

# The Accessibility of SebelasMaret University Library for Children with Special Needs

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## Abstract

*The purpose of this research is to know the provision to the accessibility of SebelasMaret University Library building for children with special needs. The research approach used is qualitative research with descriptive method. Data collection tool used is observation and documentation. The observations have made by checklist based on Ministerial Regulation of Public Works of the Republic of Indonesia No.30 / PRT / M / 2006 on Technical Guidelines amenities and accessibility In the Building and Environment. Building facilities studied in this research are the lift, door, RAM, guiding block, toilet, signs, parking area, sink, stairs. The results show that the SebelasMaret University Library building is not access for children with special needs. Based on the result of research, showing that of the nine facilities provided by SebelasMaret University Library Surakarta, only stairs that can be said to be accessible. While other facilities are not accessible for children with special needs.*

**Keywords:** Accessibility, Children with special needs, UNS Library

## I. INTRODUCTION

The definition of accessibility, according to Ministerial Regulation of Public Works of the Republic of Indonesia No.30 / PRT / M / 2006, is "the convenience provided to all persons including persons with disabilities and the elderly in order to realize the equal opportunity in all aspects of life and livelihood". According to The Department of Economic and Social Affairs (DESA) of the United Nations Secretariat (2013: 7) Accessibility refers to providing "flexibility" to accommodate the needs of each user. It can be concluded that accessibility is the provision of convenience for all people including for children with special needs.

The Government of Indonesia has advised that any constructed buildings should pay attention to the accessibility of children with special needs as regulated in the Ministerial Regulation of Public Works of the Republic of Indonesia No.30 / PRT / M / 2006 on Technical Guidelines amenities and accessibility In the Building and Environment.

The principle that must be held in planning accessibility is to provide equal opportunities to reach,

enter all places, and utilize existing facilities without becoming objects of compassion (Kurniawan, 2014: 45). The principle of facilities and accessibility formulated by The Ministerial Regulation of Public Works of the Republic of Indonesia No.30 / PRT / M / 2006, there are:

- 1) Safety, that is, any building of a general nature in a built environment, should pay attention to the safety of all.
- 2) Easiness everyone can reach all places or buildings that are common in an environment.
- 3) Usefulness, that everyone should be able to use all places or buildings that are common in an environment.
- 4) Independence, that everyone should be able to reach, enter and use all places or buildings that are common in an environment with no need of help from others.

Each building must provide accessibility that takes into account the four principles above so that everyone can access a place with comfort, especially for children with special needs. The provision of accessibility is intended to create conditions and environments that are more supportive of persons with disabilities can be fully social (The Law Number 4th Year 1997 Article 10: 2).

Children with special needs are children with certain disabilities (disable children) both physically, mentally and emotionally as well as having special needs in education (children with special educational needs) (Suparno, 2007: 1). Children with special needs are divided into several disabilities, including blind, deaf, mental retardation, physical disability, emotional disability, learning disability, behavioral disorders, autism and gifted. Children with special needs have the same rights as other regular children. It is already mentioned in the 1945 Act and the declaration of the Convention of Rights for People with Disability (CRPD). One of the rights of the child with special needs is the right to carry out all activities of daily life safely and comfortably.

Comfort and safety of an activity, one of which is determined by the availability of physical accessibility. The Government of Indonesia has regulated the availability of physical accessibility for children with special needs as stipulated in Law Number 28 the Year 2001 on Building Buildings and

Ministerial Regulation of Public Works of the Republic of Indonesia No.30 / PRT / M / 2006 on Technical Guidelines amenities and accessibility Inthe Building and Environment. Both of these regulations provide instructions for each public building to meet the standards of accessibility in accordance with regulations governed by the Indonesian government.

One of the buildings accessed by children with special needs is the library. According to Issa (2009: 12) libraries are defined as "book repositories, book lenders, acquirers, and borrowers of organized information with the greatest emphasis on reliable information for ready access and ready delivery to users". The library has a very important function, as a means for students to be skilled at lifelong learning and able to develop thinking power so that they can live as responsible citizens (IFLA, 2006: 6). Therefore, libraries have enormous benefits for children with special needs in learning activities.

SebelasMaret University Library is a provider center for books, journals, theses and other learning resources. The Declaration of the SebelasMaret University of Surakarta as an inclusion collage for children with special needs requires the SebelasMaret University of Surakarta to provide access to children with special needs. It is also listed in the Minimum Service Standards of the SebelasMaret University of Surakarta on the quality policy in the field of infrastructure and facilities which reads "Infrastructure of SebelasMaret University must meet the technical and spatial requirements, and environmental health".

SebelasMaret University Library building which has recently been repaired, so the building is divided into new buildings and old buildings. Standardized accessibility should be applied in both buildings so that children with special needs can access all facilities of the SebelasMaret University Library building. Therefore, there needs to be an evaluation of accessibility in SebelasMaret University Library building.

The purpose of this research is to evaluate the accessibility of library building of SebelasMaret University Surakarta for children with special needs. The evaluation focused on 9 library building facilities that lift, door, RAM, guiding block, toilet, signs, parking area, sink, stairs.

The results of this study are expected to provide recommendations for improving accessibility to library buildings SebelasMaret University Surakarta for the fulfillment of the rights of children with special needs and make the SebelasMaret University of Surakarta as a college-friendly for children with special needs.



Figure 1 SebelasMaret University Library  
Source:[http:// uns.ac.id](http://uns.ac.id)

## II. RESEARCH METHOD

This research is a qualitative research using the descriptive method. The object of this research is SebelasMaret University Library located on Ir. Sutami, Number 36 A, Jebres, Surakarta, Central Java. Data collection techniques in this study are by observation and documentation techniques.

The observations were conducted with a checklist based on the Ministerial Regulation of Public Works of the Republic of Indonesia No.30 / PRT / M / 2006 on Technical Guidelines amenities and accessibility Inthe Building and Environment.

The data collected will also be analyzed in the form of description and compared with government regulations relating to building accessibility as well as other sources related to the design of buildings that are accessible to children with special needs.

## III. RESULT OF THE RESEARCH

### A. Lift

Based on the observations, the lift facility at the SebelasMaret University Library of Surakarta is only found in new buildings. While the old building is not provided lift facilities. Most of the lift conditions are in line with the standards. However, there are still some things that need to be improved and added that the lift handles there is only one, better lift handles are provided on the three sides of the lift. The absence of audio instructions makes visitors with visual impairments having difficulty accessing lift.

Need to provide audio instructions that provide information about where the floor has been achieved. Signal signs about the location of the floor to how not all the floors in the provided facilities. It should be equipped with visual signs on all floors so as to facilitate visitors with a hearing obstacle to know the location of the building.

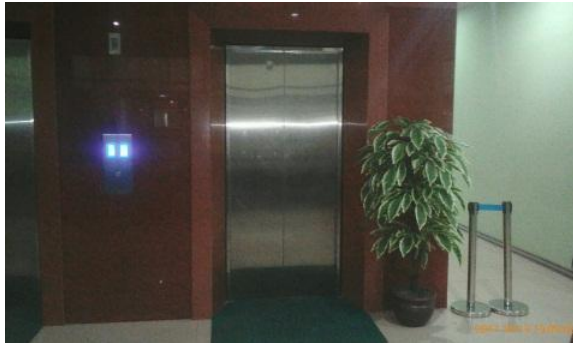


Figure 2 Lift Sebelas Maret University Library

### B. Door

Based on the observation, the door to the old building at SebelasMaret University Library of Surakarta using a revolving door that has a size not according to the standard. According to The Ministerial Regulation of Public Works of the Republic of Indonesia No.30 / PRT / M / 2006, the revolving door is one type of door that is not recommended in the building because it can be opened in both directions. In addition, there is a difference in height on the floor around the door that makes it difficult for wheelchair users to access the door. From these results, it can be concluded that the door at the SebelasMaret university library is not accessible.



Figure 3 The door to the Old Building in Sebelas Maret University Library.

Floor height should be equalized or evenly so there is no difference in the height of the door. In addition, the door is not expected to open in two directions but one way. The width of the door must also be adjusted to the standard of the main door width of the opening of at least 90 cm and the main door is not a minimum of 80 cm.

The use of automatic doors is also recommended to facilitate children with special needs in accessing the door. If this can be realized, automatic door closing gear should be installed so that the door closes perfectly, since partially open doors may be dangerous for special needs children.



Figure 4 Examples of Accessible Door Design.  
Source: <http://manajemenrumahsakit.net>

### C. RAM

The RAM facility at the SebelasMaret University library building has not accommodated the entire library room. This 7storey library has the only RAM on the 1st floor only. The RAM condition on the library page already has an appropriate slope but uneven ram texture and lack of grip beside RAM make user users having difficulty accessing the RAM. The second RAM has a very steep slope that exceeds 7 degrees. It is dangerous for wheelchair users accessing RAM. Lighting around RAM is also lacking.



Figure 5 RAM on Sebelas Maret University Library

Therefore, according to Ministerial Regulation of Public Works of the Republic of Indonesia No.30 / PRT / M / 2006, it is better than the slope of RAM should not exceed 7 degrees, the surface of RAM should be flat, the lighting around the RAM should be enough, and need a handle on the RAM side to help users RAM more secure and comfortable.



Figure 6 Example of a RAM Handle Design.  
Source: Newel (2015).

#### D. Guiding Block

Based on observations, SebelasMaret University Library does not have guiding block. Though guiding block is very important to help visitors with a visual barrier to get to the desired place. Guiding blocks need to be installed in the SebelasMaret University library by observing the good and correct guiding block standards.

One of the important places in pairs of guiding blocks is in front of the entrance/exit from and to the stairs or crossing facility with the difference in floor height. The texture of the pointed tiled steering wheel shows the direction of the journey. The tile warning texture (rounded) warns against any change in the surrounding situation/warning



Figure 7 Example of Guiding block Installation. Source: Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) (2015).

#### E. Toilet

The condition of toilets in the SebelasMaret University Library is still difficult to access by children with special needs, especially for wheelchair users. This is because the width of the toilet door is less than 80 cm, the toilet area is narrow and lack of space, causing wheelchair users to be difficult to enter the toilet. The absence of a side-grip on the toilet and the absence of toilet signs for people with disabilities make the SebelasMaret University toilet not accessible for children with special needs.

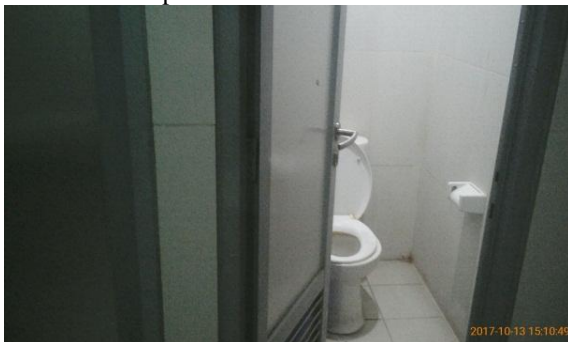


Figure 8 Toilet Library of SebelasMaret University.

According to The Ministerial Regulation of Public Works of the Republic of Indonesia No.30 / PRT / M / 2006, accessible toilets should be provided with a symbol/symbol display with a "Toilet for people with

special needs" embossed system on the outside. Public toilets should have enough space to enter and exit wheelchair users. Toilets should also be provided with handles/handrails that have position and height adjusted for wheelchair users and other disabled persons. The recommended grip has a right-angled shape to help move the wheelchair user.



Figure 9 Examples of toilets that are accessible to children with special needs. Source: Hasanzada (2002).

#### F. Signs

The signs contained in SebelasMaret University Library Surakarta only in the form of writing and not comprehensive to every room. So it is not yet accessible for children with special needs who experience visual and auditory obstacles.

In accordance with The Ministerial Regulation of Public Works of the Republic of Indonesia No.30 / PRT / M / 2006, signs in a building shall be provided in the audio and visual form. So it is necessary to provide signs in the form of audio and signs arise, to help visitors with visual impediments in accessing the library.

In addition, Teletext facilities should be provided in lobby rooms, and sign language facilities to assist visitors with a hearing impediment in accessing the library. The visual signs must be clear and have sufficient illumination. Special facilities for children with special needs need to be provided.



Figure 10 Information Board in SebelasMaret University Library.

#### G. Parking Area

SebelasMaret University library parking lot is located next to the library building and connected to one. According to The Ministerial Regulation of Public

Works of the Republic of Indonesia No.30 / PRT / M / 2006,the library parking area of SebelasMaret University has not been accessible for children with special needs. The absence of special parking space for children with special needs, less parking space, and no RAM path to connect between the parking lot to the library building.



Figure 11 Parking Area of SebelasMaret University Library.

Therefore, it is necessary to provide special parking for children with special needs and given special parking symbol for children with special needs. The parking space must be standard by 370cm for single parking or 620cm for double parking. The RAM that connects between the parking lot and the library building is very important to facilitate the child with special needs in a wheelchair in mobility from the parking lot to the library building.



Figure 12 Examples of the Accessible Parking Area. Source: Newell (2015).

#### H. Sink

The sink facility is in the SebelasMaret University library on every floor of the building and becomes one with a toilet.



Figure 13 Sink in SebelasMaret University Library

In accordance with The Ministerial Regulation of Public Works of the Republic of Indonesia No.30 / PRT / M / 2006,the sink at the SebelasMaret University library building Surakarta already has a suitable height and has a faucet with a lever system. However, the space around the sink is still less extensive, the location of the faucet that is not on the side and no grip around the sink.

Therefore, the space around the sink needs to be expanded to facilitate special needs children who use wheelchair mobility around the sink. The location of the faucet is better placed next to the sink to facilitate children with special needs that use a wheelchair in reaching the faucet. Handles in addition to the sink also need to be provided to help children with special needs when using the sink.

#### I. Stairs

Stair is a facility for the vertical movement that is designed with consideration of the size and scope of the footing and climbs with a reasonable width (Ministerial Regulation of Public Works of the Republic of Indonesia No.30 / PRT / M / 2006). Facilities stairs are provided on every floor of SebelasMaret University Library building in Surakarta.



Figure 14 Stairs in the SebelasMaret University Library.

The condition of the stairs in the library of SebelasMaret University is mostly in accordance with the standard of Ministerial Regulation of Public Works of the Republic of Indonesia No.30 / PRT / M / 2006. However, the lighting around the ladder needs to be added to make it more accessible for the visitors especially for children with special needs.

The following is a recap of the research results accessibility of building facilities library SebelasMaret University of Surakarta:

| No | Facilities Building | Accessible / Not Accessible |
|----|---------------------|-----------------------------|
| 1  | Lift                | Not Accessible              |
| 2  | Door                | Not Accessible              |
| 3  | RAM                 | Not Accessible              |
| 4  | Guiding Block       | Not Accessible              |
| 5  | Toilet              | Not Accessible              |
| 6  | Signs               | Not Accessible              |
| 7  | Parking area        | Not Accessible              |
| 8  | Sink                | Not Accessible              |
| 9  | Stairs              | Accessible                  |

#### IV. CONCLUSION

Based on the results of the research, it can be seen that from the 9 building facilities provided at SebelasMaret University Library of Surakarta, only 1 accessible, this is stairs. Therefore, it can be concluded that the SebelasMaret University Library building is not accessible for children with special needs.

It is expected that these results can be an evaluation material for SebelasMaret University Surakarta, in order to be able to provide accessible facilities for children with special needs in library buildings.

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