

TC 2.3 - Gaseous Contaminants/Removal Equipment
Chapter 47 – Air Cleaners for Gaseous Contaminants in HVAC Applications- 2023
Handbook Sub-Committee DRAFT Minutes
Virtual meeting Monday, 6/16/22 1000 – 1100 EDT
Virtual address on ASHRAE

1. Call to order

a. Meeting called to order 10:03 AM

In this and all other ASHRAE meetings:

- We will act with honesty, fairness, courtesy, competence, inclusiveness and respect for others.
- This will exemplify ASHRAE's core values of excellence, commitment, integrity, collaboration, volunteerism and diversity.
- We shall avoid all real or perceived conflicts of interests.

2. Determine who will be taker-of-minutes and recorder-of-participants.

a. Tori will take notes

EVERYBODY SIGN IN TO CHAT WITH NAME AND EMAIL

3. Chapter 47 is due into ASHRAE by July 2022. The TC needs to vote on chapter in June.

4. Comments on Jan. minutes?

a. No comments

5. Most of the comments on the chapter were received and incorporated. The corrected version of 47 was sent out with agenda. Some of the final reviews for the whole chapter were received.

6. The equations (in blue background) are to have a final check for editing.

7. A spot review of Table 3 needs to be done - the rest of Tables and Figures have been finalized.

8. Ozone comments:

a. Comments from Mike Sherber on ozone and corona discharge

- i. Add that most are 2998 UL certified
- ii. Current language reads anti ionizer, suggested changes intend to make language more inclusive
- iii. Edits from Mike Sherber are accepted

9. Other Comments:

a. Effect of media size – “pleatable” media

- i. Found under Section 6 EQUIPMENT
- ii. Keep the K version edits; includes the addition of 12” depth
- iii. Deleted the “extruded carbon monolith honeycombs” section; repeated the above information

b. Pressure drop versus resistance to air flow

- i. Do not have time to change for this edition of Chapter 47; should be addressed as a change for the 2027 edition of the chapter
 - 1. Add/move resistance to air flow as a definition and redefine pressure drop
 - 2. Replace “pressure drop” wherever

- c. Typo in heading of Section 2; corrected
- d. Repeated paragraph in Section 3 “Problem Assessment” “to address specific...”; deleted first occurrence.
- e. Section 5, yellow highlighted section
 - 1. Residence time language that did not belong in definitions moved into body of the text and split in two.
 - 2. Already addressed and updated
- f. Chemisorption needs to be started as a new paragraph; changed format
- g. Section 7, reference to performance test media test not filter test; “145.1” in text changed to “145.2”
- h. Under “Full-Scale Laboratory Tests” heading, ISO 10121 updated to 10121-2
- i. Under “Small-Scale Dynamic Media Testing” heading; added sentence “ISO 10121-1 test that covers flat sheet media in addition to granular media.” to body of text
 - 1. *ACTION ITEM: Add ISO 10121-1 to references*
- j. *ACTION ITEM: Add Guideline 47 to references*
- k. CADR, removed and reworked sentence to read logically
- l. Section 7 updated bulleted “concentration”
 - i. Added sentence “It should be noted that there is an upper limit to the adsorption in both cases.”
- m. Added that equations 2-7 are in Section 2

10. A vote is needed by the subcommittee on Chapter 47.

- a. A vote will be made during the TC 2.3 main meeting in Toronto

11. The following statement is to be given to the TC for its vote on the chapter:

The vote by the TC needs to be taken to approve what the Handbook Subcommittee has approved and submitted for the chapter. The information is needed for the submission form going to ASHRAE: number of votes in favor, number of votes against, any abstentions, and the total committee membership.

The motion should read as follows: “A motion is made to accept Chapter 47 in the HVAC Applications Volume as completed and voted for acceptance by the Handbook Subcommittee, with some minor edits.” The TC is voting on the Handbook Subcommittee’s recommendation.

12. ACTION ITEM: Send any recommended changes for the 2027 edition of Chapter 47 to Gemma, Gemma will email Tori proposed future changes to be added to the minutes

- a. Proposed future changes:
 - i. Resistance to Airflow preferred term over Pressure Drop
 - 1. Move and update the definitions
 - 2. Replace pressure drop with resistance to airflow wherever it appears in the body of the text
 - ii. Section 3—Problem assessment: add reference to the Standard 62.1 list of design compounds to be used with the IAQP method
 - iii. Section 4/5 – Locate and put in context the text removed from the definition of residence time.

13. Adjourn

Adjourned at 10:54 AM EDT