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## PERTINENCE OF UNIVERSAL DESIGN AND ACCESSIBILITY IN MOSQUE FOR PEOPLE WITH DISABILITIES

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#### Abstract:

Malaysia is a country which is known for the heavy Islamic moral values presence in its culture and traditions. Mosques in Malaysia are well known for their beauty and captivating architecture. There are 5,300 mosque that have been built in Malaysia until November 2017 and it is increasing as the years go by but the accessibility of amenities for the Persons with Disabilities (PwDs) is still a major problem. The mosque is not just for those without disability; therefore it is important to provide them an equal opportunity to perform congregational prayers together with other devoted Muslims and help them perform their responsibility and their social roles. All the way through history, community attitudes and physical obstructions in the built environment have barred PwDs from fully participating in the society. These days, along with the emergence in the PwDs population, the mission for impartiality and equal rights has become fully-fledged. Currently, major changes in design requirements, both market-driven and legally mandated, are creating a new life system for People with Disabilities (PwDs) and a new path for designers. Hence this study focuses on the appraisal of accessibility of amenities in 10 mosques in Penang using requirements from the current Malaysian Standards for accessibility; MS1184:2014 Code of Practice on Access for Disabled Persons to Public Buildings. The methodology of this research considers conducting access audit of case studies, observations on site and semi-structured interviews. The expected findings are to identify whether the facilities provided match the needs of the people with disabilities. This is further supported by using the Malaysian standard (MS 1184:2014) Universal Design that fits and matches the facilities provided for various types of People with Disabilities PwDs. The access audit was done so as to assess the accessibility of facilities provision. Besides that, a semi structured interview was also conducted. The results reveal that most of the facility provisions for the disabled provided in the mosque comply with the standard MS1184:2002, but the important provision such as ramps, toilet facilities and hand rails still do not comply with this standard.

Keywords: Accessibility, Disabled person, Facilities, Mosque, People with disabilities

#### 1.0 INTRODUCTION

The mosque is not just for those people without disability therefore, it is crucial that the Persons with Disabilities (PwDs) too are provided accessibility so as to give them an equal opportunity to perform congregational prayers together with other devoted Muslims at the same time helping them to perform their responsibility and their social roles (Abdul Rahim, 2016). According to Persons with Disabilities Act 2008, persons with disabilities should have the right to access the use of public facilities, amenities, services and buildings open or provided to the public on equal basis with persons without disabilities. However, this is subject to the existence or emergence of such situations that may endanger the safety of persons with disabilities (Abdul Munir et. al, 2014). According to statistics from the Department of Social Welfare (JKM) in November 2017, there are 443,541 people with disabilities throughout Malaysia (Zawiah et. al, 2016). Malays have the highest number amounting to 294,997 people compared to other ethnic groups. The statistics also show that 4.2 million people with disabilities have yet to register with JKM.based on the population statistics which is a total of 30.1 million (Ramli, 2017). Besides, based on PwDs in Penang those who are registered under JKM is 75,342 while there are 89,867 people with disabilities who are yet to register with JKM (Kamaruddin, 2012).

#### 2.0 LITERATURE REVIEW

There is a variety of people with disabilities (PwDs). PwDs can be classified into four categories which are visual disabilities, hearing disabilities, physical disabilities, and mental disabilities which affect their mobility to their use of buildings and related amenities (Jaafar et. al. 2014). A local newspaper, reported that PwDs also have the intention and desire of wanting to go to mosque to perform their congregational prayer together with other Muslims but when the mosque or the destination facility does not provide good infrastructure or an accessible environment for PwDs,it makes their trip to the mosque difficult and depressing (Islam, 2015). Lack of access creates physical barriers that burden the PwDs, the temporary ambulant, disabled and the elderly (Mohd Isa et al., 2016). These barriers eventually discourage them to visit mosques for prayers and other activities related to the mosque and the mosque compound as they lack accessibility continuity especially from the parking area, the entrance, the ablution area, toilets and to reach the prayer hall (Abdul Rahim et. al, 2014). In order to fulfill the objective of all the standard is "to ensure that persons with disabilities in Malaysia have the same rights to equality before the law as the rest of the community in the country; to eliminate, as far as possible, discrimination against persons on the ground of disability in various areas of life; and to promote recognition and acceptance within the community of the principle that persons with disabilities be afforded equal opportunities and full participation to enable them to live as a rightful citizen of the country" and comply with Malaysian Standard 1184:2014 (Bashiti and Abdul Rahim, 2015).

#### 3.0 METHODOLOGY

For this research, two methods of data collection was used which is site assessment and access audit and also semi-structured interview. This research was carried out at several mosques around the areas of Gelugor, Bayan Lepas and Bayan Baru as well as Pulau Pinang to make observations on accessibility in mosques. Next, semi-structured interviews were conducted with respondents among whom were members of the mosque committee like the chairman and mosque chief and people with disabilities who were in the area. The research location is at the Penang island area only which covered 3 categories of disabilities the wheelchaired, the visually impaired the elderly.

#### 3.1 Site Assessment & Access Audit

Access audit can be described into 2 different types:

- i. audit that assess the presence of access facilities for disabled persons; and
- ii. audit that is designed to assess how well the facilities will work for disabled people.

Access audit is purposely done to establish how well a particular building or environment performs in term of access and ease of use by a wide range of potential users, including disabled persons and to recommend access improvement where the process involves access audit. The access audit will consider the needs of all users, and potential users, of a building or environment and assess the factors affecting independent use and access to services.

#### 3.2 Semi-structured Interview

Interview method of collecting data involves presentation of oral-verbal stimuli and reply in terms of oral-verbal responses. Semi structured interview are characterized by flexibility of approach to questioning and it does not follow a system of pre-determined questioned and standard technique of recording information. Semi-structured interview is a part of access audit data collection conducted for the assessed buildings. In the semi-structured interview, the interviewer is allowed much greater freedom to ask, in case of need, supplementary questions and at times may omit certain questions if situation requires and also the question sequences can be changed. Semi-structured is the central technique of collecting information in the case of exploratory and formulate research studies. Semi-structured interview content for this research include: history of the mosque, general facilities, specific facilities for person with disabilities, activities provided for PWDs, accounts of any encounter, event or emergency involving persons with disabilities, awareness of the needs and the rights of the people with disabilities.

### 4.0 DATA COLLECTION

There are 10 mosques that had been chosen for this study which ae located in Penang island. The mosques are summarized in Table 1

Table 1: Mosque selection for this study

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No.	Description	
1	Masjid Al Jami' Al-Shoghir Basically, this mosque is just a small mosque named Surau Al-Jami 'As-Shoghir. The surau was built by 1998 and fully completed in 2000. The mosque still needs to improve their facilities to give comfort to PwDs	
2	Masjid Negeri Pulau Pinang Penang State Mosque is a state mosque for the state of Penang, Malaysia. Built in 1979 and the mosque design model is provided by the Penang Public Works Department. The architect is E. B. Paz from the Philippines	
3	Masjid Sungai Gelugor The Sungai Gelugor Mosque was built around 1812 by Raruthabtillai and the land was donated by David Brown. Raruthabtillai is a wealthy Muslim Indian trader. The mosque is constructed with half walls of concrete and semi-wood and semi-concrete.	
4	Masjid Umar Al-Khattab, Bayan Baru The Umar Al-Khattab Mosque was completed in 1994 and the aspect of architecture, the mosque shows the characteristics and designs of a modern mosque as the mosque was built around the 1990s.	
5	Masjid Al-Huda Sungai Ara Sungai Ara Al-Huda Mosque has moved the site for three times. No records were found about the opening date of this original mosque. This mosque also has lack of facilities for PwDs and overall facilities at this mosque are old and not fulfill the Malaysian standard.	
6	Masjid At-Taqwa Taman Brown, Taman Tun Sardon The Brown At-Taqwa mosque was built in 1974. Initially, the mosque began as a small surau constructed by the residents of Taman Brown for religious purposes. The construction of the surau was initiated by the late Datuk Haji Mohd. Nor	111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
7	Masjid Jamek Sungai Nibong Besar Masjid Jamek Sungai Nibong Besar is an old mosque built around the 1880's and it is among the oldest mosques in Penang. It is also a symbol of the placement of Malay Muslims in the past which forms part of the current population of the people of Penang.	
8	Masjid Al-Ittifaq, Sungai Nibong Kechil The mosque is believed to exist since the 1870s but there is no evidence to confirm the history of the construction of this mosque. The mosque was officially opened in 1961.	
9	Masjid Kapitan Keling Kapitan Keling Mosque is a landmark for the Muslim community in Penang, especially for the Indian Muslim community. Originally the mosque was just a small mosque built by the British East Indies (SHTI) tribe after Francis Light occupied Penang.	<b>Lini</b>
10	Masjid Melayu (Jamek) Lebuh Acheh The Acheen Street Malay Mosque was built in 1808 by Tunku Sayyid Hussain Al-Aidid, a wealthy spice trader of Arab descent who was also an Aceh Royal family member.	

#### 5.0 RESULTS & DISCUSSION: AVAILABILITY OF DISABLED FACILITIES

There are 13 parameters of amenities for the use of the person with disabilities in the mosques. Table 2 as shown below is used as a guideline to perceive the existence of such facilities which is derived from the MS 1184:2014.

No.	Type of facilities	1	2	3	4	5	6	7	8	9	10	%	Rank
1	Vehicle Parking	X	$\sqrt{}$	$\sqrt{}$			X	X	X	X	X	40	4
2	Pathways & Ramps	V	$\sqrt{}$			V	V	V	V		X	90	2
3	Main Entrance	V	$\sqrt{}$			V	V	X	V	V		90	2
4	Step Ramps	X	X	X	X	X	X	X	X	X	X	0	6
5	Stairs	V	$\sqrt{}$			V	V	V	V	X		90	2
6	Handrails	V	$\sqrt{}$			V	V	X	V	V	X	80	3
7	Grabrails	V	X			X	X	X	X		X	40	4
8	Guiding Blocks	X	X	X	X	X	X	X	X	X	X	0	6
9	Toilets	X	$\sqrt{}$	$\sqrt{}$		X	X	X	X		X	40	4
10	Water closets	V	$\sqrt{}$			V	V	X	V	V		90	2
11	Washbasin	V	$\sqrt{}$			V	V	X	V	V		90	2
12	Bath	X	$\sqrt{}$			X	X	X	X	X	X	30	5
13	Signs and symbol	V	$\sqrt{}$	$\sqrt{}$		V	V	V	V	V		100	1
%		62	77	85	85	62	54	23	54	62	38		
Rank		3	2	1	1	3	4	6	4	3	5		

Table 2: Facilities provision according to the MS 1184:2014

With reference to Table 2, Mosque 3 and Mosque 4 achieved highest ranked in terms of facility provision in accordance to MS1184:2018 with 85% mark. This is followed by Mosque 2 which achieved 77%. Mosque 1, mosque 5 and Mosque 9 were ranked 3<sup>rd</sup> with 62% mark. Mosque 7 seems not to have good facilities establishment for PwD's as it only achieved 27%. In terms of the type of facilities, signs and symbol achieved highest rating with 100% fulfilment. This is followed by pathway & ramps, main entrance, stairs, water closets and washbasins which achieved 90% execution. Step ramps and guiding blocks achieved 0% achievement(not been included in any mosques).

#### 6.0 ANALYSIS OF SEMI-STRUCTURED INTERVIEW

Once access audit had been completed, semi-structured interview was conducted with the mosque representatives. Several questions were asked as per stated in section 3.2. Regarding the activities that can be done by the disabled at the mosque, all of the representatives gave the answer that there were no activities specifically done for the disabled people. Most of the activities cater for the normal people but they can be participated by the disabled person such as the congregation prayers, talks, workshop and also others religious related activities. In addition, they were asked if they had encountered any event or emergency involving persons with disabilities. All of them never encountered any event or emergency which involved disabled persons but they mentioned that they sometimes saw disabled persons especially those wheel chair bound and visually impaired while performing congregation prayers. They were also asked regarding their awareness of the needs and the rights of the person with disabilities and their answer is they do not have knowledge about the needs and the right of the person with disabilities. When questioned as if they have ever attended or been given any awareness program regarding the needs and rights of person with disabilities, they mentioned that they had never been invited or attended any such programme. In addition, they highlighted that the matter of facility provision for the persons with disabilities had never come across or arisen in managing the mosque.

#### 7.0 CONCLUSION

Based on the case study, it can be concluded that not all mosques provide good facilities for people with disabilities. Generally, Mosque 3 and Mosque 4 achieved highest rank in terms of facilities provision (85%). is followed by Mosque 2 which accomplished 77% facilities provision. Mosque 1, mosque 5 and Mosque 9 were tiered 3<sup>rd</sup> with 62% mark. Mosque 7 seems not to have good facilities establishment for PwD's which only achieved 27%. In terms of type of facilities, signs and symbol attained highest rating with 100% implementation. This followed by pathway & ramps, main entrance, stairs, water closets and washbasin which achieved 90% accomplishment. Step ramps and guiding blocks achieved 0% achievement(not been included in any mosques).

Based on the findings, it can be said that people with disabilities have difficulties to access the mosque for their worship. Management of the mosque should have the knowledge, awareness and understanding of the disabled. It should also set up specific policies for people with disabilities to improve the lack of facilities in the mosque. Nevertheless, the analysis shows that there is a mosque which is equipped with facilities for the disabled, namely Masjid Sungai Gelugor, Masjid Umar Ibnu Al-Khattab, Bayan Baru and Masjid Kapitan Keling which are categorized as disabled friendly mosque. These 3 mosques have attractive designs, equipped with facilities and amenities that suit the environment of the local community. While, the other mosques in Pulau Pinang are not provided with the facilities for disabled people. It must be noted that the number of disabled persons residing in the vicinity of the mosque was also a factor in setting up facilities for the disabled at the mosque.

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