MHCC
Proposed Changes

Received as of February 28, 2015

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Log # 87 - § 3280.112 Hallways		Date: 11/18/2014
Submitter:	Steve Anderson	
Requested Action:	Revised Text	
Proposed Change:	**§ 3280.112 Hallways.** Hallways shall have a minimum horizontal dimension of ~~28~~36 inches measured from the interior finished surface to the interior finished surface of the opposite wall. When appliances are installed in a laundry area, the measurement shall be from the front of the appliance to the opposite finished interior surface. When appliances are not installed and a laundry area is provided, the area shall have a minimum clear depth of ~~27~~35 inches in addition to the ~~28~~36inches required for passage. In addition, a notice of the available clearance for washer/dryer units shall be posted in the laundry area. Minor protrusions into the minimum hallway width by doorknobs, trim, smoke alarms or light fixtures are permitted.	
Reason:	The justification has nothing to do with cost. It has everything to do with fire safety. Basic physics teach us that the narrowed the hallway, the greater the velocity. This means that there is a greater chance of the chimney effect occurring in homes with narrower hallways than with wider hallways. Most building codes recognize these factors by enlarging hallway widths. Most local building codes require hallway widths to be from 36” to 48". Florida state code puts them at either 42” or 48” – depending on whether it is handicapped accessible or not. Los Angeles County Building Code is 36”. Salt Lake City has adopted the 2012 version of the IBC, which places the width at 36 inches.	
Substantiating Documents:	No	
Additional Cost:	Unknown	
Cost Benefit Explanation:	This proposal does not pretend to be of any financial benefit – with regards to cost savings in the construction of the homes. Instead, the benefit comes from making the homes safer and the potential loss of life lessened. The question regarding cost savings comes from the problem of defining the worth of human life. To me, the cost is high – others have a different point of view.	
Subcommittee Recommendation:		
MHCC Action:		
MHCC Modification of Proposed Change:		
MHCC Reason:		
Current Status:	Tabled.	
Log History:	**12/2/2014** – Table until next MHCC meeting awaiting additional supporting documents.	

Log # 88 - § 3280.715 Circulating Air Systems	Date: 10/08/2014
Submitter:	Task Force: Manuel Santana (chair), Debra Blake, & Tim O'Leary
Requested Action:	Revise as follows:
Proposed Change:	**§ 3280.715 Circulating air systems.** (a)(1) Supply air ducts, fittings, and any dampers contained therein must be made of galvanized steel, tin-plated steel, or aluminum, or must be listed as Class 0 or Class 1 air ducts and air connectors in accordance with UL 181– 2003, Factory-Made Air Ducts and Air Connectors (incorporated by reference, see § 3280.4). ~~Class 1 air~~ Air ducts and air connectors ~~must be~~ located ~~at least~~ within 3 feet ~~from~~ of the furnace discharge ~~bonnet or plenum~~ must be rated to withstand the maximum discharge air temperature of the equipment. Air connectors must not be used for exterior manufactured home duct connection. A duct system integral with the structure must be of durable construction that can be demonstrated to be equally resistant to fire and deterioration as required by this section. ~~Furnace supply plenums must be constructed of metal that extends a minimum of 3 feet from the heat exchanger measured along the centerline of airflow.~~ Ducts constructed from sheet metal must be in accordance with the following table:
Reason:	Adding the requirement that the duct be rated to at least the maximum air discharge temperature of the equipment satisfies the fire safety concern and covers all installation cases without needing to specify type of equipment or type of duct.
Substantiating Documents:	no
Additional Cost:	No
Cost Benefit Explanation:	There will be no additional cost associated with this proposal.
Subcommittee Recommendation:	Approve (10-0-0)
MHCC Action:	Approve (19-0-0)
MHCC Modification of Proposed Change:	
MHCC Reason:	
Current Status:	MHCC Final Action submitted to HUD.
Log History:	**2/10/2014** – Final Action from December 2-4, 2014 meeting confirmed by MHCC Ballot II. **12/5/2014** – Additional Cost and Cost Benefit Explanation received from Manuel Santana. **12/4/2014** o MHCC Motion: Approve. o TSSC Recommendation: Approve. **10/8/2014** – Log 88 was submitted by a Task Force consisting of Manuel Santana (chair), Debra Blake, and Tim O'Leary. The TF was responsible for turning Action Item 1 – Supply Air Ducts Letter into a proposed change. Log 88 is the resulting proposed change. The proposed change is missing Cost/Benefit Information.

Log # 89 - § 3282.8 Applicability		Date: 11/19/2014
Submitter:	Mark Weiss	
Requested Action:	Revised Text	
Proposed Change:	***Revise 24 CFR 3280.2 Definitions as follows:*** Dwelling ~~unit~~ means ~~one or more habitable rooms which are designed to be occupied by one family with facilities for living, sleeping, cooking and eating~~ a structure designed and constructed for use as a permanent residence by one or more persons, with facilities for sleeping, eating, cooking, and sanitation, which constitutes an independent living unit. The term "dwelling" (as defined in 24 C.F.R. 3282.8(g) does not include recreational vehicles or other transportable structures designed, constructed, and utilized exclusively for temporary, non-residential occupancy. Manufactured home means a structure, transportable in one or more sections, which in the traveling mode is 8 body feet or more in width or40 body feet or more in length or which when erected on-site is 320 or more square feet, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air-conditioning, and electrical systems contained in the structure. This term includes all structures that meet the above requirements except the size requirements and with respect to which the manufacturer voluntarily files a certification pursuant to§ 3282.13 of this chapter and complies with the construction and safety standards set forth in this part 3280. ~~The term does not include any self-propelled recreational vehicle~~. Calculations used to determine the number of square feet in a structure will include the total of square feet for each transportable section comprising the completed structure and will be based on the structure's exterior dimensions measured at the largest horizontal projections when erected on site. These dimensions will include all expandable rooms, cabinets, and other projections containing interior space, but do not include bay windows. Nothing in this definition should be interpreted to mean that a manufactured home necessarily meets the requirements of HUD's Minimum Property Standards (HUD Handbook 4900.1) or that it is automatically eligible for financing under 12U.S.C. 1709(b). ***Revise 24 C.F.R. 3282.8 Applicability as follows:*** **3282.8** (g) Recreational vehicles. ~~Recreational vehicles are not subject to this part, part3280, or part 3283. A recreational vehicle is a vehicle which is:~~ ~~(1) Built on a single chassis;~~ ~~(2) 400 Square feet or less when measured at the largest horizontal projections;~~ ~~(3) Self-propelled or permanently towable by a light duty truck; and~~ ~~(4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.~~ A recreational vehicle is a self-propelled or towable vehicle, or other transportable structure, not affixed to land either permanently or temporarily, that is neither designed, constructed nor utilized as a dwelling.	

Reason:	At the urging of the recreational vehicle (RV) industry, legislation has been introduced in Congress (i.e. H.R. 5658) that would exempt certain RVs from the definition of "manufactured home" contained in the National Manufactured Housing Construction and Safety Standards Act of 1974 (as amended) (42 U.S.C. 5402(6)) ("Act"). Currently, the Act expressly exempts only "self-propelled recreational vehicle[s]" from the statutory definition of "manufactured home" and potential regulation by HUD pursuant to the Act. H.R. 5658 would create and extremely broad statutory exemption for "towed" RVs, with no size or single-chassis limitation, and for an undefined class of "Park Model" RVs with a "gross area of not greater than 400 square feet…" Given the fact that the Act, by its express terms, is a "housing" law and, in its original form, included no reference to RVs, expanded statutory RV exemption language would only exacerbate the problems caused by the later inclusion of "self-propelled" RVs. Such a broad statutory exemption, moreover, which could effectively create a class of unregulated de facto homes and thereby expose consumers to significant safety risks and home value issues, among other negative impacts, is unnecessary to address any potentially valid concerns raised by RV interests. It would also invite potentially unlimited requests for similar statutory exclusions for other types of existing structures and/or structures that could evolve with new technology in the future. Instead, since the Act defines regulated "manufactured homes" as designed for use as a "dwelling," and there is no dispute that RVs are not designed for use as a "dwelling," the sections cited above should be modified to exclude non-dwelling RVs from HUD regulation pursuant to the Act. Such regulation, based on the design, construction and use of RVs versus manufactured homes, would eliminate continuing disputes over the current definitions and exclusions based on size parameters and dimensions, as well as administrative interpretations regarding the proper measurement of those parameters, and create a firewall between manufactured homes designed and constructed as permanent residences and RVs.
Substantiating Documents:	No
Additional Cost:	No
Cost Benefit Explanation:	MHARR does not anticipate any impact on the cost of manufactured housing to the public as defined by the Act (42 U.S.C. 5403(e)) as a result of adoption of the proposed amendments.
Subcommittee Recommendation:	
MHCC Action:	Approved as Modified (19-0-0)
MHCC Modification of Proposed Change:	*Revise Standard as follows:* ***3282.8 Applicability*** (g) *Recreational vehicles.* Recreational vehicles are not subject to this part, part 3280. A recreational vehicle is a ~~vehicle which is:~~ factory built vehicular structure designed only for recreational use and not as a primary residence or for permanent occupancy, built and certified in accordance with NFPA 1192-2015 or ANSI A119.5-09 consensus standards for recreational vehicles and not certified as a manufactured home. ~~(1) Built on a single chassis;~~ ~~(2) 400 Square feet or less when measured at the largest horizontal projections;~~ ~~(3) Self-propelled or permanently towable by a light duty truck; and~~ ~~(4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.~~
MHCC Reason:	The HUD Office of Manufactured Housing regulates manufactured housing. Manufactured housing designed and built to HUD standards under the HUD Office of Manufactured Housing program are permanent residences. RVs designed and built for temporary recreational or seasonal camping accommodation in accordance with widely used/accepted national standards and are not manufactured homes.

	RVs, in their many shapes and sizes, are not manufactured homes and are outside of the manufactured home standards and regulations. The current HUD regulation that excludes recreational vehicles from the HUD manufactured housing standards and regulations adds language that defines an RV. In practice, this has the effect of acting as de facto federal HUD regulation of RVs. There is no need for a complicated definition of recreational vehicles in the HUD regulations that acts as de facto HUD standards for RVs and potentially creates an obligation for the HUD Office of Manufactured Housing to attempt to enforce manufactured housing standards on RVs. The model for this proposal is 24 CFR 3282.8(L): "(l) Multifamily homes. Mobile homes designed and manufactured with more than one separate living unit are not covered by the standards and these regulations." This simple exclusionary language creates a clear, simple and bright line between manufactured housing and multifamily housing. The same clear, simple and bright line also makes sense for excluding RVs from HUD's manufactured housing program.
Current Status:	MHCC Final Action submitted to HUD.
Log History:	**2/10/2014** – Final Action from December 2-4, 2014 meeting confirmed by MHCC Ballot II. **12/2/2014** – MHCC Motion: Approve as Modified.

Log # 90 - § 3285.2 Manufacturer installation instructions	Date: 11/21/2014
Submitter:	Manuel Santana, Cavco Industries
Requested Action:	Revised Text
Proposed Change:	**3285.2(c)(1)(ii)** If designs and instructions are not available from the manufacturer, obtain an alternate design prepared and certified by a registered professional engineer or registered architect for the support and anchorage of the manufactured home that is consistent with the manufactured home design ~~,~~ and conforms to the requirements of the MHCSS~~,~~ ~~and has been approved by the manufacturer and the DAPIA.~~
Reason:	This section recognizes that it is impossible for a manufacturer's installation manual to address all site specific circumstances. This section provides owners and installers with the option to obtain an installation method better suited (be it due to cost or site conditions) to their situation. Requiring that the proprietary, site specific installation or foundation system that the customer paid to obtain be submitted to both the manufacturer and DAPIA completely eliminates the benefit of allowing consumers to obtain their own design. This requirement only serves to increase both the cost and completion time of the project.
Substantiating Documents:	No
Additional Cost:	No
Cost Benefit Explanation:	This proposal constitutes a savings to the customer both in time and money, total savings will vary.
Subcommittee Recommendation:	
MHCC Action:	
MHCC Modification of Proposed Change:	*Revise Standard as follows:* **3285.2(c)(1)(ii)** If designs and instructions are not available from the manufacturer, obtain an alternate design prepared and certified by a registered professional engineer or registered architect for the support and anchorage of the manufactured home that is consistent with the manufactured home design~~,~~ and conforms to the requirements of the MHCSS, and has been approved by ~~the manufacturer and~~ the DAPIA.
MHCC Reason:	Approval by the DAPIA was too important to remove from this section.
Current Status:	Awaiting Final Action from MHCC.
Log History:	**2/10/2014** – Final Action from December 2-4, 2014 meeting overturned by MHCC Ballot II. **12/2/2014** – MHCC Motion: Approve as Modified. " *Revise Standard as follows:* **3285.2(c)(1)(ii)** If designs and instructions are not available from the manufacturer, obtain an alternate design prepared and certified by a registered professional engineer or registered architect for the support and anchorage of the manufactured home that is consistent with the manufactured home design~~,~~ and conforms to the requirements of the MHCSS, and has been approved by ~~the manufacturer and~~ the DAPIA."

Log # 91 - § 3280.603 General requirements		Date: 11/21/2014
Submitter:	Manuel Santana, Cavco Industries	
Requested Action:	Revised Text	
Proposed Change:	**3280.603(b)(4)(ii)** A statement in the installation instructions required by §3280.306(b), stating that if the heat tape of pipe heating cable is used, it must be listed ~~for use with manufactured homes.~~ or certified for its intended purpose.	
Reason:	Heat tape used on a manufactured home is not different than heat tape used on a conventionally built home. This would relieve the added cost to the customer of additional listing expense incurred by the manufacturer.	
Substantiating Documents:	No	
Additional Cost:	No	
Cost Benefit Explanation:	There is no additional costs with this proposal. there are potential cost savings by having more options available to the consumer.	
Subcommittee Recommendation:		
MHCC Action:	Approve (19-0-0)	
MHCC Modification of Proposed Change:		
MHCC Reason:		
Current Status:	MHCC Final Action submitted to HUD.	
Log History:	**2/10/2014** – Final Action from December 2-4, 2014 meeting confirmed by MHCC Ballot II. **12/2/2014** – MHCC Motion: Approve.	

Log # 92 - § 3280.709 Installation of appliances		Date: 11/21/2014
Submitter:	Manuel Santana, Cavco Industries	
Requested Action:	Revised Text	
Proposed Change:	**3280.709(a)** The installation of each appliance shall conform to the terms of its listing and the manufacturer's instructions. ~~The installer shall leave the manufacturer's instructions attached to the appliance.~~ Every appliance shall be secured in place to avoid displacement. For the purpose of servicing and replacement, each appliance shall be both accessible and removable.	
Reason:	§3280.711 requires that installation instructions be shipped with the homeowners manual. This caused confusion as to whether it was necessary to ship two installation instructions with each appliance, one with the appliance and one with the homeowners manual. This revision will make it clear that it is not necessary to ship a duplicate set of installation instructions with each house.	
Substantiating Documents:	No	
Additional Cost:	No	
Cost Benefit Explanation:	There is a cost benefit of not having to procure and ship duplicate sets of installation manuals.	
Subcommittee Recommendation:		
MHCC Action:	Approve (19-0-0)	
MHCC Modification of Proposed Change:		
MHCC Reason:		
Current Status:	MHCC Final Action submitted to HUD.	
Log History:	**2/10/2014** – Final Action from December 2-4, 2014 meeting confirmed by MHCC Ballot II. **12/2/2014** – MHCC Motion: Approve.	

Log # 93 - § 3280.709 Installation of appliances & § 3285.503 Optional appliances		Date: 11/21/2014
Submitter:	Manuel Santana, Cavco Industries	
Requested Action:	Revised Text	
Proposed Change:	**3280.709(g)** Solid fuel-burning factory-built fireplaces and fireplace stoves listed for ~~use in manufactured homes~~ residential use may be installed in manufactured homes provided they and their installation conform to the following paragraphs. A fireplace or fireplace stove shall not be considered as a heating facility for determining compliance with subpart F. **3285.503 (b) *Fireplaces and wood stoves*.** When not provided by the home manufacturer, fireplaces and wood-stoves must be listed ~~for use with manufactured homes~~ or certified for their intended purpose and must be installed in accordance with their listings.	
Reason:	Residential fireplaces when listed by a nationally recognized agency are constructed in the same manner as one that has been listed for use in a manufactured home. This would relieve the added cost to the customer of additional listing expense incurred by the manufacturer.	
Substantiating Documents:	No	
Additional Cost:	No	
Cost Benefit Explanation:	There is no additional cost associated with this proposal	
Subcommittee Recommendation:		
MHCC Action:	Log 93-A: Approve (19-0-0) Log 93-B: Approve as Modified (18-1-0)	
MHCC Modification of Proposed Change:	**Log 93-A** **3280.709(g)** Solid fuel-burning factory-built fireplaces and fireplace stoves listed for ~~use in manufactured homes~~ residential use may be installed in manufactured homes provided they and their installation conform to the following paragraphs. A fireplace or fireplace stove shall not be considered as a heating facility for determining compliance with subpart F. **Log 93-B** *Revise proposed change as follows (in red):* **3285.503 (b) *Fireplaces and wood stoves*.** When not provided by the home manufacturer, fireplaces and wood-stoves must be listed for residential use ~~with manufactured homes or certified for their intended purpose~~ and must be installed in accordance with their listings.	
MHCC Reason:	Log 93-B: Clarification for residential use only, "certified for their intended purpose" language was deemed unnecessary. If the fireplace or wood stoves were intended for residential use and are installed in accordance with their listings there should be no reason why you shouldn't be able to use them in a manufactured home.	
Current Status:	Log 93-A: MHCC Final Action submitted to HUD. Log 93-B: MHCC Final Action submitted to HUD.	
Log History:	**2/10/2014** – Final Action from December 2-4, 2014 meeting confirmed by MHCC Ballot II. **12/2/2014** ○ MHCC Motion: Approve as Modified Log 93-B**.** ○ MHCC Motion: Approve Log 93-A. ○ MHCC Motion: Divide proposed change based on section.	

Log # 94 - § 3280.707 Heat producing appliances	Date: 11/21/2014
Submitter:	Manuel Santana, Cavco Industries
Requested Action:	Revised Text
Proposed Change:	**3280.707(a)** Heat-producing appliances and vents, roof jacks and chimneys necessary for their installation in manufactured homes shall be listed or certified by a nationally recognized testing agency ~~for use in manufactured homes.~~
Reason:	Safety features and efficiency ratings can be met by using a residential appliance listed by a nationally recognized listing agency and not cause additional expense to the manufacturer and customer by forcing appliance manufacturers to state their product is listed for use in a manufactured home.
Substantiating Documents:	No
Additional Cost:	No
Cost Benefit Explanation:	There is no additional cost associated with this proposal. It will benefit consumers by making available a wider ranges appliances for installation in manufactured homes.
Subcommittee Recommendation:	
MHCC Action:	Approve as Modified (19-0-0)
MHCC Modification of Proposed Change:	*Revise proposed change as follows (in red):* **3280.707(a)** Heat-producing appliances and vents, roof jacks and chimneys necessary for their installation in manufactured homes shall be listed or certified for residential use by a nationally recognized testing agency. ~~for use in manufactured homes.~~
MHCC Reason:	Clarification.
Current Status:	MHCC Final Action submitted to HUD.
Log History:	**2/10/2014** – Final Action from December 2-4, 2014 meeting confirmed by MHCC Ballot II. **12/2/2014** – MHCC Motion: Approve as Modified.

Log # 95 - § 3280.102 Definitions & § 3280.103 Light and ventilation		Date: 11/21/2014
Submitter:	Michael Lubliner, Northwest Energy Efficiency Alliance	
Requested Action:	Revised Text	
Proposed Change:	**PROPOSED VENTILATION CHANGES TO CURRENT HUD MANUFACTURED HOUSING CONSTRUCTION & SAFETY STANDARDS (MHCSS):** **Insert the following definitions from 62.2-2013 into 3280.103:** ***air, exhaust:*** air discharged from any space to the outside by an exhaust system. ***air, outdoor:*** air from outside the building taken into a ventilation system or air from outside the building that enters a space through infiltration or natural ventilation openings. ***exhaust system:*** one or more fans that remove air from the building, causing outdoor air to enter by ventilation inlets or normal leakage paths through the building envelope. ***mechanical ventilation:*** the active process of supplying air to or removing air from an indoor space by powered equipment such as motor-driven fans and blowers but not by devices such as wind-driven turbine ventilators and mechanically operated windows ***natural ventilation:*** ventilation occurring as a result of only natural forces, such as wind pressure or differences in air density, through intentional openings such as open windows and doors. ***supply system:*** one or more fans that supply outdoor air to the building, causing indoor air to leave by normal leakage paths through the building envelope. ***ventilation:*** the process of supplying outdoor air to or removing indoor air from a dwelling by natural or mechanical means. Such air may or may not have been conditioned. **Insert and delter the following in § 3280.103 Light and ventilation.** (b) *Whole-house ventilation.* Each manufactured home must be provided with whole-house mechanical ventilation having a minimum capacity of 0.035 ft3/min/ft2 of interior floor space or its hourly average equivalent. This ventilation capacity must be in addition to any openable window area. . The following criteria must be adhered to: (1) The ventilation capacity must be provided by a mechanical ventilation system or a combination passive and mechanical ventilation system. (3) The ventilation supply system or a portion of the system is permitted to be integral with the home's heating or cooling system. The supply system must be capable of operating independently of the heating or cooling modes. A mechanical ventilation supply system that is integral with the heating or cooling system is to be listed as part of the heating and cooling system or listed as suitable for use with that system. (c) *Additional ventilation.* (2)Kitchens shall be provided with a local exhaust fan that is capable of exhausting 100 cfm to the outside of the home. The local exhaust fan shall be located as close as possible to the range or cook top, but in no case farther than 3 feet horizontally from the range or cook top. (3)Each bathroom and separate toilet compartment shall be provided with local exhaust fans capable of exhausting 50 cfm to the outside of the home. A separate toilet compartment may be provided with 1.5 square feet of openable glazed area in place of mechanical ventilation, except in Uo value Zone 3. (f) **Ventilation Supply and Exhaust System(s) Airflow Measurement.** The airflow required is the quantity of indoor air supplied and/or exhausted by the ventilation	

system as installed and shall be measured using a flow hood, flow grid, or other commercially available airflow measuring device in accordance with the manufactured instructions. The frequency of testing shall be specified in manufacturer's quality assurance plan (QA). Measurements and shall occur whenever any ventilation system components is changed that may impact airflow(e.g. fan size, duct diameter, termination fitting type)

Exception: The airflow rating, at a pressure of 0.25 in. w.c. (62.5 Pa) may be used, provided the duct sizing meets the prescriptive requirements of Table XX or manufacturer's design criteria.

TABLE XX – Prescriptive Duct Sizing
(note: bolded values are the range for mfg. home ventilation systems)

Duct Type	**Flex Duct**								**Smooth Duct**							
Fan Airflow Rating																
CFM @0.25 in. w.c. (L/s @ 62.5 Pa)	**50 (25)**	**80 (40)**	**100 (50)**	125 (65)	150 (75)	200 (100)	250 (125)	300 (150)	**50 (25)**	**80 (40)**	**100 (50)**	125 (65)	150 (75)	200 (100)	250 (125)	300 (150)
Diameter[1] in. (mm)	Maximum Length[2,3,4] ft. (m)															
3 (75)	X	X	X	X	X	X	X	X	5(2)	X	X	X	X	X	X	X
4 (100)	**56 (17)**	**4 (1)**	**X**	**X**	**X**	X	X	X	**114 (35)**	**31 (9)**	**10 (3)**	X	X	X	X	X
5 (125)	**NL**	**81 (25)**	**42 (9)**	**16 (5)**	**2 (0.6)**	X	X	X	**NL**	**152 (46)**	**91 (28)**	51 (16)	28 (9)	4 (1)	X	X
6 (150)	**NL**	**NL**	**158 (48)**	**91 (28)**	**55 (17)**	18 (5)	1 (0.3)	X	**NL**	**NL**	**NL**	168 (51)	112 (34)	53 (16)	25 (8)	9 (3)
7 (175)	NL	NL	NL	NL	161 (49)	78 (24)	40 (12)	19 (6)	NL	NL	NL	NL	NL	148 (45)	88 (27)	54 (16)
8 (200) and above	NL	NL	NL	NL	NL	189 (58)	111 (34)	69 (21)	NL	NL	NL	NL	NL	NL	198 (60)	133 (41)

1. For non-circular ducts, calculate the diameter as four times the cross-sectional area divided by the perimeter.
2. This table assumes no elbows. Deduct 15 feet (5 m) of allowable duct length for each elbow.
3. NL = no limit on duct length of this size.
4. X = not allowed, any length of duct of this size with assumed turns and fitting will exceed the rated pressure drop.

Reason:	PROBLEM: This proposal attempts to address the GAO report recommendations to HUD related to INDOOR AIR QUAILTY. The proposer believes GOA raises urgent health and safety issue that must be PROMPTLY addressed to protect consumers and reduce liability issues to industry and HUD. PROPOSAL RECOMENDATIONS: 1) Utilize recognized engineering standards by better aligning 3280-103 with ANSI/ASHRAE standard 62.2-2013. The proposer believes that alignment is consistent with the objectives National Technology Transfer Act, which direct federal agencies to use established industry ANSI type standards. 2) The proposer looks forwarded to discussing this proposal as chair of the systems sub-committee task group addressing the GAO recommendations at the December 2014 MHCC meeting. 3) Improve engineering design equipment selection. This proposal advises on using 0.25 inch water static pressure drop (not 0.1 as currently assumed) and exhaust duct sizing tables in ASHRAE 62.2 at the design stage in selecting the ventilation system components. 4) Performance testing to ensure compliance with design values. The proposal includes a testing requirement for ALL ventilation system fans, using commercially available flow measuring equipment in accordance with the equipment manufacturer instructions for operation and calibration. The equipment manual instructions will allow for accurate measurements to be performed by manufacturer, DAPIA's, IPIA's, HUD staff and IBTS. it was suggested that the manufacturer QA plan should guide the frequency of ventilation system flow rate testing at the discretion of the manufacturer with DAPIA, IPIA and HUD/IBTS oversight. Noted examples of this commercially available equipment from; THE ENERGY CONSERVATORY: http://products.energyconservatory.com/flowblaster-capture-hood-attachment/ and http://products.energyconservatory.com/exhaust-fan-flow-meter/ ALNOR: http://www.tsi.com/Alnor-Balometer-Capture-Hood-EBT721/ The following are the proposers observations/notes from the MHCC Task Group Conference call on 11/17/2004: 1) Is there a low flow issue in the field? Lubliner offered to HUD and industry stakeholders technical field/in plant assistance to measure the performance of ventilation systems to ensure compliance with 3280.013 minimum flow rate requirements of; 0.035 cfm/ft2 for whole house, 100 cfm for kitchen and 50 cfm bath exhaust fans. Lubliner referenced his person experiences testing as well as an ASHRAE peer review research paper on HUD-code mfg. home ventilation, and the NIST research report for HUD Healthy Homes program. Both reports are peer reviewed engineering publications that document low flow measurements of bath, kitchen and whole house ventilation systems and both referenced in GAO report. 2) What is the scope of GAO report with respect to testing? Lubliner noted he believes the GAO report did not limit performance testing to just whole house ventilation, and suggests bath and kitchen fans performance testing be included, since the consumer care about all exhaust fans meeting the minimum flow rates required in MHCSS 3280.103. 3) What standards and protocols needed to guide flow rate measurements? There are no specific engineering standards that can be referenced to guide the testing. Francisco noted that that ASHRAE 62.2 does not include flow rate protocol requirements. Lubliner suggested that using the equipment manufacturer instructions should be adequate to help ensure the required accuracy and repeatability, as is the case when 62.2 is employed in site built and modular homes. 4) Proposer action items for HUD/MHCC should focus on; * The design and equipment selection using 0.25 pressure drop assumptions (as this proposal addresses), and duct sizing table. * Testing flow rates of ventilation systems using commercially available equipment in accordance the equipment manufacturer instructions. (as t * HUD provides an interpretation that would allow for one exhaust fan located in a bathroom be used for both whole house and bath exhaust ventilation to reduce cost to consumer and improve ventilation system performance.
Substantiating Documents:	
Additional Cost:	No
Cost Benefit Explanation:	There is no cost increase in this proposal, IF HUD allows, (as 62.2 does), the use of one $100 low sone (quiet) exhaust fan in a bathroom to satisfy both the 50 CFM bath fan AND 0.035 CFM.ft2 whole house requirements in MHCSS-3280-103. Any increased cost would be offset by not having to install a furnace supply system (e.g. POS or Blendaire)

	or installing cheap "whole house fan" in the hallway and by eliminating labor and materials associated with; ducting, wiring, ceiling drywall and roof decking/flashing. The cost of testing is insignificant, since the proposal allows the frequency to be determined by the mfg. QA plan. The testing equipment runs $100-$1000 and can be amortized over time so as not tom impact the cost of the individual home. These issues were discussed on the MHCC systems sub-committee tasks groups conference call 11/17/2014.
Subcommittee Recommendation:	Approve as Modified (8-0-0)
MHCC Action:	Approve as Modified (17-1-1)
MHCC Modification of Proposed Change:	*Revise Standard as follows:* **PROPOSED VENTILATION CHANGES TO CURRENT HUD MANUFACTURED HOUSING CONSTRUCTION & SAFETY STANDARDS (MHCSS):** **Insert the following definitions from 62.2-2013 into 3280.102:** ***air, exhaust:*** air discharged from any space to the outside by an exhaust system. ***air, outdoor:*** air from outside the building taken into a ventilation system or air from outside the building that enters a space through infiltration or natural ventilation openings. ***exhaust system:*** one or more fans that remove air from the building, causing outdoor air to enter by ventilation inlets or normal leakage paths through the building envelope. ***mechanical ventilation:*** the active process of supplying air to or removing air from an indoor space by powered equipment such as motor-driven fans and blowers but not by devices such as wind-driven turbine ventilators and mechanically operated windows ***natural ventilation:*** ventilation occurring as a result of only natural forces, such as wind pressure or differences in air density, through intentional openings such as open windows and doors. ***supply system:*** one or more fans that supply outdoor air to the building, causing indoor air to leave by normal leakage paths through the building envelope. ***ventilation:*** the process of supplying outdoor air to or removing indoor air from a dwelling by natural or mechanical means. Such air may or may not have been conditioned. **Insert the following in § 3280.103 Light and ventilation.** (b) *Whole-house ventilation.* Each manufactured home must be provided with whole-house mechanical ventilation having the capability to provide a minimum capacity of 0.035 ft3/min/ft2 of interior floor space or its hourly average equivalent. This ventilation capacity must be in addition to any openable window area. The following criteria must be adhered to: (1) The ventilation capacity must be provided by a mechanical ventilation system or a combination passive and mechanical ventilation system. (3) The ventilation supply system or a portion of the system is permitted to be integral with the home's heating or cooling system. The supply system must be capable of operating independently of the heating or cooling modes. A mechanical ventilation supply system that is integral with the heating or cooling system is to be listed as part of the heating and cooling system or listed as suitable for use with that system. (c) *Additional ventilation.* (2)Kitchens shall be provided with a local exhaust system that is capable of exhausting 100 cfm to the outside of the home. The local exhaust system shall be located as close as

	possible to the range or cook top, but in no case farther than ~~10~~ 3 feet horizontally from the range or cook top. (3)Each bathroom and separate toilet compartment shall be provided with local exhaust system capable of exhausting 50 cfm to the outside of the home. A separate toilet compartment may be provided with 1.5 square feet of openable glazed area in place of mechanical ventilation, except in Uo value Zone 3. ~~(d) **Ventilation Supply and Exhaust System(s) Airflow Measurement.** The airflow required is the quantity of indoor air supplied and/or exhausted by the ventilation system as installed and shall be measured using a flow hood, flow grid, or other commercially available airflow measuring device in accordance with the manufactured instructions. The frequency of testing shall be specified in manufacturer's quality assurance plan (QA). Measurements and shall occur whenever any ventilation system components is changed that may impact airflow(e.g. fan size, duct diameter, termination fitting type)~~ During the design stage, the airflow rating at a pressure of 0.25 in. w.c. (62.5 Pa) may be used, provided the duct sizing meets the prescriptive requirements of ANSI/ASHRAE Standard 62.2-2013 *Ventilation and Acceptable Indoor Air Quality in low-rise Residential Buildings* Table 5.3 or ventilation system manufacturer's design criteria.
MHCC Reason:	The committee had concerns on the testing portion of the proposed change. It was removed to allow the other parts of the proposed change to move forward.
Current Status:	MHCC Final Action submitted to HUD.
Log History:	**2/10/2014** – Final Action from December 2-4, 2014 meeting confirmed by MHCC Ballot II. **12/4/2014** o MHCC Motion: Approve as Modified. o TSSC Recommendation: Approve as Modified. o Resolution of AI-2 GAO letter was presented as a modification to Log 95.

Log # 96 - § 3280.2 Definitions	Date: 11/21/2014
Submitter:	Mark Wilson, Community Frameworks
Requested Action:	New Text
Proposed Change:	Development of Manufactured Home Construction and Safety Standards for structures transportable in one section, which in the traveling mode is 8 body feet or more in width or 40 body feet or less in length or which when erected on-site is between 150 and 320 square feet, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air-conditioning, and electrical systems contained in the structure. The dwelling may or may not contain a kitchen, per se, and may or may not contain bathing fixtures, but at a minimum would contain a water closet and sink.
Reason:	Community Frameworks is a 501(C)3 non-profit organization that has been developing affordable housing in the Pacific Northwest for over forty years. We are also a licensed manufactured home dealer in the states of OR and WA. We recently completed a development of (30) Tiny Homes for a non-profit in Olympia, WA that provided permanent residence for otherwise homeless individuals. The development resulted in national media coverage and has resulted in a great deal of interest by non-profits and cities throughout the nation. The Tiny Homes for that project were site built as a result of a dearth of factory built options. We would like to develop a factory built solution that can be replicated but due to the size of the structures and their intended usage, we are relegated to having them built to IRC standards. By establishing standards under CFR 3280, it would create a Federal Preemption, establish a universal design, facilitate the ease of placement and undoubtedly result in a more affordable solution. In addition to providing a permanent residence to homeless populations, we believe there are other vulnerable individuals and groups that could benefit from the development of this standard. Information specific to the above referenced development may be found at: http://www.nytimes.com/2014/02/20/garden/small-world-big-idea.html?_r=0 (or) at http://quixotevillage.com/
Substantiating Documents:	No
Additional Cost:	Unknown
Cost Benefit Explanation:	Relative to Administrative Costs: I do not know the cost implications to the Office of Manufactured Housing Programs. Relative to product Costs: It has been my experience that it is much more cost effective to have a dwelling built to Part 3280 Manufactured Housing Construction and Safety Standards than to the International Residential Code.
Subcommittee Recommendation:	
MHCC Action:	Disapprove (19-0-0)
MHCC Modification of Proposed Change:	
MHCC Reason:	The MHCC does not have the authority under the Act to create a standard for a home under 320 sq ft. Other means are available for a tiny home producer to seek approval from HUD.
Current Status:	MHCC Final Action submitted to HUD.
Log History:	**2/10/2014** – Final Action from December 2-4, 2014 meeting confirmed by MHCC Ballot II. **12/2/14** – MHCC Motion: Disapprove.

Log # 97 - § 3280.707 Heat producing appliances		Date: 11/21/2014
Submitter:	Michael Lubliner, Northwest Energy Efficiency Alliance	
Requested Action:	New Text	
Proposed Change:	Insert "fuel burning" after "heat producing" in 3280-707	
Reason:	The requirement for listing was intended only for heat producing, "fuel burning" appliances such as natural gas, propane, oil and solid fuel furnaces &/or Domestic Hot Water heater (DHW). This proposal will save consumers money and provide greater choices to utilize non-burning energy efficient technologies such as; heat pump water heaters and ductless and centrally ducted Variable Refrigerant flow (VRF) heat pumps. Consumers who desire these systems are often told that HUD requirements do not allow these technologies to be used without a special listing for HUD-homes built to MHCC. This often results in installation aftermarket which is more expensive than having the plant install	
Substantiating Documents:	No	
Additional Cost:	No	
Cost Benefit Explanation:	Consumers who desire these electric space and water heating systems are often told that HUD requirements do not allow these technologies to be used without a special listing for HUD-homes built to MHCC. Often they end up doing the installation aftermarket which is more expensive than having the plant install, and may result in non-compliance with MHCSS. The proposal however will reduce revenues to listing agencies who conduct the "special" HUD listing.	
Subcommittee Recommendation:		
MHCC Action:	Disapprove (18-1-0)	
MHCC Modification of Proposed Change:		
MHCC Reason:	In favor of action on Log 94.	
Current Status:	MHCC Final Action submitted to HUD.	
Log History:	**2/10/2014** – Final Action from December 2-4, 2014 meeting confirmed by MHCC Ballot II. **12/2/14** – MHCC Motion: Disapprove.	

Log # 98 - § 3280.307 Resistance to elements and use	Date: 11/21/2014
Submitter:	Michael Lubliner, Northwest Energy Efficiency Alliance
Requested Action:	New Text
Proposed Change:	**Add section 6.2 definitions:** Water Resistive Barrier – A material behind the exterior wall covering that is intended to prevent liquid water that has penetrated behind the exterior covering from intruding further into the exterior wall assembly. **Add a new section "e":** **§3280.307 Resistance to elements and use.** (e) The exterior wall envelope shall be designed and constructed in a manner that prevents the accumulation of water within the wall assembly by providing a Water Resistive Barrier (WRB) behind the exterior cladding and a means of draining water that enters the assembly.
Reason:	This proposal seeks to improve the durability, longevity, and quality of our national "federally preempted" housing stock built to HUD MHCSS. WRB systems are recognized by the residential home building industry as an effective way to reduce long-term potential wall moisture problems. WRB practices have been adopted in site-built codes and even the Manufactured Housing Standard NFPA501-2010 sections 6.2.1.2 and 6.7.1.3.1. WRB systems are also required by DOE, ASHRAE, EPA, and HUD in voluntary housing programs. Requiring a WRB system may reduce wall moisture problems such as mold, rot, and insects. Wall moisture-related problems may damage consumer property and may present potential negative health impacts. Reducing moisture problems may also lower risks to industry manufacturers, retailers, consumers, lenders, and insurance company property. During the MHCC meeting discussion, it was noted that manufactured home manufacturers follow window installation procedures detailed in installation manuals provided by window manufacturers. Window manufacturers that sell HUD code-approved windows have excluded a requirement for window flashings in their installation manuals because they do not want to upset their customers, such as large HUD-code corporations, in fear that they will lose their business. Adoption of this proposal levels the playing field so window installation practices follow those of the site built and modular industry
Substantiating Documents:	No
Additional Cost:	Unknown
Cost Benefit Explanation:	Moisture-related problems, which show up long after the manufacturer warranty expires, result from failed cladding and/or window systems. The repair bill can easily be several thousand dollars. The proposal would add an estimated; $0.80 to $1.11 per window for window flashing and $0.20 to $0.30 per square foot for a WRB. Cost benefits are positive given the avoided maintenance expenses, increases resale benefits and extended useful life and/or home resale value.
Subcommittee Recommendation:	Approve (10-0-0)
MHCC Action:	Approve (19-0-0)
MHCC Modification of Proposed Change:	
MHCC Reason:	
Current Status:	MHCC Final Action submitted to HUD.
Log History:	**2/10/2014** – Final Action from December 2-4, 2014 meeting confirmed by MHCC Ballot II. **12/3/14** o MHCC Motion: Approve. o TSSC Recommendation: Approve.

	12/2/14 – MHCC Motion: Refer to Technical Systems Subcommittee.

Log # 99 - § 3282.8 Applicability	**Date: 11/24/2014**
Submitter:	Matt Wald, RVIA
Requested Action:	New Text
Proposed Change:	**3282.8** (g) *Recreational vehicles.* Recreational vehicles are not subject to this part, part 3280, or part 3283. A recreational vehicle is a vehicle which is built on a single chassis and designed as temporary living quarters for recreational, camping, travel, or seasonal use and built in compliance with consensus standards for such products, including: (1) a self-propelled motorhome or recreational vehicle trailer that is towed by another vehicle without a special highway use permit and is regulated by the National Highway Traffic Safety Administration as a vehicle, and (2) a park model recreational vehicle that has a gross area of not greater than 400 square feet based on the exterior dimensions of the unit measured at the largest horizontal projections in the setup mode, excluding any loft area having less than 5 feet in ceiling height, roof overhangs, and exterior porch or deck area 10 feet or less in length that is not enclosed other than by guardrails. ~~(1) Built on a single chassis;~~ ~~(2) 400 Square feet or less when measured at the largest horizontal projections;~~ ~~(3) Self-propelled or permanently towable by a light duty truck; and~~ ~~(4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.~~
Reason:	Recreation vehicles (RV) are not manufactured housing: they are not designed nor built to be permanent residences, they do not have a HUD label (tag), their manufacturers do not seek to attach a HUD label to them, and manufacturers are not seeking federal preemption from state or local regulations of RVs. The Department of Housing and Urban Development (HUD) and, specifically, the HUD Office of Manufactured Housing regulates manufactured housing. Manufactured housing, designed and built to HUD standards under the HUD Office of Manufactured Housing program, are permanent residences. Recreational vehicles are designed and built to provide temporary living quarters for camping, recreational or seasonal use. Most, in fact, are vehicles. Therefore, RVs are statutorily outside the scope of HUD's manufactured housing program, regulation and standards. These proposed amendments to the applicable regulations will clarify RVs' status under the law. RVs and their use are regulated by: • The National Highway Traffic Safety Administration (NHTSA) • State maximum vehicle dimension laws which limit the length, width and height of all vehicles • State Motor Vehicle Departments • State RV standards requirements • Local zoning laws and regulations • ANSI/NFPA RV consensus standards RVIA's proposed amendments to HUD's regulations, by clarifying that RVs are excluded from the definition of manufactured housing, avoids conflicts and tensions between regulatory regimes and unnecessary overregulation of the RV industry. The current HUD regulation defining "recreational vehicles" as excluded from the HUD manufactured housing standards program is 32 years old. The definition does not reflect the evolution of RVs over the past three decades or the regulatory scheme they operate under today. Since the current definition was written in 1982, park model RVs with porches have become a common RV choice in American campgrounds. Fifth wheel and travel trailer RVs have evolved to meet consumer demand, including the advent of slide-out rooms. These innovations in response to consumer demand do not pose any additional safety or health risks to the public, as evidence by the fact that state highway laws have allowed vehicles, including travel trailers and fifth wheels, to become larger. The HUD definition of "recreational vehicle" must be updated to reflect the

	modern RV industry, current state maximum vehicle dimension laws, technology improvements, and consumer preferences rather than relying on regulatory policies that were created over a generation ago when electric typewriters and cassette tapes were cutting edge technology. RVIA's proposed amendments to HUD's regulations would create a modern, clear, simple and bright line between manufactured housing and recreational vehicles. Consumers, regulators, manufacturers, campground owners, dealers, and other stakeholders will be able to clearly and easily understand the distinction between modern manufactured housing that bears a HUD label and modern RVs that provide temporary living quarters for camping, recreational or seasonal use. As a result, there will be less need for enforcement action by the Office of Manufactured Housing as the industry will be better able to bring itself into compliance with the new regulations. Both the RV industry and the manufactured housing industry will benefit, as will consumers. These proposed amendments to the HUD regulations are supported by the recreation vehicle manufacturers, dealers, and the manufactured housing industry as well as the campground and RV park industry. In a letter to Administrator Danner (attached), RVIA requests HUD's support of these changes as well as sub-regulatory action to mitigate the effect of the outdated definition while updates to the regulation are considered.
Substantiating Documents:	Yes
Additional Cost:	No
Cost Benefit Explanation:	There are no costs associated with this proposal. To the contrary, confusion caused by the existing regulations and the interpretive bulletins issued under them have created circumstances in which a failure to promulgate an amended regulation on an expedited basis will lead to significantly increased costs. The October 1, 2014, HUD Office of Manufactured Housing policy memo affects current park models with porches that extend beyond 400 square feet, worth approximately $454 million , and has pushed manufacturers that had intended to build additional park models into a regulatory limbo that could lead to closing down their businesses or substantial product lines. While accurate dollar value estimates do not currently exist, jobs and sales revenue will be lost for manufacturers and dealers if the regulations are not amended as proposed. In addition, campgrounds face the risk of being required to prohibit the use of park models or risk new regulation and taxation from state and local authorities. Millions of dollars in revenue and taxes could be at risk if the proposed new regulations are not promulgated quickly. Further, if the regulation is not amended to recognize the invention of slide out rooms (potentially allows slide out rooms to turn a recreational vehicle into manufactured housing) and continues to require that recreational vehicles be 'permanently towable by a light duty truck,' a term for which HUD currently has no definition' but which EPA defines as trucks 8500 GVWR and less, further costs will be incurred. Two and one-half million travel trailers, fifth wheels, and park model RVs would be classified as "manufactured housing" subject to HUD regulation if these regulatory changes are not made. The resulting cost to RV consumers, dealers, and manufacturers could total in the tens of billions of dollars. The benefits of this proposal to amend HUD's regulations extend beyond these avoided costs. Clarifying that modern RVs are not manufactured housing gives all elements of both industries, and consumers, regulatory certainty with regard to the modern line between RVs and manufactured housing. As a result, the industry's cost of compliance will be lower. Finally, the proposal frees the Office of Manufactured Housing to focus on regulating and updating standards for manufactured housing rather than spending time or resources attempting to make RVs conform to decades-out-of-date definitions.
Subcommittee Recommendation:	
MHCC Action:	Disapprove (19-0-0)
MHCC Modification of Proposed Change:	

MHCC Reason:	In favor of action on Log 89.
Current Status:	MHCC Final Action submitted to HUD.
Log History:	**2/10/2014** – Final Action from December 2-4, 2014 meeting confirmed by MHCC Ballot II. **12/2/2014** – MHCC Motion: Disapprove.

Log # 100 - § 3280.204 Kitchen cabinet protection	**Date: 11/24/2014**
Submitter:	Lois Starkey, MHI
Requested Action:	New Text
Proposed Change:	(f) Range hood finish materials must be installed with a minimum 5/16" gypsum board or other limited or non-combustible substrate between the metal range hood and the decorative finish materials. Finish materials shall have a flame spread rating not exceeding 200. Sealants and other trim materials 2" or less in width are exempt from this provision.
Reason:	Decorative range hoods are used widely in the homebuilding industry. This proposed changes is needed to ensure that the use of decorative range hood covers will meet the fire safety requirements of Subpart C of the Manufactured Home Construction and Safety Standards (24 CFR Part 3280). The proposal is more stringent then the International Residential Code (IRC) for One- to-Four Single Family Housing, which contains no such requirement.
Substantiating Documents:	Yes Staff Note: No additional documents received.
Additional Cost:	No
Cost Benefit Explanation:	The proposal will update the standard to take into consideration current industry practices and at the same time meet appropriate fire safety requirements. The cost is minimal
Subcommittee Recommendation:	
MHCC Action:	
MHCC Modification of Proposed Change:	*Note: CC Mod at December 2014 Meeting - was referred to SDSC before committee took action on this modification.* *Revise Proposed Change as follows (in red):* (f) Range hood finish materials must be installed with a minimum 5/16" gypsum board or other limited or non-combustible substrate between the metal range hood and the decorative finish materials. Finish materials shall have a flame spread rating not exceeding 200. Panel edges, sealants, and other trim materials 2" or less in width are exempt from this provision.
MHCC Reason:	
Current Status:	Awaiting SDSC Recommendation.
Log History:	**12/4/2014** – SDSC Motion: Refer Log 100 to Manuel Santana for further examination. **12/2/2014** – MHCC Motion: Refer to SDSC.

<table>
<tr><td colspan="2">Log # 101 - § 3280.611 Vents and venting</td><td>Date: 11/24/2014</td></tr>
<tr><td>Submitter:</td><td colspan="2">Lois Starkey, MHI</td></tr>
<tr><td>Requested Action:</td><td colspan="2">Revised Text</td></tr>
<tr><td>Proposed Change:</td><td colspan="2">§3280.611(c) Size of vent piping—(1) Main vents*******

§3280.611(c) Size of vent piping—(1) Main vents*******

(5) Distance of fixture trap from vent shall not exceed the values given in the following table:

Maximum Distance of Fixtures from Vent Trap
<table><tr><th>Size of fixture drain (inches)</th><th>Distance trap to vent</th></tr><tr><td>1-1/4</td><td><s>4 ft. 6 in</s>. 5 ft.</td></tr><tr><td>1-1/2</td><td><s>4 ft 6 in</s>. 6 ft.</td></tr><tr><td>2</td><td><s>5 ft.</s> 8 ft.</td></tr><tr><td>3</td><td><s>6 ft.</s> 12 ft.</td></tr></table></td></tr>
<tr><td>Reason:</td><td colspan="2">This proposal aligns the distance from the fixture trap to vent of the HUD code with that of the International Plumbing Code. The International Plumbing Code has been used for the construction of site built and modular homes for over a decade. The IPC was not around when the HUD code was first developed.</td></tr>
<tr><td>Substantiating Documents:</td><td colspan="2">No</td></tr>
<tr><td>Additional Cost:</td><td colspan="2">No</td></tr>
<tr><td>Cost Benefit Explanation:</td><td colspan="2">There is no cost associated with this proposal. it is an update to an out dated provision and aligns current construction and design practices with current codes.</td></tr>
<tr><td colspan="3"></td></tr>
<tr><td>Subcommittee Recommendation:</td><td colspan="2"></td></tr>
<tr><td>MHCC Action:</td><td colspan="2">Approve (19-0-0)</td></tr>
<tr><td>MHCC Modification of Proposed Change:</td><td colspan="2"></td></tr>
<tr><td>MHCC Reason:</td><td colspan="2"></td></tr>
<tr><td>Current Status:</td><td colspan="2">MHCC Final Action submitted to HUD.</td></tr>
<tr><td>Log History:</td><td colspan="2">2/10/2014 – Final Action from December 2-4, 2014 meeting confirmed by MHCC Ballot II.
12/3/2014 – MHCC Motion: Approve.</td></tr>
</table>

Log # 102 - § 3280.105 Exit facilities; exterior doors	Date: 11/24/2014
Submitter:	Lois Starkey, MHI
Requested Action:	New Text
Proposed Change:	**3280.105(a)(3)** One of the two required exit doors may discharge into an attached site-built garage provided the garage has an exit door that discharges to grade. An overhead garage door may not be used as an exit door.
Reason:	The proposed change is consistent with the current requirement for construction of single family site built homes. It allows for greater flexibility in home design and construction and eliminates problems that arise from designing homes with three egress doors. It reflects current building design and construction techniques, yet provides equal protection for to homeowners. The current IRC Codes require a home to have only one egress door (and it can be an egress door into a garage).
Substantiating Documents:	No
Additional Cost:	No
Cost Benefit Explanation:	Cost savings will result because it will avoid costs associated with having to meet the Alternative Construction approval requirements of the Procedural and Enforcement Regulations (24 CFR Part 3282).
Subcommittee Recommendation:	Disapprove (8-0-0) – The proposal is incomplete.
MHCC Action:	Disapprove (19-0-0)
MHCC Modification of Proposed Change:	
MHCC Reason:	The proposal is incomplete.
Current Status:	MHCC Final Action submitted to HUD.
Log History:	**2/10/2014** – Final Action from December 2-4, 2014 meeting confirmed by MHCC Ballot II. **12/4/2014** o MHCC Motion: Disapprove. o SDSC Recommendation: Disapprove. o MHCC Motion: Refer to SDSC.

Log # 103 - § 3280.808 Wiring methods and materials	Date: 11/24/2014
Submitter:	Lois Starkey, MHI
Requested Action:	Revised Text
Proposed Change:	Proposed Change to 24 CFR Part 3280.808. Wiring Methods and Materials 3280.808 (k) When outdoor or under-chassis line-voltage wiring is exposed to moisture or physical damage, it shall be protected by ~~rigid metal~~ conduit listed for the intended use. The conductors shall be suitable for wet locations.
Reason:	The current requirement limits this application to rigid metal conduit. The 2005 NEC provides many different types of conduit that can be used for wet locations and/or locations where the conductors may be subject to physical damage.
Substantiating Documents:	No
Additional Cost:	No
Cost Benefit Explanation:	This is a update to the current code, and is a benefit because it allows for new materials and technologies to be utilized in the construction of manufactured homes.
Subcommittee Recommendation:	Approve as Modified (10-0-0)
MHCC Action:	Approve as Modified (19-0-0)
MHCC Modification of Proposed Change:	*Revise Standard as follows:* **3280.808 (k)** Where ~~When~~ outdoor or under-chassis line-voltage (120 volts, nominal or higher) wiring is exposed to moisture or physical damage, it must be protected by a ~~rigid metal~~ conduit or raceway approved for use in wet locations or where subject to physical damage. ~~or intermediate metal conduit listed for the intended use~~. The conductors must be suitable for wet locations. ~~Electrical metallic tubing or rigid nonmetallic conduit is permitted to be used when closely routed against frames and equipment enclosures.~~
MHCC Reason:	Modification removes the requirement that the conduit be rigid metal and expands the possible materials to anything that is acceptable and listed for use in this manner.
Current Status:	MHCC Final Action submitted to HUD.
Log History:	**2/10/2014** – Final Action from December 2-4, 2014 meeting confirmed by MHCC Ballot II. **12/4/2014** o MHCC Motion: Approve. o TSSC Recommendation: Approve as Modified**.** **12/3/2014** – MHCC Motion: Refer to TSSC.

Log # 104 - § 3285.5 Definitions & § 3285.801 Exterior close-up		Date: 11/24/2014
Submitter:	Lois Starkey, MHI	
Requested Action:	New Text	
Proposed Change:	**PART 3285—MODEL MANUFACTURED HOME INSTALLATION STANDARDS** **In §3285.5**, in alphabetic order, add the definitions for ''peak cap assembly'' and ''peak flip assembly'' to read as follows: §3285.5 Definitions. * * * * * Peak cap assembly means any roof peak assembly that is either shipped loose or site completed and is site installed to finish the roof ridge/peak of a home. Peak flip assembly means any roof peak assembly that requires the joining of two or more cut top chord members on site. The cut top chords must be joined at the factory by straps, hinges, or other means. * * * * * **In §3285.801**, revise paragraph (f)(2) to read as follows: §3285.801 Exterior close-up. * * * * * (f) *Hinged roofs and eaves.* Hinged roofs and eaves must be completed during installation in compliance with all requirements of the Manufactured Home Construction and Safety Standards (24 CFR Part 3280) and the Manufactured Home Procedural and Enforcement Regulations 24 CFR Part 3282). Unless exempted by the following provisions, hinged roofs are also subject to a final inspection for compliance with the Manufactured home Construction Standards (24 CFR Part 3280) by the IPIA or a qualified independent inspector acceptable to the IPIA. Homes with hinged roofs that are exempted from IPIA inspection are instead to be completed and inspected in accordance with the Manufactured Home Installation Program (24 CFR Part 3286). This includes homes: 1. That are designed to be located in Wind Zone I: 2. In which the roof pitch of the hinged roof is less than 7:12, including designs incorporating peak cap or peak flip assembly components; 3. In which fuel burning appliance flue penetrations are not above the hinge	
Reason:	In 2009 under a formal opinion letter by the former program administrator for Manufactured Housing, HUD issued Alternate Construction (AC) approvals for certain specified roof ridge designs without a requirement for specific on-site IPIA inspections. HUD has changed its position for any new approvals of these types of ridge assemblies, and going forward, will require an on-site IPIA inspection as a condition for approval of these types of designs. MHI believes that hinged roof assemblies, known as double hinged or "peak flip" assemblies and ridge box or "peak cap" assemblies, that meet the requirements of §3285.801(f) do not need AC letters and should be covered by the requirements for set-up under 24 CFR Part 3285. These types of hinged roof designs do not violate any section of the standards (§3280), and thus do not qualify for or require AC letters as prescribed under §3282.14. Pursuant to §3285.801, certain hinged roofs are exempted from on-site inspection by Production Inspection Primary Inspection Agencies (IPIA's). This exemption includes homes that: (1) that are designed to be located in Wind Zone 1; (2) in which the pitch of the hinged roof is less than 7:12, and (3) in which fuel burning appliance flue penetrations are not above the hinge. As noted by both industry representatives and state regulators at the October, 2012 MHCC meeting, this type of roof installation is common throughout the country, for all types of factory-built housing, including those under applicable modular construction programs. The installation of these hinged roofs is much less complicated than most "close up" requirements for multi-section homes. The technology involved is not new and has been time-tested without failures. Licensed and trained installers must install these homes in accordance with the manufacturer's installation instructions and meet all other provisions, including inspections, of 24 CFR Parts 3285 and 3286, Model Manufactured Home Installation Standards and Manufactured Housing Installation Rules and Regulations.	

Substantiating Documents:	Yes Staff Note: No additional documents received.
Additional Cost:	No
Cost Benefit Explanation:	This will be beneficial by incorporating current design practices into the regulations, and eliminate unnecessary IPIA inspections.
Subcommittee Recommendation:	
MHCC Action:	Approve (19-0-0)
MHCC Modification of Proposed Change:	
MHCC Reason:	
Current Status:	MHCC Final Action submitted to HUD.
Log History	**2/10/2014** – Final Action from December 2-4, 2014 meeting confirmed by MHCC Ballot II. **12/3/2014** – MHCC Motion: Approve.

Log # 105 - § 3282.8 Applicability		Date: 11/24/2014
Submitter:	Lois Starkey, MHI	
Requested Action:	New Text	
Proposed Change:	Add the following (underlined language) to 24 CFR Part 3282.8 (g)Recreational vehicles. Recreational vehicles are not subject to this part, part3280, or part 3283. A recreational vehicle is a vehicle which is: (1) built on a single chassis; (2) 400 square feet or less when measured at the largest horizontal projections <u>in the setup mode, excluding any loft area having less than 5 feet in ceiling height, roof overhangs, and exterior porch or deck area less than 10 feet in length and not enclosed other than by guardrails</u>; (3) Self-propelled or permanently towable by a light duty truck; and (4)Designed primarily not for use as a permanent dwelling but as temporary living quarters, for recreational, camping travel, or seasonal use	
Reason:	The proposal clarifies that porches and roof overhangs an RV/park model may be excluded from the measurement requirements of HUD's Interpretative Bulletin A-I-88 and 24 CFR 3282.8(g). This address confusion that has arisen in the marketplace between a manufactured home and a towable, RV/Park models. Recreation vehicles (RV) are not manufactured housing: they are not designed nor built to be permanent residences, they do not have a HUD label (tag). There is no additional cost associated with this proposal	
Substantiating Documents:	No	
Additional Cost:	No	
Cost Benefit Explanation:	This will benefit consumers by eliminating any confusion between manufactured homes a RV Park Models or Recreational Park Trailers.	
Subcommittee Recommendation:		
MHCC Action:	Disapprove (19-0-0)	
MHCC Modification of Proposed Change:		
MHCC Reason:	In favor of action on Log 89.	
Current Status:	MHCC Final Action submitted to HUD.	
Log History	**2/10/2014** – Final Action from December 2-4, 2014 meeting confirmed by MHCC Ballot II. **12/2/2014** – MHCC Motion: Disapprove.	

Log # 106 - § 3282.362 Labels		Date: 11/25/2014
Submitter:	Lois Starkey, Manufactured Housing Institute	
Requested Action:	Revised Text	
Proposed Change:	**24 CFR3282.362** - Production Inspection Primary Inspection Agencies (IPIAs). (c)(2)Labeling— (i)Labels required. (A) The IPIA shall <u>continuously</u> provide the manufacturer with a ~~two– four-week~~ supply (at the convenience of the IPIA and the manufacturer) of the labels described in this subsection, except that no labels shall be issued for use when the IPIA is not present if the IPIA is not satisfied that the manufacturer can and is producing manufactured homes which conform to the design and, as appropriate, to the standards.	
Reason:	This proposal is needed to address problems in recent years, of label shortages. There have been several such occasions in the last two years when Congressional budget impasses have led to a government wide shutdown. Also State IPIAs who serve a number of manufacturers, have had problems with allocations when production increases unexpectedly.	
Substantiating Documents:	No	
Additional Cost:	No	
Cost Benefit Explanation:	The proposed will be beneficial to consumers because sales will not be constrained by arbitrary limits on the number of labels that can be purchased by manufacturers. Should there be a need to limit label distribution, HUD can do so under its compliance and enforcement authority.	
Subcommittee Recommendation:		
MHCC Action:		
MHCC Modification of Proposed Change:		
MHCC Reason:		
Current Status:	Received by Secretariat.	
Log History:		

Log # 107 - § 3280.2 Definitions		Date: 11/25/2014
Submitter:	Lois Starkey, Manufactured Housing Institute	
Requested Action:	Revised Text	
Proposed Change:	**Proposed Change to 24 CFR Part 3280.2 Definitions.** *Certification label* means the approved form of certification by the manufacturer that, under ~~§3280.8~~ §3280.11, is permanently affixed to each transportable section of each manufactured home manufactured for sale in the United States.	
Reason:	This section corrects a typographical error. The section in the HUD Code that addresses certification requirements is §3280.11. §3280.8 deals with waivers.	
Substantiating Documents:	No	
Additional Cost:	No	
Cost Benefit Explanation:	This is an editorial change only.	
Subcommittee Recommendation:		
MHCC Action:		
MHCC Modification of Proposed Change:		
MHCC Reason:		
Current Status:	Received by Secretariat.	
Log History:		

Log # 108 - § 3280.607 Plumbing fixtures		Date: 12/08/2014
Submitter:	Ross Kinzler	
Requested Action:	New Text	
Proposed Change:	(7) Accessible shower or bath tubs. These fixtures designed to accommodate individuals with special needs shall be installed in accordance with the manufacturer's instructions not withstanding other requirements of this section.	
Reason:	Manufacturers routinely reject requests for walk-in, zero step entry or other accessible bathing fixtures because of limitations imposed by 3280.607 for minimum dam heights and traps. This new language would permit in plant installation of bathing systems designed to serve the handicapped but may not conform to other sections of the HUD Code provided that they are installed in accordance with the fixture's manufacturer provided instructions.	
Substantiating Documents:	No	
Additional Cost:	No	
Cost Benefit Explanation:	Consumers report to us that they often have to order a home with a standard bath only to bear the cost of demolishing the new bath just to install a handicap accessible unit. The new language should also avoid the need for an AC letter for those manufacturers that want to be customer focused and install the correct bath in the plant.	
Subcommittee Recommendation:		
MHCC Action:		
MHCC Modification of Proposed Change:		
MHCC Reason:		
Current Status:	Received by Secretariat.	
Log History:		

Log # 109 - § 3280.210, Subpart C	Date: 12/16/2014
Submitter:	David Karmol
Requested Action:	New Text
Proposed Change:	**24 CFR 3280.210** Fire and Life Safety Detection and Suppression Systems. All manufactured home dwelling units shall comply with the following life safety requirements of *2015 International Residential Code for One and Two Family Dwelling Units*©(IRC). Residential Fire Sprinkler Systems (R313.2) Interconnected Smoke Alarms (R314) Carbon Monoxide Alarms (R315) *(All of the cited 2015 International Residential Code (IRC) requirements can be found in Chapter 3 of the code,which is available for viewing at codes.iccsafe.org)*
Reason:	The International Residential Code(IRC) is adopted throughout the United States, and since the 2009 edition, Section R313 has required the installation of automatic fire sprinklers in all new residential dwelling units. This requirement is intended to reduce the risks associated with the change in materials of construction, as well as the significant changes in the materials of housing unit room contents and furnishings, which has dramatically raised the risk of fire related deaths and injuries in new homes. These changes have affected all new dwellings, including manufactured homes. The IRC has required smoke alarms since the 2000 version, and has required carbon monoxide detectors for certain housing units since 2006.All of these requirements are minimum life safety requirements, of minimal cost, with demonstrated proof that they save thousands of lives annually. We believe that most new manufactured homes are already protected by smoke alarms, and technology has made interconnected smoke alarms a sensible, and almost zero additional cost requirement in the new IRC. Likewise, carbon monoxide detectors are required where a fuel-fired appliance is installed in the dwelling unit, and such detectors are often combined in a single system with smoke alarms, which the code recognizes and permits. The requirement for a sprinkler system follows the evidence that where sprinklers are installed in all new homes the incidence of significant fires is dramatically reduced, property damage is dramatically lessened, and most important, deaths from fire are eliminated as a risk, both to the occupants, and to first responders who answer calls when a fire breaks out. In the one jurisdiction where sprinkler systems have been required in new residential dwellings, the record is clear: not a single death, to either a firefighter or occupant, has occurred in a sprinklered home for nearly thirty years. This is a remarkable statistic, and argues strongly in favor of sprinkler installation. That jurisdiction (Scottsdale, AZ) is one where construction and home sales were booming over those same twenty years, putting to rest the false claim that requiring sprinklers would damage home sales, or make homes too expensive. See Scottsdale Sprinkler System Reliability report: http://www.usfa.fema.gov/pdf/efop/efo42677.pdf The fact is that site built homes and manufactured homes share one of the key risk factors for fires: an increase in the flammability of home furnishings that has been well documented, and is a reason that more and more fires are not survivable, especially for the elderly and the very young, who often cannot escape in time. Likewise, the faster flashover time with newer home furnishings and materials, means that the fire department often cannot reach a fire before the home becomes impossible for firefighter to enter, rescue trapped occupants or extinguish the blaze. There is no reason that fire and life safety protection should be less for those who purchase lower cost manufactured housing than for those who purchase site-built housing. And the cost to install such systems should be less in manufactured housing than in site-built housing, due to the lack of separate inspections, the ability to design common systems, and the cost reductions that accompany mass production. In fact, the cost of installing automatic sprinkler systems in Scottsdale, AZ site built homes has declined from over $1.00 per square foot of protected space to

	around $.59/sf, over the course of the years the requirement has been in place, despite generally rising construction costs over the same period. The same economies of scale should be expected with manufactured housing. See, Automatic Sprinklers, a Ten Year Study (http://www.ircfiresprinkler.org/docs/scottsdale%20sprinklers%2010%20year%20report.pdf) The NFPA Research Foundation has release a study showing the cost of installing residential fire sprinkler systems for on-site construction to be an average of $1.35/sq. ft. Link: http://www.nfpa.org/research/fire-protection-research-foundation/reports-and-proceedings/suppression/home-fire-sprinklers/home-fire-sprinkler-cost-assessment-final-report It is reasonable to presume the cost would be lower for manufactured housing based on the efficiencies that can be achieved with installation at the manufacturing facility. Two recent fires in manufactured homes, one in Edna, TX and the other in Portland, ME, which together claimed the lives of nine people- seven children and two adults- should be reason enough for the HUD MHCC to immediately mandate the same protection for manufactured homes as is now required in the International Residential Code for site built homes, which is used as the basis for residential building codes in 49 of the 50 states. See reports in FireRescue1: http://www.firerescue1.com/children/articles/2029347-5-children-killed-in-Texas-mobile-home-fire/
Substantiating Documents:	No
Additional Cost:	Yes
Cost Benefit Explanation:	The estimated cost for automatic fire sprinklers is for additional cost of less than $1.00 per square foot of dwelling unit space, based on the cost of installation of sprinklers in site built homes, where transportation costs, specialized labor costs, and coordination and inspection costs are all higher than with manufactured housing. When a home is equipped with plumbing, the additional cost of installing automatic fire sprinklers is minimal, as the fire sprinklers simply require the additional installation of flexible piping, and sprinkler heads in the rooms/locations as required by the code. The following studies support the cost in site built homes: http://www.ircfiresprinkler.org/docs/scottsdale%20sprinklers%2010%20year%20report.pdf and http://www.nfpa.org/research/fire-protection-research-foundation/reports-and-proceedings/suppression/home-fire-sprinklers/home-fire-sprinkler-cost-assessment-final-report Interconnected smoke alarms will add no cost to the cost of smoke alarms, as almost all smoke alarms sold today are available with the interconnect feature, at prices equivalent to the price of non-interconnected smoke alarms ($12-31.00 retail) Carbon Monoxide detectors are available, at retail prices of between $7.00 and $50.00 on Amazon.com, and it is likely that they can be purchased at wholesale prices of considerably less. Link: http://www.amazon.com/carbon-monoxide-detector/b?ie=UTF8&node=495272 Combination smoke and carbon monoxide detectors are also commonly available, at prices not much higher than the cost of simple smoke detectors. At most, the cost of installing interconnected smoke alarms, and carbon monoxide detectors would be less than $100.00 per manufactured home.
Subcommittee Recommendation:	
MHCC Action:	
MHCC Modification of Proposed Change:	
MHCC Reason:	
Current Status:	Received by Secretariat.
Log History:	

Log # 110 - § 24 CFR 3280.211, Subpart C	Date: 12/16/2014
Submitter:	David Karmol
Requested Action:	New Text
Proposed Change:	**24 CFR 3280.211** Life Safety and Structure Resilience. All manufactured home dwelling units shall comply with the flood safety requirements of *International Residential Code for One and Two Family Dwelling Units* ©(IRC). Flood resistant construction (R322) with specific requirements for Manufactured Homes in R322.1.9
Reason:	The reason for this section is to mandate that manufactured homes be installed in accordance with section R322 of the IRC, including Sec. R322.1.9 which includes specific requirements for manufactured homes. This section requires manufactured housing located in coastal high hazard flood zones to be installed on a foundation at or above the flood plain elevation, as well as meeting anchor and tie-down provisions in compliance with local, state and federal requirements referenced in that section. The referenced section, which includes provisions addressing manufactured homes in high hazard coastal zones, is also a minimum requirement, and should apply to manufactured homes in the same way provisions of Sec. R322 apply to site built homes in such zones.
Substantiating Documents:	False
Additional Cost:	Unknown
Cost Benefit Explanation:	This cost cannot be estimated, as this proposed section is a cost associated with installation of manufactured housing, and will be entirely dependent on where the housing is installed. If the manufactured housing unit is installed in a high hazard flood zone, there may be some additional cost to elevating the foundation to meet the requirements of the code, which will be entirely dependent on the individual site. There should be no additional cost to manufacture the housing unit, as there are no tie down or anchor requirements other than those already required under local, state or federal laws and regulations. If a manufactured housing unit is installed anywhere outside of a high hazard flood zone, there would be no cost impact to this proposed change.
Subcommittee Recommendation:	
MHCC Action:	
MHCC Modification of Proposed Change:	
MHCC Reason:	
Current Status:	Received by Secretariat.
Log History:	

Log # 111 - § 3280.2 Definitions; 3280.105 Exit Facilities, 3280.205 Fire Blocking	Date: 12/31/2014
Submitter:	Lois Starkey
Requested Action:	New Text
Proposed Change:	Revise 24 CFR 3280.2 as follows: "Dwelling Unit" means ~~one or more habitable rooms which are designed to be occupied by one family with facilities for living sleeping and eating.~~ A structure designed and constructed for use as a permanent residence by one or more persons, with facilities for sleeping, eating, cooking and sanitation, which constitute an independent living unit. Add to 24 CFR Part 3280.206 Fire Blocking a. *General.* Manufactured homes designed for one dwelling unit must meet the fire blocking requirements of this section. The integrity of all materials must be maintained. Manufactured Homes designed for more than one dwelling units must meet fire blocking and separation requirements which are comparable to those provided for in the other residential building codes for multifamily housing. Add to 24 CFR Part 328.105; Exit Facilities; exterior doors, add a new subsection: a. *General.* Manufactured homes designed for one dwelling unit must meet the egress requirements of this section. Manufactured homes designed for multifamily dwellings must meet egress requirements which are comparable to those provided for in other residential building codes for multifamily housing. Revise existing subsections (a) to (b) and (b) to (c).
Reason:	This proposal will provide for the design and construction of manufactured housing for multifamily use. The current regulations are limited to single family design and construction.
Substantiating Documents:	Yes
Additional Cost:	No
Cost Benefit Explanation:	The proposal does not envision additional costs, beyond costs that are already incurred in the normal design and construction process. In fact, this proposal could save costs by elimination duplicative design, design approval and certification requirements required by modular building codes and programs.
Subcommittee Recommendation:	
MHCC Action:	
MHCC Modification of Proposed Change:	
MHCC Reason:	
Current Status:	Received by Secretariat.
Log History:	

Log # 112 - § 3280.4(b) Incorporation by reference		Date: 12/31/2014
Submitter:	Gary Clark	
Requested Action:	Revised Text	
Proposed Change:	Air-Conditioning, Heating, & Refrigeration Institute (AHRI), ~~4100 North Fairfax Drive, Suite 200,~~2111 Wilson Boulevard, Suite 500, Arlington, VA 22203~~3~~1, telephone number 703-524-8800, fax number 703-~~528-38165~~562-1942, Web site: ~~*http://www.lightindustries.com/ARI/*~~ *www.ahrinet.org*.	
Reason:	Reference to ARI within various sections of the document needs to be modified to "Air-Conditioning, Refrigeration, and Heating Institute (AHRI)." AHRI moved to a different location in Arlington, VA in 2008, so the address and the contact information within the regulation also needs to be updated. All references to "ARI" within the regulation need to be updated to "AHRI."	
Substantiating Documents:	False	
Additional Cost:	Unknown	
Cost Benefit Explanation:	Unknown	
Subcommittee Recommendation:		
MHCC Action:		
MHCC Modification of Proposed Change:		
MHCC Reason:		
Current Status:	Received by Secretariat.	
Log History:		

Log # 113 - § 3280.4(b)(1) Incorporation by reference		Date: 12/31/2014
Submitter:	Gary Clark	
Requested Action:	Revised Text	
Proposed Change:	(1) ANSI/AHRI Standard 210/240-~~89~~2008, Unitary Air-Conditioning ~~and~~ & Air-Source Heat Pump Equipment, IBR approved for §§3280.511(b), 3280.703, and 3280.714(a),	
Reason:	Reference to ANSI/ARI Standard 210/240-89 needs to be updated to "ANSI/AHRI 210/240-2008" in various sections of 24 CFR Part 3280. The latest versions of all AHRI standards can be downloaded on the following website: http://www.ahrinet.org/site/686/Standards/HVACR-Industry-Standards/Search-Standards	
Substantiating Documents:	False	
Additional Cost:	Unknown	
Cost Benefit Explanation:	Unknown	
Subcommittee Recommendation:		
MHCC Action:		
MHCC Modification of Proposed Change:		
MHCC Reason:		
Current Status:	Received by Secretariat.	
Log History:		

Log # 114 - § 3280.4(i)(20) Incorporation by reference	Date: 12/31/2014
Submitter:	Gary Clark
Requested Action:	Revised Text
Proposed Change:	ANSI Z21.47-~~1990~~2012/CSA 2.3-2012 ~~with Addendum Z21.47a-1990 and Z21.47b-1992~~, Gas-Fired Central Furnaces ~~(Except Direct Vent System Central Furnaces)~~, IBR approved for §3280.703.
Reason:	Reference to ANSI Z21.47-1990 needs to be updated to "ANSI Z21.47-2012/CSA 2.3-2012." Also, direct vent is now included within the scope of the standard. Additional details can be accessed here: http://shop.csa.ca/en/canada/gas-fired-domestic-and-commercial-heating-equipment-and-air-conditioning/ansi-z2147-2012csa-23-2012-/invt/27020082012
Substantiating Documents:	False
Additional Cost:	Unknown
Cost Benefit Explanation:	Unknown
Subcommittee Recommendation:	
MHCC Action:	
MHCC Modification of Proposed Change:	
MHCC Reason:	
Current Status:	Received by Secretariat.
Log History:	

Log # 115 - § 3280.4(ff)(21) Incorporation by reference		Date: 12/31/2014
Submitter:	Gary Clark	
Requested Action:	Revised Text	
Proposed Change:	UL 1995~~, 1995~~-2011, Heating and Cooling Equipment, ~~Second Edition, with 1999 revisions~~, IBR approved for §3280.703. Any future version of this standard is acceptable.	
Reason:	References to UL 1995 need to be updated from the second edition to "UL 1995-2011." Also, a note needs to be added stating "any future version of this standard is acceptable." The references to standards within 24 CFR Part 3280 are not being revised frequently enough to keep up with the latest editions of those standards. Adding this sentence would address the issue in a major way.	
Substantiating Documents:	False	
Additional Cost:	Unknown	
Cost Benefit Explanation:	Unknown	
Subcommittee Recommendation:		
MHCC Action:		
MHCC Modification of Proposed Change:		
MHCC Reason:		
Current Status:	Received by Secretariat.	
Log History:		

Log # 116 - § 3280.4(aa)(2) Incorporation by reference		Date: 12/31/2014
Submitter:	Gary Clark	
Requested Action:	Revised Text	
Proposed Change:	NFPA 54 ~~2002~~2015/ANSI Z223.1-2015, National Fuel Gas Code, IBR approved for §3280.703.	
Reason:	References to National Fuel Gas Code needs to be updated from the 2002 edition to "NFPA 54-2015/ANSI Z223.1-2015"	
Substantiating Documents:	False	
Additional Cost:	Unknown	
Cost Benefit Explanation:	Unknown	
Subcommittee Recommendation:		
MHCC Action:		
MHCC Modification of Proposed Change:		
MHCC Reason:		
Current Status:	Received by Secretariat.	
Log History:		

Log # 117 - § 3280.4(aa)(5) Incorporation by reference		Date: 12/31/2014
Submitter:	Gary Clark	
Requested Action:	Revised Text	
Proposed Change:	NFPA 90B, Warm Air Heating and Air Conditioning Systems, ~~1996~~ 2015 Edition, IBR approved for §3280.703.	
Reason:	References to NFPA 90B need to be updated from the 1996 edition to the 2015 edition.	
Substantiating Documents:	False	
Additional Cost:	Unknown	
Cost Benefit Explanation:	Unknown	
Subcommittee Recommendation:		
MHCC Action:		
MHCC Modification of Proposed Change:		
MHCC Reason:		
Current Status:	Received by Secretariat.	
Log History:		

Log # 118 - § 3280.4 Incorporation by reference and 3280.703 Minimum standards		Date: 12/31/2014
Submitter:	Gary Clark	
Requested Action:	New Text	
Proposed Change:	UL 60335-2-40,Safety of Household and Similar Electrical Appliances, Part 2-34: Particular Requirements for Motor-Compressors. Any future version of this standard is acceptable.	
Reason:	A reference to the 2012 edition of the UL 60335-2-40 standard should be added within section 3280.703 since this standard deals with electrical safety of heat pumps, air conditioner and other household products that can be installed in manufactured homes. 24 CFR Part 3280 should also state that "any future version of this standard is acceptable." The references to standards within 24 CFR Part 3280 are not being revised frequently enough to keep up with the latest editions of those standards. Adding this sentence would address the issue in a major way.	
Substantiating Documents:	False	
Additional Cost:	Unknown	
Cost Benefit Explanation:	Unknown	
Subcommittee Recommendation:		
MHCC Action:		
MHCC Modification of Proposed Change:		
MHCC Reason:		
Current Status:	Received by Secretariat.	
Log History:		

Log # 119 - § 3280.508(b) Heat loss, heat gain and cooling load calculations	Date: 12/31/2014
Submitter:	Gary Clark
Requested Action:	Revised Text
Proposed Change:	The calculation of the manufactured home's transmission heat loss coefficient (Uo) must be in accordance with the fundamental principles of the ~~1997~~ latest edition of the ASHRAE Handbook of Fundamentals, Inch-Pound Edition, and, at a minimum, must address all the heat loss or heat gain considerations in a manner consistent with the calculation procedures provided in the document, Overall U-values and Heating/Cooling Loads—Manufactured Homes—February 1992-PNL 8006, HUD User No. 0005945.
Reason:	Section 3280.508 and some other sections within the regulation refer to ASHRAE 1997 Handbook for data. Reference to the most current version should be used.
Substantiating Documents:	False
Additional Cost:	Unknown
Cost Benefit Explanation:	Unknown
Subcommittee Recommendation:	
MHCC Action:	
MHCC Modification of Proposed Change:	
MHCC Reason:	
Current Status:	Received by Secretariat.
Log History:	

Log # 120 - § 3280.508(b) Heat loss, heat gain and cooling load calculations	Date: 12/31/2014
Submitter:	Gary Clark
Requested Action:	Revised Text
Proposed Change:	The calculation of the manufactured home's transmission heat loss coefficient (Uo) must be in accordance with ACCA Manual J or the fundamental principles of the ~~1997~~ latest edition of ASHRAE Handbook of Fundamentals, Inch-Pound Edition, and, at a minimum, must address all the heat loss or heat gain considerations in a manner consistent with the calculation procedures provided in the document, Overall U-values and Heating/Cooling Loads—Manufactured Homes—February 1992-PNL 8006, HUD User No. 0005945.
Reason:	Section 3280.508(b) refers to a HUD document from 1992. The section should refer to the 2011 edition of ACCA Manual J which addresses the latest and most pertinent load calculations for manufactured homes.
Substantiating Documents:	False
Additional Cost:	Unknown
Cost Benefit Explanation:	Unknown
Subcommittee Recommendation:	
MHCC Action:	
MHCC Modification of Proposed Change:	
MHCC Reason:	
Current Status:	Received by Secretariat.
Log History:	

Log # 121 - § 3280.508(d) Heat loss, heat gain and cooling load calculations	Date: 12/31/2014
Submitter:	Gary Clark
Requested Action:	Revised Text
Proposed Change:	(d) *High efficiency heating and cooling equipment credit.* The calculated transmission heat loss coefficient (Uo) used for meeting the requirement in §3280.506(a) may be adjusted for heating and cooling equipment above that required by the National Appliance Energy Conservation Act of 1987 (NAECA) by applying the following formula: Uo adjusted = Uo standard×[1+(0.6) (heating efficiency increase factor)+(cooling multiplier) (cooling efficiency increase factor)] where: Uo standard = Maximum Uo for Uo Zone required by §3280.506(a) Uo adjusted = Maximum Uo standard adjusted for high efficiency HVAC equipment Heating efficiency increase factor = The increase factor in heating equipment efficiency ~~measured by~~ based on the certified Annual Fuel Utilization Efficiency (AFUE), or the Heating Seasonal Performance Factor (HSPF) for heat pumps, above that required by NAECA (indicated as "NAECA" in formula). The formula is heating efficiency increase factor = AFUE (HSPF) home - AFUE (or HSPF) NAECA divided by AFUE (HSPF) NAECA. Cooling efficiency increase factor = the increase factor in the cooling equipment efficiency ~~measured by~~ based on the certified Seasonal Energy Efficiency Ratio (SEER) above that required by NAECA. The formula being cooling equipment=SEER home—SEER NAECA divided by SEER NAECA.
Reason:	Section 3280.508(d) mentions that the cooling efficiency increase factor is based upon "cooling equipment efficiency measured…" and a similar phrase is used for heating efficiency as well. This should be changed to be based upon the certified rating, so that it is in accordance with the U.S. Department of Energy requirements. Field measurement should not be required/allowed.
Substantiating Documents:	False
Additional Cost:	Unknown
Cost Benefit Explanation:	Unknown
Subcommittee Recommendation:	
MHCC Action:	
MHCC Modification of Proposed Change:	
MHCC Reason:	
Current Status:	Received by Secretariat.
Log History:	

Log # 122 - § 3280.511(a)(1) Comfort cooling certificate and information	Date: 12/31/2014
Submitter:	Gary Clark
Requested Action:	Revised Text
Proposed Change:	(1) *Alternative I.* If a central air conditioning system is provided by the home manufacturer, the heat gain calculation necessary to properly size the air conditioning equipment shall be in accordance with procedures outlined in the 2011 edition of ACCA Manual J, or ~~chapter 22 of~~ the ~~1989~~ latest edition of the ASHRAE Handbook of Fundamentals, with an assumed location and orientation. The following shall be supplied in the Comfort Cooling Certificate: Air Conditioner Manufacturer Air Conditioner Model Certified Capacity ___ BTU/Hr. in accordance with the appropriate Air Conditioning and Refrigeration Institute Standards The central air conditioning system provided with this home has been sized, assuming an orientation of the front (hitch) end of the home facing ___ and is designed on the basis of a 75 °F indoor temperature and an outdoor temperature of _ °F dry bulb and _ °F wet bulb. Example Alternate I COMFORT COOLING CERTIFICATE Manufactured Home Mfg Plant Location Manufactured Home Model Air Conditioner Manufacturer Certified Capacity ___ BTU/Hr. in accordance with the appropriate Air Conditioning and Refrigeration Institute Standards. The central air conditioning system provided with this home has been sized assuming an orientation of the front (hitch end) of the home facing ___. On this basis, the system is designed to maintain an indoor temperature of 75 °F when outdoor temperatures are _ °F dry bulb and _ °F wet bulb. The temperature to which this home can be cooled will change depending upon the amount of exposure of the windows to the sun's radiant heat. Therefore, the home's heat gains will vary dependent upon its orientation to the sun and any permanent shading provided. Information concerning the calculation of cooling loads at various locations, window exposures and shadings are provided in the 2011 edition of ACCA Manual J, or ~~chapter 22 of the 1989~~ the latest edition of the ASHRAE Handbook of Fundamentals.
Reason:	Section 3280.511 refers to chapter 22 of ASHRAE 1989 Fundamentals for heat gain. The section should refer to the 2011 edition of ACCA Manual J which addresses load calculations for manufactured homes, or at a minimum the latest version of the ASHRAE fundamentals. The reference to the 1989 edition is located in several sections of 24 CFR part 3280 and needs to be revised.
Substantiating Documents:	False
Additional Cost:	Unknown
Cost Benefit Explanation:	Unknown
Subcommittee Recommendation:	

MHCC Action:	
MHCC Modification of Proposed Change:	
MHCC Reason:	
Current Status:	Received by Secretariat.
Log History:	

Log # 123 - § 3280.511(a)(2) Comfort cooling certificate and information	Date: 12/31/2014
Submitter:	Gary Clark
Requested Action:	New Text
Proposed Change:	*Alternative 2.* For each home suitable for a central air cooling system, the manufacturer shall provide the following statement: "This air distribution system of this home is suitable for the installation of a central air conditioning system." Example Alternate 2 COMFORT COOLING CERTIFICATE Manufactured Home Manufacturer Plant Location Manufactured Home Model This air distribution system of this home is suitable for the installation of central air conditioning. The supply air distribution system installed in this home is sized for Manufactured Home Central Air Conditioning System of up to ___ B.T.U./Hr. rated capacity which are certified in accordance with the appropriate Air Conditioning and Refrigeration Institute Standards. When the air circulators of such air conditioners are rated at 0.3 inch water column static pressure or greater for the cooling air delivered to the manufactured home supply air duct system. Information necessary to calculate cooling loads at various locations and orientations is provided in the special comfort cooling information provided with this manufactured home.
Reason:	The "Comfort Cooling Certificate" refers to static of 0.3 in.w.c for a given capacity. Instead, the certificate should refer to static at a nominal airflow in CFM. The MHCC should discuss this section further and consider implementing changes to this section.
Substantiating Documents:	False
Additional Cost:	Unknown
Cost Benefit Explanation:	Unknown
Subcommittee Recommendation:	
MHCC Action:	
MHCC Modification of Proposed Change:	
MHCC Reason:	
Current Status:	Received by Secretariat.
Log History:	

Log # 124 - § 3280.714(a)(1)(ii) Appliances, cooling		Date: 12/31/2014
Submitter:	Gary Clark	
Requested Action:	Revised Text	
Proposed Change:	(ii) Heat pumps must be certified to comply with all requirements of the ANSI/AHRI Standard 210/240-~~89~~2008, Unitary Air Conditioning ~~and~~ & Air-Source Heat Pump Equipment. Electric motor-driven vapor compression heat pumps with supplemental electrical resistance heat must be sized to provide by compression at least 60 percent of the calculated annual heating requirements for the manufactured home being served. A control must be provided and set to prevent operation of supplemental electrical resistance heat at outdoor temperatures above 40 °F (4 °C), except for defrost conditions. (Variable speed and two speed systems can typically meet such requirements.) Electric motor-driven vapor compression heat pumps with supplemental electric resistance heat conforming to ANSI/AHRI Standard 210/240-~~89~~2008, Unitary Air Conditioning ~~and~~ & Air-Source Heat Pump Equipment, must have Heating Season Performance Factor (HSPF) efficiencies not less than as specified in the 10 CFR Part 430, Energy Conservation Program for Consumer Products: Central Air Conditioners and Heat Pumps Energy Conservation Standards.	
Reason:	Section 3280.714(a)(1)(ii) should explicitly note that the compression and control requirements specified within the section can be met by variable speed and two speed systems.	
Substantiating Documents:	False	
Additional Cost:	Unknown	
Cost Benefit Explanation:	Unknown	
Subcommittee Recommendation:		
MHCC Action:		
MHCC Modification of Proposed Change:		
MHCC Reason:		
Current Status:	Received by Secretariat.	
Log History:		

Log # 125 - § 3280.714(a)(1)(iii) Appliances, cooling		Date: 12/31/2014
Submitter:	Gary Clark	
Requested Action:	Deleted Text	
Proposed Change:	~~Electric motor-driven vapor compression heat pumps with supplemental electric resistance heat conforming to ARI Standard 210/240-89 Unitary Air-Conditioning and Air-Source Heat Pump Equipment shall show coefficient of performance ratios not less than shown below:~~	

~~COP~~

~~Temperature degrees fahrenheit~~	~~Coefficient of performance~~
~~47~~	~~2.5~~
~~17~~	~~1.7~~
~~0~~	~~1.0~~

Reason:	The minimum COP requirement at various temperatures must be removed due to conflict with federal preemption laws. The COP requirements go beyond the federal HSPF requirements and must not be specified in the regulation. The regulation, as currently written, is a violation of Federal law and needs to be revised with immediate effect.
Substantiating Documents:	False
Additional Cost:	Unknown
Cost Benefit Explanation:	Unknown
Subcommittee Recommendation:	
MHCC Action:	
MHCC Modification of Proposed Change:	
MHCC Reason:	
Current Status:	Received by Secretariat.
Log History:	

Log # 126 - § 3280.715(a)(3)(ii) Circulating air systems		Date: 12/31/2014
Submitter:	Gary Clark	
Requested Action:	Revised Text	
Proposed Change:	The refrigerated air cooling supply duct system including registers must be capable of handling at least ~~300 cfm per 10,000 btuh~~ 360 CFM/ton with a static pressure no greater than 0.3 inches of water when measured at room temperature. In the case of application of external self contained comfort cooling appliances or the cooling mode of combination heating/cooling appliances, either the external ducts between the appliance and the manufactured home supply system shall be considered part of, and shall comply with the requirements for the refrigerated air cooling supply duct system, or the connecting duct between the external appliance and the mobile supply duct system shall be a part of the listed appliance. The minimum dimension of any branch duct shall be at least $1^1/_2$ inches, and of any main duct, $2^1/_2$ inches.	
Reason:	Instead of specifying 300 CFM per 10,000 Btu/h, the requirement should mention 360 CFM/ton, especially since this requirement pertains to just the supply duct. Such a revision would make the section consistent with standard industry practice.	
Substantiating Documents:	False	
Additional Cost:	Unknown	
Cost Benefit Explanation:	Unknown	
Subcommittee Recommendation:		
MHCC Action:		
MHCC Modification of Proposed Change:		
MHCC Reason:		
Current Status:	Received by Secretariat.	
Log History:		