



# PIPELINE

FUEL FOR YOUR BUSINESS

NOV/DEC 2024

THE NEWSLETTER OF UTAH'S HVACR INDUSTRY

153 SOUTH 900 EAST, #3 • SLC, UT 84102 • WWW.UTRMGA.ORG

## ANOTHER SUCCESSFUL EDUCATION SUMMIT!

RMGA CONTRACTORS and industry leaders came together at the Sheraton Hotel in Downtown Salt Lake City on September 11th for RMGA's 2024 Education Summit. **68 attendees enjoyed networking with each other, playing a very fun horse racing game for prizes and prestige, and receiving stellar education**, with training on the economy, changes to the IRC, Lien laws and employee liability law.

Attendees went home with full bellies, a nice golf shirt, and all 6 hours of continuing education needed to renew bi-annual contractor licenses.

**Next year's summit is on Wednesday, September 24, 2025, location TBD.**

Contact [John@utrmga.com](mailto:John@utrmga.com) if you would like to be on the planning committee or have a suggestion for education topics. ■



Scott Carpenter  
scott@legendsmechanical.com  
801-599-8563 Utah  
208-466-1773 Idaho

**MESSAGE  
FROM OUR  
PRESIDENT**  
SCOTT CARPENTER



*Dear RMGA Members & Friends,*

*I hope this message finds everyone coming into the holiday season doing well. I think that even though our economy has put some constraints on the growth of our industry, we have had another great year.*

*I would like everyone in the association to understand that this association belongs to them.*

*We need everyone to be involved in the decisions and the directions we take. There are lots of great members on our board and I would encourage anybody to reach out directly to them and let us know if there is anything we can do. It looks like our Manual J, S and D class was another success, and we will continue to offer these amazing classes and training opportunities to our members. I would also like us to continue to grow partnerships with our local jurisdictions and with great groups like ACCA.*

*I hope everyone enjoys their Fall and has a wonderful holiday season. As we close out the year, I wish you all the best. I look forward to another productive year in 2025.*

**Best Regards,**

A handwritten signature in black ink, appearing to read "Scott Carpenter". The signature is fluid and cursive, written over a white background.

## RMGA BOARD BRIEFING SEPT/OCT 2023

We did not hold a board meeting in September because everyone was at the RMGA Education Summit on September 11th.

At the October meeting, it was announced that RMGA now has enough Wage and Charge Surveys to compile results that will be statistically significant. **Results are included on page 7 of this newsletter.**

We set the date for next year's Education Summit: Wednesday, September 25, 2025, and we plan to make sure that the course is listed on ICC under RMGA's preferred provider status, so more inspectors will attend and receive continuing education. It was also decided to have RMGA Gas Technician Certification Classes listed on ICC's website as well.

And last month's Manual J,D,S class series was a big success with 45 attendees on all three days, so we are offering the course series again April 22-24, 2025, and RMGA will continue to heavily subsidize these classes because the information is so critical to know.

In October, we also discussed promotional items, such as belt buckles, hats and challenge coins to give to RMGA Certified Technicians and/or Contractor members, but we decided to think more about it and discuss again at the November board meeting.

**Our next board meeting is at 11:00 a.m. on ZOOM, on Wednesday, November 13th. ■**

# RMGA GAS CERTIFICATION CLASSES

You can now request registration on the new RMGA website: <https://utrmga.org/certification>

CALL 801.521.8340  
OR EMAIL  
RMGAUTAH@GMAIL.COM  
TO REGISTER



## NOV IN-PERSON

(And on Zoom)

### Salt Lake City

Thursday, November 14  
Friday, November 15 &  
Saturday, November 16

8 a.m. - 5 p.m.

Dominion Energy CTC Room  
1000 West 100 South  
Salt Lake City, Utah 84104

## JAN IN-PERSON

(And on Zoom)

### Salt Lake City

Thursday, January 9  
Friday, January 10 &  
Saturday, January 11

8 a.m. - 5 p.m.

Dominion Energy CTC Room  
1000 West 100 South  
Salt Lake City, Utah 84104

## MAR IN-PERSON

(And on Zoom)

### Salt Lake City

Thursday, March 13  
Friday, March 14 &  
Saturday, March 15

8 a.m. - 5 p.m.

Dominion Energy CTC Room  
1000 West 100 South  
Salt Lake City, Utah 84104

All Certification Classes are \$400. Price includes the RMGA Study Guide, IFGC, online video access, 24 hours of instruction, and 2 attempts at the exam (if necessary). Technicians should attend ALL sessions. In-person attendees should bring lunch or plan to visit a local restaurant during the lunch hour. **Take the Pre-Test to evaluate your readiness for the exam at <https://utrmga.org/pre-test/>**

*Partial funding of RMGA training programs has been provided by the Division of Occupational & Professional Licensing from the 1% surcharge funds on all building permits.*

**RMGA Spanish  
Language  
Certification  
Study Guides are  
available for  
\$125, with free  
shipping!**



# MECHANICAL CODE

# DISCUSSION

I CHOSE TO WRITE on IMC 602 Plenums, because once or twice a year, I get a call from someone working on a first tenant improvement project who was required to tear out installed materials. This can be a painful, costly experience. Hopefully, this introduction to ceiling plenums, common in large commercial building, will prevent some of you from having to learn the hard way.

I was introduced to the word *plenum* in June 1972, during my first few days working for Bonneville Heating and Cooling. I was assigned to work with another young guy with a year or two of experience, working on ‘diggers,’ installing underground duct systems at a new apartment project. The plenum was a section of duct placed at the future furnace locations, with collars tapped into the sides, connecting to transite

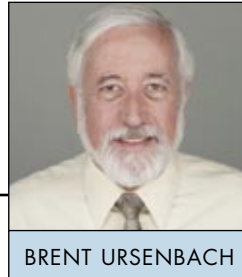
asbestos-cement (AC) pipe. When completed, we encased the sheet metal plenum, collars, tees, elbows, and boots in concrete. A few weeks later, I learned the main duct installed on top of up-flow furnaces was also identified as a plenum. Sometime in the next year, I was assigned to assist a more experienced installer working in a downtown office building where I learned the cavity above a lay-in T-bar ceiling might also be known as a return plenum, eliminating the need to fully duct return air from each inlet.

*2021 IMC Chapter 2 - Definition: PLENUM.* An enclosed portion of the building structure, other than an occupiable space being conditioned, that is designed to allow air movement, and thereby serves as part of an air distribution system.

Building, fire, and mechanical codes address many concerns created by using the full ceiling cavity as a return plenum, most related to combustible materials within the plenum and the resulting fire and smoke hazards. *Please review IMC Section 602 Plenums and 603 Duct Construction and Installation.*



# IMC 602 Plenums



BRENT URSEBACH

## BRENT URSEBACH

**HVAC EDUCATOR/  
EXPERT WITNESS**

bursenbach@gmail.com

801-381-1449

**Materials:** Materials used in plenums must be noncombustible or limited combustible, and have a ***flame spread index of no more than 25 and a smoke developed index of no more than 50.*** This includes flex duct, plastic pipes and fitting, tubing, pipe insulation, non-metallic conduits, and everything exposed within the plenum. Look for this information on labels and in specs.

### Code Compliance & Approvals

Listed & Labeled Underwriters Laboratories, Inc. File # MH11637  
UL-181 Class 1 Air Duct  
Flame Spread 25 or Less  
Smoke Developed 50 or Less.  
Meets the requirements of NFPA 90A & 90B  
UMC & IMC and most model codes.  
California Insulation Manufacturer #TD-1092.

### **Electrical wires and cables:**

Combustible electrical wires and cables must be installed in metal raceways or metal sheathed cable or listed and labeled as meeting the flame spread and smoke developed requirements. Such cables are typically listed as *plenum rated*. Standard thermostat wire is typically NOT *plenum rated*.

**Nonmetallic cable ties** used to secure cables must be compliant with the Flame Spread and Smoke Developed limits.

**Sealing** materials should be appropriate for the ductwork materials and the anticipated operating pressures. *Unlisted* pressure-sensitive tapes should not be used.

**Gypsum Boards** used to form plenums shall be limited to systems where the operating temperatures do not exceed 125° F.

### **Fire areas:**

Plenums must be limited to a single fire area to contain fire and smoke. (International Building Code [IBC] Section 707).

**Fire dampers** must be installed in transfer openings between return air ceiling plenums that are linked together.

**Insulation:** Mineral wool can be used to manage noise in plenum areas. Kraft paper, bubble foil, and other combustible products do not comply. Also applies to pipe and duct insulation.

**Smoke detectors** are required in virtually all ceiling return plenum; however, detectors that are part of the fire alarm system may also protect the plenums. See IMC Section 606.

Please consider this an introduction and limited summary of the subject. If you find yourself working in commercial offices buildings, you will encounter these systems. Use common sense, considering reasons for these requirements, while spending time studying the codes. Feel free to reach out with comments or questions.

*As we are entering the Holiday Season, may each of you find joy and happiness with those dear to you —Brent. ■*

## Be A Good “Doctor!”

Just as physicians diagnose and treat ailments, HVAC technicians diagnose and repair issues within a home’s comfort systems.

### Discover the Facts with an Over-the-Top Exam and Diagnostic

Like doctors, HVACR technicians must be skilled diagnosticians. Rushing through a service call without fully understanding the problem can lead to misdiagnoses and incomplete repairs. Proper diagnostics begin with active listening.

**Technicians should listen carefully to homeowners’ descriptions of their home’s issues.** Encourage the homeowner to provide as much detail as possible, even if they think it’s unrelated.

Next, thorough visual inspections are essential. *Technicians must inspect the system to identify any visible signs of wear, damage or malfunction. Technicians should see things the homeowner may have stopped noticing.*

### Share Solutions

After conducting diagnostics, technicians should report their

findings accurately. Use clear and concise language to describe the issue, its root cause, and the potential consequences if left untreated.

### If You See Something, Say Something

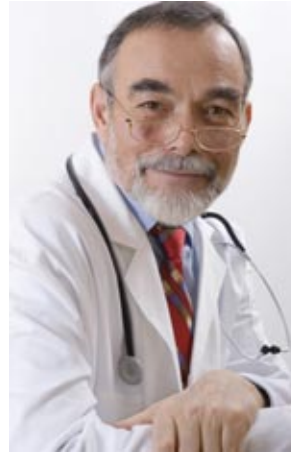
If technicians notice potential issues unrelated to the reason for the service call, they should bring them to the homeowner’s attention. Addressing potential problems proactively can prevent costly repairs and disruptions in the future, save money on utilities, or make the equipment last longer.

### Providing Outstanding Customer Service

Beyond technical expertise, fostering trust, empathy, and transparency is essential in building lasting relationships with homeowners.

### Communicate clearly and honestly with homeowners throughout the service call,

explaining each step of the diagnostic process and any



recommended repairs or maintenance. Be respectful of their time and property, taking care to clean up after completing the work.

### Sharing Solutions with Homeowners

Technicians should offer choices when it comes to repairs, replacements, and maintenance plans. When presenting options, consider factors such as cost, energy efficiency and long-term reliability. **Provide homeowners with all the information they need to make an informed decision, including the expected benefits and potential drawbacks of each option.**

By approaching each service call with professionalism, empathy, and commitment to excellence, technicians can create positive experiences for homeowners and ensure the health and longevity of their homes’ systems.

*Be a good doctor—your customers will thank you for it.*

*This edited article by Jerry Rollins, Jerryrollins@bgdgggroup.com is in the July 2024 HVACR Contractors News Magazine. ■*

# 2024 RMGA Wage and Service Charge Survey Results

24 HVAC companies in Utah responded to the RMGA 2024 Wage and Service Charge Survey, which is just shy of enough responses to provide statistically reliable results.

38% of respondents were from companies with 10 or fewer employees, and 38% from companies with 27-70 employees. 4 companies (17% of respondents) report having 11 to 18 employees, and 2 very large companies (averaging 140 employees) also responded.

**Excluding the 2 very large companies, the number of technicians per company averaged: 7.**

There was a 44/56% split among contractors who charge hourly rates versus a flat rate, with a Journeyman technician billing an hourly rate ranging from \$70 to \$390, with \$150 the median hourly rate billed. **75% of the respondents include a diagnosis charge on the bill, which averaged \$95.**

**88% charge for after hours and weekends, and 71% charge extra for overtime,** with 54% charge for out-of-town mileage; with some billing by the hour, but most billing by the mile. Only 25% of the companies have a portal-to-portal charge.

**All respondents reported having increased employee wages in the last two years, with 50% reporting providing an increase in benefits in the last two years.** 88% of HVAC companies hire or want to hire apprentices and **most every company pays for technician related training.** 92% allow their employees to take company trucks home, and 83% provide uniforms. 58% of all respondents pay their employees bi-weekly, and 42% pay weekly.

Only 3 of 24 companies say they provide distinct sick days, if employees get any, they are lumped into Paid Time Off/Holidays. **8 paid holidays is the average.** 38% of our contractors provide 1-week paid time off, most vested after one year, and 44% provide 2-weeks vested after 3 years, and 20% of contractors report giving 3-weeks of vacation, usually vested after 5 years.

**Listed below are average low and high wages, compared with 2015 numbers:**

	Avg – Low (2024)	Avg- High	Avg-Low (2015)	Avg-High
Service Tech Apprentice	\$20	\$27	\$13	\$17
Service Tech Journeyman	\$28	\$35	\$19	\$25
Service Tech Foreman	\$31	\$41	\$24	\$29
Residential Installer - Apprentice	\$18	\$25	\$11.5	\$15
Residential Installer - Journeyman	\$25	\$34	\$17	\$22
Residential Installer - Foreman	\$31	\$40	\$21	\$26
Receptionist	\$18	\$22	\$13	\$16
Dispatcher	\$19	\$24	\$15	\$18

Email [John@utrmga.com](mailto:John@utrmga.com) with questions. Thanks to all respondents!





# PIPELINE

FUEL FOR YOUR BUSINESS

153 SOUTH 900 EAST, #3  
SALT LAKE CITY, UT 84102

RETURN SERVICE REQUESTED

## FEDERATED INSURANCE

It's Our Business to Protect Yours

# Help Your Employees Make it Home Safe Today

Federated DriveSAFE<sup>SM</sup> Telematics helps your employees improve their daily driving habits and return home safe at the end of the day.



AN ASSOCIATION MEMBER BENEFIT FOR 119 YEARS  
DIRECT, LOCAL MARKETING REPRESENTATIVES AUTO  
PROPERTY AND CASUALTY SELF-INSURED RETENTION  
POLICYHOLDER SURPLUS LIVE VOICE CUSTOMER SERVICE  
MYSHIELD<sup>SM</sup> TAILORED, INDUSTRY-SPECIFIC COVERAGE  
BUSINESS SUCCESSION AND ESTATE PLANNING STABLE  
FACE-TO-FACE RELATIONSHIPS FINANCIAL STRENGTH  
MUTUAL COMPANY DIRECT CLAIMS REPRESENTATIVES  
500\* EXCLUSIVE ASSOCIATION RECOMMENDATIONS  
ESTATE PLANNING ATTORNEY NETWORK ANNUITIES

### IT'S OUR BUSINESS TO PROTECT RMGA MEMBERS

WE'RE BETTER TOGETHER LIFE AND DISABILITY INCOME  
PRIVATE BONUS PLANS KEY PERSON COVERAGE  
WORKERS COMPENSATION HIRING PRACTICES  
FEDERATED DRIVESAFE<sup>SM</sup> TELEMATICS SOLUTION  
RISK MANAGEMENT RESOURCE CENTER  
EMPLOYMENT RELATED PRACTICES LIABILITY  
EMPLOYMENT LAW ATTORNEY NETWORK  
BONDING EMPLOYEE SAFETY TRAINING  
RISK MANAGEMENT ACADEMY  
CLIENT CONTACT CENTER  
FIELD RISK CONSULTANTS  
CERTIFICATE CENTER  
SURETY SPECIALISTS  
MANAGED CARE  
CYBER

Scan to learn more about DriveSAFE TELEMATICS.



The content of this publication is for general information purposes only. Consult with a qualified professional when you have detailed questions regarding any topic in this publication.

Commercial Insurance Property & Casualty | Life & Disability Income | Workers Compensation | Business Succession and Estate Planning | Bonding  
Federated Mutual Insurance Company and its subsidiaries\*\* | federatedinsurance.com

23.01 EA 12/22 \*View A.M. Best Rating Guide information at www.aambest.com. \*\*Not licensed in all states. © 2022 Federated Mutual Insurance Company