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Closing the industry's gender gap

A magazine for
sheet metal,
heating, cooling
and ventilation
contractors

A full-page photograph of two HVAC workers in safety gear (hard hats, safety vests, and gloves) maneuvering a large, vertical, rusty metal duct. The male worker on the left is wearing a black hard hat and an orange safety vest, while the female worker on the right is wearing a white hard hat and a green safety vest. They are both smiling and looking towards the camera. The background shows a wall with vertical panels and a blue baseboard.

Minding the gender gap

**Female HVAC workers say
their ranks are growing in
number and influence**

By Audrey LaForest

Emily Wigre (right), a sheet metal worker at General Sheet Metal, maneuvers a grease duct. Image courtesy of General Sheet Metal.



Laura DiFilippo (center left), vice president and co-owner of DiFilippo's Service Co., leads a meeting alongside her husband, Vince (center right), president and co-owner of the company. Image courtesy of DiFilippo's Service Co.



Dawn Norris (center), president and owner of Forced Air Systems, poses with her employees. Norris grew up in the HVAC industry and often accompanied her father on service calls as a child. Image courtesy of Forced Air Systems.

Angela Simon was 24 years old when she was told to leave a meeting.

It was 1988, and it was her first year working as a project manager for Menlo Park, California-based Western Allied Corp. She was assigned to a project in downtown San Francisco for a five-story building. Steel beams had just gone up on the site, so the project superintendent called for a coordination meeting. Simon recalled walking into a tiny trailer with her supervisor and the room being packed with steelworkers who were talking among themselves — until they noticed Simon, that is.

“I walked into the room and they got super quiet,” she said. “And as the room got quiet, (the superintendent) says, ‘Who are you?’ And I realized he was talking to me, and I said, ‘Uh, I’m Angie Simon with Western Allied. I’m the project manager.’ ... And he goes, ‘I don’t want the girl here. The girl needs to leave.’”

Simon turned to her foreman, asked him to take notes, left the trailer and waited outside for the meeting to finish. She realized the project superintendent was probably never going to accept her, and she was OK with that.

“I’m not going to change that guy,” she said. “That guy is 73, 74 years old. He’s grown up. I’m not going to change him. He has his own vision.”

But today at 53 years old and as president of Western Allied Mechanical — the company was reorganized into two separate businesses in 2003 — Simon may have changed some people’s minds on what a woman can do in the HVAC industry. She’s watched the industry evolve more respectfully with the times, but she acknowledged that while many attitudes have changed, the number of women in the industry hasn’t moved as much.

“I think part of the problem with not as many women in the trades — or even in the engineering and managing side of it — is we just need more mentors,” she said. “We need more women examples, so that they’re not afraid to come out and also to know that, if you want to, you can do it all.”

Moving the industry needle

Only 9 percent of U.S. construction workers are women, according to 2015 data from the U.S. Bureau of Labor Statistics, despite that females represent 57 percent of the labor workforce.

A 2014 report, “Women in Construction Still Breaking Ground” by the National Women’s Law Center, a nonprofit organization working to expand opportunities for women and their families, cites reasons like sexual harassment and hostility, a lack of role models, stereotyped assumptions about women and their abilities, and discrimination in career and technical education programs as ongoing roadblocks. Young women, the report states, are being steered toward traditional occupations that align with gender stereotypes, such as secretaries, librarians and dental hygienists, instead of nontraditional occupations like mechanical engineers, HVAC construction managers and sheet metal workers.

“The biggest challenge I think women face is that there’s a lack of good examples for women,” Simon said. “I realize we need to get more women involved, and we need to have other women mentor women.”

But that can be hard to do if women almost never even consider working at your company. Laura DiFilippo, vice president and co-owner of DiFilippo’s Service Co., a family-owned residential HVAC business based in Paoli, Pennsylvania, employs three women who work in administration.

“I don’t have any women in technical (positions) here, but honestly no one has ever applied, and we look for techs all the time,” said DiFilippo, who has held several board positions nationally and locally with the Air Conditioning Contractors of America. “There’s a tech shortage — a big-time tech shortage. I advertise for techs 24 hours a day, 365 days a year. I have never had a woman apply.”

Women

DiFilippo, who was the ACCA's first national chairwoman in 2012, isn't alone in her need to fill open positions — with men or women. According to a 2015 report titled “The HVACR



Carol Duncan, president and owner of Clackamas, Oregon-based General Sheet Metal, has been in the HVAC industry since 1982. Image courtesy of Sheet Metal and Air-Conditioning Contractors' National Association.

Workforce: Demand Heats Up as Supply Melts Away” by the HVACR Workforce Development Foundation, the U.S. national average posting duration for filling middle-skill jobs in any field is 29 days. But for HVAC and refrigeration jobs, the average is 36 days, with some states like Washington and Alabama seeing durations as high as 40 to 47 days.

By 2022, the report states, more than 115,000 additional HVAC and refrigeration mechanics and installers will be needed.

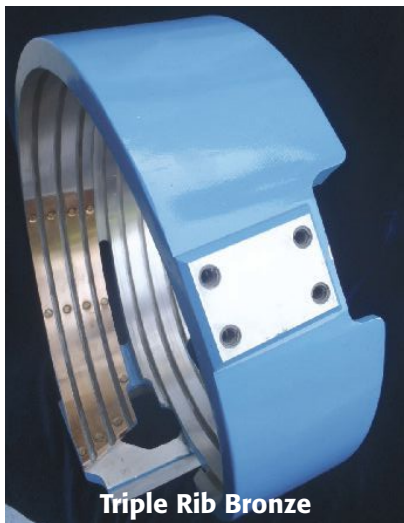


Rita Mancini, a Local 104 sheet metal worker, runs a plasma machine at Western Allied Mechanical. She's been with the company since 1998. Image courtesy of Western Allied Mechanical.

The report cites industry training programs with too few students, retiring instructors and lacking recruitment practices as just a few of the many stumbling blocks to gaining workers of either sex in the industry. But many instructors, according to the report, say the industry also needs to recruit

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Nikki Liddy, president of Windy City Women in HVAC and owner of Hillco Distributing Co., takes notes on-site. Image courtesy of Windy City Women in HVAC.

more women and minorities into their programs.

According to the U.S. Bureau of Labor Statistics, 2.3 percent of sheet metal workers and 0.8 percent of heating, air conditioning and refrigeration mechanics and installers were female in 2011. Four years later, 4.5 percent of sheet metal workers and 1.7 percent of heating, air conditioning and refrigeration mechanics and installers were female — an increase of nearly 96 percent and 112 percent, respectively. But it's still a small percentage of industry workers overall.

For Ruth Ann Davis, immediate past president of Women in HVACR, a nonprofit organization that seeks to empower industry women through networking opportunities, mentoring and education, the shortage of workers is as an open door for getting more women into these careers.

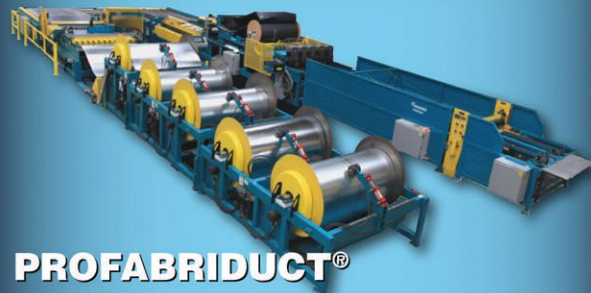
"I see it as a huge opportunity for women in all aspects of our business, whether you want to be a contractor or an installer," said Davis, who has worked in sales and marketing at HVAC equipment manufacturer Williams Comfort Products in Colton, California, for 25 years. "It's a wide-open field for women in our industry, whatever aspect you want to be involved in."

A family tradition

For HVAC industry veterans and Sheet Metal and Air-Conditioning Contractors' National Association members Carol Duncan and Dawn Norris, exposure to the industry's opportunities began early on in their households.

"I grew up in this. My uncles are all heating and cooling. My cousins are heating and cooling," said Norris, president and owner of Sterling Heights, Michigan-based Forced Air Systems. "As a kid, I'd go with my dad on the weekend on his service calls or his side jobs ... and I'd hand him his tools."

Norris recalled the initial bombardment of "Oh, honey" and "Oh, sweetie" she would get while talking to general contractors on the phone, but since starting her company in 1994, she says she's gained more respect.



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“I’ve just been elected to two union boards and they’re all men and me, and I feel like I’m an equal in those meetings, like I can hold my own,” said Norris, who was elected as a trustee for the SMACNA Detroit chapter’s industry promotion fund and joint trust insurance fund. “I can talk the talk. There’s just no way I can sling ductwork in the air.”



Angela Simon, president of Western Allied Mechanical, discusses ductwork on-site with sheet metal superintendent Randy Freitas. Image courtesy of Western Allied Mechanical.

And that may be part of the reason female sheet metal workers are so rare. Norris is straightforward about acknowledging that she’s still a “woman in a man’s world,” and in her experience, she has yet to find a female worker who can keep up with a man on the job and in an industry where “it costs you \$85 an hour just to put boots on the ground,” she said.

“(Our foremen) would be the first to tell you that the

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second that a female is on-site, every tradesman in the industry stops working to have a look,” Norris explained. “And when you’re union, it’s a very expensive way to be in business.”

Duncan said she sees things a little differently. She joined the industry in 1982 as a controller in her father and uncle’s business, General Sheet Metal in Clackamas, Oregon. Now as president and owner of the company, she employs nine women who are in administrative roles and five women who are in the field (see sidebar).

“We can’t expect special treatment, and we just have to earn our spot,” she said, adding that she feels more accepted by men in the industry today than she did in the ’80s and ’90s. “I think you have to prove yourself a little more than you do if you’re a guy.”

But Duncan also points out how sheet metal and HVAC aren’t the only male-dominated industries that have evolved to include more women. It just takes time.

Getting the word out

In a society that shows Bob the Builder more often than “Betsy the Builder” — the rare female equivalent to Bob — many women in the HVAC industry are relying on organizations and group support to help get the word out that women are not only working in this industry, but also thriving in successful HVAC careers.

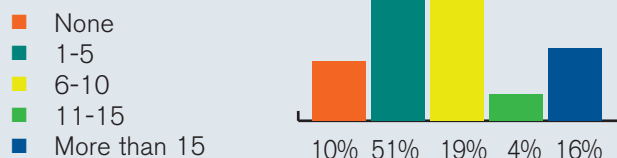
Take Michele Mele and Nikki Liddy, for example, who are supporting, educating and networking with other women in the industry through their Chicago-based organization Windy City Women in HVAC.

“Michele and I started Windy City Women together five years ago when we realized that there were more women coming into the industry, and we thought it would be amazing to educate women, to network with other women in different parts of the industry and to really encourage women

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Women in the Industry

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Women

to join the construction industry,” said Liddy, co-founder and president of WCW in HVAC and owner of Hillco Distributing Co. “Women have come a long way in what used to be known as a male industry. ... You don’t have to be a secretary. You can go build buildings. Do it all.”

The 80-member organization meets four times a year, hosts an annual charity event for the construction industry and allows businesses to post HVAC-related job openings for its members.

“(We) probably get an email a week from some business owner or somebody saying, ‘Hey, do you have any women interested in this position or that position?’” said Mele, treasurer at Windy City Women in HVAC and controller at JC Power & Control in Elk Grove Village, Illinois.

Other groups, like SMACNA’s Steering Council for Women in Construction Leadership, are showing women in the industry that it’s possible to shatter the glass ceiling one promotion at a time.

“We’re a group of women in executive positions trying to mentor the next generation and help them through some of the trials and tribulations that we’ve experienced, and share

32-year-old wishes she had joined HVAC industry years ago

You’ve heard the stereotypes: Women are weak, women are fragile and women are emotional.

But take one look at 32-year-old sheet metal apprentice Charissa Schubert as she installs rain gutters, outdoor signs and siding or assembles ductwork. None of those descriptors apply.

“Some say it’s like a competition, but I look at it as I’m proving to myself I can do the same job a stronger man would normally be doing,” said Schubert, who has been in the trade for three years and is currently working at General Sheet Metal in Clackamas, Oregon. “Sometimes I can’t lift the heavy things, or I may not be tall enough, but some men have the same struggles, so we all work together to get the work done.”

Schubert, who is 5 feet 5 inches tall, explained that

when it comes to lifting heavy equipment she has to get creative and find other tools to help her accomplish the task. But she’s also not afraid to ask for help.

“I feel like I work with like 50 brothers,” she said. “They’re always on the lookout making sure I’m safe or how I can do things differently to make things easier.”

Growing up, Schubert was inspired by her mother who was a longtime goldsmith. Her brother, who’s also a sheet metal worker, encouraged her to join the trade — something she said she wishes she would’ve done sooner.

“If I would’ve known about this type of a career and what it entails — like quick job advancement, great pay and great hours — I would have done this a long time ago,” she said.

that information and be a support,” said Duncan, who is a council board member.

America might elect its first female president in November, but there’s a woman in the HVAC industry who’s ready to accept that title, too. Simon, of Western Allied, who also serves as co-chair of the steering council, will become SMACNA’s first female president in 2020.

“I hope I can make a difference with our labor partners, but also — just maybe — open some eyes up for people across the United States,” Simon said. “And tell SMACNA contractors that, hey, just because you have a daughter and not a son, your daughter could also do the job.”

Now close your eyes and think about a worker in HVAC. What does the person look like? A woman, perhaps?

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