

GUIDELINES FOR OPTIMAL DESIGN

This section includes some considerations for the design of a small assisted living home. A well-designed assisted living home will support operational efficiency and work well from a practical standpoint. However, most importantly, it must be a home where quality of life for the residents is the most important consideration. It should have a warm, residential feeling to residents, family, and the staff who work in it.

It is important to include Elders and other community members in the design-planning phase. This will ensure that the home will incorporate important and unique community values.

These design guidelines are not meant to be comprehensive or all-inclusive. Some of these recommendations may not be allowed under certain zoning, building, and life-safety codes. When codes conflict with the “best practices” recommended here, you may want to discuss the possibility of a variance with the code authority to allow you to implement the best practice.

Overall Character

The overall character of an assisted living home should reflect a place where the resident’s lifestyle and well being are the focus. The physical space can make all the difference in whether Elders feel like they are in their own home, or in an institution. The home should reflect a social model of care, not a medical model. Small assisted living homes have a wonderful opportunity to create a real home through residentially scaled spaces and home-like materials. A successful project is one that reflects the community, invites the community in, and feels comfortable to the residents.

Most Alaskans have a deep connection to the outdoors. Thus, the design should promote interior and exterior spaces where residents can enjoy nature and the change of seasons.

Following are some examples of ways to create a successful home:

- Design the home to be fully handicapped accessible, including access from the street and parking, outside spaces, common areas, all bathrooms and all units.
- Provide large window areas in all common areas and units. Avoid windows onto narrow courtyards or passageways.
- Minimize hallways. Create a central kitchen, dining, and activity area, with individual rooms arrayed around the central space.
- Each resident should have his or her own private unit, with a bathroom and kitchenette. It’s important for residents to feel that they still have their own space, for privacy and convenience. Even if they seldom use the kitchenette, having it available will give residents a sense of independence and dignity.
- A home’s entryway should be tasteful and homelike in scale and arrangement, without grand atriums, a reception desk, or a “nurse’s station.”

- Put carpet on all floors in common areas and living spaces, not vinyl or tile. Use non-skid tile or vinyl in bathrooms. Vinyl may be used in the kitchenette areas.
- Install wooden, instead of metal, window casings,
- Place wooden handrails or ledges in hallways (not molded plastic).
- Avoid suspended ceilings and acoustic tiles on ceilings. Use residential materials.
- Use lamps and wall sconces for lighting, not large overhead fluorescent lights. Use either incandescent bulbs or incandescent-colored fluorescent (warm yellow, not cool white).
- Avoid institutional operational details such as observation windows between rooms. Instead, where possible, arrange doorways and other residential opening to provide monitoring as needed.
- Use intercom or voice systems only for emergencies or resident initiated contact. Do not use tones or an audible call system that sounds throughout the home.
- Integrate the kitchen and food preparation areas into the common areas (i.e., open to living room). Food smells and activity may increase appetites, provide activities for residents, and allow staff to stay in the center of the home when preparing food.
- Do not locate service doors for kitchen deliveries next to or in sight of the main entry door. If the service door can not be located out-of-sight, build screen walls to block the view. Use wood, stone, or brick for the screen wall. Do not use commercial fencing (e.g., chain link with slates).

As the project developer, it is up to you to tell your architect what kind of home you want. The architect you select should be experienced in designing assisted living homes or other residential spaces for elderly people and willing to go through an interactive process with you to get to the best design. Be sure to look at examples of what your architect has already designed. If the architect you select is not familiar with the special requirements of designing for the frail elderly and people with disabilities, he or she should be willing to research appropriate designs, colors, textures, furnishings, and lighting.

Rules of Thumb

Unit Square Footage

Typical studio units are 385-420 square feet and include a bathroom, closet and kitchenette. One-bedroom units are typically 450-520 square feet. Market rate buildings often have larger units.

Project Square Footage

Approximately 650 “gross” square feet per unit is typical for the entire building square footage (“gross” means the total building square footage divided by the total number of residential units). At least 35% of the total square footage is usually dedicated to common space (dining, living, etc.), circulation (hallways), and service spaces (kitchen, office).

Parking

Design the parking area so it includes ½ space per unit. Since most residents will not have vehicles, this will be enough for staff, visitors, and occasionally residents. You may need a planning variance to reduce parking to ½ space per unit.

Living and Dining Room

The living room common area should accommodate 25% or more of the residents at any one time. Dining rooms should be designed to provide a minimum of 25 square feet per diner.

Design for Quality and Safety

Life Safety

An ideal assisted living home will meet the life/safety standards for people who cannot self-evacuate in case of an emergency. In Alaska, this is commonly known as building to I-2 construction codes. Many residents in Alaskan assisted living homes are very frail, or will age-in-place and become very frail. The building should be designed accordingly. Many residents will need substantial assistance, including with ambulation. You do not want your residents to have to move to a nursing home when they require assistance with ambulation and evacuation as this will force them from the community and increase your vacancy rate.

I-2 construction includes sprinklers, hard-wired fire detection in individual units and common areas, and firewalls. Although legally you may be allowed to build to a lower standard, you may not be allowed to house non-ambulatory people if the building does not meet the more stringent I-2 standards. Talking with your local state fire marshal early in the design process is essential.

Floors

Floors must be poured or framed very carefully to be completely level, as even a slight bump can be a tripping hazard for residents. There should be no thresholds at doorways, and minimal, handicapped-compliant transition strips between flooring types. Flooring must be slip resistant, since there are typically lots of chances for water or other spills.

Corridors

Corridors should be eight feet wide wherever possible, since this amount of space will allow people in walkers and wheelchairs to easily pass each other. You may also want to include recessed alcoves in the hallways with seating and lighting and windows for natural light. Corridors should be as short as possible, especially from residential units to the dining room and activity areas, to make it as easy as possible for residents to

ambulate within the home without assistance. Locate the common areas in the middle of the residential units, to halve the walking distance.

Wanderer Security

In order to safeguard residents who may wander, consider an exit delay and alert system. Delayed egress locks on exit doors will help safeguard people with dementia. A delayed egress system works the following way: in order to exit, the “panic bar” on the door must be pushed for three full seconds which triggers a twelve second delay sequence before the door opens. When the door opening sequence is triggered, staff are alerted through their pagers, so they have time to respond. The doors can have a code override, often set to the month and year (e.g. 0404), so it changes every month. Staff can give these codes to family members, but residents with dementia will typically not be able to figure out the codes.

Design for Operational Efficiency

Design the home to encourage self-sufficiency, which benefits residents by maintaining independence and reduces staff requirements.

Handrails

Lining the hallways with handrails will increase resident safety and decrease the amount of staff time needed to help people walk. Any area that doesn't have furniture that residents can hold onto should have handrails.

Multiple Stories

The home should only have one story if possible. Multiple story buildings take more staff to provide oversight and services. If a multiple story project is required, a centrally located stairway will help staff move between floors quickly. Do not locate stairs at the ends of the building, as this will increase staff travel and time.

If the building has two or more stories, it must have an elevator. If the building has a staircase, staff must monitor it so residents won't be injured. The elevator is not a good option for staff because it moves so slowly.

Electric Outlets

If electrical outlets are placed 18 inches off the floor, residents can more easily use them without needing staff assistance.

Door Handles and Closers

Door closers should be of good enough quality to close a door, but not so tightly sprung that a frail person needs assistance to open it. All doors should be equipped with lever handles.

Drink or Snack Station

In (or near) the dining room, consider having a drink and snack station, so residents can get snacks themselves when they want them. Asking a staff person for permission takes up time and feels more institutional.

Pagers and Wireless Phones

Use staff pagers and wireless telephones for communications. Tying the nurse call, front door alert, fire alarms, and door alarms to staff pagers or a wireless phone that staff carry with them (each with a digital read-out to indicate the type and location of the alert), allows staff to go about their work any where in the building, but still be available for emergencies or when needed by a resident. Communication systems are critical to maximizing staff efficiency.

Keying

All door locks should be opened by a single master key. Only the administrator or assistant administrator should have that key. The medication room should have a separate key for designated staff and only the administrator's master key should open the medication room. The food pantry or locked kitchen cabinets should have a separate key for designated staff and only the administrator's master key should open the pantry or cabinets to avoid food loss. A sub-master key for all other service, mechanical, and resident rooms should be made for all staff. All storage and mechanical rooms must be locked and keyed.

Common and Service Areas

All common areas and service spaces should be clustered together, with as much visual connection as possible, to allow staff to work and monitor residents more efficiently, as well as not to have to run from one end of the building to the other.

Finish Materials

Use finish materials (e.g., carpet, wood finishes, corner guards, paint) that are residential in appearance but will take high wear. All interior materials must be easily cleaned and easily repaired. Avoid textured finishes or wallpaper finishes, as they cannot be easily patched and repainted if they are damaged or dirty. Use corner guards to protect walls in high traffic areas, and kick plates on doors. Scrapes from wheelchairs, walkers and other assistive devices are common and should be easily repairable.

In common areas, use carpet that is easily cleaned and can stand up to frequent commercial cleaning processes. In residential units, you may consider using less expensive carpet and replacing it after residents move out. Carpeting should be low pile or loop; glued directly to the sub floor to provide stable footing and an easy rolling

surface for wheelchairs and walkers. Do not use pads, as they make ambulating more difficult for residents who use walkers, wheelchairs, and/or have unsteady feet.

The finishes on counters and surfaces around plumbing fixtures should be able to withstand heavy cleaning without the finish wearing off.

Furniture

Furniture in the common areas should have incontinence protection (plastic wrap placed under the fabric) to allow easy and quick cleaning, but do not use vinyl upholstery, which looks institutional. Chairs should have high, firm seats and strong arms, and should be high enough so residents can easily push out of them (this helps residents and saves staff time). Chairs should not be on wheels. Chairs, with end tables, may be preferred to couches.

Design for Exterior Spaces

Exterior space is extremely important for maintaining a connection with the land. The building's interior and exterior spaces should be situated so residents will be able to view things that are important to them, such as the river, tundra, ocean, woods, or mountains. Some residents may prefer to view the parking area or street. The exterior area should be an easily accessible, yet secured area so people with cognitive impairments are unable to wander off. Be sure exterior space can be monitored by staff from within the house. Consider raised beds for gardening, and a path for walking. Garden areas should not include any poisonous plants, rosebushes, or other prickly plants.

Trash Areas

Don't place dumpsters or trashcans in front of resident rooms or the dining room, or close enough to smell. If necessary, dumpsters may be enclosed in an 8' high fence.

Parking and Street Access

Resident parking and drop-off areas should have handicapped accessible access. To prevent kitchen theft by staff, don't have staff parking directly accessible from the kitchen; instead, design staff parking so they have to walk through or past the front doors of the home.

Tinted concrete will reduce glare and make it easier for people to find their way around.

A smoke house for smoking fish might be a nice amenity to consider.

Design for Interior Common Spaces

Entry

An arctic entry or vestibule should be provided, and should be large enough to accommodate a wheel chair and assistant. The vestibule should have glass doors to the exterior and interior to allow monitoring by staff, prevent accidents (e.g., hitting a resident with the door), and allow light into the entry. The entry door should face a window, allowing you to look “through” the common area to an outside window. This will create an open and bright first impression.

Common Areas

Consider a fireplace and hearth area as a central gathering place and residential anchor. The home should use residential looking doors throughout, rather than doors that are commercial (storefront or office) in appearance. Avoid sharp corners on counters, furniture, etc. to avoid hazards for skin tears.

Public Restrooms

Public restrooms should be centrally located near dining and activity rooms. If bathrooms are too far away, people may not participate in activities because of the chance of an accident, causing a loss of staff time and embarrassment for the resident. A common design mistake is to place activity rooms too far from bathrooms, so residents cannot easily access them. Bathrooms in common areas should be equipped with grab bars and emergency pull cords. Doors should open out into the corridor, or the door hardware should have an emergency release so it can open out if necessary. If the door opens into a corridor, it should be recessed so an opening door won't knock someone down.

Office

It may be less institutional and more efficient to have small, unobtrusive, lockable workspaces for staff within the common areas, instead of an office. If the building does have an office, it should have a door or residentially appearing window onto the common space so staff can always see what is going on.

Laundry

Encourage residents to do their own laundry by making the laundry area safe and accessible. Laundry, snacks, and drinks area could all be together. The laundry room should be sufficiently large – e.g. two washers, three dryers for twenty tenants. It could be set up for resident use during the day. Be sure to provide a chair and folding table. Staff can do laundry at night. An adjacent area for soiled laundry should be well vented. The laundry room should have a window so staff can observe at all times, and it should be located close to staff work areas – kitchen, offices, etc.

Dining

Dining room chairs should not be on wheels. A long table, like a family dining table, that can accommodate up to ten people will encourage socialization and movement. Meals served family style can encourage interaction and a residential feeling. The tables should have pedestals in the center so the table legs won't get in the way. Be sure the tables are very sturdy because people will use them to stabilize themselves. There should be enough room in the dining room so people can leave walkers next to chairs without blocking the flow of traffic. The dining area should have as much natural light and as many windows as possible. If one room serves as both a dining and activity room, have a storage unit for activity supplies.

Kitchen

Do not locate the kitchen across the hallway from the dining room, since that increases the risk of staff knocking into residents. Doors from the kitchen should not be able to hit a resident (provide an alcove or pocket for the doors), and they should have a glass panel so staff can see if anyone is on other side. The dining room should be carpeted to prevent slips and falls. Upholstered furniture and carpet will decrease noise.

The kitchen should have a circuit breaker or shut off valve so kitchen appliances can be easily turned off; locate those inside locked cabinets. All drawers and appliances should be lockable, particularly if residents have easy access. The kitchen should be locked when not in use by staff.

Commercial dishwashers are usually required. The kitchen floor must be slip resistant; e.g. vinyl with embedded grit. Consider a locking half-door into the kitchen area. If there is a door to the outside from the kitchen, it should have a lock on it, with an alarm like other exterior doors.

A kitchen which is open and accessible from the common space will need to be designed with half doors to secure the kitchen. Locking cabinets and drawers should also be used to provide safety for residents with cognitive impairments. Kitchen design may be limited by health and building code requirements.

Do not locate the sewage lift station near the kitchen.

Cultural Activities

Provide space and supplies for cultural activities such as sewing, beading, carving, preparation for subsistence activities, and other things important to the Elders in your region.

Television & Phone

If possible, locate the television somewhere other than the main common area. Often televisions have to be at such high volume for all residents to hear that it can make other socialization difficult. You may decide not to have a television in the common areas if

most residents have them in their own units. Provide a telephone so people who can't afford their own phone service can make free local calls and can use a calling card for long distance calls.

Hair Salon

Consider having a room where a local stylist can work occasionally, equipped with a hair washing sink and barber chair. In small homes, just having one specialized sink for hair washing may be helpful. Sometimes people with dementia are afraid of bathing; this can be an alternative way to get hair washed. Sinks should be adjustable to an appropriate height for people in wheelchairs. Countertops should have rounded or angled corners. As in other rooms, equip the hair salon with emergency pull cords.

Medication Room

Medication and supply cabinets located in each resident's room are recommended. If you decide to have a separate room for the storage of medications, it should be double locked (both a locked door and a locked storage unit). Typically the medication room has a sink, counter space, documentation work area, and a refrigerator (for medications that must be kept cold). Check the licensing regulations for specific requirements.

Miscellaneous Rooms

The following rooms may be nice to have if a home is large enough to provide them.

- A private conference room for resident assessments, staff conferences, private dining, and family gatherings.
- A small housekeeping room to store bulk cleaning supplies, a vacuum, rug cleaner, mops, and other cleaning equipment.
- A storage room for records, seasonal and other decorations, extra furniture, and outside furniture.
- Outside storage, for grounds equipment and supplies like lawn mowers, rakes, and fertilizer. If the storage area is attached to the building, consider having access from both the inside and outside of the building. Be sure to alarm the outside door if you include an interior door.
- A bathing/whirlpool/spa room with a tub that is accessible. Although this amenity can require a big staff time commitment, it is well liked by some residents and is therapeutic for skin care and circulation.
- Depending on the preferences of potential residents in your community, saunas may be an important feature to provide.
- If you decide to have a smoking room, it should be easily visible by staff, with a staff window for observation. Include a very strong vent fan so smoke is pulled out of the room. The door should have an automatic closer. There should not be an operable window since opening the window will pressurize the room and will likely force smoke into the common areas. The smoking room floor should be non-flammable.

The floor should be linoleum and furniture should be flame retardant. Use blinds on the windows instead of curtains. Equip the room with an emergency pull cord.

Mail

Residents should have mailboxes, or mail can be delivered to individual rooms. Check with the local post office for regulations and policies.

Elevator

An elevator should have seating around it, so residents don't have to stand for long periods of time while waiting. The elevators are set to move slowly (for handicapped accessibility) and some residents will need to sit while waiting.

Design for Residential Units

Privacy

Residents should each have their own private space, and should not share a unit unless it's by their own choice (e.g. with a spouse, sibling, or close friend). Each unit should be configured to provide a kitchenette area, living area, and, at a minimum, a bedroom alcove. All units should include a private bath. It is important to note that private units are a benefit to residents and may also be required by the funding source supporting affordable assisted living.

Entry

At the entry to each unit, create a 2-foot deep by 6-foot wide alcove or niche so people can personalize their space. All doors must be 36" wide, with flat thresholds. Each unit should have a locking entry door. Door locks should be such that the resident has to push the door lock in order to lock it, avoiding accidental locking that takes up staff time to unlock.

Closets & Storage

Closets in the units should have six feet of closet pole and additional storage space for things like winter clothes. The more storage space available the better. Closet poles and shelves should have adjustable mounts so they can be raised or lowered for handicapped accessibility or for shorter residents. Do not use bi-fold closer doors, as they tend to break and fall off the tracks easily. Bypass or sliding doors are more durable and easier to fix. Usually homes don't provide additional resident storage outside of the unit because it is difficult to manage over time. If resident storage is provided outside of the unit, it should be divided into distinct storage lockers.

Bathroom

Bathrooms in the residential unit should be completely accessible by people in wheelchairs, including 3 X 5 roll-in showers. The base cabinet in the bathroom sink should have a removable door and floor to accommodate accessibility for a person in a wheelchair. Flooring in the bathroom should be non-slip, and the sink should be mounted so that a person in a wheelchair can roll up to it and easily operate the fixtures. Countertops and sharp corners on equipment should be rounded or at a 45-degree angle to help prevent injuries. Grab bars should be installed on both the outside and inside of the shower. Do not mount towel bars in any place where a resident might use them for steadying themselves because they may get torn out of the wall, creating both safety and maintenance issues.

Bathrooms should include storage space for incontinence supplies. A heater and a fan should be mounted in the ceiling, because elderly people tend to get cold easily and take longer to perform bathroom tasks. Do not locate the medicine cabinet over the toilet due to the risk of dropping medicine and supplies into the toilet. If possible, resident units should be designed so as to be able to see into the bathroom to the toilet from the bedroom. This will help some cognitively impaired residents remember to use the toilet, limiting the need for staff assistance. Paint the wall behind the toilet a contrasting color from the toilet, for additional cueing. Some designers believe that a dark colored toilet seat may also help.

Consider a pocket door into the bathroom. If the unit is small, a pocket door will save space. It will also be safer because a pocket door can be opened even if a resident falls against it. Mount the door with a large handle on each side usable by people with arthritis. The handle should also keep the door from totally recessing. If pocket doors are not used, make sure the bathroom door opens out to the bedroom, so that if someone falls against the door, it won't block the bathroom.

Kitchenette

In the kitchenette, the base cabinet under the sink should have removable doors and floors to accommodate wheelchairs. Upper cabinets should be hung approximately 15 inches above the countertops, so they are easily accessible to all residents. The kitchenette should include a microwave, small sink, and refrigerator. The refrigerator should have a separate self-defrosting freezer compartment, since ice cream is a popular treat and only separate freezers will keep it frozen. All appliances should be easy to remove or unplug in case safety issues arise with specific residents. Do not place the microwave on a countertop; instead mount it under upper cabinets. Then when the microwave door is opened it can't knock hot or cold liquids off the counter. Each unit must have a locking medication drawer in the kitchenette or bathroom.

HVAC

Each unit should have it's own thermostat.

Windows

The units should have maximum exterior wall with the largest possible windows. A deep sill or shelf at the window will allow people to keep plants. The sill or shelf should have a plastic laminate finish to facilitate easy cleaning.

Lighting

Avoid florescent lighting, which can seem institutional. Wall mounted, incandescent lighting is pleasant; just be sure that lighting levels are adequate for people with poor vision.

Emergency Call

Install an emergency pull cord in the bathroom, and an intercom in the bedroom or by the bed. If the system is wireless, the pull cord can be conveniently moved if the room furniture is rearranged.