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

30 October 2014

Attn: Mr. C.Y. Leung, Chief Executive

Office of the Chief Executive
Hong Kong Special Administrative Region
People's Republic of China

(By email: ceo@ceo.gov.hk)

Proposal for building regulation changes to enable equal access to the built environment in Hong Kong

Dear Chief Executive

The **Association for Universal Accessibility Hong Kong** (AUAHK) is a newly formed society concerned with providing universal access in the built environment of Hong Kong. Our primary objective is to promote equity and user-friendliness in the built environment on par with international practices thereby enhancing usability. AUAHK's Founding members consists of representatives from the *International Union of Architects (IUA) Region IV Work Programme "Architecture for All"*, *Hong Kong Institute of Occupational Therapy* (HKOTA), Hong Kong Representative of *Association of Consultants in Access Australia* (ACAA), *RehabAid Society* (Environmental Advisory Service) and other key stakeholders.

AUAHK had recently expressed our concern in the press regarding the urgency of a much needed change towards universal access in Hong Kong - South China Morning Post, 2014-9-2 ***"Price of doing nothing will be higher than cost of building a barrier-free city"*** (see enclosed). Now we would like to present a policy paper on the current building regulations which do not facilitate the provision of equal access in Hong Kong.

The first and foremost principle of 'Universal Accessibility' asked by the Chief Executive for the community to achieve is 'equitable use'. This means to 'provide the same means of use for all users - identical whenever possible; equivalent when not'. This is above the current statutory minimum of access provision and is intended to benefit all. "**Design for all**" is necessary as everyone need accessible design during all stages of life, at childhood, pregnancy, disability, and old age.

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From your policy address in 2014, we are glad that the Government continues to make every effort to provide barrier-free access to the public. In this connection, if the Government consider to upgrade the current minimum statutory access provision towards a “Design for all" principle, our future buildings can meet the on-going changing needs of our community, especially when Hong Kong is rapidly becoming an aging society within decades. Please find our enclosed policy paper on “***Removing Legislative Barriers to Equal Access in the Built Environment”***. We are more than happy to meet with you or your officials of the related bureau to discuss on our vision of universal accessibility for Hong Kong.

We look forward to hearing your reply. If you have any questions, please feel free to contact us at calvinluk@auahk.org.hk

Kind Regards,

Calvin WH Luk

Chairperson AUAHK

Encl. -

South China Morning Post, 2-9-2014, ***“Price of doing nothing will be higher than cost of building a barrier-free city”***

AUAHK policy paper on *“**Removing Legislative Barriers to Equal Access in the Built Environment”**.* 30 October 2014

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Price of doing nothing will be higher than cost of building a barrier-free city

Mabel Chan says Hong Kong cannot afford to wait any longer as our population profile ages rapidly

It is not news that the price for space in Hong Kong is among the highest in the world's most developed cities; as the Chinese analogy describes: "every inch of space is gold". Certainly, all Hong Kong residents are very aware of the economic pressures this high cost per square foot brings, and the impact on their lifestyle. But one critical longer-term impact has largely escaped our notice: our collective loss of freedom.

Hong Kong is known for its convenience, including the proximity of goods and services and a highly efficient public transport system. But this convenience applies only to a proportion of the population, that is, those of us who are strong and agile.

For others, such as the elderly or those in wheelchairs, an otherwise simple journey is difficult – if possible at all – often requiring significant detours through back doors or service areas, or filled with obstacles such as a door that is simply too heavy to open.

Enhanced barrier-free access, or universal accessibility, is the art of creating environments that maximise usability with flexibility for people with different abilities and ages without discrimination. In Hong Kong, this is merely an idea on paper, with some lip service thrown in, perhaps, but still an idea lacking in care, technical knowledge and execution.

Some Hong Kong people may have wrongly assumed that we've already taken steps towards inclusion, given that the international symbol of accessibility – a wheelchair – is frequently seen. It needs to be understood, however, that the existence of signage alone does not make a space accessible in reality.

In fact, full universal access does not require any signage that segregates or stigmatises any party; everything is simply functional for all.

To make universal accessibility work for all, space is required. This should not be viewed as additional space, but rather a prerequisite for sustainable development in a city that by law, supposedly

It needs to be understood that signage alone does not make a space accessible in reality

guarantees equal opportunities, and secondly, will serve the growing number of elderly among us.

At present, the construction industry is purely driven by money, particularly the cost of space. So the idea of adopting universal accessibility is rejected at the outset in almost all cases.

The average Hongkonger is also indifferent, mainly seeing the issue as something good to have but personally irrelevant. Yet, that's far from the case. Census figures suggest that, by 2041, some 2.6 million people in this city will be elderly.

Old age means changes in physical abilities, and that places demands on our infrastructure. If one pays attention, the effects can already be seen in the long queues at the only lift inside an MTR station, comprising parents with pushchairs, people with luggage, the elderly and people with disabilities or, in extreme cases, a wheelchair user on an escalator because the lift is too far away.

People also seem to forget that humans do not live in isolation; we are all connected, we all have friends and family, and so disability has only to affect one relative and the issue of equitable access becomes very personal.

The year 2041 may sound a long way off, but the truth is that the entire community will feel the negative effects of our current building design practices on our freedom much earlier than that. This is very much an issue for the majority.

The real cost is a built environment that does not meet the basic needs of the people, affecting usability and efficiency for everybody.

More than that, it will affect our workforce. An ageing population will already result in a reduction in our labour force. A lack of facilities to ensure universal access will create additional labour pressures as more young people are required to be on hand to help family members rather than join the workforce.

It is therefore not an exaggeration to say that this issue has the potential to incapacitate the economy. Worse, the situation cannot be easily rectified.

This is why many developed economies made universal access a priority more than a decade ago, with the knowledge that it can be achieved only through long-term development.

Clearly, when designers, developers and even the general public find the cost of universal accessibility too high, in terms of actual space required, it will have huge implications for society. In the longer term, the city will cease to function for a large section of society. Cities like London and Tokyo realised this years ago, and acted out of necessity.

Hong Kong is already a long way behind. To initiate change, there first needs to be a change of heart. We must realise that universal accessibility has to be a priority, and that further inaction can only result in a "disabling environment" for all.

The real cost of doing nothing will be much higher than the current monetary value per square foot of space, and that's a price Hong Kong people simply won't be able to afford.

Mabel Chan is a founding member of the Association for Universal Accessibility Hong Kong

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If you have an idea for an opinion article, email it to **oped@scmp.com**

Proposal for Building Regulation changes to ENABLE Equal Access to the Built Environment in Hong Kong 20th October 2014

The **Association for Universal Accessibility Hong Kong** (AUAHK) consists of the Representatives of the ***International Union of Architects*** *(IUA) Region IV Work Programme "Architecture for All"*, ***Hong Kong Institute of Occupational Therapy*** (HKOTA), Hong Kong representative of ***Australian Consultants of Access Consultants*** (ACAC), ***RehabAid Society*** (EAS) and key stakeholders of the disabled community.

Abstract

AUAHK would like to present a technical paper on the current building regulations which do not facilitate the provision of equal access in Hong Kong. The first and foremost principle of 'Universal Accessibility' asked by the Chief Executive for the community to achieve is 'equitable use'. This means to '*provide the same means of use for all users - identical whenever possible; equivalent when not*'. This is above the statutory minimum of access provision and is intended to benefit all. "*Design for all"* is necessary as everyone need accessible design during all stages of life, at childhood, pregnancy, disability, and old age. Inclusive Design is for the benefit of all instead for a small group of citizens. Therefore providing some form of access does not equate to 'universal accessibility'. 'Means' of access shall also be considered in line with the *Disability Discrimination Ordinance chapter 487 section 25*;

> *(b) In the terms or **conditions** on which the first-mentioned person is prepared to allow that other person access to, or the use of, any such premises;*
>
> *(c) In relation to the provision of **means of access** to such premises;*

Based on the above, the objective of this paper is to highlight the major aspects within current Building Regulations that hinder the provision of 'universal accessibility' in Hong Kong. Concurrently the paper suggests corresponding solution that would not only remove the hindrances but encourage implementation in all sectors including the private sector. The following are the issues that each section will address;

Item 1: 125-150mm Step at Entrances

Item 2: Unequal provision of Accessible Vertical Access and Size- Lifts

Item 3: Unequal provision of Sanitary Facilities and Size

Item 4: Absence of Inclusive Emergency Evacuation Means for High Rise Buildings

Item 5: Circulation at Doors

The paper concluded that existing hindrance to "equitable use" is evident in the current building regulation of Hong Kong. The government shall take the lead to remove these barriers to fulfill the "Universal Accessibility" principle and strive towards an inclusive society. Possible exemptions under Building Ordinance may provide incentives for the building industry to adopt these suggested changes.

Item 1: 125-150mm Step at Entrances

1.1 Issue

This is a common issue that prevents wheelchair users from equal access, as well as ease of use for those with other mobility impairments or just incidental burden, such as baby strollers, pull on luggage, shopping trolleys etc. Stepless access is a most universal feature and in Hong Kong, where the climate is temperate not tropical, should be achievable in most circumstances.

The Building regulation that is applicable and may pose a hindrance is as follow:

Level Difference for Floor Adjoining External Ground Level or Flat Roof *(as per PNAP No. APP-125)*

> *Regulations 35 and 49(1) of the Building (Construction) Regulations (B(C)Rs) stipulates that the level of an internal floor shall not be less than 150 mm above the level of the external ground or adjoining flat roof. The objective of these requirements is to prevent the ingress of rainwater.*

Currently, the authorize person may request for an exemption with the addition of drainage and provision of falls not less than1:80 away from the usable area, if granted by the Building Department (BD). However, this process is not automatic.

1.2 Suggested Exemption

Elimination of step shall be automatically an available option without having to apply for exemption, when accompanied with provision of additional drainage and falls of 1:50 to 1:80 away from building. Falls greater than 1:50 is not recommended without suitable levelled landing, as it may create excessive cross-falls for wheelchair and people with mobility impairments.

Item 2: Unequal provision of Accessible Vertical Access and Size - Lifts

2.1 Issue

One of the primary vertical access issues in Hong Kong is the extensive use of escalators, which is generally not considered as an “accessible” means of vertical circulation. In accordance with ISO 21542:2011 and Universal Design Principle No.1: Equitable Use 1a. (Provide the same means of use for all users: identical whenever possible; equivalent or not), therefore lift access should be provided where there is escalator or stair access (Figure 1). This does not only provides non-discriminatory access for people with disabilities or temporary disabilities, but also benefits all users including the elderly, people with prams, trolleys, and luggage. There are currently exemptions in place but these can be elaborated to be based on equity. All lifts should be accessible lifts. This is already a common practice in most developed countries, as other means of vertical transport are inaccessible.

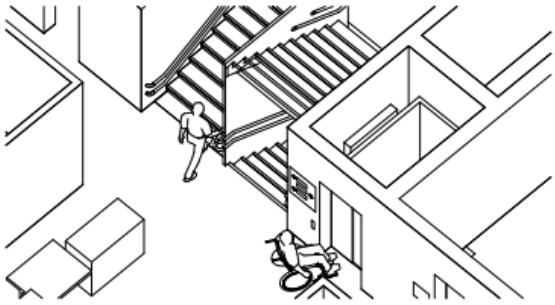
No.	Key accessibility issues	Example
4	Equitable access to the same paths in vertical circulation, e.g. safe stairs, spacious lifts with easy operation, good signage, good lighting and good visual contrast. See Clauses 12, 13, 14, 15, 17, 33, 35 and 40.	

Figure1: Equal Vertical Access, Source: ISO 21542:2011

The following regulation is applicable.

Lift shaft Exemptions ***(as per PNAP No. APP-89)***

> *2. Areas of lifts and the lift shafts in a building are measured as gross floor areas (GFA) under Building (Planning) Regulation 23(3)(a).*
>
> *3. Except for fireman's lifts and those required to be provided for people with a disability, no requirements and dimensions are spelt out in the Buildings Ordinance and regulations to enable an assessment to be made as to the adequacy of a lift service. To maximize on the usable floor area of a building, the practice has been quite common that only the minimum area is allowed for the provision of lifts, occasionally at the expense of comfort and convenience of occupants of the building. The BA considers that there is room for improvement in this area.*

There are currently exemptions, including up to 3% for office areas over 10,000sq.f and other conditions.

Lift Sizes

Currently, the smallest lift of 1100mm x 1200mm in BFA2008 is inadequate as the international wheelchair footprint itself is 800mm x 1300mm. The minimum lift size should be 1100m x 1400mm which allows a person and a wheelchair to accommodate. However a lift of 1400mm x 1600mm deep is more universal as it allows turning to get out as well as accommodation of a carer pushing a wheelchair which occupies a length of 1500mm when stationary.

2.2 Suggested Exemption

Lift shafts areas are suggested to be completely exempted disregarding % of GFA, when both of the following two criteria for equal access are met:

- Equitable access is provided where there is one set of stair or escalator access and;
- lift sizes with minimum dimensions 1400mm wide x 1600mm deep, with lift door opening clearance not less than 850mm

Item 3: Unequal provision of Sanitary Facilities and Size

3.1 Issue

Extent and location

Equal provision of unisex accessible toilet facilities means at each locations where gender facilities are provided, an accessible unisex Toilet is also provided. Current statutory provisions are one unisex accessible toilet per floor, and do not take account of the size of the floor. Equitable access shall not require anyone in need to look for an accessible toilet. Therefore it should be simple, straight forward, and just located at each group of gender facilities.

Size

The current size in the *Design Manual – Barrier Free Access 2008 (BFA 2008)* is still smaller than the smallest acceptable type that has obtained international consensus (Figure 2). Wheelchairs particularly electric ones are getting larger and do require more maneuvering space. A space that requires a 5-6 point turns does not function well.

3.2 Suggested Exemption

GFA exemption is suggested to be granted for the full toilet area, when accessible facilities is provided in additional to the mandatory one and when all accessible facilities exceed the size of ISO Type C or ISO Type B (Figure 3 & 4).

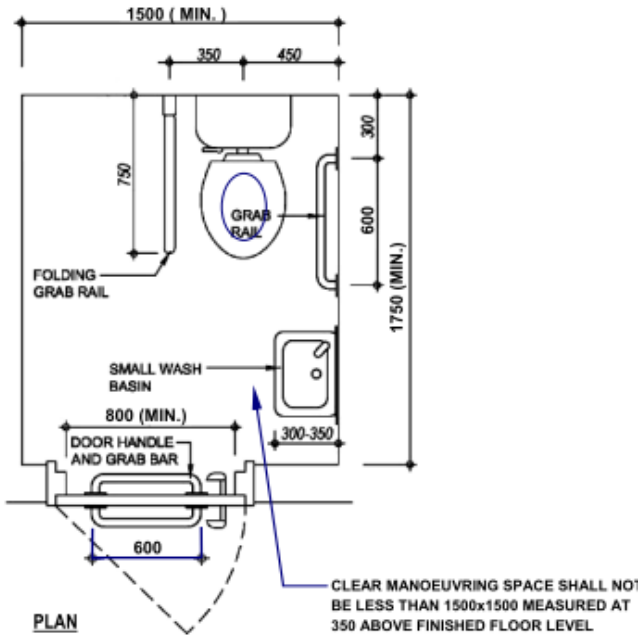
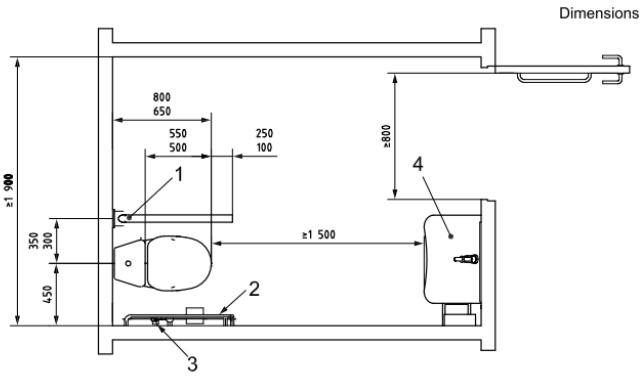


Figure2: Extract from BFA 2008 Figure 24 – Accessible Toilet

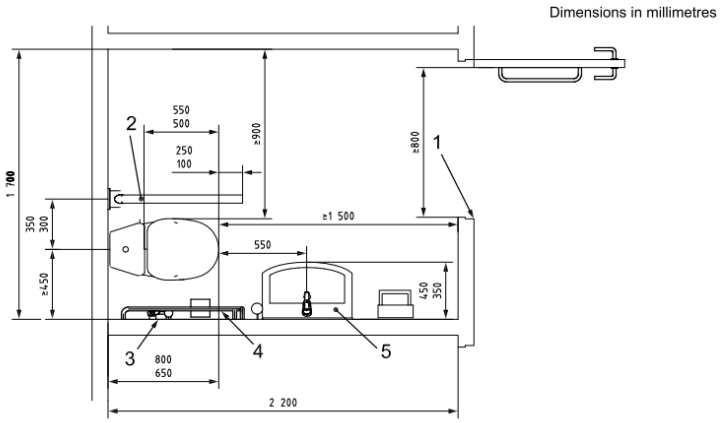


Key

1 foldable grab rail
2 grab rail on wall
3 independent water supply
4 washbasin

Figure 38 — Example of type B large corner toilet room

Figure 3: ISO Type B Sanitary Facility



Key

1 minimum 800 mm (850 mm recommended)
2 foldable grab rail
3 independent water supply
4 grab rail on wall
5 washbasin

Figure 4: ISO Type C Sanitary Facility

Item 4: Absence of Inclusive Emergency Evacuation Means for Upper Levels

4.1 Issue

The issue of emergency evacuation for people that cannot negotiate egress stairs by themselves is still under development globally. There is talk which is contrary to historic practices, users should evacuate themselves with a fireproof lift. However this is still under development. As a mitigation measure, there needs to be a smoke free lobby with communication devices to provide a place to wait. Presently developers will not provide such space without exemption.

4.2 Suggested Resolution

GFA exemption is suggested to be granted for smoke lobbies/safe havens with suitable communication device to accommodate wheelchair spaces according to the anticipated users of the facility (at 4% based on ISO method of determining accessible parking spots). Note that this should vary for special facilities such as hospitals, elderly care and other facilities where a high number of users that will not be able to use stairs in emergency evacuation. Each wheelchair space should be 800mm x 1300mm and excludes the path of travel of 1000mm wide for emergency personnel.

Item 5: Circulation around Doors

5.1 Issue

The circulation requirements around doors in BFA2008 are incomprehensive and do not capture a large enough percentage of wheelchair users. This is due to limitations in upper body movement and reach to the door handle. This issue should be applied to all doors with the exception of areas like store rooms and cleaners but also apply to all staff areas. Certainly, latch side clearance to doors does not apply when doors are automated.

5.2 Suggested Exemption

GFA exemption suggested to be granted for additional space around door circulation at corridor or path minus the 330mm mandatory latch side clearance. International recommendation is 600mm with sufficient circulation depth (Figure 5).

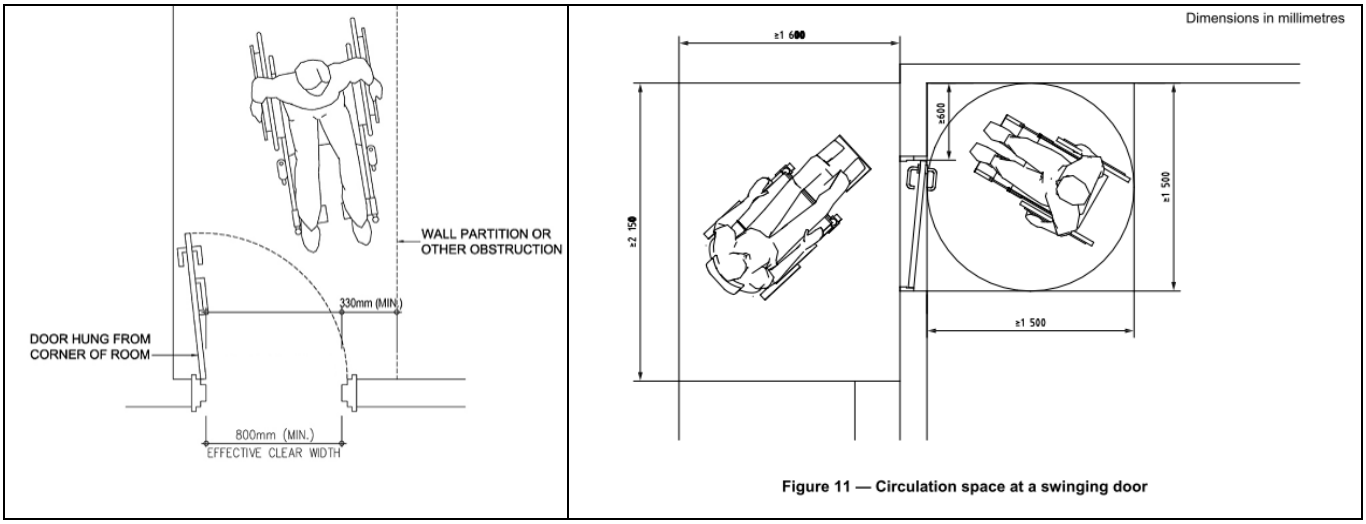


Figure 5: Door Comparisons

References:

Design Manuel: Barrier Free Access 2008
ISO 21542:2011 – Accessibility and usability of the built environment
Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers No. APP-125: Level Difference for Floor Adjoining External Ground Level or Flat Roof
Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers No. APP-89: Provision of Better Lift Service