

Universal Mosque/Masjid Design

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Abstract. As a public building, a mosque (or any prayer area for Muslims in public buildings) should remove all barriers that may confront persons with disabilities and hinder them from performing their religious rituals. A mosque is regularly used at least five times a day for praying, and for weekly events such as Jumu'ah (Friday prayers). Therefore, a mosque should be accessible for all. But in fact, persons with disabilities still find difficulties in accessing mosques. For example, the calling to prayer and Friday sermon (Khutba) through loudspeakers, is a problem for persons with hearing loss. Persons with physical disabilities, especially users of wheelchairs, walkers or crutches, have difficulties in several areas in the mosque, including the entrance, place of ablution, the lavatories and the area for removing shoes at the entrance to the prayer hall. People are not allowed to enter the place of ablution or prayer hall wearing shoes, people are also not allowed to enter with their personal mobility devices. This is so that dirt from outside does not get carried into the mosque. In order to understand the accessibility requirements for persons with disabilities in a mosque, we have to know the essential parts in the construction of the mosque and the mobility pattern that usually occurs in a mosque. In this paper, an accessibility checklist which has been developed on the basis of an analysis of accessibility requirements in mosques is presented.

Keywords. Universal Design, mosques, public places of worship

1. Introduction

There is a strong will, among officials and policy makers, in the United Arab Emirates in general, and Dubai in particular, to promote the inclusion of people with disabilities in all aspects of life, including education, employment, and public services. This has been reflected in the adoption of various measures such as the Federal Law No 29 in 2006 (Disabilities Act) [1] concerning the rights of persons with disabilities, the Local Law No 2 in 2014 [2], enacted by Dubai Executive Council concerning the rights of disabled people and the initiative of his Highness Sheik Hamdan Bin Mohammed Bin Rashid Almaktoom to make Dubai an accessible place for all [4].

Accessibility is a general term used to describe the degree to which devices, services, environments, entities, buildings or facilities are accessible by as many people as possible. Our meaning of accessibility specifically focuses on people with disabilities and their right of access, with or without the use of assistive devices, to anywhere that other persons can access.

The Ministry of Community Development [3] is one of the federal ministries and includes several departments. The Department of Welfare and Rehabilitation of Persons with Disabilities is one of these departments. This department oversees and coordinates

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with federal and local ministries and authorities to implement Federal Law No. 29 of 2006 (Disabilities Act).

2. Mosque architecture

The English word “mosque” comes from the Arabic word “masjid”, which means “a place for (ritual) prostration”. “Jami” refers to the mosque used specifically for Friday communal prayer. Although most of the five daily prayers prescribed in Islam can take place anywhere, all men are required to gather together at the mosque for the Friday noon prayer (women are welcome to attend Friday prayers, but not required to do so).

The essential element of mosque architecture are:

- Prayer hall: The most fundamental necessity of congregational mosque architecture.
- Ablution (wudoo) area: ablution is the Islamic procedure for washing parts of the body (hands, mouth, nostrils, arms, head, feet) using water.
- Lavatories.

These three areas are completely separated from each other: while it is possible to enter the lavatory with shoes or using assistive mobility devices, there is no entry to the place of ablution wearing shoes, and worshippers must use the slippers available at the entrance of ablution area.



Figure 1. Shoe removal area

3. Mobility patterns in the mosque

There are three mobility patterns that usually occur in a mosque. In the first pattern, a person who already has performed their ablutions will directly approach the prayer hall. At the entrance of the hall they must take off their shoes (to prevent dirt from outside entering the mosque). In the second pattern, the worshiper must go to the place of ablution first and after that to the prayer hall. In the third pattern, the worshiper goes to the lavatories first, before approaching the ablution place and prayer hall. As we can see from the analysis of mobility patterns, the accessibility requirements needed for persons with physical disabilities occur at:

- A. Entrance and pathway to the prayer hall.
- B. Ablution place and pathway to the prayer hall.
- C. Lavatory and pathway to the ablution place.

Persons with hearing disabilities may have difficulty hearing the call to prayer and Friday sermon (Khutba) through loudspeakers.

4. Plan followed by the Ministry of Community Development in building accessibility in Dubai

To achieve accessibility for persons with disabilities in public places the Ministry of Community Development was eager to:

- Involve persons with disabilities in evaluating the accessibility of public places including some mosques and prayer areas in public buildings;
- Allow persons with disabilities to determine the nature of the accessibility they need;
- Increase public awareness about the various needs of persons with disabilities in public places; and
- Publish a series of technical guidelines and design checklists to help architects and interior designers to adopt Universal Design principles in public buildings.

In a preparation phase of evaluating accessibility in public places, the Ministry formed a committee whose members included persons with mobility restrictions (wheelchair and assistive device users), persons with hearing disabilities, persons with visual disabilities, architects and specialists in building codes, and professionals in the field of disability.

The basic requirements of accessibility were recommended by the committee to be found in mosque/prayer area. These were based on site visits to several mosques and prayer areas in public buildings and on analysis of mobility patterns that usually occur in a mosque. The committee was able to identify the basic requirements of accessibility as follows:

- Accessible parking
- Signage systems using the international accessibility symbol
- Exterior accessible route from parking to the main entrance, shoe removal area, accessible lavatories, and accessible ablution place
- Seating available at the shoe removal area
- Accessible ablution place

- Assistive mobility devices (e.g. wheelchair, walker, crutches) to be provided at shoe removal area and ablution place
- Accessible storage spaces (e.g. shoe storage racks) to be provided for storing mobility devices or shoes
- Additional accommodations for persons with hearing disabilities



Figure 2. Prayer Schedule board



Figure 3. Accessible ablution facilities

5. Accessibility Checklist

A checklist has been designed by the author to be used to determine, as well as to check, the accessibility requirements in each part of the mosque. This checklist was developed after analysing mobility patterns which usually occur in a mosque. Table 1 presents this checklist, for each item, the checker can tick, “yes” or “no”.

Table 1. Checklist for accessibility of mosques

	Item	Comments
1	At least one accessible route 120 cm wide to the entrance from external areas and parking	
2	Accessible entrance has a clear opening of 90 cm and manoeuvring clearance adjacent to the push and pull side of door	
3	Accessible interior route or corridor at least 90 cm wide free from protruding objects / unobstructed by changes in level or other barriers from entrance to : - shoe removal area - to the accessible lavatories - to the ablution place - to the prayer hall	Usually the shoe removal area is separated by a threshold higher than 10 cm from the interior area leading to the prayer rooms
4	Seat(s) provided at the shoe removal area	To help persons with physical disabilities in taking off their shoes. People walking will have to take off their shoes and wheelchair users will be required to transfer to another wheelchair provided at the shoe removal area
5	Seats have armrests to assist persons with disabilities to get up from the seats	
6	Grab bars on a wall adjacent to the seats to support transfer to the seat or to a wheelchair	
7	Assistive mobility devices (e.g. wheelchair, walker, crutches) provided at shoe removal area and arranged for people with disabilities to access without assistance	
8	A space not less than 90 x 120 cm to help wheelchair users to transfer to another wheelchair when this is required	
9	Accessible storage spaces (e.g. shelves) not higher than 90 cm above the floor for storing mobility devices or shoes	
10	Signage indicating spaces for persons using wheelchairs and or other assistive devices to change the wheelchair /device	
11	Are there obstructions or change in levels between the shoe removal area and the accessible interior route?	Changes in level greater than 13 mm high shall have a ramp
12	Accessible lavatories	

13	Accessible ablution place with bench, handrail mounted 85 to 90 cm above the floor and lower water faucets	See Figure 3
14	Ablution floor surfaces are even and slip resistant	
15	Accessible interior route from ablution place to prayer hall with no changes in level	
16	Seats with firm armrests provided in the prayer hall	
17	Call to prayers (adzan), provide additional tools to inform praying times (e.g. prayer schedule board)	See Figure 2
18	Shelf provided for a bag, a briefcase or other personal belongings to avoid placing them on the floor	
19	The international symbol for accessibility is used in all exterior routes and along walkways that provide directions to the accessible routes, entrances, accessible ablution place, accessible entrances to prayer hall	

References

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