



## MANUFACTURED HOUSING CONSENSUS COMMITTEE

1.888.602.4663 | [MHCC@HUD.GOV](mailto:MHCC@HUD.GOV) | [MHCC@HOMEINNOVATION.COM](mailto:MHCC@HOMEINNOVATION.COM)

# DRAFT MINUTES MHCC TECHNICAL SYSTEMS SUBCOMMITTEE MEETING

December 8, 2020

# DRAFT MINUTES

## MANUFACTURED HOUSING CONSENSUS COMMITTEE (MHCC) TECHNICAL SYSTEMS SUBCOMMITTEE MEETING

December 8, 2020

### Call to Order

The Manufactured Housing Consensus Committee (MHCC) Technical System Subcommittee meeting was held on Tuesday, December 8, 2020 via Zoom teleconference. Subcommittee Chair, Michael Wade, called the meeting to order at 10:05 a.m. Kevin Kauffman, Administering Organization (AO) Home Innovation Research Labs, called the roll and announced that a quorum was present. See [Appendix A](#) for a list of meeting participants.

### Introduction and Opening Remarks

Teresa Payne, Administrator of the Office of Manufactured Housing Programs, and Designated Federal Officer (DFO) welcomed the MHCC members and meeting participants to the teleconference.

### Approval of the Minutes

**Motion to approve the October 30, 2019 MHCC Technical Systems Subcommittee meeting minutes.**

Maker: Michael Moglia

Second: Robert Parks

The motion carried unanimously.

### Public Comments Period

Manufactured Housing Institute (MHI) and Manufactured Housing Association for Regulatory Reform (MHARR) submitted written public comments. See [Appendix B](#).

The public comments during this period focused on the Log Items assigned to the Subcommittee.

Mark Weiss, MHARR, thanked HUD and the Subcommittee for the opportunity to provide feedback. For Log 211 and Log 216, MHARR wants the Subcommittee to disapprove these two items due to lack of cost benefit analysis.

Leslie Gooch, MHI, thanked HUD and the Subcommittee for the opportunity to provide feedback for this teleconference and through written comments. Ms. Gooch explained MHI's position on the two Log Items that were submitted by MHI and how the industry will benefit from those changes. Ms. Gooch requested the HUD Code to be regularly updated.

### Log Items Assigned to Technical Systems Subcommittee

The Subcommittee worked on the assigned Log Items. The Subcommittee Chair introduced each Log Item and opened the floor for discussion.

**LOG 211: § 3280.715 (a)(4) Airtightness of supply duct systems**

**Subcommittee Motion: Approve as Modified**

Maker: Robert Parks Second: Alan Spencer

The motion carried unanimously via voice vote.

Subcommittee Chair Wade and Robert Parks provided some background on the item. The current language in the standard refers to an outdated method of duct testing. Nowadays manufacturers are using modern duct systems, and the current tests are not appropriate for testing duct leakage. The new language would update this section to more appropriate methodology, which aligns with the International Residential Code (IRC) and the International Energy Conservation Code (IECC). The Subcommittee understood that this change will have a slight cost impact for manufacturers if they did not have the new equipment. However, a lot of the manufacturers are already doing it and the cost can be easily recouped through better performing duct systems. The Standard as written today has a requirement for duct tightness and the proposal is updating the test methodology, not adding additional testing.

**LOG 212: § 3280.709(h) Installation of appliances**

**Subcommittee Motion: Approve as Modified**

Maker: Michael Moglia                      Second: James Husom

The motion carried unanimously via voice vote.

**LOG 216: § 3280.715 (a)(7) Supply system**

**Subcommittee Motion: Approve as Modified**

Maker: James Husom                      Second: Michael Moglia

The motion carried via voice vote with one opposed and one abstention.

Bobby Parks provided background on the item. The manufactured housing industry allows the least insulated duct (R-4) to be placed in the hottest cavity of the building. When doing the Manual J heating and cooling calculations, a duct system that is in the attic is most often the single largest heat gain/loss component of the home. Placing R-4.2 ducts in the attic can increase the heating and cooling capacities to a level great enough that the unit can no longer heat/cool the home. Thus, many manufacturers have already made R-8 a required upgrade when placing the duct system in the attic. Subcommittee Chair Wade noted that his company has moved to R-8 duct across the board. It costs a little bit more, but there is a payback as the manufacturer can sometimes use a smaller air conditioner because of the smaller gain.

**LOG 219: § 3280.703 Minimum standards**

**Subcommittee Motion: Disapprove**

Maker: James Husom                      Second: Alan Spencer

The motion carried unanimously via voice vote.

The proposal clarifies that heat pump water heaters are permitted to be installed in new manufactured homes.

**LOG 222: § 3280.710—Venting, Ventilation, and Combustion Air**

**Subcommittee Motion: Approve**

Maker: Alan Spencer                      Second: James Husom

The motion carried via voice vote with one opposed and one abstention.

The proposal is amending the HUD code's ventilation requirement to be able to install ventless range hoods.

**LOG 223: § 3280.715—Circulating Air Systems**

**Subcommittee Motion: Approve**

Maker: Alan Spencer                      Second: James Husom

The motion carried via voice vote with one abstention.

This proposal adds bathroom and closets as exceptions to the current requirement relating to the return of circulation air from all rooms and living spaces.

## Public Comments Period

Ms. Gooch requested the HUD Code to be regularly updated and to continue pushing the Log Items quickly through the HUD rulemaking process. Mr. Weiss thanked the Subcommittee members for their time and effort.

Subcommittee Chair Wade thanked the MHCC members for their time and participation. MHCC members and DFO Payne thanked Mr. Wade for serving on the MHCC as he will be rolling off the MHCC at the end of the year. DFO Payne explained that the rule changes need to go through all requirements of the Administrative Procedures Act as well as the HUD and other agency clearance processes to get updated therefore taking a long time towards implementation. DFO Payne thanked the MHCC and Subcommittee members for their work so far and HUD is looking forward to the future MHCC meetings.

The MHCC Technical Systems Subcommittee adjourned at 11:50 a.m.

## Appendix A: Subcommittee Attendees

<b>Technical Systems</b>		
<b>3280 Subpart F, G, H, I</b>		
	<b>Name</b>	<b>Attendance</b>
Users	Garold Miller	N
	Catherine Yielding	Y
	Rita Diienzo	Y
Producers	Michael Wade	Y
	Luca Brammer	N
	Alan Spencer	Y
General Interest / Public Official	Michael Moglia	Y
	Robert Parks	Y
	James Husom	Y

**HUD Staff**

Teresa Payne, DFO  
 Jason McJury  
 Barton Shapiro  
 Demetress Stringfield  
 Alan Field  
 Leo Huott  
 Tommy Daison  
 Glorianna Peng

**AO Staff, Home Innovation Research Labs**

Kevin Kauffman  
 Nay Shah  
 Elina Thapa

**MHCC Members**

Manuel Santana  
 Dave Anderson

Mitchel Baker  
 Cameron Tomasbi  
 Joseph Sadler

**Public**

William Sherman  
 Kara Beigay  
 Leslie Gooch  
 Mark Weiss  
 Benjamin Brantley  
 Daniel Humphreys  
 Devin Leary-Hanebrink  
 John Westfall  
 Keith Shadix  
 Mark Campion  
 Wade Heck



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# Appendix B: Written Public Comments

DRAFT



# Manufactured Housing Association for Regulatory Reform

1331 Pennsylvania Avenue, NW • Suite 512 • Washington, DC 20004 • 202-783-4087 • Fax 202-783-4075 • mharrdg@aol.com

December 1, 2020

## VIA FEDERAL EXPRESS AND ELECTRONIC SUBMISSION

Manufactured Housing Consensus Committee  
C/O Home Innovation Research Labs  
Administering Organization  
400 Prince George's Boulevard  
Upper Marlboro, Maryland 20774

Re: Log Items Scheduled for Review -- December 8, 2020  
MHCC Technical Systems Subcommittee Meeting

Dear Members of the MHCC Technical Systems Subcommittee:

The Manufactured Housing Association for Regulatory Reform (MHARR) submits the following comments to the Technical Systems Subcommittee of the Manufactured Housing Consensus Committee (MHCC), regarding the Log Items scheduled for discussion at the Subcommittee's December 8, 2020 meeting, as announced in the Federal Register on November 10, 2020. MHARR is a national trade association representing smaller and medium-sized producers of manufactured housing subject to federal regulation pursuant to the National Manufactured Housing Construction and Safety Standards Act of 1974, as amended by the Manufactured Housing Improvement Act of 2000.

## **I. INTRODUCTION**

The Manufactured Housing Consensus Committee (MHCC) was established by Congress as the centerpiece reform of the Manufactured Housing Improvement Act of 2000. Its function, as is made clear both by its composition and by its express statutory duties and responsibilities, is not merely "technical" in nature. While an analysis of the technical merit of any proposal is certainly *part* of the MHCC's statutory function, its duties and functions extend much further, to a consideration of: (1) whether a proposal serves to advance the statutory objectives of the 2000 reform law (42 U.S.C. 5401); (2) an analysis of the probable effect of the proposed standard, regulation or interpretation on the "cost of the manufactured home to the public" (42 U.S.C. 5304(e)(4)); and (3) whether the benefits of any such proposal outweigh its costs and its likely impact on the "availability of affordable manufactured homes." (42 U.S.C. 5401(b)(2)). MHCC consideration of *any* proposal, therefore, involves not just an analysis of technical merit, but also a balancing of whether a proposal, even if technically sound, would produce negative cost impacts that would override its value in connection with a type of housing that, as a matter of law and

federal policy is – and must remain – inherently affordable for every American and, particularly, lower and moderate-income homebuyers.

Based on this statutory formulation, which is *mandatory* for both the MHCC (including subcommittees) and HUD, MHARR offers the following comments on the Log Items scheduled for review at the December 8, 2020 Regulatory Enforcement Subcommittee meeting.

## II. COMMENTS

### A. Log Item 211 – 24 C.F.R. 3280.715(a)(4) – Airtightness of Supply Duct Systems

This Log Item would repeal and delete the current text of 24 C.F.R. 3280.715(a)(4), which provides a performance-based standard for the airtightness of supply ducts and replace it with new language requiring that supply ducts “demonstrate air leakage to the outside or total air leakage of less than or equal to 8 cfm per 100 ft<sup>2</sup> of conditioned floor area when tested at a difference pressure of 0.1 water (25pa).” The proponent asserts that the current standard/parameters are “antiquated” and that the proposed new prescriptive parameters are “similar to the 2009 IECC [International Energy Conservation Code]. MHARR objects to this proposal on multiple grounds. First, aside from the anecdotal assertion that the current standard is “antiquated,” there is no data or information offered to demonstrate that the existing standard is either irrelevant, ineffectual, or has resulted in any adverse safety impacts. Second, the proponent acknowledges cost impacts resulting from this proposal, but does not specifically quantify potential costs versus claimed benefits. Third, the proponent offers no data or analysis to support adoption of the criterion proposed, other than claiming alleged “similarity” to the 2009 IECC. The IECC, however, unlike the HUD Code, is not specifically designed for manufactured housing, and is not based on a balancing of costs versus benefits, as is statutorily required for HUD manufactured housing standards. Thus, any “similarity” to the IECC standards is irrelevant at best.

### B. Log Item 212 – 24 C.F.R. Part 3280.709(h) – Installation of Appliances

This Log Item calls for the re-location of the current requirement for water heater drip pans from 24 C.F.R. 3280.709(h), where it is stated at present, to 24 C.F.R. 3280.609(c)(iv), which the proponent maintains would be more appropriate. Insofar as this proposed change is ministerial only, and would not entail either a substantive change in the Code requirement or the cost of compliance, MHARR has no objection to this proposal.

### C. Log Item 216 – 24 C.F.R. Part 3280.715(a)(7) – Supply System

This Log Item would add new language to 24 C.F.R. 3280.715(a)(7) that would require ducts “located in an unvented or vented attic” to be insulated with material “having a minimum thermal resistance of R-8 in all Thermal Zones.” The proponent maintains that “the manufactured housing industry is basically the only industry that still allows the cheapest insulated duct (R-4) to be placed in the hottest cavity of the building.” The proponent’s submission, maintains that the proposed change would have “no” additional cost, but then contradicts this assertion, stating: “The average cost for a single-section home to upgrade from R-4.2 to R-8 is approximately \$100....” MHARR objects to this proposal on cost grounds. Neither the implementation cost of this new



requirement, or the value of alleged cost “offsets” supposedly flowing from its adoption, are substantiated with specific data or information. Thus, while this option should be available for consumers, it should not be affirmatively mandated by the HUD Code for all manufactured homes in all Thermal Zones.

**D. Log Item 219 – 24 C.F.R. 3280.703 – Minimum Standards**

This Log Item would specify that heat pump water heaters could be installed by the manufacturer in new manufactured homes. Insofar as this proposed change is permissive and would increase consumer choice without mandating the use of such water heaters – which could entail additional cost to the consumer – MHARR does not object to this proposal.

**E. Log Item 222 – 24 C.F.R. 3280.710 – Venting, Ventilation and Combustion Air**

This Log Item would allow for ductless range hoods that are not vented to the exterior of the home. Insofar as the proposed change would increase the appliance placement options available to homeowners while potentially reducing production and homeowner costs, MHARR does not object to this proposal.

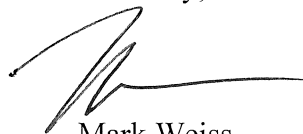
**F. Log Item 223 – 24 C.F.R. 3280.715 – Circulating Air Systems**

This Log Item would add bathrooms and closets as exceptions to the current requirement relating to the return of circulating air “from all rooms and living spaces.” Insofar as this proposed change would potentially expand home design options without entailing additional costs for either manufacturers or consumers, MHARR does not object to this proposal.

**III. CONCLUSION**

In accordance with the foregoing, MHARR urges the Technical Systems Subcommittee to reject Log Items 211 and 216, as stated, absent additional necessary information. Beyond these proposals, however, MHARR urges the Subcommittee *and the full MHCC* to demand information and an answer from HUD regarding the status of the regulatory reform proposals reviewed and recommended by the MHCC in 2019 (and early 2020). To date, there has been no public action by HUD to follow-up on the extensive and detailed consideration and recommendations provided by the MHCC with respect to those proposals. In accordance with both the 2000 reform law and Executive Orders 13771 and 13777, HUD is *required* to take action with respect to those MHCC recommendations.

Sincerely,



Mark Weiss  
President and CEO

cc: Hon. Dana Wade  
Members, Manufactured Housing Consensus Committee



December 3, 2020

The Honorable Ben Carson  
Secretary  
U.S. Department of Housing and Urban Development  
451 7th Street SW  
Washington, D.C. 20410

**RE: Notice of a Federal Advisory Committee Meeting; Manufactured Housing Consensus Committee: Technical Systems Subcommittee (Docket No. FR-6237-N-02)**

Dear Secretary Carson,

The Manufactured Housing Institute (MHI) is pleased to provide feedback to the U.S. Department of Housing and Urban Development (HUD) and the Manufactured Housing Consensus Committee (MHCC) in response to the request for public comments in preparation for the MHCC's upcoming Technical Systems Subcommittee (the Subcommittee) teleconference.

MHI is the only national trade association that represents every segment of the factory-built housing industry. Our members include home builders, suppliers, retail sellers, lenders, installers, community owners, community operators, and others who serve the industry, as well as 49 affiliated state organizations. In 2019, our industry produced nearly 95,000 homes, accounting for approximately 10 percent of new single-family home starts. These homes are produced by 32 U.S. corporations in 129 plants located across the country. MHI's members are responsible for close to 85 percent of the manufactured homes produced each year.

Ensuring that the HUD Code is regularly updated is critically important to our industry. If the HUD Code is not updated on a consistent basis, our members cannot continue to provide millions of Americans with access to safe, affordable manufactured homes that include the latest innovations, technologies and features that consumers demand. Our industry has also launched a new class of homes known as CrossMod™ that are indistinguishable from site-built homes, and any delay in updating the HUD Code to support this potential solution for providing more attainable homeownership opportunities only hurts prospective homebuyers.

As the Subcommittee reviews the proposed changes for the 2020-2021 HUD Code development cycle, below are MHI's recommendations for specific Log Items on the Subcommittee's agenda.

**1) Log 211 – 24 C.F.R. § 3280.715 (a)(4) – Airtightness of supply duct systems (Robert Parks, Healthy Homes of Louisiana, LLC)**

This Log Item seeks to revise the current testing requirements for determining the airtightness of supply ducts. MHI understands that when duct leakage exists, it can allow air to infiltrate the ductwork which can impact the comfort, durability and indoor air quality of a home, including increasing a homeowner's utility costs. However, the revised language as currently proposed is vague and could unnecessarily create complications in the home building process.

MHI suggests additional edits to the proposed language to help better clarify the testing requirements. Below is the original language proposed by the submitter with our additions in red bold font:

3280.715 Circulating air systems.

(a) Supply system.

4) Airtightness of supply duct systems.

~~A supply duct system shall be considered substantially airtight when the static pressure in the duct system, with all registers sealed and with the furnace air circulator at high speed, is at least 80 percent of the static pressure measured in the furnace casing, with its outlets sealed and the furnace air circulator operating at high speed. For the purpose of this paragraph and § 3280.715(b) pressures shall be measured with a water manometer or equivalent device calibrated to read in increments not greater than 1/10 inch water column.~~

**Factory installed** supply ducts **located partially or completely outside the building thermal envelope, with or without air handlers installed in the factory** shall demonstrate air leakage to the outside or total air leakage of less than or equal to 8 cfm per 100 ft<sup>2</sup> of conditioned floor area when tested at a difference pressure of 0.1 in. water (25pa). Supply duct testing shall occur at frequency determined by the manufacturer's quality assurance plan.

**2) Log 216 – 24 C.F.R. § 3280.715 (a)(7) – Supply System (Robert Parks, Healthy Homes of Louisiana, LLC)**

This Log Item seeks to add language requiring that “ducts located in an unvented or vented attic” must be insulated with material having a minimum thermal resistance of R-8 in all Thermal Zones. While MHI encourages HUD to update the standards in a timely manner to keep the Code aligned with current building practices, updates cannot be done carelessly or haphazardly. Updates should not be made without a thorough economic and cost-benefit analyses, which is required by statute. The new language would most likely require manufacturers to redesign roof trusses to accommodate this new requirement, which will result in additional costs to homeowners. Because of the additional costs without demonstrated need, MHI recommends that the Subcommittee disapprove this proposal.

**3) Log 222 – 24 C.F.R. § 3280.710 – Venting, Ventilation, and Combustion Air (Lesli Gooch, Manufactured Housing Institute)**

This Log Item, which was submitted by MHI, seeks to update the venting requirements for range hoods. Currently, the HUD Code requires that range hoods vent to outside the home. Further, the HUD Code does not permit the installation of ductless range hoods. Amending the HUD Code’s ventilation requirements would provide manufacturers with the same flexibility to install ductless range hoods that site-built homebuilders have enjoyed for several years. MHI is recommending that the HUD Code be updated with an exception for ductless range hoods that mirrors the same provision in the International Residential Code. The benefit would be two-fold—it would lower manufacturing costs and eliminate a regulatory burden that is exclusive to manufactured housing construction. We encourage the Subcommittee to approve this proposal.

**4) Log 223 – 24 C.F.R. § 3280.715 – Circulating Air Systems (Lesli Gooch, Manufactured Housing Institute)**

This Log Item, which was submitted by MHI, seeks to update the air return requirements for closets and baths. As part of the HUD Code’s provisions for circulating air systems, only toilet rooms are excepted from the return air opening requirements. Given that installing the master bath between the master bedroom and closet is a popular floorplan with homebuyers, complying with the HUD Code requires installing closet air returns that pull through the bath (which can introduce unpleasant odors) or the installation of jump ducts between the closet and bedroom to circumvent the bath (which can be prohibitively expensive). In comparison, the International Residential Code states that return air shall not be taken from a closet, bathroom, or toilet room. MHI is recommending that the HUD Code be updated to clarify that return air need not be pulled from bathrooms and closets and ensure consistency with other contemporary building codes. We encourage the Subcommittee to approve this proposal.

MHI appreciates the MHCC’s work to keep the HUD Code current. When the HUD Code is not regularly updated, manufacturers are forced to navigate an outdated regulatory landscape to simply provide consumers with the latest innovations, technologies, and features they demand. As the MHCC continues to offer recommendations for updates to the Code it is imperative that this important work does not simply add to the backlog. HUD must act on those recommended changes that the MHCC has already voted on. MHI urges HUD to finalize the proposed changes made earlier this year with our suggested enhancements and to move forward with finalizing the subsequent sets of updates that have been approved by the MHCC but are still pending HUD action.

Again, MHI thanks the MHCC for their diligence in evaluating and recommending updates to the HUD Code. We look forward to continuing our efforts to ensure the MHCC’s hard work leads to ultimately implementation of these changes.

Sincerely,

A handwritten signature in black ink that reads "Lesli Gooch". The signature is written in a cursive, flowing style.

Lesli Gooch, Ph.D.  
Chief Executive Officer