

THE ACCESSIBILITY OF PUBLIC FACILITIES TOWARDS UNIVERSAL DESIGN IN OFFICE BUILDING

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ABSTRACT: Accessible facilities in office building is a major concern that should be provided appropriately for person with disabilities. According to Act by the Government of Malaysia indicates the guideline that are required when designing facilities for PwDs. The research to study the facilities in office building whether it has provided sufficient and efficient for PwDs according to Malaysian Standard. Detail observation is conducted at DBKL II building in Kuala Lumpur and findings found most of the facilities are provided as such need to be improvise in order to achieve the standard.

KEYWORDS: *Universal Design; Diasabled Peoples; Office Facilities*

1.0 INTRODUCTION

The term "accessibility" is commonly used to describe the condition in which people can have easy access to any part of the built environment in order for them to function properly in this rapid-moving world. It can be as simple as getting on public transportation such as LRT, or entering a shopping complex. Indeed, everyone deserves to have their right to get an access to any environment or surrounding freely without having any difficulties. For example, office workers need easy access to the workplace, students need access to the school and so on; and this right is especially important to People with Disabilities (PwDs).

Accessibility is an important factor for the PwDs to enable them to live and work independently. This accessibility refers to objects, buildings, information and technology that disabled people can use, and thus the term "accessibility right" is clear enough to describe the general concept that physically disabled people should not be prevented from using and obtaining an equal benefit from any services provided.

Universal design meant to produce buildings, products and environments that are inherently accessible to both people without disabilities and people with disabilities. It is the concept of designing all products and the built environment to be aesthetic and usable to the greatest extent possible by everyone, regardless of their age, ability, or status in life.

In Malaysia, the Person with Disabilities Act 2008 was tabled and approved in the parliament of Malaysia. It is meant to provide the registration, protection, rehabilitation and wellbeing for PwDs in this country (Persons with Disabilities Act, PwDA, 2008). According to the act, in the matter of accessibility in Malaysia, PwDs have the right to access and use public facilities, amenities, services and buildings, public transport facilities, education, employment, information and communication technology (ICT), cultural life, recreation, leisure and sports. Thus, since 2008, concerns and matters on PwDs accessibility have been placed into the attention of various authorities, government agencies, non-governmental organizations (NGOs), as well as professions such as architects and environmental designers.

As the number of PwDs is increasing yearly, the Malaysian government is now enforcing and

legislating the PwDs Act 2008 to be applied throughout the country in terms of providing good access to public buildings, transportation, and other public facilities and amenities (PwDA, 2008).

On the other hand, Ardi Herman Mohd Mardzi (2010) touched on the opposite direction of accessibility issue, which is the PwDs' access to the recreational or the outdoor spaces and its limitation. The study was done in the realization that although the accessible facilities are available mostly on the indoor environment, but not very much effort is taken to properly design the outdoor environment such as the recreational area to be utilised by the PwDs. The research was done by conducting a specific study on some of the chosen recreational areas to find out whether these areas provide the facilities for the PwDs or not and their efficiency, resulting in the idea of more outdoor spaces should be made accessible for the PwDs.

Berube (1981) suggested that barrier-free design should be taken into consideration in all town planning and building design so as to reduce physical barrier for the disabled. He stated that barrier-free design is not architecture specifically for the disabled. It's simply design that takes into account the wide range of potential users of a building (p. 123). He also pointed out that attitude of the architect is the key point in realising barrier-free design and it involves no extra cost as the architect just simply needs to design differently that is to avoid any features that would be barriers to the disabled.

Otmani, Moussaoui, and Pruski (2009); and also Rodgers (2005) place high emphasis on the ability of PwDs to access indoor spaces and their boundaries. These two studies were carried out to find out about the effectiveness of the indoor accessible facilities in common places such as residential buildings and museums, for example ramps, tactile pathways and so on. They were done by conducting some research and observation on how the PwDs' movement inside the building with the aid of these facilities is like. At the end of the study, both came to the conclusion that although some of the public buildings have implemented accessible facilities throughout the building system, but some of them are not working properly as they either have not been carefully designed or are not efficient enough to meet the needs of the PwDs.

2.0 RESEARCH METHODOLOGY

In conducting the study on the problem faces by the PwDs on the issue of accessibility, an observation was used as an aid throughout the research process to gain the best possible results. Observation was made on the existing accessible facilities provided for the PwDs at DBKL II building to find out whether or not these facilities can meet the needs of the disabled people. A detail observation on the disabled people which a wheelchair bound and vision impaired people have been selected to be an experimental person in order to access the building. A set of checklist is provided in order to observe the accessibility of public facilities provided for disabled peoples. During the observations, photos of the facilities will be taken as evidence to support the finding of the research. The measurement tools also have been used to measure the component of the facilities provided. The measurement data will be compared with the Malaysian Standard to get the accurate measure for disabled people.

3.0 RESULTS AND DISCUSSION

Table 1.1 and 1.2 shows the total percentage between the two respondents of all the components of the checklist towards their accessibility of the office building (DBKL building). The level of accessible of these facilities can be measured up to 60% only as both of the disabled people are accessible of the building with 57.425 %. 35.175% is measured as ineffective public facilities for disabled people and only 7.4% is neutral. From the findings, the researcher concludes that most of the facilities provided by DBKL building can be access by the disabled people. At the certain area, the facilities can be improving to achieve the standard for disabled people which is universal design.

Table 1.1: Result of accessibility survey

AREA	A	B	C	D	E	F	G	H	I	J	K	SCORE (100%)
Vision Impaired												51.85
Wheelchair bound												63

LEGEND

- | | | |
|------------------|--------------------|------------------------------------|
| A) Parking | E) Door | I) Toilet |
| B) Pathway | F) Corridor | J) Public Telephone |
| C) Curbcuts | G) Elevator & Lift | K) Reception & Information Counter |
| D) Main Entrance | H) Escalator | |

YES  NO 

Table 1.2: Result of accessibility survey

Accessibility	Wheelchair bound %	Vision impaired %	Total	Percentage %
Yes	51.85	63	Accessible	57.425
No	48.15	22.2	Not Accessible	35.175
Not related	-	14.8	Neutral	7.4

4.0 SUMMARY

This study on the issue of accessibility right for disabled people come to the conclusion that although accessible facilities had been provided for the PwDs in certain places but the level of satisfaction of the disabled people who are using it clearly still in its minimum level as some of it is inefficient enough to be utilised. Proper planning of what and where the suitable facilities to be located should be the key point and barrier-free design should be introduced for future development.

5.0 REFERENCES

- Berube, B. (1981). Barrier-free design--making the environment accessible to the disabled. Canadian Medical Association Journal, 124(1), 68.
- Hosking, D. L. (1994). Accessibility rights for disabled people (Doctoral dissertation, University of British Columbia).
- Rodgers, P. (2005). Managing access at the museum: Disability and institutional boundaries. University of Toronto, Toronto, ON, Canada.
- Otmani, R., Moussaoui, A., & Pruski, A. (2009). A new approach to indoor accessibility. International Journal of Smart Home, 3(4), 1-14.

Mohd Mardzi, A. H. (2010). A Study on Outdoor Accessibility in Recreational Areas for Persons with Disabilities (Doctoral dissertation, Kulliyah of Architecture and Environmental Design, International Islamic University Malaysia).