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Design and Architectural Features of Senior Housing

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Introduction

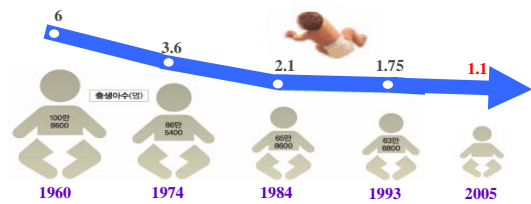
By 2026, Korean society is expected to become a "Super-aged Society" in which 20% of the population will be above 65 years of age. The potential market for senior housing and related services is huge and companies are exploring how to break into this market. In response, the Korean government has begun addressing legal issues and building requirements for senior housing. This study sought to explore architectural characteristics and trends in senior housing in the U.S. to use as a baseline for establishing senior housing plans in Korea.

Why Do We Need Senior Housing?

Falling Birth Rates

The increasing percentage of an aging population is due to falling birth rates. For economic reasons such as the high cost of education, many young couples are having fewer children or postponing raising a family.

Figure 1: Average number of children born to a woman between the age of 15 and 49



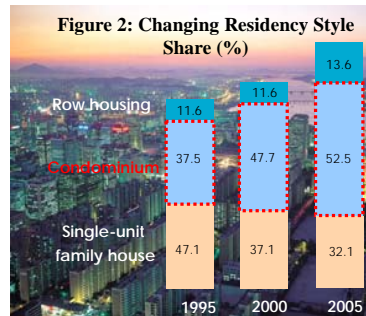
Source: Korea National Statistics Office (2005)

Increasing Life Expectancy

Over the last 40 years, the average lifespan has increased from 50 years to the late 70s, due to improved living standards, better nutrition and personal hygiene, and advances in medical technology.

Change in Residential Style

Fifty years ago, 3 generation families living together was common in Korea. But Korean society has changed dramatically. Today, the typical Korean family lives in a high-rise condominium, housing only the nuclear family. Half of Koreans live in condominiums, which are too small and expensive to support multi-generation living.



Source: Korea National Statistics Office (2005)

Types of Senior Housing in the U.S.

Independent Living

Independent Living Communities are designed to enable independent seniors to enjoy a lifestyle filled with recreational, educational and social activities amongst other seniors.

Assisted Living

Assisted living provides personal care to persons with need for assistance in daily living, and can respond to unscheduled needs for assistance.

Memory Care

Memory Care provides specialized care and housing tailored to the special needs of individuals suffering from dementia, Alzheimer's and other diseases of the mind.

Skilled Nursing

Nursing Homes, or Skilled Nursing Facilities, are designed for seniors who are in need of 24-hour nursing care.

Characteristics of U.S. Senior Housing

Category	Independent Living	Assisted Living	Memory Care	Skilled Nursing
Daily Living Activities (dressing, personal care)	Scale: No Assistance ↔ Comprehensive Assistance			
Overall Health (physical, emotional)	Scale: Generally Poor ↔ Generally Good			
Community Activities (social events, outings, golf)	Scale: None Offered ↔ Many Offered			
Community Services (laundry, cleaning)	Scale: None ↔ Many			
Health Services (medications, nursing care)	Scale: None ↔ Skilled Nursing			
Environment (personal freedom)	Scale: Limited ↔ Independent			

Source: Senior Housing Net (2006)

Case Studies : Four Senior Housing Facilities in Portland

Name	Canfield Place	Cherry Wood	Willamette View	Terwilliger Plaza
Services Offered	•Assisted Living	•Independent Living •Assisted Living	•Independent Living •Assisted Living •Memory Care •Skilled Nursing	•Independent Living •Assisted Living
Location	SW Portland (Beaverton)	SE Portland	SE Portland, riverside	Portland city center
Land Size	1.7 acres	19 acres	27 acres	5.6 acres
# of Units	88 units	444 units	450 units	280 units
Date Constructed	1996	1998	1985	1962
# of Clients	90	450	500	288
# of Staff	60	400	390	127
Price (monthly, 2-bedroom unit)	\$3,395 (Assisted Living)	\$2,265 (Independent Living)	\$2,690 (Independent Living) plus \$222,816 entrance fee	\$2,750 (Independent Living) plus \$600,000 entrance fee
Architectural Features	•Two story wooden construction building forms H-shape radial layout •Easy to access outdoors via individual patios	•Mix of row houses and condominium buildings •Outdoor space includes mini golf course, water falls, and gardens	•All buildings connected with bridges for easier accessibility •Client can choose customized plan and interior materials •Good vista of the Willamette River	•High-rise condominium is planned according to the topography (on steep slope) •Eastside of the building faces city center and westside is forest



Sky bridge : connects buildings for sharing amenities

Amenities : for convenience of personal life and social activities including spa, chapel, salon, game rooms, dining halls



Condominium style housing : easy to maintain for seniors



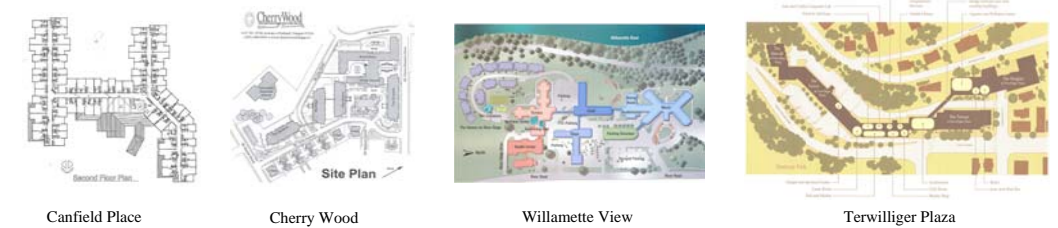
Interior Space : home-like atmosphere and customizable remodeling



Location : different locations provide access to transportation and proximity to medical facilities

Case Studies : Site Plan Analysis

- Independent Living communities tend to be located closer to the city center than Assisted Living communities.**
 - Independent seniors want an active lifestyle.
 - Transportation from the city is important for the client and their family.
- Different types of senior facilities are separated on the site plan.**
 - Each type of facility has its own building.
 - Independent living is located in the central position with access to a reception area.
- Each building is connected with sky bridges which provide easy access.**
 - Social activities are shared amongst communities and sky bridges connect each building to public space.



Case Studies : Unit Plan Analysis

Through the study of the units, 2 bedrooms with living room type was found to be the most common unit configuration.

1. Unit is divided into 3 parts :

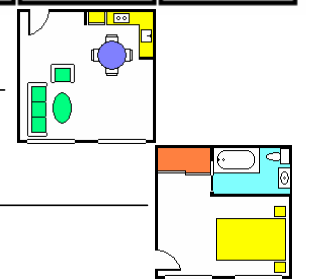
Master bedroom + Living room + Second bedroom

- Living room is located in the center, surrounded by bedrooms.
- Long rectangular units allow more sunlight.
- Second bedroom is commonly used as a guest room or office.



2. Public Space : Living + Dining + Kitchen

- Public space is composed of living room, dining room and kitchen.
- Open floor design of the three rooms makes efficient use of a compact public space.



3. Private Space : Bedroom + Bathroom + Closet

- Bedroom, bathroom and closet compose the private space.
- Bathrooms are designed for wheelchair access.
- Pocket doors are often used in the bathroom and the closet for space versatility.



Conclusion

- Aging-in-place is the most important factor to consider in site planning for senior housing. Seniors prefer to continue living where they are and they want to be near family, friends, amenities, and various services within the city.
- Amenities provided are focused on convenience for personal life and social activities.
- Seniors want to live in a house that is low-maintenance, energy-efficient, and of smaller size than their current home. These preferences lead to building condominium-style senior housing rather than single unit senior housing.
- Although seniors prefer the convenience of condominium-style homes, they want to express their own personal characteristics when decorating the interior space. They pursue a home-like atmosphere, decorate, and sometimes remodel their units when they move in.
- The market need for senior housing in the U.S. is strong and growing, and the potential market in Korea is likely to be greater.
- The first successful senior housing market creator in Korea is likely to maintain market dominance.

Future Needs to Encourage Senior Housing in Korea:

- Finding an adjustable design for Korea
- Encouraging public senior housing construction
- Improving incentive grant programs for senior housing