



Why Would Anyone Think Code Compliance Is Good Enough?

By Ruth Neeman AIA and Tom Levi AIA ([LWDA](#) is a Senior Housing Forum Partner)

Regulatory agencies and the codes and regulations they promulgate, are failing residents in Senior Living and Senior Care. Why?

They are either enforcing standards that are irrelevant to the needs of the older and frailer population or they are being completely silent on important features that can make the difference between independence and dignity on the one hand, and isolation and decline, on the other.

Codes and regulations represent a minimum set of attributes and performance criteria acceptable to the authorities having jurisdiction but fail to address the needs of the older and frailer population or accommodate the trend towards livable, user-friendly personal-choice driven senior environments. As a result, residents and staff will be required to devise workarounds from day one.

Design professionals who are not experienced in the challenges of daily living for seniors and the temporarily infirm will rely on codes and regulations to design the spaces in which elders and staff need to live and function. An experienced design team is needed to guide the client to right-size and equip the building so that it really works for the needs of elders.

Making the environment “age-friendly” requires:

- Understanding the challenging ins and outs of negotiating the environment for an older person and their assistants / care givers
- Understanding code objectives in order to achieve equivalent facilitation that is more suitable for elders.
- Going beyond code requirements where needed, realizing that bigger is not always better.

Waivers and Variances to the Rescue

Fortunately, the regulatory world acknowledges that not all conditions and circumstances can be anticipated and accommodated. While updating codes can be a long and cumbersome process that takes many years, the variance / waiver process acts as a stopgap until laws and regulations catch up.

The Owner and Design Team can apply for a variance or waiver to legally amend the requirements for a particular project. Despite the time and cost involved, the variance / waiver process should not intimidate owners and architects; it will save time and money in the long run, to help create a facility that reflects the actual activities of daily living and the

delivery of care. But the waivers must be obtained prior to construction – those who ask permission are in a stronger position than those who ask forgiveness after the fact.

Here are a few examples of key focus areas where current codes fall short:

1. Accessibility codes

Federal, state and local accessibility regulations, instituted in the 1960s and 1970s, were originally designed to serve the needs of injured veterans, who might be living with a disability, but were otherwise independent, mobile, and cognitively intact, able to devise and remember “workaround” solutions. Seniors, on the other hand, are often frail and may be recuperating from illness or medical procedures. They often face several diminished capacities:

- Mobility, flexibility, balance, and range of motion
- Overall strength and stamina
- Cognitive abilities
- Vision and hearing loss

The resulting disconnect has led to inappropriate requirements that fail to address basic needs:

- **Extent of accessible SNF rooms:** Most accessibility codes (local, state, federal, ADA, UFAS, etc.) require a Skilled Nursing Facility to have 5% - 10% of patient rooms / bathrooms fully accessible, and 45% of the rooms adaptable to a lesser level of accessibility. This potentially leaves up to 50% of the room not accessible, left to the discretion of the owner, while common sense tells us 100% of SNF residents need access to bedrooms and bathrooms that supports maneuverability and assistance.
- **Extent of accessible AL and IL units:** Similarly, only 5% - 10% of Assisted Living and Independent Living units are required to be fully accessible, with the rest adaptable. This leads to the potential scenario where a temporarily incapacitated resident might need to be relocated from their home to an accessible unit (if one is even available).
- **Insufficient dimensional requirements:** An ADA compliant 3’ x 3’ shower may be appropriate for a healthy person with upper body strength capable of independent transfer, but it is not adequate for a frail resident who requires one or two assistants; a 3’ x 5’ footprint is more realistic. A 32” clearance at a door opening is tight and requires power and precision maneuvering to avoid injury.
- **Slopes:** Fully compliant 1:12 handicapped ramps, result in slopes and runs are often too steep for frail elders to negotiate independently.

2. Department of Health codes

Health Departments and the Facilities Guidelines Institute (FGI) publish their own set of regulations, which sometimes do not accommodate the building users and conflict with accessibility and building codes.

For instance, the 10 square feet per resident minimum in a Skilled Nursing facility dining room in some DPH Long Term Care regulations will not accommodate a tightly packed layout of tables and chairs, let alone wheelchairs, walkers, and serving isles.

The FGI guidelines come closest to addressing the needs of elders in a resident-centered setting. FGI solicits input from users, architects, and owners to fine-tune the content, and issues updates every four years. FGI guidelines frequently become the governing regulations once adopted by the state.

3. Building codes

Building codes assign the minimum fire rating requirement based on the use of the building, as well as the capability of the inhabitants for self-preservation. A Senior Living resident may move in as an Independent Living resident with faculties intact and the ability to evacuate the building if needed.

However, very few Assisted Living residents can react to an alarm or handle evacuation without verbal or physical assistance. The choice to design over and above code minimum and provide a higher level of fire rating, can help:

- reduce the need for a resident to evacuate
- reduce the areas of a building to be evacuated

- allow the architect to design a safer, more open interior that features a more residential feel

This trade-off— a higher level of fire protection for an enhanced interior and reduced exiting-- is a fundamental decision that should be addressed early in the design process.

Codes are mostly silent, or not specific enough about:

- Appropriate use of color and contrast to accommodate cognitive and visual impairment
- Glare and glossy surfaces
- Appropriate use of artificial lighting to regulate circadian rhythms
- Acoustical control of the environment

You can see that there is an abundance of challenges in store for architects navigating the changing waters of designing environments for seniors. The right design team will identify issues that require review and not get lulled into a false sense of security that mere code compliance addresses all the needs.

Remember, when it comes to the design of Senior environments, mere compliance is complacency!

Thomas Levi, AIA, President



President and Founder of LWDA Inc. with forty- five years of experience in senior living, healthcare, corporate, laboratories and planning, including master planning and urban design for complex mixed-use urban reuse projects, new construction, adaptive reuse and renovation of existing facilities, and managing large complex projects with multiple user groups. Regardless of the project type, he integrates all four LWDA services with the intent to create integrated living and working environments that promote engagement, support and wellness for all users, based on sound business approaches. He has worked to develop a balance of appropriate creative design and business service, that allows LWDA to support it clients fully.

His special interest in senior supportive environments, rehabilitation and technology was deepened by his parents' journey through the healthcare and acute rehabilitation system. He looks at healthcare, rehabilitation and senior care/living design from the perspective of an architect, healthcare planner, clinician and family advocate. These different perspectives have allowed him to look at the design for care and aging populations more deeply and with great passion.

Ruth Neeman, AIA, Principal and Director of the Senior Enivornments Studio



Principal and director of the Senior Environments Design Studio at LWDA, with over 35 years of experience in planning, design and research focusing exclusively on environments that enable elders and support independence and aging with dignity.

Supportive environments for elders and particularly those living with cognitive impairment is a special interest that has led to ongoing professional alliances with experts in the field and initiation of Post Occupancy Evaluation (POE) research work on several of her projects.

Ruth's special, and personal interest in the impact of the appropriate environment on well-being of elders, has led her to serve as the Co-Chair of the Design for Aging committee of the Boston Society of Architects since 2008, contributing to education and lively exchange of ideas among architects, designers, scientists, regulators and owners. She has developed long-term relationships with several non-for-profit providers and developed creative architecture and interiors working within challenging budgets and regulatory environments.

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