

# Universal Design - Innovative Care for the Independent Elderly in Hong Kong

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## The Nature and Purpose of SEN

The Senior Citizen Residences (SEN) programme developed by the Hong Kong Housing Society aims to provide accommodation appropriate to the needs of the independent elderly, in conjunction with facilities and services to enable healthy aging and aging in place.

The Chinese tradition is of elderly care within the family but attitudes are changing. In Hong Kong 38% of the elderly do not share their home with a younger family member. This proportion will rise as population ages. From 8.7% in 1991, the percentage of people over 65 or over rose to 11% in 2001 and is expected to rise to 24% by 2031. Yet the new elderly will also have rising expectations. New housings, facilities and services will be needed.

Currently 40% of the elderly live in ordinary rental housing units. Older stocks can be extremely basic, with standard units shared by unrelated individuals. The 31% who own their own apartments often occupy decaying walk-up buildings up to six storeys high with primitive services, while recent high-rise buildings are still limited by inflexible layout and tight space standards. In better development, high management fees and less accessible locations may be disadvantageous for the independent elderly. Hong Kong elderly residential provisions are aimed primarily at those who cannot cope at home. Around 5% of the elderly live in Government, NGO and commercial institutions of various kind. Quality is variable.

This sets out to investigate the needs of the elderly in Hong Kong who are independent, have resources which disqualify them for public housing, but are not so wealthy that they can meet their needs for accommodation and services through the market. SEN received policy support in 1998. Exploratory discussions with elderly representatives, consultants and potential operators led to the appointment of architects Leigh and Orange and P & T in 1998. Jolly Place in Tseung Kwan O was handed over to the operator in 2003, and Cheerful Court in Jordan Valley in 2004. (See Fig 1, 2 and 2a).



Fig 1. Studio unit in Jolly Place



Fig 2. Living/dining room in Cheerful Court (above) and Fig 2a. Cheerful Court (below)

## Building Design

The architecture of Leigh and Orange and P & T shows that high-rise elderly housing can be extremely efficient and convenient for the elderly residents, enabling location in lively urban areas. These buildings are enjoyable places to live for people who don't see or present themselves as elderly.

### "Healthy aging" and "aging in place"

- An extensive range of recreational facilities (see Fig 3 and 4) if provided within the development so that the senior citizens can maintain their active and energetic lifestyle.
- Residential care is integrated with one-stop medical and health care services. (See Fig 5). Senior citizen can enjoy prompt access to the required services in case their health conditions deteriorate, minimizing the trauma of relocation from one place to the other.



Fig 3. Indoor swimming pool of Cheerful Court

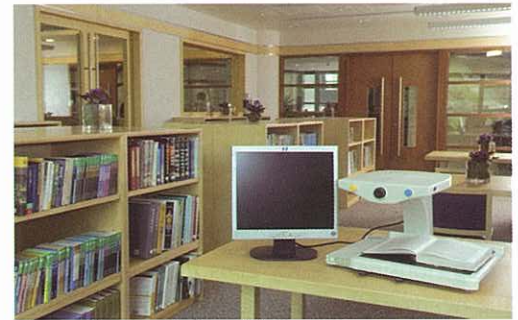


Fig 4. Library of Cheerful Court



Fig 5. Dental room of Cheerful Court



Fig 6. Electric induction cooking plates installed to reduce the fire risks brought by naked fire.

### Fire safety

- One of the major safety concerns is fire safety for the elderly in a high-rise building.
- Refuge areas are provided on each floor next to the firemen lifts and escape staircase to facilitate rescue.
- Finishes in public area are carefully chosen to ensure they are fire-retardant.
- Adequate signages and visual/audio alarm signals are installed to ensure clear indication of emergency exit route.
- Electric induction cooking plates are installed in residential units to reduce the fire risks brought by naked fire. (See Fig 6).
- Sprinklers are installed in the entire building as an extra means of safety.

### Mobility

- Lift provision is optimized for efficient transportation of residents.
- Each residential block is equipped with a service lift which can facilitate inter-floor transportation of bed together with tenant in need.
- Foldable chairs are provided within the lifts to ensure maximum comfort of the senior citizens. (See Fig 7).
- Residential corridors are wide and spacious and equipped with handrails on both sides to enhance mobility and safety. (See Fig 8).
- All doors and passages are wide enough to allow easy and safe access for wheelchairs.
- Mobility within the floor level is enhanced by grouping facilities of similar nature in cluster, so that the facilities are always within reach of the senior citizens.

## Adaptability and flexibility

- Bathroom inside the self-contained apartment is disable-friendly. Shower cubicle can be readily removed should the tenant become wheelchair-bound. (See Fig 9).
- Bathroom doors are openable from both sides to facilitate access and rescue.
- Flat floor shower.
- Bench height socket outlets.

## Tactile safety

- Non-slip ceramic and vinyl tiles are extensively used in the development.
- Vinyl floor finishes are used in the domestic portion of the Jordan Valley building to provide a softer surface for senior citizens who are susceptible to falling.
- Door handles, basin taps and shower taps are easy to operate.
- Bathrooms are equipped with safety rails.

## Lease for Life

The residents pay a lump sum entry contribution which gives them ownership of the flat until they pass away or terminate the lease. This is intended to be equivalent to public housing rent for about 20 years, full market rent for about seven years or one third of full market value. Residents pay management fees and for optional services provided by the operator. On termination of the lease, a sum between 10-70% of the entry contribution is returned to residents or their beneficiaries, declining according to the length of tenure.

## Looking into the Future

SEN grew from the needs of a specific group in a special place. Its principles happen to be widely replicable. The ultimate, tantalizing potential this programme suggests is that new and higher standards of elderly care might be achievable, not only in expensive, secluded enclaves but at a reasonable cost, as an integral part of the cities and the continuum of life.



Fig 7. Foldable chairs provided within the lifts. (above)  
Fig 8. Wide and spacious corridor equipped with handrails on both sides to enhance mobility and safety. (bottom left)  
Fig 9. Bathrooms equipped with safety rail, and shower cubicle removable to serve wheelchair-bound resident. (bottom right)

## List of Facilities Provided in Senior Citizen Residences Projects

### Cheerful Court, Jordan Valley

- G/F: Convenience store, coffee shop, restaurant and multi-purpose hall.
- 1/F: Library, music room, pottery room, polyclinic, dental rooms, grooming room and conference room.
- 2/F: Residential care home for the elderly, assisted bath room, physiotherapy room, recreation room and club room.
- 3/F: Indoor swimming pool, gymnasium and podium garden

### Jolly Place, Tseung Kwan O

- G/F: Carpark
- 1/F: Residential care home for the elderly, kitchen, day room.
- 2/F: Wellness centre, multi-purpose hall, hobby room, games room, reading room and podium garden.
- 3/F: Hydropool, sauna, rehabilitation centre.

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### Carmen Wong

Practising architect in Hong Kong and participated in the Cheerful Court project from its inception in 1988 to its completion in 2004.