



CURRENT BOG

Interim President: Nathan Roelofs Ph: 901.283.2892

Interim President Elect: Lionel Davis II Ph: 901.713.1894

Technology Transfer/Programs: Max Graham Ph: 901.653.9955

Membership Promotion:Amanda KrausCasper BriggsPh: 901.495.4599Ph: 901.765.0013

Treasurer: Tom Bird Ph: 901.547.2500

Research/Promotion:Robert SmithLionel Davis IIPh: 225.620.5088Ph: 901.713.1894

Secretary: Stephanie Cianciola Ph: 901.345.6100

Refrigeration: Ashley Shipley Ph: 901.337.6831

Honors & Awards:Abby StutzJack GriffithPh: 901.726.0810Ph: 901.379.0500

Historian & Memorials: Evans Jack Ph: 901.324.6610

Digital Communications: Patrick Silva Ph: 901.482.1382

Young Engineer Activities Chair: Trey Deschamp Ph: 901-229-8241

Student Activities: Mariel Meegan Ph: 901.384.8400

K12/STEM: Stephanie Cianciola Ph: 901.345.6100

Government Affairs Chair: Mike Bilderbeck Ph: 901.734.5502

Nominating Committee: Casper Briggs Ph: 901.765.0013

Mariel Meegan Ph: 901.384.8400

Lionel Davis Ph: 901.713.1894

Nathan Roelofs Ph: 901.283.2892

Max Graham Ph: 901.653.9955

Community Outreach: Lionel Davis II Ph: 901.713.1894

Meeting Location:

The Learning Center Lichterman Nature Center 5992 Quince (between Lynnfield and Ridgeway, east of I-240)

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2023-2024 MEMPHIS ASHRAE CALENDAR AND ANNOUNCEMENTS

Chapter Meetings/Events Tuesday, May 14th – Q/A With Shelby County Code Officials







2024 Region 7 CRC

Memphis, TN

July 25-27

Peabody Hotel

Sponsorship Opportunities

Platinum Level—\$20,000 Exclusive Signage at Event and 10 Tickets to the Event (2 Available)

- Thursday Night Welcome Party at the Rock & Soul Museum / Rum Boogie Café
 - Friday Night Event at the National Civil Rights Museum & Central BBQ

Gold Level—\$5,000 Exclusive Signage at Event and 6 Tickets to the Welcome Party or the Friday Night Event (3 Available)

- Friday Lunch at the Peabody
- Saturday Lunch at the Peabody
 - Hospitality Suite

Silver Level—\$1,500 and 4 Tickets to the Welcome Party (3 Available)

Technical Sessions (This opportunity is reserved for Engineering Firms only)

Bronze Level—\$1,000 Recognition in the Program and 4 Tickets to the Welcome Party

All Sponsors will be recognized in Email publications to all ASHRAE Members in the seven state Region 7 area covering Tennessee, Mississippi, Alabama, Kentucky, West Virginia, Louisiana, & NW Florida. All Sponsors will also be recognized in printed programs given to all attendees.

Contact: David George - davidg@etairoshvac.com / 901-828-2995

Ricky Bursi - rbursi@ogcbinc.com / 901-488-9295





2024 Region VII CRC Schedule (Memphis)

(February 6, 2024)

Wednesday – July 24, 2024

Golf Outing Hospitality Suite – 5:00 pm – 11:00 pm

Thursday – July 25, 2024

Registration Desk – 7:00 am – 6:00 pm Hospitality Suite – 7:00 am – 11:30 pm (closed during Welcome Party) Business Session #1 Lunch – 12:00 pm (*Boxed lunches for Society Rep, Regional Officers, and Chapter Delegates & Alternates*) Business Session #1 – 12:30 pm – 4:00 pm Caucus #1 – 4:15 pm – 5:15 pm Welcome Party: (walk to Rock-N-Soul Museum, then Rum Boogie) – 6:30 pm – 11:30 pm

Friday – July 26, 2024 Registration Desk – 7:00 am – 6:00 pm Hospitality Suite – 7:00 am – 11:30 pm (closed during President's Lunch and Dinner Event) Business Session #2 – 8:00 am – 11:30 pm "Platinum/Gold/Bronze Sponsor Showcase" – 10:30am – 5:00pm President's Lunch – 11:45 am – 1:15 pm <u>Tech Sessions</u> – 1:30 pm – 4:30 pm Companion Activities– 8:30 am – 2:30 PM Caucus #2 – 4:45 pm – 5:45 pm Dinner Event: National Civil Rights Museum and Central BBQ – 6:15 pm – 10 pm YEA Event – 10:00 pm – Midnight

Saturday – July 27, 2024

Registration Desk – 7:00 am – 11:00 am Hospitality Suite – 7:00 am – 3:00 pm Chapter Operations/Treasurer Workshop - 8:00 am – 10:00 am GAC Workshop – 8:00 am – 11:00 am RP Workshop – 8:00 am – 10:00 am MP/YEA Workshop – 8:00 am – 10:00 am CTTC Workshop – 7:30 am – 10:00 am ECC Workshop – 10:00 am – 11:00 am Historian Workshop – 10:00 am – 11:00 am Student Activities Workshop – 8:00 am – 10:00 am Awards Luncheon – 11:30 am – 1:00 pm Business Session #3 - 1:30 pm – 3:30 pm CRC Adjourns – 3:30 pm

CRC Recap Meeting – 4:00 pm – 5:00 pm Optional Dinner outing – 6:00 pm – 9:00 pm





2024 Region VII CRC Subcommittees

(January 12, 2024)

- 1. Steering committee Mike Bilderbeck, Casper Briggs, Jeff Gatlin, Evans Jack, Patrick Silva, Ashley Shipley
- 2. Hotel Mike Bilderbeck and Casper Briggs
- 3. Financial Max Graham

a. Handle the checkbook

4. Transportation – Robert Smith (chair)

- a. Thursday night's activities are 1/3 mile from the Peabody door, so most folks will walk. Set up a carpool for those who don't want to walk
- b. getting us to and from Friday night's party
- c. getting ASHRAE officers and staff person to hotel from airport (Mike, Jeff, and Casper will assist)

5. Attendance – Stephanie Cianciola (chair)

a. Responsible to distribute/collect attendance sheets at every session/meeting. Prepare PDH certificates for the tech sessions

6. Hospitality room – Ryan Hertter (chair)

- a. Wednesday afternoon until 3 PM Saturday
- b. See schedule for closures

7. Tech sessions - Lionel Davis (chair)

- a. Gotta be at the hotel, no available time for travel
- b. Three 1-hour sessions
- Money raising David George and Ricky Bursi (co-chairs)

 Exhibitor tables and streetside trailers

9. Registration desk – Mariel Megan (chair)

- a. Wednesday afternoon until noon Saturday, except
- b. at least 2 at all times
- c. would be nice to have at least 1 floater during peak times

10. Swag bags, women - Libby Bilderbeck (chair)

11. Swag bags, men - Stephanie Cianciola (chair)

12. A/V - Patrick Silva (chair)

- a. day-to-day liaison
- b. Mike and Casper will negotiate pricing
- 13. Companion events London Davis (chair)
 - a. During the day Friday, and Saturday morning
- **14. Banners/signs Mariel Megan (chair)** a. Promoting contributors
- 15. Golf Wednesday Ricky Bursi and David George (co-chairs)
 - a. 5-10 folks will want to play

16. PR - Lionel Davis (chair)

- a. Promote Society officer to TV/newspaper
- b. Get a mayor to attend Thursday afternoon or Friday morning business session
- 17. Meeting secretary to take minutes Mariel/Stephanie will find a student
 - a. Paid position, college student?





President's Corner:

This is our last newsletter heading into the summer and subsequently this President's Corner will be the last of my interim presidency. I want to take a moment to thank each of you, the members for attending and participating in multiple ASHRAE activities. I also want to thank the Board and Committee members, as they keep the Chapter operations running smoothly and put a good amount of effort into making all the meetings and events happen. We would not be as great of a Chapter without each of your support and time.

Last month we heard from Christian Taber on ASHRAE Standard 55. It was interesting to learn about how different airspeeds and environments effect thermal comfort for the occupants.

Since our last newsletter, our Student Activities Committee held an event, Engineering Palooza, at Campus School. It was a great success and will lead to future opportunities to serve within the community. Thank you to all who volunteered to make this a success!

The 4th Annual JRA Golf Tournament was a success and we had a great turnout with over 28 teams. Thankful for our Platinum Sponsor, Etairos, other sponsors, volunteers, and ASHRAE membership who made this the grand occasion it usually is.

The Nominating Committee (Lionel, Casper, Mariel, Max, Stephanie, and I) met and outlined the BOG for next year. If you're interested in serving in any capacity, please do not hesitate to reach out.

Our final Chapter meeting for this chapter year is going to be a joint meeting with ASPE and will have a Q&A session with three highly knowledgeable speakers, Tim Montgomery(Shelby County Chief Mechanical Field Inspector), John Bowman (Shelby County Chief Plumbing Inspector), and Jim Prillaman (PE and Shelby County Code Advisory Board). Please RSVP if you're planning to attend the last chapter meeting until September 2024! Look forward to seeing you there!

That will be our last chapter meeting, but the Memphis Chapter will be hosting CRC this summer! It is going to be a great few days of learning, networking, and enjoying ourselves with other ASHRAE members in the Region.

Sincerely,

Nate Roelofs Interim President, ASHRAE Memphis 2024





Committee Updates:

Student Activities

Volunteer Opportunity!- The University of Mississippi is holding an engineering camp over the summer for middle school students (July 14-19) and high school students (June 24-28). For more information, see the links below or contact Theresa Holland <u>theresa.holland@dcsms.org</u>.

Middle School Engineering Camp High School Engineering Camp

Chapter Event Updates:

Golf Tournament

Congratulations to team Upchurch Services for taking 1st place for the second year in a row! This year's team members were Blake Upchurch, Barry Howard, Hunter Raines, and Trent Scott.

The BOG would also like to thank all of our sponsors, tourney teams, and volunteers for another successful golf tournament this year! Without everyone's support, hard work, and generous donations to our Chapter, maintaining our chapter and putting on these wonderful events wouldn't be possible. Thank you all, and we hope to see you all there again next year!





Chapter Meeting Topic: "Q/A With Shelby County Code Officials"

We're teaming up with ASPE for lunch and a Q/A session with:

- Tim Montgomery Shelby County chief mechanical field inspector
- John Bowman Shelby County chief plumbing inspector
- Jim Prillaman, PE mechanical engineer on Shelby County Code Advisory Board

Mike Bilderbeck will moderate the session.





Did Ya Know -- You Gotta Read the Darn Code Carefully!!!!!!

We recently had 2 different issues with the 2021 Code. Both taught us we have to read the code carefully:

Caution about Residential Split Efficiency Requirements

Table C403.3.2 of the 2021 IECC lists the minimum efficiency requirements for HVAC equipment. If you are laying out a job around small split units (< 5 tons) and go look at Table C403.3.2, 13.4 SEER2 is the value shown in the table. But watch out! 13.4 is incorrect for single phase equipment! If you look closer, the table excludes US single phase equipment (but doesn't say that very clearly!).

TABLE C403.3.2(1) ELECTRICALLY OPERATED UNITARY AIR CONDITIONERS AND CONDENSING UNITS—MINIMUM EFFICIENCY REQUIREMENTS^{C, d}

EQUIPMENT	SIZE CATEGORY	HEADING SECTION TYPE	SUBCATEGORY OR RATING CONDITION	MINIMUM	TEST
				EFFICIENCY	PROCEDURE ^a
Air conditioners, air cooled	< 65,000 Btu/h ^b	All	Split system, three phase and applications outside US single phase ^b	13.0 SEER	
				before 1/1/2023	AHRI 210/240— 2017
				13.4 SEER2	
				after 1/1/2023	before 1/1/2023
			Single-package, three phase and applications outside US single phase ^b	14.0 SEER	AHRI 210/240-
				before 1/1/2023	2023
				13.4 SEER2	after 1/1/2023
				after 1/1/2023	

Superscript note 'b' for this Table states:

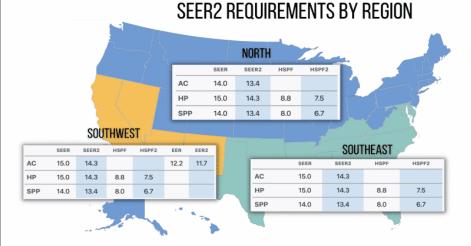
Singe-phase, US air-cooled air conditioners less than 65,000 Btu/h are regulated as consumer products by the US Department of Energy Code of Federal Regulations DOE 10 CFR 430. SEER and <u>SEER2 values for single-phase products are set by the US Department of Energy</u>.





So, for this equipment, the IECC only pertains to 3-phase equipment, or equipment outside the U.S.

Here is an infographic showing the DOE has listed the minimum SEER2 requirements for single-phase units by region



Single phase AC equipment needs a minimum <u>14.3 SEER2</u> rating here in the southeast region (compared to 13.4 for 3-phase units). So watch out! Use the DOE requirements for residential splits, not the IECC!

Many designers and code officials rely on COMCheck software to confirm compliance with energy codes. Also watch out, COMCheck did not detect this difference.

Code Vs. Commentary

Most books in the ICC family of building codes are available:

- Showing the written Code as adopted
- With the written Code (and each Code section is followed with Commentary telling the reader what the previous Code words mean)

I've always been told the Code is the Code and the Commentary is NOT the Code....the Commentary is just an explanation. The Commentary is identified by the "Diamond symbol".

Except when it's not.

Section 910 of the International Fire Code deals with smoke and heat venting from storage and factory occupancies. The idea is to get enough smoke out so the firefighters can see to fight the fire.





Here's a snip of page 9-130 of the 2021 IFC. Section 910.2.1 says that F-1 and S-1 occupancies with more than 50,000 SF of undivided area shall have smoke and heat vents:

910.2.1 Group F-1 or S-1. Smoke and heat vents installed in accordance with Section 910.3 or a mechanical smoke removal system installed in accordance with Section 910.4 shall be installed in buildings and portions thereof used as a Group F-1 or S-1 occumancy having more than 50,000 square feet (4645, m²) of undivided area. In occupied portions of a building equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1, where the upper surface of the story is not a roof assembly, a mechanical smoke removal system in accordance with Section 910.4 shall be installed. Exception: Group S-1 aircraft repair hangars. Large-area buildings with moderate to heavy fire loads present special challenges to the fire department in disposing of the smoke generated in a fire. In order to provide the fire department with the ability to rapidly COMMENTARY and efficiently dispose of smoke in large-area Group F-1 and S-1 buildings exceeding 50,000 square feet (4645 m2) in undivided area without exposing personnel to the dangers assoclated with cutting ventilation holes in the roof, smoke and heat vents or a smoke removal system must be provided. The code is not clear on what is meant by the term individed area." However, the intent is to provide the ability to manage the smoke in large spaces. Draft curtains or potentially any physical separation (regardless of rating) would provide such division. Draft curtains are typically constructed of sheet metal, lath and plaster, gypsum board or other materials that resist the passage of smoke. Typically, draft curtains are at least 6 feet deep (1829 mm) from the ceiling. In keeping with the concern for managing smoke, the joints and connections should be smoke tight.

But look at the Commentary. It says the code doesn't define "undivided area," and that:

"draft curtains or potentially any physical separation...would provide such division."

So, in this case, the commentary seems to include a valuable exception to the code.

Consider buying the Commentary version of the codes.