

# *Contents*

	<i>Page</i>
<b>Introduction</b>	<b>2</b>
<b>General Hints</b>	<b>3</b>
<b>1. Outside</b>	<b>4</b>
1.1 Entrances	
1.2 Ramps	
1.3 Footpaths and Kerbs	
1.4 Doors	
1.5 Car Parks	
<b>2. Inside</b>	<b>7</b>
2.1 Corridors	
2.2 Handrails	
2.3 Floor Surfaces	
2.4 Escape Routes	
2.5 Lifts	
2.6 Stairs	
2.7 Doors	
<b>3. Bathroom and Toilets</b>	<b>9</b>
3.1 Bathroom	
3.2 Squat Toilets	
3.3 Western Toilets	
3.4 Urinals	
<b>References</b>	<b>12</b>

# **ACCESSIBILITY GUIDELINES**

*ACCESSIBILITY refers to the built environment  
(buildings and other physical structures)  
being designed so that all people (including those with disabilities)  
are able to move around the environment freely.*

## **WHY DOES CAMBODIA NEED ACCESSIBILITY GUIDELINES?**

ESCAP (Economic and Social Commission for Asia and the Pacific), in line with the UN General Assembly resolutions, adopted a policy of "Standard Rules on the Equalization of Opportunities for Persons with Disabilities" in 1993. This recognized that the inequalities experienced by people with disabilities are important issues, and that it is essential that all countries work towards full participation and equality.

In order for people with disabilities to obtain equality and full participation in community life the built environment must allow them access.

The Kingdom of Cambodia recognizes this by being a signatory to the ESCAP "Asia and Pacific Decade of Disabled Persons 1993-2002: Mandates for Action". This mandate (Section 5: Accessibility and Communication) states that governments should work towards:

- Development of design codes concerning accessibility for new buildings, renovations and expansions.
- Introduction of these design codes to professionals and technicians working in planning and construction,
- These steps should be taken with the assistance of people with disabilities.

## **AIMS OF THIS DOCUMENT**

These brief guidelines are aimed at:

- Being a starting point for development of Accessibility Standards for the Kingdom of Cambodia.
- Giving professionals and technicians in building planning and construction some basic practical guidelines for making buildings accessible.

## **GENERAL HINTS**

- All building designs must be considered in terms of their accessibility to people with disabilities.
- Essential services and facilities (e.g. toilets, classrooms, kitchens, meeting rooms, and service centres) must be located on the ground floor, or a lift must be provided.
- It doesn't cost much more to design and build a new building with accessibility in mind.
- Existing building and environments can be renovated to be accessible with some simple changes (check this booklet for more details).
- Local materials and knowledge should be considered when making changes.
- Access points for disabled people should be clearly marked with the universally recognised disability symbol.



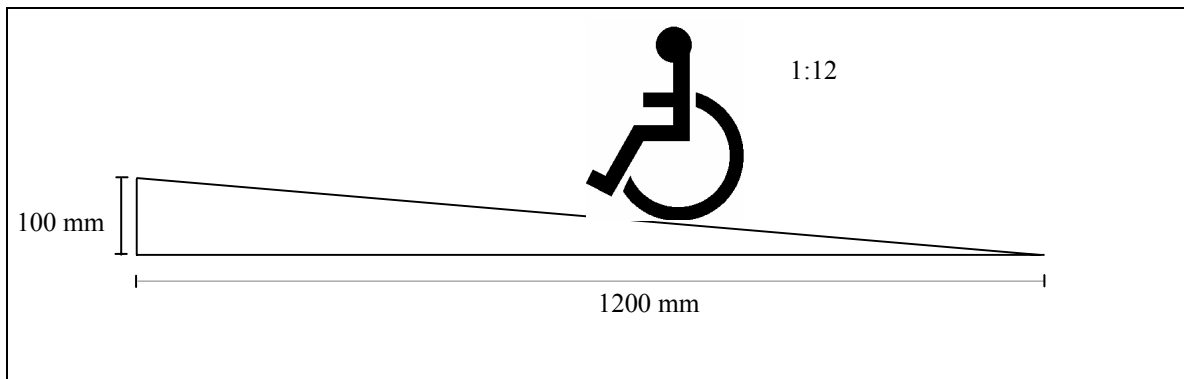
## Outside

### 1.1 Entrances & Exits

- At least one entrance/exit for all buildings should be accessible; if there are steps, a ramp should be installed (See "1.2 Ramps").
- If the ramp is very long, there should be steps also for people who tire easily.

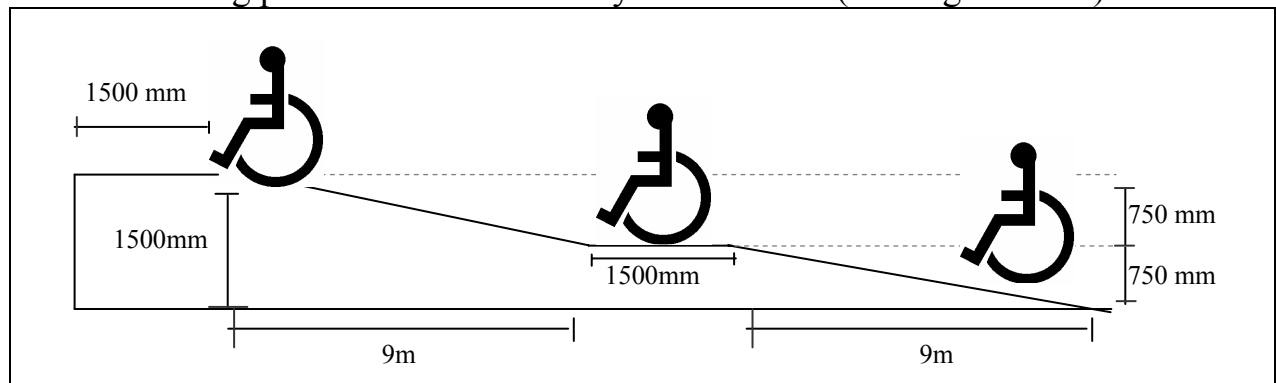
### 1.2 Ramps

- Ramps should have a gradient of 1:12 (See Figure 1.2.1). For every 100mm in height, the ramp must be 1200mm long.



*Figure 1.2.1: Gradient of Ramp*

- A resting point is needed for every 750mm rise. (See Figure 1.2.2).



*Figure 1.2.2: Resting point on ramps*

At the top, bottom and resting points of the ramp there should be a level area big enough to turn a wheelchair (1500mm x 1800mm).

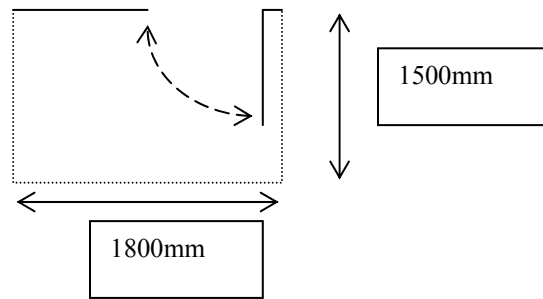
- Handrails should be fitted on both sides at a height between 750mm - 850mm (See " 2.2 Handrails").
- Ramps should be at least 1000mm wide.

### **1.3 Footpaths and Kerbs**

- Footpaths should be flat and continuous.
- Footpaths must be a minimum of 1500mm wide.
- Footpath surfaces should be non-slip and kept clear of hazards, e.g. trees.
- Kerbs should have ramp access points, no steeper than 1:12.
- Public paths should have a strip of different coloured 'spot' tiles to help guide a visually impaired person (for more information, contact the DAC or check references listed at the end of this document).

### **1.4 Doors**

- At least one door into a room must be 800mm (minimum) wide.
- Doorways should have enough space to allow wheelchair users to open doors. This space should be at least 1500mm x 1800 mm. (see Figure 1.4.1)



*Figure 1.4.1: Area in front of door*

- Lever type door handles (rather than round) are easier to use.
- Door thresholds should not be higher than 20mm.
- Doors should not be too heavy and must swing easily.

## **1.5 Carparks**

- There should be at least one disabled parking area that is large enough (5m wide) for a person in a wheelchair to get in and out of the car.
- Reserved parking spots for people with disabilities should be provided close to the building or route, and marked with the disabled symbol.

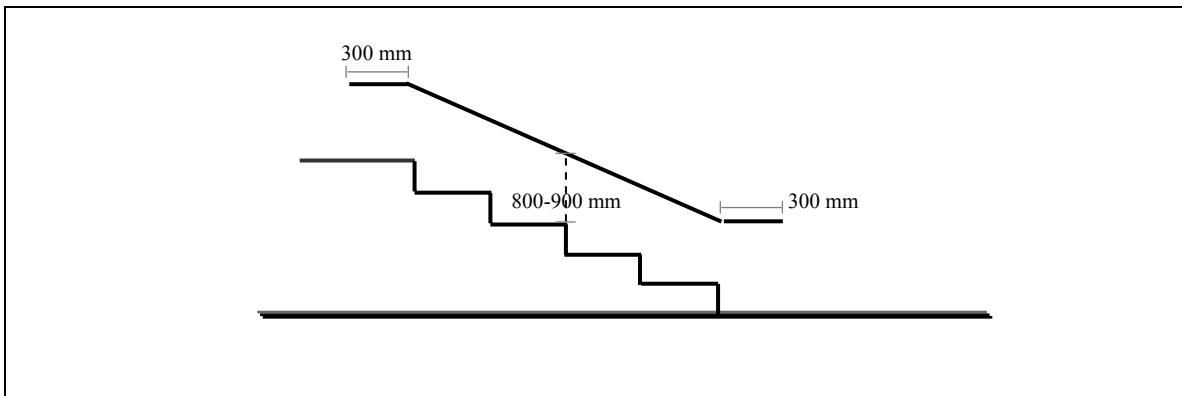
## 2. Inside

### 2.1 Corridors

- Corridors should be 1500mm (minimum) wide.

### 2.2 Handrails

- Handrails should be fitted on all stairs and ramps at 800mm to 900mm (See Figure 2.2.1).



*Figure 2.2.1: Handrail next to steps*

- Handrails should be wide and strong enough to take a person's weight.
- If handrail is next to a wall, there must be 40mm (minimum) between the rail and wall.
- Handrails should be a contrasting color to the background environment.
- Handrails should extend 300mm horizontally past the ends of stairs and ramp (see Figure 2.2.1).
- It is useful to visually impaired people to have a warning cue, e.g. small bump or groove, 200mm before the handrail ends or turns.

### **2.3 Floor Surfaces**

- Floor surfaces should be level, firm and non-slip.

### **2.4 Escape Routes**

- In case of fire or other emergency, exit doors must be wheelchair accessible and clearly marked (see "1.4 Doors").

### **2.5 Lifts**

- Wherever possible, buildings should have a lift.
- If this is not possible, all essential services and rooms must be available on ground floor level.
- Lift doors must be wide enough for wheelchair users (800mm).
- Lift floor space must allow wheelchair turning space (1500mm x 1800mm).
- Lift controls must be in reach of wheelchair users.

### **2.6 Stairs**

- Stairs should have a handrail on both sides (see "2.2 Handrails").
- Stairs should be of even height.
- Stairs should have a non-slip surface.
- Stairs should have a strip of contrasting color (e.g. painted strip) on the edge of each step to make it more visible.

### **2.7 Doors**

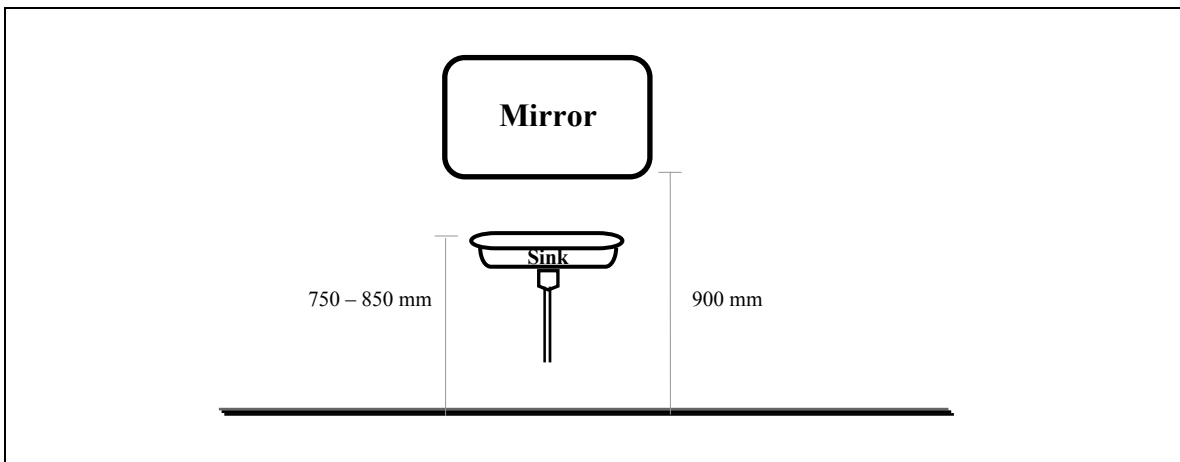
- Doors should comply with specifications in "1.4 Doors".



## **3. Bathroom and Toilets**

### **3.1 Bathroom**

- There should be enough room for a wheelchair to go in, out, and turn around, and get close to the toilet seat (see "1.4 Doors").
- There should be no step at the entrance to the bathroom.
- Doors should be sliding, or open outwards.
- Floor surfaces should be non-slip.
- The toilet paper holder and hose should be easy to reach when using the toilet.
- The sink and mirror should be low enough for people in a wheelchair to use. A mirror on a hinge can be angled to the necessary height (see Figure 3.1.1).

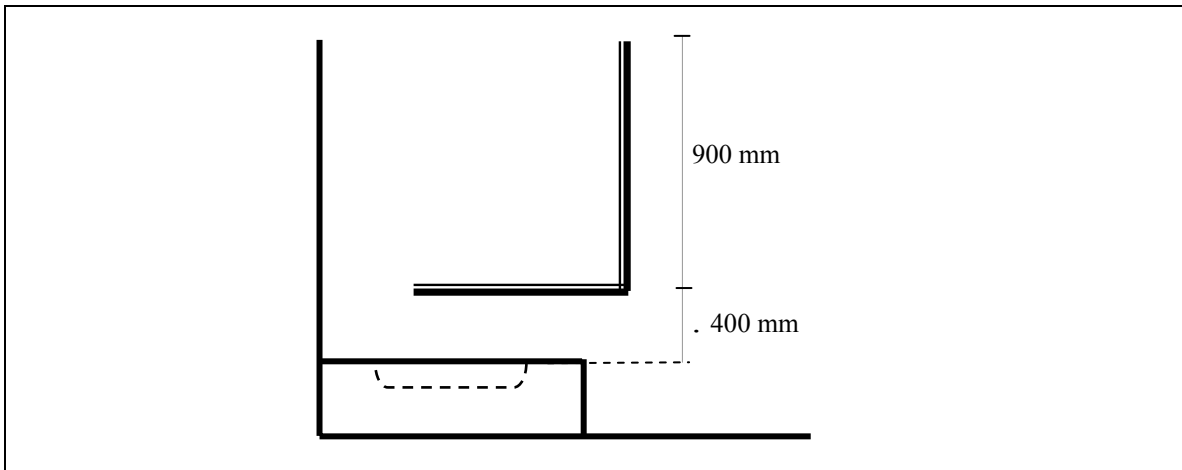


*Figure 3.1.1: Mirror and sink fittings*

- Lever taps are easier to use than round taps.
- Showers should be within reach of wheelchair users.
- If the bathroom has a water tank/container with scoop, it should be within reach of wheelchair users.

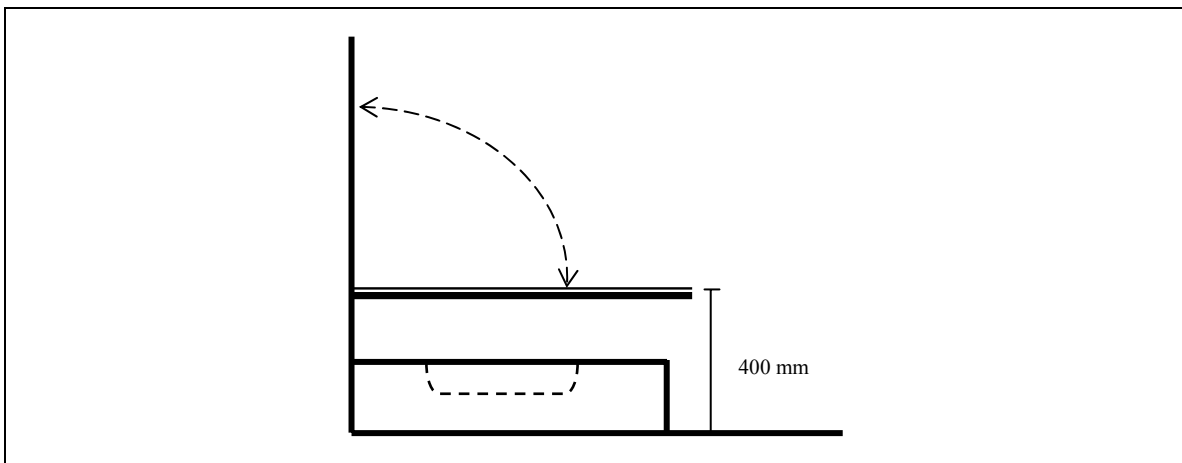
### 3.2 Squat Toilets

- Toilets should be in the corner of the room.
- The toilet should have rails (see Figure 3.2.1).



*Figure 3.2.1: Squat Toilet with Rails*

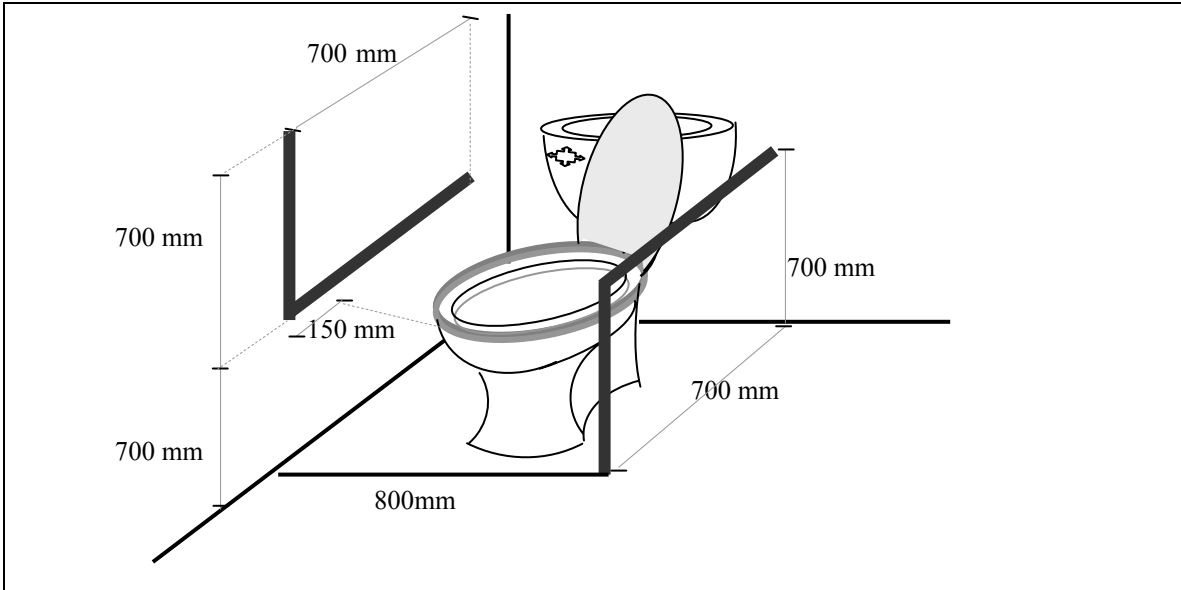
- A flip-down seat, made from plastic or wood, could be installed about 400mm above the squat toilet to be used by people who cannot squat (see figure 3.2.2).



*Figure 3.2.2 Squat Toilet with Flip Down Seat*

### 3.3 Western Toilets

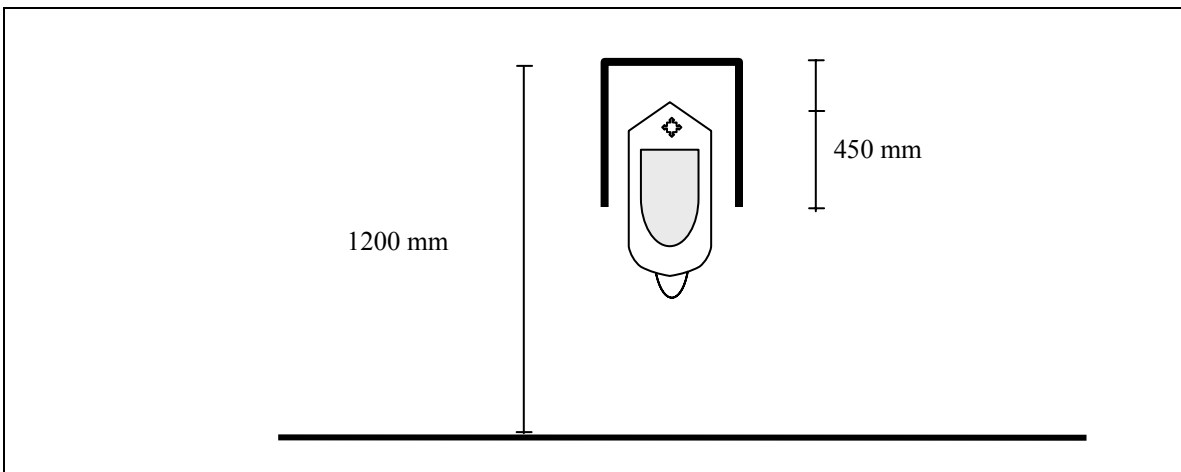
- Toilets should be in the corner of the room.
- The toilet should have rails (see Figure 3.3.1).



*Figure 3.3.1: Western Toilet with Rails*

### 3.4 Urinals

- Urinals should have a rail (see Figure 3.4.1).



*Figure 3.4.1 Urinal with Rail*

## REFERENCES

- 1) ESCAP (1999). *Promotion of Non-Handicapping Environments for Disabled Persons: pilot projects in three cities*. Social Development Division, United Nations; Thailand.
- 2) ESCAP (1995). *Promotion of Non-Handicapping Physical Environments for Disabled Persons: Guidelines*. Social Development Division, United Nations.

For more information and to view these documents contact the:

Disability Action Council (DAC)  
#86, St. 99, Khan Chamkamorn,  
Phnom Penh.  
Tel: 023 215 341  
E-mail: [dac@dac.org.kh](mailto:dac@dac.org.kh)



# **Accessibility Guidelines**

**Draft prepared by Katie McCausland and Hannah Clark  
For the Disability Action Council  
May 2000**