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Tara Hall
North Carolina Housing Finance Agency
3508 Bush Street
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Re: Comments on 2024 Draft Appendix B.

At the invitation of NCHFA, I wish to offer my comments on the 2024 Draft Appendix B.

There are portions of the proposed, current, and past Appendix B documents that cite accessibility related dimensions, clearances, and other requirements that exceed the statutory requirements. This causes confusion. In some cases, terminology is used that means one thing in the context of ANSI, but has a separate intent by NCHFA. In all cases, the amount of building area needed to satisfy the NCHFA intent increases the burden on the development team. In some particular cases, the addition and then overlapping of some requirements causes an excessive burden that is not productive. Unnecessarily constraining the design solutions in this manner reduces the ability of the development team to provide cost effective solutions to NCHFA. I urge the Agency to reconsider the ramping up of the basic statutory requirements. I have comments on other items as well.

B. DOORS AND WINDOWS

4. Insulated, double pane, vinyl windows meeting current North Carolina Model Energy Code and have at least a minimum UFACTOR 0.30 and SHGC 0.27 are required for new construction and rehabilitation projects (if replacing windows).

The NC Energy Code code allows for compliance by either prescriptive or performance methods. The Agency also requires Energy Star Multi Family New Construction compliance, which helps to insure the energy performance of the buildings. The addition of this requirement is unnecessary and burdensome.

C. INTERIOR DESIGN AND MATERIALS

20. In all Type A units, a 67-inch minimum turning radius is required into and throughout all usable areas of the kitchen, in accessible bathroom, in laundry rooms, and in closets that exceed 48 inches in depth.

This requirement represents both a lack of clarity and an over-expansion of the actual standard required by ANSI (the anticipated ANSI A117.1 2017). Based on my discussions with the plan reviewers, the Agency's interpretation of "turning radius" does not allow for any overlapping elements, while the ANSI definition clearly does, and also allows other T-type turning spaces. I

question the value of immediately ramping up the new standard and I also suggest that clarification of the Agency standard may be in order.

E. BATHROOMS

13. In Type A units, the 67 inches clear floor space may not include floor spaces under toilets or vanities.

This revised item adopts only the circular turning area defined by ANSI 2017 and then immediately exceeds it by not allowing any overlapping elements. It is unnecessarily burdensome.

F. KITCHENS

9. In Type A units:

g. Pantry cabinets/closets must have 30 inches x 52 inches clear floor space centered on the door.

My understanding is that this requirement is not supported by ANSI. In combination with providing the side reach requirements to reach fully into the unit, the door swing conflict, and the clear floor space requirement, this item becomes a substantial driver of the layout of Type A kitchens that I don't believe is supported by the statutory standard. Can the Agency get some guidance from Dominic Marinelli on this item?

G. LAUNDRY ROOM CLOSETS

4. In Type A and Type B units, each clothes washer and dryer must be centered for a side approach only in a 52 inch four foot clear floor space area. The washer and dryer clear floor space areas may overlap. The clear floor spaces at each appliance may not use door openings or the ability to remove laundry room/closet doors in achieving the required parallel approach clear floor space. All electrical, plumbing, and venting rough-ins must be centered behind each washer and dryer.

The imposition of the 52 clear floor space on the Type B units is not supported by ANSI, is confusing, and should be removed.

A. PLUMBING PROVISIONS

5. All electric water heaters must have a Uniform Energy Factor of 0.93 efficiency or an Energy Factor of at least 0.95 efficiency and be a minimum of 40 gallons (50-gallon minimum for 3 bedroom and larger). This cannot be achieved by using an insulated water heater jacket. Water heaters may not be installed under HVAC air handlers. They may be installed beside the air handler or in separate closet.

With the required compliance with both the energy code and Energy Star Multi Family New Construction, this requirement is unnecessary, leads to confusion, and should be deleted. If you must state a minimum standard, please state only one and don't get into the business of equating separate standards.

B. ELECTRICAL PROVISIONS

5. Switched exterior lighting is required at each unit entry door for resident use on buildings with porches and breezeways.

7. All exterior stairways must have light fixtures wired to a "house" panel and activated by a photo cell placed on the east or north side of the buildings.

The combination of these 2 requirements, strictly interpreted, can result in the unnecessary duplication of 2 light fixtures, one switched in the unit, and the other switched by photocell, outside of a unit door. The large majority of development team members working on these projects work hard to meet the requirements, take pride in the results, and hate to see such a waste of resources. Please rethink this and clarify the requirement.

C. HEATING, VENTILATING AND AIR CONDITIONING PROVISIONS

1. All non-residential areas and residential units must have their own separate heating and air conditioning systems. HVAC equipment must have a minimum SEER2 15.0 performance rating. With the required compliance with both the energy code and Energy Star Multi Family New Construction, this requirement is unnecessary, leads to confusion, and should be deleted. Unnecessarily constraining the design solutions in this manner reduces the ability of the development team to provide cost effective solutions.

10. Range hoods and micro-hoods must be vented to the exterior of the building with 8 inches minimum galvanized sheet metal using the shortest possible run.

Ramping up the requirement to 8 inches multiplies the construction challenges related to this item. With the required compliance with both the energy code and Energy Star Multi Family New Construction, this requirement is unnecessary, leads to confusion, and should be deleted. 6" ducts for correctly sized range hoods can provide the necessary airflow as determined by ESMFNC. This requirement should remain as stated in the 2023 Appendix B.

F. RADON VENTILATION

There is an established standard for radon for this type of construction; ANSI/AARST CC-1000 2018. The brief sentences provided in the Appendix B are no longer up to the task of describing the necessary construction requirements and should be deleted in lieu of the established standard.

G. REFUSE COLLECTION AREAS

The guidance on dumpster areas and accessibility relating to ANSI are not well defined. Here is an area where some statement by NCHFA would be valuable. Guidance for how many of the total dumpster areas need to be accessible, and how many of each individual dumpsters in a single location need to be accessible would be a useful addition.

VIII. QUALIFIED ALLOCATION PLAN

Five percent (5%) of all units in new construction and adaptive re-use projects must:

1. be a Type A unit according to the standards set forth in Chapter 11 of the North Carolina State Building Code and ANSI A117.1, Section 103,

4. have a minimum 67 inch turning radius for 5 foot by 5-foot clear floor space within the usable kitchen floor area with no overlapping elements or fixtures.

I have 2 concerns about this. Based on conversations with NCHFA plan reviewers, I have been instructed that these requirements (all of 1.- 4.) apply to all Type A and Type A Roll-in Shower units (10%). That is not what the document says. My interpretation is that it says that all Type A Roll-in Shower units (5%) must meet this requirement, and that the other 5% of units that are Type A need to meet ANSI plus whatever additional requirements are established in the remainder of the Appendix B. Also, I find the immediate ramping up of the 67 inch turning

diameter to not allow any overlapping elements or fixtures to be unnecessary and overly burdensome. I suggest that this portion of the Appendix B be rewritten for clarification and that the 67 inch turning diameter be allowed to have overlapping elements in accordance with ANSI.

I appreciate the opportunity to present my opinion.

Thank you,

Wayne Jones

Wayne Jones
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