

Annex A

Waterfront I & II @ Northshore



Developer

Housing & Development Board

Architect

Housing & Development Board,
Building & Research Institute

Project Details

Lining the picturesque Punggol Northshore seafront, Waterfront I & II @ Northshore consists of 15 residential blocks comprising a total of 1,694 flats ranging from 2-room Flexi to 3Gen flats. The project is integrated with a neighbourhood centre (Northshore Plaza I & II). Designed by HDB's in-house team of planners, architects, and engineers, the project enables residents to connect with nearby amenities and nature in a safe and convenient manner and encourages neighbourly interactions through the provision of communal spaces.

Features

- At the precinct level, the 3Gen playgrounds (i.e. children's playground, and adult and elderly fitness corners) and facilities such as the Active Ageing Hub, Senior Care Centre, and childcare centre are co-located within an expansive oasis of greenery and seamlessly linked via barrier-free pavements. This co-location of facilities presents opportunities for inter-generational interaction among various user groups.
- To allow more residents to enjoy the seafront view, an undulating wheelchair-accessible promenade and viewing deck with edge rails are provided for safety. The promenade and viewing deck interface with the coastal park where residents can enjoy a nice stroll, jog or cycle by the sea.
- At the block level, barrier-free communal spaces are aplenty. The community living rooms on the first storey, landscaped bridges on the second storey, and roof gardens interspersed across most blocks all provide opportunities for residents of all ages to interact with one another.
- The residential blocks are also connected via a sheltered linkway on the first and second storeys. These linkways not only allow residents to access facilities and communal spaces within the residential development, but also seamlessly connects them to the neighbourhood centre Northshore Plaza II.
- At Northshore Plaza II, a community spine on the second storey seamlessly connects residents across the road to the other side of the neighbourhood centre, Northshore Plaza I, to the bus-stops and Samudera LRT station, and to the adjacent residential developments, in a safe and convenient manner.
- For wayfinding to help users navigate the development, pictograms are used in the precinct signage and maps, and each block series is represented by a themed icon at the basement carpark.

Royalgreen



Developer

Allgreen Properties Limited

Architect

ADDP Architects LLP

Project Details

Royalgreen comprises 8 residential condominium blocks with a total of 285 dwelling units, a basement carpark, landscaped deck on the ground and a unique roof garden at the top, linking all residential blocks. It has full condominium facilities such as clubhouse, 50m lap pool, recreational tennis court, BBQ pavilions and children's play area.

The Universal Design approach taken for Royalgreen resulted in a user-friendly environment for varying needs of diverse user groups and created platforms to promote social interaction and bonding.

Features

- The roofs of all 8 blocks are linked via a series of bridges to facilitate accessibility to all roof garden facilities, with the tennis court as landmark for the development where one can spot the structure not only from the development main entrance drop off, but along Bukit Timah Road as well.
- Overall site planning with clear zoning via landscape facilities, such as the landscaped deck and roof garden. Each zone is thoughtfully designed with wide range of family and kids-friendly facilities to support multi-generation living.
- The auto sensor door to the clubhouse lobby, coupled with the large lift, provides wheelchair persons, residents with pram, cyclists, furniture movers and visitors seamless and sheltered access to the clubhouse and all the blocks.
- Covered outdoor playground under the tennis court is provided with good shade and shelter from light rain, complete with seating with grab bars for the elderly.
- Indoor Play Area with flexible play furniture and screen projection for learn and play. The space is also flexible to be converted into other setting to host party or kids' event.
- The condo management office is conveniently located near the basement clubhouse lift lobby, fitted with wheelchair-friendly customer service counter, work desks for staffs and a pantry. A separate meeting room is provided for condo management use.
- Block layout is designed to allow units to be combined and integrated to promote multi-generation living. Unit layouts are designed to provide flexibility in space usage and future adaptation.

Fernvale Community Club, Hawker Centre & Market



Developer

People's Association

Architect

AGA Architects Pte Ltd

Project Details

The 5-storey integrated development, Fernvale Community Club, Hawker Centre & Market brings social-communal facilities such as a childcare centre, activity rooms, multi-purpose hall, gym, enrichment spaces, F&B including hawker centre, as well as market, together as a single-destination lifestyle hub that benefits residents.

Features

- A centrally-positioned, distinctive and tall atrium at 1st storey, which is connected to the main road and the commercial mall and LRT station nearby. It is provided with benches and landscaped and is designed to be a 24-hour open public space programmed for mass activities and events.
- Floor level changes are minimised throughout the development for a seamless movement and circulation suitable for all users.
- The 5th storey is themed as a child-friendly activity level, where there is an open-to-sky roof garden, a sky terrace garden, a playground and a fitness corner for the general public. Other facilities include a childcare centre, children's activity rooms, children's jogging track and deck spaces. There are also lactation room and family washroom available for families with young kids.
- Generous space is catered for the foyer at 4th storey, which serves as waiting space or study area for residents attending classes at the Seminar/Activity Rooms, Dance Studios, Culinary Studio as well as the Multi-Purpose Hall. Children toilets are also provided at this level.
- The Hawker Centre at 3rd storey features a family seating area where tables and benches are designed at lower heights for child-use. This family seating zone is sited near to the lactation room and pram parking space.
- Toilet facilities within the development cater for children's and elderly use, with lowered basins and grab bars provided.

Kallang Polyclinic and Long-term Care



Developer

MOH Holdings Pte Ltd

Architect

RDC Architects Pte Ltd

Project Details

The new Kallang Polyclinic and Long-term Care Facility (KPCLTC) is a new government-built co-located development with a polyclinic and long-term care facilities that meets its model of care as a healing environment for patients, operational needs and service requirements.

The design approach is centered around person-centered care and eldercare friendly design principles. The long-term care facilities will support flexibility and adaptability for future-proofing and ease of design for modular construction. The environment also reflects culturally-normalised living space and view as a home setting with cues for orientation.

Features

- Located within the Main Pharmacy at Level 2, the glass wall enclosed Health Studio is highly visible to the public coming through the Pharmacy waiting area, to raise awareness and promote general health wellness. This Health Studio is designed with movable and modular cooking counters for flexibility of use.
- Overall wayfinding is aided with a colour and spices theme. Each floor is represented by a specific colour and spice icon. This helps users to easily orientate themselves.
- Provision of a family-friendly toilet cubicle within the general male and female cluster toilets at Level 3, to compliment the notion of family-friendly services to the Women & Children's Clinic.
- Feature stairs for internal vertical access between Level 1 to Level 4 is highly visible to visitors and staff and allow ease of vertical movement, without having to depend solely on lifts. This feature stairs and central atrium also acts as an anchor for users to easily navigate through the various levels.
- The accessible counters with hearing enhancement system, had provided ease of communication and interaction between staff and patients/visitors with disabilities, especially for those who are not accompanied by a caregiver.

Annex B

FACTSHEET ON ACCESSIBILITY AND USER-FRIENDLINESS OF THE BUILT ENVIRONMENT

1. Approximately 25% of the Singapore population will be aged 65 or older by 2030.¹ It is therefore important to make Singapore an inclusive and age-friendly city, where people of all ages and abilities can move freely and participate in all aspects of life. Accessibility and Universal Design in the Built Environment (BE) is a key enabler, through the following key strategies:

- a. Ensure minimum accessibility standards;
- b. Drive accessibility upgrading for existing buildings;
- c. Improve accessibility of public spaces; and
- d. **Promote universal design (UD)² adoption.**

I. Promoting and Enabling UD Adoption

2. To promote and enable wider implementation of UD, BCA works closely with partners to accord recognition for voluntary adoption and raise industry capabilities.

- a. BCA UD Excellence Award

To spur the pursuit of exemplary UD implementation in buildings and innovations in user-friendly designs, projects that are outstanding will be recognised with the UD Excellence Award (UDEA). The UDEA replaces the voluntary UD Mark certification scheme and awards³ which ran from 2012 to 2021.

- b. Universal Design index Self-assessment Framework

BCA rolled out the Universal Design index (UDi) self-assessment framework on 1 June 2022, which includes a checklist⁴ of accessibility and UD features that developers and Qualified Persons (QPs) can use to

- (i) learn about and consider UD provisions that can be included in their projects; and
- (ii) obtain an indicative measure of the level of inclusiveness of their developments.

¹ Source: Singapore Department of Statistics), Population in Brief 2021.

² UD refers to “design for all”. In the context of the built environment, it seeks to create more inclusive building infrastructure that addresses the needs of all age groups (e.g. families with young children and infants, elderly persons) and persons with varying abilities (e.g. wheelchair users, ambulant disabled, those with visual/hearing impairments) to the greatest extent possible.

³ Under the UD Mark certification scheme and awards, BCA has given more than 270 UD Mark awards to almost 100 developers and architectural firms to recognise their efforts in user-friendly building design.

⁴ BCA has included the checklist in the list of documents that developers and QPs will have to submit as part of their application for Temporary Occupation Permit or Certificate of Statutory Completion on or after 1 September 2022.

In doing so, BCA aims to encourage developers and QPs to provide accessibility and UD features beyond the prevailing requirements under the Code on Accessibility in the Built Environment. The framework will also enable BCA to gather more comprehensive data on building accessibility.

c. Certification Course for UD Assessor (Enhanced)

BCA rolled out the UD Assessor course in 2012 to promote the appreciation and application of UD principles and to deepen the understanding of various disabilities among building professionals (e.g. architects, developers, facilities/project managers). To date, this course has trained more than 615 industry professionals.

To keep abreast of the latest UD initiatives and to enhance the awareness of senior-friendly design, the UD Assessor course will be enhanced to include topics on designing to enable ageing-in-place and for persons with dementia. A refresher course will also be made available for previously certified UD assessors to update themselves with the latest developments in UD.

d. UD Design Guides

BCA has worked with public agencies to develop and launch the “UD Guide for Public Places” in July 2016. The guide seeks to raise awareness on the needs of persons with disabilities, the elderly as well as families, and assist designers in incorporating UD principles in the design of public buildings and infrastructure (e.g. public transport, hawker centres and parks).

II. Encouraging Voluntary Upgrading of Private Sector Existing Buildings with Elder-friendly and Family-friendly Features

3. To improve the accessibility of pre-1990 privately-owned buildings, BCA introduced the \$40 million Accessibility Fund (AF) in 2007 to incentivise building owners to carry out voluntary upgrading. **The AF co-funds up to 80% of the construction cost for basic accessibility features⁵, and up to 60% of the construction cost for UD features⁶, capped at \$300,000 per development.**

4. In addition, the AF was **enhanced** to allow more building owners, with buildings that already have basic accessibility features and which were built before the implementation of 2013’s Code on Accessibility in the Built Environment (i.e. after 1990 and before 2013), to tap on the fund to put in more UD features. For this group of buildings, **the AF co-funds up to 60% of the construction cost for UD features, capped at \$100,000 per development.**

5. As of June 2022, more than 150 private building owners have tapped on the AF to retrofit their buildings with accessibility features, with about \$20 million still available. BCA will continue to accept applications till 31 March 2027 to incentivise pre-1990 building owners to carry out basic accessibility upgrading works.

⁵ Basic accessibility features include (i) ramps/lifts to provide entry into the building and within the entrance level, (ii) accessible toilet, and (iii) signage to provide directions to the accessibility features.

⁶ Universal Design features include (i) elder-friendly features such as additional grab bars, (ii) family-friendly features such as child-friendly sanitary facilities, lactation rooms, diaper-changing stations, and (iii) features for persons with visual/hearing impairment such as hearing enhancement systems, braille/tactile features.

6. An interim payment option⁷ is now available for projects with a minimum value of \$200,000 and involving lift installation works. This one-time interim payment can be claimed at any point during the project, which will help building owners address cashflow challenges for costlier accessibility upgrading works.

⁷This is applicable only for pre-1990 private buildings that are not affected by the basic accessibility requirements under the Building Control Act 1989.