



HKHS

“Age-friendly Housing”

Seminar

4 November 2015

“Accessibility – Key to Age Friendly Housing”



AUAHK
香港無障通達協會
ASSOCIATION FOR UNIVERSAL ACCESSIBILITY HK

Dr. Calvin W Luk PhD HKRCMP RAIA

Founding Chairman

Association for Universal Accessibility Hong Kong



Mission

To promote a universal accessible built environment in Hong Kong for people of all ages and abilities (with equity, dignity and independence), by recognizing diversity and embracing inclusion for all.



AUAHK

香港無障通達協會

ASSOCIATION FOR UNIVERSAL ACCESSIBILITY HK

History

*AUAHK was founded in 2013 by skilled professionals and experts working on **improving accessibility to premises in Hong Kong.***



International Union of Architects
Region IV Work Programme
"Architecture for All"



香港職業治療學會

HONG KONG OCCUPATIONAL THERAPY ASSOCIATION



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香港建築師學會
The Hong Kong Institute of Architects



平等機會委員會
EQUAL OPPORTUNITIES COMMISSION



THE HONG KONG INSTITUTE OF
SURVEYORS
香港測量師學會



**HONG KONG
HOUSING SOCIETY**
香港房屋協會



The University of Hong Kong

THE UNIVERSITY OF HONG KONG 香港大學
faculty of architecture 建築學院



THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學



康復治療科學系
Department of Rehabilitation Sciences



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Design
& Health

International Academy for Design and Health



香港認知障礙症協會

Hong Kong Alzheimer's Disease Association



聘志發展基金

Unleash Foundation



香港盲人輔導會

The Hong Kong Society for the Blind

SVhk

Social Ventures Hong Kong
香港社會創投基金



香港傷殘青年協會

Hong Kong Federation of Handicapped Youth

diamondcab 鑽的



路向四肢傷殘人士協會

Direction Association for the Handicapped



What is Universal Accessible Built Environment?

Everyone will find their situation difficult at some stage of their life. Our objective is to foster a built environment that is easier to use, hence universal and accessible.

Accessibility – Key to Age Friendly Housing

Agenda

- 1. Accessibility and Ageing in Place**
- 2. Accessible Housing in Hong Kong
– issues & challenges**
- 3. Improving Age Friendly Housing
in Hong Kong**



I. Accessibility & Ageing in place



www.easrs.org.hk



https://www.youtube.com/watch?v=Ijcp3rUFDxs&feature=em-share_video_user

I. Accessibility & Ageing in place



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I. Accessibility & Ageing in place

Accessibility is one of the dimensions of design for

- **Built environment**
- **Transportation**
- **Information & Communication Technology**

allowing access to services, community participation & social inclusion.



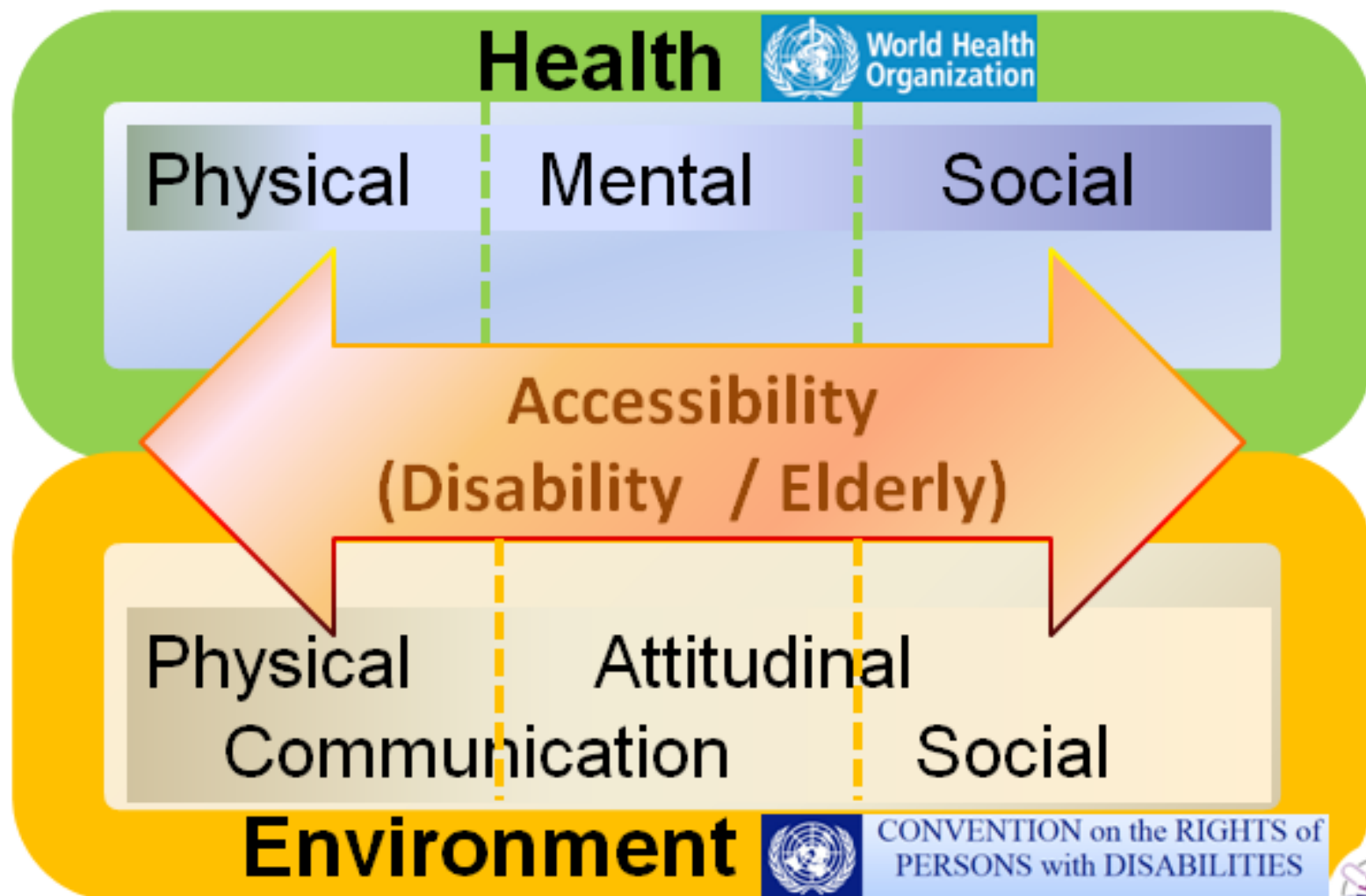
**World Health
Organization**

“Global Age Friendly Cities
: A Guide” 2007

Figure 6. Age-friendly city topic areas



I. Accessibility & Ageing in place



I. Accessibility & Ageing in place

“Access for all”

promotes active ageing,
independent life style,
with improved sense of
well-being, dignity and
self esteem.

*Particular for persons with
Dementia, the living
environment shall respond to
a “**Vision for way of Life**”
(Fleming R 2015)*



HammondCare
An independent Christian charity

DC

Dementia Centre

- Compensate for disability
- Maximise independence
- Promote self-esteem and self-confidence

II. Accessible Housing in Hong Kong

– issues & challenges



Accessible
Hong Kong



II. Accessible Housing in Hong Kong

– issues & challenges



“Hong Kong remains largely inaccessible.”

林煥光 WK LAM GBS JP
(Chairperson EOC 2010-13)
at Hong Kong Institute of Architects
3/5/2012



II. Access to Built Environment in Hong Kong – issues

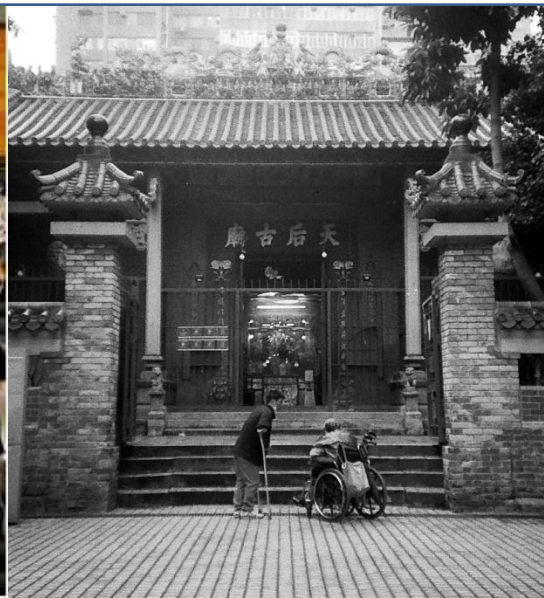
Topography – hilly terrain

Pre-1997 buildings

Technical & financial burden

Legislative barrier – Building Regulations vs DDO

Photo source - Equal Opportunities Commission



Physical barrier.....



Also service, emotional barrier....



I. Accessibility & Ageing in place



www.easrs.org.hk

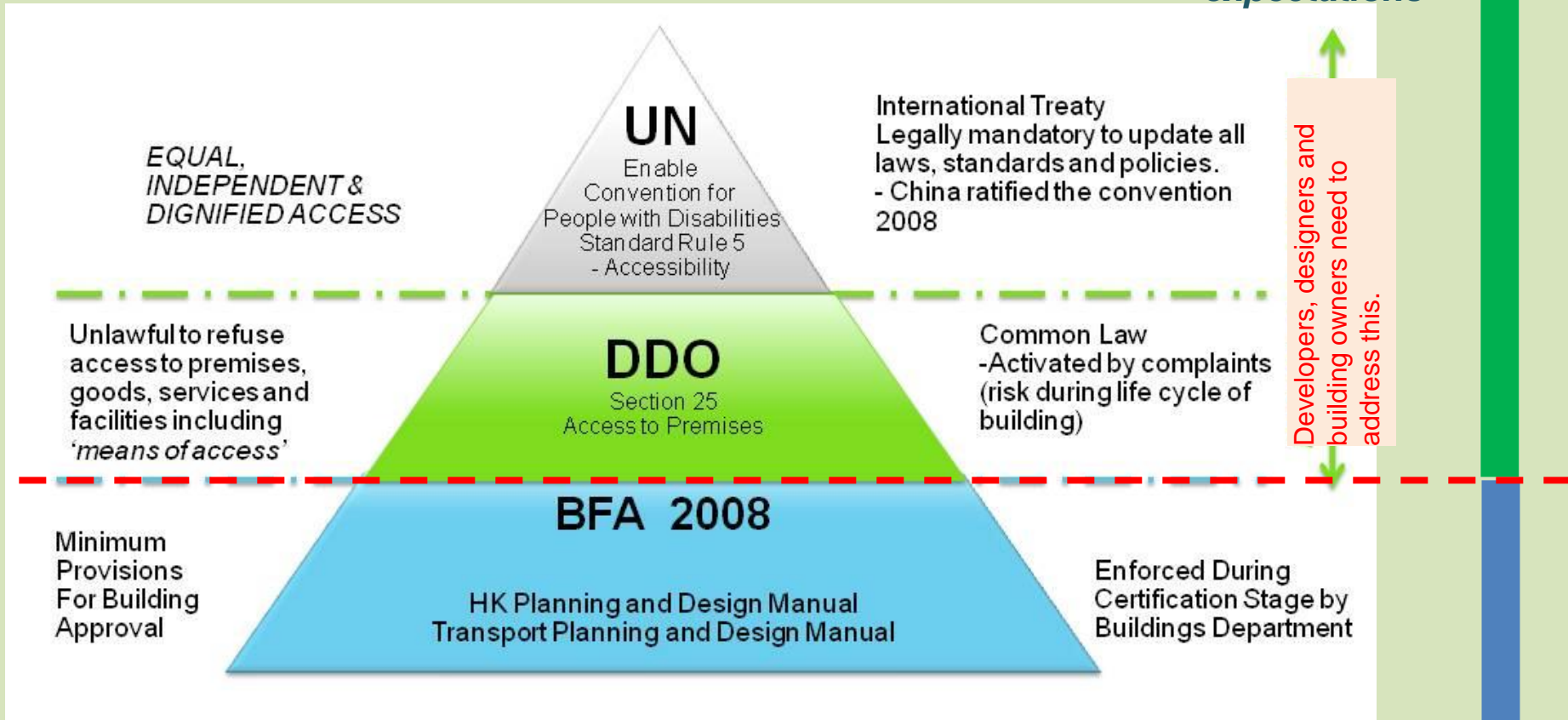


https://www.youtube.com/watch?v=Ijcp3rUFDxs&feature=em-share_video_user

Current Control Instrument on Access in Hong Kong

Universal Accessibility:

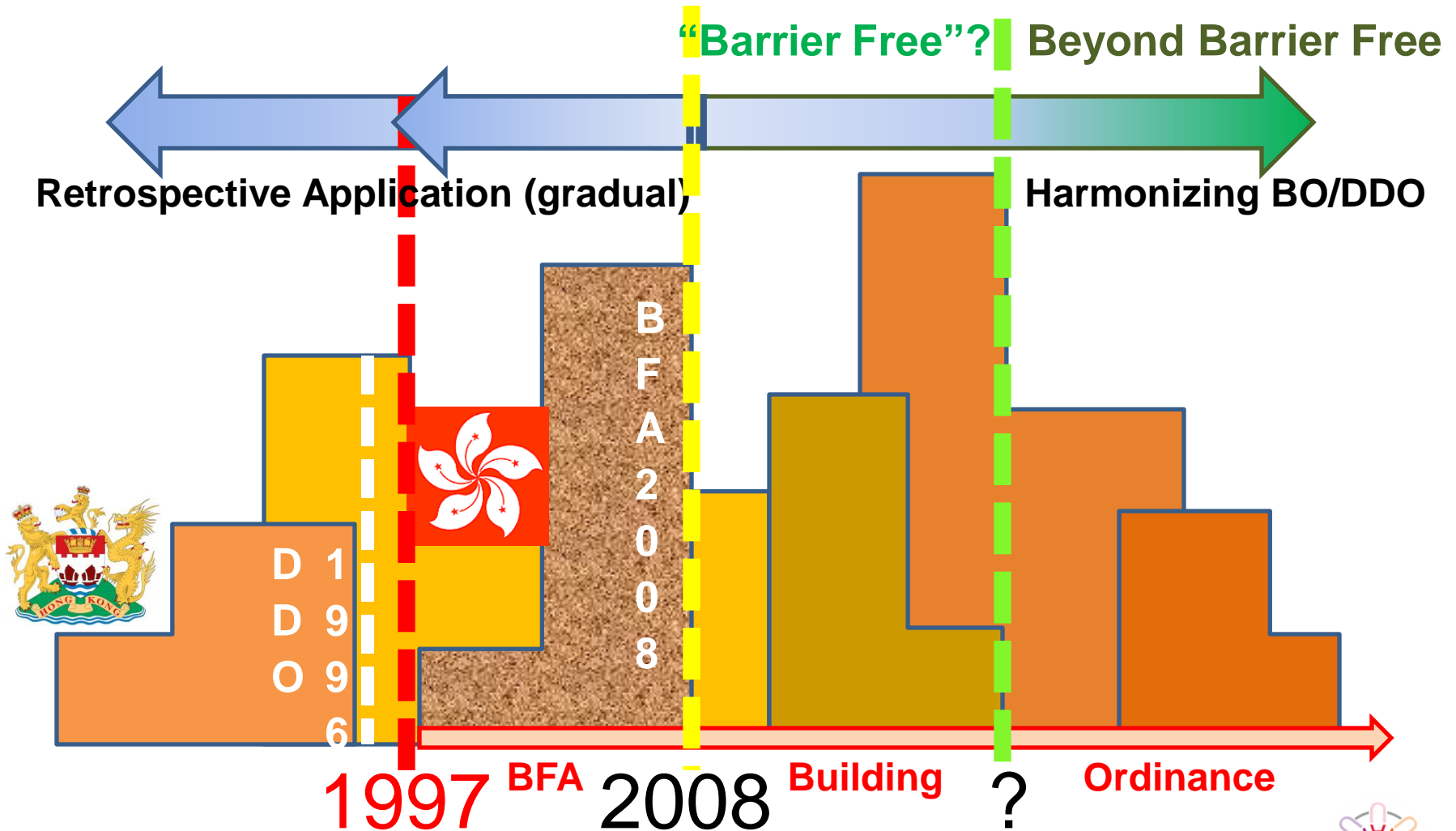
Universal Design that minimizes cost & exceeds expectations



: Minimally acceptable compliance, but not user-friendly

Source: Adapted from Mabel Chan, Accredited Access consultant, Representative (HK), Association of Consultants in Access Australia

Improving Access to Premises in Hong Kong



III. Improving Age Friendly Housing in Hong Kong

Based on the experience of **overseas national programs** (*Life Time Homes UK, King's Fund Enhancing the Healing Environment UK, Livable Housing Australia*) and **Evidence Based Design** principles (University of Stirling/Marshal, DTSC Australia/Fleming), **accessibility may provides a new holistic approach allowing elderly to carry on active “ageing in place” at their own homes.**



III Improving Age Friendly Housing in Hong Kong

easy HOME

HONG KONG
易安居 2016

Initiated by



Sponsored by



Labour and Welfare Bureau
The Government of the Hong Kong Special Administrative Region



無障礙社會
A Barrier Free World
由平等開始
Starts with Equality for All



III. Improving Age Friendly Housing in Hong Kong

The concept

Natural ageing process - mobility, sensory, cognitive deficits

Accessibility - perceptible, comprehensible, manageable

segmented considerations of safety, barrier free provisions, or stigmatization of Dementia or Alzheimer's disease.

EASy home living features - a continuum of design










consideration addressing the full spectrum of ageing deficits,

to meet changing needs of home occupants

– temp injury, disabilities, ageing baby-boomers

“easy to enter, easier and safer to use”

Addressing the ageing housing issue

Accessible Home Design Guide	UK	Australia	Hong Kong
Mobility	 <p>1990s</p>	 <p>2010</p>	 <p>2003</p>
Sensory	 <p>2009</p>	 <p>2008</p>	 <p>2016</p>
Cognitive	 <p>2009</p>	 <p>2008</p>	 <p>2016</p>



Addressing the ageing housing issue



UK 1990s

16 criteria
(Category 2 of 3)



Australia 2010

16 design
elements

3 performance
levels



Hong Kong 2016

12 design
elements

4 levels



Addressing the ageing housing issue



16 criteria (categ2/3)

1. Car parking width
2. Moving from the parking space to the home
3. Approach to the home
4. Entrances
5. Communal stairs and lifts
6. Doorways & hallways
7. Space to turn and move around
8. Living room
9. Convenient bed-space
10. Accessible WC and potential shower
11. Bathroom walls
12. Getting upstairs - possibility for stair lift and future through floor lift
13. Getting between bedroom and bathroom - potential hoist
14. Bathroom layout
15. Windows
16. Sockets and controls

16 elements (3 levels)

1. Dwelling Access
2. Dwelling entrance
3. Car parking
4. Internal doors & corridors
5. Toilet
6. Shower
7. Reinforcement of bathroom & toilet walls
8. Internal stairways
9. Kitchen space
10. Laundry space
11. Ground/Entry level Bedroom space
12. Switches & powerpoints
13. Door & tap hardware
14. Family/living room space
15. Window sills
16. Flooring

12 elements (4 levels)

1. Main approach
2. Common Entry
3. Lifts
4. Home entrance
5. Internal doors & corridors
6. Toilet & Shower
7. Kitchen
8. Door & sanitary hardware
9. Service controls & sockets
10. Windows & outdoor access
11. Car parking
12. Hoisting provisions



III. Improving Age Friendly Housing in Hong Kong



consists of a continuum of 4 tiers of design considerations:

4. Sensory and Cognitive Manageability

3. Wheelchair Manoeuvrability

2. Base-line Accessibility

1. Visitability

*Criteria: - Can be incorporated in day one to benefit all older persons
- Otherwise require disruptive retrofitting or substantial alteration*

III. Improving Age Friendly Housing in Hong Kong



consists of a continuum of 4 tiers of design considerations:

4. Sensory and Cognitive Manageability

3. Wheelchair Manoeuvrability

2. Base-line Accessibility



1. Visitability At the very basic level, a home shall allow its occupants to go out freely to visit, and reciprocally be visitable by family and friends. Connectivity and accessible entry are prerequisites to stay “connected”, both at personal & community level **ALL HOMES**

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III. Improving Age Friendly Housing in Hong Kong



consists of a continuum of 4 tiers of design considerations:

4. Sensory and Cognitive Manageability

3. Wheelchair Manoeuvrability

2. Base-line Accessibility an accessible home forms the baseline, providing most universal access features in

living, bed room, bathroom, kitchen etc. **ALL NEW HOMES**



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III. Improving Age Friendly Housing in Hong Kong



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4. Sensory and Cognitive Manageability

3. Wheelchair Manoeuvrability – full wheelchair provisions **10%**



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III. Improving Age Friendly Housing in Hong Kong



consists of a continuum of 4 tiers of design considerations:

4. Sensory and Cognitive Manageability cater for declined ability in cognitive and

other age-related sensory impairments - a progressive component of ageing deficiency and shall not be distinguished as a separate issue (most profound among persons with Dementia and Alzheimer's disease)



3. Wheelchair Manoeuvrability – full wheelchair provisions **10%**



2. Base-line Accessibility an accessible home forms the baseline, providing most universal access features in

living, bed room, bathroom, kitchen etc. **ALL NEW HOMES**



1. Visitability At the very basic level, a home shall allow its occupants to go out freely to visit, and reciprocally be visitable by

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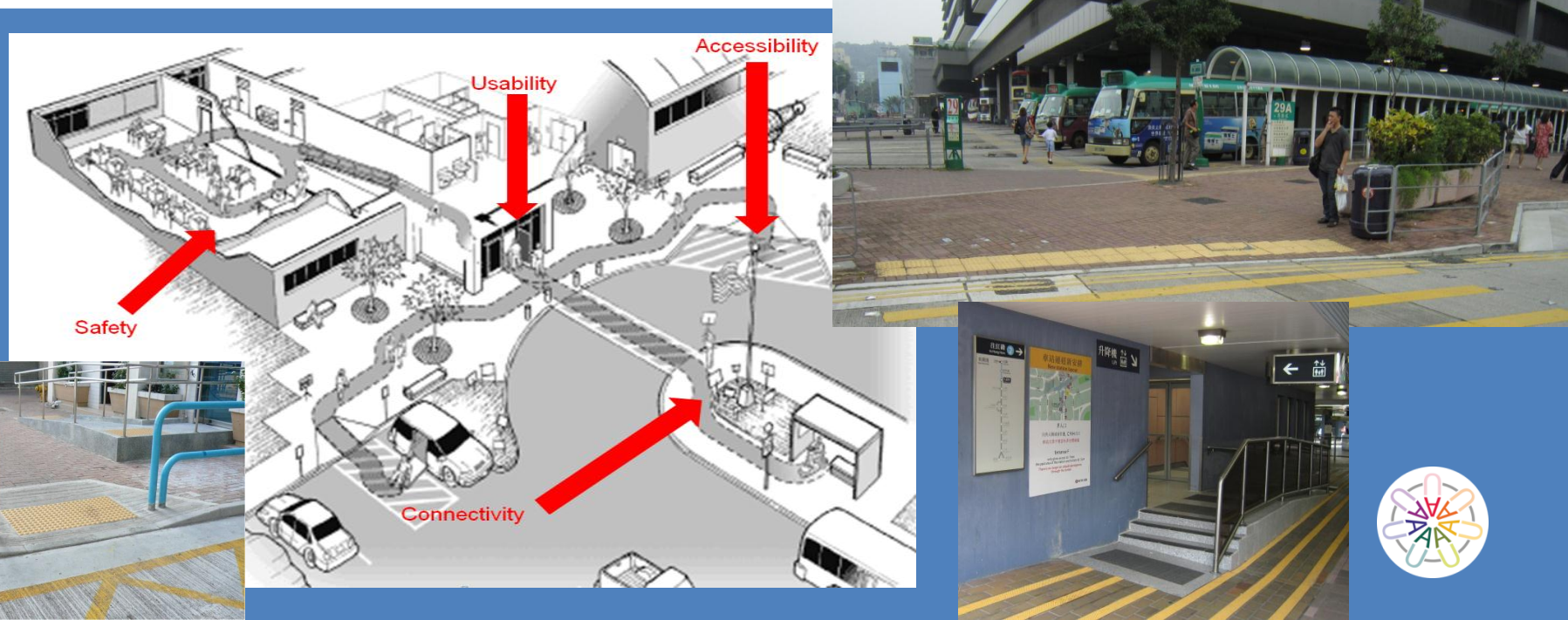
- Otherwise require disruptive retrofitting or substantial alteration

III. Improving Age Friendly Housing in Hong Kong

1. Visitability (Barrier free – Universal access) **ALL HOMES**

- visitable to ageing persons and most with disability
- to stay “connected” at personal and community level.

- ✓ Main approach - connectivity of premises
- ✓ Common Entrance – stepless/ramp, doorway >820mm + landing 1.2m L, easy to use access Control.



III. Improving Age Friendly Housing in Hong Kong

1. Visitability **ALL HOMES**

- ✓ Communal passage – 1.2m, doorway >820mm, latch side clearance 450mm
- ✓ Communal Seating - with arm rest/rail
- ✓ All lifts – entry clearance >850mm
- ✓ Home Entry – doorway >820mm, level/threshold (<15mm bevelled)/
ramp threshold (<56mm 1:8)



III. Improving Age Friendly Housing in Hong Kong



Silver

Base-line
Accessibility

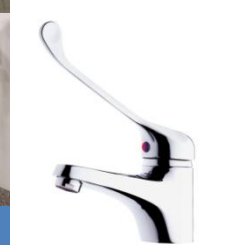


Visitability

2. Base-line Accessibility

ALL NEW HOMES

- ✓ **All lifts** size >1.1m x 1.4m, hand rail & control, etc
- ✓ Internal **doors** – doorway >800mm
- ✓ Internal **corridor** >900mm
- ✓ **WC & showers** – threshold >15mm/hobless, clear space >900mm x 1.1m **non-slip flooring**
- ✓ Door & Sanitary **Hardware** – lever handles, grab rails, shower seats, toilet backrest
- ✓ Service **Controls** & sockets – mounting height 450mm – 1.2m, Rocker switch/push pad (size >35mm)
- ✓ **Window** – sill height <1m, latch height <1.2m
- ✓ **Balcony** – level / threshold (<15mm beveled) /ramp threshold (<56mm 1:8), doorway >800mm



III. Improving Age Friendly Housing in Hong Kong



3. Wheelchair Manoeuvrability **10% NEW HOMES**

- ✓ **All lifts** – size >1.5m x 1.5m, landing >1.5m, handrail & control,
- ✓ **Internal doorway** – 900mm+ >330mm latch side clearance
- ✓ **Living/bed room** – 750mm min clear from all obstacles
- ✓ **WC & showers** – clear space 1.5m x 1.5m or 1.4m x 1.7m
- ✓ **Kitchen** – bench clearance 1.2m & linear layout
- ✓ **Hoisting provision** – knock-out panel/non RC wall to connect bed and bathroom
- ✓ **Carparking** – 900mm adjoining safe access



Wheelchair
Manoeuvrability



Base-line
Accessibility



Visitability

III. Improving Age Friendly Housing in Hong Kong



Sensory and Cognitive Manageability



Wheelchair Manoeuvrability



Base-line Accessibility

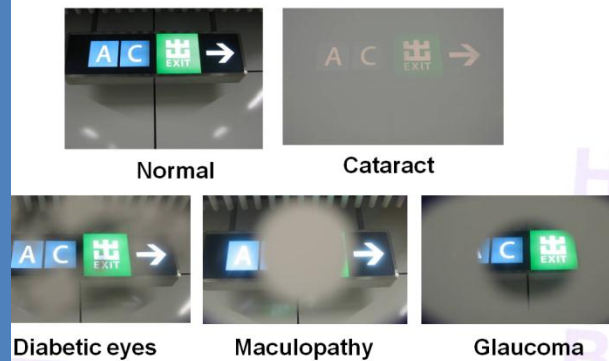


Visitability

4. Sensory and Cognitive Manageability

- ✓ **Signages** - eye level graphics, composite maps, objects for orientation, multiple cues for way-finding,
- ✓ **Colour contrast**- eg. bathroom finishes, fixtures, toilet seats, hand rail, light switch

Different types of visual impairment



III. Improving Age Friendly Housing in Hong Kong



4. Sensory and Cognitive Manageability

- ✓ **Kitchen** shelving & appliance – open shelving/glass front cabinet, concealed task light over worktop, induction cooker, alarm/cutoff valve
- ✓ Direct **visual link** to all areas - minimum corridor
- ✓ Access to **outdoor** – leisure area w/loop path and secured perimeter
- ✓ Visual & Audible **alarm**



Sensory and Cognitive Manageability



Wheelchair Manoeuvrability



Base-line Accessibility



Visitability

Cost issue?



UK - £1,100/dwelling

	2013/14 costs
Top 10 developers' profits	+ £1,600m
Build all new homes to Lifetime Homes standard	- £115m
Build 10% homes to wheelchair accessible standards	- £151m
Top 10 developer profits if all homes disabled-friendly	+ £1,334m



Australia - 22x more cost efficient than retrofitting to meet unplanned needs



Certifying our homes for a lifetime of living.

Our Platinum Corporate Partners



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Advertise your business
 FIND OUT HOW
click here

Key Takeaway



Age Friendly Housing.....

**Partnership between
community, government,
building industry & every
individual, benefiting**

✓ the **Elderly**,

✓ **Yourself**no body can avoid getting
old

✓ **Next generation** / Children –Insurance
policy



Thank You

www.auahk.org

