI), the ultimate recognition of apprenticeship training excellence.

The Western Washington JATC covers all of Western Washington excluding Clark and Skamania Counties, conducting training programs in sheet metal worker, HVAC service technician, HVAC testing, adjusting and balancing technician, and residential sheet metal worker.

The Training Center joins an elite group of platinum recipients among the 153 unionized sheet metal training centres across the country that are assessed every five years by the ITI for accreditation, which sets the quality standards for higher education in the sheet metal industry. When the assessment process recommenced in the summer of 2017, Sheet Metal Workers Local 16 in Portland, Oregon; Local 2 in Kansas City, Missouri; Local 91 in Rock Island, Illinois; and Local 206 in San Diego emerged with the platinum designation.

Jeff Reinhardt, training coordinator at the Western Washington JATC says the team is glad to have done all the work necessary



to get platinum accreditation, including training trustees on the accreditation process. “The value of being recognized by other organizations as having achieved a new plateau of standards cannot be underestimated,” he says.

Larry Lawrence is an ITI field representative and a former Colorado-based JATC coordinator who had taken the steps necessary to achieve gold designation, formerly the highest JATC accreditation standard.

“As far as I’m concerned, platinum sends the message that the pinnacle of excellence is higher than previously thought,”

he says. “It keeps programs fresh. It motivates coordinators to improve. In a real sense, with platinum we’re setting a benchmark for JATCs everywhere.”

Like previous recipients, when Western Washington began preparing for the accreditation, coordinators learned that it required updated written documentation of policies and samples to fit each criterion, rather than explaining in-person to the ITI board how business is conducted.

“There is a substantial list that needs to be completed for the accreditation, but the list is tiered so the more you do the better your ranking is based off of earned points,” Reinhardt says.

Carl Odendahl, training coordinator at Local 91, and Chris Caricato, training director at Local 206, say the use of TotalTrack – and how it’s used – was the secret weapon in giving the JATC the best chance at achieving platinum status. TotalTrack is an online portal which allows training directors and instructors to track apprentices’ progress, keep grades, communicate, and log hours worked on a jobsite, which is mandatory for the completion of the apprenticeship. Forms, files, and other official paperwork are digitally and safely kept in the TotalTrack system.

“TotalTrack makes things much easier to manage from the educational standpoint,” said Caricato. “Much of the added platinum criteria is based off the TotalTrack database.”

TotalTrack was the method by which Western Washington was able to upload its substantial volume of data. Previous platinum recipients have praised TotalTrack for facilitating the accreditation process, but there is some concern of a learning curve.

Jason Ferguson, coordinator for the Sheet Metal JATC for the Greater Kansas City area, said in 2018, “Had we not already been using TotalTrack in our training center, the accreditation process would have been much more difficult. We would not have been able to achieve platinum status.”

But Reinhardt’s JATC demonstrates that the learning curve needn’t be overwhelming. “Larry did an excellent job supporting us by establishing a file structure system for TotalTrack and being available whenever we had questions,” he says.

Lawrence adds that while inputting the data and having it verified can be time-consuming, the ITI can help by training staff on how to expand their capabilities. “It’s not an insurmountable problem,” he says.

The Western Washington JATC has good human resources – including two coordinators and two administrators – who could help with the information gathering and uploading.



“It keeps programs fresh. It motivates coordinators to improve. In a real sense, with platinum we’re setting a benchmark for JATCs everywhere,” says ITI Field Representative Larry Lawrence.

As for involving the trustees in the accreditation process, Reinhardt says they were all for it.

“Training consisted of gathering them together in a room and staging a PowerPoint-style presentation,” he says. “It took several hours, and the trustees said they either learned something new or had some of their existing ideas reinforced.”

Now that the platinum accreditation is gaining momentum, Lawrence is gung-ho about other JATCs earning the designation. “It’s equally beneficial to us as it is to the training committees,” he says. “For example, it makes them as close to a college as they can possibly be perceived, which in turn helps in the recruitment process—and which, in turn, helps us get more funding.”

As with gold or any of the other designations, there is a healthy amount of leeway in achieving platinum, as well as considerations once it’s obtained. “If you don’t get it on the first try, at least you know what the criteria is and you can use this knowledge to make a better second attempt,” says Lawrence. “Theoretically, if you put in the required work you can go from a bronze to platinum in the space of a one-year cycle. But once you get it, just like gold or the other designations you can easily lose it if you don’t maintain your high standards.”

Past platinum recipients suggest that contenders start as early as they can to obtain all of the documentation they need—especially given that they may have to create new documentation, which has to be approved by their committee. They also stress that other coordinators can provide advice, and that regional ITI representatives are a great information resource. Finally, they suggest that TotalTrack be continuously updated through the five years in between accreditation audits.

For his part, Reinhardt thinks other JATCs should consider aiming for platinum. “We’re accredited through a local technical college, and with our Dupont and Everett training facilities now platinum designated, we can use it as a great sales pitch,” he says. “Only good things can come from upping your game.” ■



OSHA & DOSH Confined Spaces in Construction: What contractors need to know

By / Jessica Kirby & Travis Brock
Photos courtesy of International Training Institute (ITI)

The Confined Space in Construction standard in Washington State went through a major overhaul in 2018. Updates to the standard were prompted by the Federal Occupational Safety and Health Administration (OSHA) adopting an updated Confined Space in Construction standard, 29 CFR 1026 Subpart AA. In Washington State the Federal OSHA standards do apply but are limited to projects where Federal OSHA has jurisdiction. The majority of employers in Washington State fall under the safety and health guidelines of the Division of Occupational Safety & Health (DOSH) our state OSHA program. What that means to SMACNA members is that employers in Washington must follow the DOSH standards not Federal OSHA.

The new requirements are similar to the previous standards; however, there are enough changes that we felt all SMACNA-Western Washington members needed to be updated to assure compliance.

“SMACNA-Western Washington contractors may encounter confined spaces in a variety of contexts,” says Travis Brock,

Permit Required Spaces Include the Following Potential Hazards

- a. Temperature Hazards
- b. Noise Hazards
- c. Toxic Atmosphere (use gas monitor)
- d. Flammable Atmosphere (use gas monitor)
- e. Oxygen Deficiency (use gas monitor)
- f. Mechanical Hazards
- g. Electrical Hazards
- h. Adjacent Work Hazards that could affect the confined space work

1. The space is large enough to enter.
2. The space has limited means of access/egress.
3. The space is not designed for continuous human occupancy.

Once the employer determines that it is a confined space they must determine what type of space it is. Previously, the documentation provided three options for classification of confined spaces: Permit required confined spaces, non-permit required spaces, and permit required but entering under alternant entry procedures.

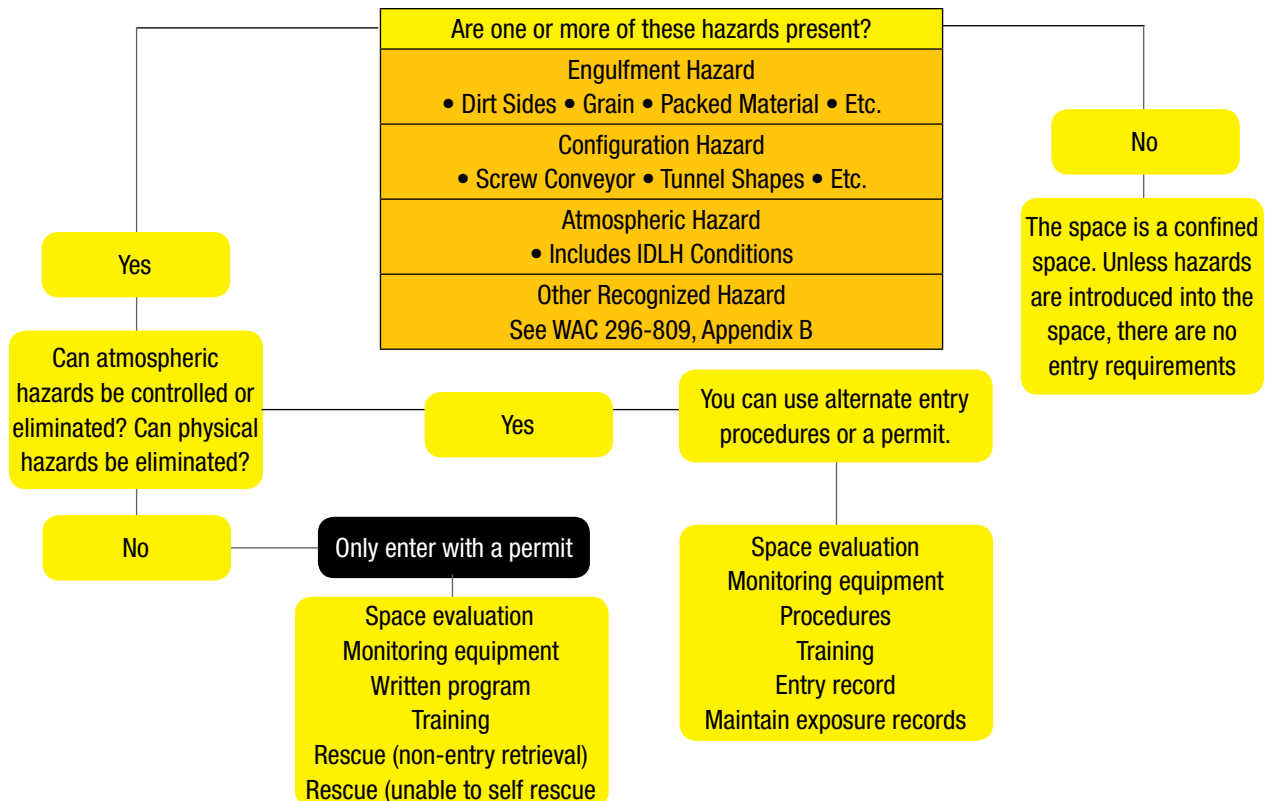
“The new standard has eliminated the non-permitted definition and provided two primary classifications,” Brock says, “Permit required spaces and alternate methods spaces. Basically, the new standard requires you to classify all spaces as permitted until you can prove otherwise.”

The above list of hazards must be eliminated for the space to be considered for use by alternate methods. Employers must follow all the same guidelines of the permit required confined space and document to prove you can utilize alternate method procedures. See Reference WAC 296-809-60002 for a complete guide to Alternate Method Entry.

principal/director of safety services for Shield of Armor Safety. “Some of these include ductwork, utility tunnels, pits, vaults, shaft work, or work in attics or crawl spaces. Some other possibilities are storage tanks, air handling equipment, sewers or waste water facilities, or in many aspects of refinery work”

When evaluating a space an employer must determine that it is safe for all employees to enter or they are not allowed to enter the space. If the space meets the following guidelines it must be treated as a confined space.

Non-Mandatory Appendix C
The permit-space program and the entry permit
You determined that you have a confined space.





Common mistakes contractors make when assessing safety around confined spaces include not classifying and or testing the air to prove there is no atmospheric hazards, Brock says. “Many gases that may be present are tasteless, odorless gases that are either lighter or heavier than air and rise to the top or sink to the bottom of a space and get trapped. If you are not utilizing a simple four-gas meter to check for adequate oxygen or explosive atmospheres and document that it is safe, you could be exposing workers.”

All employees working in confined spaces need adequate training, which includes understanding the required equipment needed for entry, identifying the common hazards of a space, knowing the proper work procedures for entry, and attending and supervising the work.

“A competent person supervisor needs to be identified for all confined space entries,” Brock says. “This person is an employee who has been deemed competent by the employer and has the training, knowledge, skills, and ability to identify the risks and potential hazards associated with confined space

Common mistakes contractors make when assessing safety around confined spaces include not classifying and or testing the air to prove there is no atmospheric hazards.

entry and utilizes his or her authority to correct any hazards present.”

Minimizing risks means all confined spaces should be viewed as having the potential to contain a hazardous atmosphere until proven otherwise.

“If you utilize a four-gas monitor every time you enter a confined space, there should never be an issue of exposure to gases or a lack of oxygen,” Brock says. “Employees are protected as long as the air monitor is used properly and calibrated per the manufacturer requirements.”

The SMACNA Risk Management Committee meets regularly at the SMACNA-Western Washington office. The chapter has Safety and Tech Conference set for May 29 at the Sea-Tac Marriott. See page 5 for this and other events, or contact Carrie Heinrich at the SMACNA-WW office for more details cheinrich@smacnaww.org.

Read about Confined Space regulation and hazard mitigation measures at <http://www.lni.wa.gov/safety/rules/chapter/809/WAC296-809.PDF>

For training, comments, or questions, please contact the SMACNA-Western Washington office or Travis Brock, CSP, ASP, CHST, Shield of Armor Safety at 206.617.6191 or tbrock@shieldofarmorsafety.com. ■

Reaching the HVAC and sheet metal market in Western Washington is easy. Advertise with *Sheet Metal Journal - Western Washington*, to access industry professionals in this busy and successful region.

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SMACNA's Technical Resources Library

Nearly 300 resources for higher standards and quality workmanship in the sheet metal industry

By / Jessica Kirby

SMACNA's Technical Services & Research Department fulfills many roles and responsibilities for SMACNA members and the HVAC, architectural, industrial, and building codes community at large. The department's members develop industry related standards and technical presentations, work with the model code groups to ensure proper code enforceable language is adopted, and answer day-to-day technical questions of interest to SMACNA members and the general design industry.

Eli Howard III, executive director, technical resources for SMACNA National, says, "As an ANSI accredited standards developer, SMACNA follows specific procedures for the development of ANSI related documents to ensure a broad reach of the industry that may be materially affected by the standard, and can provide technical feedback during the development process to ensure a genuine consensus-based standard has been developed."

The department also provides interpretations of SMACNA standards through the SMACNA Technical Inquiry process via the SMACNA website. "This allows anyone to submit a technical question and receive a technical interpretation and/or intent of the standard as relates to the specific area of the inquiry," Howard says.

Currently, there are nearly 300 resources available for SMACNA members including books and supporting materials, technical papers and guidelines, apps, webinars, and technical training workshops and seminars.

"2019 will also see SMACNA's Technical Services and Research Department releasing new editions of the *SMACNA HVAC Duct Construction Standards*, *HVAC Total Systems Leakage Manual*, and *SMACNA Fire, Smoke and Radiation Damper Installation Guide for HVAC Systems*," Howard says.

Future ongoing projects include revisions to the *Rectangular Industrial Duct Construction Standards*, *TAB Manual*, *Food Grade Ductwork Guidelines*, and *Seismic Bracing*.

The highly coveted SMACNA Technical University will also continue as an intensive one- to two-day program covering the top SMACNA standards and their use and application. Visit <https://www.smacna.org/technical> for a full list of resources, and <https://www.smacna.org/events-education> for Technical University and other SMACNA training opportunities.

Available from SMACNA's Technical Services and Research Department

Apps

[SMACNA HVAC Duct Construction App](#)

The app will provide SMACNA-compliant options for rectangular duct with dimensions from 1 inch to 120 inches for applications from negative to positive ten-inch water gauge. The app is intended to be used in conjunction with SMACNA's *HVAC Duct Construction Standard*.

[SMACNA Air Duct Leakage App](#)

This tool allows engineers, architects, designers, and contractors to easily and accurately estimate the leakage of air from ductwork. It also allows a quick and easy way to determine the pass/fail mark for properly specified Duct Air Leakage Tests (DALT). The method used is compliant with ASHRAE 90.1, IECC, IGCC Version 2, IMC, and the UMC.

[SMACNA's Round Industrial Duct Construction App](#)

This app allows the user to create an infinite number of solutions using the methods and formulas covered in *SMACNA's Round Industrial Duct Construction Standards Manual*. After selections are made the user can then create a full engineering report that outlines the procedure used to create the specific solution.

[SMACNA's Downspout & Gutter Sizing Calculator](#)

This tool allows engineers, architects, designers, and contractors to easily and accurately size downspout and gutters per SMACNA's *Architectural Sheet Metal Manual*. The Design Area Wizard makes it easy to calculate the roof design area by providing various shape calculations and the

calculation for Vertical Walls area per International Plumbing Code (IPC.)

Papers and Guidelines

This section contains white papers, research reports, and resulting guidelines developed by SMACNA or its partners, or commissioned through private research firms. Topics include construction techniques, inspection, standard development, fabrication methods, best practices, design recommendations, building code compliance, and other matters of relevance to the sheet metal industry. It also includes a Master Index of SMACNA's technical publications, which is searchable by keyword or phrases. The following are available as of this writing:

- Soldering Copper Flat Lock Roof Seams
- Residential Sheet Metal Guidelines
- 2017 Update for Architectural Fascia and Coping Wind Tests Report
- Architectural Sheet Metal Inspection Guide
- Architectural Sheet Metal Manual
- Effects of Imposing a Universal Requirement on All Components of Ductwork
- Custom Fabricated Sheet Metal Test Report
- ICC/International Code Adoption
- Technical Guideline on Through Penetration Firestopping
- SMACNA Master Index of Technical Publications
- ERRATA, Rectangular Industrial Duct Construction Standards
- New Test Standards for Fire, Smoke and Combination Fire/Smoke Dampers
- SMACNA CAD Standard
- Improper Fire Damper Installation
- Duct Cleanliness for New Construction Guidelines
- ERRATA, Guide for Steel Stack Construction, 2nd Edition 1996
- Building Code Update

Books

SMACNA publishes hundreds of books and supporting figures, CDs, and drawings available on for download from its website: smacna.org/technical. Simply navigate to your area of interest or enter keywords to browse the extensive collection. Some of its most popular publications are:

- *Round Industrial Duct Construction Standards*
- *Architectural Sheet Metal Manual*
- *HVAC Systems Commissioning Manual*
- *HVAC Duct Construction Standards – Metal and Flexible*

Webinars

Technical webinars cover a variety of topics that leverage the knowledge and standards set out in SMACNA's standard and guidelines documents. Webinars are available live by

registration in advance, or archived versions are available for download by members. Some of SMACNA's current webinar offerings include:

[HVAC Duct Construction Standards 103 - Round and Oval Duct, Hangers, and Casing Construction](#)

Gain solid understanding of how to construct duct in a resource efficient and sustainable manner that is compliant with SMACNA's *HVAC Duct Construction Standard*. This is the final session in a three part series.

[HVAC Duct Construction Standards 102 - Rectangular Duct Tie Rods, New Tables \(TDC/TDF\), and Rectangular Duct Over 120'](#)

Gain solid understanding of how to construct duct in a resource efficient and sustainable manner that is compliant with SMACNA's *HVAC Duct Construction Standard*. This is the second session in a three part series.

[HVAC Duct Construction Standards 101 - Rectangular Duct External Reinforcement](#)

This presentation will cover the following (with respect to rectangular duct): Basic definitions used to properly describe rectangular duct, limits and proper application of various joints and seams, use of the manual to determine proper construction options, and more.

[SMACNA Fire, Smoke & Radiation Damper](#)

Session highlights the considerations in specifying and installing fire dampers, smoke dampers, combination fire and smoke dampers, and ceiling dampers in HVAC systems.

[SMACNA Seismic Restraint Manual - Webinar](#)

Session highlights the SMACNA *Seismic Restraint Manual – Guidelines For Mechanical Systems 3rd Edition* (ANSI) means and methods for seismically bracing ducts and pipes to meet the requirements of the regionally appropriate seismic hazard levels so that ducts/pipes are more likely to maintain their integrity and remain attached to the building's structure during a seismic event.

[HVAC Air Duct Leakage](#)

This webinar presentation on duct air leakage will define what duct air leakage is and how it relates to equipment air leakage, accessory air leakage, and HVAC system air leakage.

[HVAC Duct Construction Standards](#)

This webinar will demonstrate how to use SMACNA's third edition of the *HVAC Duct Construction Standards* to determine the proper range of construction options of rectangular duct used in today's commercial market.

Learn more about SMACNA's Technical Services and Research department by visiting www.smacna.org/technical. Read guidelines for submitting technical inquiries at www.smacna.org/technical/make-a-technical-inquiry ■

FASTEST, INC. ESTIMATING SUITE IS OPTIMAL FOR MULTI-TRADE CONTRACTORS

By Mike Postiglione

FastEST, Inc. Director of Marketing

When FastEST, Inc. released its FastWRAP™ program eight years ago, the company added a very helpful program to its software catalogue. FastWRAP™ is designed with the same layout and easy-to-use interface as the company's other long-standing, dependable programs, FastDUCT® and FastPIPE®, but with a database and unique features specifically tailored for use on mechanical insulation estimates.

Nowadays, as more contractors are self-performing additional scopes of work beyond HVAC ductwork, plumbing, and mechanical piping, many FastEST customers are now utilizing all three of the estimating platforms to create comprehensive estimates that include mechanical insulation, firestopping, and other subcontractor scopes, as well.

One important and useful aspect of FastEST's software design is that there is uniformity across all three programs. This is not always the case with other estimating software programs on the market today. But with FastEST, all of the programs have the same look, feel, and operational steps for users to easily and smoothly create, take off, and calculate project estimates—from the main menu to the takeoff interface to the reports and final spreadsheet layout. And with that uniformity comes the benefit that once an estimator becomes adept with one of the programs, they are inherently familiar with the other programs, as well. That said, if further training is needed, one advantage that comes with purchase or lease of any FastEST program is that it includes online training for any and all users.

Another more recently-added feature worth mentioning is that any bids that were previously taken off in FastDUCT® or FastPIPE® can now be quickly imported directly into the FastWRAP™ program, so there's no need to perform an additional, separate takeoff within FastWRAP™. The user just copies the bid takeoff into FastWRAP™, runs a report, and just like that, they have a detailed breakdown of material



costs and person-hours related to the mechanical insulation portion of that job's scope.

And as always, all three FastEST programs include the award-winning On-Screen Digitizer feature and come with a full database of material pricing and labor hours (some competing products require an add-on charge for on-screen takeoff capability, and/or for material pricing to be included in the database).

Call FastEST today at 800-828-7108, or visit the website at fastest-inc.com to find out more about all three accurate, reliable, and easy-to-use estimating systems. ■

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RADIAL FLOW AIR DIFFUSERS

Unlike typical office spaces where diffusers are spaced to promote even mixing and a uniform temperature profile throughout the room, laboratories need to supply large volumes of air at low velocities to disperse impurities and make up for exhaust air volumes without interfering with fume hood function. The airflow pattern is designed to produce a uniform pattern to prevent dead spots where contaminants can linger. Projecting into the space is necessary for the high degree of control offered by this configuration.

The most serious application problem to be considered is a high sensitivity to inlet conditions. These diffusers employ a deep back pan and internal baffles to minimize this effect. Also the radial face allows for a true radial pattern. This is required if entrainment is to be avoided. In the past, all available flush types of diffusers have a multi-jet, rather than a radial displacement pattern. This results in induction, potential contaminant injection, and uneven room air velocities and temperatures.

All diffusers (including radial flow diffusers) have operational limitations. Radial flow diffusers are limited in terms of room-diffuser delta-T and max/min air flow rates. The radial flow diffuser with the curved blades and round shape has the broadest range of performance in terms of both flow and delta-T and its ability to maintain a radial flow pattern over a range of flows. Flush face designs are often more limited due



By / Norm Grusnick, P. Eng.

to the compromises made in attempting to achieve radial flow from a flat surface.

The interaction of supply and induced airflows at the surface of a perforated metal face is very complex. A jet of air emerging from a hole in a flat surface tends to entrain air from the surrounding space. Once the jet becomes even slightly less than perpendicular to the surface, it tends to follow along the surface. This is due to the fact that any small orifice jet has negative static pressure. When near a surface, it tends to adhere to that surface. The radial flow diffuser maintains many jets, all perpendicular to the curved surface.

Why is radial flow important? Again, the goal is to minimize induction. When there is induction, the jet entrains contaminants from surrounding areas and changes in temperature. A true

continued on page 22

WE'RE ON YOUR TEAM!

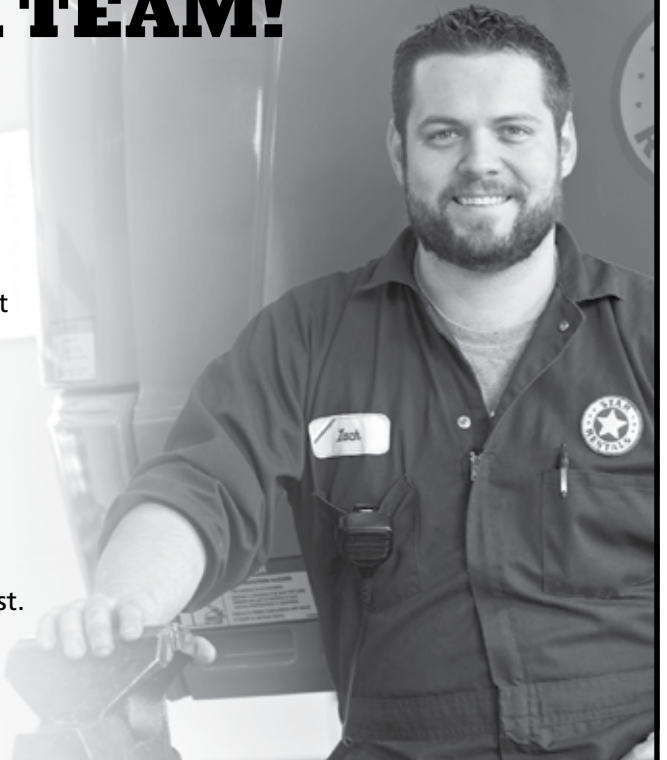
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LEGISLATIVE SESSION HITS THE HALFWAY MARK

The Legislature hit the ground running and has not stopped. At the halfway mark over 2,000 bills had been introduced and a third of them made it past the first major hurdle—getting out of their house of origin. There are a lot of bills on housing, health care, employment, and climate change. Some of these bills have an impact on SMACNA contractors.

The housing bills provide more revenue and directions to build affordable housing, including multi-family. The condominium sector could improve if bills on warranty-based lawsuits pass. SB 5334 says warranty law suits would have to be based on the building codes in place at the time of construction, and that actual damage would have to be demonstrated. Senator Jamie Pedersen is the prime sponsor. HB 1576 would ensure that each construction professional against whom the action is proposed be notified and that all of a condominium's owners would be allowed to vote on whether to bring a construction defect action. Both bills have passed out of their house of origin and are awaiting hearing in the opposite house.

Last year the Legislature passed a bill that required prevailing wage be set using collective bargaining agreements (CBA) rates. Among the groups complaining about increased rates were the affordable housing groups. HB 1743 would set prevailing wages for residential construction by using the wage and survey method instead of a CBA. The bill applies to affordable housing, weatherization, and home re-habilitation for low-income, and homeless and domestic violence shelters. SB 5035 would increase fines for prevailing wage violations, doubles the time to file a complaint, and require contractors to retain payroll records and submit certified payroll records at least once a month. Both bills have passed out of their house of origin and are awaiting a hearing in the opposite house.

In the employment arena there were several wage bills that would have required new liens and liability for unpaid wages. HB 1395 would have made a contractor liable for one of his/her subcontractor's unpaid employee wages. This would have applied to both general and subcontractors. HB 1965 would have allowed law suits to be filed by third parties on a variety of employment issues, including wages. HB 1514 would have established a statutory wage lien for claims on unpaid wages. All of these bills failed to move out of the House by the deadline, but the legislative interest in this issue will continue.

Governor Inslee introduced a package of bills dealing with climate change. HB 1257 and SB 5293 would require owners of larger buildings to do energy performance audits and upgrade their buildings according to energy standards that the Building Code Council would write. The state would provide some incentive money. By 2026 non-compliance could result in a penalty. These bills also would require natural gas



By / Kathleen Collins
SMACNA Legislative Consultant

utilities to do energy conservation programs. SMACNA is generally supportive of these bills. Another climate change bill, HB 1112, would phase out use of hydrofluorocarbons in refrigerant systems. SMACNA supports this bill but would like the time frames in this bill to be extended to allow more time for the manufacturers to produce alternatives. SB 5116 would require electric utilities to transition to non-emitting and renewable energy by 2030 resulting in an increased demand for conservation measures and the use of solar power.

In the construction arena, SB 5457 would have required the naming of all subcontractors on bids when they are submitted. Currently only the three major subcontractors—HVAC, plumbing, and electrical—have to be listed with submitted bids. The bill did not pass the Senate. There have been a plethora of bills that increase bid limits for local governments. SMACNA is working with other construction groups to contain them.

Senator Hobbs, Chair of the Senate Transportation Committee, is proposing a 10-year transportation package. Half of the funding would come from a tax on fossil fuel, including natural gas and electricity. Overall it would increase the price of gas by about 20 cents a gallon. It is not clear if there is interest in moving a transportation package this year, especially one that relies on a carbon tax that has failed two times at the ballot.

As we enter the second half of session, budget preparation has begun. The majority Democrats have signaled that the need for additional revenue. As reported earlier, the likely targets are increased B&O taxes for some categories of taxpayers and a capital gains tax. SMACNA has concerns with the capital gains tax since it would include income from the sale of a business. We will have to wait to see what the majority party proposes. Session is supposed to end April 28, assuming the budgets are done and the major issues are resolved.

Stay tuned to further updates on legislative issues from SMACNA. If you have questions, please call the SMACNA office. ■

SIX NEW LAWS MAY AFFECT YOUR EMPLOYMENT POLICIES

Six new laws took effect in June 2018 and may impact employers in Washington State. Check out these updates, and review your employment policies to make sure you are in compliance with these new regulations.

“Ban the Box” employers are bound by additional protections for individuals with criminal convictions during the hiring process

House Bill 1298 or the “Fair Chance Act,” also known as “Ban the Box,” prohibits employers from asking applicants about arrests or convictions before a determination has been made about the applicant’s qualifications for the job. Specifically, the employer may not:

- Advertise open positions in a way that excludes people with criminal records (e.g. can’t say “no felonies”).
- Include application questions about criminal history or background.
- Automatically disqualify applications based on criminal record.
- Reject or disqualify an applicant for failure to disclose a criminal record.

This law applies to all employee applicants except:

- Applicants who will have unsupervised access to minor children or vulnerable adults.
- Applicants to financial institutions.
- Applicants for law enforcement or criminal justice agencies.
- Applicants to an entity that requires compliance with a self-regulatory organization.

Equal Pay Opportunity Act

House Bill 1506 is an update to existing state law and requires that employers pay “similarly employed” workers equal compensation and provide equal opportunities for career advancement regardless of gender. The EPOA prohibits discrimination in compensation between “similarly employed” employees. Individuals are similarly employed if: 1) they work for the same employer; 2) the performance of the job requires similar skill, effort, and responsibility; and 3) the jobs are performed under similar working conditions. Job titles are not determinative.

Discrimination does not include differences in wages based in good faith on bona fide job-related factors such as: education, training, experience, a seniority system, a merit system, a production-based earning system, or regional differences in compensation. However, an individual’s previous wage history is not a defense.



By / Karen Forner

Employers may not discriminate against victims of domestic violence, sexual assault, or stalking

House Bill 2661, prohibits employers from discriminating against employees or from refusing to hire candidates who are victims of domestic violence, sexual assault, and stalking. The Bill also requires that employers provide victims of domestic violence, sexual assault, and stalking reasonable safety accommodation.

Sexual harassment or assault in nondisclosure agreements is prohibited

House Bill 5996 prohibits employers from requiring employees to sign nondisclosure agreements that include discussions of sexual harassment or assault occurring at the workplace, at work events, or in any other way between the employer and employee. The new law does not prohibit settlement agreements relating to workplace sexual harassment or assault from having confidentiality provisions.

Employers may not require employees to waive their right to pursue claims of discrimination or require dispute resolution for those claims

Senate Bill 6313 prohibits employers from requiring employees to waive their right to file state or federal discrimination claims. The Bill also prohibits employers from requiring employees to agree to resolve discrimination claims through dispute resolution.

Model sexual harassment policies and best practices for employers

Senate Bill 6471 directs the state Human Rights Commission to convene a stakeholder work group to develop model policies and best practices to keep workplaces safe from sexual harassment. The purpose of this bill is to encourage employers to adopt and implement policies making workplace reporting safe, without fear of retaliation, loss of status, or loss of promotional opportunities. Aspects of this law must be met and adopted by January 1, 2019. Employers should have reviewed and revised their sexual harassment policies for compliance with this policy before the first quarter 2019 implementation.

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MAKE THE MOST OF 2019 WITH THE SELF-KNOWLEDGE LEADERSHIP TEST

I have seen many leaders fall short of their potential because they simply could not be honest with themselves. They were unwilling to dig into the challenge of self-knowledge—and that's understandable. We often find more things we don't like about ourselves when we do it, but that's precisely why we need to bite the bullet. The polite term is self-deception. The true description is bullshitting yourself.

Self-knowledge and management are the foundations for successful long-term leadership capability. (They also impact our relationships, marriages, parenting and more). You have to look at leadership as a long-term personal and professional evolution rather than a one-time event (like a promotion). Self-knowledge (the psychological mirror) is a tool to be used for this evolution. The hardest part is that the more successful we get, the less pressure there is to self examine.

For leaders who work for me I have used many avenues to promote self awareness and knowledge: 360 evaluations, executive coaches; Myers-Briggs, and even paid for professional therapy. Simply put, if you don't know yourself, you can't lead yourself. If you can't lead yourself, you cannot effectively lead others.

This list of questions is a good filter to help you and your leaders avoid rationalization and BS – and see the truly good, bad and ugly that we must embrace to really grow.

- What is my “gift” as a person that makes me remarkable, do I own it, and how does it impact those around me?



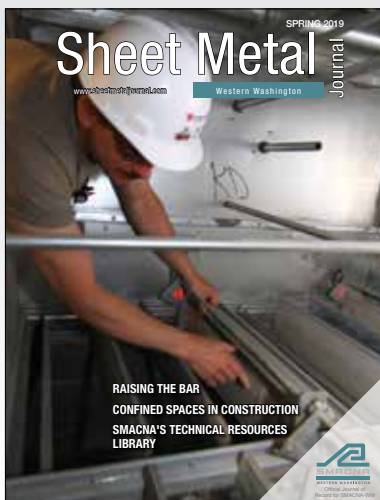
By / Mark Breslin

- What is my fatal flaw, do I own it, and how does it impact people around me?
- Can I take brutally honest feedback in service of my advancement?
- Am I truly secure enough in myself to lead well?
- Do I lead more from strategy or emotion?
- Do I make decisions from instinct or logic?
- Am I a reactive person or a proactive person?
- What level of intuition do I bring to motivating others?
- How do I generally behave under stress and what does that look like to others?

Want to have a really authentic discussion with someone above or below you? Someone you trust enough to share the truth with? Try just two or three of these.

Remember, self-awareness and knowledge give you the most honest foundation possible for good leadership. Have the courage to make it a priority for yourself and those that need your guidance and help. ▀

Submit your news, story, or photo idea



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.

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.

INDUSTRY NEWS

continued from page 9

Launched in August 2018, the SMART Heroes program was established to provide free sheet metal industry training to enlisted U.S. Military men and women who plan to enter the civilian life within the year, thereby assisting in a successful transition into the civilian workforce. Adjacent to Joint Base Lewis-McChord, the Western Washington Sheet Metal JATC seemed the ideal host for the inaugural SMART Heroes class.

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

The revised edition includes new breakaway fire damper connections and inspection/test requirements for new and existing fire, smoke, and radiation dampers. A revised chapter for the design professional is included and a detailed fire, smoke, and radiation damper matrix based on the model building codes to assist designers/code officials and contractors on the selection of these dampers.

To download a copy of the draft visit smacna.org/news/latest/archives/2019/04/01/fire-smoke-and-radiation-damper-installation-guide-for-hvac-systems-6th-edition-45-day-public-review. Comments must be in by May 10. ■

FOREIGNER IS 2019 CONVENTION HEADLINE ENTERTAINMENT

SMACNA proudly announces that the 2019 Annual Convention headline entertainment act is one of the best-selling bands of all time, **Foreigner**. Long a staple on classic rock stations around the globe, **Foreigner** is universally hailed as one of the most popular rock acts in the world with a formidable musical arsenal that continues to propel sold-out tours and has album sales now exceeding 80 million.

Foreigner will be providing attendees of SMACNA’s 2019 Annual Convention with an exclusive concert on Wednesday evening, October 23, at the upscale JW Marriott in Austin, Texas. This once in a lifetime exclusive concert is just the type of memory that all attendees will never forget. Early registration officially began on April 1. ■

ENGINEER'S DESK

continued from page 18

radial pattern will have nearly constant temperatures and will not contain any particles from surrounding spaces.

In conclusion, the radial flow diffuser offers the least compromise, most stable air delivery, and lowest entrained contaminants of any design assuring optimal performance for laboratories with VAV hoods and other critical environments. The radial flow ceiling diffuser system allows greater flexibility during installation by being the least sensitive design to inlet conditions. ■

ITS THE LAW

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Laws are changing. All employers should have a full handbook and policy review to ensure they is up to date with the ever-changing and expanding state and federal employment laws. At K-Solutions Law, a typical handbook review takes approximately three to four hours of attorney time (time will vary depending on handbook length and missing content). Making this investment now will help you avoid or minimize disputes, distrust, and disruption in the future. ■

FIRE, SMOKE, AND RADIATION DAMPER INSTALLATION GUIDE FOR HVAC SYSTEMS 6TH EDITION 45-DAY PUBLIC REVIEW

The revised 6th edition of the SMACNA Fire, Smoke, and Radiation Damper Installation Guide for HVAC Systems is now available for public review and comment.

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Photo courtesy of PSF Mechanical Inc.

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