Welcome to the October ASHRAE Meeting!

Today's Agenda

- Lunch begins – 11:30AM
- Meeting – 12:00PM
- 2023-2024 Sponsors
- Chapter Sponsorship Opportunities
- Membership and Guest Introductions
- Past Event Summary
- Upcoming Events
- Main Speaker Introduction

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Thank You 2023-2024 Platinum Sponsors

Carrier

HOFFMAN & HOFFMAN, INC.

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Thank You 2023-2024 Gold Sponsors!

Reach out to our RP Chairs Paul Shelor & Kyler Asia if you are interested in chapter sponsorship.

Paul.Shelor@gmail.com Kyler.Asia@carrier.com

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Thank You 2023-2024 Platinum/Gold Sponsors!

Insert Company Name here

This could be you!

Insert Company name here

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Why is Research Promotion so important?

The RP Campaign benefits the funding of numerous ASHRAE programs including:

- ASHRAE Research
- ASHRAE Scholarships for undergrads
- ASHRAE Learning Institute development of new courses
- Graduate Research Projects
- Young Engineers in ASHRAE Leadership Training

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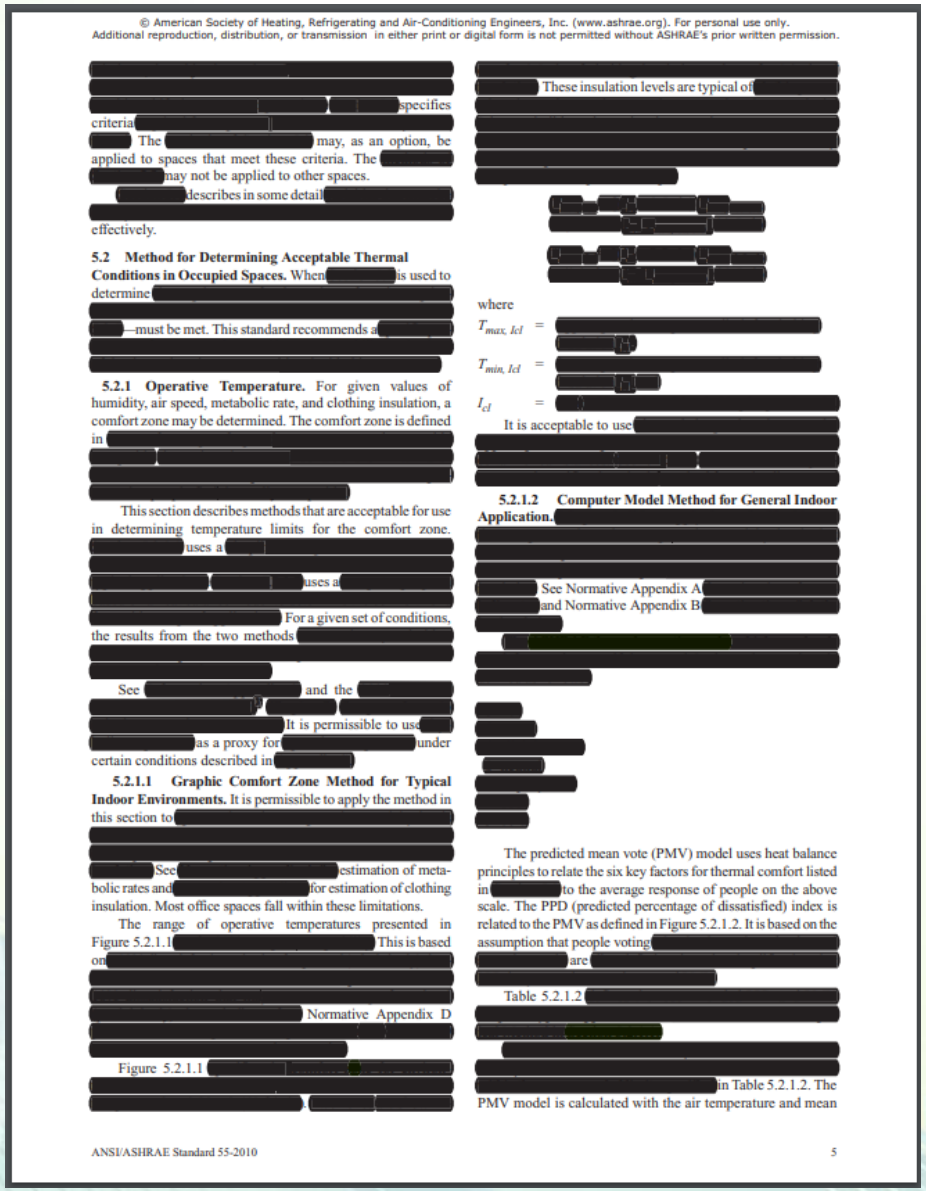
Standard 55 Without Your Support



[redacted] specifies criteria [redacted] The [redacted] may, as an option, be applied to spaces that meet these criteria. The [redacted] may not be applied to other spaces.

[redacted] describes in some detail [redacted] effectively.

5.2 Method for Determining Acceptable Thermal Conditions in Occupied Spaces. When [redacted] is used to determine [redacted] —must be met. This standard recommends a [redacted]

5.2.1 Operative Temperature. For given values of humidity, air speed, metabolic rate, and clothing insulation, a comfort zone may be determined. The comfort zone is defined in [redacted]

This section describes methods that are acceptable for use in determining temperature limits for the comfort zone. [redacted] uses a [redacted] uses a [redacted] For a given set of conditions, the results from the two methods [redacted]

See [redacted] and the [redacted] It is permissible to use [redacted] as a proxy for [redacted] under certain conditions described in [redacted]

5.2.1.1 Graphic Comfort Zone Method for Typical Indoor Environments. It is permissible to apply the method in this section to [redacted] See [redacted] estimation of metabolic rates and [redacted] for estimation of clothing insulation. Most office spaces fall within these limitations.

The range of operative temperatures presented in Figure 5.2.1.1 [redacted] This is based on [redacted] Normative Appendix D [redacted]

Figure 5.2.1.1 [redacted]

[redacted] These insulation levels are typical of [redacted]

[redacted]

where

$T_{max,\ Icl}$ = [redacted]

$T_{min,\ Icl}$ = [redacted]

I_{cl} = [redacted]

It is acceptable to use [redacted]

5.2.1.2 Computer Model Method for General Indoor Application. [redacted] See Normative Appendix A [redacted] and Normative Appendix B [redacted]

[redacted]

The predicted mean vote (PMV) model uses heat balance principles to relate the six key factors for thermal comfort listed in [redacted] to the average response of people on the above scale. The PPD (predicted percentage of dissatisfied) index is related to the PMV as defined in Figure 5.2.1.2. It is based on the assumption that people voting [redacted] are [redacted]

Table 5.2.1.2 [redacted] in Table 5.2.1.2. The PMV model is calculated with the air temperature and mean

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New Members or New Guests?

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Have a question?
Reach out to us!

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Past Event Summary:

- September Meeting: 78 attendees, wow!
- YEA Happy Hour: 15-20 Attendees
- October Chapter Meeting = 78 attendees (not final)

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Upcoming Events:

Event Name	Date	Time	Location
2nd Chapter Meeting: "High Performance Building Design – What the Future Holds for the Direction of Our Industry" – Tom Lawrence	10/5/2023	11:30AM-1PM	Lenny Boy Brewing
UNC Charlotte Fall Picnic	10/6/2023	10AM-2PM	UNC Charlotte
3rd Chapter Meeting: Rob Dodson	11/2/2023	11:30AM-1PM	Lenny Boy Brewing
Fall Annual Golf Tournament for RP w/ AEE	11/8/2023	10AM-6PM	Verdict Ridge
Sustainability Event – Chapter-wide	November	?	Trees Charlotte
Tech Hour Virtual Meeting – PDHs Available	12/7/2023	11:45AM-1PM	Virtual Meeting
Christmas Auction and 2022-2023 Donor Recognition Event	December ?	6PM-9PM	?

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High Performance Building Design: What the Future holds for the Direction of the Industry

Dr. Lawrence is the Mechanical Engineering program lead with the University of Georgia, and has nearly 40 years of professional experience. He spent the first 18 years in industry and after going back for his PhD at Purdue he has been at UGA since January 2004. He is the past chair of ASHRAE Technical Committee 2.8 and is a member of the committee that wrote and maintains ASHRAE Standard 189.1 for High Performance Green Buildings. As an ASHRAE Distinguished Lecturer, he gives seminars related to high-performance buildings at venues around the world. Dr. Lawrence was named an ASHRAE Fellow in 2017 and was a Director-at-Large on the Board of Directors for ASHRAE from 2016-2019.

Dr. Lawrence has a B.S. with Highest Distinction in Environmental Science from Purdue University (1978), a M.S. degree in Mechanical Engineering from Oregon State University (1982) and a second M.S. degree in Engineering Management from Washington University in 1989. He received a Ph.D. in Mechanical Engineering from Purdue University in the spring of 2004.

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