

# ACCESS AUDIT REPORT

## NON FORMAL EDUCATION CELL

(EXTERNAL CANDIDATE)

Under the Project



## Accessible University of Delhi

by



**National Centre for Accessible Environments**

A project of Samarthyam Trust (Regd. No. 35922)

B-181, Mansarovar Garden, New Delhi-110015

Telefax: +91-11-41019389 (M) 9810558321

Email: [samarthyaindia@yahoo.com](mailto:samarthyaindia@yahoo.com)

Web site: [www.samarthyam.org](http://www.samarthyam.org)

**FEBRUARY 2009**

## Introduction:

The University of Delhi is the premier university of the country and is known for its high standards in teaching & research. It offers courses at the Undergraduate and Post Graduate levels in most subjects and at present, there are around 71 colleges spread all over the city. With the number of students exceeding 3,00,000, it is among the largest universities in the world. The University of Delhi is taking all measures to achieve the goal of "Education for All". Special emphasis has been on the students with diverse disabilities. In this year more than 700 students have been admitted in various colleges. Still, many opt out because of accessibility issue. Physical access to the college building, both external & internal is usually full of barriers, are unapproachable and non-usable.

The University of Delhi in association with Samarthyam (a Civil Society Organization promoting Accessible Environments for Disabled Persons) has launched a Project "Accessible University of Delhi", to make all buildings disabled friendly. It is also mandatory under The Persons With Disabilities (PWD) Equal Opportunities, Protection of Rights and Full Participation Act, 1995. University Grants Commission (UGC) has issued necessary orders/directions to all the Universities and Colleges to implement provisions of the PWD Act, and for this a one time grant amount has also been allocated. It is extremely importantly that this Project should be expedited as efficiently and as conscientiously as possible; to ensure that all persons with disabilities (students, teaching and non teaching staff) receive an equal opportunity to participate and succeed in the academic program.

Samarthyam sincerely appreciate Prof. Deepak Pental, Vice Chancellor, University of Delhi; Prof. Ramakant Agnihotri and Equal Opportunity Cell for their commitment to make all DU buildings disabled friendly, under the Project "Accessible University of Delhi".

## Access Audit & Report:

**SAMARTHYAM** Access Resource Group, which includes trained access auditors with diverse disabilities and professionals, greatly appreciates the management of Non Formal Education Cell (NFE) for extending all co-operation during the access audit of the premises.

It may be pertinent to mention that access audit is not a fault finding exercise. The **objective** of the access audit is to assess the existing facilities and provide suggestions for further improvement. The Report recommendations of the access audit are based on ground realities and provide cost effective solutions. A list of companies/vendors supplying accessible accessories is also given in the report.

## Contact Person:

Shri V.K. Gulati, Asstt. Registrar  
Phone: 27667729

Access Audit of the following areas was conducted:	
1. Approach	7. Notice board
2. Main Gate	8. Enquiry windows
3. Parking	9. Drinking water Facility
4. Building Entrance	10. Toilets
5. General circulation area	
6. Signages	

## Remarks:

- ✚ Signage – directional and room signage.
- ✚ Tactile guiding path with warning strip for persons with low vision and vision impairment.
- ✚ Drinking water facility.
- ✚ Accessible toilet.

## EXTERNAL

### APPROACH

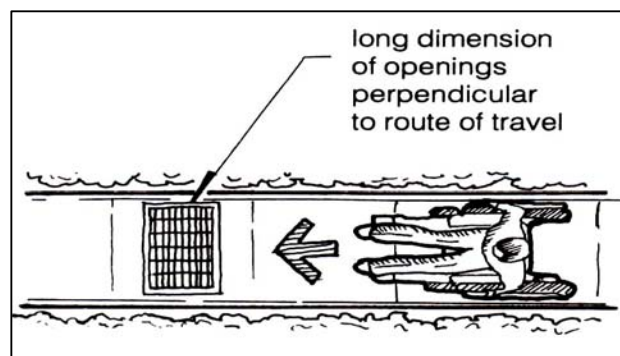
Unmaintained road trapped small wheels of the wheelchair and can also cause trip hazard for persons using mobility aids.



- ✚ Periodic general maintenance of the road should be undertaken.
- ✚ Level differences to have smooth slope/ramp.

### GRATINGS

Water drainage grating were observed in the line of travel of the main gate. Grating openings may trap tip of white cane, crutches and front wheels of wheelchair.



- ✚ Grating should be placed outside the line of travel. The cover should be flush with the road surface, benefitting persons using mobility aids and persons with vision impairment.
- ✚ Grating openings should not be wider than 12mm and where un-avoidable, strip of net/mesh to be securely fixed on to the existing gratings. Same can be removed while cleaning/maintaining the drainage.

## MAIN GATE

It was found that both vehicular and pedestrian movement takes place from this entrance.

- ✚ Main gate to be painted in bright colors (preferably yellow/red) for easy identification by persons with low vision from a distance.

## SIGN BOARD

Signboard was observed on the compound wall.



- ✚ Signboard to be provided on the route from Jai Jawan Tea Stall/ Science Faculty area.
- ✚ To be mounted at a height of 2100mm from the floor level.
- ✚ To be in bright colour contrast and bold/large lettering.
- ✚ Font Size 100 – 170 mm.

## GENERAL PARKING

Haphazard parking obstructs right of way and safe movement of everyone particularly persons using mobility aids.

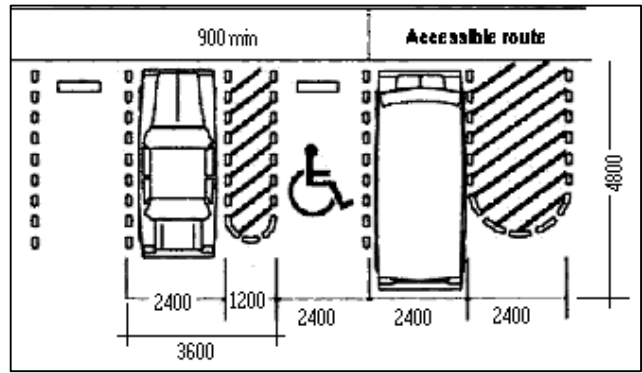
- ✚ Parking area to be clearly specified with directional signage.

## RESERVED PARKING

For staff/students with mobility impairments driving their own vehicles (scooter/car) reserved parking should be provided in the space identified (refer photo).

- ✚ Parking should be within 30 meters of the main entrance of the building.
- ✚ Two accessible parking lots with overall minimum dimension 3600mm x 4800mm, should be provided.
- ✚ It should have the access symbol painted on the ground and also on a signpost/board put near it.
- ✚ There needs to be directional signs guiding people to the accessible parking.
- ✚ Approach to the parking to be maintained.
- ✚ All security guards/staff should be sensitized and well informed about these reserved parking for Persons with Disabilities (PwDs).





## STANDARDS & SIGNAGE FOR ACCESSIBLE PARKING

### NOTICE BOARD

Notices were observed to be pasted on the compound walls, some of which were inaccessible for persons with disabilities.

The notices are small in fonts, mounted too high, on external compound walls with pavements.



- ✚ A proper place with over head shed to be provided for placement of all notices.
- ✚ Way to this area should be obstruction free and access through ramp or level area should be provided.
- ✚ Notices should be in large print mounted between 1200-1400mm height. Wherever possible Braille notices and forms should be provided.
- ✚ Directional way finding signages to be placed at strategic locations to locate this area.
- ✚ Tactile pavers (Annexure I) should be provided leading to this area.

## INTERNAL

### WAY FINDING SIGNAGES

- ✚ Key plans and directional signage for accessible features/amenities are proposed at entrance and other strategic locations.



### GENERAL CIRCULATION AREA

These are the main movement areas for visitors, students and staff. Protruding objects and encroachments in the line of travel restrict the movement of persons using mobility aids such as walkers, crutches etc. and hazardous for persons with low vision and vision impairment.

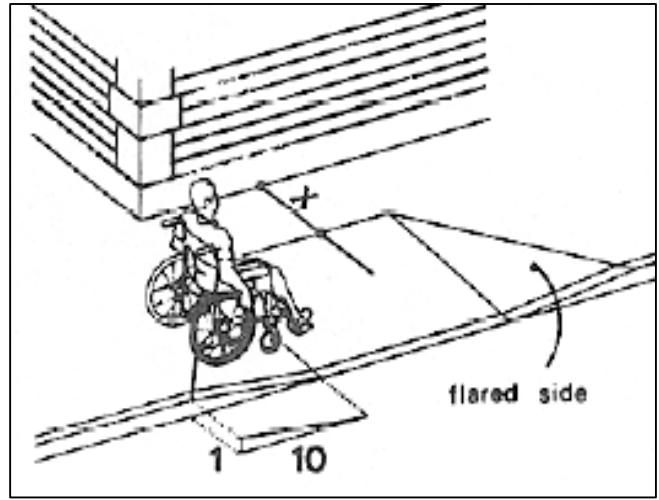
Pavement curb (160mm high) restricts persons using mobility aids such as walker, crutches, stick, wheelchair from accessing the service/enquiry windows and resting spaces.



- ✚ Curb ramp to be provided, as illustrated on page 7.
- ✚ Tactile guiding path (engineering configuration given at Annexure I) to be provided for the benefit of persons with vision impairment.



**Existing**

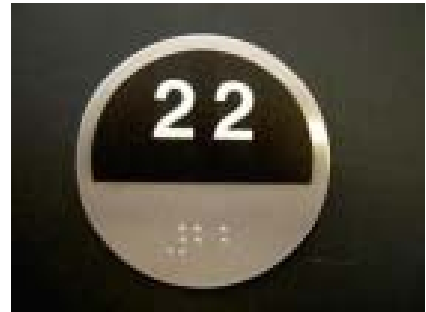


**Proposed**

- ✚ Pavement should be dropped, to be flush with roadway, at a gradient no greater than 1:10 on both sides of necessary and convenient crossing points. Width should not be less than 1200mm.
- ✚ If width (X) is less than 1200mm, then slope of the flared side shall not exceed 1:12.
- ✚ Warning strip (Annexure I) to be provided on the curb side edge of the slope, so that a person with vision impairment does not accidentally walk onto the road.

### **SIGNAGES –ENQUIRY COUNTERS, ROOM**

- ✚ Signs should be mounted between 1400mm and 1700mm from floor level on the wall.
- ✚ The individual characters between 15mm-50mm tall and raised by 1-1.5mm.
- ✚ Signage, name and numbers to be in Braille & raised alphabets at the eye level, on the wall, bold & color contrasted with their background.



**Proposed signage with Braille locator**



**Example of enquiry window signage which is above eye level and in small fonts.**

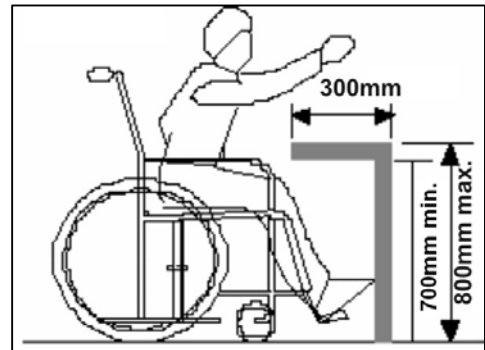
- ✚ Signage with Braille markings for enquiry counters to be placed at eye level, as per standards mentioned above.

Existing counter height is 730 mm with leg clearance for wheelchair users, which is fairly accessible. Overhead shelter has been provided.



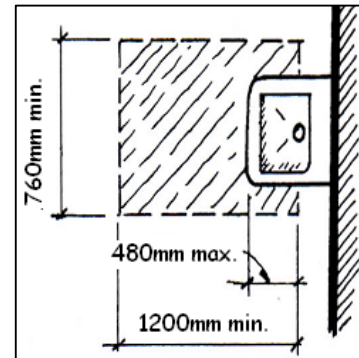
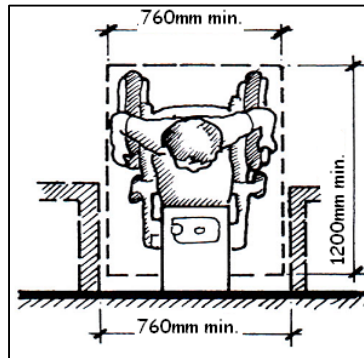
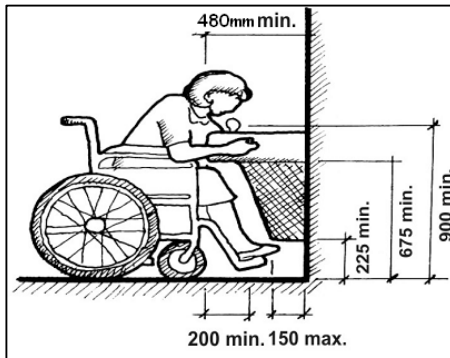
**General recommendations for enquiry windows:**

- ✚ Counter top should not be more than 800mm from the floor, with a minimum clear knee space of 650mm-680mm high and 280mm-300mm deep.
- ✚ Aisle space to reach these counters should not be less than 900mm.



**DRINKING WATER**

- ✚ Tap to be lowered down so that all operable parts are between 900mm-1000mm height.
- ✚ Leg and knee space to be provided (as shown in the diagrams) with basin to avoid spilling of water.
- ✚ This allows both front and parallel access to taps for students using mobility aids like wheel chair, crutches etc.

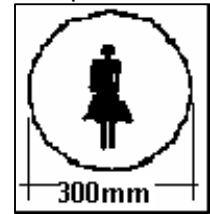
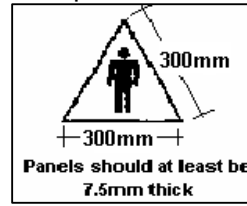




## GENERAL TOILETS

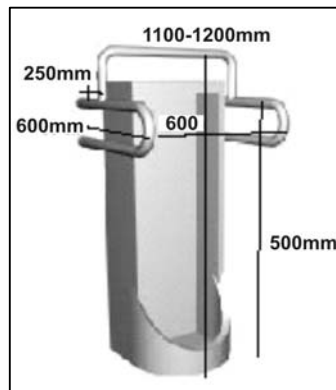
**GENERAL TOILETS** to have pictogram (male in triangle and female in circle), marked on plates along with Braille & raised alphabets, put on wall next to door, for the benefit of the persons with vision impairment.

- For students/employees with low vision and vision impairments, following are proposed:
  - Warning strip/ door mat 300mm before the toilet entrance.
  - Braille signage should be displayed on the right side of every toilet by indicating embossed letters with ladies and gents pictogram.
  - All signage to be in raised alphabets at the eye level, on the wall and in bold and contrasting colors.

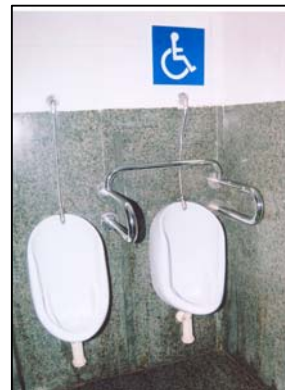


## URINALS

- At least one of the urinals in the **Gents toilet** should have grab bars; installed on each side and in the front of the urinal to support ambulant persons with disabilities (for example, crutch users).
- The front bar is to provide chest support; the sidebars are for the user to hold on to while standing.
- Urinals shall be stall-type or wall-hung, with an elongated rim at a maximum of 430mm above the finish floor.
- A clear floor space 760mm by 1220mm should be provided in front of urinals to allow forward approach. Urinal shields (that do not extend beyond the front edge of the urinal rim) may be provided with 735 mm clearance between them.



Accessible Urinal



Urinal with grab bar, Dilli Haat

An accessible unisex toilet is proposed in the premises.

## ACCESSIBLE TOILET

A minimum of one toilet compartment should have enough floor space for wheelchair users to enter and exit.

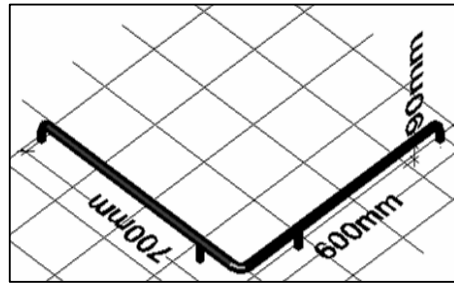
- Clear floor space 2000mm x 1750mm.
- Provide a door of clear opening of at least 900mm with the door swing outwards or be folding or sliding type.
- Should have slip resistant flooring.
- Accessible toilet** should have a switch near the WC (one at 300mm and the other at 900mm from the floor level), which activates an emergency audio alarm (at the reception/attendants desk, etc.).



## WATER CLOSET (WC)

- Have clear space of not less than 900mm wide next to the water closet.
- Be located between 460mm to 480mm from the centerline of the WC to the adjacent wall and have a clear dimension of 800mm from the edge of the WC to the rear wall to facilitate side transfer.
- The top of the WC to be 475-490mm from the floor.

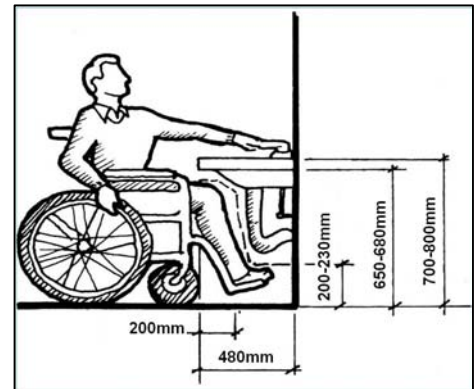
- ✚ Have a back support.
- ✚ Grab bars at the transfer side of the WC and the adjacent wall.
- ✚ On the transfer side of the WC- swing up type and on the wall side L-shape grab bars should be provided.



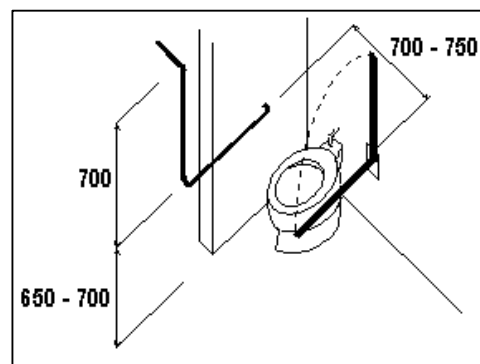
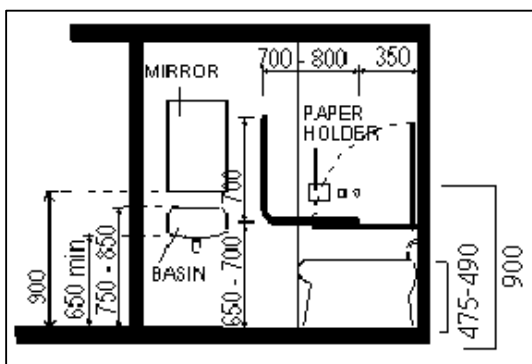
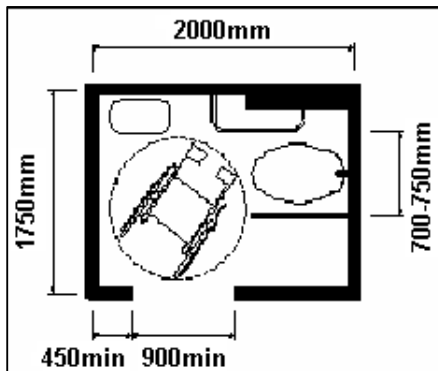
L-shape grab bar

### WASHBASIN

- ✚ With dimensions 520mm and 410mm, so mounted that the top edge is between 700mm-800mm from the floor; have a knee space of at least 760mm wide by 200mm deep by 650mm-680mm high.
- ✚ Lever type handles for taps are recommended.
- ✚ Mirror's bottom edge to be 900-1000mm from the floor and the mirror may be inclined at an angle.



### PLANS OF ACCESSIBLE TOILET



## EMERGENCY EVACUATION

There is no Exit signage or fire hydrant observed in the building.

- ✚ **Emergency exits** should be clearly marked with proper signage and should be clear of all obstructions.
- ✚ **Emergency alarm** both audio (hooter type) and visual (flashing bulb) to be provided on each floor/level at strategic locations.
- ✚ **Employees/staff and security guards**, need to be drilled for the same at periodic intervals.
- ✚ An **access sensitization/ awareness training** to be given to security guards and staff handling/transferring students with disabilities to refuge area during emergency.

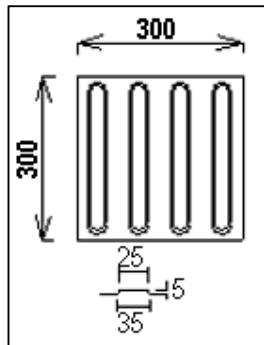


### REPORT PREPARED BY

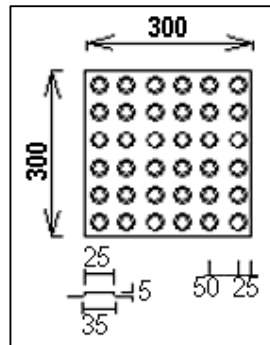
Access Resource Group, Samarthyam  
Contact person: Ms. Anjlee Agarwal  
(M) 9810558321  
Email: [samarthyaindia@yahoo.com](mailto:samarthyaindia@yahoo.com)

**TACTILE SURFACES: GUIDING STRIP & WARNING BLOCKS**

- Line-type blocks indicate the correct path/route to follow.
- Dot-type blocks provides warning signal, to screen off obstacles, drop-offs or other hazards, to discourage movement in an incorrect direction and to warn of a corner or junction. Should be placed 300mm at the beginning and end of the ramps, stairs and entrance to any door.



**Guiding path**



**Warning strip**



**Places to install guiding blocks:**

- In front of an area where traffic is present.
- In front of an entrance/exit.
- To and from a staircase or multi-level crossing facility.
- In open space to orient students with vision impairment.

