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> SUSTAINABLE BUILT **ENVIRONMENT**

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COMPARISON OF ACCESSIBILITY FOR DISABLED AT MOSQUES IN PERAK BASED ON MS 1184:2014

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ABSTRACT

Mosques are sacred places where Muslims assemble to participate in various religious activities such as daily prayers, and special prayers during religious festivals. Persons with Disabilities (PwDs) have been unable to gather or participate in any events in the building due to insufficient accessibility. Mosques, on the other hand, are designed to accommodate all users, including persons with disabilities (PwDs). Because of the mosque's lack of facilities, this group finds it difficult to complete purposes, and as a result, this group prefers to isolate themselves rather than socialise in society. This study takes a qualitative approach to achieve its objectives, applying a variety of approaches such as case studies, document analysis, and literature reviews. The methodology considers doing observation at three selected case studies with related Malaysian Standard - MS1184:2014 guidelines. The purpose of this study was to determine whether or not the current level of accessibility for disabled people in mosques was adequate. With all of this information gathered, the researcher was able to make recommendations for future researchers on how to raise awareness and recognise the importance of accessibility for PwDs at mosques so that all Muslims, regardless of ability or disability, can participate in mosque activities comfortably.

Keywords: *accessibility, person with disabilities, mosques*

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INTRODUCTION

Mosques are essential spiritual spaces for Muslims, serving as prayer, religious activity centres, teaching centres, and venues for public events and seminars. They must be designed to accommodate all users, including those with disabilities, the elderly, and children. However, physical obstacles, such as lack of access, can discourage disabled individuals from visiting the mosque. Mosque architects, designers, administration, and caretakers must provide fair and protective treatment of all individuals' rights, regardless of physical ability or handicap, as this is the central component of equality in Muslim culture. (Asiah et al., 2014)

Muslims with disabilities have expressed frustration and difficulties in attending Malaysian mosques, with limited facilities for them. (Rahim et al., 2014). Having challenges in an accessible setting, both inside and outside of the building, will hinder these people's ability to enjoy life (Tan, 2008). While in public settings, the environment that is accessible to disabled individuals can contribute to increased stress, low self-esteem, and embarrassment (Nosek, Foley, Hughes, and Howland, 2001; O'Hara, 2004; Iwasaki and Mactavish, 2005).

Disabled persons face impediments to access, particularly car parking, toilets and entrances are located. Malaysia has over 5,300 mosques, but amenities for disabled individuals are difficult to find due to a lack of availability. (Rohaiza, 2017)

PWDs have the right to access and use public facilities, but they must access them on an equal basis with persons without disabilities, subject to situations that may endanger their safety. The Persons with Disabilities Act (2008) ensures equal access to public facilities and services for all users, regardless of their physical ability or handicap.

LITERATURE REVIEW

In general, a mosque is regarded as a location where activities related to society and religion should be planned and carried out. It is one of the places that plays a vital role in shaping the character of Islamic communities and assisting its adherents in acting in accordance with Islamic rules. These locations serve as hubs for their political, social, religious, and institutional activities. However, most mosques continue to lack facilities, creating physical barriers that burden PWDs, the temporarily ambulant disabled, and the elderly. (Niya, 2015)

Mosque constructions are among the most important public structures. In Muslim communities, this form of architectural environment is very essential. As the majority of Malaysia's population is Muslim, the spiritual refuge of these congregational

community institutions grows in number. at addition to urging Muslims to gather at mosques five times a year, numerous significant prayers are performed in mosques throughout the year. In addition, in addition to the various rituals, supplemental religious celebrations are performed to stress the importance of these for members of Muslim communities (Utaberta, 2010).

As a result, a mosque should be generally constructed to accommodate all sorts of users, including PwDs, the elderly, and children. The significance of accessibility is to allow Persons with Disabilities (PwDs) with an equal chance to participate congregational prayers with other faithful Muslims, therefore assisting them in fulfilling their responsibility. (Rahim, Samad, Rahim, & Badrulhisham, 2014)

The mosque is an essential asset for the growth of Islam. They are not just for regular people to utilise, but also for impaired individuals. Mosques provide a range of public amenities, including bathrooms, parking, and ablution facilities. Most mosques are inaccessible and have no facilities for those with disabilities. Furthermore, PwDs are part of a community that requires support for them to worship comfortably with the rest of the community. They have the same rights and possibilities for fulfilment in life as the rest of the community.

Person with Disabilities

According to the Persons with Disabilities Act of 2008 (PWD), "PWD" refers to people who have long-term physical, mental, intellectual, or sensory impairments that prevent them from participating fully and effectively in society when faced with challenges.

From the clinical perspective, disability is caused by many impairments such as physical, mental, sensory, and emotional, or a combination of these. These problems might be inherited or emerge later in life. However, according to the World Health Organisation (WHO), "disability is an umbrella term that covers impairments, activity limitations, and participation restrictions." The first global assessment on disability, prepared in conjunction with WHO and the World Bank, shows that more than one billion people are disabled globally today. On a lesser scale, the number of registered PWDs in Malaysia's Department of Social Welfare is roughly 500,000, or 1.5% of the population as of 2012 (Utaberta, Niya, & Maulan, 2015).

According to Nations Convention on the Rights of Persons with Disabilities, Article 1, stated that 'Persons with disabilities are those who have long-term physical, mental, intellectual, or sensory impairments that, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others.

Disability, Impairment and Handicapped

According to Department of Social Welfare data, there were 619,273 registered handicapped individuals in Malaysia by the end of August 2022, with that number growing yearly (2022). According to this, there are 171,931 registered handicapped persons between the ages of 6 and 21, with the majority of them being students. Nonetheless, the proportion is tiny in compared to the World Health Organization's (WHO) estimate of at least 15% of the country's population being impaired, or 4.8 million Malaysians with disabilities. There will be 226,381 persons disabled with learning impairments, 214,188 physically impaired, 41,869 hearing challenged, 53,825 visually disabled, 51,426 mentally disabled, and 28,285 people disabled in various ways by the end of August 2022. (Malaysia Department of Social Welfare, 2022).

According to the Department of Statistic Malaysia,

The 2019 National Health and Morbidity Survey (NHMS) report provides a more accurate estimate of Malaysians with disabilities. According to the NHMS 2019 report:

Table 1: Estimation of Malaysians with Disabilities

- 11.1% of Malaysians over the age of 18 are disabled.
- 1 in every 4 Malaysian adults has functional difficulties in one or more of the following domains: vision, hearing, memory, walking, self-care, and communication.
- 4.7% of children between the ages of 2 and 17 have functional difficulty in at least one domain, including hearing, vision, communication/comprehension, learning, mobility, and emotions.
- Workforce participation among working-age Malaysians with disabilities is low, with approximately 4,500 workers in the public and private sector as of 2018, accounting for less than 1% of the country's registered disabled population.

Sources: National Health and Mobility Survey

Causes of Lack of PwD's Facilities

Several studies have found that disabled persons are dissatisfied with the architecture of public buildings. Previous study findings revealed that the facilities in a few public buildings are in poor condition, give little access to equipment, current facilities are not planned and are not in complying with the required design, and there is inadequate space for a disabled person. This scenario was based on data from research conducted in a university library, shopping mall, and Muslim Mosque (Kportufe, 2015; Soyingbe et al 1998; Bodaghi et al 2013).

Aside from that, the community's unfavourable attitude creates a sociocultural barrier. According to Datillo (1994), this is an attitude obstacle that will be the hardest to overcome. People's fear of the disabled, as well as a lack of understanding and communication skills, contribute to this obstacle.

Local Guidelines for Disabled Facilities and Accessibility

The Persons with Disabilities Act of 2008 (Act 685) provides for the registration, protection, rehabilitation, development, and well-being of disabled people. A disabled person may assert his or her constitutional rights under Article 8 of the Federal Constitution, which guarantees equality to all people unless the constitution expressly authorises otherwise. Discrimination based solely on disability is also prohibited in employment, education, housing, transportation, business ventures, sports, recreational activities, access to public places, and access to public facilities and services.

Malaysian Standard (MS1184:2014) include a variety of requirements and recommendations for many of the construction elements, assemblies, components, and fittings that comprise the built environment. These requirements are related to the constructional aspects of access to buildings, circulation within buildings, egress from buildings in the normal course of events, and evacuation in the event of an emergency. This requirement and guidelines in this standard are intended to apply to persons with disabilities (PwDs).

According to Malaysian Standard 1184:2014 Universal Design and Accessibility in the Built Environment - Code of Practice, a building is separated into two parts: access to the building and accessibility as well as access within the building (refer Table 2). This overview includes all elements and elements of a structure that can be modified to provide disabled facilities and access

Table 2: Summary of Malaysian Standard 1184:2014

SUI	SUMMARY OF MS1184:2014	
1. <i>A</i>	1. Approach to the building	
a.	Accessible parking space	
	Path to building	
	Ramps	
	Guarding along paths and ramps	
2. lı	2. Internal Access	
a.	Building Entrances	
	Horizontal Circulation	
	Floors in corridors	
b.	Vertical Circulation	
	Ramps	
	Stairs	
C.	Handrails	
d.	Lifts	
e.	Toilets	
f.	Control devices and signals	

METHODOLOGY

The qualitative method was chosen, and the analysis is done by result discussion. This research will be conducted by observation at the related case study. All the data will be collected at the case study with guidelines of the checklist related to the guidelines.

Methodology Used

The research was conducted in two stages. To begin, all case studies were observed early on. This inspection revealed the application of accessibility for PwDs of Mosque A, B, and C, and its publicly accessible areas and services.

Following that, a major comprehensive evaluation checklist was created based on the applicable requirements in the Malaysian Standard MS 1184:2014 Universal Design and Accessibility in the Built Environment - Code of Practise and the primary characteristics determined in the first stage.

Case Study

The backgrounds of the multiple selected case studies are summarized in Table 3

Table 3: Summary of the selected multiple case studies

Case Study	Mosque A	Mosque B	Mosque C
Address	Kuala Kangsar	lpoh	Seri Iskandar
Year of Built	1917	1968	2006
Architecture	Indo-Seracenic style.	Modernist Islamic style	Modernist Islamic style

FINDINGS AND ANALYSIS

The previous observation was to identify existing disabled facilities at mosques. The observation was to identify existing disabled facilities for PwDs at mosques in Perak. These are the existing disabled facilities that are provided in selected case studies.

Table 4: The existing disabled facilities provided at the selected buildings

	Mosque A	Mosque B	Mosque C
Disabled facilities provided at	Accesible parking spaces	Accessible parking spaces	Horizontal Circulation
mosque	Ramps	Ramps	
	Toilet	Toilet	

Table 5: Result of compliance of selected buildings with MS 1184:2014

	SUMMARY CHECKLIST OF MS1184:2014		MOSQUE		
		Α	В	С	
	1. Approach to the building				
a.	Accessible parking space	/	1	0	
b.	Path to building	/	/	0	
C.	Ramps	/	0	0	
d.	Guarding along paths and ramps	/	0	0	
	2. Internal Access				
a.	Building Entrances				
	Horizontal Circulation	1	1	1	
	Floors in corridors	1	1	1	
b.	Vertical Circulation	_			
	Ramps	1	/	0	

	Stairs	/	/	/
C.	Handrails	/	0	0
d.	Lifts	0	0	0
e.	Toilets	/	/	0
f.	Control devices and signals	0	0	0

Legend
/ - Complied
O – Not Complied

The second phase of the observation was carried out using MS 1184:2014 Universal Design and Accessibility in the Built Environment - Code of Practise (Second Revision) to demonstrate compliance in the three case studies chosen. Based on the case studies, a compliance analysis was conducted to analyse the findings and observations at structures.

Access to the building

Accessible parking spaces

Only two out of three case studies provide parking for PwDs. Most of the management is aware of PwDs users.

Paths to the building

All three cases have clear paths on the outside. For disabled people to be able to use the paths safely, they must be free of any obstacles.

Ramps

Only Mosque C does not have an external ramp. The other mosques are complete with external ramps.

Guarding along paths and ramps

The handrail is available only at Mosque A and complied with the MS 1184:2014 which is a maximum height of 850mm-1000mm.

Access within Building

Building entrances

All three mosques have sufficient width of entrance into the buildings. They are comfortable and ease the disabled's entry. The entrances are wide and large enough for access by disabled. The entrance doors for all case studies have an adequate width for PwDs.

Vertical circulation

The circulation in these cases is sufficient for the disabled to manoeuvre inside the building. All three case studies that the surfaces of these multiple cases are suitable for walking, flat, and easy for the disabled to walk. Mosque A and B applied ramps t the building. All these three case studies have stairs. However, the stair is complete with handrails but not meeting the exact requirement of MS Standard.

Lift

None of these requirements are applicable for all three case studies.

Toilets

Out of the three mosques, only Mosque A and B provides toilet for disabled.

Control devices and signals

None of these requirements are provided by the management in these cases.

Table shows that Mosque A has provided most of the disabled facilities and accessibility whereas Mosque C provides the least. This is because Mosque C is not aware of the disabled facilities. The building is not ready to implement the disabled facilities and accessibility requirements. Improving building accessibility and facilities is important to accommodate users with different impairments. Most mosques provide common disabled facilities and accessibility, such as parking spaces, toilets, and ramps

CONCLUSION

The three mosques have all complied with practises. According to the research, most of the case studies' entry to the buildings fully complied with the standards. Also only partially completed is access within the building. The findings imply that the building's management are less concerned with the mosques' most crucial feature, which is access within the building. Since most activities take place inside a mosque, access within the building is crucial. According to this analysis of compliance, there is a problem that makes it challenging for individuals with disabilities to use the buildings. The author recommends that more educational materials and awareness campaigns be developed in the future to highlight how crucial it is for mosques to be inclusive and accessible to all.

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