



DRAFT MINUTES MHCC TECHNICAL SYSTEMS SUBCOMMITTEE MEETING

December 2, 2015

Via Teleconference

DRAFT MINUTES

MANUFACTURED HOUSING CONSENSUS COMMITTEE (MHCC) TECHNICAL SYSTEMS SUBCOMMITTEE MEETING

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Call to Order

This is a meeting of the Manufactured Housing Consensus Committee (MHCC) Technical Systems Subcommittee and the meeting notice was published in the November 3, 2015 *Federal Register*, Vol. 80, No. 212. The Chairman, Manuel Santana, called the meeting to order at 1:05 p.m. (Eastern). Kevin Kauffman, Program Manager of the 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 attendees.

Approval of the Minutes

Motion to approve the December 4, 2014, MHCC Technical Systems Subcommittee Meeting Minutes.

Maker: Debra Blake Second: Michael Lubliner

The motion carried.

New Business: Review of Referred Logs

(All Log Items are available at www.hud.gov/mhs)

LOG 116: § 3280.4.(aa)(2) Incorporation by Reference

Chairman Santana noted that Log 116 would update the reference code NFPA 54 2002 to NFPA 54 2015/ANSI Z223.1-2015. Mr. Santana asked if anyone had any knowledge of the changes that would have an impact.

Bob Gorleski, PFS, noted that he submitted a summary of changes at the MHI meeting in Boca Raton and their review showed that there were no significant changes that would impact the code. Lois Starkey, MHI, agreed that from a manufacturer and third-party agency perspective, the MHI TAC concluded that there would be no significant impact and recommends adopting the 2015 standard.

Ms. Starkey clarified that the PFS summary review was submitted to HUD but that it had not been disseminated to the Technical Systems Subcommittee (see [Appendix B](#)) and she asked Mr. Gorleski to summarize their findings. Mr. Gorleski noted that there was a section by section review and that there was some reorganizing of the reference standards and additions. He stated that there was one noteworthy change regarding corrugated stainless steel tubing—the bonding requires a 6-gauge wire. He confirmed that the installation, sizing, and materials allowed remain the same. It was also noted that ¼ in. piping was dropped from the standard which is no longer in use.

Mark Weiss, MAHRR, questioned what PFS would consider to be a significant change. Mr. Weiss stated that he had not had the opportunity to review the summary produced by PFS because it was not included in the public record and that it should be available to the public for review.

Following the discussion, subcommittee members stated that they were ready for the vote.

Motion to recommend that the MHCC approve Log 116.

Maker: John Weldy Second: Michael Lubliner

Meeting Vote: 10-0-0

LOG 118: § 3280.4 Incorporation by Reference and 3280.703 Minimum Standards

Chairman Santana reviewed the proposal and opened the floor for discussion.

Timothy O'Leary stated that he was not comfortable with, "Any future version of this standard is acceptable," being included. Mr. Santana agreed that MHCC could not approve a standard without noting the year.

Following a discussion, the subcommittee decided on the following action:

Motion to recommend that the MHCC approve Log 118 as modified.

Maker: John Weldy Second: William Freeborne

Meeting Vote: 10-0-0

During discussion of the above log items both Chairman Santana and Michael Lubliner expressed concerns as to why any heating appliance that is listed for use in residential applications is not acceptable for use in manufactured homes and the reasons why heating appliances continue to be required to be listed for use in manufactured homes.

Review of Assigned Reference Standards

ANSI/ASHRAE 62.2, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings

Chairman Santana asked if anyone had some background information on this standard.

Michael Lubliner stated that there were some changes between 2010 and 2013; however, the most significant change is how background ventilation (the amount of ventilation that is assumed to be naturally occurring) will be addressed in the home by adjusting the ventilation. In 2013 the default minimum flow rate was increased, but if the home is tested for tightness, there is a credit, based on the tightness, for sizing the whole-house fan. This issue can be addressed by providing an exception in the HUD code that a blower assumption of five air changes per hour is acceptable. This is a reasonable assumption that was also used in the term sheet presented at the DOE/ASHRAE discussions. Since blower-door testing is not performed in the factory, this exception is important. Additionally, 2013 adds a carbon monoxide alarm, adds an option for minimum filtration, and clarifies sound ratings for manufacturers. Mr. Lubliner recommended that the subcommittee recommend updating to 2013 with an exception that 5.0 air changes per hour at 50 pascals can be used for computing flow.

Mr. Santana stated that indoor air quality has been an ongoing issue as evidenced by the number of Log Items on this topic that have come before the MHCC. The ASHRAE 62.2 2010 version was approved by the MHCC as a voluntary option two years ago and it has not been included in the Rule to date. He argued that it is premature to approve an update to a reference standard before it is actually a reference standard. There was agreement on that point from some subcommittee members.

Mr. Lubliner disagreed and asked the subcommittee to adopt the 2013 update because this is a health and safety issue and ASHRAE 62.2 is an ANSI standard vetted by experts in their field. It is important to provide consumers with the best standards available. The fact that HUD has been unable to include 2010 as a rule for

two years is not an acceptable reason to reject adopting 2013. There was agreement on that point from some subcommittee members.

Mr. Santana was concerned about the cost impact of adopting 2013 since the cost impact of 2010 is still unknown as it is not yet officially recognized.

Mr. Lubliner disagreed that cost should be an issue because it is optional and if a manufacturer found it to be cost prohibitive, then they would not be required to use it. Lois Starkey supported Mr. Lubliner's position and stated that the MHI TAC committee's consensus was that because it is a voluntary standard that adopting 2013 was appropriate.

Rick Mendlen advised the subcommittee that the MHCC could modify its previous approval and recommendation to adopt ASHRAE 62.2 2010 as an option, to the 2013 edition since the prior MHCC recommendation has not yet been published as a proposed rule in the *Federal Register*.

Mark Weiss noted that whether or not a standard is considered *voluntary*, there is still an obligation by the MHCC to evaluate the cost impact.

Motion to recommend that the MHCC reject the 2013 update ASHRAE 62.2, which is not currently in the HUD Code.

Maker: John Weldy

Second: Debra Blake

Meeting Vote: 4-6-0 (Failed)

The subcommittee moved on to discuss whether or not to recommend that the MHCC modify its previous approval of ASHRAE 62.2 as an option from 2010 to 2013.

Michael Lubliner noted that costs were discussed at length in previous meetings when ASHRAE 62.2 2010 was approved as an option and upon further review of 2013 he found no cost implications compared with 2010.

Mr. Santana was not in agreement with this action stating that this would take more time to get ASHRAE 62.2 out into a final rule. Most of the MHCC committee members are not versed in the differences between 2010 and 2013, and it has the potential to come back to the subcommittee causing further delay.

When asked to provide his cost analysis, Mr. Lubliner replied that there were a number of proposals regarding ASHRAE 62.2-2010 including support from HUD's Office of Healthy Homes and Lead Hazard Control. In addition, there was also a presentation made by ASHRAE to the MHCC and it is all part of the public record.

Motion to recommend that the MHCC modify the original addition of ANSI/ASHRAE 62.2-2010 to the 2013 version Indoor Air Quality: Optional compliance with ASHRAE 62.0. (Log 25).

Maker: Timothy O'Leary

Second: Rick Hanger

Meeting Vote: 6-4-0

The question was raised regarding the pass/fail of the vote since it was not a clear 2/3rd majority. The AO deferred to the DFO on this issue. Acting DFO Mendlen accepted the majority recommendation on the basis that it is a technical subcommittee and not the full MHCC recommendation.

Mark Weiss noted that the subcommittee was asking the MHCC to reverse a recommendation where there was consensus, based on a recommendation by a subcommittee where there was not consensus, is potentially problematic.

ASTM E96, Standard Test Methods for Water Vapor Transmission of Materials

John Weldy provided a summary of his review of the ASTM E96: 1) changed to the metric system; 2) changed some of the minimum thicknesses; and 3) the test procedure is the same. Mr. Weldy stated that the cost was too high for the benefit and recommended that the MHCC not update the standard as products would be required to be retested. There is no advantage to update the standard.

Michael Lubliner questioned, in terms of a vapor retarder, whether or not the updated standard would have an impact on the use of vinyl covering on drywall. Does the change in test change the manufacturing process with respect to the perm rating of vinyl drywall?

David Tompos reviewed an evaluation performed by NTA (see [Appendix C](#)).

William Freeborne noted that this is a reference standard and that manufactured housing plants will not be performing these tests. The manufactured housing industry will accept this test method regardless of the version of the standard.

John Weldy reiterated that the test applies to the products that are purchased. However, the products would all have to be retested to the new standard, which is expensive. It is not a performance issue; it is a cost issue of getting material retested.

Motion to recommend that the MHCC reject ASTM E96 2015

Maker: John Weldy

Second: Timothy O'Leary

Meeting Vote: 10-0-0

NFPA 70 National Electrical Code

John Weldy noted that there are several thousand code changes between the 2005 to the 2014 and some are very significant. The 2014 NEC requires that all outlets within 6 ft. of a sink need to be on a GFI, and it also adds arc fault. If the refrigerator is within 6 ft. of a kitchen sink, it would be required to be on a GFI and that could become a problem. Some states have written quite a few amendments to the NEC. He urged the subcommittee to proceed cautiously and possibly consider amendments to the 2014 NEC.

Motion to refer NFPA 70, National Electrical Code 2014 update to a Task Group led by John Weldy.

Maker: John Weldy

Second: Debra Blake

Meeting Vote: 8-0-2

Task Group Includes:

Lois Starkey

Jonathon Stewart

Don Iverson

James Demitrus

Jonathan Stewart, NEMA, stated that while the NEC is very broad and expansive, the MHCC is only concerned with the residential sections, which are narrower in scope. The major issue is an increase in the requirements for the AFCI, GFCI, and tamper resistant receptacles. States have created cost analysis which NEMA can provide. The cost increase is around 10 to 20 cents per square foot. There is agreement that the current standard is out of date.

Don Iverson, NEMA, offered clarification regarding the refrigerator and the GFIs. UL standard requires the manufactures to limit refrigerator current leakage to ½ amp and the GFIs will trip at 4 to 6 milliamps; so there shouldn't be an issue with the refrigerator being on a GFI circuit. Keven Kauffman will distribute letter of support of NFPA 70 NEC 2014 to the subcommittee (see [Appendix D](#)).

Rick Mendlen suggested that the Task Force meet during the January 2016 MHCC meeting.

Open Discussion

Michael Lubliner thanked the subcommittee for the work they have done over the years and stated that he has worked hard to help solve problems in the manufactured housing industry that include affordability, energy, durability, and indoor air quality. Mr. Lubliner stated that there is a need for HUD to provide resources to the MHCC to help them make decisions, particularly regarding updates to reference standards. He looks forward to participating, in the future, as a public member.

The meeting was adjourned at 2:55 p.m.

DRAFT

**Appendix A:
Subcommittee Attendees**

Technical Systems			
3280 Subpart F, G, H, I			
	Name	Email	Attendance
Users	Mark Mazz	mark.j.mazz@verizon.net	N
	Michael Lubliner	lublinerm@energy.wsu.edu	Y
	James Demitrus	portagepacer@aol.com	Y
	Timothy O'Leary	idahoinspector@frontier.com	Y
Producers	John Weldy	john.weldy@clayton.net	Y
	Leo Poggione	leo@forahouse.com	Y
	Manuel Santana	manuel@caavco.com	Y
General Interest / Public Official	Robin Roy	rroy@nrdc.org	Y
	Debra Blake	debra.blake@dfbls.az.gov	Y
	William Freeborne	WFreeborne@aol.com	Y
	Rick Hanger	Rick.Hanger@state.co.us	Y

HUD Staff

Pamela Beck Danner, DFO
Teresa Payne
Eric Bers
Jason McJury
Rick Mendlen
Patricia McDuffie
Demetress Stringfield

AO Staff, Home Innovation Research Labs

Kevin Kauffman
Tanya Akers

MHCC Members

Joseph Sadler
Timothy Sheahan
David Tompos

Others Participating

Mark Weiss, Manufactured Housing Association for Regulatory Reform
Lois Starkey, Manufactured Housing Institute
George Waechter, Minute Man Anchors
Don Iverson, National Electrical Manufacturers Association
Jonathan Stewart, National Electrical Manufacturers Association
Bob Gorleski, EIT, PFS Corporation
Jim Husom, PFS Corporation



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APPENDIX B: PFS CORPORATION MEMO 2015 NATIONAL FUEL GAS CODE (NFGC) – SUMMARY OF CHANGES

By Robert Gorleski



PFS Corporation

An Employee-Owned Company

Assurance you can build on[®]

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Western

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Southeast

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Products Division

Cottage Grove, WI
608.839.1013

Manufactured Structures

Division
Cottage Grove, WI
608.839.1013

Date: October 2, 2015

To: Manufactured Housing Institute

From: Robert Gorleski
General Manager
Manufactured Structures Division

RE: 2015 National Fuel Gas Code (NFGC) - Summary of Changes

PFS Corporation reviewed the National Fuel Gas Code changes, and we developed a summary of changes that may impact the manufactured homes industry (attached). Manufacturers may have to evaluate their compliance documents to incorporate any changes.

If there are any questions, please contact us.



2015 National Fuel Gas Code – Summary List of Changes

(NFPA54/ANSI Z223.1)

SECTION	SUBJECT	CHANGE
Chapter 2	Referenced Standards	Revised standards to the latest editions of the code.
Chapter 3	Definitions	Revised various definitions and replaced with NFPA definitions.
4.4	Noncombustible Material	New section added for combustible material complying with ASTM E 136 Standard
5.4.2.1	Volumetric flow rate of gas	The volumetric flow rate of gas provided shall be the sum of the maximum input of the appliances served.
5.4.2.2	Volumetric flow rate for altitude	Where gas is provided an adjustment for altitude for installation above 2K feet.
5.6.4.1.3	PVC	PVC and CPVC tubing and fittings shall not be used to supply fuel.
5.9	Overpressure protection devices	Revised and reorganized for pressure limitation and devices.
Table 6.2(c) and(d)	Schedule 40 pipe sizing for low pressure installation	Revised table to accommodate 4" sizing capacities.
7.2.6	CSST (Corrugated Stainless Steel Tubing)	Revised to clarify the installation with the code and manufacturer's installation instructions.
7.3.6	Shutoff valves in tubing systems	New requirement for supporting of tubing in concealed locations.
7.13.2	CSST bonding	Bonding jumper shall not be smaller than a 6 AWG or equivalent. Maximum length of bonding jumper is 75ft.
8.1.1.5	Pressure Testing	A piping system shall be tested as a complete unit or in sections.

SECTION	SUBJECT	CHANGE
8.1.5.2	Detection of leaks and tests	An approved gas detector, a noncorrosive leak detection fluid, or other approved leak detection shall be used.
9.1.24	Existing appliance located within conditioned space and building envelop changes	Require existing appliances comply with section 9.3 (combustion air) and Chapter 12 (venting).
9.6.1.1 and 9.6.1.2	Protection of connectors	No change, just renumbered
Annex	Subject	Change
A3.3.53	Gas Vent plastic piping	New annex definition for plastic plumbing pipe that is not listed for gas vent.
A.3.3.64.1	Combustible	New definition to clarify that materials are considered combustible even if they were fire-retardant treated.
A.5.4.2.1	Determining appliance input	New section providing guidance on to estimate the input when the appliance is unknown.
Table A.5.4.2.1	Approximate gas input for typical appliances	No change just relocated table to annex.
Table A.5.6	List of pipe, tube, fittings, and joints.	Revised "brass" to "copper alloy," and added "polyamide" (PA 11)
A.7.13.2	CSST bonding	Provides a reference to the GTI research that is the technical basis for CSST bonding.



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APPENDIX C: NTA INC. TIP SHEET: EQUIVALENCY BETWEEN VERSIONS OF ASTM E96

By Dave Tompos

DRAFT

1 PURPOSE

This Technical Implementation Procedure (TIP) provides equivalency information for ASTM E0096 testing pertaining to Water Vapor Transmission of Materials.

2 SCOPE

This TIP applies to all NTA personnel involved in quoting, setting up and/or testing, and writing reports regarding the water vapor transmission of materials. Prior to conducting work described in this TIP, personnel shall have training to this procedure. All personnel activities shall be in accordance with this TIP and in full compliance with NTA's Quality Assurance Program.

If this procedure cannot be implemented as written, NTA personnel shall notify the Laboratory Director, Laboratory Manager, Project Engineer, or another specified designee. If it is determined that a portion of work cannot be accomplished as described in this TIP, or would produce undesired results, that portion of work shall be stopped and not resumed until this procedure is modified or the deviating procedures are reviewed and approved.

3 GENERAL

3.1 Principle

ASTM E96-10 is the base standard of this equivalency TIP. 24CFR 3280.504 requires the use of the -95 version of the document.

Standard	Ed./Yr	Summary
ASTM E96	-10	“The relative humidity shall be maintained at 50±2% except where extremes of humidities are desired when the conditions shall be 100±1.8°F (38±1°C) and 90±2% relative humidity.” (Section 6.2)
ASTM E96	-10	“The air velocity over the specimen shall be between 0.066 and 1 ft/s (0.02 and 0.3 m·s ⁻¹). Suitable racks shall be provided on which to place the test dishes within the test chamber.” (Section 6.2)
ASTM E96	-10	“The nominal thickness of the specimen shall be determined using a thickness-measuring gage with an accuracy of ±1 % of the reading or 0.0001 in. (0.0025 mm), whichever is greater.” (Section 6.4)
ASTM E96	-10	“For homogeneous (not laminated) materials with thickness greater than 1/2 in., the overall nominal thickness of each specimen shall be measured with an accuracy of ±1 % of the reading at the center of each quadrant and the results averaged.” (Section 9.5)
ASTM E96	-10	Calculation of permeability is optional (Section 13.3) and only allowed if the specimen is homogeneous and not less than 1/2”.
ASTM E96	-10	<p>Corrections—It is important that all applicable corrections be made to all measurements that result in permeance value more than 2-perm (114 ng·Pa⁻¹·s⁻¹·m⁻²). Corrections for materials with permeance value below 2-perm (114 ng·Pa⁻¹·s⁻¹·m⁻²) are insignificant and need not be done. The procedures for making various corrections, as summarized below, are found in the literature. (Section 13.4)</p> <ul style="list-style-type: none"> • Buoyancy Correction (Section 13.4.1) • Correction for Resistance due to Still Air and Specimen Surface (Section 13.4.2) • Edge Mask Correction (Section 13.4.3)
ASTM E96	-10	Gasketed seals are not permitted for the measurement of permeance less than 4 perms. (Appendix X2.6.4)
ASTM E96	-10	Appendix X3 included to provide procedure to calculate dependency of water vapor transmission rate on relative humidity.

4 EQUIVALENCY

4.1 Equivalency Analysis

Various related standards will be evaluated against ASTM E96-10 to determine if they are equivalent in the table below.

Standard	Ed./Yr	Summary	Equivalent (Y/N)
ASTM E96	-95	“The relative humidity shall be maintained at 50±2%, except where extremes of humidities are desired, when the conditions shall be 100±1°F (38±0.6°C) and 90±2% relative humidity. (Section 6.2)” (this would apply to procedure E or any client requested conditions)	N
ASTM E96	-95	“The air velocity over the specimen in feet per minute shall be, numerically, not less than ten times the permeance of the specimen expressed in perms, not exceeding a maximum of 600 ft/min (3.05 m/s). However, for designed materials with a permeance of greater than 55 perms the velocity shall be 550 ±50 ft/min (2.80±25 m/s). Suitable racks shall be provided on which to place the test dishes within the test chamber.” (Section 6.2)	N
ASTM E96	-95	“The overall thickness of each specimen shall be measured at the center of each quadrant and the results averaged. Measurement of specimens of 0.125 in. or less in thickness shall be made to the nearest 0.0001 in. Measurement of specimens greater than 0.125 in. in thickness shall be made to the nearest 0.001 in.” (Section 9.5)	N
ASTM E96	-95	Only calculate permeability when the test specimen is homogeneous and not less than 1/2” thick (Section 13.3)	N
ASTM E96	-95	When results of water vapor transmission are expected to be less than .05 perm, a dummy specimen is strongly recommended. Such a dummy specimen should be attached to an empty cup in the normal manner. The environmental effects of temperature variation and buoyancy variability due to barometric pressure fluctuation <u>can be arithmetically tared out of the weighing values.</u> (Section 11.3) (Note that section 11.3 is identical between versions, but the newer version also contains section 13.4)	N
ASTM E96	-95	Gasketed seals are not permitted for the measurement of permeance less than 44 perms. (Appendix X2 Section X1.7.4)	N

ASTM E96-12 does not differ from any of the cited sections in the table, above, for ASTM E96-10. The fundamental revision in ASTM E96-12 is the inclusion of data for bias (Section 15.2 through Section 15.5). Therefore, ASTM E96-12 is equivalent to ASTM E96-10.

ASTM E96-13 contains only editorial revisions (parenthesis were changed to brackets throughout the document for alternate dimensions) and inclusion of a new, non-mandatory appendix which gives direction for testing extremely low permeance materials (X4). For tests where the information in X4 may be relevant, additional review may be required to determine if the test lab followed the guiding principles of the test standard. For other materials, ASTM E96-13 is equivalent to ASTM E96-10.

ASTM E96-14 contains an addition to Section X 4.3.1 addressing the thickness of the materials used in the low permeance testing. It also revises the statement in X 4.6.7 stating that it is known that thick materials and moisture retaining materials need upwards of two months or longer to reach steady-state, but thinner materials may not need as such a time.

4.2 Equivalency Notes

The 1995 and the 2010 versions of ASTM E96 have some specific differences which may disqualify a test of one version from being allowed where the other version is required.

- Tolerance on the temperature where extreme relative humidities are used went from $\pm 1^{\circ}\text{F}$ to $\pm 1.8^{\circ}\text{F}$. The 1995 version could be used for 2010 but the actual variance would need to be verified to use the 2010 for the 1995.
- The air velocity in the chamber for the 1995 version shall be no less than 10 times the permeance of the specimen and no more than 600 ft/min. The 2010 version requires the velocity to be between 3.96 and 60 ft/min. Any material more than 6 perm are not compatible in either direction. Test data should be verified against the appropriate standard if equivalency is to be established.
- Specimen thickness measurement resolution has changed between versions. Test data should be verified against the appropriate standard if equivalency is to be established.
- Calculation of permeability is optional in the 2010 version. The 1995 version requires it, but as with the 2010 version, it should only be used on homogeneous materials not less than 1/2” thick. This is roughly equivalent, but the option must be exercised in the 2010 version to meet the 1995 version. Because this is a calculation, it could be performed after the fact if sufficient data is provided.
- Both versions state in Section 11.3 that environmental effects of temperature variation and buoyancy variability can be tared out of the weighing either analytically or empirically. This can be done by the dummy specimen or arithmetically. The 2010 version provides a method for buoyancy, still air and edge mask corrections. The buoyancy calculation, if properly applied is compatible. Still air and edge mask corrections must be removed from a 2010 test to be equivalent to 1995, or added to the 1995 report to be equivalent to 2010.

Correction	1995	2010	Equivalency
Buoyancy	Compatible	Required above 2 perms	2010 -> 1995 equivalent 1995 ->2010 must be present
Still Air	Not addressed	Required above 2 perms	2010 -> 1995 must be removed 1995 ->2010 must be added
Edge Mask	Not-addressed	Required above 2 perms	2010 -> 1995 must be removed 1995 ->2010 must be added

- If gasketed seals are used, there are 2 separate requirements for each version. Test method and application should be verified against the appropriate standard if equivalency is to be established.

It is possible to for either version to be performed in a manner which is compatible with the other version, but in reviewing a test report, the specific details listed above must be reviewed to determine acceptability of the report for the other version. It should also be noted that the -12, -13, and -14 versions have additional information, but tests are compatible with the -10 version.

24 CFR 3280.504 HUD testing requires the “Dry Cup Method” which implies one of the desiccant methods. This is another variation which should be looked at if evaluating equivalence of a test report.

5 RESPONSIBILITIES

5.1 Project Engineer / Laboratory Manager

The Project Engineer or Laboratory Manager is responsible for assuring full compliance with this procedure and providing training thereof. The Project Engineer or Laboratory Manager is responsible for overseeing and coordinating the preparation, review, distribution, revision, and recommending revisions of this TIP.



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MHCC TECHNICAL SUBCOMMITTEE MEETING
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APPENDIX D: NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA) LETTER

By Jonathan Stewart

DRAFT



Kevin Kauffman
Home Innovation Research Labs
400 Prince George's Blvd.
Upper Marlboro, MD 20774

Re: FR-5849-N-06 Notice of a Federal Advisory Committee Manufactured Housing Consensus Committee Technical Systems Subcommittee Teleconference

Via Email: MHCC@homeinnovation.com

Dear Mr. Kauffman,

The National Electrical Manufacturers Association (NEMA) and the National Fire Protection Association (NFPA) are writing to express our joint view in favor of reference to the residential provisions of the most recent edition of the National Electrical Code (NEC) in the Manufactured Housing Construction and Safety Standards (the Code) which the U.S. Department of Housing and Urban Development (HUD) uses to regulate the design, construction and installation of manufactured homes.

The National Electrical Code (NEC) is the benchmark for safe electrical design, installation, and inspection to protect people and property from electrical hazards. Updated through a consensus-driven process by the NFPA every three years, its adoption and incorporation is unanimous across all 50 states and the District of Columbia. Currently, 23 states have adopted the 2014 edition of the NEC (the most recent edition) and 18 others have adopted the 2011 edition. A handful of states still rely on the 2008 edition, but no states continue under the 2005 edition (which is the edition referenced in the Code).

The NEC focuses on the proper installation of electrical systems and equipment to protect people and property from hazards arising from the use of electricity in the built environment. In the last 10 years, NFPA has made numerous updates to the NEC to protect home owners and occupants from the risk of electric shock and electrical fires. For instance, ground-fault circuit interrupter (GFCI) protection is now required for receptacles in close proximity to water sources such as dishwashers, sinks, and bathtubs/showers to protect against water-related electrical hazards. For the same reason, arc-fault circuit interrupter (AFCI) protection is expanded to cover kitchens and laundry areas. Tamper-resistant receptacles, which greatly reduce the likelihood of electric shock, particularly to young children, are now required in the NEC. These are just some of the examples of how the requirements of the 2014 NEC are improved over and above the requirements in 2005.

Despite the prevalence of state laws that require electrical and life safety devices in the home, due to the preemptive effect of the Manufactured Housing Construction and Safety Standards, these requirements do not apply to manufactured homes across the country. Residents of manufactured homes deserve the same or similar levels of protection against these risks that the rest of the country enjoys.

Thank you in advance for your attention to this important matter. NEMA and NFPA look forward to working with the Manufactured Housing Consensus Committee (Committee) and we are available to provide further information as the Committee deems appropriate. Contact information for the appropriate point of contact in both organizations can be found below.

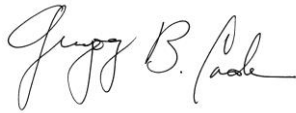
The National Electrical Manufacturers Association (NEMA) is the association of electrical equipment and medical imaging manufacturers, founded in 1926 and headquartered in Rosslyn, Virginia. Nearly 400 members strong, its companies manufacture a diverse set of products including power transmission and distribution equipment, lighting systems, factory automation and control systems, and life safety devices.

Founded in 1896, NFPA is a global, nonprofit organization devoted to eliminating death, injury, property and economic loss due to fire, electrical and related hazards. The association delivers information and knowledge through more than 300 consensus codes and standards, research, training, education, outreach and advocacy; and by partnering with others who share an interest in furthering the NFPA mission. NFPA has approximately 65,000 members and is accredited by the American National Standards Institute.

Sincerely,



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Gregory B. Cade
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