

A SUCCESSFUL 2022 EDUCATION SUMMIT!

ATTENDANCE WAS FABULOUS at last month's RMGA Education Summit, with over 50 contractor members and 20 building inspectors in attendance, who got to know each other better by playing a bingo-style networking challenge at the break and lunch. Over \$1000 in prizes were awarded to attendees either in the networking challenge or at the final raffle!

Robert Spendlove with Zions Bank kicked off the Summit with an Economic Outlook that was not rosy. Most attendees think we are already in a recession or heading into one. From there the meeting focused on Duct Design and airflow (**Brent Ursenbach**), and how to fix duct system leaks that exacerbate problems in poorly designed

systems, shared by **Mitch Richardson** with **Building Science West**.

We also honored **David Clayton** (Hercules Industries) with the RMGA Distinguished Service award for his 56 years in the industry and over 30 years serving on the RMGA board of directors.

Four associate members:

Federated Insurance (Premier sponsor), **Johnstone Supply**, **Resource Innovations**, and **Evergreen Consulting** (Silver sponsors) gave brief descriptions of services they offer RMGA members.

Join the 2023 Education Summit Planning Committee by emailing John@utrmga.com! ■



Jamie Schumacher
jamie@gunthers.com
801-756-9683 ext 230



MESSAGE FROM OUR PRESIDENT

JAMIE SCHUMACHER

Dear RMGA Members & Friends,

For those of you who were able to attend this year's Education Summit, I want to personally express my appreciation for your willingness to devote your time to improving our industry. This year we had some great instruction on some of the problems we have been discussing as a board, most specifically "ductwork installations".

With the combined efforts of great contractors showing how systems are supposed to be designed and installed and building officials understanding the importance of both design and installation I believe we have made strides into improving not only the projects we work on but projects throughout the state.

For those of you who weren't able to attend, please make efforts to attend trainings on duct design and installation, RMGA offers specific trainings for Manuals J, D, & S.

Best,

Register as a Certified Propane System Installer

Working with Rocky Mountain Propane Association and Utah's State Fire Marshal, RMGA plans to include propane education in our future Certification Classes.

State law exempts RMGA certified technicians from having to take a propane exam, but technicians and companies that work on propane systems will want to get listed on the State website for certified propane installers.

Get registered at <https://firemarshal.utah.gov/liquified-petroleum-gas/>



RMGA BOARD BRIEFING SEP & OCT 2022

The RMGA Exam Review Committee met with the State Fire Marshall and has decided to add several propane related questions to the Certification Exam. The committee plans to keep the exam's total questions to 100, so several deration, orifice sizing and B-vent questions will be eliminated. A revised study guide, expected in January 2023, will also include propane related information.

The RMGA 50-question Pre-test has been modified so all questions are multiple choice, in keeping with the format of the official test. Both the English and Spanish language versions of the Pre-test will be reproduced in the Canvas format, so it looks and feels like what technician's face when they take the RMGA Certification Exam.

A brief discussion about a truck sticker advertising campaign focused on the limited space on vehicles and that any campaign should focus on RMGA and not a specific company. In November, the board will review a couple slogans and sticker designs before proceeding.

As a follow up to the Problem Home study, UHBA provided RMGA with contact information for a homeowner in Eagle Mountain, who is willing to have the HVAC system in their home tested.

Our next board meeting will be held on Zoom on Wednesday, November 9th at 11:00 AM. Everyone is invited to attend; please contact john@utrmga.com. ■

RMGA GAS CERTIFICATION CLASSES

CALL 801.521.8340
OR EMAIL
RMGAUTAH@GMAIL.COM
TO REGISTER

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

NOV IN-PERSON

(And on Zoom)

Salt Lake City

Thursday, November 10
Friday, November 11 &
Saturday, November 12
8 a.m. - 5 p.m.

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

JAN 2023 IN-PERSON

(And on Zoom)

Salt Lake City

Thursday, January 19
Friday, January 20 &
Saturday, January 21
8 a.m. - 5 p.m.

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

MAR 2023 IN-PERSON

(And on Zoom)

Salt Lake City

Thursday, March 16
Friday, March 17 &
Saturday, March 18
8 a.m. - 5 p.m.

Location TBD

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 have been provided by the Division of Occupational & Professional Licensing from the 1% surcharge funds on all building permits.

Spanish Language Certification Exam in the Works

The RMGA Board recently voted to develop a Spanish language version of the RMGA Certification Exam and Certification Study Guide.

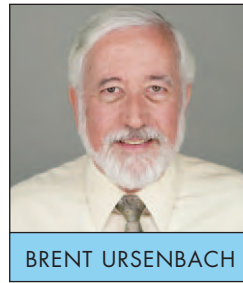
After the Exam Review Committee updates the current English version of the Exam, a Spanish translation will be developed along with a new study guide. The International Fuel Code is already in Spanish.

Our search is on for a Spanish-speaking Certification Instructor to teach our class in Spanish.



MECHANICAL CODE DISCUSSION

Indoor Pools and Spas — Ventilation Systems



BRENT URSEBACH

**HVAC EDUCATOR/
EXPERT WITNESS**

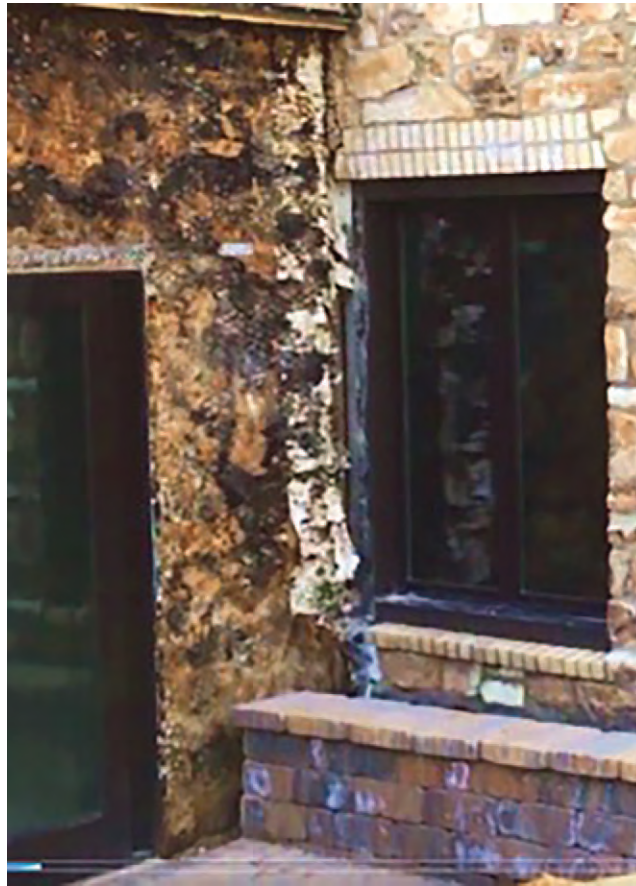
bursenbach@gmail.com
801-381-1449

GREETINGS! IT WAS WONDERFUL seeing many of you at the 2022 RMGA Education Summit this past Wednesday. I appreciate the opportunity to serve on the Board and within the association with so many dear friends.

The day following the Summit, I recently received a disturbing phone call from a building inspector, performing a final inspection on a large custom home with an indoor attached swimming pool. He shared how at plan review; the builder requested a deferred submittal as the mechanical design for the pool room was not complete. Those with experience working in a building department know a deferred submittal is rarely submitted unless later in the building process, there is a threat of a stop work on the project. In this case, the deferred submittal did not happen, the pool room is finished, with several mini-split heat

pumps installed, but without mechanical ventilation. Why do I find this disturbing? Because I've investigated several cases where total structural rebuilding of pool

rooms was required due to water damage. Notice the black mold and OSB failure due to the excessive inside the pool area on the left side of the photo. The condensation due to high humidity and poor insulation practices saturated the OSB, resulting in large sections of stone literally falling off the wall.



As indoor pools are infrequently installed in homes, inspectors, general and HVAC contractors typically have no idea what to do or understand the serious issues which will occur. Additionally, the IRC

does not address pool ventilation in the mechanical chapters.

Where do we go when the code does not appear to address a condition such as this? Referring to the scope of the mechanical chapters in the IRC:

M1301.1 Scope. *The provisions of this chapter shall*

☛ (Continues top of next page)

govern the installation of mechanical systems not specifically covered in other chapters applicable to mechanical systems. Installations of mechanical appliances, equipment and systems not addressed by this code shall comply with the applicable provisions of the International Mechanical Code and the International Fuel Gas Code.

According to IMC Table 403.3.1.1, swimming pools and surrounding deck areas require 0.48 CFM of outdoor airflow per square foot of area in the *breathing zone*. A *breathing zone* calculation will often require an adjustment to increase the ventilation air based on the supply air and return/exhaust air terminal locations. Confusing? Simply put, the ventilation systems work best where airflow sweeps through the occupiable space, reaching all occupants and flushing out contaminants. Please see *IMC 403.3.1.1.1.2 - Zone air distribution effectiveness* for details on these adjustments.

Let's consider a 1000 square foot pool room with an 80% air distribution effectiveness:

$1000 \text{ ft}^2 \times 0.48 \div 0.80 = 600 \text{ CFM}$ of outside ventilation

Please consider the following:

1. The code basically requires an exhaust and makeup air system, with no recirculation of air into other areas of the home, for the purposes of controlling moisture and chemical fumes (where chlorine or similar water treatments are used). In our climate, replacing exhausted air with dry outside air works well.
2. There is an exception allowing a reduced volume of ventilation air if an engineered dehumidification system is used. In humid climates, a refrigerated dehumidification system is mandatory.
3. With any system, the pressure inside an attached

pool room must be maintained at a slightly negative pressure with respect to the home. If 600 CFM of outside ventilation air is supplied to the pool room without a slightly larger exhaust rate, creating a negative pressure in the pool room, moisture will move into the home.

4. In our climate, the ventilation air obviously must be tempered, as 10- or 20-degree makeup/ventilation air introduced into a pool space will not be acceptable.
5. As makeup air systems and dehumidification systems consume a significant quantity of energy, the energy code generally requires the exhaust/makeup air system use heat recovery ventilation in indoor pool applications. Several manufacturers produce HRVs, specifically for pool rooms.
6. The design professional and builder must carefully consider building and insulation strategies, typically including the use of closed cell foam products, ensuring the wall and roof cavities remain above dewpoint.

My experience with pool rooms in my years in HVAC included installation of two exhaust/makeup air systems, 3 or 4 large capacity dehumidification systems, and several dozen HRV systems. In my experience, the HRVs far outperform the other systems in humidity controls and operated at one-tenth the operating expense. I suggest you study and consider HRV in any dehumidification application. A word of caution; if you lack experience and knowledge with these applications, I strongly recommend involving an engineer experienced in these systems.

Please remember your questions and comments on this and other subjects are welcome. — Brent ■



JOEL ROTHMANN

Meet and Get to Know: JOEL ROTHMANN

Q. Tell us about your company. . .

A. As a mutual

insurance company, we believe At Federal Insurance that our value is measured by the success of our clients.

Q. What is your position within the company?

A. I am an Account Executive.

Q. If you weren't with Federated Insurance, what would you like to be?

A. I would like to be an NBA Basketball Player.

Q. What are your favorite aspects of your job?

A. Working with our Association partners and helping to train and develop our new marketing professionals.

Q. If you could travel anywhere in the world, where would you go?

A. Japan or Singapore.

Q. What is your favorite hobby? When did you last do it?

A. Playing ping-pong with my family. (I played) just last night.

Q. Tell us about your hidden talent.

A. (I have) no hidden talents.

Q. Do you have a favorite movie?

A. Catch Me if You Can starring Leonardo DiCaprio.

Q. People would be surprised to know . . .

A. I'm a Dual Citizen. I'm a citizen of both the United States and Germany. ■

Joel Rothmann is with Federated Insurance. He can be reached at Jtrothmann@fedins.com.



JOEL ROTHMANN FAMILY

WELCOME OUR NEW RMGA MEMBERS

AT YOUR SERVICE PROS

Jarrett Sorenson
1325 S 500 E #302
American Fork, UT 84003
801-367-8646
office@atyourservicepros.us

EXPRESS HOME SERVICES

Jeremy Anderson
2124 Orchard Dr
Bountiful, Utah 84010
385-300-2204
www.callexpress.com

SOS HEATING AND COOLING

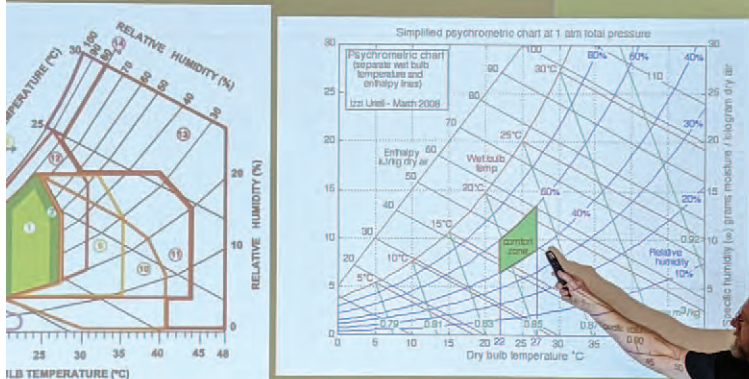
Bryson Ninow
346 E 3300 S
SLC, Utah 84115
801-449-1771
www.sosairutah.com

TAYLOR HVAC INC

Benjamin Taylor
PO Box 1585
Draper, Utah 84020
801-759-0933
www.taylorhvac.com



effective as you'd think. Most humans.... 71-80 degrees RH 40-60%
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WEDNESDAY, OCTOBER 12

RMGA

EDUCATION

SUMMIT

2022

DOWNTOWN SLC, UTAH





PIPELINE

FUEL FOR YOUR BUSINESS

RETURN SERVICE REQUESTED

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

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