



DELIVERING **WORLD-CLASS** CARE
AND QUALITY OF LIFE

THE OWNER'S GUIDE TO SENIOR LIVING DESIGN AND CONSTRUCTION



KORTE

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AN INTRODUCTION TO SENIOR LIVING DESIGN AND CONSTRUCTION

We've created this guide as a resource to help owners and facility managers through the process of having a senior living facility designed and constructed. In it, we show you the key elements of interior design, architectural design and construction for senior living facilities. Then, we give you a case study that takes you through the successful construction program of an efficient, modern senior living facility.





SENIOR LIVING DESIGN AND CONSTRUCTION WITH A PURPOSE

A nursing home or senior living facility has a unique dual purpose: to deliver excellent care and to provide a high quality of life for senior citizens.

That's a major change from the past, when nursing homes followed the hospital model, and efficient care was the driving force behind design and construction. Dignity, privacy and lifestyle have become core values in senior care. And new, innovative materials and technologies have made it possible to cost-efficiently design and build better living environments that allow for improved quality of life.

As part of this trend in senior living and nursing home design, it's become increasingly important to build for the continuum of care. What we mean is that as seniors age and require different levels of care, senior living centers need facilities that can provide the right living environment and care. Smart architectural design and construction allow you to build the proper environments for seniors as they move from independent living to assisted living and into skilled care, or even specialty care. In this guide, we cover what these trends mean for your facility and your construction program.



Interior hallway at Stillwater Senior Living in Edwardsville, Illinois. The warm colors follow evidence-based design conventions, while the low railings are helpful for those with disabilities.



SENIOR LIVING INTERIOR DESIGN

Every element of senior living interior design comes back to the dual purpose of quality care and quality of life. To better show you just what this means, we'll start by examining traditional nursing home design.

THE TRADITIONAL HOSPITAL MODEL OF NURSING HOME DESIGN

For years, nursing homes were synonymous with low-tech hospitals. Throughout the U.S., roughly 2 million beds have been built in skilled nursing centers, long-term care facilities and nursing homes. Nearly all of those facilities were designed with rooms branching off central, hospital-like corridors. Rooms were built to be semi-private, with two beds separated by a curtain, one by a window and another by a bathroom. In many ways, our seniors were seen purely as patients. Nearly all facilities incorporated group showers, a central dining facility for all residents and a kitchen that was off limits to residents. Maintenance functions weren't neatly separated from living areas. It was a one-size-fits-all model that provided sterile environments and lacked many amenities and individual spaces.

Facilities were efficient, cost-effective and profitable, and residents could receive the care they needed. But nursing homes generally didn't make for a good home. They weren't a place to live and enjoy the golden years.

INTERIOR DESIGN THAT MEETS A SENIOR LIVING FACILITY'S DUAL PURPOSE

Today, as senior living moves toward the dual-purpose model of efficient care and quality lifestyle, good facilities incorporate the best design elements of hospitals, hotels and homes. And they're set up to be as friendly as possible to those who have disabilities.

INCORPORATING THE PRIVACY OF THE HOME INTO SENIOR LIVING INTERIOR DESIGN

To improve senior living facilities, interior designers can use elements of the traditional home, the biggest of which is privacy. As seniors progress from living on their own to receiving daily care in a nursing home, they still expect dignity and personal space. Today, facilities are increasingly providing private rooms to seniors, along with private bathrooms that feature individual showers or baths. It's become a priority to create living spaces that make it possible for seniors to invite their family



members to visit. That includes individual spaces for games, entertainment and fun. To help create more privacy and personalization, some facilities go as far as providing house-like units with smaller numbers of residents and accessible patios, porches and sitting areas where people can enjoy the day together. These units sometimes include gas fireplaces, usable washing machines and dryers for visiting families.

Instead of a single, large dining area for all residents, facilities are transitioning to smaller, more private dining areas and open kitchens that are accessible to residents. The design of dining and kitchen areas has become increasingly important.

Interior designers are creating senior living facilities with comforting lighting, walls designed with inviting colors, themed and comfortable furniture and custom decorations. A true home.

INCORPORATING THE BEST OF HOTELS IN SENIOR LIVING DESIGN

Nursing home facilities that have long been associated with sterile environments are now being designed to create a first impression like a hotel. In many facilities, nursing stations have been transformed from a desk behind high walls to a concierge-like station. It's a place



A small kitchen and dining area at Stillwater Senior Living in Edwardsville, Illinois. This smaller, more personal dining area provides an accessible sink, stove and touch of the home — a far cry from the traditional nursing home model of dining.



that encourages interaction between care providers and residents. Mini nursing stations with medical supplies are present at desks, shelves and wall cabinets throughout facilities to make it easier for staff to deliver more personal care and service. Maintenance and housekeeping duties are functionally designed to be separate from residents in order to create a more visually appealing home.

Senior living facilities now incorporate welcoming design into walls, flooring, furniture and outdoor areas in ways that had previously been unachievable. In the past, one of the limiting factors for design had been state regulations for cleanliness and infection control. After all, nursing homes are state-licensed facilities. But today, organizations like the Centers for Medicaid and Medicare Services have worked with regulators to create standards that incorporate personalization and call for a high quality of life. At the same time, new technologies and materials have allowed for a clean, healthy environment without limiting design capabilities. And many of these innovations have come directly from hotels.

One example of a new material is solution-dyed carpets with moisture backings. They're visually pleasing, meet regulations and can stand up to industrial-strength cleaners necessary for infection control. Other materials, such as new types of vinyl, painted gypsum boards and wall coverings, offer the same benefits. Furniture lines,

created specially for those who need assistance, come with removable elements, chair arms designed for lifting assistance and other features that make life easier for the elderly and caregivers. Part of senior living design is simply keeping seniors in mind in each detail.

But beyond the details of design, some the finest facilities offer amenities like hotel-style dining areas, pools, fitness centers, spas, libraries, computer centers, wellness facilities, business centers, art studios — even beauty salons and barbershops. Seniors are able to stay active and fit longer while enjoying a better daily experience.



Interior visiting area at Stillwater Senior Living in Edwardsville, Illinois. The warm colors and open spaces reflect evidence-based design standards. The furniture and attention to decoration have helped make Stillwater a “small, boutique hotel” for seniors.



INCORPORATING THE BEST OF HOSPITALS IN SENIOR LIVING DESIGN

In recent years, hospitals have seen many important developments and improvements in technology and interior design. Some of those positives translate directly to senior living.

New technology that's custom-made for care settings is improving staff communication and care throughout many facilities. Automated tracking and alerts can inform nurses and care providers when patients fall, require attendance or enter or exit certain areas. Nursing stations now come equipped with the latest computing technology, and facilities are set up to work with modern medical devices and IT infrastructures. In many new nursing homes, automated lifts come built into the facility and make it easier for care providers to move residents from room to room and up stairs.

Accommodations for medical care technology work in coordination with evidence-based design. Research study after research study has shown that environments with nurturing colors, green spaces and inviting decorations have a positive impact on patient outcomes and care. Using evidence-based design, your interior designer and nursing home architect can create an environment that tangibly improves the quality of life for your residents.

FUNCTIONAL ARCHITECTURE AND NURSING HOME DESIGN

Architecture has gotten smarter. Better modeling methods, computer-aided design technology and evidence-based design have changed the way we approach nursing home design. Architects can better structurally customize senior living facilities to suit the needs of senior residents. Your architect can create a facility that's primed to deliver quality care with a high quality of life. So what does that mean for your facility?

You'll want a modern architectural model that maximizes individual spaces while making every element of your building disability-friendly. It pervades all aspects of architectural design, from the organization of buildings on a senior living campus to the layout of rooms, closets and common spaces in a facility.

DISABILITY-FRIENDLY NURSING HOME DESIGN

Designing a senior living facility that's friendly to those with disabilities goes beyond complying with the standards set forth by the Americans with Disabilities Act (ADA). It takes into account the way that those with disabilities must navigate every element of their days. Why? Because delivering a high quality of life means enabling seniors to do as much as they can for themselves.



Making a facility disability-friendly means making halls and rooms big enough to accommodate wheelchairs and medical devices. It means creating ramps wherever possible instead of stairs. Closets in rooms should have the space to comfortably accommodate bulky wheelchairs. Levers, closet rods, light switches and shelves shouldn't be high and out of reach. They should be low enough for seniors to conveniently access them. Individual rooms can come with medical closets that lock and open with a nurse's keys, so nurses aren't tied so tightly to the med cart and can be more accessible to seniors. Simply put, the design of personal rooms and common spaces should take into account the details of living with physical disabilities and make it possible for seniors to get around and perform tasks independently.

INNOVATIVE ARCHITECTURAL MODELS FOR NURSING HOME DESIGN

As senior living facilities have changed and adapted to deliver a high quality of life, new architectural building models have taken shape. One completely unconventional example is the Green House Project, where groups of 10 to 12 seniors live in houses that are custom designed to increase staff contact with seniors. These homes provide a foyer, a living room, an open kitchen, a family-style dining area, a sunroom den, an office, a beauty shop, a spa, a utility room and private

bedrooms with full bathrooms and individual showers around the periphery. They truly have all the trappings of a home with the companionship of caring staff and other seniors.

Of course, on the surface it seems that delivering fully disability-friendly, custom group homes for seniors is tremendously expensive. And cost was one of the main reasons for the traditional model of nursing home design. Economies of scale made it possible for seniors to get affordable care and housing, while owners could operate nursing homes at a profit. But today, many new models blend the best of private and group homes with the cost efficiencies and scale of traditional care facilities.

Some senior living communities are broken into neighborhoods of house-like facilities that provide 8 – 10 bedrooms and many of the amenities of home. In total, there will still be hundreds of residents. They're organized with some functions performed in a central facility, while caregivers can efficiently move house to house to provide assistance. Meds for individual patients will be organized and locked in the house units. One senior living center in Wisconsin is actually arranged with houses in concentric circles. Even senior living centers made up of one large facility will come with patios and open, green spaces that provide views of nature, gardens



and bodies of water. On the inside, modern facilities include natural lighting to brighten rooms, systems to raise indoor air quality, energy and water conservation and efficient lighting to deliver energy-efficiency savings.

Even in more traditionally styled facilities, private rooms are becoming the norm, and they come with many of the amenities of home, like microwaves, refrigerators and surfaces for dining. According to research from the Gerontological Society of America, published by the Oxford Journals, [the cost of building private rooms is usually offset in less than two years time](#). Owners can cost-effectively renovate older facilities to make shared rooms more like private rooms, putting walls between beds or building a sliding door between them. One trend is to have senior couples in one room with a bed on one side and a living room on the other side.



Completed Stillwater Senior Living facility in Edwardsville, Illinois. Residents have private rooms and a healthy view of pleasant outdoor areas, providing a high quality of life and following the conventions of evidence-based design.



SMART NURSING HOME CONSTRUCTION

Much like nursing home interior design and architectural design, in nursing home construction, it's important to remember the core purpose of a senior living center — to facilitate quality care and provide seniors a high quality of life. And in every construction project, you want to get the best possible value. We provide you some tips to do just that.

BUILDING TO ALL CODES FROM THE START

Every state and municipality has different accessibility codes. One key to rapid, cost-efficient construction is looping inspectors into the process early and often. That way, you can ensure that every element of your facility is to code and spec. Make sure your builder has a plan in place to meet all pertinent codes before construction begins.

BUILDING FOR THE CONTINUUM OF CARE

If you're having a construction team build or renovate your facility, you'll want a long-term plan in place from the start of design and construction. In many cases, that means building with future expansion in mind. You'll

want special thought put into setting up the wiring, piping and utilities of your facility to extend beyond your initial building. If there's a plan in place to remove or extend certain walls when you expand, your builder should examine ways to use inexpensive materials on those walls, since you'll be removing them anyway. And structural loads should be set up to accommodate more weight as you expand.

In every project, you want to build for the life of your facility. A good builder will provide a complete Life Cycle Cost Analysis (LCCA) that shows the long-term tradeoffs of using different materials and construction solutions. Complete with your LCCA, you should also receive a Sustainability Return on Investment (SROI) report that shows the short-term costs and long-term savings of using different energy-efficient solutions. Your builder should make it easy for you to make informed construction decisions.

GETTING THE BEST VALUE FROM YOUR SENIOR LIVING CONSTRUCTION PROJECT

Taking into account the full lifecycle of your facility, the key to getting the best value is having the right team deliver it. Every job is different, and our belief has always been that the job is the boss. You'll want a partner who can assemble the right expertise and team for your



job and find best-value solutions to help you nail your timeline and budget.

One of the most efficient ways to deliver a facility is through Design-Build, a single-source construction delivery method that aligns the design and construction elements under the same contract. When all the components of a project are facilitated through a single entity, it enables the Design-Builder to focus on the design and constructability of a facility, while delivering a project that reflects the vision of the owner. It also enables the Design-Builder to control costs and schedules, which translates to faster builds, better quality and less risk for the owner.

Savings are realized through early and continuous design reviews. Engineers, architects and contractors are integrated and work as a collaborative team with the owner, seeking best-value solutions throughout every phase of the project.

In short, giving customers more than they expect is a powerful tool in building long-term partnerships with our clients. For this reason and because of the many benefits Design-Build provides, we've adopted it, honed it and adapted our processes to it. At The Korte Company, we're a fully integrated Design-Builder, using Design-Build in more than 90 percent of our projects.



The Korte Company crew builds the new Stillwater Senior Living facility in Edwardsville, Illinois. The project team delivered the build rapidly and under budget.



STILLWATER SENIOR LIVING CASE STUDY

To give you an example of a senior living center that's enjoyed successful design and construction, we'll evaluate the building program of Stillwater Senior Living. Kathy Long, owner and founder of Genesis Development Group, planned the project after careful evaluation of the senior living market in Edwardsville, Illinois.

Her goal was to build a facility that met the dual mission of quality care and quality of life.

"It's all about person-centered care," Kathy said. "The different individual needs and wants of an individual person. To achieve that goal, we need to design our buildings and equipment inside buildings to compliment owner and staff that will be facilitating that role."

Stillwater Senior Living is functionally designed to enable quality care. It's set up for people who have disabilities to navigate the facility and enjoy a comfortable residence. The building helps the care staff take advantage of the latest technology too. The Stillwater facility and staff are equipped with an innovative "Our Care System."

Kathy said:

It's really important that you put the infrastructure in there. There's going to be a lot of improvement in different types of nurse call systems that need good WiFi in a building. This is kind of a new procedure. Residents have a device, and when they go into a room, they scan the device. It tells staff when residents have entered a room. We know when meds are administered, when people fall and when care providers get there to help. We know when people need a shower. Caregivers have a device with reminders — we can put notes in files that say whether residents weren't feeling good, or when it's someone's birthday. It helps us customize the care.

The design of the facility incorporates a beautiful interior that uses warm colors and wood finishes to create a home-like atmosphere. It's set up as a small, boutique hotel where seniors can enjoy their days. Perhaps one of the most unique features of the facility is the way it takes into account transgenerational design. In addition to featuring private rooms with space for personal visits, Stillwater incorporates a children's play area. Families can come and let kids run around while visiting their senior family members.



THE CONSTRUCTION PROGRAM OF STILLWATER SENIOR LIVING

As a new facility, Stillwater Senior Living did not opt to build their full vision all at once. Instead, they're expanding in phases, filling their initial facility with residents, then growing their building to serve seniors at different stages of their lives. Beginning with assisted living, Stillwater plans to add areas for independent living and memory care. As the builder for this facility, The Korte Company incorporated future expansion into building plans. We accommodated it by extending wiring, piping and utilities where the building expansion would be located. And we used temporary, lower-cost materials for the parts of the facility that would be replaced.

As part of the building program, we worked directly with the architect and expert subcontractors to reduce costs. Wherever possible, we found cost-saving solutions, and we completed the project under budget, delivering \$20,000 back to Stillwater. Despite a wet spring that threw many challenges at the project team, we got the job done in a tight, six-month timeline.

Kathy said, "It went really well. It was an open book. I knew what the cost was going to be as I made every decision. They had a time crunch and couldn't get started until March. But they had the project completed by the end of November, which is really very, very good. They did a tremendous job."





CONCLUSION

The right facility design and construction program will help you take advantage of the latest trends in senior living. So your facility can tangibly help caregivers provide excellent care and help seniors enjoy a high quality of life.





MORE ABOUT THE KORTE COMPANY

In 1958, The Korte Company started building for neighbors with little more than three people, a truck and a saw. Today, we've delivered more than 2,000 projects nationwide, including many healthcare and senior living projects. But all these years later, we still treat every job like it's for our neighbors. And we've proudly put the Korte name on every finished project.

The defining quality of our company is our drive to build better, faster and smarter than the last time. In 1963, we invented and honed the Design-Build method — 20 years before the industry began adopting it. Now, we have our own in-house architectural team, Korte Design, and we partner with specialty architectural firms to deliver a wide range of projects. We're seasoned in Design-Build and Design-Build-Furnish, so we can deliver architectural design, construction and interior design for any senior living facility. No matter what skills and knowledge the job calls for, we form the right team to get the job done — safely, on-budget and on-time. Every time.

If you have any questions about architecture or construction, or you'd like some direction on how to start your project, call us anytime at 618-654-8611.

