DESIGN GUIDELINES
for
UNIVERSAL DESIGN

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20 April 2009
What is Universal Design?

“What Universal Design is the design of products and environment to be usable by all people, to the greatest extent possible, without the need for adaptation or specialised design.”

Ronald Mace
The Center for Universal Design
NC State University Raleigh
North Carolina, USA
Universal Design covers the needs of people of different abilities, i.e. design for all people.

Therefore the incorporation of Universal Design is essential in order to transform Singapore into an accessible and user-friendly city for all.
Universal Design cover the needs of all user groups in the community:

- Infants & Children
- Expectant Mothers
- Elderly
- Wheelchair Users
- Physically Injured Persons
- Sightless or Partially Sighted Persons
- Hearing Impaired Persons

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The objectives of the Design Guidelines:

• To integrate all people with different abilities with the society in terms of Usability, Safety, Comfort and Convenience.

• To assist urban designers and architects to better address the needs of people of different abilities.

• To promote a greater sensitivity and innovation in universal design beyond min requirements.

• To achieve a higher standard of universal design for the built environment.
The 7 principles of Universal Design:

• Equitable Use
• Flexibility in Use
• Simple and Intuitive
• Perceptible Information
• Tolerance for Error
• Low Physical Effort
• Size and Space for Approach and Use
Carparks

with provision for drivers with disabilities

Examples of accessible parking lots in blue background for easy identification
Entrances

provision of adequate space for waiting, boarding & alighting. Seats & bollards / guardrail are recommended
Information Counters

important to ensure visibility & accessibility to all users
Seating Facilities

Sitting areas should be provided in lobbies & corridors & also visually linked to main circulation paths.
Ramps - appropriate gradient, regular landings & safety precautions for safe, easy & comfortable access to all
Pedestrian crossing
raised to avoid level difference - for easy usage
Tactile Indicators
Should be provided along major pathways & in public buildings - from the entrance to main points of destination
Lifts & Lift cars

an integral part of the accessible route, user-friendly provisions are signage, call buttons with braille, all to be positioned appropriately
Escalators
Attention should be paid to landings & buffer area for safety and to avoid congestion
Staircases - attention to width, detailing of railings, treads & risers is essential for a comfortable & safe transition between levels
Accessibility for all
reflected in many ways
Signage
Clear signage & directory with braille directions should be prominently displayed
Retail
There should be no barrier between access corridor & shops/goods - no change in level & doors automated
Food Courts & Cafes
Seating arrangement should be accessible to wheelchairs & baby chairs
Entrance to Washrooms
discreet and with no doors
Example of accessible toilet
Facilities for children
Provision of Baby Seat in washrooms
User-friendly features at home

Courtesy of BCA & HDB

Example of kitchen cabinets with mobile cabinets and knee spaces under the stove and kitchen sink.

Alternatively, stainless steel ramp can be inserted in-between the door frames.
Thank You